Virginia: ESIMAP 1 BIOLOGICAL RESOURCES:

BIRD:

	:							
#	Species	S F	Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting 	. -
1	Black-bellied plover		LOW	$\times \times $	-	-	-	
	Bonaparte's gull	0	LOW	XXXXXXXXXX	-	-	-	
	Brown pelican Caspian tern	C C	LOW LOW	$egin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	
	Common tern	Ŭ	LOW	XXXXXXXXX	-	_	_	
	Forster's tern		MODERATE	$X\ X\ X\ X\ X\ X\ X\ X\ X\ X$	-	-	-	
	Great black-backed gull		LOW	X X X X X X X X X	-	-	_	
	Herring gull		LOW	X X X X X X X X X X X X	-	_	_	
	Laughing gull Least sandpiper		LOW	$egin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	
	Least tern	C	LOW	X X X X X	-	-	-	
	Lesser black-backed gull		LOW	$\times \times $	-	-	-	
	Ring-billed gull		VERY HIGH	X X X X X X X X X X X X X	-	-	-	
	Royal tern Ruddy turnstone		MODERATE LOW	$egin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	
	Sanderling		VERY HIGH	\times	_	_	_	
	Sandwich tern	С	LOW	$\times \times $	-	-	-	
	Semipalmated plover		LOW	X X X X X X X X X X X X X	-	-	-	
	Semipalmated sandpiper Willet		LOW LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	
	American black duck		HIGH	X X X X X X X X X X X X X	APR-MAY	_	_	
	American wigeon		HIGH	$X \; X \; X$	MAY-JUN	-	-	
	Canada goose		LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$			-	
	Gadwall		HIGH		APR-MAY	-	-	
	Green-winged teal Tundra swan		HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	
	American bittern		LOW	$X \times X \times$	APR-MAY	_	_	
	American black duck		HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	
	American coot		LOW	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	
	American wigeon		LOW		MAY-JUN	-	-	
	Blue-winged teal Bufflehead		MODERATE LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUN -	_	_	
	Canada goose		MODERATE		- APR-JUN	-	_	
	Cattle egret		LOW	XXX	JUN-AUG	-	-	
	Common merganser		LOW	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	
	Common moorhen	С	LOW		MAY-JUN	-	-	
	Gadwall	~	MODERATE		APR-MAY	-	-	
	Glossy ibis Great blue heron	С	LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAYTITT.	_	_	
	Great egret	С	MODERATE	X X X X X X X X X X	-	_	_	
	Greater yellowlegs	<u> </u>	LOW	XXXXX	-	-	-	
	Green-winged teal		HIGH	X X X X X X X X X X X	-	-	-	
	Killdeer		LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	— МЛV тттт	-	-	
	King rail Least bittern		MODERATE LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUN MAY-JUN	-	_	
	Least sandpiper		LOW	XXX XXX	MAI - 50N	_	_	
	Lesser yellowlegs		MODERATE	X X X	-	_	_	
	Mallard		VERY HIGH	$\times \times $	APR-MAY	-	-	
	Northern pintail		MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-	
	Northern shoveler Pied-billed grebe		LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAYTIIN	_	_	
	Ruddy duck		LOW	X X X X X X X X X X X X X X X X X X X	- MAI - JUN	_	_	
	Scaup		LOW	X X X X X X X X X X	-	-	-	
	Semipalmated plover		LOW	$X\ X\ X$	-	-	-	
	Semipalmated sandpiper		MODERATE	X X X	-	-	-	
	Short-billed dowitcher		LOW	X X X	-	_	-	
	Snow goose Snowy egret		MODERATE MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	
	Sora Sora		LOW	X X X X X X X X X X X X X X X X X X X	-	-	-	
	Spotted sandpiper		LOW	$X X X \qquad X X X$	-	-	-	
	Tricolored heron	С	LOW	X X X X X X X X X X	-	-	-	
	Tundra swan		MODERATE	X X X X X X X X X X X X X X X X X X X	- MAN TIIN	_	-	
	Virginia rail Wood duck		LOW MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-MAY	_	_	
	Osprey		110DB1411E	XXXXXXXXX	MAR-AUG	_	_	
	Greater yellowlegs		LOW	X X X	-	-	-	
	Lesser yellowlegs		MODERATE	X X X	-	-	-	
	Semipalmated sandpiper	~	MODERATE	XXXXX	-	-	-	
	Brown pelican Common loon	С		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	
	Northern gannet		HIGH	X X X X X X X X X X X X X X X X X X X	_	_	_	
	Red-breasted merganser		VERY HIGH	X X X X X X X	-	-	-	
	Red-necked grebe			X X	-	-	-	
	Red-throated loon			X X X X X X X	-	-	-	
	American black duck		ABUNDANT COMMON	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-MAY MAY-JUN	-	_	
	American wigeon Gadwall		COMMON		MAY-JUN APR-MAY	-	_	
	Green-winged teal		COMMON	X X X X X X X X X X X X X X X X X X X	_	-	-	
	Mallard		ABUNDANT	X X X X X X X X	APR-MAY	-	-	
	Northern pintail		COMMON	X X X X X X X	-	-	-	
	Snow goose Tundra swan		ABUNDANT	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	=	
	Tundra swan Lesser scaup		COMMON MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	
	Snow goose			X X X X X X X X X X X X X X X X X X X	-	-	-	
	American black duck		HIGH	$\times \times $		-	-	
	American coot		LOW	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	
	American wigeon		LOW		MAY-JUN	-	-	
	Blue-winged teal		MODERATE	X X X X X X X	MAY-JUN	-	-	
	Gadwall Green-winged teal		MODERATE HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-MAY -	-	_	
	Mallard		VERY HIGH	X X X X X X X X X X X X X X X X X X X	APR-MAY	_	_	
	Northern pintail		MODERATE	X X X X X X	-	-	-	
	Northern shoveler		LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	
	Wood duck		MODERATE	X X X X X X X X X	APR-MAY	-	-	
	American wigeon Gadwall		HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_	
	Black scoter		HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_	
-	Surf scoter			X X X X X X X X	-	-	-	
	White-winged scoter			X X X X X X X	-	-	-	
	Great blue heron		50 NESTS	\times	MAY-JUL	-	-	
			G		•	_	- .	_
	Species	S F	Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juvenil
					MAD = TIIT			JAN-DEC
				X X X X X X X X X X X X X X X X X X X				
ŧ	Black crappie Bluegill			$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	- OAN-DEC
ŧ	Black crappie				APR-SEP	-	-	
-	Black crappie Bluegill			$\times \times $	APR-SEP APR-JUN APR-JUN	- - -	- - -	-

Virginia: ESIMAP 1 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH	cont.)									
RAR#	Species	S F Conc.		J F M A M J		Spawning	Eggs	Larvae	Juveniles	Adults
3	Chubsucker			X X X X X X X					JAN-DEC	JAN-DEC
5	Common carp			XXXXXX			_	_	-	JAN-DEC
	Largemouth bass			X X X X X X			-	-	-	JAN-DEC
	Pumpkinseed White perch			X X X X X X X X X X X X X X X X X X X		MAR-JUN -	_	_	JAN-DEC JAN-DEC	JAN-DEC -
	Yellow perch			XXXXXX		-	_	_	JAN-DEC	JAN-DEC
6	Alewife			X X X X X X		-	-	_	JAN-DEC	-
	American eel			X X X X X X X		-	-	-	JAN-DEC	-
	Atlantic menhaden Blueback herring			X X X X X X X X X X X X X X X X X X X		-	_	_	JAN-DEC JAN-DEC	- -
	Bowfin			XXXXXX			_	_	-	JAN-DEC
	Brown bullhead			X X X X X X			-	-	-	JAN-DEC
	Common carp			XXXXXX		MAY-AUG	-	_	- TAN DEC	JAN-DEC
	Spot Summer flounder			X X X X X X X X X X X X X X X X X X X		_	_	_	JAN-DEC JAN-DEC	-
	White perch			XXXXXX			APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Yellow perch			X X X X X X			-	-	JAN-DEC	JAN-DEC
7	Atlantic croaker				X	-	-	_	AUG-DEC	MAY-NOV
	Atlantic mackerel Atlantic menhaden			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	x	_	_	_	- JAN-DEC	MAR-APR MAY-OCT
	Black drum				XXXX	_	_	_	-	APR-OCT
	Black sea bass				X X X X	JUN-OCT	-	-	APR-OCT	APR-OCT
	Bluefish				X	-	-	-	MAY-NOV	APR-NOV
	Butterfish Crevalle jack			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X	_	_	_	JUL-NOV JAN-DEC	MAR-NOV -
	Northern kingfish				x	- MAY-AUG	-	-	JAN-DEC -	- APR-OCT
	Northern searobin			XXXX		-	-	-	-	MAR-OCT
	Pollock			X X X X	X	-	-	-	-	DEC-APR
	Red drum				XXXXX	JUL-NOV	-	-	- EED MAY	MAY-NOV
	Red hake			XXXX	XXX	-	-	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark			x x	XXXX	_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)			XXXX		-	-	-	JUN-OCT	MAR-OCT
	Silver hake			X X X X X	X X X	-	-	-	-	OCT-MAY
	Southern kingfish (whiting)				XXXX	-	-	-	-	APR-OCT
	Spanish mackerel Spiny dogfish			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	хх	_	_	_	_	APR-MAY NOV-APR
	Spot			XXXXXX		_	_	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake			X X X X	X X X	-	-	-	MAR-JUN	MAR-JUN
										SEP-NOV
	Spotted seatrout				X	MAY-JUL	-	- -	APR-NOV	APR-NOV
	Summer flounder Tautog			X X X X X X X X X X X X X X X X X X X		- 7 DD = 7 IIC	_	OCT-MAY -	_	APR-OCT JAN-DEC
	Weakfish				XXXXXX	APR-AUG	_	MAY-AUG	APR-NOV	APR-NOV
	RTEBRATE:									
AR#	Species	S F Conc.		JFMAMJ	JASOND		Eggs	Larvae	Juveniles	Adults
3	Brackishwater clam				x	-		-	JAN-DEC	JAN-DEC
				$\times \times \times \times \times \times$						
	Carolina marsh clam			X X X X X X X		_	-	_	JAN-DEC	JAN-DEC
	Brackishwater clam			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X X X X X X X X X X X X X X X X X X X	-	-	<u>-</u>	JAN-DEC JAN-DEC	JAN-DEC
	Brackishwater clam Blue crab			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X X X X X X X X X X X X X X X X X X X		- - -	- MAY-NOV	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Brackishwater clam			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X X X X X X X X X X X X X X X X X X X		- - - -	-	JAN-DEC	JAN-DEC
7	Brackishwater clam Blue crab			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X X X X X X X X X X X X X X X X X X X		- - -	- MAY-NOV	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
7 IARII	Brackishwater clam Blue crab Channeled whelk	S F Conc.		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X X X X X X X X X X X X X X X X X X X	-	- - - - Calving	- MAY-NOV -	JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
7 [ARI] AR# 	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species	S F Conc.		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	-	-	- MAY-NOV -	JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
7 [ARI] [AR# 	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin	S F Conc.		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	-	-	- MAY-NOV -	JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
7 [ARI] [AR# 	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin	S F Conc.		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- Mating - -	-	- MAY-NOV -	JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
7 [ARI] AR# 	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin	S F Conc. 		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- Mating - - -	Calving	- MAY-NOV -	JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
7 IARII AR# 7	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale			J F M A M J X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- Mating - - -	- Calving - - -	- MAY-NOV -	JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
7 IARII AR# 7	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale	E E		J F M A M J	X X X X X X X X X X X X X X X X X X X	- Mating - - - -	Calving JAN-DEC	- MAY-NOV - Pupping - - -	JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEC JAN-DEC JAN-DEC
7 IARII AR# 7	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale			J F M A M J X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- Mating - - - -	Calving JAN-DEC	- MAY-NOV - Pupping - - -	JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC
7 IARII AR# 7 REPT: AR#	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species	E E S F Conc.		J F M A M J X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- Mating - - - -	Calving JAN-DEC	- MAY-NOV - Pupping - - -	JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEC JAN-DEC JAN-DEC
7 IARII AR# 7 REPT: AR#	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale	E E		J F M A M J X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- Mating - - - -	Calving JAN-DEC	- MAY-NOV - Pupping - - -	JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Les Adults
7 MARII RAR# 7 REPT: RAR#	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle	E E S F Conc. T T		J F M A M J X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	Mating Nesting	Calving JAN-DEC	- MAY-NOV - Pupping - - -	JAN-DEC JAN-DEC JAN-DEC Molting Molting MAY-NO	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NO
7 IARII AR# 7 EEPT: AR# 7	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle	E E S F Conc. T T E E E E T T		J F M A M J	X X X X X X X X X X X X X X X X X X X	Mating Nesting	Calving JAN-DEC	- MAY-NOV - Pupping - - -	JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOW MAY-NOW MAY-NOW MAY-NOW	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII AR# 7 REPT: AR# 7	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle	E E S F Conc. T T E E E E		J F M A M J	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	Pupping Internest	JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOW MAY-NOW	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Les Adults Les V Les V MAY-NC MAY-NC
7 IARII AR# 7 EPT: AR# 7	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle	E E S F Conc. T T E E E E T T		J F M A M J	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	Pupping Internest	JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOW MAY-NOW MAY-NOW MAY-NOW	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 ARH 7 REPT: ARH 7 576	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle	E E S F Conc. T T E E E E T T		J F M A M J	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	Pupping Internest	JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOW MAY-NOW MAY-NOW MAY-NOW	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII AR# 7 EPT: AR# 7	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle	E E S F Conc. T T E E E E T T		J F M A M J	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	Pupping Internest	JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOW MAY-NOW MAY-NOW MAY-NOW	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII AR# 7 EPT: AR# 7 576 UUMAI	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle	E E S F Conc. T T E E E E T T	Contact	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	Pupping Internest	JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOW MAY-NOW MAY-NOW MAY-NOW	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII AR# 7 EPT: AR# 7 576 SUMAI COAS: UN#	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle N USE RESOURCES: I GUARD: Name	E E S F Conc. T T E E E E T T T T	Contact	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	Pupping Internest	JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOW MAY-NOW MAY-NOW MAY-NOW	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII AR# 7 EPT: AR# 7 576 SUMAI	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle VISE RESOURCES: F GUARD:	E E S F Conc. T T E E E E T T T T	Contact	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	Pupping Internest	JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOW MAY-NOW MAY-NOW MAY-NOW	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 ARII AR# 7 EPT: 576 ===: 0AS: 0AS: 64	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle N USE RESOURCES: I GUARD: Name	E E S F Conc. T T E E E E T T T T	Contact	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	Pupping Internest	JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOW MAY-NOW MAY-NOW MAY-NOW	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII AR# 7 REPT: AR# 7 576	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle TOUSE RESOURCES: I GUARD: Name FALSE CAPE USCG STATION (HISTOR)	E E S F Conc. T T E E E E T T T T	22.22.2	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	- MAY-NOV - Pupping	JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOW MAY-NOW MAY-NOW MAY-NOW	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 ARII AR# 7 EPT: AR# 7 576 64 CANACUN#	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Viggerhead sea turtle N USE RESOURCES: I GUARD: Name FALSE CAPE USCG STATION (HISTOR)	E E S F Conc. T T E E E E T T T T	Contact	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	Pupping Internest	JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOW MAY-NOW MAY-NOW MAY-NOW	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 MARII AR# 7 REPT: AR# 7 576 SOAS! UN# 64 MANAGUN#	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle TOUSE RESOURCES: I GUARD: Name FALSE CAPE USCG STATION (HISTOR)	E E S F Conc. T T E E E E T T T T	22.22.2	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	- MAY-NOV - Pupping	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOV MAY-NOV	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII AR# 7 EPT: AR# 7 576 :===: UMAI COAS: UN# 64 UN# 105	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle TUSE RESOURCES: F GUARD: Name FALSE CAPE USCG STATION (HISTOR) SEMENT AREA: Name	E E S F Conc. T T E E E E T T T T	Contact	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching 7	Pupping Internest	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOV MAY-NOV - MAY-NOV	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII IAR# 7 SEPT: IAR# 7 576 64 IUN# 64 IUN# 105 118	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle Species I GUARD: Name FALSE CAPE USCG STATION (HISTOR) SEMENT AREA: Name FALSE CAPE NATURAL AREA PRESERVE PRINCESS ANNE WILDLIFE MANAGEMEN	E E S F Conc. T T E E E E T T T T	Contact VA DCR 1	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching 7	- MAY-NOV	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOV MAY-NOV - MAY-NOV	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII AR# 7 SEPT: AR# 7 576 SOAS: UMAI COAS: UN# 64 IANAC UN# 105 118	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle Species I GUARD: Name FALSE CAPE USCG STATION (HISTOR) SEMENT AREA: Name FALSE CAPE NATURAL AREA PRESERVE PRINCESS ANNE WILDLIFE MANAGEMEN	E E S F Conc. T T E E E E T T T T	Contact VA DCR I VDGIF	J F M A M J	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	- Calving JAN-DEC Hatching	- MAY-NOV	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOV MAY-NOV - MAY-NOV	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NO W MAY-NO W MAY-NO W MAY-NO
7 IARII AR# 7 ST6 EPT: AR# 7 ST76 EUMAI COAS: UN# 64 IANAO IANA	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle Species I GUARD: Name FALSE CAPE USCG STATION (HISTOR) SEMENT AREA: Name FALSE CAPE NATURAL AREA PRESERVE PRINCESS ANNE WILDLIFE MANAGEMEN	E E S F Conc. T T E E E E T T T T	Contact VA DCR 1	J F M A M J	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	- Calving JAN-DEC Hatching	- MAY-NOV	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOV MAY-NOV - MAY-NOV	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII AR# 7 ST76 ST76 ST76 ST76 ST76 ST76 ST76 S	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Toggerhead sea turtle Loggerhead sea turtle Species I GUARD: Name FALSE CAPE USCG STATION (HISTOR) GEMENT AREA: Name FALSE CAPE NATURAL AREA PRESERVE PRINCESS ANNE WILDLIFE MANAGEMEN Name	E E S F Conc. T T E E E E T T T T	Contact VA DCR I VDGIF Contact	J F M A M J	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	- MAY-NOV	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOV MAY-NOV MAY-NOV	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII IAR# 7 REPT: ARH 7 576 IUNH 105 118 PARK IUNH 137	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle SPECIES I GUARD: Name FALSE CAPE USCG STATION (HISTOR) FALSE CAPE NATURAL AREA PRESERVE PRINCESS ANNE WILDLIFE MANAGEMEN I Name FALSE CAPE STATE PARK	E E S F Conc. T T E E E E T T T T	Contact VA DCR I VDGIF	J F M A M J	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	- MAY-NOV	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOV MAY-NOV MAY-NOV	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 ARII AR# 7 EPT: AR# 7 576 ====: 64 UMAI OAS! UN# 105 118 ARK UN# 137	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Toggerhead sea turtle Loggerhead sea turtle Species I GUARD: Name FALSE CAPE USCG STATION (HISTOR) GEMENT AREA: Name FALSE CAPE NATURAL AREA PRESERVE PRINCESS ANNE WILDLIFE MANAGEMEN Name	E E S F Conc. T T E E E E T T T T	Contact VA DCR I VDGIF Contact	J F M A M J	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	- MAY-NOV	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOV MAY-NOV MAY-NOV	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII IAR# 7 REPT: ARH 7 576 IUNH 105 118 PARK IUNH 137	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle SPECIES I GUARD: Name FALSE CAPE USCG STATION (HISTOR) FALSE CAPE NATURAL AREA PRESERVE PRINCESS ANNE WILDLIFE MANAGEMEN I Name FALSE CAPE STATE PARK	E E S F Conc. T T E E E E T T T T	Contact VA DCR I VDGIF Contact	J F M A M J	X X X X X X X X X X X X X X X X X X X	Mating Nesting MAY-NOV	Calving JAN-DEC Hatching	- MAY-NOV	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOV MAY-NOV MAY-NOV	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII AR# 7 EPT: AR# 7 576 EPT: UMAI COAS! UMMAI 64 IANA(UN# 105 118 PARK UN# 137 ILIDI UN# 137	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle Species I GUARD: Name FALSE CAPE USCG STATION (HISTORI SEMENT AREA: Name FALSE CAPE NATURAL AREA PRESERVE PRINCESS ANNE WILDLIFE MANAGEMEN I Name FALSE CAPE STATE PARK LIFE REFUGE: Name	E E S F Conc. T T E E E E T T T T CCAL)	Contact VA DCR VDGIF Contact VA DCR	J F M A M J	X X X X X X X X X X X X X X X X X X X	Mating	Calving JAN-DEC Hatching	Pupping	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOV MAY-NOV	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC
7 IARII AR# 7 EPT: AR# 7 576 EPT: IUMAI COAS: UN# 64 IANA(UN# 118 IARK UN# 137	Brackishwater clam Blue crab Channeled whelk NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle SPECIES I GUARD: Name FALSE CAPE USCG STATION (HISTOR) FALSE CAPE NATURAL AREA PRESERVE PRINCESS ANNE WILDLIFE MANAGEMEN I Name FALSE CAPE STATE PARK LIFE REFUGE: Name	E E S F Conc. T T E E E E T T T T CAL)	Contact VA DCR VDGIF Contact VA DCR Contact U.S. FIS	J F M A M J	X X X X X X X X X X X X X X X X X X X	Mating	Calving	- MAY-NOV	JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting MAY-NOV MAY-NOV	JAN-DEC JAN-DEC JAN-DEC Les Adults V - V MAY-NC W MAY-NC W MAY-NC

BIOLOGICAL RESOURCES:

BIRD:

BIRD	:													
RAR#	Species	SF	Conc.	J F	M	A	M	JJ	A	SOND	Nesting	, W	Migrating	Molting
1	Black-bellied plover		LOW	 	 X	- X	<u>-</u> Х	 x x	- X				-	
_	Bonaparte's gull		LOW	ХХ						Х	-		-	-
	Brown pelican	С	LOW							X X X	-		-	-
	Caspian tern Common tern	С	LOW			X				X X X X X X X X X X X X X X X X X X X	_		_	_
	Forster's tern		MODERATE							XXX	_		_	_
	Great black-backed gull		LOW	ХХ						X X X X	-		-	-
	Herring gull		LOW	X X						X X X X	-		-	-
	Laughing gull		LOW					ХХ		XXX	-		-	_
	Least sandpiper Least tern	С	LOW			X		ХХ		XXX	_		_	_
	Lesser black-backed gull		LOW	ХХ						X X X X	-		-	-
	Ring-billed gull		VERY HIGH	X X						X X X X	-		-	-
	Royal tern		MODERATE LOW			X		ХХ		X X X X X X X X X X X X X X X X X X X	-		-	_
	Ruddy turnstone Sanderling		VERY HIGH	хх				ХХ		XXXX	_		_	_
	Sandwich tern	С	LOW							X X X	-		-	_
	Semipalmated plover		LOW	X X	X			XX		X X X X	-		-	_
	Semipalmated sandpiper		LOW		v	X		vv		X	-		-	-
2	Willet American black duck		LOW HIGH	x x						X X X X	APR-MAY	,	_	_
-	American wigeon		HIGH	XX							MAY-JUN		-	-
	Canada goose		LOW								APR-JUN		-	-
	Gadwall		HIGH	XX							APR-MAY		-	_
	Green-winged teal Tundra swan		HIGH MODERATE	XX						X X X X X			_	_
3	American bittern		LOW					ХХ			APR-MAY		-	_
	American black duck		HIGH					ХХ			APR-MAY	•	-	-
	American coot		LOW	XX				.,		XXXX	-		-	-
	American wigeon Blue-winged teal		LOW MODERATE	ХХ				X X X			MAY-JUN MAY-JUN		_	_
	Bufflehead		LOW	ХХ		. 21	21	21 21		XXXX			_	_
	Canada goose		MODERATE	ХХ	ΧХ	X	Χ	ХХ	X	X X X X	APR-JUN	Ī	-	_
	Cattle egret		LOW					ХХ			JUN-AUG	;	-	-
	Common merganser Common moorhen	С	LOW	XX				v		X X X X	- MAY-JUN	r	_	_
	Gadwall	C	MODERATE	XX				Λ			APR-MAY		_	_
	Glossy ibis	С	LOW					ХХ		XXX	-		_	_
	Great blue heron		LOW	ХХ							MAY-JUL	ı	-	-
	Great egret	С	MODERATE		Х			XX		XXX	-		-	-
	Greater yellowlegs Green-winged teal		LOW HIGH	хх	7 X	X				X $X X X X$	_		_	_
	Killdeer		LOW	21 21				ХХ		XXXX	_		_	_
	King rail		MODERATE	ХХ	Х	Х	Χ	ХХ	X	X X X X	MAY-JUN	Ī	-	-
	Least bittern		LOW					XX			MAY-JUN	Ī	-	_
	Least sandpiper		LOW		Х	X				XXX	_		_	_
	Lesser yellowlegs Mallard		MODERATE VERY HIGH	хх	Χ	X		ХХ		X	APR-MAY		_	_
	Northern pintail		MODERATE	XX						XXXX			-	_
	Northern shoveler		LOW	ХХ						X X X X			-	-
	Pied-billed grebe		LOW								MAY-JUN	Ī	_	_
	Ruddy duck Scaup		LOW LOW	XX						X X X X X X			_	_
	Semipalmated plover		LOW					ХХ		XXXX			-	_
	Semipalmated sandpiper		MODERATE			Χ	Х			X	-		-	-
	Short-billed dowitcher		LOW			X					-		-	-
	Snow goose Snowy egret		MODERATE MODERATE	XX				v v		X X X X X X	_		_	_
	Sora		LOW							XXXX			_	_
	Spotted sandpiper		LOW			Χ				X X X	-		-	_
	Tricolored heron	С	LOW					ХХ		X X X	-		-	_
	Tundra swan		MODERATE LOW	XX				vv		XXXX		r	-	_
	Virginia rail Wood duck		MODERATE	Λ Λ						XXXX	MAY-JUN APR-MAY		_	_
4			1102214112							XXX	MAR-AUG		-	_
5	Greater yellowlegs		LOW			Χ				X	-		-	_
	Lesser yellowlegs		MODERATE			X				X	-		-	_
8	Semipalmated sandpiper Brown pelican	С	MODERATE		Х	X		хх		X X X X	_		_	_
· ·	Common loon	Ü		ХХ						XX	_		_	_
	Northern gannet		HIGH	ХХ	Х					XX	-		-	-
	Red-breasted merganser		VERY HIGH	XX						ХХ			-	-
	Red-necked grebe Red-throated loon			XX	Χ					хх	_		-	_
10	Lesser scaup		MODERATE	XX			Χ			XXXX			_	_
	Snow goose			ХХ						X X X X			-	_
11	American black duck		HIGH					ХХ			APR-MAY		-	_
	American coot American wigeon		LOW	XX				Y		XXXX	- MAY-JUN	ī	_	_
	Blue-winged teal		MODERATE	Λ Λ				XX			MAY-JUN		_	_
	Gadwall		MODERATE	ХХ							APR-MAY		-	_
	Green-winged teal		HIGH	X X						X X X X			-	_
	Mallard Northern pintail		VERY HIGH MODERATE	XX		X	Χ	ХХ		X X X X X	APR-MAY		_	_
	Northern shoveler		LOW	XX		Х	Χ			XXXX			_	_
	Wood duck		MODERATE					ХХ		XXX	APR-MAY		-	-
13	American wigeon		HIGH	ХХ						X X X X	-		-	-
1.4	Gadwall		HIGH	XX			Χ			XXXX			_	-
14	Black scoter Surf scoter		HIGH	XX						X X X X			_	_
	White-winged scoter			XX						XX			_	_
109	American bittern		LOW	ХХ	Х	Χ	Χ	ХХ	Х	X X X X	APR-MAY		-	_
	Great blue heron		< 10 NESTS								MAY-JUL		-	_
	King rail Least bittern		LOW	ХХ				X X			MAY-JUN MAY-JUN		-	-
	Virginia rail		LOW	x x							MAY-JUN MAY-JUN		_	_
110	American black duck		HIGH								APR-MAY		-	_
	Canada goose			X X	X	X	Χ	ХХ	X	X X X X	APR-JUN		-	-
	Great blue heron	~	LOW	XX						X X X X	-		-	-
	Great egret Green-winged teal	С	LOW HIGH	ХХ						X X X X X X	_		-	_
	Mallard		111-011								- APR-MAY		_	-
111	Bald eagle	ТТ		XX							MAR-MAY		-	-
	Least bittern		LOW-MODERATE			X	Χ	ХХ			APR-MAY		-	-
110	Mallard American bittern		T OW	XX		v	v	V ''		X X X X			-	-
112	American bittern American black duck		LOW								APR-MAY APR-MAY		_	-
	Clapper rail		VERY LOW							XXX	APR-MAY		-	-
	King rail		MODERATE	X X	X	X	Χ			X X X X	APR-MAY		-	-

Virginia: ESIMAP 2 (cont.)

BIOLOGICAL RESOURCES: (cont.)

BIRD: (cont.)

	(cont.)	S F Conc.		TEM		T 3 C	0 N D	Nootina	Vienstine	Wolting		
110	Species	S F Conc.				J A S		Nesting	Migrating	Molting	- -	
	Mallard Virginia rail	LOW		XX	XXX		X X X X Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	- APR-MAY	-	-		
	American black duck	LOW		XXX			XXX	-	-	-		
	Gadwall	LOW		XXX			XXX	-	-	-		
	Great blue heron Great egret	LOW C LOW			. x x x : x x x		X X X X X X X X X X X X X X X X X X X	_	-	-		
	Mallard	LOW		X X X			X X X	-	-	-		
	Tundra swan Great blue heron	LOW 5 NESI	3	XXX			X X X X X X X X X X X X X X X X X X X	- MAY-JUL	_	_		
432	Great blue heron	10 NES						MAY-JUL	-	-		
562	Peregrine falcon	T		X	XXX	ХХ		MAR-AUG	-	-		
FISH:												
	Species	S F Conc.		JFM	AMJ	JAS	OND	Spawning	Eggs	Larvae	Juveniles	Adults
3	Black crappie			 X X X	- 	 x x x	 X X X	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Bluegill							APR-SEP	-	-	-	JAN-DEC
	Bowfin Brown bullhead							APR-JUN APR-JUN	-	-	-	JAN-DEC JAN-DEC
	Chain pickerel			XXX	$X \times X \times X$	X X X	X X X	FEB-APR	-	-	_	JAN-DEC
	Chubsucker Common carp				X			- MAY-AUG	-	_	JAN-DEC -	JAN-DEC JAN-DEC
	Largemouth bass							MAR-MAY	-	-	-	JAN-DEC
	Pumpkinseed White perch						X X X X X X X X X X X X X X X X X X X	MAR-JUN	-	-	JAN-DEC JAN-DEC	JAN-DEC -
	Yellow perch						XXX	_	_	_	JAN-DEC	JAN-DEC
	Alewife						XXX	-	-	-	JAN-DEC	-
	American eel Atlantic menhaden						X X X X X X X X X X X X X X X X X X X	_	_	-	JAN-DEC JAN-DEC	_
	Blueback herring				XXX			-	-	-	JAN-DEC	-
	Bowfin Brown bullhead							APR-JUN APR-JUN	-	-	_	JAN-DEC JAN-DEC
	Common carp			X X X	XXX	X X X	X X X	MAY-AUG	-	-	-	JAN-DEC
	Spot Summer flounder				X X X			-	-	-	JAN-DEC JAN-DEC	-
	Summer flounder White perch				X			- APR-JUN	- APR-JUN	- APR-JUN	JAN-DEC JAN-DEC	- JAN-DEC
	Yellow perch				XXX	X X X	X X X	APR-JUN	-	-	JAN-DEC	JAN-DEC
	Atlantic croaker Atlantic mackerel			Х	X X X	ххх	XXX	-	-	-	AUG-DEC -	MAY-NOV MAR-APR
	Atlantic menhaden				XXX			-	-	-	JAN-DEC	MAY-OCT
	Black drum Black sea bass					X X X X X		- JUN-OCT	_	_	- APR-OCT	APR-OCT APR-OCT
	Bluefish				X X X	X X X	ХХ	-	-	-	MAY-NOV	APR-NOV
	Butterfish Crevalle jack				X		X X X X X	-	_	_	JUL-NOV JAN-DEC	MAR-NOV -
	Northern kingfish				XXX	X X X	Χ	MAY-AUG	-	-	-	APR-OCT
	Northern searobin Pollock			X X X X	XXX	XXX	X X	_	_	_	_	MAR-OCT DEC-APR
	Red drum			21 21 21		ххх		JUL-NOV	-	-	_	MAY-NOV
	Red hake			ХХ	XX	X	ХХ	-	-	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark				ХХ	ххх	X	_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)				XXX			-	-	-	JUN-OCT	MAR-OCT
	Silver hake Southern kingfish (whiting)			XXX			X X X X X		_	_	-	OCT-MAY APR-OCT
	Spanish mackerel				ХХ			-	-	-	_	APR-MAY
	Spiny dogfish Spot			XXX		v v v	X X X X X		_	- DEC-APR	- MAR-NOV	NOV-APR MAR-NOV
	Spotted hake				XXX			-	-	-	MAR-JUN	MAR-JUN
												SEP-NOV
	Cnotted contrast				V V V	v v v	vv	MAN SZ TITT			MON DON	
	Spotted seatrout Summer flounder			XXX			X X X X X		-	- OCT-MAY	APR-NOV	APR-NOV APR-OCT
	Summer flounder Tautog				X X X X	X X X X X X	$\begin{array}{cccc} X & X & X \\ X & X & X \end{array}$	- APR-AUG	- - -	OCT-MAY	- -	APR-NOV APR-OCT JAN-DEC
	Summer flounder Tautog Weakfish				X X X X	X X X X X X	X X X	- APR-AUG	-	OCT-MAY	-	APR-NOV APR-OCT
IABIT	Summer flounder Tautog Weakfish	S.F. Cong		XXX	X X X X X X X X X X X X X X X X X	X X X X X X	X X X X X X X X	- APR-AUG	-	OCT-MAY	- -	APR-NOV APR-OCT JAN-DEC
IABIT	Summer flounder Tautog Weakfish	S F Conc.		XXX	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X	X X X X X X X X	- APR-AUG	-	OCT-MAY	- -	APR-NOV APR-OCT JAN-DEC
IABII AR#	Summer flounder Tautog Weakfish	S F Conc.		Х X X Ј F M 	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- APR-AUG	-	OCT-MAY	- -	APR-NOV APR-OCT JAN-DEC
IABIT AR# 113	Summer flounder Tautog Weakfish PAT: Species	S F Conc.		Х X X Ј F M 	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- APR-AUG	-	OCT-MAY	- -	APR-NOV APR-OCT JAN-DEC
IABIT AR# 113 :NVER	Summer flounder Tautog Weakfish PAT: Species	S F Conc.		J F M X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning	- - - Eggs	OCT-MAY	- APR-NOV	APR-NOV APR-OCT JAN-DEC APR-NOV
IABIT AR# 113 INVER AR#	Summer flounder Tautog Weakfish PAT: Species Rare plant	S F Conc.		J F M X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning	- - - Eggs	OCT-MAY - MAY-AUG	- - APR-NOV	APR-NOV APR-OCT JAN-DEC APR-NOV
IABIT AR# 113 INVER AR# 3	Summer flounder Tautog Weakfish PAT: Species	S F Conc.		J F M X X X J F M X X X	I A M J I A X X I A X X I A X X I A X X I A X X I A X X I A X X I A X X I A X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning	- - - Eggs 	OCT-MAY - MAY-AUG Larvae	Juveniles JAN-DEC JAN-DEC	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC
IABIT AR# 113 ::NVER AR# 3	Summer flounder Tautog Weakfish PAT: Species	S F Conc.		J F M X X X J F M X X X	I A M J I A X X I X X X I X X X I X X X I X X X I X X X I X X X I X X X I X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning	- - - Eggs	OCT-MAY - MAY-AUG Larvae	Juveniles JAN-DEC JAN-DEC JAN-DEC JAN-DEC	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC
IABIT AR# 113 INVER AR# 3 6 7	Summer flounder Tautog Weakfish PAT: Species	S F Conc.		J F M X X X J F M X X X X X X X X X X X X X X X	I A M J I X X X I X X X I X X X I X X X I X X X I X X X I X X X I X X X I X X X I X X X I X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning	- - - Eggs 	OCT-MAY - MAY-AUG Larvae	Juveniles JAN-DEC JAN-DEC	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC
IABIT LAR# 113 INVER LAR# 3 6 7	Summer flounder Tautog Weakfish PAT: Species	S F Conc.		J F M X X X J F M X X X X X X X X X X X X X X X	I A M J I X X X I X X X I X X X I X X X I X X X I X X X I X X X I X X X I X X X I X X X I X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning	Eggs 	CCT-MAY MAY-AUG Larvae MAY-NOV	Juveniles JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
HABIT RAR# 113 INVER RAR# 3 6 7 MARIN RAR#	Summer flounder Tautog Weakfish PAT: Species Rare plant PTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species	S F Conc.		J F M X X X J F M X X X X	I A M J I X X X I X X X I A M J I X X X I X X X I X X X I X X X I X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning	Eggs 	CCT-MAY MAY-AUG Larvae MAY-NOV	Juveniles Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
IABIT LAR# 113 INVER LAR# 3 6 7 IARIN LAR#	Summer flounder Tautog Weakfish PAT: Species Rare plant PTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Brackishwater clam Brackishwater clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species	S F Conc.		J F M X X X J F M X X X X	I A M J I A M J I A X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning	Eggs 	CCT-MAY - MAY-AUG Larvae MAY-NOV -	Juveniles Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
HABIT RAR# 113 INVER RAR# 3 6 7 MARIN RAR#	Summer flounder Tautog Weakfish PAT: Species Rare plant PTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species	S F Conc.		J F M X X X J F M X X X X	I A M J I A M J I A X X X I A X X X X I A X X X X X I A X X X X X I A X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X X I A X X X X X X I A X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning	Eggs 	CCT-MAY - MAY-AUG Larvae MAY-NOV -	Juveniles Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
HABIT LAR# 113 INVER AR# 3 6 7 MARIN LAR# 7	Summer flounder Tautog Weakfish PAT: Species Rare plant RTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise	S F Conc. S F Conc.		J F M X X X J F M X	I A M J I X X X I A M J I A M J I X X X I A M J I A M	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning	Eggs	CCT-MAY - MAY-AUG Larvae MAY-NOV -	Juveniles Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
HABIT RAR# 113 INVER RAR# 3 6 7 MARIN RAR# 7	Summer flounder Tautog Weakfish PAT: Species Rare plant PATEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale	S F Conc.		J F M X X X J F M X	I A M J I X X X I A M J I A M J I X X X I A M J I A M	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning	Eggs	CCT-MAY - MAY-AUG Larvae MAY-NOV -	Juveniles Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
HABIT RAR# 113 INVER RAR# 7 MARIN RAR# 7	Summer flounder Tautog Weakfish PAT: Species Rare plant PATEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale	S F Conc. S F Conc.		J F M X X X J F M - X	I A M J I X X X I A M J I X X X I A M J I X X X I A M J I X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning	Eggs	CCT-MAY MAY-AUG Larvae MAY-NOV - Pupping	Juveniles JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
HABIT RAR# 113 INVER RAR# 3 6 7 MARIN RAR# 7	Summer flounder Tautog Weakfish PAT: Species Rare plant PATEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale	S F Conc. S F Conc.		J F M X X X J F M - X	I A M J I X X X I A M J I X X X I A M J I X X X I A M J I X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning Mating	Eggs	CCT-MAY MAY-AUG Larvae MAY-NOV - Pupping	Juveniles Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec Jan-Dec	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
HABIT LAR# 113 INVER LAR# 7 CREPTI LAR# 7	Summer flounder Tautog Weakfish PAT: Species Rare plant RTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle	S F Conc. S F Conc. E E S F Conc.		J F M X X X J F M - X	I A M J I A M J I A X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X I A X X X X X X I A X X X X X X I A X X X X X X X I A X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning	Eggs	CCT-MAY MAY-AUG Larvae MAY-NOV - Pupping	Juveniles JAN-DEC	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
HABIT LAR# 113 INVER LAR# 7 MARIN LAR# 7	Summer flounder Tautog Weakfish PAT: Species Rare plant RTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle	S F Conc. S F Conc. E E S F Conc. T T E E E E		J F M X X X J F M - X	I A M J I A M	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning Nesting Nesting	Eggs	CCT-MAY MAY-AUG Larvae MAY-NOV - Pupping	Juveniles Jan-Dec	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC
IABIT LAR# 3 6 7 MARIN LAR# 7	Summer flounder Tautog Weakfish PAT: Species Rare plant RTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle	S F Conc. S F Conc. E E S F Conc. T T E E E E T T		J F M X X X J F M - X	I A M J I A M J I A X X I A X X I A M J I A X X I A X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning Nesting	Eggs	CCT-MAY MAY-AUG Larvae MAY-NOV - Pupping	Juveniles Jan-Dec Molting	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC
IABIT AR# 113 :NVEF AR# 3 6 7 IARIN AR# 7	Summer flounder Tautog Weakfish PAT: Species Rare plant RTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle	S F Conc. S F Conc. E E S F Conc. T T E E E E		J F M X X X J F M - X	I A M J I A M	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning Nesting	Eggs	CCT-MAY - MAY-AUG Larvae MAY-NOV - Pupping	Juveniles Jan-Dec	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC
HABIT LAR# 3 6 7 MARIN LAR# 7	Summer flounder Tautog Weakfish PAT: Species Rare plant RTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle	S F Conc. S F Conc. E E S F Conc. T T E E E E T T		J F M X X X J F M - X	I A M J I A M	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning Nesting MAY-NOV	Eggs	CCT-MAY MAY-AUG Larvae MAY-NOV - Pupping	Juveniles Jan-Dec Molting	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC V MAY-NOV MAY-NOV MAY-NOV MAY-NOV
HABIT RAR# 113 INVER RAR# 7 MARIN RAR# 7	Summer flounder Tautog Weakfish PAT: Species Rare plant RTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle	S F Conc. S F Conc. E E S F Conc. T T E E E E T T		J F M X X X J F M - X	I A M J I A M	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning Nesting MAY-NOV	Eggs	CCT-MAY MAY-AUG Larvae MAY-NOV - Pupping	Juveniles Jan-Dec Molting	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC V MAY-NOV MAY-NOV MAY-NOV MAY-NOV
HABIT RAR# 3 6 7 MARIN RAR# 7 S76 577 HUMAN	Summer flounder Tautog Weakfish PAT: Species Rare plant RTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle	S F Conc. S F Conc. E E S F Conc. T T E E E E T T		J F M X X X J F M - X	I A M J I A M	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning Nesting MAY-NOV	Eggs	CCT-MAY MAY-AUG Larvae MAY-NOV - Pupping	Juveniles Jan-Dec Molting	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC V MAY-NOV MAY-NOV MAY-NOV MAY-NOV
HABIT PARH 113 INVER RARH 7 MARIN RARH 7 REPTI RARH 7 576 577 110MAN COAST	Summer flounder Tautog Weakfish PAT: Species Rare plant PTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Blue crab Channeled whelk FE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale PUE: Species Green sea turtle Kemp's ridley sea turtle Loggerhead sea turtle	S F Conc. S F Conc. E E S F Conc. T T E E E E T T		J F M X X X J F M - X	I A M J I A M	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning Nesting MAY-NOV	Eggs	CCT-MAY MAY-AUG Larvae MAY-NOV - Pupping	Juveniles Jan-Dec Molting	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC V MAY-NOV MAY-NOV MAY-NOV MAY-NOV
HABIT PARH 113 INVER RARH 7 MARIN RARH 7 REPTI RARH 7 576 577 110MAN COAST	Summer flounder Tautog Weakfish PAT: Species Rare plant PTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Brackishwater clam Channeled whelk IE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale PLE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle	S F Conc. S F Conc. E E S F Conc. T T E E E E T T		J F M X X X J F M - X	I A M J I A M	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning Nesting MAY-NOV	Eggs	CCT-MAY MAY-AUG Larvae MAY-NOV - Pupping	Juveniles Jan-Dec Molting	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC V MAY-NOV MAY-NOV MAY-NOV MAY-NOV
HABIT RAR# 113 INVER RAR# 7 MARIN RAR# 7 576 577 1UMAN COAST HUMAN COAST HUMAN 65	Summer flounder Tautog Weakfish CAT: Species Rare plant CTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Blue crab Channeled whelk IE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale CLE: Species Green sea turtle Kemp's ridley sea turtle Loggerhead sea turtle	S F Conc. S F Conc. E E S F Conc. T T E E E E T T		J F M X X X J F M - X	I A M J I A M	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning Nesting MAY-NOV	Eggs	CCT-MAY MAY-AUG Larvae MAY-NOV - Pupping	Juveniles Jan-Dec Molting	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC V MAY-NOV MAY-NOV MAY-NOV MAY-NOV
HABIT RAR# 113 INVER RAR# 7 MARIN RAR# 7 576 577 1UMAN COAST HUMAN COAST HUMAN 65	Summer flounder Tautog Weakfish PAT: Species Rare plant PTEBRATE: Species Brackishwater clam Carolina marsh clam Brackishwater clam Blue crab Channeled whelk PE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Humpback whale PLE: Species Green sea turtle Leatherback sea turtle Loggerhead sea turtle LITILE ISLAND USCG STATION	S F Conc. S F Conc. E E S F Conc. T T E E E E T T		J F M X X X J F M - X	I A M J I A M	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG Spawning Nesting MAY-NOV	Eggs JAN-DEC Hatching	CCT-MAY MAY-AUG Larvae MAY-NOV - Pupping	Juveniles Jan-Dec Molting	APR-NOV APR-OCT JAN-DEC APR-NOV Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC V MAY-NOV MAY-NOV MAY-NOV MAY-NOV

Virginia: ESIMAP 2 (cont.)

HUMAN USE RESOURCES: (cont.)

PARK:

 HUN#
 Name
 Contact
 Phone

 137
 FALSE CAPE STATE PARK
 VA DCR
 757/426-7128

WATER INTAKE:

 HUN#
 Name
 Contact
 Phone

 145
 WATER INTAKE
 JOHN GALLEGOS
 757/721-2412

WILDLIFE REFUGE:

HUN#NameContactPhone146BACK BAY NATIONAL WILDLIFE REFUGEU.S. FISH AND WILDLIFE SERVICE757/721-2412

BIOLOGICAL RESOURCES:

BIRD	:
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BYB#	: Species	S F Conc.	T F M A M T T A C O N D	Noating	Migrating	Mol+ing		
	species	5 F CONC.	J F M A M J J A S O N D		migracing			
8	Brown pelican	С	$\times \times $	-	-	-		
	Common loon	HTCH	X X X X X X X X X X X X X X X X X X X		-	-		
	Northern gannet Red-breasted merganser	HIGH VERY HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Red-necked grebe		X X	-	-	-		
	Red-throated loon		X X X X X X		-	-		
14	Black scoter Surf scoter	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	White-winged scoter		X X X X X X X		_	-		
113	American black duck	LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		
	Gadwall Great blue heron	LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Great egret	C LOW	XXXXXXXXX	_	_	_		
	Mallard	LOW	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
E.C.O.	Tundra swan	LOW	X X X X X X X X X X	- MAD AUC	-	-		
362	Peregrine falcon	Т	X X X X X X	MAR-AUG	_	_		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D		Eggs	Larvae	Juveniles	Adults
6	Alewife		X X X X X X X X X X X X X			-	JAN-DEC	
	American eel		\times		-	-	JAN-DEC	-
	Atlantic menhaden		X X X X X X X X X X X X		-	-	JAN-DEC	-
	Blueback herring Bowfin		X X X X X X X X X X X X X X X X X X X	– APR–₁∏IN	_	_	JAN-DEC -	- JAN-DEC
	Brown bullhead		$\times \times $		-	-	-	JAN-DEC
	Common carp		X X X X X X X X X X X X X		-	-	-	JAN-DEC
	Spot Summer flounder		X X X X X X X X X X X X X X X X X X X	_	<u>-</u>	_	JAN-DEC JAN-DEC	_
	White perch		\times		APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Yellow perch		X X X X X X X X X X X X X	APR-JUN	-	-	JAN-DEC	JAN-DEC
7	Atlantic croaker Atlantic mackerel		$\begin{smallmatrix} & & \times \\ & & \times & \times$	-	-	_	AUG-DEC -	MAY-NOV MAR-APR
	Atlantic menhaden		X X X X X X X X X X X X X	-	-	-	JAN-DEC	MAY-OCT
	Black drum		X X X X X X X	-	-	-	-	APR-OCT
	Black sea bass Bluefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUN-OCT -	-	_	APR-OCT MAY-NOV	APR-OCT APR-NOV
	Butterfish		X X X X X X X X X	-	-	-	JUL-NOV	MAR-NOV
	Crevalle jack		$\times \times $	-	-	-	JAN-DEC	-
	Northern kingfish Northern searobin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-AUG -	-	_	-	APR-OCT MAR-OCT
	Pollock		X X X X X X X X X X X X X X X X X X X	-	-	-	-	DEC-APR
	Red drum		X X X X X X X	JUL-NOV	-	-	-	MAY-NOV
	Red hake		X X X X X X X X	-	-	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark		$\times \times \times \times \times$	_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake Southern kingfish (whiting)		XXXXX XXX	-	-	-	-	OCT-MAY APR-OCT
	Spanish mackerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	_	APR-MAY
	Spiny dogfish		X X X X X X X X X	-	-	-	-	NOV-APR
	Spot		X X X X X X X X X X X X	-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		XXXXXXXX	-	_	_	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	-	APR-NOV	APR-NOV
	Summer flounder		X X X X X X X X X X X X		-	OCT-MAY	-	APR-OCT
	Tautog Weakfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	- MAY-AUG	- APR-NOV	JAN-DEC APR-NOV
18	Alewife		XXXXX	-	_	-	-	FEB-JUN
	American eel		X X X X X X X X X X X X X	-	-	-	JAN-DEC	SEP-DEC
	American shad Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	NOV-MAR AUG-DEC	JAN-JUN MAY-NOV
	Atlantic mackerel		XX	-	-	-	-	MAR-APR
	Atlantic menhaden		X X X X X X X X X X X X X	-	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside Atlantic spadefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL -	_	-	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic sturgeon	С	X X X X X X X X X X	-	-	-	-	JAN-OCT
	Bay anchovy		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Black drum Black sea bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN JUN-OCT	APR-JUN -	APR-JUN -	APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring		XXXXXXXXXXX		_	_	NOV-MAR	JAN-JUN
	Bluefish		X X X X X X X X	-	-	-	MAY-NOV	APR-NOV
	Butterfish Clearnose skate		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	-	JUL-NOV -	MAR-NOV MAY-NOV
	Gobies		X X X X X X X X X X X X X X X X X X X	APR-SEP	- APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad Hogchoker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-SEP	- MAY-SEP	- MAY-SEP	NOV-MAR JAN-DEC	JAN-JUN JAN-DEC
	Inland silverside		X X X X X X X X X X X X X X X X X X X		MAI-SEP	- MAI-SEP	JAN-DEC	JAN-DEC
	Minnows		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog Northern kingfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG -	-	-	JAN-DEC -	JAN-DEC APR-OCT
	Northern pipefish		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin Red drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL JUL-NOV	_	_	- AUG-SEP	MAR-OCT MAY-NOV
	Red hake		XXXX XXX	- 00T-NOA	-	-	FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark Scup (porgy)		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	MAY-OCT JUN-OCT	MAY-OCT MAR-OCT
	Silver hake		X X X X X X X X X X	-	-	_	-	OCT-MAY
	Silver perch		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Spot Spotted hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	DEC-APR -	MAR-NOV MAR-JUN	MAR-NOV MAR-JUN
	Spooted Make						-111/ OOM	SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass Striped killifish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- ADR-SED	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Summer flounder		X X X X X X X X X X X X X X X X X X X		-	- OCT-MAY	JAN-DEC JAN-DEC	APR-OCT
	Tautog			-	-	-	-	OCT-APR
	Threadfin shad		X X X X X X X X	-	-	-	-	FEB-MAY
	Weakfish		X X X X X X X X	APR-AUG	_	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
			** **					· · ·
HABI		C E Cons	T T W A W T T A C C					
KAR#	Species	S F Conc.	J F M A M J J A S O N D					
113	Rare plant		$\times \times $					

Virginia: ESIMAP 3 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
6	Brackishwater clam		X X X X X X X X X X X X			-	JAN-DEC	JAN-DEC
7	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Channeled whelk		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
18	Horseshoe crab		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Knobbed whelk		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
19	Blue crab		$\times \times $	MAY-OCT	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
	Channeled whelk		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
7	Bottlenose dolphin		X X X X X X	-	-	-	-	
	Common dolphin		X X X X X X	-	-	-	-	
	Harbor porpoise		$X \ X \ X \ X \ X$	-	-	-	_	
	Humpback whale	E E	$\times \times $	-	JAN-DEC	-	_	
18	Harbor porpoise		$X \ X \ X \ X \ X$	-	-	-	-	
20	Bottlenose dolphin		$\times \times \times \times \times \times \times$	-	-	-	-	
REPI	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesti	ng Juvenile	es Adults
7	Green sea turtle	T T	X X X X X X X	-	-		MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	_	_	_	MAY-NOV	MAY-NOV
	Leatherback sea turtle	E E	X X X X X X X	_	_	_	_	MAY-NOV
	Loggerhead sea turtle	T T	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
576	Loggerhead sea turtle	ТТ	$\times \times \times \times \times \times \times$	MAY-NOV	-	-	-	MAY-NOV

HUMAN USE RESOURCES:

HUN#	Name	Contact	Phone
146	BACK BAY NATIONAL WILDLIFF REFUGE	U.S. FISH AND WILDLIFE SERVICE	757/721-2412

BIOLOGICAL RESOURCES:

R	т	R	D	•

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	g Molting	ī	
	Yellow-crowned night-heron	C 3 NESTS	X X X X X X X X	MAY-JUL	-		· -	
	Yellow-crowned night-heron	C 4 NESTS	X X X X X X X X X	MAY-JUL	-	-		
454	Yellow-crowned night-heron	C 8 NESTS	$\times \times $	MAY-JUL	-	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Alewife		XXXXX	-	-	-	-	FEB-JUN
	American eel		$\times \times $	-	-	-	JAN-DEC	SEP-DEC
	American shad			-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker		$X\;X\;X\;X\;X\;X\;X\;X$	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	-	-	-	-	MAR-APR
	Atlantic menhaden		$X\ X\ X$	-	-	VON-YAM	JAN-DEC	MAY-OCT
	Atlantic silverside				-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish		XXXX	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	X X X X X X X X X X X		-	-	-	JAN-OCT
	Bay anchovy		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Black drum		X X X X X X X X	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		X X X X X X X	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring		XXXXXXXXXX	-	-	-	NOV-MAR	JAN-JUN
	Bluefish		X X X X X X X X	_	_	_	MAY-NOV	APR-NOV
	Butterfish		X X X X X X X X X	-	-	-	JUL-NOV -	MAR-NOV
	Clearnose skate Gobies		X X X X X X X	- -			JAN-DEC	MAY-NOV
			X X X X X X X X X X X X X X X X X X X	APK-SEP	APR-SEP	APR-OCT		JAN-DEC
	Harvestfish Hickory shad		X X X X X X X X X X X X X X X X X X X	_	_	_	JUL-OCT NOV-MAR	APR-OCT
	2					- MAY-SEP		JAN-JUN
	Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X		MAY-SEP	MAI-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Northern kingfish		XXXXXXXX	AIN A0G	_	_	- OAN DEC	APR-OCT
	Northern pipefish		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Northern puffer		XXXXXXXXX	MAY-AUG	_	_	MAR-OCT	MAR-OCT
	Northern searobin		XXXXXXXX	MAY-JUL	_	_	-	MAR-OCT
	Red drum		XXXXXX	JUL-NOV	_	_	AUG-SEP	MAY-NOV
	Red hake		X X X X	-	-	-	FEB-MAY	FEB-MAY
	_ ,, , ,							SEP-NOV
	Sandbar shark		X X X X X X	-	-	_	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	_	JUN-OCT	MAR-OCT
	Silver hake		X X X X X X X X X X	-	_	_	-	OCT-MAY
	Silver perch		X X X X X X X X X X X X X X X X X X X	APK-MAY	_	- DEC-APR	JAN-DEC	JAN-DEC
	Spot Spotted hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted make		X X X X	-	_	_	MAR-JUN	MAR-JUN
	Cnotted gootrout		V V V V V V V	MAN TIIT			ADD MOTA	SEP-NOV
	Spotted seatrout		X X X X X X X X X X X X X X X X X X X	MAY-JUL -	-	_	APR-NOV JAN-DEC	APR-NOV JAN-DEC
	Striped bass Striped killifish		X X X X X X X X X X X X X X X X X X X		-	_		
	Summer flounder		X X X X X X X X X X X X X X X X X X X		-	- OCT-MAY	JAN-DEC JAN-DEC	JAN-DEC APR-OCT
	Tautog		X X X X X X X X X X X X X X X X X X X		_	- MAI	JAN-DEC	OCT-APR
	Threadfin shad		X X X X X X X X	_	_	_	_	FEB-MAY
	Infeddiin Shaa		11 11 11 11 11 11 11					SEP-NOV
	Weakfish		X X X X X X X X	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
18	Horseshoe crab		X X X X X X X X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Knobbed whelk		X X X X X X X X X X X X	_	_	_	JAN-DEC	JAN-DEC
19	Blue crab		X X X X X X X X X X X X					JAN-DEC
	Channeled whelk		X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
18	Harbor porpoise		X X X X X X X	-		-	-	
	Bottlenose dolphin		X X X X X X X	-	-	_	_	

BIOLOGICAL RESOURCES:

BIRD:

BIRD								
	Species	S F Conc.	J F M A M J J A S O N D				J 	
433	Yellow-crowned night-heron Yellow-crowned night-heron	C 4 NESTS	$\times \times $	MAY-JUL	-	-		
445 462	Yellow-crowned night-heron Great egret	C 5 NESTS C 9 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	-		
402	Yellow-crowned night-heron	C 2 NESTS		MAY-JUL	-	-		
FISH	:							
	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
1.0	71							
18	Alewife American eel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	- JAN-DEC	FEB-JUN SEP-DEC
	American shad			-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker Atlantic mackerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	AUG-DEC -	MAY-NOV MAR-APR
	Atlantic menhaden		$X \times X \times$	-	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL -	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish Atlantic sturgeon	С	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	AUG-OCT -	AUG-NOV JAN-OCT
	Bay anchovy		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Black drum Black sea bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN JUN-OCT	APR-JUN -	APR-JUN -	APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring		$X \times X \times$	-	-	-	NOV-MAR	JAN-JUN
	Bluefish Butterfish		X X X X X X X X	-	-	-	MAY-NOV	APR-NOV
	Clearnose skate		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	-	JUL-NOV -	MAR-NOV MAY-NOV
	Gobies		$\times \times $	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	-	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Hogchoker		$\times \times $		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside Minnows		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		\times		-	-	JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish		$\begin{smallmatrix} & & \times & \times & \times & \times & \times & \times \\ \times & \times & \times &$	– MAY TIM	-	-	- JAN-DEC	APR-OCT JAN-DEC
	Northern puffer		XXXXXXXX	MAY-AUG	_	_	MAR-OCT	MAR-OCT
	Northern searobin		X X X X X X X X	MAY-JUL	-	-	-	MAR-OCT
	Red drum Red hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUL-NOV -	_	-	AUG-SEP FEB-MAY	MAY-NOV FEB-MAY
								SEP-NOV
	Sandbar shark Scup (porgy)		$\begin{array}{c} X & X & X & X & X & X \\ Y & Y & Y & Y & Y & Y & Y & Y \end{array}$	-	- -	- -	MAY-OCT JUN-OCT	MAY-OCT
	Scup (porgy) Silver hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JUN-OCT -	MAR-OCT OCT-MAY
	Silver perch		X X X X X X X X X X X X X	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot Spotted hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	DEC-APR -	MAR-NOV MAR-JUN	MAR-NOV MAR-JUN
	specied nake						111111111111111111111111111111111111111	SEP-NOV
	Spotted seatrout Striped bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL	_	-	APR-NOV JAN-DEC	APR-NOV JAN-DEC
	Striped bass Striped killifish		X X X X X X X X X X X X X X X X X X X	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Summer flounder		\times		-	OCT-MAY		APR-OCT
	Tautog Threadfin shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-	-	OCT-APR FEB-MAY
								SEP-NOV
6.6	Weakfish Alewife		$\begin{array}{c} X \ X \ X \ X \ X \ X \ X \end{array}$	APR-AUG -	-	MAY-AUG -	APR-NOV -	APR-NOV FEB-JUN
00	American eel		X X X X	-	-	-	FEB-MAY	-
	American shad		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		-	-	NOV-MAR	JAN-JUN -
	Atlantic croaker Atlantic mackerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	-	JAN-DEC -	- MAR-APR
	Atlantic menhaden		$\times \times $		-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside Atlantic spadefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL -	-	-	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic sturgeon	С	$\times \times $	-	-	-	JAN-DEC	APR-NOV
	Bay anchovy Black drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_ λ DD _ TIIN	- APR-JUN	JAN-DEC APR-NOV	JAN-DEC APR-NOV
	Black sea bass		XXXXX	-	- AIR OON	- ALK OON	APR-AUG	-
	Blueback herring		XXXXXXXXXXX	-	-	-	NOV-MAR	JAN-JUN
	Bluefish Butterfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	-	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Clearnose skate		X X X X X X X	-	-	-	-	MAY-NOV
	Gobies Harvestfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP	APR-SEP	APR-OCT	JAN-DEC JUL-OCT	JAN-DEC APR-OCT
	Hickory shad		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	NOV-MAR	JAN-JUN
	Hogchoker Inland silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		MAY-SEP -	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog Northern kingfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG -	-	-	JAN-DEC -	JAN-DEC APR-OCT
	Northern pipefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer Northern searobin		$\begin{smallmatrix} X&X&X&X&X&X&X\\ X&X&X&X&X&X&X\end{smallmatrix}$	MAY-AUG MAY-JUL		-	MAR-OCT	MAR-OCT MAR-OCT
	Red drum		$X \times X \times X \times X$	JUL-NOV	_	-	- AUG-SEP	MAY-NOV
	Red hake		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-	FEB-MAY	FEB-MAY
	Sandbar shark		X X X X X X	_	_	_	MAY-OCT	SEP-NOV MAY-OCT
	Scup (porgy)		X X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake Silver perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	- JAN-DEC	OCT-MAY JAN-DEC
	Spot		$\times \times $	-	-	DEC-APR	MAR-NOV	JAN-DEC
	Spotted hake		X X X X	-	-	-	MAR-JUN	MAR-JUN
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	-	APR-NOV	SEP-NOV APR-NOV
	Striped bass		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Striped killifish Summer flounder		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Tautog			-	-	-	-	OCT-APR
	Threadfin shad		X X X X X X X X	-	-	-	-	FEB-MAY SEP-NOV
	Weakfish		X	_	-	-	JAN-DEC	_ ⊃⊓E_M∩∧
TARTE	RTEBRATE:							
	RTEBRATE: Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eaas	Larvae	Juveniles	Adults
18	Horseshoe crab		X X X X X X X X X X X X X X X X X X X	_	-	-	JAN-DEC	JAN-DEC
19	Knobbed whelk Blue crab		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-OCT	- MAY-SEP	- MAY-NOV	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Channeled whelk		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
66	Blue crab Eastern oyster		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- JUN-SEP	MAY-SEP JUN-SEP	MAY-NOV JUN-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Knobbed whelk		X X X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC

Virginia: ESIMAP 5 (cont.)

BIOLOGICAL RESOURCES: (cont.)

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O 1	N D	Mating	Calving	Pupping	Molting
18	Harbor porpoise		X X X X X	X	-	-	-	-
20	Bottlenose dolphin		X X X X X X X		-	-	-	-

S F Conc.

BIOLOGICAL RESOURCES:

BIRD:

RAR# Species

413	Yellow-crowned night-heron	C 3 NESTS	$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $	MAY-JUL	_	_		
	Yellow-crowned night-heron		$X \times X \times X \times X \times X$		_	_		
459	Great egret	C 309 NESTS	X X X X X X X X X		_	_		
	Peregrine falcon	C 309 NESTS T	X X X X X X	MAR-AUG	-	-		
FISH	:							
	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Alewife		X X X X X					FEB-JUN
00	American eel		XXXX	_	_	_	FEB-MAY	
	American shad		X X X X X X X X X X	_	_	_	NOV-MAR	JAN-JUN
	Atlantic croaker		X X X X X X X X X X X X X		_	_	JAN-DEC	-
	Atlantic mackerel		XX	_	_	_	-	MAR-APR
	Atlantic menhaden		X X X X X X X X X X X X X	_	_	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		imes ime	MAR-JUL	_	_	JAN-DEC	JAN-DEC
	Atlantic spadefish		X X X X	_	_	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	X X X X X X X X X X	-	_	_	JAN-DEC	APR-NOV
	Bay anchovy		X X X X X X X X X X	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Black drum		X X X X X X X X	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		X X X X X	-	-	-	APR-AUG	-
	Blueback herring		$X \ X \ X \ X \ X \ X \ X$	-	-	_	NOV-MAR	JAN-JUN
	Bluefish		X X X X X X X X	-	-	_	MAY-NOV	APR-NOV
	Butterfish		X X X X X X X X X	-	-	_	JUL-NOV	MAR-NOV
	Clearnose skate		X X X X X X X	-	-	-	-	MAY-NOV
	Gobies		$X\ X\ X$	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad		$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-	NOV-MAR	JAN-JUN
	Hogchoker		$X \; X \; $	MAY-SEP		MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		$X \; X \; $		-	_	JAN-DEC	JAN-DEC
	Minnows		$X \; X \; $		-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Northern kingfish		X X X X X X X	-	-	-	-	APR-OCT
	Northern pipefish		X X X X X X X X X X X X		_	-	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X		_	-	MAR-OCT	MAR-OCT
	Northern searobin		X X X X X X X X		-	_		MAR-OCT
	Red drum		X X X X X X X	JUL-NOV	-	_	AUG-SEP	MAY-NOV
	Red hake		XXXX XXX	_	-	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		X X X X X X X X X X X X X X X X X X X	-	-	-	-	OCT-MAY
	Silver perch		X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X	-	-	DEC-APR	MAR-NOV	JAN-DEC
	Spotted hake		X X X X X X X	-	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Striped killifish		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder		X X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Tautog		XXXX XXX	-	-	-	-	OCT-APR
	Threadfin shad		X X X X	-	-	-	-	FEB-MAY SEP-NOV
	Weakfish		X	-	-	-	JAN-DEC	-
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
66	Blue crab		X X X X X X X X X X X X X X X X X X X	-	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		$\times \times $	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
	Knobbed whelk		X X X X X X X X X X X X X X	_	_		JAN-DEC	JAN-DEC

JFMAMJJASOND Nesting Migrating Molting

HUMAN USE RESOURCES:

HUN#	Name	Contact	Phone
151	GREAT DISMAL SWAMP NWR	U.S. FISH AND WILDLIFE SERVICE	757/986-3705

BIOLOGICAL RESOURCES:

ъ	TDD	
\mathbf{D}	$_{\rm LKD}$	

RAR#	Species	S F Conc	. JFM	${\tt A} \ {\tt M} \ {\tt J} \ {\tt J} \ {\tt A} \ {\tt S} \ {\tt O} \ {\tt N}$	D Nesting	Migrating	Molting
88	American black duck	LOW	X X X	X X X	X -	-	-
	Bufflehead	MODE	RATE X X X	X X X	X -	-	-
	Canada goose		XXX	X X X	X -	-	-
	Canvasback	HIGH	XXX	X X X	X -	-	-
	Common goldeneye		XXX	X X X	X -	-	-
	Mergansers		XXX	X X X	X -	-	-
	Ring-necked duck		XXX	X X X	X -	-	-
	Ruddy duck	HIGH	XXX	X X X	X -	-	-
	Scaup	MODE	RATE X X X	X X X	X -	-	-
	Scoters		XXX	X X X	X -	-	-
413	Yellow-crowned night-heron	C 3 NE	STS X	$X\ X\ X\ X\ X\ X\ X\ X\ X$	MAY-JUL	-	-

FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
66	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel		XXXX	-	-	-	FEB-MAY	-
	American shad		$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker		$X\;X\;X\;X\;X\;X\;X\;X\;$	-	-	-	JAN-DEC	-
	Atlantic mackerel		X X	-	-	-	-	MAR-APR
	Atlantic menhaden		$X\ X\ X\ X\ X\ X\ X\ X\ X\ X\ X$	-	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		$X\;X\;X\;X\;X\;X\;X\;X\;$	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish		X X X X	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	C	$X\ X\ X\ X\ X\ X\ X\ X\ X\ X\ X$	-	-	-	JAN-DEC	APR-NOV
	Bay anchovy		$X\ X\ X\ X\ X\ X\ X\ X\ X\ X\ X$		-	-	JAN-DEC	JAN-DEC
	Black drum			APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		X X X X X	-	-	-	APR-AUG	-
	Blueback herring		$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-	NOV-MAR	JAN-JUN
	Bluefish			-	-	-	MAY-NOV	APR-NOV
	Butterfish		$X\ X\ X\ X\ X\ X\ X\ X\ X$	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate		X X X X X X X	-	-	-	-	MAY-NOV
	Gobies		$X\ X\ X$	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad		$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-	NOV-MAR	JAN-JUN
	Hogchoker				MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside				-	-	JAN-DEC	JAN-DEC
	Minnows		$X\ X\ X$		-	-	JAN-DEC	JAN-DEC
	Mummichog				-	-	JAN-DEC	JAN-DEC
	Northern kingfish		X X X X X X X	-	-	-	-	APR-OCT
	Northern pipefish		$X\ X\ X$		-	-	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin		X X X X X X X X	MAY-JUL	-	-	-	MAR-OCT
	Red drum		X X X X X X X	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake		XXXXXXXXX	-	-	_	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		$X \ X \ X \ X \ X \ X \ X$	-	-	-	-	OCT-MAY
	Silver perch		$X\ X\ X$	-	-	-	JAN-DEC	JAN-DEC
	Spot		$X \; X \; $	-	-	DEC-APR	MAR-NOV	JAN-DEC
	Spotted hake		X X X X X X X X	-	-	-	MAR-JUN	MAR-JUN
								SEP-NOV
	Spotted seatrout		$X\;X\;X\;X\;X\;X\;X\;X\;$	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass		$X\ X\ X$	-	-	-	JAN-DEC	JAN-DEC
	Striped killifish		$X\ X\ X\ X\ X\ X\ X\ X\ X\ X\ X$		-	-	JAN-DEC	JAN-DEC
	Summer flounder			-	-	-	JAN-DEC	JAN-DEC
	Tautog		X X X X X X X X X X X X X X X X X X X	-	-	-	-	OCT-APR
	Threadfin shad		XXXXXXXXX	-	_	_	-	FEB-MAY SEP-NOV
	Weakfish		$\times \times $	-	-	-	JAN-DEC	-
90	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American shad		X X X X X	-	-	-	-	FEB-JUN
	Blueback herring		X X X X X	-	-	-	-	FEB-JUN
	Hickory shad		XXXXX	-	-	-	-	FEB-JUN
INVE RAR#	RTEBRATE: Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
66	Blue crab		X X X X X X X X X X X X X	-	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		X X X X X X X X X X X X X X X X X X X		JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
	Knobbed whelk		X X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC

Knobbed whelk HUMAN USE RESOURCES:

HUN#	Name	Contact	Phone
151	GREAT DISMAL SWAMP NWR	U.S. FISH AND WILDLIFE SERVICE	757/986-3705

BIOLOGICAL RESOURCES:

BIRD	:
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PIKD	•							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	r	
88	American black duck						-	
88	Bufflehead	LOW MODERATE	$egin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
		MODERALE			_	_		
	Canada goose Canvasback	HIGH	$egin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Common goldeneye	птСп	$egin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
					_	_		
	Mergansers		$egin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Ring-necked duck	HTCH			_	_		
	Ruddy duck	HIGH	X X X X X X X X X		_	_		
	Scaup	MODERATE	XXXX XXX		-	_		
	Scoters		X X X X		-	_		
	Wood duck	6 377.070	X X X X X X X X X X X X X X X X X X X		-	_		
12	Great blue heron	6 NESTS	X X X X X X X X X X X X X X X X X X X	MAY-JUL	_	-		
ISH					_	_		
R#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs 	Larvae	Juveniles	Adults
66	Alewife		X X X X X	-	-	-	-	FEB-JUI
	American eel		X X X X	-	-	-	FEB-MAY	-
	American shad		X X X X X X X X X X X X X X X X X X X		-	-	NOV-MAR	JAN-JU
	Atlantic croaker		$\times \times $	-	-	-	JAN-DEC	-
	Atlantic mackerel		X X	-	-	-	-	MAR-AP
	Atlantic menhaden		$\times \times $	-	-	MAY-NOV	JAN-DEC	MAY-OC
	Atlantic silverside		$\times \times $	MAR-JUL	-	-	JAN-DEC	JAN-DE
	Atlantic spadefish		XXXX	-	-	-	AUG-OCT	AUG-NO
	Atlantic sturgeon	C	imes ime	-	-	-	JAN-DEC	APR-NO
	Bay anchovy		imes ime	APR-SEP	-	-	JAN-DEC	JAN-DE
	Black drum		X X X X X X X X	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NO
	Black sea bass		X X X X X	_	-	_	APR-AUG	_
	Blueback herring		X X X X X X X X X X X X X X X X X X X	-	_	_	NOV-MAR	JAN-JU
	Bluefish		X X X X X X X X	-	_	_	MAY-NOV	APR-NO
	Butterfish		X X X X X X X X X	-	_	-	JUL-NOV	MAR-NO
	Clearnose skate		X X X X X X X	_	_	_	_	MAY-NO
	Gobies		X X X X X X X X X X X X X	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DE
	Harvestfish		XXXXXX	_	_	_	JUL-OCT	APR-OC
	Hickory shad		XXXXXXXXXX	_	_	_	NOV-MAR	JAN-JU
	Hogchoker		X X X X X X X X X X X X X X X X X X X		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DE
	Inland silverside		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DE
	Minnows		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DE
	Mummichog		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DE
	Northern kingfish		XXXXXXX	AFK-AUG		_	- DEC	APR-OC
	Northern pipefish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DE
	Northern puffer		X X X X X X X X X X X X X X X X X X X	MAY-AUG	_	_	MAR-OCT	MAR-OC
	Northern puller Northern searobin		x	MAY-AUG MAY-JUL	_	_	MAR-OCT	
					=	-		MAR-OC
	Red drum		XXXXXX	JUL-NOV	-		AUG-SEP	MAY-NO
	Red hake		XXXX XXX	-	_	_	FEB-MAY	FEB-MA SEP-NO
	Sandbar shark		X X X X X X	-	-	_	MAY-OCT	MAY-OC
	Scup (porgy)		$X\ X\ X\ X\ X\ X\ X\ X\ X$	-	-	-	JUN-OCT	MAR-OC
	Silver hake		X X X X X X X X X X X X X X X X X X X	-	-	-	-	OCT-MA
	Silver perch		$\times \times $	-	-	-	JAN-DEC	JAN-DE
	Spot		$\times \times $	-	-	DEC-APR	MAR-NOV	JAN-DE
	Spotted hake		$X \ X \ X \ X \qquad X \ X \ X$	-	_	-	MAR-JUN	MAR-JU
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	-	APR-NOV	APR-NO
	Striped bass		imes ime	-	-	-	JAN-DEC	JAN-DE
	Striped killifish		imes ime	APR-SEP	-	-	JAN-DEC	JAN-DE
	Summer flounder		imes ime	-	-	-	JAN-DEC	JAN-DE
	Tautog		X X X X X X X X X X	-	-	_	-	OCT-AP
	Threadfin shad		X X X X X X X X	-	-	-	-	FEB-MA
								SEP-NO
	Weakfish		x	-	_	_	JAN-DEC	_
90	Alewife		XXXXX	-	_	_	-	FEB-JU
-	American shad		XXXXX	_	_	_	_	FEB-JU
	Pluoback horring		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~					FED OU

INVERTEBRATE:

250 Alewife

	J F M A M J J A S O N D Spawning Eggs Larvae Juveniles	Species S F Conc.	Adults	
Eastern oyster X X X X X X X X X X X X X JUN-SEP JUN-SEP JAN-DEC	X X X X X X X X X X X JUN-SEP JUN-SEP JUN-SEP JAN-DEC	Eastern oyster	JAN-DEC JAN-DEC JAN-DEC	

X X X X X

X X X X X

 $\mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}$

 $\mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}$

 $\mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}$

FEB-JUN FEB-JUN FEB-JUN

FEB-JUN FEB-JUN FEB-JUN FEB-OCT FEB-JUN FEB-JUN FEB-JUN FEB-OCT FEB-JUN FEB-JUN FEB-OCT

FEB-JUN

FEB-JUN

FEB-JUN

FEB-JUN

FEB-JUN

FEB-JUN

FEB-OCT

HUMAN USE RESOURCES:

Blueback herring

Blueback herring

Hickory shad

American shad

Hickory shad

HUN#	Name	Contact	Phone
151	GREAT DISMAL SWAMP NWR	U.S. FISH AND WILDLIFE SERVICE U.S. FISH AND WILDLIFE SERVICE	757/986-3705
156	NANSEMOND NATIONAL WILDLIFE REFUGE		757/986-3705

BIOLOGICAL RESOURCES:

BIRD:

RAR# Species

RAR#	Species	S F Conc.	J F M A M J J A S O N D		Migrating	Molting		
		C	X X X X X X X X X				_	
O	Common loon	C	XXX	_	_	_		
	Northern gannet	HIGH	X X X X X X		-	_		
	Red-breasted merganser	VERY HIGH	X X X X X X		_	_		
	Red-necked grebe		X X	-	-	-		
	Red-throated loon		X X X X X X X X X X X X X X X X X X X		-	-		
14	Black scoter	HIGH		-	-	-		
	Surf scoter		X X X X X X X X		-	-		
	White-winged scoter		X X X X X X X X	-	-	_		
FISH	:							
RAR#	Species	S.F.Conc.	JEMAMJJASOND	Spawning	Eggs	Larvae	Juveniles	Adults
	Species							
7	Atlantic croaker		X X X X X X X X	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	-	-	-	-	MAR-APR
	Atlantic menhaden		X X X X X X X X X X X X		-	_	JAN-DEC	MAY-OCT
	Black drum Black sea bass		XXXXXX	- JUN-OCT	_	-	- APR-OCT	APR-OCT APR-OCT
	Bluefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_	MAY-NOV	APR-NOV
	Butterfish		XXXXXXXXX	_	_	_	JUL-NOV	MAR-NOV
	Crevalle jack		imes ime	-	-	-	JAN-DEC	-
	Northern kingfish		X X X X X X X	MAY-AUG	-	-	-	APR-OCT
	Northern searobin		X X X X X X X X	-	-	-	-	MAR-OCT
	Pollock Red drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	-	DEC-APR MAY-NOV
	Red hake		XXXX XXX	- 00L-NOV	_	_	FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-		-	JUN-OCT	MAR-OCT
	Silver hake		X X X X X X X X X	-	_	-	-	OCT-MAY
	Southern kingfish (whiting) Spanish mackerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	- -	APR-OCT APR-MAY
	Spiny dogfish		X X X X X X X X	_	_	_	-	NOV-APR
	Spot		\times		-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		$X \ X \ X \ X \ X \ X \ X$		-	-	MAR-JUN	MAR-JUN
								SEP-NOV
	Spotted seatrout			MAY-JUL	-	- OCE MAY	APR-NOV	APR-NOV
	Summer flounder Tautog		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	OCT-MAY -	_	APR-OCT JAN-DEC
	Tautog Weakfish		X X X X X X X X X X X X X X X X X X X		_	- MAY-AUG	- APR-NOV	APR-NOV
18	Alewife		XXXXX	-	-	-	-	FEB-JUN
	American eel		$\times \times $	-	-	-	JAN-DEC	SEP-DEC
	American shad		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	NOV-MAR	JAN-JUN
	Atlantic croaker		X X X X X X X X		_	-	AUG-DEC	MAY-NOV
	Atlantic mackerel Atlantic menhaden		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	- MAY-NOV	- JAN-DEC	MAR-APR MAY-OCT
	Atlantic menhaden Atlantic silverside		X X X X X X X X X X X X X		_	MAI -NOV -	JAN-DEC	JAN-DEC
	Atlantic spadefish		XXXX	-	_	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon	C	imes ime	-	-	-	-	JAN-OCT
	Bay anchovy		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Black drum Black sea bass		X	APR-JUN JUN-OCT	APR-JUN -	APR-JUN -	APR-NOV	APR-NOV
	Blueback herring		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	APR-OCT NOV-MAR	APR-OCT JAN-JUN
	Bluefish		XXXXXXXX	_	_	_	MAY-NOV	APR-NOV
	Butterfish		X X X X X X X X X	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate			-	-	-	-	MAY-NOV
	Gobies		X X X X X X X X X X X X		APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Hogchoker		X X X X X X X X X X X X X			MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		\times		-	-	JAN-DEC	JAN-DEC
	Minnows		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	— МЛУ— ПІМ	-	-	- JAN-DEC	APR-OCT JAN-DEC
	Northern puffer		XXXXXXXX		_	_	MAR-OCT	MAR-OCT
	Northern searobin		$\times \times \times \times \times \times \times \times$	MAY-JUL	_	_	_	MAR-OCT
	Red drum		X X X X X X X X X	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake		X X X X X X X X	-	-	-	FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark Scup (porgy)		$\begin{smallmatrix} & & \times & \times & \times & \times & \times \\ & \times & \times & \times & \times$	_	_	-	MAY-OCT JUN-OCT	MAY-OCT MAR-OCT
	Silver hake		XXXXXXXXXXX		_	_	-	OCT-MAY
	Silver perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	- DEC-APR	JAN-DEC	JAN-DEC
	Spot		$\begin{array}{cccccccccccccccccccccccccccccccccccc$				MAR-NOV	MAR-NOV
	Spotted hake		X X X X	-	-	-	MAR-JUN	MAR-JUN
	Spotted goot yout		V V V V V V V V	MAN TITT	_	_	ADD MOT	SEP-NOV APR-NOV
	Spotted seatrout Striped bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	APR-NOV JAN-DEC	APR-NOV JAN-DEC
	Striped bass Striped killifish		X X X X X X X X X X X X X X X X X X X		_		JAN-DEC	JAN-DEC
	Summer flounder		\times	-		- OCT-MAY	JAN-DEC	APR-OCT
	Tautog		$X \ X \ X \ X \qquad \qquad X \ X \ X$		-	-	-	OCT-APR
	Threadfin shad		X X X X	-	-	-	-	FEB-MAY
	Weakfish		X	סיז ג _ מס ג	_	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
	MCGVTT911		A A A A A A A A	AFK-AUG	-	MAI-AUG	ALV-NOA	AFK-NUV
INVE	RTEBRATE:							
RAR#		S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
7	Blue crab		X X X X X X X X X X X X X X X X X X X			MAY-NOV	JAN-DEC	JAN-DEC
10	Channeled whelk Horseshoe crab		X X X X X X X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
ТΩ	Knobbed whelk		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
19	Blue crab		X X X X X X X X X X X X X X X X X X X				JAN-DEC	JAN-DEC JAN-DEC
	Channeled whelk		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC	JAN-DEC
1/2	NE MAMMAT.							
	NE MAMMAL:					_		
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
7	Bottlenose dolphin	_ = ==	X X X X X X X				_	
,	Common dolphin		XXXXXX	_	_	_	_	
	Harbor porpoise		X X X X X X X X X X X X X X X X X X X	-	-	-	-	
	Humpback whale	E E	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	JAN-DEC	-	-	
	Bottlenose dolphin	HIGH	XXXXXXX	-	APR-OCT	-	-	
18 20	Harbor porpoise Bottlenose dolphin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_	- -	
20			11 11 11 11 11 11 11					

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

Virginia: ESIMAP 9 (cont.)

BIOLOGICAL RESOURCES: (cont.)

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
7	Green sea turtle	т т	X X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	T T	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
23	Green sea turtle	T T	X X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	ТТ	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV

HUMAN USE RESOURCES:

PARK:

HUN#	Name	Contact	Phone
138	FIRST LANDING STATE PARK	VA DCR	757/412-2300

BIOLOGICAL RESOURCES:

BIRD	:
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on pelican non loon chern gannet breasted merganser necked grebe throated loon ck scoter scoter ce-winged scoter scors ap nt flehead g-tailed duck at blue heron prican eel cican shad	HIGH VERY HIGH HIGH VERY HIGH MODERATE MODERATE MODERATE MODERATE 35 NESTS S F Conc.	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - -	- - - - - - - - - - - -	_	
non loon Chern gannet Chern gannet Chereasted merganser Checked grebe Chroated loon Ck scoter Checked scoter Ch	HIGH VERY HIGH HIGH VERY HIGH MODERATE MODERATE MODERATE 35 NESTS	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- - - - - - - - - - - MAY-JUL	- - - - - - - - -	- - - - - - - - - -		
rebreasted merganser recked grebe -throated loon -th scoter -scoter -e-winged scoter -scors	VERY HIGH HIGH VERY HIGH MODERATE MODERATE MODERATE 35 NESTS	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X	- - - - - - - - - - MAY-JUL	-	- - - - - - - - - -		
enecked grebe -throated loon ck scoter ce-winged scoter cs cors up tt flehead y-tailed duck ut blue heron pies wife rican eel rican shad	HIGH VERY HIGH MODERATE MODERATE MODERATE 35 NESTS	X X X X X X X X X X X X X X X X X X X	X X	- - - - - - - - - - MAY-JUL	- - - - - - - -	- - - - - - - - -		
throated loon ck scoter cs scoter cs cors ap at tflehead g-tailed duck at blue heron pies vife cican eel cican shad	VERY HIGH MODERATE MODERATE MODERATE 35 NESTS	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X X	- - - - - - - - MAY-JUL	-	- - - - - - -		
ck scoter E scoter Ee-winged scoter Es Cors Ep Et	VERY HIGH MODERATE MODERATE MODERATE 35 NESTS	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X X	- - - - - - - MAY-JUL	- - - - - - -	- - - - - - -		
ce-winged scoter cors pp tt flehead g-tailed duck at blue heron cies rife rican eel rican shad	MODERATE MODERATE MODERATE 35 NESTS	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X	- - - - - - - MAY-JUL	- - - - - -	- - - - - -		
cors pp tt Elehead g-tailed duck at blue heron pries rife rican eel rican shad	MODERATE MODERATE MODERATE 35 NESTS	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X	- - - - - - MAY-JUL	- - - - - -	- - - - - -		
cors ip it ilehead y-tailed duck it blue heron cies vife rican eel rican shad	MODERATE MODERATE MODERATE 35 NESTS	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X	- - - - - - MAY-JUL	- - - - -	- - - - -		
np nt Elehead y-tailed duck nt blue heron pies wife rican eel rican shad	MODERATE MODERATE MODERATE 35 NESTS	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X	- - - - MAY-JUL	- - - -	- - - -		
rit Flehead y-tailed duck pat blue heron Pies Wife Fican eel Frican shad	MODERATE MODERATE MODERATE 35 NESTS	X X X X X X X X X X X X X X X X X X X	$\begin{array}{cccc} X & X & X \\ X & X & X \\ X & X & X \end{array}$	- - - MAY-JUL	- - -	- - -		
r-tailed duck the blue heron cies rife rican eel rican shad	MODERATE 35 NESTS	X	X X X	- - MAY-JUL	- - -	-		
cies vife rican eel rican shad	35 NESTS	X X X X X X X		- MAY-JUL	-	_		
cies 			XXXXX	MAY-JUL	_			
rife rican eel rican shad	S F Conc.	JFMAMJ				_		
rife rican eel rican shad	S F Conc.	JFMAMJ						
rican eel rican shad			JASOND	Spawning	Eggs	Larvae	Juveniles	Adults
rican eel rican shad								
cican shad		$egin{array}{cccccccccccccccccccccccccccccccccccc$, , , , , , ,	-	-	_	- JAN-DEC	FEB-JUN SEP-DEC
		XXXXXX	XX	_	_	_	NOV-MAR	JAN-JUN
antic croaker			XXXXX	_	_	_	AUG-DEC	MAY-NOV
antic mackerel		X X		-	-	-	-	MAR-APR
antic menhaden		X X X X X X X		-	-	MAY-NOV	JAN-DEC	MAY-OCT
antic silverside		XXXXXXX	XXXXX	MAR-JUL -	-	_	JAN-DEC	JAN-DEC
antic spadefish antic sturgeon	С	X		_	_	_	AUG-OCT	AUG-NOV JAN-OCT
anchovy	<u> </u>	XXXXXXX			_	_	JAN-DEC	JAN-DEC
ck drum			XXXX	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
ck sea bass		XXXX		JUN-OCT	-	-	APR-OCT	APR-OCT
eback herring		XXXXXX	XX	-	-	-	NOV-MAR	JAN-JUN
efish cerfish		X X X X X X X X X	X X X X X X X X X X	-	_	_	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
arnose skate			XXXXX	_	_	_	- 30T-MOA	MAY-NOV
es		XXXXXXX		APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
vestfish		XXXX		-	-	-	JUL-OCT	APR-OCT
cory shad		X X X X X X	X X	-	-	-	NOV-MAR	JAN-JUN
choker and silverside		X			MAY-SEP	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
nows		XXXXXXXX			_	_	JAN-DEC	JAN-DEC
nichog		X X X X X X X X			_	_	JAN-DEC	JAN-DEC
chern kingfish		XXXX	XXXX	-	-	-	-	APR-OCT
thern pipefish		XXXXXXX			-	-	JAN-DEC	JAN-DEC
chern puffer		XXXXX		MAY-AUG	-	-	MAR-OCT	MAR-OCT
chern searobin drum		XXXXX	X X X X	MAY-JUL JUL-NOV	_	_	- AUG-SEP	MAR-OCT MAY-NOV
hake		XXXX		-	_	_	FEB-MAY	FEB-MAY
								SEP-NOV
lbar shark			XXXX	-	-	-	MAY-OCT	MAY-OCT
(porgy)		X X X X X		-	-	-	JUN-OCT	MAR-OCT
ver hake ver perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X X X	_ λ DD _ Mλ V	_	-	- JAN-DEC	OCT-MAY JAN-DEC
c perch		XXXXXXXX		-	_	DEC-APR	MAR-NOV	MAR-NOV
ted hake		XXXX	XXX	_	_	-	MAR-JUN	MAR-JUN
								SEP-NOV
ted seatrout			XXXXX	MAY-JUL	-	_	APR-NOV	APR-NOV
ped bass ped killifish		XXXXXXX		-	_	-	JAN-DEC	JAN-DEC
ner flounder		X		APK-SEP	_	- OCT-MAY	JAN-DEC JAN-DEC	JAN-DEC APR-OCT
cod		XXXXX	XXX	-	_	-	-	OCT-APR
eadfin shad		XXXX	XXX	-	-	-	-	FEB-MAY
								SEP-NOV
cfish		XXXX	XXXXX	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
BRATE:								
cies 	S F Conc.	J F M A M J J	FASOND	Spawning	Eggs	Larvae	Juveniles	Adults
		X X X X X X X	X X X X X	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
thern quahog (hard clam)		XXXXXXX		-	-	-	JAN-DEC	JAN-DEC
chern quahog (hard clam) seshoe crab		X X X X X X X		- МЛУ-ОСТ	- MAY-SEP	- MAY-NOV	JAN-DEC	JAN-DEC
chern quahog (hard clam) seshoe crab obed whelk				MAY-OCT	MAY-SEP	MAY-NOV -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
chern quahog (hard clam) seshoe crab		X X X X X X X X					 -	. 220
chern quahog (hard clam) seshoe crab obed whelk e crab nneled whelk		X X X X X X X X						
chern quahog (hard clam) seshoe crab se crab nneled whelk		X X X X X X X X	X				Molting	
chern quahog (hard clam) seshoe crab sbed whelk e crab nneled whelk MAMMAL:	S F Conc.	X X X X X X X X X X X X X X X X X X X	X		Calving	Pupping		
chern quahog (hard clam) seshoe crab sbed whelk e crab nneled whelk IAMMAL: cies		X X X X X X X X X X X X X X X X X X X	J A S O N D			Pupping		
chern quahog (hard clam) seshoe crab sbed whelk c crab nneled whelk MAMMAL: cies		X X X X X X X X X X X X X X X X X X X	J A S O N D		Calving APR-OCT	Pupping 	- - -	
chern quahog (hard clam) seshoe crab sbed whelk e crab nneled whelk IAMMAL: cies		X X X X X X X X X X X X X X X X X X X	J A S O N D		APR-OCT	Pupping - - -	 - -	
chern quahog (hard clam) seshoe crab bed whelk c crab nneled whelk MAMMAL: cies clenose dolphin por porpoise		J F M A M J J	J A S O N D		APR-OCT	Pupping	 - - -	
chern quahog (hard clam) seshoe crab sbed whelk c crab nneled whelk MAMMAL: cies clenose dolphin sor porpoise clenose dolphin	HIGH S F Conc.	J F M A M J J	J A S O N D X X X X X X X X X X X X X X X X X X	Mating Nesting	APR-OCT Hatching	 - - -	 - - - :ing Juvenil	les Adul
chern quahog (hard clam) seshoe crab bbed whelk c crab nneled whelk MAMMAL: cies clenose dolphin por porpoise clenose dolphin	HIGH S F Conc.	J F M A M J J X X X X X X X X X X X X X X X X X X	J A S O N D X X X X X	Mating Nesting	APR-OCT	 - - -	ing Juveni	
chern quahog (hard clam) seshoe crab sbed whelk e crab nneled whelk MAMMAL: cles clenose dolphin bor porpoise clenose dolphin	HIGH S F Conc.	J F M A M J J X X X X X X X X X X X X X X X X X X	J A S O N D X X X X X X X X X X X X X X X X X X	Mating Nesting	APR-OCT Hatching	 - - -		
chern quahog (hard clam) seshoe crab sbed whelk c crab nneled whelk MAMMAL: sies clenose dolphin sor porpoise clenose dolphin sries en sea turtle o's ridley sea turtle cherback sea turtle	HIGH S F Conc. T T E E E E	J F M A M J J X X X X X X X X X X X X X X X X X X	J A S O N D X X X X X J A S O N D X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	Mating Nesting	APR-OCT Hatching	Internest	/ON-YAM /ON-YAM -	V MAY: MAY:
chern quahog (hard clam) seshoe crab sbed whelk c crab nneled whelk MAMMAL: cies clenose dolphin cor porpoise clenose dolphin	HIGH S F Conc. T T E E E E T T	J F M A M J J X X X X X X X X X X X X X X X X X X	J A S O N D X X X X X X X X X X X X X X X X X	Mating Nesting	APR-OCT Hatching	Internest	MAY-NOV MAY-NOV MAY-NOV - NOV-YAM	V MAY MAY MAY
then sesh obec connel	cab Led whelk MAL: S	rab Led whelk MAL: S S F Conc.	MAL: S SF Conc. JFMAMJJ	MAL: S SFConc. JFMAMJJASOND	S F Conc. J F M A M J J A S O N D Mating	S F Conc. J F M A M J J A S O N D Mating Calving		

58
PARK:

AQUACULTURE: OYSTERS

 HUN#
 Name
 Contact
 Phone

 138
 FIRST LANDING STATE PARK
 VA DCR
 757/412-2300

BIOLOGICAL RESOURCES:

BIRD	:
------	---

RAR# Species

RAR#	Species	S F Conc.	J F M A M J J A S O N D					
	Brown pelican		X X X X X X X X X				_	
	Common loon		X X X X X X		-	_		
	Northern gannet		X X X		-	-		
	Red-breasted merganser	VERY HIGH	X X X X X X	-	-	_		
	Red-necked grebe		X X	-	-	-		
1 /	Red-throated loon Black scoter	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_		
17	Surf scoter	IIIGII	X X X X X X X X			_		
	White-winged scoter		X X X X X X X		_	_		
17	Gulls		$X \ X \ X \ X$	-	-	-		
	Raptors		X X X X X X X X X X X X X X X X X X X	-	-	-		
413	Yellow-crowned night-heron	C 3 NESTS	X X X X X X X X X	MAY-JUL	-	-		
445	Yellow-crowned night-heron Great egret	C 5 NESTS	X X X X X X X X X	MAY-JUL MAY-JUL	_	_		
403	Vellow-crowned night-heron	C 3 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL	_	_		
464	Yellow-crowned night-heron Great egret Yellow-crowned night-heron Yellow-crowned night-heron	C 4 NESTS		MAY-JUL	_	_		
	Yellow-crowned night-heron	C 10 NESTS		MAY-JUL	-	-		
465	Yellow-crowned night-heron	C 12 NESTS	X X X X X X X X X X	MAY-JUL	-	-		
466	Great egret	C 33 NESTS	X X X X X X X X X X	MAY-JUL	-	-		
FISH	•							
		S E Cons	TEMAMITACONO	Smarrain a	Easa	T a	Turnani laa	Adults
	Species	5 F Conc.		spawning	Eggs	Larvae	Juveniles	Adults
18	Alewife		X X X X X	_	_	_	_	FEB-JUN
	American eel		$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$	-	_	-	JAN-DEC	SEP-DEC
	American shad		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker		X X X X X X X X	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		XX	_	-	- MAY-NOV	- TAN DEG	MAR-APR
	Atlantic menhaden Atlantic silverside		X X X X X X X X X X X X X X X X X X X		_	MAI-NOV	JAN-DEC JAN-DEC	MAY-OCT JAN-DEC
	Atlantic spadefish		XXXX	-	_	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	X X X X X X X X X X	-	_	_	_	JAN-OCT
	Bay anchovy		$\times \times $			-	JAN-DEC	JAN-DEC
	Black drum		X X X X X X X X		APR-JUN		APR-NOV	APR-NOV
	Black sea bass		X X X X X X X	JUN-OCT	-	_	APR-OCT	APR-OCT
	Blueback herring Bluefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	NOV-MAR MAY-NOV	JAN-JUN APR-NOV
	Butterfish		XXXXXXXXX	_	_	_	JUL-NOV	MAR-NOV
	Clearnose skate		XXXXXXX	_	_	-	-	MAY-NOV
	Gobies		\times \times \times \times \times \times \times \times \times			APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad		X X X X X X X X X X X X X X X X X X X	-	-	-	NOV-MAR	JAN-JUN
	Hogchoker Inland silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		MAY-SEP	MAY-SEP	JAN-DEC JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		$X \times X \times$		_	_	JAN-DEC	JAN-DEC
	Northern kingfish		XXXXXX	-	_	_	-	APR-OCT
	Northern pipefish		$\times \times $	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer			MAY-AUG	-	_	MAR-OCT	MAR-OCT
	Northern searobin		\times \times \times \times \times \times \times	MAY-JUL	-	_	-	MAR-OCT
	Red drum Red hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUL-NOV	-	_	AUG-SEP FEB-MAY	MAY-NOV FEB-MAY
	Red liake		***	_	_	_	FED-MAI	SEP-NOV
	Sandbar shark		$X \times X \times X \times X$	_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake			-	-	-	-	OCT-MAY
	Silver perch		$\times \times $			_	JAN-DEC	JAN-DEC
	Spot Spotted hake		X X X X X X X X X X X X	-	_ _	DEC-APR -	MAR-NOV MAR-JUN	MAR-NOV
	sported make		X X X X X X X X	_	_	_	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-,TIII,	_	_	APR-NOV	APR-NOV
	Striped bass		\times		_	_	JAN-DEC	JAN-DEC
	Striped killifish		$\times \times $	APR-SEP	-	- - OCT-MAY	JAN-DEC	JAN-DEC
	Summer flounder		$\times \times $					APR-OCT
	Tautog Threadfin shad		X X X X X X X X			-	-	OCT-APR
	Inreadin Shad		XXXX XXX	-	_	_	_	FEB-MAY SEP-NOV
	Weakfish		X X X X X X X X	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
66	Alewife		XXXXX	-	_	-	-	FEB-JUN
	American eel		X X X X	-	-	-	FEB-MAY	-
	American shad		$X \ X \ X \ X \ X \ X \ X \ X$		-	_	NOV-MAR	JAN-JUN
	Atlantic croaker		X X X X X X X X X X X X X	-	-	-	JAN-DEC	-
	Atlantic mackerel Atlantic menhaden		$\begin{array}{c} X \ X \\ X \ X \ X \ X \ X \ X \ X \ X \$	_	_	- MAY-NOV	- JAN-DEC	MAR-APR MAY-OCT
	Atlantic menhaden Atlantic silverside		X X X X X X X X X X X X X X X X X X X			- NOV	JAN-DEC	JAN-DEC
	Atlantic spadefish			-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	C	$\times \times $		-	-	JAN-DEC	APR-NOV
	Bay anchovy		X X X X X X X X X X X X			-	JAN-DEC	JAN-DEC
	Black drum Black sea bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		APR-JUN -	APR-JUN -	APR-NOV	APR-NOV -
	Black sea bass Blueback herring		X X X X X X X X X X X X X X X X X X X		_	_	APR-AUG NOV-MAR	- JAN-JUN
	Bluefish		XXXXXXXX		_	-	MAY-NOV	APR-NOV
	Butterfish		X X X X X X X X X	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate		$X\;X\;X\;X\;X\;X\;X\;X$		-	-	-	MAY-NOV
	Gobies		X X X X X X X X X X X X			APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Hogchoker		X X X X X X X X X X X X X X X X X X X			- MAY-SEP	JAN-DEC	JAN-JUN JAN-DEC
	Inland silverside		$X \times X \times$		-	- -	JAN-DEC	JAN-DEC
	Minnows		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG	_	-	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $		-	- -	JAN-DEC	JAN-DEC
	Northern kingfish		X X X X X X X	-	-	-	-	APR-OCT
	Northern pipefish Northern puffer		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC MAR-OCT	JAN-DEC MAR-OCT
	Northern searobin		x x x x x x x x x x x x x x x x x x x		-	_	MAR-OCT	MAR-OCT
	Red drum		XXXXXXX			-	AUG-SEP	MAY-NOV
	Red hake		x x x x	-	-	-	FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake Silver perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	- JAN-DEC	OCT-MAY JAN-DEC
	Spot		X X X X X X X X X X X X X X X X X X X		_	- DEC-APR	MAR-NOV	JAN-DEC JAN-DEC
	Spotted hake		XXXXXXXXXX	-	_	-	MAR-JUN	MAR-JUN
								SEP-NOV
	Spotted seatrout		$\times \times \times \times \times \times \times \times$		-	-	APR-NOV	APR-NOV
	Striped bass		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Striped killifish		X X X X X X X X X X X X X X X X X X X	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Summer flounder Tautog		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_ _	_	JAN-DEC -	JAN-DEC OCT-APR
	Luatoy							OCI AFK

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

Virginia: ESIMAP 11 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH	: (cont.)							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae J	Tuveniles	Adults
66	Threadfin shad		X X X X X X X X	-	-	-	-	FEB-MAY SEP-NOV
	Weakfish		$\times \times $	-	-	- J	AN-DEC	-
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae J	uveniles	Adults
16	Northern quahog (hard clam)		X X X X X X X X X X X X	MAY-OCT	MAY-OCT	MAY-OCT J	AN-DEC	JAN-DEC
18	Horseshoe crab		$\times \times $	-	-	- J	AN-DEC	JAN-DEC
	Knobbed whelk		$\times \times $	-	-	– J	AN-DEC	JAN-DEC
19	Blue crab		$\times \times $	MAY-OCT	MAY-SEP	MAY-NOV J	AN-DEC	JAN-DEC
	Channeled whelk			-	-		AN-DEC	JAN-DEC
66	Blue crab			-	MAY-SEP	MAY-NOV J	AN-DEC	JAN-DEC
	Eastern oyster			JUN-SEP	JUN-SEP		AN-DEC	JAN-DEC
	Knobbed whelk		X X X X X X X X X X X X	-	-	– J	AN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping M	olting	
18	Harbor porpoise		X X X X X X	-	-	-	-	
20	Bottlenose dolphin		$\times \times \times \times \times \times \times$	-	-	-	-	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internestin	g Juvenil	les Adults
23	Green sea turtle	тт	X X X X X X	-	-	-	MAY-NOV	7 –
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	/ MAY-NOV
	Leatherback sea turtle	ΕE	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	т т	X X X X X X X	-	-	-	MAY-NOV	/ MAY-NOV

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD RAR#		9 1	Conc.	.T F N	/ 2\ M .T	г.т а. с		Nesting	Migrating	Molting		
											-	
69	Dabbling ducks Green-winged teal			X X X	X		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Northern shoveler Shorebirds			X X X	X X X X X	Х	XXX	_	_	-		
	Yellow-crowned night-heron Yellow-crowned night-heron	C	3 NESTS 4 NESTS		X			MAY-JUL MAY-JUL	-	-		
445	Yellow-crowned night-heron	С	5 NESTS	Σ	XXXX	XXX	XX	MAY-JUL	-	-		
449	Great egret Yellow-crowned night-heron	C C	2 NESTS 6 NESTS		X			MAY-JUL MAY-JUL	-	-		
	Yellow-crowned night-heron Yellow-crowned night-heron	C C	11 NESTS 6 NESTS		X			MAY-JUL MAY-JUL	-	-		
	Black skimmer	C	84 NESTS	Σ	XXXX	X X X X	X	MAY-JUL	-	-		
	Common tern Great black-backed gull		791 NESTS 11 NESTS		X			MAY-JUL MAY-JUL	-	-		
	Gull-billed tern Herring gull	Т	18 NESTS 24 NESTS		XXXX			MAY-JUL MAY-JUL	-	-		
	Laughing gull		2711 NESTS	Σ	XXXX	$X \times X \times X$	XX	MAY-JUL	-	-		
454 458	Yellow-crowned night-heron Great egret		8 NESTS 5 NESTS		<pre></pre>			MAY-JUL MAY-JUL	-	-		
562	Peregrine falcon	Т		Σ	XXXX	XX		MAR-AUG	-	-		
FISH												
RAR#	Species	S I	Conc.	J F N	1 A M J	J A S	O N D	Spawning	Eggs 	Larvae	Juveniles	Adults
18	Alewife American eel				XXXX		XXX	_	-	-	- JAN-DEC	FEB-JUN SEP-DEC
	American shad				XXXX		ХХ	_	_	_	NOV-MAR	JAN-JUN
	Atlantic croaker Atlantic mackerel			Σ	X X	XXX	XXXX	_	-	-	AUG-DEC -	MAY-NOV MAR-APR
	Atlantic menhaden Atlantic silverside						XXXX	- MAR-JUL	-	MAY-NOV	JAN-DEC JAN-DEC	MAY-OCT JAN-DEC
	Atlantic spadefish					ХХ	XX	- -	_	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon Bay anchovy	С			<pre></pre>			- APR-SEP	_	-	- JAN-DEC	JAN-OCT JAN-DEC
	Black drum				XXX	X X X X	XX	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass Blueback herring			ххх		:	. X X X	JUN-OCT -	-	_	APR-OCT NOV-MAR	APR-OCT JAN-JUN
	Bluefish Butterfish			_		XXXX		_	_	-	MAY-NOV JUL-NOV	APR-NOV
	Clearnose skate			2	X X X X X X X X X X X X X X X X X X X	XXXX		-	-	-	- 00T-NOA	MAR-NOV MAY-NOV
	Gobies Harvestfish			ХХХ		X X X X X X X X X X X X X X X X X X X		APR-SEP	APR-SEP	APR-OCT	JAN-DEC JUL-OCT	JAN-DEC APR-OCT
	Hickory shad				XXXX		ХХ	-	-	-	NOV-MAR	JAN-JUN
	Hogchoker Inland silverside							MAY-SEP APR-MAY	MAY-SEP -	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows Mummichog							APR-AUG APR-AUG	-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish				XXX	$X \times X \times X$	X	-	_	_	-	APR-OCT
	Northern pipefish Northern puffer				X			MAY-JUN MAY-AUG	_	-	JAN-DEC MAR-OCT	JAN-DEC MAR-OCT
	Northern searobin				XXXX	X X X X	X	MAY-JUL	-	-	-	MAR-OCT
	Red drum Red hake			ХΣ	X X X X X	X X X X X	XXX	JUL-NOV -	-	-	AUG-SEP FEB-MAY	MAY-NOV FEB-MAY
	Sandbar shark				v v	XXX	· v	_	_	_	MAY-OCT	SEP-NOV MAY-OCT
	Scup (porgy)			Σ	XXXX			-	-	-	JUN-OCT	MAR-OCT
	Silver hake Silver perch			XXX		XXX	XXX	- APR-MAY	-	_	- JAN-DEC	OCT-MAY JAN-DEC
	Spot			ххх	XXXX	X X X X	X X X	-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake			2	XXXX	. Х	XX	-	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout Striped bass			V V \		XXXX	XXX	MAY-JUL -	-	-	APR-NOV JAN-DEC	APR-NOV JAN-DEC
	Striped killifish			ххх	XXXX	X X X X	X X X X	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder Tautog			X X X		XXX	XXXX	-	-	OCT-MAY	JAN-DEC -	APR-OCT OCT-APR
	Threadfin shad			ΧУ	XXX	X	XX	-	-	-	-	FEB-MAY
	Weakfish				XXX	XXX	XX	APR-AUG	-	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
66	Silver perch Spot						X X X X X X X X X X X X X X X X X X X	_	-	- DEC-APR	JAN-DEC MAR-NOV	JAN-DEC JAN-DEC
	Spotted hake				XXXX		XXX	-	-	-	MAR-JUN	MAR-JUN
	Spotted seatrout				XXX	XXX	XX	MAY-JUL	_	_	APR-NOV	SEP-NOV APR-NOV
	Striped bass						XXX	- ADD GED	-	-	JAN-DEC	JAN-DEC
	Striped killifish Summer flounder			ххх	XXXX		X X X X	APR-SEP -	-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Tautog Threadfin shad			X X X	X X X X X	X	X X X	-	-	-	-	OCT-APR FEB-MAY
								_		_	TAN DEG	SEP-NOV
	Weakfish Alewife				<		XXX	-	-	-	JAN-DEC -	FEB-JUN
	American eel American shad				X		хх	_	-	-	FEB-MAY NOV-MAR	- JAN-JUN
	Atlantic croaker			ххх	XXXX		XXX		-	-	JAN-DEC	-
	Atlantic mackerel Atlantic menhaden				X X X X X X	XXX	XXX	_	-	- MAY-NOV	- JAN-DEC	MAR-APR MAY-OCT
	Atlantic silverside					$X \times X \times X$		MAR-JUL -	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish Atlantic sturgeon	С		ххх	XXXX		XXX	-	-	-	AUG-OCT JAN-DEC	AUG-NOV APR-NOV
	Bay anchovy Black drum			ХХХ		X		APR-SEP APR-JUN	- APR-JUN	- APR-JUN	JAN-DEC APR-NOV	JAN-DEC APR-NOV
	Black sea bass				XXX	XX		-	-	-	APR-AUG	-
	Blueback herring Bluefish			ХХХ	X X X X X X X X X X X X X X X X X X X	: :	X X	_	-	-	NOV-MAR MAY-NOV	JAN-JUN APR-NOV
	Butterfish			Σ	XXXX	XXX	XX	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate Gobies			ххх		X		- APR-SEP	- APR-SEP	- APR-OCT	JAN-DEC	MAY-NOV JAN-DEC
	Harvestfish Hickory shad			X Y V	X	X X X	XXX			-	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Hogchoker			ххх	XXXX	X X X X	X X X X	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside Minnows							APR-MAY APR-AUG	-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog				XXXX	$X \times X \times X$	X X X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish			ххх		X		- MAY-JUN	-	- -	JAN-DEC	APR-OCT JAN-DEC
	Northern puffer Northern searobin			Σ	XXXX	XXX		MAY-AUG	-	-	MAR-OCT	MAR-OCT MAR-OCT
	Red drum			2			XXX		-	_	AUG-SEP	MAY-NOV

Virginia: ESIMAP 12 (cont.)

BIOLOGICAL RESOURCES: (cont.)

D3D#	0	0 H C	T T W T W T T T O O W D	O	T	T 7		Adults
KAR#	Species	S F Conc.	J F M A M J J A S O N D	spawning	Eggs	Larvae J	uveniles	Adults
66	Red hake		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	- F	EB-MAY	FEB-MAY SEP-NOV
	Sandbar shark		X X X X X X	-	-	- M	AY-OCT	MAY-OCT
	Scup (porgy)		$X\;X\;X\;X\;X\;X\;X\;X$	-	-	- J	UN-OCT	MAR-OCT
	Silver hake		$X \ X \ X \ X \ X \ X \ X$	-	-	-	-	OCT-MAY
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae J	uveniles	Adults
16	Northern quahog (hard clam)		X X X X X X X X X X X X	MAY-OCT	MAY-OCT	MAY-OCT J	AN-DEC	JAN-DEC
18			$\times \times $	_	-	- J	AN-DEC	JAN-DEC
	Knobbed whelk		$\times \times $	-	-	- J	AN-DEC	JAN-DEC
19	Blue crab		$\times \times $	MAY-OCT	MAY-SEP	MAY-NOV J	AN-DEC	JAN-DEC
	Channeled whelk		$\times \times $	-	-	- J	AN-DEC	JAN-DEC
66	Blue crab		$\times \times $	-	MAY-SEP	MAY-NOV J	AN-DEC	JAN-DEC
	Eastern oyster		$\times \times $	JUN-SEP	JUN-SEP	JUN-SEP J	AN-DEC	JAN-DEC
	Knobbed whelk		$\times \times $	-	-	- J	AN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping M	olting	
18	Harbor porpoise		X X X X X X X	-	-	-	-	
20	Bottlenose dolphin		X X X X X X X	-	-	_	_	
67	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Harbor porpoise		$X \ X \ X \ X \ X \qquad \qquad X$	-	-	-	-	
REPI	'ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internestin	g Juvenile	es Adults
23	Green sea turtle	T T	X X X X X X	-	-		MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	MAY-NO
	Leatherback sea turtle	ΕE	X X X X X X X	-	-	_	_	MAY-NO
	Loggerhead sea turtle	т т	X X X X X X X	-	-	_	MAY-NOV	MAY-NO
67	Green sea turtle	т т	X X X X X X X	-	-	-	MAY-NOV	_
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	_
	Leatherback sea turtle	E E	X X X X X X X	-	-	_	-	MAY-NO
	Loggerhead sea turtle	ТТ	X X X X X X X				MAY-NOV	_

BIOLOGICAL RESOURCES:

BIRD	:
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RAR# Species

RAR#	Species	SF	Conc.	JFMAMJJASO	ND	Nesting	Migrating	Molting		
69	Dabbling ducks			X X X X X X	 Х Х	-			_	
	Green-winged teal				ХХ	-	-	_		
	Northern shoveler				ХХ	-	-	-		
	Shorebirds			X X X X X X		-	-	-		
88	American black duck		LOW		ХХ	-	-	_		
	Bufflehead Canada goose		MODERATE		X X X X	_	_	_		
	Canvasback		HIGH		XX	_	_	_		
	Common goldeneye				ХХ	-	_	_		
	Mergansers				ХХ	-	-	-		
	Ring-necked duck				ХХ	-	-	-		
	Ruddy duck		HIGH		ХХ	-	-	_		
	Scaup Scoters		MODERATE		X X X X	-	_	_		
91	Bufflehead		HIGH		XX	_	_	_		
71	Canvasback		HIGH		XX	_	_	_		
	Common goldeneye			$X \ X \ X \ X$	ХХ	-	-	-		
	Mergansers		MODERATE		ХХ	-	-	-		
	Redhead				ХХ	-	-	-		
	Ring-necked duck		HTCH		ХХ	_	-	_		
	Ruddy duck Scaup		HIGH MODERATE		X X X X	_	_	_		
394	Great blue heron		9 NESTS	X X X X X X X X X X X		MAY-JUL	_	_		
413	Yellow-crowned night-heron	С	3 NESTS	X X X X X X X X		MAY-JUL	_	_		
	Double-crested cormorant		154 NESTS	$\times \times $	ХХ	MAY-JUL	-	_		
	Yellow-crowned night-heron		4 NESTS	X X X X X X X X	Χ	MAY-JUL	-	-		
	Least tern		10 NESTS	X X X X X X X		MAY-JUL	-	-		
562	Peregrine falcon	Т		X X X X X X		MAR-AUG	-	_		
FISH	•									
		e tr	Conc.	J F M A M J J A S O	M D	Cnaunina	Faac	Larvae	Juveniles	Adults
KAK#	Species							Larvae	Juveniles	Adults
66	Alewife			X X X X X		_	_	_	_	FEB-JUN
	American eel			XXXX		-	_	-	FEB-MAY	-
	American shad			X X X X X X	ХХ	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker				ХХ	-	-	-	JAN-DEC	-
	Atlantic mackerel			XX	** -:	-	-	-	-	MAR-APR
	Atlantic menhaden			X X X X X X X X X X X X X X X X X X X		— MAD 7117	_	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside Atlantic spadefish			$\begin{array}{cccccccccccccccccccccccccccccccccccc$		MAR-JUL -	_	_	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic spacerism Atlantic sturgeon	С		$\begin{smallmatrix} & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & $		_	_	_	JAN-DEC	AUG-NOV APR-NOV
	Bay anchovy	Ü		X X X X X X X X X X X X		APR-SEP	_	-	JAN-DEC	JAN-DEC
	Black drum			X X X X X X X	Χ	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass			X X X X X		-	-	-	APR-AUG	-
	Blueback herring				ХХ	-	-	-	NOV-MAR	JAN-JUN
	Bluefish			XXXXXXX		-	-	-	MAY-NOV	APR-NOV
	Butterfish Clearnose skate			$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	-	_	JUL-NOV	MAR-NOV MAY-NOV
	Gobies			X X X X X X X X X X			APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish			$\times \times \times \times \times \times \times$		-	-	-	JUL-OCT	APR-OCT
	Hickory shad				ХХ	-	-	-	NOV-MAR	JAN-JUN
	Hogchoker			$\times \times $	ХХ	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside			X X X X X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Minnows			X X X X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Mummichog Northern kingfish			$\begin{array}{cccccccccccccccccccccccccccccccccccc$		APR-AUG	-	_	JAN-DEC -	JAN-DEC APR-OCT
	Northern pipefish			X X X X X X X X X X X X X X X X X X X			_	_	JAN-DEC	JAN-DEC
	Northern puffer			XXXXXXXXX		MAY-AUG	_	_	MAR-OCT	MAR-OCT
	Northern searobin			$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $		MAY-JUL	-	_	_	MAR-OCT
	Red drum			X X X X X X	Χ	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake			X X X X X X X X	Χ	-	-	-	FEB-MAY	FEB-MAY
										SEP-NOV
	Sandbar shark			X X X X X X		-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)			XXXXXXXX		-	-	-	JUN-OCT -	MAR-OCT
	Silver hake Silver perch			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	XX	_	_	_	JAN-DEC	OCT-MAY JAN-DEC
	Spot			X X X X X X X X X X X X X X X X X X X		_	_	DEC-APR	MAR-NOV	JAN-DEC
	Spotted hake			XXXXXXXX		_	_	-	MAR-JUN	MAR-JUN
	=								- -	SEP-NOV
	Spotted seatrout			$X\ X\ X\ X\ X\ X\ X$	Χ	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass			$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	-	JAN-DEC	JAN-DEC
	Striped killifish			$\begin{array}{cccccccccccccccccccccccccccccccccccc$			-	-	JAN-DEC	JAN-DEC
	Summer flounder Tautog			X X X X X X X X X X X X X X X X X X X	X X X X	-	-	-	JAN-DEC -	JAN-DEC OCT-APR
	Tautog Threadfin shad			$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	_	_	FEB-MAY
										SEP-NOV
	Weakfish			X X X X X X X X X X X	ХХ	-	-	-	JAN-DEC	-
68	Alewife			X X X X X		-	-	-	-	FEB-JUN
	American shad			XXXXX		-	-	-	-	FEB-JUN
	Blueback herring			XXXXX		-	_	_	- -	FEB-JUN
	Hickory shad Striped bass			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ХХ	_	_	_	- -	FEB-JUN OCT-JUN
89	American eel			X X X X X X X X X X X X X X X X X X X		_	_	_	JAN-DEC	- OCT-JUN
	American shad			X X X X X X X X X X		-	-	-	FEB-OCT	-
	Atlantic croaker			$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	-	JAN-DEC	-
	Atlantic menhaden			$X\ X\ X\ X\ X\ X$		-	-	-	MAY-NOV	-
	Atlantic silverside	_		X X X X X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Atlantic sturgeon	С		X X X X X X X X X X X X X X X X X X X		- ADD CED	-	-	JAN-DEC	APR-NOV
	Bay anchovy			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ΧХ	APR-SEP	_	_	JAN-DEC APR-AUG	JAN-DEC -
				X X X X X X X X X X X X X X X X X X X	хх		- MAY-SEP	- MAY-SEP	JAN-DEC	JAN-DEC
	Black sea bass						MAI-SEF	- MAI-3EF	JAN-DEC	JAN-DEC
				X X X X X X X X X X X			_	-	JAN-DEC	JAN-DEC
	Black sea bass Hogchoker			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ХХ	-				_
	Black sea bass Hogchoker Mummichog Silver perch Spot			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ХХ	-	-	DEC-APR	APR-NOV	
	Black sea bass Hogchoker Mummichog Silver perch Spot Striped bass			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ХХ	- - -	-	-	MAY-OCT	-
	Black sea bass Hogchoker Mummichog Silver perch Spot Striped bass Summer flounder			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	x x x x	- - -	-	- -	MAY-OCT JAN-DEC	-
	Black sea bass Hogchoker Mummichog Silver perch Spot Striped bass Summer flounder Weakfish			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccc} X & X \\ X & X \\ X & X \end{array}$	-		-	MAY-OCT JAN-DEC JAN-DEC	-
90	Black sea bass Hogchoker Mummichog Silver perch Spot Striped bass Summer flounder Weakfish White perch			X X X X X X X X X X X X X X X X X X X	$\begin{array}{cccc} X & X \\ X & X \\ X & X \end{array}$	- - -	-	- -	MAY-OCT JAN-DEC	- JAN-DEC
90	Black sea bass Hogchoker Mummichog Silver perch Spot Striped bass Summer flounder Weakfish			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccc} X & X \\ X & X \\ X & X \end{array}$	- - -	-	- -	MAY-OCT JAN-DEC JAN-DEC	- JAN-DEC FEB-JUN
90	Black sea bass Hogchoker Mummichog Silver perch Spot Striped bass Summer flounder Weakfish White perch Alewife			X X X X X X X X X X X X X X X X X X X	$\begin{array}{cccc} X & X \\ X & X \\ X & X \end{array}$	- - - - -	-	- -	MAY-OCT JAN-DEC JAN-DEC	- JAN-DEC FEB-JUN FEB-JUN
90	Black sea bass Hogchoker Mummichog Silver perch Spot Striped bass Summer flounder Weakfish White perch Alewife American shad			X X X X X X X X X X X X X X X X X X X	$\begin{array}{cccc} X & X \\ X & X \\ X & X \end{array}$	- - - - -	-	- -	MAY-OCT JAN-DEC JAN-DEC	- JAN-DEC FEB-JUN FEB-JUN FEB-JUN
	Black sea bass Hogchoker Mummichog Silver perch Spot Striped bass Summer flounder Weakfish White perch Alewife American shad Blueback herring Hickory shad			X X X X X X X X X X X X X X X X X X X	$\begin{array}{cccc} X & X \\ X & X \\ X & X \end{array}$	- - - - -	-	- -	MAY-OCT JAN-DEC JAN-DEC	- JAN-DEC
INVEI	Black sea bass Hogchoker Mummichog Silver perch Spot Striped bass Summer flounder Weakfish White perch Alewife American shad Blueback herring Hickory shad			X X X X X X X X X X X X X X X X X X X	X X X X X X X	-	-	- - - - - -	MAY-OCT JAN-DEC JAN-DEC JAN-DEC - - -	JAN-DEC FEB-JUN FEB-JUN FEB-JUN FEB-JUN
INVEI	Black sea bass Hogchoker Mummichog Silver perch Spot Striped bass Summer flounder Weakfish White perch Alewife American shad Blueback herring Hickory shad RTEBRATE: Species		Conc.	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X	- - - - - - - - - Spawning	- - - - - - -	- - - - - - - -	MAY-OCT JAN-DEC JAN-DEC JAN-DEC Juveniles	JAN-DEC FEB-JUN FEB-JUN FEB-JUN FEB-JUN
INVEI RAR#	Black sea bass Hogchoker Mummichog Silver perch Spot Striped bass Summer flounder Weakfish White perch Alewife American shad Blueback herring Hickory shad RTEBRATE: Species			X X X X X X X X X X X X X X X X X X X	x x x x x x x x	- - - - - - - - - Spawning	- - - - - - - Eggs	- - - - - - - -	MAY-OCT JAN-DEC JAN-DEC JAN-DEC - - -	JAN-DEC FEB-JUN FEB-JUN FEB-JUN FEB-JUN Adults
INVEI RAR# 16	Black sea bass Hogchoker Mummichog Silver perch Spot Striped bass Summer flounder Weakfish White perch Alewife American shad Blueback herring Hickory shad RTEBRATE: Species			X X X X X X X X X X X X X X X X X X X	x x x x x x x x x x x x x x x x x x x	- - - - - - - - Spawning 	- - - - - - - Eggs	- - - - - - - -	MAY-OCT JAN-DEC JAN-DEC JAN-DEC Juveniles	JAN-DEC FEB-JUN FEB-JUN FEB-JUN FEB-JUN

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

Virginia: ESIMAP 13 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
66	Knobbed whelk		X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
89	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		$\times \times $	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
37	Bottlenose dolphin		X X X X X X	-	-	-	-	
	Harbor porpoise		$X \ X \ X \ X \ X$	-	-	_	-	
67	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Harbor porpoise		$X \ X \ X \ X \ X \qquad X$	-	-	-	-	
REPT	ILE:							
DAD#	Species	S F Conc	л г м д м л л д ч О м п	Nosting	Watching	Internes	ting Juwenil	les Adıı

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
67	Green sea turtle	T T	X X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	-
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	ТТ	X X X X X X X	-	-	-	MAY-NOV	-

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
119	RAGGED ISLAND WILDLIFE MANAGEMENT AREA	VDGIF	804/367-1000

BIOLOGICAL RESOURCES:

BIRD:

BIRD								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
88	American black duck	LOW	X X X X X X X X X	-			_	
	Bufflehead	MODERATE	X X X X X X X X	-	-	-		
	Canada goose				-	_		
	Canvasback	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_		
	Common goldeneye Mergansers		X X X X X X X X X X X X X X X X X X X		-	-		
	Ring-necked duck		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Ruddy duck	HIGH	X X X X X X X X		-	_		
	Scaup Scoters	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
91	Bufflehead	HIGH	X X X X X X X X		-	_		
	Canvasback	HIGH			-	-		
	Common goldeneye		X X X X X X X X		-	-		
	Mergansers Redhead	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Ring-necked duck		X X X X X X X X		_	_		
	Ruddy duck	HIGH	XXXX		-	_		
	Scaup	MODERATE		-	-	_		
422	Great blue heron	17 NESTS	X X X X X X X X X X X X	MAY-JUL	-	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
66	Alewife		XXXXX	-	-	-		FEB-JUN
	American eel American shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_	FEB-MAY NOV-MAR	– JAN–JUN
	Atlantic croaker		X X X X X X X X X X X X		_	_	JAN-DEC	- JAN-JON
	Atlantic mackerel		XX	_	_	_	-	MAR-APR
	Atlantic menhaden		$\times \times $			MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		X X X X X X X X X X X X	MAR-JUL -	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish	С	$\begin{array}{c} & \times $	_	_	_	AUG-OCT JAN-DEC	AUG-NOV APR-NOV
	Atlantic sturgeon Bay anchovy	C	X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC JAN-DEC	JAN-DEC
	Black drum		XXXXXXXX	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		X X X X X	-	-	-	APR-AUG	-
	Blueback herring		XXXXXXXXXXX	-	-	-	NOV-MAR	JAN-JUN
	Bluefish Butterfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	-	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Butterfish Clearnose skate		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	JUL-NOV -	MAR-NOV MAY-NOV
	Gobies		X X X X X X X X X X X X X X X X X X X		- APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad			-	-	-	NOV-MAR	JAN-JUN
	Hogchoker		X X X X X X X X X X X X X			MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside Minnows		X X X X X X X X X X X X X X X X X X X		-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish		XXXXXXX	-	_	_	-	APR-OCT
	Northern pipefish		$\times \times $	MAY-JUN	-	_	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	-	_	MAR-OCT	MAR-OCT
	Northern searobin Red drum		X X X X X X X X	MAY-JUL	-	-	-	MAR-OCT
	Red hake		X X X X X X X X X X X X X X X X X X X	JUL-NOV -	-	_	AUG-SEP FEB-MAY	MAY-NOV FEB-MAY
	Ned have		AAAA AAA				red mai	SEP-NOV
	Sandbar shark		X X X X X X	-	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		X X X X X X X X X X X X X X X X X X X		-	_	-	OCT-MAY
	Silver perch		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Spot Spotted hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	DEC-APR -	MAR-NOV MAR-JUN	JAN-DEC MAR-JUN
	Spocced nake		AAAA AAA				MAIX OON	SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-JUL	_	_	APR-NOV	APR-NOV
	Striped bass		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Striped killifish		X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Summer flounder Tautog		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	- -	JAN-DEC -	JAN-DEC OCT-APR
	Threadfin shad		XXXX XXX		_	_	_	FEB-MAY
	Inicaarin bhaa		21 21 21 21 21 21					SEP-NOV
	Weakfish		imes ime	-	-	-	JAN-DEC	-
68	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American shad		XXXXX	-	-	-	_	FEB-JUN
	Blueback herring Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	_	FEB-JUN FEB-JUN
	Striped bass		X X X X X X X X X X X X X X X X X X X	-	-	_	_	OCT-JUN
89	American eel		$\times \times $		-	-	JAN-DEC	-
	American shad		X X X X X X X X X X	-	-	-	FEB-OCT	-
	Atlantic croaker Atlantic menhaden		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-	JAN-DEC MAY-NOV	_
	Atlantic mennaden Atlantic silverside		X X X X X X X X X X X X X X X X X X X	MAR-JUI	-	-	JAN-DEC	JAN-DEC
	Atlantic sturgeon	С	$\times \times $	-	-	-	JAN-DEC	APR-NOV
	Bay anchovy		x		-	-	JAN-DEC	JAN-DEC
	Black sea bass		X X X X X	- MAY CED	- MAY CED	- MAY CED	APR-AUG	-
	Hogchoker Mummichog		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		MAY-SEP -	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Silver perch		X X X X X X X X X X X X X X X X X X X		-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Spot		X X X X X X X X X X X X X		_	DEC-APR	APR-NOV	-
	Striped bass		X X X X X X	-	-	-	MAY-OCT	-
	Summer flounder		\times		-	-	JAN-DEC	-
	Weakfish White perch		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	- JAN-DEC
90	White perch Alewife		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	JAN-DEC -	JAN-DEC FEB-JUN
20	American shad		XXXXX	_	_	_	_	FEB-JUN
	Blueback herring		X X X X X	-	-	-	-	FEB-JUN
	Hickory shad		$X \ X \ X \ X \ X$	-	-	-	-	FEB-JUN
TMAE	RTEBRATE:							
	Species	S F Conc.	триамттассис	Snarmi	Faac	T.a mira a	Juvenile	∆ d1+-
KAK#	орестер	s r conc.	J F M A M J J A S O N D	spawning	≞ggs 	 пат.vg6	ouveniles	AGUITS
16	Northern quahog (hard clam)	_ _	x x x x x x x x x x x x x	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
	Blue crab		\times			MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		$\times \times $	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
	Knobbed whelk		X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
89	Blue crab		X X X X X X X X X X X X X X X X X X X			MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		X X X X X X X X X X X X	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
37	Bottlenose dolphin		X X X X X X X		-	-	-	
	Harbor porpoise		X X X X X X	-	-	-	_	

Virginia: ESIMAP 14 (cont.)

BIOLOGICAL RESOURCES: (cont.)

MARINE MAMMAL: (cont.)

RAR#	Species	S F Conc.	J F M	AMJJAS		Mating	Calving	Pupping	Molting
67	Bottlenose dolphin			X X X X X X	X	-	-	-	-
	Harbor porpoise		X X X X	X X	X	-	-	-	-

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
67	Green sea turtle	TT	X X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	-
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	т т	X X X X X X X	-	-	=-	MAY-NOV	-

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
119	RAGGED ISLAND WILDLIFE MANAGEMENT AREA	VDGIF	804/367-1000

BIOLOGICAL RESOURCES:

BIRD:

BIKD															
RAR#	Species	SE	Conc.	J	F M								Nesting	Migrating	Molting
				-											
8	Brown pelican	С									ХХ		-	-	-
	Common loon				ХХ						Х		-	-	_
	Northern gannet		HIGH	X	ХХ						Х	Χ	-	-	-
	Red-breasted merganser		VERY HIGH	X	ХХ						Х	Χ	-	-	-
	Red-necked grebe				ХХ								-	-	-
	Red-throated loon			X	ХХ						Χ	Χ	-	-	_
14	Black scoter		HIGH	X	ХХ	Χ					Χ	Χ	-	-	-
	Surf scoter			Χ	ХХ	Χ					Х	Χ	_	_	_
	White-winged scoter			Х	ХХ	Х					Х	Χ	-	_	_
17	Gulls			Х	ХХ	Χ					Х	Χ	-	-	_
	Raptors			Х	ХХ	Χ					Х	Χ	_	-	_
2.6	American woodcock			Х						X :	ХХ		_	_	_
	Black-bellied plover					Х	X	x x	χX		ХХ		_	_	_
	Dunlin			X	ХХ						ХХ		_	_	_
	Greater yellowlegs										ХХ		_	_	_
	Killdeer					21		XX					_	_	_
	Least sandpiper				v	v					ХХ		_	_	_
											XX		_	_	_
	Lesser yellowlegs				Λ	Λ							_	_	_
	Pectoral sandpiper				.,						ХХ		-	_	_
	Red knot							XX					_	-	_
	Ruddy turnstone							XX					-	-	-
	Sanderling			X							XX		_	_	_
	Semipalmated plover										ХХ		-	-	_
	Semipalmated sandpiper										ХХ		-	-	-
	Short-billed dowitcher			X	XX	Χ					ХХ		-	-	-
	Stilt sandpiper							X X	X	X Z	ХХ		-	-	-
	Western sandpiper							X X	X	X Z	ХХ		-	-	-
	Whimbrel				Х	Χ	Χ	ΧХ	X				-	-	-
	White-rumped sandpiper				X	Χ	Χ						-	-	-
	Willet			X	ХХ	Χ	Χ	ХХ	X	X	ХХ	Χ	-	-	-
92	American black duck		COMMON	X	ХХ	Χ	Χ	ΧХ	X	X	ХХ	Χ	APR-JUN	-	_
	American kestrel		ABUNDANT							X	ХХ		-	-	-
	American wigeon		COMMON	Х	ХХ	Χ	Χ			X	ХХ	Χ	-	-	_
	Black-crowned night-heron		COMMON						ΧХ				MAY-JUL	_	_
	Blue-winged teal		COMMON								ХХ		_	_	_
	Brant		COMMON	Х	XX						XX	Х	_	_	_
	Broad-winged hawk		COMMON		21 21		21				XX	21	_	_	_
	Canada goose		COMMON	v	v v	v	v	v v	, ,			v	APR-JUN	_	_
	Cattle egret		COMMON	Λ							XX	Δ	MAY-JUL	_	_
	_			v								v			
	Clapper rail		VERY ABUNDANT COMMON										APR-JUN	_	_
	Gadwall	~	COMMON	Χ									APR-JUN	_	_
	Glossy ibis	С	00104014								XX		MAY-JUL	-	_
	Great blue heron	_	COMMON	Х							ХХ		-	-	_
	Great egret	С	COMMON							X Z	ХХ		MAY-JUL	-	-
	Green-winged teal			Χ	ХХ	Χ	Χ			X Z	ХХ	Χ	-	-	_
	King rail			X	ХХ	Χ	Χ			X	ХХ	Χ	-	-	-
	Little blue heron	С			X	Χ	Χ	ΧХ	X	X	ХХ		MAY-JUL	-	-
	Mallard		COMMON	X	ХХ	Χ	Χ	ΧХ	X	X	ХХ	Χ	MAY-JUL	-	_
	Merlin		COMMON							X	ХХ		_	_	_
	Northern harrier	С	COMMON	Х	Х					Х	ХХ	Х	_	_	_
	Northern pintail				ХХ	Х	Χ				ХХ		_	_	_
	Northern shoveler				XX						ХХ		_	_	_
	Red-tailed hawk		COMMON	X		21	2.1				XX		_	_	_
			ABUNDANT	Λ	Λ							77			
	Sharp-shinned hawk		ABUNDANI								XX		_	_	_
	Snow goose			Х	XX						ХХ	Χ	_	-	_
	Snowy egret		COMMON					X X	ΧX		ХХ		-	-	-
	Sora				X	Х	Χ			X	ХХ		-	-	_
	Striated heron		COMMON		Х	Χ	Χ	ΧХ	X	X	ХХ		MAY-JUL	-	-
	Tricolored heron	С	COMMON	X	ХХ	X	Χ	ΧХ	ΧX	X	ХХ	Χ	MAY-JUL	-	-
	Tundra swan			X	ХХ	Χ	Χ			X	ХХ	Χ	-	-	-
	Virginia rail			X	ХХ	Χ	Χ	ХХ	X	X	ХХ	Χ	-	-	-
	Willet		COMMON	X	ХХ	Χ	Χ	ХХ	X	X	ХХ	Χ	MAR-JUN	-	-
	Yellow-crowned night-heron	С			Х	Χ	Χ	ΧХ	ΧX	X	ХХ		MAY-JUL	_	_
93	Osprey										ХХ		MAR-AUG	_	_
	Clapper rail		HIGH	X								Χ	APR-AUG	_	_
J -	King rail		111011								ХХ		-	_	_
	Sora					Х					ХХ		_	_	_
	Virginia rail			V				y y	z v			У	APR-JUN	_	_
	Whimbrel		HIGH	21		X				X		21	-	_	_
	Willet		HIGH	37								v	- and Add V	-	_
٥٦													APR-SEP	_	_
95	American black duck		HIGH				Χ	Λ Χ	\ X				MAR-JUL	-	_
	American wigeon		MODERATE		XX						XX		-	-	_
	Brant		HIGH		XX				, .		XX		-	-	-
	Canada goose		HIGH										APR-JUN	-	-
	Gadwall		MODERATE				Х	ΧХ	ΧX				APR-JUN	-	-
	Green-winged teal		MODERATE		ХХ						ХХ		-	-	-
	Mallard		MODERATE				Χ	ХХ	X				MAY-JUL	-	-
	Northern pintail		MODERATE	X	ХХ	Х					ХХ		-	-	-
	Northern shoveler		LOW	Х	ХХ	Χ				2	ХХ	Χ	-	-	-
	Snow goose		HIGH	Х	ХХ	Х				2	ХХ	Χ	-	-	-
96	Bufflehead		HIGH	X	ХХ	Χ				2	ХХ	Χ	-	-	-
	Long-tailed duck		MODERATE	Х	ХХ	Х				1	ХХ	Х	_	_	_
	Mergansers		HIGH		XX						XX		_	_	_
	Scoters		HIGH		XX						XX		_	_	_
	Tundra swan		MODERATE		A A						A A		_	_	_
0.0			TOPHATE	Λ			v	v ,	7 37			Δ	_	_	-
	Osprey	~									XX		_		_
T00	Brown pelican	С								X			-	-	-
	Gulls							ХΣ	×Χ		XX		-	-	-
	Loons				ХХ						ХХ		-	-	-
	Mergansers			Χ	ХХ						ХХ	Χ	-	-	-
	Osprey				Х	Χ	Х	XX	ΧX	X	ХХ		-	-	-
	Scoters		HIGH	Х	ХХ	Х				2	ХХ	Χ	-	-	-
	Terns						Х	ХХ	ΧХ	X			-	-	-
102	American oystercatcher		15 ADULTS					XX					MAR-JUL	_	_
	American oystercatcher		82 ADULTS					XX					MAR-JUL	_	_
														_	_
	American oystercatcher		1 ADULT					XX					MAR-JUL	_	_
	American oystercatcher	~	4 ADULTS					XX			.,		MAR-JUL	-	_
296	Brown pelican	С	939 ADULTS							X		_	MAY-JUL	-	-
	Great black-backed gull		63 ADULTS										MAY-JUL	-	-
	Herring gull		860 ADULTS	X	ХХ	Х	Χ	ХХ	X	X Z	ХХ	Χ	MAY-JUL	-	-
	Royal tern		3380 ADULTS		Х	Х	Χ	ХХ	ΧX	X	X		MAY-JUL	-	-
	Sandwich tern	С	54 ADULTS			Χ	Χ	ХХ	ΧХ	X	X		MAY-JUL	-	_
297	Forster's tern		40 ADULTS		Х					X			MAY-JUL	-	-
	American oystercatcher		HIGH	Х	ХХ			-			ХХ	Х	-	_	_
	Peregrine falcon	Т	-				Х	ХХ	Χ		- 1	-	MAR-AUG	_	_

Virginia: ESIMAP 15 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH	:													
RAR#	Species	S F Conc.		J F N	A IA	м J 	J A	s o	N D	Spawning	Eggs	Larvae	Juveniles	Adults
18	Alewife			ХΣ	ХХ	ХХ				-	-	-	-	FEB-JUN
	American eel American shad			(X) (X)				ХХ	X X X X	-	-	-	JAN-DEC NOV-MAR	SEP-DEC JAN-JUN
	Atlantic croaker		2	\ A 2				ХХ	XX	_	_	_	AUG-DEC	MAY-NOV
	Atlantic mackerel Atlantic menhaden		,		XX	v v	v v	v v	ХХ	-	_	- MAY-NOV	- JAN-DEC	MAR-APR MAY-OCT
	Atlantic silverside									MAR-JUL	_	- MAI -NOV	JAN-DEC	JAN-DEC
	Atlantic spadefish Atlantic sturgeon	С	,	, v .	v v	v v	X X X	XX		-	-	-	AUG-OCT -	AUG-NOV JAN-OCT
	Bay anchovy	C								APR-SEP	_	_	JAN-DEC	JAN-DEC
	Black drum						XX			APR-JUN	APR-JUN -	APR-JUN -	APR-NOV	APR-NOV
	Black sea bass Blueback herring		Σ	XX			ХХ		ХХ	JUN-OCT -	-	-	APR-OCT NOV-MAR	APR-OCT JAN-JUN
	Bluefish Butterfish			,			ХХ			-	-	-	MAY-NOV	APR-NOV
	Clearnose skate			2			X X X X			-	-	-	JUL-NOV -	MAR-NOV MAY-NOV
	Gobies Harvestfish		Σ	XΧ						APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Hickory shad		Σ	XX			ХХ	X X	ХХ	_	-	-	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Hogchoker									MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside Minnows									APR-MAY APR-AUG	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		Σ	XΧ						APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish		Σ	XX			X X			- MAY-JUN	_	_	- JAN-DEC	APR-OCT JAN-DEC
	Northern puffer						ХХ			MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin Red drum			2			X X			MAY-JUL JUL-NOV	_	-	- AUG-SEP	MAR-OCT MAY-NOV
	Red hake			ХΣ	ХХ	Χ		ХХ	Χ	-	-	-	FEB-MAY	FEB-MAY
	Sandbar shark					ХХ	ХХ	ХХ		_	_	_	MAY-OCT	SEP-NOV MAY-OCT
	Scup (porgy)				ХХ	ХХ	ХХ	ХХ		-	-	-	JUN-OCT	MAR-OCT
	Silver hake Silver perch			(X) (X)			хх		X X X X	- APR-MAY	_	-	- JAN-DEC	OCT-MAY JAN-DEC
	Spot			XX	ХХ	ХХ	ХХ	ХХ	ХХ	-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake			Σ	ХХ	ХХ		ХХ	Χ	-	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout				Х	ХХ	ХХ	ХХ	Х	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass Striped killifish								XX	- APR-SEP	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Summer flounder								XX	-	-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog Threadfin shad		Σ	XX	X X	v		X X X	XX	-	_	-	-	OCT-APR FEB-MAY
	Infeadin Shad			Λ 2	Λ Λ	Λ		Λ Λ	Λ	_	_	_	_	SEP-NOV
2.5	Weakfish		,	, ,, ,			ХХ			APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
25	Atlantic menhaden Black drum		2	(X 2			XX		ХХ	-	-	-	JAN-DEC -	MAY-OCT APR-OCT
	Black sea bass									JUN-OCT	-	-	APR-OCT	APR-OCT
	Bluefish Butterfish			Σ			X X X X		X X	-	_	-	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Crevalle jack		Σ		ХХ	ХХ	ХХ	ХХ	ХХ		-	-	JAN-DEC	-
	Northern kingfish Northern searobin			2			X X X X			MAY-AUG -	_	-	-	APR-OCT MAR-OCT
	Pollock		Σ	XX	XX				Х		-	-	-	DEC-APR
	Red drum Red hake			V 3	ХХ			X X X X	X	JUL-NOV -	_	-	- FEB-MAY	MAY-NOV FEB-MAY
	ned nake			21 2	1 21	21		21 21	21				IDD PMI	SEP-NOV
	Sandbar shark			,			X X X X			-	_	_	MAY-OCT JUN-OCT	MAY-OCT
	Scup (porgy) Silver hake		Σ	2 2 X 2			X X		ХХ		-	-	- JUN-OCT	MAR-OCT OCT-MAY
	Southern kingfish (whiting)						ХХ	ХХ		-	-	-	-	APR-OCT
	Spanish mackerel Spiny dogfish		Σ	XΧ	X X X	X			ХХ	-	-	-	_	APR-MAY NOV-APR
	Spot		Σ						ХХ	-	_	DEC-APR -	MAR-NOV	MAR-NOV
	Spotted hake			2	XX	ХХ		ХХ	X	-	_	_	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout									MAY-JUL	-	-	APR-NOV	APR-NOV
	Summer flounder Tautog									- APR-AUG	_	OCT-MAY -	-	APR-OCT JAN-DEC
	Weakfish				Х	ХХ	ХХ	ХХ	X	APR-AUG	-		APR-NOV	APR-NOV
	Atlantic croaker Atlantic mackerel			Σ	ХХ	ХХ	ХХ	ХХ	ХХ	-	_	_	AUG-DEC -	MAY-NOV MAR-APR
30	Alewife			ΧΣ	ХХ					-	-	-	-	FEB-JUN
	American eel American shad		Σ		X X X X			ХХ	ХХ	_	_	_	JAN-DEC -	- FEB-JUN
	Atlantic croaker					ХХ	ХХ	ХХ	ХХ	-	-	-	MAY-DEC	-
	Atlantic herring Atlantic mackerel				X X	ХХ				-	_	_	-	FEB-JUN MAR-APR
	Atlantic menhaden						ХХ			-		_	MAY-NOV	MAY-OCT
	Bay anchovy Black drum		Σ	XΧ			X X X X			APR-SEP	_	_	JAN-DEC -	JAN-DEC APR-OCT
	Black sea bass						XX			-	-	-	APR-SEP	APR-SEP
	Blueback herring Bluefish			ΧΣ			X X X X			-	-	FEB-JUN -	FEB-OCT MAY-OCT	FEB-JUN MAY-OCT
	Crevalle jack		Σ	XX					ХХ	_	_	-	JAN-DEC	MAI-001 -
	Gobies							ХХ	ХХ	APR-SEP	APR-SEP	APR-OCT	JAN-DEC -	JAN-DEC
	Hickory shad Hogchoker			X X X X X				ХХ	ХХ	- MAY-SEP	- MAY-SEP	- MAY-SEP	JAN-DEC	FEB-JUN JAN-DEC
	Killifish									MAR-SEP	-	-	JAN-DEC	JAN-DEC
	Minnows Mummichog									APR-AUG APR-AUG	- -	- - - -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern pipefish					ХХ	ХХ	ХХ	ХХ	-	-	-	JAN-DEC	JAN-DEC
	Northern searobin Pollock		Σ	XX	ХХ		ХХ		Х	-	_	_	JUN-AUG -	JUN-AUG DEC-APR
	Red drum		2			ХХ	ХХ		X		-	-	AUG-SEP	MAY-NOV
	Red hake			ΧΣ	ХХ	Χ		ХХ	X	-	-	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark						ХХ			-		-	MAY-OCT	MAY-OCT
	Scup (porgy) Silver hake		_	ζ ζ Χ Σ			ХХ		ХХ	_	_	-	JUN-OCT -	MAR-OCT OCT-MAY
	Silver perch		Σ	XX	ХХ	ХХ		ХХ	ХХ	APR-MAY	APR-MAY	APR-JUN	JAN-DEC	JAN-DEC
	Silversides Spanish mackerel		Σ	XΣ	X X X		ХХ	ХХ	ХХ	MAR-JUL -	MAR-JUL -	APR-SEP	JAN-DEC -	JAN-DEC APR-MAY
	Spot				Χ		ХХ			-	-	-	APR-OCT	JUL-SEP
	Spotted hake Spotted seatrout		Σ	XX		y v	хх		X X	- MAY-JUL	-	-	OCT-APR APR-NOV	- APR-NOV
	Striped anchovy				Χ	ХХ	ХХ	ХХ	X	APR-SEP	_	-	APR-NOV	APR-NOV
	Summer flounder Tautog		_	(X)		ХХ	ХХ		X X X	-	_	-	APR-NOV	APR-NOV OCT-APR
	Weakfish		2			ХХ	ХХ			APR-AUG	-	-	- MAR-OCT	APR-OCT

Virginia: ESIMAP 15 (cont.)

BIOLOGICAL RESOURCES: (cont.)

БІОІ	OGICAL RESOURCES: (CONT.)							
FISH	: (cont.)							
	Species	S F Conc.	J F M A M J J A S O N D	Snawning	Eags	Larvae	Juveniles	Adults
30	White hake		$X X X \qquad X X X$	-	-	-	-	MAR-MAY SEP-NOV
	White perch		* * * * * * * * * * * * * * * * * * * *	APRTIIN	APRTIIN	APR=.TIIN	JAN-DEC	JAN-DEC
	Winter flounder		X X X X X X X X X X X X X X X X X X X	-	-	-	DEC-JUL	DEC-MAY
HABI	TAT:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D					
27	Maritime dune scrub		$\times \times $					
	Native coastal strand vegetation		$\times \times $					
	Sea-beach knotweed		X X X X X X X X X X X X X X					
97	Southern beach spurge Maritime dune scrub		X X X X X X X X X X					
	RTEBRATE:							
		G T C	T	Q	W	T	T	34.14.
	Species	S F Conc.	J F M A M J J A S O N D		Eggs	Larvae	Juveniles	Adults
	Northern quahog (hard clam)		x		MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
	Horseshoe crab		\times	_	_	_	JAN-DEC	JAN-DEC
	Knobbed whelk		\times	_	-	_	JAN-DEC	JAN-DEC
19	Blue crab		imes ime	MAY-OCT	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
	Channeled whelk		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
25	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Channeled whelk		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
30	Blue crab		$\times \times $	-	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
	Channeled whelk		X X X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Northern quahog (hard clam)		X X X X X X X X X X X X X		MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
	Northeastern beach tiger beetle	T T	X X X X X X X X X X X X X		JUN-SEP	-	JAN-DEC	JUN-OCT
98	Monarch butterfly	1000S	X X X	-	-	_	-	_
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
15	Bottlenose dolphin	HIGH	X X X X X X X	-	APR-OCT	-	-	
18	Harbor porpoise		X X X X X X X	-	-	-	-	
	Bottlenose dolphin		X X X X X X X	-	-	-	-	
25	Bottlenose dolphin		X X X X X X X	-	_	-	-	
	Common dolphin		X X X X X X	_	-	_	-	
	Harbor porpoise		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		-	-	-	
	Harbor seal	E E	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		JAN-DEC	_	_	
3.0	Humpback whale Bottlenose dolphin	E E	XXXXXX	_	JAN-DEC	_	_	
50	Harbor porpoise		XXXXXXXXX	_	_	_	_	
	Harbor seal		X X X X X	_	_	-	_	
101	Bottlenose dolphin	HIGH	X X X X X X X	-	-	_	_	
REPT								
RAR#		S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesti	ing Juvenil	les Adults
23		ТТ	X X X X X X X	-	-	-	// // // // // // // // // // // // //	
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	// MAY-NOV	
	Leatherback sea turtle	EE	X	_	-	-	-	
2.5	Loggerhead sea turtle	TT	XXXXXX	-	_	_	MAY-NOV	
25	Green sea turtle	T T E E	X	_	_	_	MAY-NOV	
	Kemp's ridley sea turtle Leatherback sea turtle	E E	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	MAY-NOV -	
	Loggerhead sea turtle	T T	XXXXXXX	_	_	_	ZON-YAM	
27	3 3	± ±	X X X X X X X X X	- MAY-JUL	_	_	MAR-NOV	
	Green sea turtle	ТТ	XXXXXXX	MAI-00L	_	_	MAY-NOV	
50	Kemp's ridley sea turtle	E E	XXXXXXX	_	_	_	MAY-NOV	
	Leatherback sea turtle	E E	XXXXXXX	_	_	_	-	
	Loggerhead sea turtle	T T	$X \times X \times X \times X$	_	_	_	// // // // // // // // // // // // //	
92			X X X X X X X X X	-	-	-	MAR-NOV	
94	Diamondback terrapin		X X X X X X X X X X	-	-	-	MAR-NOV	

HUMAN USE RESOURCES:

HUN#	Name	Contact	Phone		
148	EASTERN SHORE OF VIRGINIA NWR	U.S. FISH AND WILDLIFE SERVICE	757/331-2760		
150	FISHERMANS ISLAND NWR	U.S. FISH AND WILDLIFE SERVICE	757/331-2760		

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD	:								
RAR#	Species	S F Conc.	JFMAMJJA S	OND	Nesting	Migrating	Molting		
								-	
8	Brown pelican	С	X X X X X X X		-	-	-		
	Common loon		X X X	ХХ	-	-	-		
	Northern gannet	HIGH	X X X	XX	-	-	_		
	Red-breasted merganser	VERY HIGH	XXX	ХХ	_	-	_		
	Red-necked grebe Red-throated loon		X X X X X	хх	_	_	_		
1 /	Black scoter	HIGH	XXXX	XX	_	_	_		
1.4	Surf scoter	nign	XXXX	XX	_	_			
	White-winged scoter		XXXX	XX	_	_	_		
17	Gulls		XXXX	XX	_	_	_		
Ι,	Raptors		XXXX	XX	_	_	_		
2.1	Scaup	VERY HIGH	XXXX	XXX	_	_	_		
	Journ	vant mrom	11 11 11						
FISH	:								
RAR#	Species	S F Conc.	JFMAMJJA S	OND	Spawning	Eggs	Larvae	Juveniles	Adults
18	Alewife		X X X X X		-	-	-	-	FEB-JUN
	American eel		X X X X X X X X X X	XXX	-	-	-	JAN-DEC	SEP-DEC
	American shad		X X X X X X	ХХ	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker		$X \times X \times X$	XXX	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X		-	-	-	-	MAR-APR
	Atlantic menhaden		X X X X X X X X X X		-	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		X X X X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish			XXX	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	X X X X X X X X X X		- 7 DD _ CFD	-	_		JAN-OCT
	Black drum		XXXXXXXXX			- 7 DD TIIN		JAN-DEC	JAN-DEC
	Black drum		XXXXXX		APR-JUN	APR-JUN -	APR-JUN -	APR-NOV	APR-NOV
	Black sea bass		X X X X X X X	X X	JUN-OCT -		- -	APR-OCT NOV-MAR	APR-OCT
	Blueback herring Bluefish		$egin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	_	MAY-NOV	JAN-JUN APR-NOV
	Butterfish		XXXXXXX		_	_	_	JUL-NOV	MAR-NOV
	Clearnose skate		XXXXX		_	_	_	- NOV	MAY-NOV
	Gobies		X X X X X X X X X X		APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		XXXXXX		_	-	-	JUL-OCT	APR-OCT
	Hickory shad		XXXXXX	ХХ	_	_	_	NOV-MAR	JAN-JUN
	Hogchoker		XXXXXXXXX		MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		X X X X X X X X X X			_	_	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X			-	_	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X	XXX	APR-AUG	-	_	JAN-DEC	JAN-DEC
	Northern kingfish		X X X X X X	X	-	-	-	_	APR-OCT
	Northern pipefish		X X X X X X X X X X	$X \times X \times X$	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	X	MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin		X X X X X X X	X	MAY-JUL	-	-	-	MAR-OCT
	Red drum		X X X X X	XX	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake		X X X X X	XXX	-	-	-	FEB-MAY	FEB-MAY
									SEP-NOV
	Sandbar shark		X X X X X	X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		$X \times X \times$	X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		X X X X X	X X X		-	-	-	OCT-MAY
	Silver perch		X X X X X X X X X X				-	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X		-	-		MAR-NOV	MAR-NOV
	Spotted hake		XXXX	XXX	-	-	-	MAR-JUN	MAR-JUN
									SEP-NOV
	Spotted seatrout		X X X X X X			-	-	APR-NOV	APR-NOV
	Striped bass		X X X X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Striped killifish		X X X X X X X X X X			-	- -	JAN-DEC	JAN-DEC
	Summer flounder		XXXXXXXXX	XXX		-	OCT-MAY	JAN-DEC -	APR-OCT
	Tautog Threadfin shad		X X X X X X X X	XXX		_	_	-	OCT-APR FEB-MAY
	INITEQUITIN SHOU		^ ^ ^ ^	. л Л	_	_	_	-	SEP-NOV
	Weakfish		X X X X X X	, A A	ADD=AIIC	_	MAY-AUG	APR-NOV	APR-NOV
	WEGKIISH		A A A A A A		AFK-AUG		MAI-AUG	AFK-NOV	AFK-NOV
INVE	RTEBRATE:								
RAR#	Species	S F Conc	JFMAMJJA S	сиоз	Snawning	Eaas	Larvae	Juveniles	Adults
	Species								
16	Northern quahog (hard clam)		X X X X X X X X X			MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
	Horseshoe crab		XXXXXXXXX			-	-	JAN-DEC	JAN-DEC
	Knobbed whelk		X X X X X X X X X X			_	_	JAN-DEC	JAN-DEC
19	Blue crab		X X X X X X X X X X			MAY-SEP	MAY-NOV		JAN-DEC
	Channeled whelk		X X X X X X X X X X				-	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:								
RAR#	Species	S F Conc.	JFMAMJJA S	OND	Mating	Calving	Pupping	Molting	
	Bottlenose dolphin	HIGH	X X X X X X		-	APR-OCT	-	-	
	Harbor porpoise			X		-	-	-	
	Bottlenose dolphin		X X X X X X			-	-	-	
1 0 1	Bottlenose dolphin	HIGH	X X X X X X	. X	-	-	-	-	
101									
	TT.R •								
REPT									
REPT:	Species	S F Conc.	JFMAMJJA S	OND	Nesting	Hatching	Internest.	ing Juvenil	les Adults
REPT	Species				Nesting				
REPT	Species	тт	X X X X X	 X X X	Nesting 	-	Internest	MAY-NOV	 7 -
REPT	Species Green sea turtle Kemp's ridley sea turtle		X X X X X X X X X X X X X X X X X X X	 X X X X X X	<u>-</u> - -	-	- - -	VON-YAM	//// - MAY-NOV
REPT	Species Green sea turtle	тт	X X X X X	X X X X X X X X X X X X X X X		-		MAY-NOV	J – J MAY-NOV MAY-NOV

BIOLOGICAL RESOURCES:

BIRD	:
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RAR#	Species	S F Conc.	JFMAMJJ	A S O N D	Nesting	Migrating	Molting		
8	Brown pelican	C	X X X X X					_	
O	Common loon	C	XXXX	XXX	_	_	_		
	Northern gannet	HIGH	XXX	хх	-	-	_		
	Red-breasted merganser	VERY HIGH	X X X	ΧX	-	-	-		
	Red-necked grebe		X X		-	-	-		
	Red-throated loon		XXX	XX	-	-	-		
14	Black scoter	HIGH	XXXX	XX		-	_		
	Surf scoter White-winged scoter		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X X X X		_	_		
	White-winged scoter		ΛΛΛΛ	Α Λ	_	_	_		
FISH	:								
RAR#	Species	S F Conc.	JFMAMJJ	ASOND	Spawning	Eggs	Larvae	Juveniles	Adults
18	Alewife		X X X X X		-	-	-	-	FEB-JUN
	American eel		XXXXXXX		_	_	_	JAN-DEC	SEP-DEC
	American shad Atlantic croaker			$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	NOV-MAR AUG-DEC	JAN-JUN MAY-NOV
	Atlantic mackerel		XX	A A A A A	_	_	_	AUG-DEC	MAR-APR
	Atlantic menhaden		X X X X X X X X	X X X X X	_	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		X X X X X X X		MAR-JUL	-	_	JAN-DEC	JAN-DEC
	Atlantic spadefish			X X X X	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	C	X X X X X X X	X X X	-	-	-	-	JAN-OCT
	Bay anchovy		X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Black drum			XXXX		APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		XXXX		JUN-OCT	-	-	APR-OCT	APR-OCT
	Bluefich		XXXXXX	XX	-	-	-	NOV-MAR	JAN-JUN
	Bluefish Butterfish		$\begin{array}{c} & \times $	X X X X X X X X X X X X X X X X X X X	_	_	_	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Clearnose skate			XXXX	_	_	_	- JOT-NOA	MAY-NOV MAY-NOV
	Gobies		X			APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		XXXXX		-	-	-	JUL-OCT	APR-OCT
	Hickory shad		X X X X X X	хх	-	-	_	NOV-MAR	JAN-JUN
	Hogchoker		X X X X X X X	$X \ X \ X \ X \ X$	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		X X X X X X X	$X \ X \ X \ X \ X$	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Northern kingfish		X X X X			-	-		APR-OCT
	Northern pipefish		X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Northern puffer		XXXXX		MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin Red drum		XXXXX	XXXX	MAY-JUL JUL-NOV	_	_	- AUG-SEP	MAR-OCT MAY-NOV
	Red hake		XXXX		- 00L-NOV	_	_	FEB-MAY	FEB-MAY
	ica nake		22 22 22 22	21 21 21				I DD THII	SEP-NOV
	Sandbar shark		XXX	x x x	_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X		_	_	_	JUN-OCT	MAR-OCT
	Silver hake		X X X X X	X X X	-	-	-	-	OCT-MAY
	Silver perch		X X X X X X X	$X \ X \ X \ X \ X$	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot		X X X X X X X		-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		X X X X	XXX	-	-	-	MAR-JUN	MAR-JUN
									SEP-NOV
	Spotted seatrout			X X X X		-	-	APR-NOV	APR-NOV
	Striped bass		XXXXXXX		-	_	_	JAN-DEC	JAN-DEC
	Striped killifish Summer flounder		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		APK-SEP	-	- OCT-MAY	JAN-DEC JAN-DEC	JAN-DEC APR-OCT
	Tautog		XXXX	XXX		_	- OCI-MAI	JAN-DEC	OCT-APR
	Threadfin shad		XXXX	XXX	_	_	_	_	FEB-MAY
			11 11	41					SEP-NOV
	Weakfish		X X X X	X X X X	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
NVE	RTEBRATE:								
	Species	S F Conc.	JFMAMJJ	A S O N D	Spawning		Larvae	Juveniles	Adults
1.0	No all and a second and a local								
	Northern quahog (hard clam)		X			MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
ТЯ	Horseshoe crab Knobbed whelk		X		_	-	-	JAN-DEC	JAN-DEC
1 Ω	Blue crab		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		— M∆∨-∩∩⊓	- MAY-SEP	- MAY-NOV	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
19	Channeled whelk		X		MAY-0C1	MAI-SEP	MAI-NOV	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
			-1 11 11 11 11 11					3111. 220	2222 220
IARI	NE MAMMAL:								
AR#	Species	S F Conc.	JFMAMJJ			Calving	Pupping	Molting	
	Harbor porpoise		X X X X X	Χ		-	_	_	
20	Bottlenose dolphin		XXXX	XXX	-	-	-	-	
REPT	ILE:								
	Species	S F Conc.	JFMAMJJ	ASOND	Nestina	Hatching	Internest	ing Juveni	les Adults
-C11/17									
	_	ТТ	X X X	$X \ X \ X \ X$	_	-	-	MAY-NOV	<i>J</i> –
	Green sea turtle								
	Kemp's ridley sea turtle		X X X	X X X X	-	-	-	MAY-NOV	
		E E E E T T	XXX	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- - -	- - -	- - -	/ON-YAM - /ON-YAM	MAY-NO

BIOLOGICAL RESOURCES:

BIRD	:
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BIKD	Species	S F Conc.	J F M A M J J A S O N D	Nestina	Migrating	Molting	-	
106	American black duck		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN	_	_		
	American wigeon Black-necked stilt		XXXXXX	_	_	_		
	Blue-winged teal		хх	-	-	-		
	Brant Canada gasas		XXXX XXX	- ADD TIIN	-	-		
	Canada goose Glossy ibis	C	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- -	_	_		
	Great blue heron		X X X X X X	-	-	-		
	Great egret Green-winged teal	С	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Mallard		X X X X X X X X X X X X X X X X X X X	MAY-JUL	_	_		
	Northern harrier	C	$\times \times $	MAR-MAY	-	-		
	Osprey Red-shouldered hawk		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_		
	Saltmarsh sharp-tailed sparrow	С	x x x x x x x x x x x x x	MAY-JUL	-	-		
	Sedge wren	С	X X X X X X	MAY-JUL	-	-		
	Snow goose Snowy egret		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Striated heron		X X	-	-	-		
	Tricolored heron	C	XXX	-	-	-		
107	Yellow-crowned night-heron Brant	C VERY HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Brown pelican	C	$X \times X \times X \times X$	-	-	-		
	Bufflehead	HIGH	X X X X X X X X	-	-	-		
	Canvasback Common goldeneye		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Common loon		X X	-	-	-		
	Double-crested cormorant		XXXX	-	-	-		
	Long-tailed duck Mergansers		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Ruddy duck		X X X X X X X X	-	-	-		
	Scaup	HIGH	X X X X X X X X X	-	-	-		
	Scoters Tundra swan	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
108	American oystercatcher		$X \times X \times X$	-	-	-		
	Black skimmer		XX	-	-	-		
	Common tern Great black-backed gull		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Laughing gull		XXXX	-	-	-		
	Least tern	С	XX	-	-	-		
	Lesser yellowlegs Piping plover	тт	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Royal tern		X X	-	-	-		
	Sandwich tern	С	X X	-	-	-		
	Short-billed dowitcher Willet		$egin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_		
412	Great blue heron	6 NESTS	$\times \times $	MAY-JUL	-	-		
	Yellow-crowned night-heron	C 7 NESTS	X X X X X X X X X	MAY-JUL	-	-		
441	Great egret Yellow-crowned night-heron	C 2 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
443	Yellow-crowned night-heron	C 2 NESTS C 4 NESTS C 55 NESTS C 5 NESTS	XXXXXXXXX		-	-		
	Yellow-crowned night-heron	C 5 NESTS		MAY-JUL	-	-		
	Great egret	C 244 NESTS C 6 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
			\times \times \times \times \times \times \times	MAY-JUL	-	-		
F.C.0		9 NESTS C 130 NESTS	X	MAY-JUL	-	-		
362	Peregrine falcon	T	X X X X X X	MAR-AUG	-	_		
FISH								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Alewife		X X X X X	-	_	-	_	FEB-JUN
	American eel		$\times \times $		-	-	JAN-DEC	SEP-DEC
	American shad Atlantic croaker		X X X X X X X X X X X X X X X X X X X		_	_	NOV-MAR AUG-DEC	JAN-JUN MAY-NOV
	nciancic cioakci		V V V V V V V		_			1.17.7.T 14.O.A
	Atlantic mackerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-		-	-	MAR-APR
	Atlantic menhaden		$\begin{smallmatrix} & & \times & \times \\ \times & \times & \times & \times & \times & \times & \times &$	-	-	MAY-NOV	- JAN-DEC	MAY-OCT
	Atlantic menhaden Atlantic silverside		$\begin{array}{c} & \times \times \\ \times \times$	- - MAR-JUL			- JAN-DEC JAN-DEC	MAY-OCT JAN-DEC
	Atlantic menhaden	C	$\begin{smallmatrix} & & \times & \times \\ \times & \times & \times & \times & \times & \times & \times &$	-	-	MAY-NOV	- JAN-DEC	MAY-OCT
	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy	С	X X X X X X X X X X X X X X X X X X X X	- - MAR-JUL - - - APR-SEP	- - - -	MAY-NOV - - - -	JAN-DEC JAN-DEC AUG-OCT - JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC
	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum	С	X X X X X X X X X X X X X X X X X X X	- - MAR-JUL - - APR-SEP APR-JUN	- - - - - APR-JUN	MAY-NOV APR-JUN	JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV
	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy	C	X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT	- - - -	MAY-NOV - - - -	JAN-DEC JAN-DEC AUG-OCT - JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC
	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish	С	X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT	- - - - - APR-JUN - -	MAY-NOV	JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV
	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish	С	X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT	- - - - - APR-JUN	MAY-NOV APR-JUN	JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV
	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish	С	X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT	- - - - - APR-JUN - - - -	MAY-NOV	JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV
	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish	C	X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP	- - - - - - - - - - - - - - - - - -	MAY-NOV APR-JUN APR-OCT -	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV MAY-NOV JAN-DEC APR-OCT
	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad	C	X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP		MAY-NOV APR-JUN APR-OCT	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV MAY-NOV JAN-DEC APR-OCT JAN-JUN
	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish	C	X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP - MAY-SEP		MAY-NOV APR-JUN APR-OCT -	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV MAY-NOV JAN-DEC APR-OCT
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	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder	C	X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY		MAY-NOV APR-JUN APR-OCT MAY-SEP	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAY-OC
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66	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish Alewife	C	X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-AUG APR-AUG APR-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY		MAY-NOV APR-JUN APR-OCT MAY-SEP	JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC APR-OCT OCT-MAY JAN-DEC APR-OCT OCT-MAY JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV APR-NOV JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV FEB-MAY SEP-NOV APR-NOV FEB-MAY SEP-NOV APR-NOV FEB-MAY SEP-NOV APR-NOV FEB-JUN
66	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish	C	X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-MAY APR-AUG APR-AUG APR-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-MAY APR-MAY APR-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-MAY		MAY-NOV APR-JUN APR-OCT MAY-SEP	JAN-DEC AUG-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT COCT-MAY JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV APR-NOV JAN-DEC APR-OCT APR-OCT APR-OCT COCT-APR FEB-MAY SEP-NOV APR-NOV APR-NOV

Virginia: ESIMAP 18 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH:	(cont.)	

RAR#	: (Cont.) Species	S F Conc.		MAN	J J	ASONI	Spawning	Eggs	Larvae	Juveniles	Adults
	Atlantic croaker				 v v	·	·			JAN-DEC	
0.0	Atlantic mackerel			XX	ΔΛ	11 11 11 11 11 1	_	_	_	-	MAR-APR
	Atlantic menhaden				ХХ	XXXXX	ζ –	_	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside						MAR-JUL	-	_	JAN-DEC	JAN-DEC
	Atlantic spadefish					X X X X	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	C	ХХХ	XXX	ХХ	XXXXX	- ×	-	-	JAN-DEC	APR-NOV
	Bay anchovy		ΧХХ	XXX	ХХ	X X X X X	K APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum			ХХ	ХХ	X X X X	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass			ХХ	ХХ	X	-	-	-	APR-AUG	-
	Blueback herring		ХХХ			X	<u> </u>	-	-	NOV-MAR	JAN-JUN
	Bluefish			ХХ	ХХ	X X X X	-	-	-	MAY-NOV	APR-NOV
	Butterfish		Σ	XXX	ХХ	X X X X X	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate					X X X X	-	-	-	-	MAY-NOV
	Gobies		X X X	XXX	XX	XXXXX	K APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish					XXX	-	-	-	JUL-OCT	APR-OCT
	Hickory shad			XXX		X		-	-	NOV-MAR	JAN-JUN
	Hogchoker						MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside						X APR-MAY	-	-	JAN-DEC	JAN-DEC
	Minnows						K APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X				K APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern kingfish					XXX	-	-	-	-	APR-OCT
	Northern pipefish						MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer					XXX	MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin		Σ			XXX	MAY-JUL	-	-	-	MAR-OCT
	Red drum				ХХ	X X X X	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake		XΣ	XXX		$X \times X$	-	-	-	FEB-MAY	FEB-MAY
											SEP-NOV
	Sandbar shark			X	ХХ	X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		Σ	ХХХ	ХХ	XXX	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		ΧХХ	ХХХ		XXX	ζ –	-	-	-	OCT-MAY
	Silver perch		ΧХХ	ХХХ	ХХ	XXXXX	ζ –	-	_	JAN-DEC	JAN-DEC
	Spot		ΧХХ	ХХХ	ХХ	XXXXX	ζ –	-	DEC-APR	MAR-NOV	JAN-DEC
	Spotted hake		Σ	XXX	Х	X X X	_	_	_	MAR-JUN	MAR-JUN
	1										SEP-NOV
	Spotted seatrout			хх	хх	X X X X	MAY-JUL	_	_	APR-NOV	APR-NOV
	Striped bass		X X X			XXXXX		_	_	JAN-DEC	JAN-DEC
	Striped killifish						APR-SEP	_	_	JAN-DEC	JAN-DEC
	Summer flounder					XXXXX		_	_	JAN-DEC	JAN-DEC
	Tautog		XXX		21 21	XXX		_	_	-	OCT-APR
	Threadfin shad			XXX		XXX		_	_	_	FEB-MAY
	Inicadiin Shad		21 2	1 21 21		21 21 21					SEP-NOV
	Weakfish		ХХХ	XXX	ХХ	X X X X X	ζ –	-	-	JAN-DEC	-
NVE	RTEBRATE:										
AR#	Species	S F Conc.	JFN	1 A M	JЈ	ASONI	Spawning	Eggs	Larvae	Juveniles	Adults
16	Northern quahog (hard clam)		ΧХХ	ХХХ	ХХ	X X X X X	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
18	Horseshoe crab		ΧХХ	ХХХ	ХХ	X X X X X	ζ –	-	-	JAN-DEC	JAN-DEC
	Knobbed whelk		ΧХХ	ХХХ	ХХ	X X X X X	ζ –	-	-	JAN-DEC	JAN-DEC
19	Blue crab		ΧХХ	XXX	ХХ	X X X X X	MAY-OCT	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
	Channeled whelk		ххх	ХХХ	ХХ	X X X X X	ζ –	-	-	JAN-DEC	JAN-DEC
66	Blue crab		ΧХХ	XXX	ХХ	X X X X X	ζ –	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		ххх	ХХХ	ХХ	X X X X X	K JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
	Knobbed whelk					XXXXX		-	_	JAN-DEC	JAN-DEC
\RI	NE MAMMAL:										
				MAN	JЈ	ASONI) Mating	Calving	Pupping	Molting	
R#	Species	S F Conc.	JFR								
	<u>-</u>					,	ζ –	_	_		
18	Harbor porpoise			 X X X		·	ζ –	-	_	_	
18 20	Harbor porpoise Bottlenose dolphin			X X X X X X X X	ХХ	XXX		- - -	- - -	-	
18 20	Harbor porpoise Bottlenose dolphin Bottlenose dolphin		 x x x	X X X X X X X X X X X X X X	ХХ	X X X X X X X X X X X X X X X X X X X	- -	- - -	- - -	- - -	
18 20	Harbor porpoise Bottlenose dolphin		 x x x	X X X X X X X X	ХХ	XXX	- -	- - - -	- - -	- - -	
18 20 67	Harbor porpoise Bottlenose dolphin Bottlenose dolphin		 x x x	X X X X X X X X X X X X X X	ХХ	X X X X X X X X X X X X X X X X X X X	- -	- - - -	- - - -	- - -	
18 20 67	Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise	S F Conc.	X X X X X X X X X X X X X X X X X X X		х х х х	XXXX	- - - O Nesting	- - - - Hatching	- - - - Internest	- - - :ing Juveni	les Adul
18 20 67 EPT	Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise ILE: Species	S F Conc.	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	х х х х J J	X X X X X X X X X X X X X X X X X X X	- - - O Nesting	- - - - Hatching	Internest		
20 67 EPT AR#	Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise ILE: Species	S F Conc.	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X J J X X	X X X X X X X X X X X X X X X X X X X	- - - O Nesting	- - - - Hatching 	Internest	MAY-NO	 V -
18 20 67 EPT	Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise ILE: Species Green sea turtle Kemp's ridley sea turtle	S F Conc. T T E E	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X J J X X X X X	X X X X X X X X X X X X X X X X X X X	- - - O Nesting	- - - - Hatching 	Internest	MAY-NO	 V - V MAY-
18 20 67 EPT	Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle	S F Conc. T T E E E E	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- - - O Nesting	- - - - Hatching - -	- - - - Internest - - - -	MAY-NO MAY-NO	V V MAY- V MAY-
18 20 67 EPT • R#	Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle	S F Conc. T T E E E E T T	X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- - - O Nesting	- - - - Hatching - - -	- - - -	MAY-NO MAY-NO - MAY-NO	V ————————————————————————————————————
18 20 67 EPT • R#	Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Green sea turtle	S F Conc. T T E E E E T T T T	X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- - - O Nesting	- - - - Hatching - - - -	- - - - - - - - - - -	MAY-NO MAY-NO - MAY-NO MAY-NO	V
18 20 67 EPT AR#	Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Green sea turtle Kemp's ridley sea turtle	S F Conc. T T E E E E T T T T T T E E E	X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- - - O Nesting	- - - - Hatching - - - - - -	- - - -	MAY-NO MAY-NO MAY-NO MAY-NO MAY-NO MAY-NO	V - V MAY- MAY- V MAY- V - V -
18 20 67 EPT AR# 23	Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Green sea turtle	S F Conc. T T E E E E T T T T	X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- - - O Nesting	- - - Hatching - - - - - - -	- - - -	MAY-NO MAY-NO - MAY-NO MAY-NO	V

HUMAN USE RESOURCES:

HUN#	Name	Contact	Phone	
158	PLUM TREE ISLAND NWR	U.S. FISH AND WILDLIFE SERVICE	757/721-2412	

BIOLOGICAL RESOURCES:

DIDD.	
RIKI)	

BIRD RAR#		S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
							=	
	Great blue heron Great blue heron	3 NESTS 100 NESTS C 150 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		
F.C.0	Great egret	C 150 NESTS	$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		-	-		
562	Peregrine falcon	Т	XXXXX	MAR-AUG	-	-		
FISH								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel American shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	JAN-DEC NOV-MAR	SEP-DEC JAN-JUN
	Atlantic croaker		X X X X X X X X X		-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	-	-	-	-	MAR-APR
	Atlantic menhaden Atlantic silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	– МДРТІІТ.	_	MAY-NOV -	JAN-DEC JAN-DEC	MAY-OCT JAN-DEC
	Atlantic spadefish		XXXX	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	X X X X X X X X X X X	-	-	_	-	JAN-OCT
	Bay anchovy Black drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$			- APR-JUN	JAN-DEC APR-NOV	JAN-DEC APR-NOV
	Black sea bass		X X X X X X X	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring Bluefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	-	NOV-MAR MAY-NOV	JAN-JUN APR-NOV
	Butterfish		X X X X X X X X X X	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate Gobies		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- 	- ADD CED	- A DD OCT	- JAN-DEC	MAY-NOV
	Harvestfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- -	APR-SEP -	APR-OCT	JUL-OCT	JAN-DEC APR-OCT
	Hickory shad		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	NOV-MAR	JAN-JUN
	Hogchoker Inland silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		MAY-SEP -	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	- JAN-DEC	APR-OCT JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin Red drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL JUL-NOV	_	-	- AUG-SEP	MAR-OCT MAY-NOV
	Red hake		XXXX XXXX	-	-	-	FEB-MAY	FEB-MAY
	Sandhar chark		V V V V V V			_	MAV-ACE	SEP-NOV
	Sandbar shark Scup (porgy)		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	MAY-OCT JUN-OCT	MAY-OCT MAR-OCT
	Silver hake		X X X X X X X X X	-	-	-	-	OCT-MAY
	Silver perch Spot		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-MAY -	_	- DEC-APR	JAN-DEC MAR-NOV	JAN-DEC MAR-NOV
	Spotted hake		X X X X X X X X	-	-	-	MAR-JUN	MAR-JUN
	Constitution of the contract o		V V V V V V V V	M7 57 TIIT			ADD NOU	SEP-NOV
	Spotted seatrout Striped bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL -	_	-	APR-NOV JAN-DEC	APR-NOV JAN-DEC
	Striped killifish		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Summer flounder Tautog		$\begin{array}{cccccccccccccccccccccccccccccccccccc$			OCT-MAY	JAN-DEC -	APR-OCT OCT-APR
	Threadfin shad		X X X X X X X X	-	-	-	_	FEB-MAY
	Transl Chale		W W W W W W W	300 3110		M217 2110	ADD MOH	SEP-NOV
66	Weakfish Alewife		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG -		MAY-AUG -	APR-NOV	APR-NOV FEB-JUN
	American eel		X X X X	-	-	-	FEB-MAY	-
	American shad Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	NOV-MAR JAN-DEC	JAN-JUN -
	Atlantic mackerel		XX	-	-	-	-	MAR-APR
	Atlantic menhaden		$\begin{array}{cccccccccccccccccccccccccccccccccccc$			MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside Atlantic spadefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL -	-	_	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic sturgeon	C	$\times \times $	-	-	-	JAN-DEC	APR-NOV
	Bay anchovy Black drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		- APR-JUN	- 7 DD = TIIN	JAN-DEC APR-NOV	JAN-DEC APR-NOV
	Black sea bass		X X X X X	-	-	-	APR-AUG	-
	Blueback herring Bluefish		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		-	_	NOV-MAR	JAN-JUN
	Butterfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Clearnose skate		$X\;X\;X\;X\;X\;X\;X$	-	-	-		MAY-NOV
	Gobies Harvestfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP	APR-SEP -	APR-OCT	JAN-DEC JUL-OCT	JAN-DEC APR-OCT
	Hickory shad		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	NOV-MAR	JAN-JUN
	Hogchoker Inland silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$			MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows		$X \times X \times X \times X \times X \times X \times X \times X$		_	-	JAN-DEC	JAN-DEC
	Mummichog Northern kingfish		X X X X X X X X X X X X X X	APR-AUG	-	-	JAN-DEC -	JAN-DEC APR-OCT
	Northern pipefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	-	- - - -	MAR-OCT	MAR-OCT
	Northern searobin Red drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL JUL-NOV	-	_	- AUG-SEP	MAR-OCT MAY-NOV
	Red hake			-		-	FEB-MAY	FEB-MAY
	Sandbar shark		X X X X X X	_	_	_	MAY-OCT	SEP-NOV MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAY-OCT MAR-OCT
	Silver hake			-	-	-	- TAN_DEC	OCT-MAY
	Silver perch Spot		$\begin{array}{cccccccccccccccccccccccccccccccccccc$			- DEC-APR	JAN-DEC MAR-NOV	JAN-DEC JAN-DEC
	Spotted hake		XXXXXXXXX	-	-	-	MAR-JUN	MAR-JUN
	Spotted seatrout		X	MAYTIIT.	_	_	APR-NOV	SEP-NOV APR-NOV
	Striped bass		$\times \times $	-		-	JAN-DEC	JAN-DEC
	Striped killifish Summer flounder		X X X X X X X X X X X X X X X X X X X	APR-SEP	-	-	JAN-DEC	JAN-DEC JAN-DEC
	Tautog		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC -	JAN-DEC OCT-APR
	Threadfin shad		$X\ X\ X\ X \qquad \qquad X\ X\ X$	-	-	-	-	FEB-MAY
	Weakfish		X	_	_	_	JAN-DEC	SEP-NOV -
68	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American shad		XXXXX	-	-	-	-	FEB-JUN
	Blueback herring Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	-	-	FEB-JUN FEB-JUN
	Striped bass		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	-	OCT-JUN
89	American eel American shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	-	JAN-DEC FEB-OCT	-
	Atlantic croaker		X X X X X X X X X X X X X X X X X X X	_	-	-	JAN-DEC	_
	Atlantic menhaden Atlantic silverside		X X X X X X X X X X X X X X X X X X X	– МЛD 7117	-	-	MAY-NOV	- TAN-DEC
	Atlantic silverside Atlantic sturgeon	С	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL -	-	-	JAN-DEC JAN-DEC	JAN-DEC APR-NOV
	Bay anchovy		X	APR-SEP	-	-	JAN-DEC	JAN-DEC

Virginia: ESIMAP 19 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH	: (cont.)							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
89	Black sea bass		X X X X X		-		APR-AUG	-
	Hogchoker		$\times \times $	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Silver perch		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	-	JAN-DEC	JAN-DEC
	Spot		$X\ X\ X$	-	-	DEC-APR	APR-NOV	-
	Striped bass		X X X X X X	-	-	-	MAY-OCT	-
	Summer flounder			-	-	-	JAN-DEC	-
	Weakfish		$X\ X\ X$	-	-	-	JAN-DEC	-
	White perch		X X X X X X X X X X X X	-	-	_	JAN-DEC	JAN-DEC
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
16	Northern quahog (hard clam)		X X X X X X X X X X X X	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
18	Horseshoe crab		$\times \times $	-	_	_	JAN-DEC	JAN-DEC
	Knobbed whelk		$X\ X\ X$	-	-	-	JAN-DEC	JAN-DEC
19	Blue crab		$X\ X\ X$	MAY-OCT	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
	Channeled whelk		$X\ X\ X$	-	-	-	JAN-DEC	JAN-DEC
66	Blue crab		$X\ X\ X$	-	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		$X\ X\ X$	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
	Knobbed whelk		$X\ X\ X$	-	-	-	JAN-DEC	JAN-DEC
89	Blue crab			-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		X X X X X X X X X X X X	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
18	Harbor porpoise		X X X X X X X X	_	-	_	_	
20	Bottlenose dolphin		X X X X X X X	-	-	-	-	
37	Bottlenose dolphin		$X \ X \ X \ X \ X \ X$	-	-		-	
	Harbor porpoise		$X \ X \ X \ X \ X$	-	-		-	
67	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Harbor porpoise		X X X X X X	-	-	-	-	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internest	ing Juveni	les Adults
67	Green sea turtle	 Т Т	X X X X X X		-		MAY-NO	J –
	Kemp's ridley sea turtle	E E	X X X X X X X	_	_	_	MAY-NO	J –
	Kemp s ridiey sea curcie							
	Leatherback sea turtle	E E	X X X X X X X	-	_	_	_	MAY-NO

S F Conc.

BIOLOGICAL RESOURCES:

ъ	т	D	_	

RAR# Species

KAK#	species	S F Conc.			Migrating	MOITING	, 	
	Bufflehead	HIGH	X X X X X X X X					
2 ±	Canvasback	HIGH	X X X X X X X X	_	_	_		
	Common goldeneye		X X X X X X X X		_	_		
	Mergansers	MODERATE	X X X X X X X X		_	_		
	Redhead		X X X X X X X X X	_	-	_		
	Ring-necked duck		X X X X X X X X X X X X X X X X X X X	-	-	_		
	Ruddy duck	HIGH		-	-	-		
	Scaup	MODERATE	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Great blue heron	2 NESTS	$X\ X\ X$		-	_		
	Great blue heron	12 NESTS	X X X X X X X X X X X X X		-	-		
	Great blue heron	28 NESTS	X X X X X X X X X X X X X X X X X X X		-	_		
419	Great blue heron	23 NESTS	X X X X X X X X X X X X	MAY-JUL	-	_		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
			J F M A M J J A S O N D					
68	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American shad		X X X X X	-	-	-	-	FEB-JUN
	Blueback herring		$X \ X \ X \ X \ X$	-	-	_	-	FEB-JUN
	Hickory shad		X X X X X	-	-	-	-	FEB-JUN
0.0	Striped bass		X X X X X X X X X X X X X X X X X X X	_	-	-	-	OCT-JUN
89	American eel		X	_	-	_	JAN-DEC	<u>-</u>
	American shad Atlantic croaker		X X X X X X X X X X X X X X X X X X X	_	_	_	FEB-OCT JAN-DEC	_
	Atlantic croaker Atlantic menhaden		X	_	_	_	MAY-NOV	_
	Atlantic silverside		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Atlantic sturgeon	С	X X X X X X X X X X X X X	-	_	_	JAN-DEC	APR-NOV
	Bay anchovy	-	$X \times X \times X \times X \times X \times X \times X$	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Black sea bass		X X X X X	_	-	_	APR-AUG	-
	Hogchoker		$\times \times $	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Mummichog		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Silver perch		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Spot		$X\ X\ X$	-	-	DEC-APR	APR-NOV	-
	Striped bass		X X X X X X	-	-	_	MAY-OCT	-
	Summer flounder		X X X X X X X X X X X X X		-	-	JAN-DEC	-
	Weakfish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	- TAN DEG
111	White perch Alewife		X	_	_	_	JAN-DEC FEB-OCT	JAN-DEC FEB-JUN
114	American eel		X X X X X X X X X X X X X X X X X X X	_	_	_	JAN-DEC	- -
	American shad		XXXXXXXXXX	_	_	_	FEB-OCT	FEB-JUN
	Atlantic croaker		X X X X X X X X X X X X X	_	_	_	JAN-DEC	-
	Atlantic menhaden		XXXXXX	_	_	_	MAY-NOV	_
	Atlantic silverside		X X X X X X X X X X X X X	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Atlantic sturgeon	С		-	-	-	JAN-DEC	APR-NOV
	Bay anchovy		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X X	-	-	-	FEB-OCT	FEB-JUN
	Channel catfish		$X\ X\ X$	MAR-MAY	-	_	JAN-DEC	JAN-DEC
	Gizzard shad		$\times \times $	-	-	-	JAN-DEC	-
	Hickory shad		X X X X X X X X	-	-	-	MAR-SEP	FEB-JUN
	Hogchoker Minnows		X		MAY-SEP -	MAY-SEP -	JAN-DEC	JAN-DEC
			X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Mummichog Silver perch		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $	APR-AUG	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Spot		X X X X X X X X X X X X X	_	_	DEC-APR	APR-NOV	-
	Striped bass		XXXXXXXXX	_	_	-	MAY-OCT	FEB-JUN
	Weakfish		\times	_	-	_	JAN-DEC	-
	White catfish		$\times \times $	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	White perch		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
TMVE	RTEBRATE:							
		S E C	TEN 3 W T T 3 C C	Cm e * · ·	Total -	T a	Tonne	34
KAR#	Species	S F Conc.	J F M A M J J A S O N D			Larvae	Juveniles	Adults
16	Northern quahog (hard clam)		x			MAY-OCT	JAN-DEC	JAN-DEC
	Blue crab		$X \times X \times X \times X \times X \times X \times X$	-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		$\times \times $	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
114	Blue crab		$\times \times $		-	MAY-NOV	JAN-DEC	JAN-DEC
115	Eastern oyster		$\times \times $	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
MADT	NE MAMMAL:							
				Wahina	Calving	Drawn i n a	Molting	
	Species	S F Conc	J F M A M .I .I A S C K I I					
	Species	S F Conc.	J F M A M J J A S O N D			Pupping		
RAR#						 -		

JFMAMJJASOND Nesting Migrating Molting

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN# Name Contact Phone

98 BALTHROPE MARSH WILDLIFE MANAGEMENT AREA

BIOLOGICAL RESOURCES:

В	IRD	:

BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	r 	
91	Bufflehead	HIGH	x x x x	_	_	_		
	Canvasback	HIGH	$X \ X \ X \ X $	-	-	-		
	Common goldeneye		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Mergansers	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Redhead		X X X X X X X X	-	-	-		
	Ring-necked duck	HTCH.	X X X X X X X X X X X X X X X X X X X	-	-	_		
	Ruddy duck	HIGH	X X X X X X X X X X X X X X X X X X X	_	_	_		
408	Scaup Great blue heron	MODERATE 26 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
FISH								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
68	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American shad		XXXXX	-	_	-	_	FEB-JUN
	Blueback herring		XXXXX	_	_	_	_	FEB-JUN
	Hickory shad		XXXXX	-	-	_	_	FEB-JUN
0.0	Striped bass American eel		X X X X X X X X X X X X X X X X X X X	_	_	_	JAN-DEC	OCT-JUN -
09			X X X X X X X X X X X X X	_	_	_		_
	American shad Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	FEB-OCT JAN-DEC	_
	Atlantic menhaden		XXXXXXX	_	_	_	MAY-NOV	_
	Atlantic menhaden Atlantic silverside		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Atlantic sturgeon	С	X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	APR-NOV
	Bay anchovy	<u> </u>	X X X X X X X X X X X X X X X X X X X	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Black sea bass		XXXXX	-	_	_	APR-AUG	-
	Hogchoker		\times		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Mummichog		\times		_	_	JAN-DEC	JAN-DEC
	Silver perch		\times	-	_	_	JAN-DEC	JAN-DEC
	Spot		imes ime	_	-	DEC-APR	APR-NOV	_
	Striped bass		X X X X X X	_	_	_	MAY-OCT	_
	Summer flounder		X X X X X X X X X X X X X X	-	-	_	JAN-DEC	_
	Weakfish		$\times \times $	-	-	-	JAN-DEC	-
	White perch		imes ime	-	-	_	JAN-DEC	JAN-DEC
114	Alewife		X X X X X X X X X X	-	-	-	FEB-OCT	FEB-JUN
	American eel		$\times \times $	-	-	-	JAN-DEC	-
	American shad		X X X X X X X X X X	-	-	-	FEB-OCT	FEB-JUN
	Atlantic croaker		$\times \times $	-	-	-	JAN-DEC	-
	Atlantic menhaden		X X X X X X X	-	-	-	MAY-NOV	-
	Atlantic silverside				-	-	JAN-DEC	JAN-DEC
	Atlantic sturgeon	С	X X X X X X X X X X X X X	-	-	-	JAN-DEC	APR-NOV
	Bay anchovy		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X	_	-	_	FEB-OCT	FEB-JUN
	Channel catfish		X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
	Gizzard shad		X X X X X X X X X X X X X	-	-	_	JAN-DEC	-
	Hickory shad		X X X X X X X X	- MAY CED	- MAY 000	MAY OFF	MAR-SEP	FEB-JUN
	Hogchoker Minnows				MAY-SEP	MAY-SEP -	JAN-DEC	JAN-DEC
	Mummichog		$\begin{array}{cccccccccccccccccccccccccccccccccccc$			_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Silver perch		X X X X X X X X X X X X X X X X X X X	APR-AUG	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Spot		X X X X X X X X X X X X X X X X X X X	_	_	- DEC-APR	APR-NOV	JAN-DEC -
	Striped bass		XXXXXXXXX	_	_	DEC-AFK	MAY-OCT	FEB-JUN
	Weakfish		X X X X X X X X X X X X X X X X X X X	_	_	_	JAN-DEC	- -
	White catfish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	White perch		\times	-	_	_	JAN-DEC	JAN-DEC
MVE	RTEBRATE:							
	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Northern quahog (hard clam)		X X X X X X X X X X X X X			MAY-OCT	JAN-DEC	JAN-DEC
89	Blue crab		X X X X X X X X X X X X X X X X X X X	- TIIM_CED	- TIIN_CED	MAY-NOV	JAN-DEC	JAN-DEC
111	Eastern oyster		X X X X X X X X X X X X X X X X X X X			JUN-SEP	JAN-DEC	JAN-DEC
	Blue crab Eastern oyster		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- JUN-SEP		MAY-NOV JUN-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
				_				
27								
37	Bottlenose dolphin Harbor porpoise		XXXXXXXXXX	_	_	_	_	

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD	:											
RAR#	Species	SF	Conc.	JF	MAM	JJAS	воир	Nesting	Migrating	Molting	ì	
8	Brown pelican	- <u>-</u> -			 x x x	X X X X	- 				· -	
Ü	Common loon	Ü		XXX		21 21 21 2	XX	_	_	_		
	Northern gannet		HIGH	XXX			X X		-	-		
	Red-breasted merganser		VERY HIGH	XXX			ХХ	-	-	-		
	Red-necked grebe Red-throated loon			XXX			хх	_	_	_		
14	Black scoter		HIGH	XXX			XX	_	-	-		
	Surf scoter			XXX			ХХ	-	-	-		
0.6	White-winged scoter			XXX	XX		X X	_	-	-		
26	American woodcock Black-bellied plover			XX	x x x	XXXX	XXXX	_	_	_		
	Dunlin				XXX		XXXX	_	_	_		
	Greater yellowlegs			2		XXXX	XXX	-	-	-		
	Killdeer					XXX	, ,, ,,	-	-	-		
	Least sandpiper Lesser yellowlegs					X X X X X X X X X X X X X X X X X X X		_	_	_		
	Pectoral sandpiper			2		XXXX		_	_	_		
	Red knot			2	XXX	X X X		-	-	-		
	Ruddy turnstone				XXX			-	-	-		
	Sanderling Semipalmated plover					X X X X X X X X X X X X X X X X X X X	XXXX	_	_	-		
	Semipalmated prover Semipalmated sandpiper					X		_	_	_		
	Short-billed dowitcher						XXXX	-	-	-		
	Stilt sandpiper					X X X X		-	-	-		
	Western sandpiper					XXXX	XXX	-	-	-		
	Whimbrel White-rumped sandpiper				X X X X X X X X X X X X X X X X X X X	XXX		_	_	_		
	Willet					XXXX	XXXX	_	_	_		
94	Clapper rail		HIGH	XXX	XXX	XXXX	X X X X	APR-AUG	-	-		
	King rail						XXXX	-	-	-		
	Sora Virginia rail				XXX		XXX	- APR-JUN	_	_		
	Whimbrel		HIGH		XXX	XXX		- AIN OON	_	_		
	Willet		HIGH					APR-SEP	-	-		
95	American black duck		HIGH			X X X X		MAR-JUL	-	-		
	American wigeon		MODERATE	XXX			XXX	-	_	-		
	Brant Canada goose		HIGH HIGH	XXX		XXXX	X X X	- APR-JUN	_	_		
	Gadwall		MODERATE					APR-JUN	_	-		
	Green-winged teal		MODERATE	XXX			X X X	-	-	-		
	Mallard		MODERATE			XXXX		MAY-JUL	-	-		
	Northern pintail Northern shoveler		MODERATE LOW	XXX			X X X X X X X X X X X X X X X X X X X	_	_	_		
	Snow goose		HIGH	XXX			XXX	_	_	_		
96	Bufflehead		HIGH	ХХХ			X X X	-	-	-		
	Long-tailed duck		MODERATE	XXX			X X X	-	-	-		
	Mergansers		HIGH	XXX			X X X X X X X X X X X X X X X X X X X	_	-	-		
	Scoters Tundra swan		HIGH MODERATE	XXX			XXX	_	_	_		
102	American oystercatcher		15 ADULTS			XXXX		MAR-JUL	_	_		
116	American kestrel		ABUNDANT				XXX	-	-	-		
	Broad-winged hawk		COMMON				X X X	-	-	-		
	Merlin Red-tailed hawk		COMMON ABUNDANT	ХХ			XXX	_	_	-		
	Sharp-shinned hawk		ABUNDANT	AA			XXX	_	_	_		
117	Gulls				ХХ	XXXX		MAY-JUL	-	-		
118	Black skimmer			2	X X X	XXXX	X	MAY-JUL	-	-		
110	Common tern					XXXX		MAY-JUL	-	-		
	Piping plover American oystercatcher	ТТ				X X X X X X X X X X X X X X X X X X X		APR-SEP MAR-JUL	_	_		
	American oystercatcher		38 ADULTS			XXXX		MAR-JUL	_	-		
122	American oystercatcher		25 ADULTS	2	X X X	XXXX	ζ	MAR-JUL	-	-		
	American oystercatcher		29 ADULTS			XXXX		MAR-JUL	-	-		
212	Herring gull Laughing gull		7 ADULTS 15 ADULTS			XXXX		MAY-JUL MAY-JUL	_	_		
275	Laughing gull		15 ADULTS			XXXX		MAY-JUL	_	_		
	Laughing gull		235 ADULTS			XXXX		MAY-JUL	-	-		
	Forster's tern		25 ADULTS			XXXX		MAY-JUL	-	-		
	Laughing gull		27 ADULTS			XXXX		MAY-JUL	_	-		
	Laughing gull Laughing gull		450 ADULTS 70 ADULTS			X X X X X X X X X X X X X X X X X X X		MAY-JUL MAY-JUL	_	_		
	Laughing gull		8 ADULTS			XXXX		MAY-JUL	-	-		
	Forster's tern		6 ADULTS			XXXX		MAY-JUL	-	-		
	Forster's tern		8 ADULTS			XXXX		MAY-JUL	-	-		
33/	Black skimmer Common tern		2 ADULTS 26 ADULTS			X X X X X X X X X X X X X X X X X X X		MAY-JUL MAY-JUL	_	-		
	Least tern	С	80 ADULTS			XXXX		MAY-JUL	-	-		
344	Common tern		66 ADULTS	2	ХХХ	XXXX	X	MAY-JUL	-	-		
215	Gull-billed tern	Т	86 ADULTS			XXXX		MAY-JUL	_	-		
	Forster's tern Least tern	С	45 ADULTS 32 ADULTS			X X X X X X X X X X X X X X X X X X X		MAY-JUL MAY-JUL	_	-		
	Least tern		3 ADULTS			XXXX		MAY-JUL	-	-		
	Forster's tern		62 ADULTS	2	XXX	X X X X	X	MAY-JUL	-	-		
	Forster's tern	m	9 ADULTS			XXXX		MAY-JUL	-	-		
	Gull-billed tern American oystercatcher	T	10 ADULTS HIGH	X X X		XXXX	x x x x	MAY-JUL -	_	_		
	-					-	**					
FISH												
RAR#	Species		Conc.	JF	MAM	JJA S	SOND	Spawning	Eggs	Larvae	Juveniles	Adults
25	Atlantic croaker				 y		 X X X X		-		AUG-DEC	MAY-NOV
2.5	Atlantic mackerel			2	ХХ		A A	-	_	-	AUG-DEC	MAR-APR
	Atlantic menhaden			ХХХ	XXX	XXXX	XXXX	-	-	-	JAN-DEC	MAY-OCT
	Black drum					XXXX		- TUN 000	-	-		APR-OCT
	Black sea bass Bluefish					X X X X X X X X X X X X X X X X X X X		JUN-OCT -	_	-	APR-OCT MAY-NOV	APR-OCT APR-NOV
	Butterfish			7				-	_	-	JUL-NOV	MAR-NOV
	Crevalle jack				ХХХ	XXXX	XXXX	-	-	-	JAN-DEC	-
	Northern kingfish							MAY-AUG		-	-	APR-OCT
	Northern searobin Pollock							_	-	-	- -	MAR-OCT DEC-APR
	Red drum			A A 2	Х Х	XXXX	XXX	- JUL-NOV	_	-	_	MAY-NOV
	Red hake			ΧΣ			XXX			-	FEB-MAY	FEB-MAY
												SEP-NOV
	Sandbar shark						XX	-	_	-	MAY-OCT	MAY-OCT
	Scup (porgy) Silver hake				X X X X X X X X X X X X X X X X X X X	XXXX	XXX	_	_	-	JUN-OCT -	MAR-OCT OCT-MAY
	Southern kingfish (whiting)						XX		_	-	-	APR-OCT
	Spanish mackerel				ХХ			-	-	-	-	APR-MAY

Virginia: ESIMAP 22 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH: (cont.)

	: (cont.)															
RAR#	Species	S F Conc.		JE	MA	м Ј	JA	A S O	ND	Spawning	Eggs	Larvae	Juv	eniles	Adults	
	Spiny dogfish			XX	 X				ХХ	-	-	-		_	NOV-APR	
	Spot						ХХ	ХХХ	XX		_	DEC-APR		-NOV	MAR-NOV	
	Spotted hake				ХХ	XX		ХХ	X	-	-	-	MAR	-JUN	MAR-JUN	
															SEP-NOV	
	Spotted seatrout					XX				MAY-JUL	-	_		-NOV	APR-NOV	
	Summer flounder								XX		-	OCT-MAY -		_	APR-OCT	
	Tautog Weakfish			XX		XX				APR-AUG APR-AUG	-	- MAY-AUG		- -NOV	JAN-DEC APR-NOV	
3.0	Minnows			x x						APR-AUG APR-AUG	_	MAI-AUG		-NOV -DEC	JAN-DEC	
30	Mummichog									APR-AUG	_	_		-DEC	JAN-DEC	
	Northern pipefish								ХХ		-	-	JAN	-DEC	JAN-DEC	
	Northern searobin						XX	ζ		-	-	-		-AUG	JUN-AUG	
	Pollock			XX	XXX	_			X		-	_		-	DEC-APR	
	Red drum Red hake			₹.	XXX		. X X	X X X X X		JUL-NOV -	_	_		-SEP -MAY	MAY-NOV FEB-MAY	
	Red Hake			Δ				Λ Λ	. А	_	_	_	FED	-MAI	SEP-NOV	
	Sandbar shark					ХХ	ХХ	XX		_	_	-	MAY	-OCT	MAY-OCT	
	Scup (porgy)				ХХ	XX	ХХ	ХХХ		-	-	-	JUN	-OCT	MAR-OCT	
	Silver hake				XXX				XX		-	-		-	OCT-MAY	
	Silver perch									APR-MAY	APR-MAY	APR-JUN		-DEC	JAN-DEC	
	Silversides Spanish mackerel			XX		XX	. X X	X X	. X X	MAR-JUL -	MAR-JUL -	APR-SEP -		-DEC -	JAN-DEC APR-MAY	
	Spot					XX	ХХ	X X X		_	_	-		-OCT	JUL-SEP	
	Spotted hake			ХХ	ХХХ				ХХ	-	-	_		-APR	-	
	Spotted seatrout				X	XX	XX	ХХХ	X	MAY-JUL	-	-	APR	-NOV	APR-NOV	
	Striped anchovy					XX				APR-SEP	-	-		-NOV	APR-NOV	
	Summer flounder			77 7		XX	XX			-	-	_		-NOV	APR-NOV	
	Tautog Weakfish			X X	X X X	XXX	. X X		XX	- APR-AUG	_	_		- -OCT	OCT-APR APR-OCT	
	White hake				XX		. 21 21	XX		-	_	_		-	MAR-MAY	
															SEP-NOV	
	White perch							ХХХ		APR-JUN	APR-JUN	APR-JUN		-DEC	JAN-DEC	
	Winter flounder					XX			Χ	-	-	-		-JUL	DEC-MAY	
	Alewife					XX		, ,, -	,	-	-	-		- DEC	FEB-JUN	
	American eel American shad					XXX		XXX	XX	_	_	_		-DEC -	- FEB-JUN	
	Atlantic croaker			Δ				XXX	ХХ	-	-	-		- -DEC	- -	
	Atlantic herring			Х	ххх	XX				-	-	-		-	FEB-JUN	
	Atlantic mackerel				ХХ					-	-	-		_	MAR-APR	
	Atlantic menhaden							XXX		-	-	-		-NOV	MAY-OCT	
	Bay anchovy Black drum			XX						APR-SEP	_	_		-DEC -	JAN-DEC	
	Black grum Black sea bass					X X X X X X			•	_	_	_		- -SEP	APR-OCT APR-SEP	
	Blueback herring			Х		XX				_	_	FEB-JUN		-OCT	FEB-JUN	
	Bluefish							ХХХ		-	_	_		-OCT	MAY-OCT	
	Crevalle jack								XX		-	-		-DEC	-	
	Gobies							XXX	XX	APR-SEP	APR-SEP	APR-OCT		-DEC	JAN-DEC	
	Hickory shad					XX		, ,, ,,	, .,	- MAY CED	- MAY CED			- DEG	FEB-JUN	
	Hogchoker Killifish									MAY-SEP MAR-SEP	MAY-SEP -	MAY-SEP -		-DEC -DEC	JAN-DEC JAN-DEC	
	KITITION			21 2			. 21 21			IIIIC DEL			01111	DEC	Oliv DEC	
HABI	TAT:															
RAR#	Species	S F Conc.		JE	MA	мј	JA	a s o	N D							
27	Maritime dune scrub					XX										
	Native coastal strand vegetation Sea-beach knotweed					X X X X X X										
	Southern beach spurge					XX										
INVE	RTEBRATE:															
	Species	S F Conc.		J E	MA	МЈ	JA	a s o	N D	Spawning	Eggs	Larvae		eniles	Adults	
	Diverge					. – –						MAN NOT		DEG		
25	Blue crab Channeled whelk								XX		_	MAY-NOV -		-DEC -DEC	JAN-DEC JAN-DEC	
30	Blue crab								XX		MAY-SEP	MAY-NOV		-DEC	JAN-DEC	
	Channeled whelk								ХХ		_	_		-DEC	JAN-DEC	
	Northern quahog (hard clam)			XX	XXX	XX	XX	ХХХ	XX	MAY-OCT	MAY-OCT	MAY-OCT	JAN	-DEC	JAN-DEC	
MADT	NE MANNAT.															
	NE MAMMAL:	C T C								Matin	G-1	D	N- 1			
	Species	S F Conc.								Mating	Calving	Pupping		ting 		
25	Bottlenose dolphin					хх				_	_	_		_		
-	Common dolphin							XXX		-	-	-		-		
	Harbor porpoise				XXX	X			Х		-	-		_		
	Harbor seal			XX		, ,, ,,	. 37 37		XX		- TAN DEG	_		-		
3.0	Humpback whale Bottlenose dolphin	ΕE		X X		XX			XX	_	JAN-DEC -	_		_		
30	Harbor porpoise			ХХ	XXX		. 21 21		X	_	_	_		_		
	Harbor seal			ХХ	Ζ			Х	ХХ	-	-	-		-		
DFDT	TT.F.															
REPT	ILE: Species	S F Conc.		лт	י אוי	M T	• т.		י זא	Nesting	Hatchine	Internest	in-	Juston i 1	Les Adult	- 6
		5 1 CONG.														
25	Green sea turtle	т т				ХХ	ХХ	ХХХ	X	-	-	-		MAY-NOV	<i>-</i>	
	± -	E E						XXX		-	-	-		MAY-NOV		
	Leatherback sea turtle	EE						XXX		-	-	-		- VALV. NOT		
27	Loggerhead sea turtle Diamondback terrapin	ТТ			y v			X X X	X	- MAY-JUL	_	_		MAY-NOV MAR-NOV		
	Green sea turtle	т т			ΛΛ			XXX		-	_	_		MAY-NOV		
	Kemp's ridley sea turtle	E E						XXX		-	-	-		MAY-NOV		
	Leatherback sea turtle	E E				ХХ	XX	ХХХ	X	-	-	-		-	MAY-N	VOV
0.1	Loggerhead sea turtle	Т Т			., -			XXX		-	-	-		MAY-NOV		
	Diamondback terrapin ====================================					X X X				- 	-	- 		MAR-NOV	/ MAR-N	101
	N USE RESOURCES:															
AQUA	CULTURE:															
HUN#	Name		Contact								P	hone				
 E 7	ACHAGII MURRI MARRI CARAC															
57	AQUACULTURE: HARD CLAMS															
MANA	GEMENT AREA:															
HUN#	Name		Contact								P!	hone				
113	MOCKHORN WILDLIFE MANAGEMENT AREA		VDGIF									04/367-1000				
123	WRECK ISLAND NATURAL AREA PRESERV	<u>r.</u>	VA DCR D	ΝH							7	57/787-5576)			

BIOLOGICAL RESOURCES:

BIRD:

BIRD	:															
RAR#	Species	SF	Conc.	J	F	M Z	A M	1 J	J	A	s	o N	D	Nesting	Migrating	Molting
				 -				-	-	-	-		-			
8	Brown pelican	С					XX	X	X	Χ	Χ	XX		-	-	-
	Common loon				X Z								X	-	-	-
	Northern gannet		HIGH	Χ									X	-	-	-
	Red-breasted merganser		VERY HIGH	Χ								X	X	-	-	-
	Red-necked grebe				X 2									-	-	-
1 /	Red-throated loon		HTCH	X			.,						X	-	-	_
14	Black scoter Surf scoter		HIGH	X									X	_	_	-
	White-winged scoter			Х									X	_	_	_
26	American woodcock			Х		Λ.	Λ				v	ХХ		_	_	_
20	Black-bellied plover			21		x :	ΧХ	. x	· x			XX		_	_	_
	Dunlin			Х									Х	_	_	_
	Greater yellowlegs											ХХ		_	_	_
	Killdeer				•				X					_	_	_
	Least sandpiper				2	X I	ХХ				Х	ХХ		_	_	_
	Lesser yellowlegs											ХХ		_	_	_
	Pectoral sandpiper							Х	X	Χ	Х	ХХ		-	_	_
	Red knot				2	X Z	ХХ	Χ	X	Χ				-	-	-
	Ruddy turnstone				2	X Z	ХХ	Χ	X	Χ				-	-	-
	Sanderling			Χ	X	X Z	ХХ	X	X	Х	Χ	ХХ	X	-	-	-
	Semipalmated plover											ХХ		-	-	-
	Semipalmated sandpiper				2	X I	ΧX	X	X	Χ	Χ	XX		-	-	-
	Short-billed dowitcher			Χ	X Z	X I	XX						X	-	-	-
	Stilt sandpiper											XX		-	-	-
	Western sandpiper										Χ	XX		-	-	-
	Whimbrel								X	Х				-	-	_
	White-rumped sandpiper						X X							-	-	-
0.0	Willet American black duck		COMMON									ХХ		- TIIN	-	_
92	American black duck American kestrel		ABUNDANT	Λ	Λ 4	Χ	X 2	\ Z	. A			хх ХХ		APR-JUN -	_	_
	American wigeon		COMMON	Х	v	ν,	v v	,				A A		_	_	_
	Black-crowned night-heron		COMMON						· x					MAY-JUL	_	_
	Blue-winged teal		COMMON	21			XX					XX		-	_	_
	Brant		COMMON	Х								XX		_	_	_
	Broad-winged hawk		COMMON					-				ХХ		_	_	_
	Canada goose		COMMON	Х	X	X Z	ХХ	Χ	Х					APR-JUN	_	_
	Cattle egret		COMMON									ХХ		MAY-JUL	_	_
	Clapper rail		VERY ABUNDANT	Χ	X	X Z	ΧХ	Χ	X	Χ	Х	ХХ	Х	APR-JUN	_	_
	Gadwall		COMMON	Х	X	X Z	ХХ	X	X	Χ	Χ	ХХ	X	APR-JUN	-	_
	Glossy ibis	C			2	X Z	ΧХ	X	X	Χ	Χ	ХХ		MAY-JUL	-	-
	Great blue heron		COMMON	Χ	X X	X Z	ΧХ	X	X	Χ	Χ	XX	X	-	-	-
	Great egret	С	COMMON							Χ	Χ	ХХ		MAY-JUL	-	-
	Green-winged teal			Χ									X	-	-	-
	King rail			Χ									X	-	-	-
	Little blue heron	С										XX		MAY-JUL	-	-
	Mallard		COMMON	Χ	X Z	X I	XX	X	X	Χ				MAY-JUL	-	-
	Merlin		COMMON									ХХ		-	-	_
	Northern harrier	С	COMMON	X								ХХ		-	-	_
	Northern pintail			X								XX		-	-	_
	Northern shoveler Red-tailed hawk		COMMON	X		X 2	X X					XX		_	- -	-
	Sharp-shinned hawk		COMMON	Χ	Λ							X X X X		_	_	_
	Snow goose		ABUNDANT	v	X	· ·	v v	,				a a		_	_	_
	Snowy egret		COMMON	27					· v			XX		_	_	_
	Sora		COPIFICIA				XX		. 21			XX		_	_	_
	Striated heron		COMMON						X			XX		MAY-JUL	_	_
	Tricolored heron	С	COMMON	Х										MAY-JUL	_	_
	Tundra swan	Ü	00111011	Х									X	-	_	_
	Virginia rail								Х			ХХ		_	_	_
	Willet		COMMON											MAR-JUN	_	_
	Yellow-crowned night-heron	С										ХХ		MAY-JUL	_	_
94	Clapper rail		HIGH	Χ	X	X Z	ΧХ	Χ	X	Χ	Х	ХХ	Х	APR-AUG	_	_
	King rail			Χ	X	X I	ХХ	X	X	Χ	Χ	ХХ	Х	-	-	-
	Sora				2	X Z	ΧХ	ζ.			Χ	ХХ		-	-	-
	Virginia rail			Χ	X	X Z	ΧX	X	X	Χ	Χ	XX	X	APR-JUN	-	-
	Whimbrel		HIGH		2	X Z	ХХ	ζ.		Χ	Χ	Χ		-	-	-
	Willet		HIGH											APR-SEP	-	-
95	American black duck		HIGH					X	X	Χ				MAR-JUL	-	-
	American wigeon		MODERATE	Χ									X	-	-	_
	Brant		HIGH		X 2							ХХ		_	-	_
	Canada goose		HIGH											APR-JUN	<u>-</u>	-
	Gadwall		MODERATE					. X	. X	Х				APR-JUN	_	_
	Green-winged teal Mallard		MODERATE MODERATE	X				, ,		v		XX		- MAY-JUL	_	_
	Northern pintail		MODERATE	Х				<u>.</u> _	. ^	Λ		A A		- MAI-00L	_	_
	Northern shoveler		LOW	Х								A A		_	_	_
	Snow goose		HIGH	Х									X	_	_	_
96	Bufflehead		HIGH	Х									X	_	_	_
	Long-tailed duck		MODERATE	Χ									Х	_	_	_
	Mergansers		HIGH	Х									Х	-		-
	Scoters		HIGH	Χ	X	X Z	Χ					ХХ	X	-	-	-
	Tundra swan		MODERATE	Χ	X	X Z	X					ХХ	X	-	-	-
99	Osprey				2	X I	ΧХ	X	X	Χ	Χ	ХХ		-	-	-
100	Brown pelican	С			2	X Z	ΧХ	X	X	Χ	Χ	X		-	-	-
	Gulls			Χ	X Z	X Z	XX	X	X	Χ	Χ	XX	X	-	-	_
	Loons			Χ									X	-	-	-
	Mergansers			Χ									X	-	-	_
	Osprey							X	. X	Х		ХХ		-	-	_
	Scoters		HIGH	Χ				, .				ХХ	. X	-	-	-
116	Terns American kestrel		אווע ע טוווט ע		2	Λ.	ΑΣ	. X	X					_	- -	-
110			ABUNDANT									XX		_	_	_
	Broad-winged hawk Merlin		COMMON COMMON									X X X X		_	_	-
	Meriin Red-tailed hawk			Х	У							x x X X		_	_	_
	Sharp-shinned hawk		ABUNDANT ABUNDANT	Λ	Λ							x x X X		_	_	_
124	Bald eagle	тт		Х	X	х '	χv	(- FEB-MAY	_	_
124		1 I	HIGH						×					MAR-JUL	_	_
140	American black duck American wigeon		111-011		X				. 4	27			X	-	_	_
	Canada goose		HIGH					7 7	У	У				- APR-JUN	_	_
	Gadwall		-11-011		X			^	. 1	21			X	APK-JUN -	_	_
	Green-winged teal				X								X	-	_	-
	Mallard		MODERATE					X	Х	Х				MAY-JUL	_	-
	Snow goose				X			-	-	·			Х	-	_	-
127	Bufflehead		HIGH	Х									Х	-	_	-
	Long-tailed duck				X								Х	-		-
	Mergansers			Х									X	-	-	-
	Ring-necked duck				X Z								Χ	-	-	-
	Scaup				X Z								X	-	-	-
	Scoters		HIGH	Χ	X	X Z	X					ХХ	X	-	-	-

Virginia: ESIMAP 23 (cont.)

BIOLOGICAL RESOURCES: (cont.)

DIDD	/ L \
BIRD: ((cont.)

127								
	Species	S F Conc.	J F M A M J J A S O N D		Migrating	Molting	τ 	
	Tundra swan Forster's tern	13 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-JUL	_	_		
	American oystercatcher	HIGH	X X X X X X X X X X X X X X X X X X X		-	-		
482	Common tern	80 NESTS	X X X X X X X X		-	-		
	Great blue heron Peregrine falcon	19 NESTS T	$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		-	_		
FISH	-							
_	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
18	Alewife American eel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	- JAN-DEC	FEB-JUN SEP-DEC
	American shad		XXXXXXXXXXX		-	-	NOV-MAR	JAN-JUN
	Atlantic croaker		X X X X X X X X X	-	-	-	AUG-DEC -	MAY-NOV
	Atlantic mackerel Atlantic menhaden		$\begin{smallmatrix} X&X\\ X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	_	_	- MAY-NOV	JAN-DEC	MAR-APR MAY-OCT
	Atlantic silverside		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish Atlantic sturgeon	С	$\begin{smallmatrix} & & & \times & $	_	_	-	AUG-OCT -	AUG-NOV JAN-OCT
	Bay anchovy	C	X X X X X X X X X X X X X	APR-SEP	_	-	JAN-DEC	JAN-DEC
	Black drum		X X X X X X X X	APR-JUN		APR-JUN	APR-NOV	APR-NOV
	Black sea bass Blueback herring		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUN-OCT -	-	_	APR-OCT NOV-MAR	APR-OCT JAN-JUN
	Bluefish		$\times \times $	-	-	-	MAY-NOV	APR-NOV
	Butterfish Clearnose skate		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JUL-NOV -	MAR-NOV MAY-NOV
	Gobies		X X X X X X X X X X X X			APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad Hogchoker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		- MAY-SEP	- MAY-SEP	NOV-MAR JAN-DEC	JAN-JUN JAN-DEC
	Inland silverside		$\times \times $	APR-MAY	_	-	JAN-DEC	JAN-DEC
	Minnows Mummichog		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish		XXXXXXX	-	-	-	-	APR-OCT
	Northern pipefish		$\begin{smallmatrix} & \times & $		-	-	JAN-DEC	JAN-DEC
	Northern puffer Northern searobin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	MAR-OCT -	MAR-OCT MAR-OCT
	Red drum		$\times \times \times \times \times \times \times$		-	-	AUG-SEP	MAY-NOV
	Red hake		X X X X	-	-	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark		$X \times X \times X \times X$	_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake Silver perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- APR-MAY	_	_	- JAN-DEC	OCT-MAY JAN-DEC
	Spot		X X X X X X X X X X X X	-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		X X X X	-	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout		$x\;x\;x\;x\;x\;x\;x\;x\;$	MAY-JUL	_	_	APR-NOV	APR-NOV
	Striped bass		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Striped killifish Summer flounder		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		-	- OCT-MAY	JAN-DEC JAN-DEC	JAN-DEC APR-OCT
	Tautog		X X X X X X X X X		-	-	-	OCT-APR
	Threadfin shad		X X X X	-	-	-	-	FEB-MAY
	Weakfish		$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $	APR-AUG	_	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
25	Atlantic croaker		$\times \times $		-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel Atlantic menhaden		$\begin{smallmatrix} X&X\\ X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	_	_	-	- JAN-DEC	MAR-APR MAY-OCT
	Black drum		XXXXXXX	-	-	-	-	APR-OCT
	Black sea bass		$X \times X \times X \times X$	JUN-OCT -	-	-	APR-OCT	APR-OCT
	Bluefish Butterfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Crevalle jack		$\times \times $		-	-	JAN-DEC	-
	Northern kingfish Northern searobin		$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\\ X\;X\;X\;X\;X\;X\;X\;X\end{array}$	MAY-AUG -	_	-	-	APR-OCT MAR-OCT
	Pollock		X X X X X X		-	-	-	DEC-APR
	Red drum		X X X X X X X	JUL-NOV	-	-	- -	MAY-NOV
	Red hake		XXXX XXX	-	-	_	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy) Silver hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	-	JUN-OCT -	MAR-OCT OCT-MAY
	Southern kingfish (whiting)		XXXXXXX	-	-	-	-	APR-OCT
	Spanish mackerel Spiny dogfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	-	APR-MAY NOV-APR
	Spot		X X X X X X X X X X X X X X X X X X X		_	DEC-APR	- MAR-NOV	MAR-NOV
	Spotted hake		$\times \times $	-	-	-	MAR-JUN	MAR-JUN
	Spotted seatrout		X	MAY-JUL	_	_	APR-NOV	SEP-NOV APR-NOV
	Summer flounder		$\times \times $	-	-	OCT-MAY	-	APR-OCT
	Tautog Weakfish		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		-	- MAY-AUG	- APR-NOV	JAN-DEC APR-NOV
30	Weakiish Alewife			APR-AUG -	-	MAY-AUG -	APR-NOV -	APR-NOV FEB-JUN
	American eel		$\times \times $	-	-	-	JAN-DEC	-
	American shad Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	- MAY-DEC	FEB-JUN -
	Atlantic herring		X X X X X	-	-	-	-	FEB-JUN
	Atlantic mackerel Atlantic menhaden		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	- MAY-NOV	MAR-APR MAY-OCT
	Atlantic menhaden Bay anchovy		X X X X X X X X X X X X X X X X X X X		-	-	MAY-NOV JAN-DEC	MAY-OCT JAN-DEC
	Black drum		X X X X X X X	-	-	-	-	APR-OCT
	Black sea bass Blueback herring		$\begin{smallmatrix} & & \times & \times & \times & \times & \times \\ & \times & \times & \times & \times$	-	-	- FEB-JUN	APR-SEP FEB-OCT	APR-SEP FEB-JUN
	Bluefish		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Crevalle jack Gobies		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		- ADR-SED	- APR-OCT	JAN-DEC JAN-DEC	- JAN-DEC
	Hickory shad		X X X X X X X X X X X X X X X X X X X	APR-SEP	APK-SEP -	APR-OCT	JAN-DEC -	FEB-JUN
	Hogchoker		X X X X X X X X X X X X X X X X X X X					JAN-DEC
	Killifish Minnows		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $			-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern pipefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JAN-DEC	JAN-DEC
	Northern searobin Pollock		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JUN-AUG -	JUN-AUG DEC-APR
	Red drum		X X X X X X X	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Dead had a		X X X X	-	-	_	FEB-MAY	FEB-MAY
	Red hake							SEP-NOW
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	SEP-NOV MAY-OCT
			X X X X X X X X X X X X X X X X X X X	- -	- - -	- -	MAY-OCT JUN-OCT	

Virginia: ESIMAP 23 (cont.)

BIOLOGICAL RESOURCES: (cont.)

###	Maritime dune scrub Native coastal strand vegetation Sea-beach knotweed Southern beach spurge Maritime dune scrub RTEBRATE: Species Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species	S F Conc.		X X X X X X X X X X X X X X X X X X				X X X X X X X X X X X X X X X X	Spawning APR-MAY MAR-JUL MAY-JUL APR-SEP APR-AUG - APR-JUN - Spawning MAY-OCT	APR-MAY MAR-JUL APR-JUN -	Larvae APR-JUN APR-SEP	Juveniles JAN-DEC JAN-DEC APR-OCT OCT-APR APR-NOV APR-NOV APR-OCT	JAN-DEC JAN-DEC APR-MAY JUL-SEP - APR-NOV APR-NOV OCT-APR APR-OCT MAR-MAY SEP-NOV JAN-DEC DEC-MAY Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
######################################	Silver perch Silversides Spanish mackerel Spot Spotted hake Spotted seatrout Striped anchovy Summer flounder Tautog Weakfish White hake White perch Winter flounder PAT: Species	S F Conc.		X X X X X X X X X X X X X X X X X X				X X X X X X X X X X X X X X X X	APR-MAY MAR-JUL - MAY-JUL APR-SEP - APR-AUG - APR-JUN - Spawning	APR-MAY MAR-JUL	APR-JUN APR-SEP	JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR APR-NOV APR-NOV APR-NOU JAN-DEC DEC-JUL JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC APR-MAY JUL-SEP - APR-NOV APR-NOV OCT-APR APR-OCT MAR-MAY SEP-NOV JAN-DEC DEC-MAY
HABIT RAR# 27 97 INVEE RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Silversides Spanish mackerel Spot Spotted hake Spotted seatrout Striped anchovy Summer flounder Tautog Weakfish White hake White perch Winter flounder PAT: Species Maritime dune scrub Native coastal strand vegetation Sea-beach knotweed Southern beach spurge Maritime dune scrub RTEBRATE: Species Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species	S F Conc.		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	(* X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	MAR-JUL MAY-JUL APR-SEP APR-AUG - APR-JUN - Spawning	MAR-JUL	APR-SEP	JAN-DEC JAN-DEC JAN-DEC - APR-OCT OCT-APR APR-NOV APR-NOV - MAR-OCT - JAN-DEC DEC-JUL Juveniles - JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC APR-MAY JUL-SEP - APR-NOV APR-NOV OCT-APR APR-OCT MAR-MAY SEP-NOV JAN-DEC DEC-MAY Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
HABIT RAR# 27 97 INVEE RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Silversides Spanish mackerel Spot Spotted hake Spotted seatrout Striped anchovy Summer flounder Tautog Weakfish White hake White perch Winter flounder PAT: Species Maritime dune scrub Native coastal strand vegetation Sea-beach knotweed Southern beach spurge Maritime dune scrub RTEBRATE: Species Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species	S F Conc.		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	(* X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	MAR-JUL MAY-JUL APR-SEP APR-AUG - APR-JUN - Spawning	MAR-JUL	APR-SEP	JAN-DEC APR-OCT OCT-APR APR-NOV APR-NOV APR-NOV _ MAR-OCT _ JAN-DEC DEC-JUL Juveniles _ JAN-DEC JAN-DEC JAN-DEC	JAN-DEC APR-MAY JUL-SEP - APR-NOV APR-NOV APR-NOV OCT-APR APR-OCT MAR-MAY SEP-NOV JAN-DEC DEC-MAY Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
HABIT RAR# 27 97 INVEE RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Spott Spotted hake Spotted seatrout Striped anchovy Summer flounder Tautog Weakfish White hake White perch Winter flounder CAT: Species Maritime dune scrub Native coastal strand vegetation Sea-beach knotweed Southern beach spurge Maritime dune scrub RTEBRATE: Species Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species	S F Conc.		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	(**	X X X X X X X X X X X X X X X X X X X	MAY-JUL APR-SEP APR-AUG - APR-JUN - Spawning	MAY-OCT -		APR-OCT OCT-APR APR-NOV APR-NOV APR-NOV _ MAR-OCT _ JAN-DEC DEC-JUL Juveniles _ JAN-DEC JAN-DEC JAN-DEC	Adults Adults Jan-dec
HABIT RAR# 27 97 INVEE RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Spotted hake Spotted seatrout Striped anchovy Summer flounder Tautog Weakfish White hake White perch Winter flounder CAT: Species Maritime dune scrub Native coastal strand vegetation Sea-beach knotweed Southern beach spurge Maritime dune scrub RTEBRATE: Species Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species	S F Conc.		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	(**	X X X X X X X X X X X X X X X X X X X	MAY-JUL APR-SEP APR-AUG - APR-JUN - Spawning	Eggs MAY-OCT	- - - - - - - APR-JUN - - MAY-OCT	OCT-APR APR-NOV APR-NOV APR-NOV - MAR-OCT - JAN-DEC DEC-JUL Juveniles JAN-DEC JAN-DEC JAN-DEC	APR-NOV APR-NOV APR-NOV OCT-APR APR-OCT MAR-MAY SEP-NOV JAN-DEC DEC-MAY Adults
HABIT RAR# 27 97 INVEE RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Striped anchovy Summer flounder Tautog Weakfish White hake White perch Winter flounder CAT: Species Maritime dune scrub Native coastal strand vegetation Sea-beach knotweed Southern beach spurge Maritime dune scrub RTEBRATE: Species Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab C	S F Conc.		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	(X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-SEP - APR-AUG - APR-JUN - Spawning	Eggs MAY-OCT	- - - - - APR-JUN - - MAY-OCT	APR-NOV APR-NOV - MAR-OCT - JAN-DEC DEC-JUL Juveniles JAN-DEC JAN-DEC JAN-DEC	APR-NOV APR-NOV OCT-APR APR-OCT MAR-MAY SEP-NOV JAN-DEC DEC-MAY Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
HABIT RAR# 27 97 INVEE RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Summer flounder Tautog Weakfish White hake White perch Winter flounder CAT: Species	S F Conc.		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	(* X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG - APR-JUN - Spawning	Eggs MAY-OCT	Larvae MAY-OCT	APR-NOV - MAR-OCT - JAN-DEC DEC-JUL Juveniles JAN-DEC JAN-DEC JAN-DEC	APR-NOV OCT-APR APR-OCT MAR-MAY SEP-NOV JAN-DEC DEC-MAY Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
HABIT RAR# 27 97 INVER RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Tautog Weakfish White hake White perch Winter flounder PAT: Species	S F Conc.		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	(* X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AUG - APR-JUN - Spawning	Eggs MAY-OCT	Larvae MAY-OCT	JAN-DEC DEC-JUL Juveniles JAN-DEC JAN-DEC JAN-DEC	OCT-APR APR-OCT MAR-MAY SEP-NOV JAN-DEC DEC-MAY Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
HABIT RAR# 27 97 INVER RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	White hake White perch Winter flounder CAT: Species Maritime dune scrub Native coastal strand vegetation Sea-beach knotweed Southern beach spurge Maritime dune scrub CTEBRATE: Species Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Slue crab Channeled whelk Species	S F Conc.		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	(X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-JUN - Spawning	Eggs MAY-OCT	Larvae MAY-OCT	JAN-DEC DEC-JUL Juveniles JAN-DEC JAN-DEC	MAR-MAY SEP-NOV JAN-DEC DEC-MAY Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
#### 18	White perch Winter flounder PAT: Species Maritime dune scrub Native coastal strand vegetation Sea-beach knotweed Southern beach spurge Maritime dune scrub PATEBRATE: Species Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Species Harbor porpoise	S F Conc.		J F : X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	4 J J J J J J J J J J J J J J J J J J J	* X X X X X X X X X X X X X X X X X X X	O N D X X X O N D X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	APR-JUN - Spawning	Eggs MAY-OCT	Larvae MAY-OCT	JAN-DEC DEC-JUL Juveniles JAN-DEC JAN-DEC	Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
### 27 10 10 10 10 10 10 10 1	Winter flounder PAT: Species Maritime dune scrub Native coastal strand vegetation Sea-beach knotweed Southern beach spurge Maritime dune scrub RTEBRATE: Species Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species	S F Conc.		J F :	M A M X	1 J J J J J J J J J J J J J J J J J J J	**************************************	O N D X	Spawning	Eggs MAY-OCT	Larvae MAY-OCT	Juveniles JAN-DEC JAN-DEC	Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
######################################	Maritime dune scrub Native coastal strand vegetation Sea-beach knotweed Southern beach spurge Maritime dune scrub RTEBRATE: Species	S F Conc.		J F :	M A M X	1 J J	* A S	O N D X	Spawning	Eggs MAY-OCT	Larvae MAY-OCT	Juveniles JAN-DEC JAN-DEC	Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
PAR# 27 97 INVEE RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Maritime dune scrub Native coastal strand vegetation Sea-beach knotweed Southern beach spurge Maritime dune scrub RTEBRATE: Species Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species	S F Conc.		X X X X X X X X X X X X X X X X X			X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X		MAY-OCT	MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
97 INVEE RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Maritime dune scrub Native coastal strand vegetation Sea-beach knotweed Southern beach spurge Maritime dune scrub RTEBRATE: Species	S F Conc.		X X X X X X X X X X X X X X X X X			X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X		MAY-OCT	MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
97 INVER RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Native coastal strand vegetation Sea-beach knotweed Southern beach spurge Maritime dune scrub RTEBRATE: Species Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species	ТТ		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X		MAY-OCT	MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
97 INVER RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Sea-beach knotweed Southern beach spurge Maritime dune scrub RTEBRATE: Species	ТТ		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	4 J J J	* X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X		MAY-OCT	MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
INVER RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Southern beach spurge Maritime dune scrub RTEBRATE: Species Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species Harbor porpoise	ТТ		J F : X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	4 J J	* X X X X * * * * * * * * * * * * * * *	X X X X X X X X X X X X X X X X X X X		MAY-OCT	MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
INVER RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	RTEBRATE: Species Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species Harbor porpoise	ТТ		J F : X X X X X X X X X X X X X X X X X	M A M X	4 J J X X X X X X X X X X X X	A S : : : : : : : : : : : : : : : :	O N D X X X X X X X X X		MAY-OCT	MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
RAR# 16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species	ТТ		X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X	 X X X X X X X X X		MAY-OCT	MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species	ТТ		X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X	 X X X X X X X X X		MAY-OCT	MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
16 18 19 25 30 97 126 MARIN RAR# 18 20 25	Northern quahog (hard clam) Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species	ТТ		X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X	$\begin{array}{ccccc} X & X & X \\ X & X & X \end{array}$	MAY-OCT	-	-	JAN-DEC	JAN-DEC JAN-DEC JAN-DEC
18 19 25 30 97 126 MARIN RAR# 18 20 25	Horseshoe crab Knobbed whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species			X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X	$\begin{array}{ccccc} X & X & X \\ X & X & X \end{array}$	- 	-	-	JAN-DEC	JAN-DEC JAN-DEC JAN-DEC
19 25 30 97 126 MARIN RAR# 18 20 25	Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species			X X X X X X X X X X X X X X	X	X X X	ХХ			_	_	.TAN-DEC	JAN-DEC
25 30 97 126 MARIN RAR# 18 20 25	Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species			X X X X X X X X X X X X	X	XXX		v V V	- MANA OCE		34377		
30 97 126 MARIN RAR# 18 20 25	Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species			X X X X X X X X	X			XXX	MAY-OCT -	MAY-SEP -	MAY-NOV -	JAN-DEC JAN-DEC	JAN-DEC
97 126 MARIN RAR# 18 20 25	Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species			X X X X			XX	X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
97 126 MARIN RAR# 18 20 25	Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species Harbor porpoise			$\begin{array}{ccc} X & X \\ X & X \end{array}$	$\Delta \Delta \Delta$			X X X	-	- MAY-SEP	- MAY-NOV	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
97 126 MARIN RAR# 18 20 25	Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species Harbor porpoise			ХХ	ХХХ			XXX	-	MAY-SEP	MAY-NOV -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
126 MARIN RAR# 18 20 25	Eastern oyster Northern quahog (hard clam) IE MAMMAL: Species Harbor porpoise								MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
MARIN RAR# 18 20 25	Northern quahog (hard clam) IE MAMMAL: Species Harbor porpoise								JUN-SEP JUN-SEP	JUN-SEP JUN-SEP	- JUN-SEP	JAN-DEC JAN-DEC	JUN-OCT JAN-DEC
18 20 25	Species								MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
RAR# 18 20 25	Species												
20 25		S F Conc.		JF	мам	1 J J	AS	OND	Mating	Calving	Pupping	Molting	
20 25						 ,							
25	Bottlenose dolphin			ХХ	$\begin{array}{cccc} X & X & X \\ & X & X \end{array}$		ХХ	X	_	_	_	_	
	Bottlenose dolphin						XX		-	-	-	-	
	Common dolphin Harbor porpoise			x x	х ххх		XX	X	_	_	_	_	
2.0	Harbor seal			ХХ		-		$X \times X$	-	-	-	-	
	Humpback whale	E E		ХХ				XXX	-	JAN-DEC	-	-	
	Bottlenose dolphin Harbor porpoise			ХХ	XXX		XX	A X	-	_	_	-	
	Harbor seal			X X				XXX	-	-	-	-	
101	Bottlenose dolphin	HIGH			ХХ	(X X	ХХ	X	-	-	_	-	
REPT]													
RAR#	Species	S F Conc.		J F :	мам 	1 J J 	A S	O N D	Nesting	Hatching	Internest	ting Juveni 	les Aduli
	Green sea turtle	ТТ					XX		-	-	-	MAY-NO	
	Kemp's ridley sea turtle Leatherback sea turtle	E E E E					XX		_	_	_	MAY-NO	
	Loggerhead sea turtle	TT					XX		-	-	-	MAY-NO	
	Green sea turtle	ТТ					XX		-	-	-	MAY-NO	
	Kemp's ridley sea turtle Leatherback sea turtle	E E E E					XX		-	-	_	MAY-NO	
	Loggerhead sea turtle	ТТ					XX		-	-	-	MAY-NO	
	Diamondback terrapin Green sea turtle	т т					XX	X X X X	MAY-JUL -	-	-	MAR-NO MAY-NO	
	Kemp's ridley sea turtle	ΕE			X	XXX	XX	X X	-	-	-	MAY-NO	V MAY-1
	Leatherback sea turtle Loggerhead sea turtle	E E T T					XX		-	-	<u>-</u>	- MAY-NO	
92	Diamondback terrapin	1 1			ХХХ				_	_	_	MAR-NO	
94	Diamondback terrapin				ххх	XXX	ХХ	ХХ	-	-	-	MAR-NO	V MAR-1
	I HEE DECOMDER.		======					=====	======	======	======		======
	USE RESOURCES:												
-	CULTURE:												
HUN#	Name		Contact								none		
57	AQUACULTURE: HARD CLAMS		_								_ _		
MANAC	SEMENT AREA:												
HUN#	Name		Contact							ρl	none		
113	MOCKHORN WILDLIFE MANAGEMENT AREA		VDGIF							8(04/367-100	U	
PARK													
HUN#	Name		Contact							Pl	none		
140			VA DCR							 7'	 57/331-226	 7	
	KIPTOPEKE STATE PARK		2010							/ \	, 220		
мтГDI													
TITTE-II	LIFE REFUGE:		0										
HUN#			Contact							Pl 	none		

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

BIOLOGICAL RESOURCES:

RIKD:

RAR# Species

RAR#	Species	S F Conc.	. J	F M	A M	. J .	J A 1	3 O I		Nesting	Migrating	Molting	_	
8	Brown pelican	C		 X	 Х Х	X	 K X :	 X X X	 K	-	_			
	Common loon		Х	ХХ				Σ	XX	-	-	-		
	Northern gannet	HIGH		ХХ					XX	-	-	-		
	Red-breasted merganser	VERY HIGH		ХХ				Σ	XX	-	-	_		
	Red-necked grebe			XX				,	7 37	-	_	_		
14	Red-throated loon Black scoter	HIGH		X X X X	Х				X X	_	_	_		
	Surf scoter			ХХ					ХХ	_	_	_		
	White-winged scoter		X	ХХ	Х			Σ	XX	-	-	-		
100	Brown pelican	С					X X			-	-	_		
	Gulls					X	XX.	X X X		-	-	-		
	Loons Mergansers			X X X X					X X X X	_	_	_		
	Osprey		21			X	X X	X X X		-	_	_		
	Scoters	HIGH	Х	ХХ					ХХ	-	_	_		
	Terns			Χ	ХХ	X	X X	ХХ		-	-	-		
125	American black duck	HIGH				X 2	X X :			MAR-JUL	-	_		
	American wigeon Canada goose	HIGH		XX		v	, ,		XX	- APR-JUN	_	_		
	Gadwall	IIIGII		XX			`` Z\ .		XX	- AIR OON	_	_		
	Green-winged teal			ХХ					ХХ	-	_	_		
	Mallard	MODERATE	Х	ХХ	ХХ	X	X X	ХХΣ	ХХ	MAY-JUL	-	-		
405	Snow goose			ХХ					XX	-	-	-		
127	Bufflehead Long-tailed duck	HIGH		X X					X X	_	_	_		
	Mergansers			XX					XX	_	_	_		
	Ring-necked duck			XX					XX	_	_	_		
	Scaup		Х	ХХ	Χ			ΧΣ	ХХ	-	-	-		
	Scoters	HIGH	Х	ХХ	Χ			ХΣ	ХХ	-	-	-		
	Tundra swan			ХХ					XX		-	-		
480	Great blue heron	44 NESTS	Х	ХХ	ХХ	X 2	Χ X .	ХХΣ	XX	MAY-JUL	-	_		
FISH	:													
RAR#	Species	S F Conc.	J	FΜ	а м	J.	JA	s o i	N D	Spawning	Eggs	Larvae	Juveniles	Adults
18	Threadfin shad			ХХ	ХХ		:	ХХΣ	X	-	-	-	-	FEB-MAY
	1611					_								SEP-NOV
	Weakfish Alewife						(X :	ХΧΣ	X	APR-AUG	-	MAY-AUG -	APR-NOV	APR-NOV
	Alewite American eel			X X			χ x .	ххх	χχ	_	_	_	- JAN-DEC	FEB-JUN SEP-DEC
	American shad			XX			- 41 .		XX	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker				Х	X	X X	ХХΣ	XX	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel			X						-	-	-	-	MAR-APR
	Atlantic menhaden							XΧΣ		– MAD TIII	-	MAY-NOV -	JAN-DEC	MAY-OCT
	Atlantic silverside Atlantic spadefish		Х	хх	ХХ	X 2		x		MAR-JUL -	_	_	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic sturgeon	С	Х	ХХ	хх	X X			Δ	_	_	_	#0G-0C1	JAN-OCT
	Bay anchovy								ХХ	APR-SEP	_	-	JAN-DEC	JAN-DEC
	Black drum							ХХΣ			APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass							ХХ		JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring Bluefish		Х	ХХ				X X X		-	-	_	NOV-MAR MAY-NOV	JAN-JUN APR-NOV
	Butterfish							XXX		_	_	_	JUL-NOV	MAR-NOV
	Clearnose skate							ХХΣ		-	_	-	-	MAY-NOV
	Gobies		Х	ХХ	ХХ	X	X X	ХХΣ	ХХ	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish						X X			-	-	-	JUL-OCT	APR-OCT
	Hickory shad			XX			, ,,		XX	- MAY 0ED	-	- MAN GED	NOV-MAR	JAN-JUN
	Hogchoker Inland silverside									MAY-SEP APR-MAY	MAY-SEP -	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows									APR-AUG	_	_	JAN-DEC	JAN-DEC
	Mummichog									APR-AUG	_	-	JAN-DEC	JAN-DEC
	Northern kingfish				ХХ	X	X X	ХХ		-	-	-	-	APR-OCT
	Northern pipefish		Х							MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer Northern searobin									MAY-AUG MAY-JUL	_	_	MAR-OCT	MAR-OCT MAR-OCT
	Red drum			Λ				лл ХХХ			-	_	- AUG-SEP	MAY-NOV
	Red hake			ХХ				ХХΣ			_	_	FEB-MAY	FEB-MAY
														SEP-NOV
	Sandbar shark							ХХ		-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)						X X :		7 17	-	-	-	JUN-OCT -	MAR-OCT
	Silver hake Silver perch			XX				XX		- APR-MAY	_	_	JAN-DEC	OCT-MAY JAN-DEC
	Spot							XXX		-	_		MAR-NOV	MAR-NOV
	Spotted hake				ХХ			ХХΣ		-	_	-	MAR-JUN	MAR-JUN
														SEP-NOV
	Spotted seatrout							ХΧΣ			-	-	APR-NOV	APR-NOV
	Striped bass Striped killifish							X X X		- APR-SEP	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Summer flounder							XXX			_	OCT-MAY		APR-OCT
	Tautog			ХХ					ХХ		-	-	-	OCT-APR
HABI	mam.													
			_			_								
RAR#	Species	S F Conc.	. J	F M	A M	. J .	J A :	S 0 1	U D					
97	Maritime dune scrub							ххх						
								- 4	-					
	RTEBRATE:													
RAR#	Species	S F Conc.	J	F M	A M	J	JA	SOI	N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Northern quahog (hard clam)									MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
	Northern quanog (hard clam) Horseshoe crab							х х 2 х х 2		MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Knobbed whelk							XXX		-	-	-	JAN-DEC	JAN-DEC
19	Blue crab		Х	ХХ	ХХ	X	X X	ХΧΣ	XX	MAY-OCT	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
								ХΧΣ		-	-	-	JAN-DEC	JAN-DEC
	Channeled whelk									JUN-SEP	JUN-SEP	- M7 V – NOV	JAN-DEC JAN-DEC	JUN-OCT
97	Channeled whelk Northeastern beach tiger beetle	T T		ΛX	v X	X 2	` X .	ХХХ	ΛΛ	-	MAY-SEP	MAY-NOV	OMM-DEC	JAN-DEC
97	Channeled whelk	т т	Х											
97 128	Channeled whelk Northeastern beach tiger beetle	T T	Х											
97 128 MARI	Channeled whelk Northeastern beach tiger beetle Blue crab	T T S F Conc.		FМ	ΑМ	J	JA	son	N D	Mating	Calving	Pupping	Molting	
97 128 MARI RAR#	Channeled whelk Northeastern beach tiger beetle Blue crab NE MAMMAL: Species			F M 	A M 		J A :	s o 1	N D	Mating	Calving	Pupping	Molting	
97 128 MARI RAR#	Channeled whelk Northeastern beach tiger beetle Blue crab NE MAMMAL: Species		J 	 X X	 x x				N D	Mating 	Calving 	Pupping	Molting 	
97 128 MARI RAR#	Channeled whelk Northeastern beach tiger beetle Blue crab NE MAMMAL: Species		J 	 X X	 x x		J A :			Mating - -	Calving - -	Pupping - -	Molting - -	
97 128 MARI RAR#	Channeled whelk Northeastern beach tiger beetle Blue crab NE MAMMAL: Species		J 	 X X	 x x					Mating - -	Calving - -	Pupping - -	Molting	
97 128 MARI RAR# 18 20	Channeled whelk Northeastern beach tiger beetle Blue crab NE MAMMAL: Species	S F Conc. S F Conc.	Ј Х	 X X	 X X X X	- x x	·	 x x	 X				Molting ing Juvenil	les Adults
97 128 MART RAR# 18 20 REPT RAR#	Channeled whelk Northeastern beach tiger beetle Blue crab NE MAMMAL: Species Harbor porpoise Bottlenose dolphin TILE: Species	S F Conc.	Ј Х	 X X	 X X X X	- X X	· К Х : Л А :	 x x s o 1	X D				ing Juvenil	
97 128 MART RAR# 18 20 REPT RAR#	Channeled whelk Northeastern beach tiger beetle Blue crab NE MAMMAL: Species Harbor porpoise Bottlenose dolphin TILE: Species Green sea turtle	S F Conc. S F Conc. T T	Ј Х	 X X	 X X X X A M 	- X X X X X X X X X X X X X X X X X X X	J A :		X X X D X				ing Juvenil	 V -
97 128 MART RAR# 18 20 REPT RAR#	Channeled whelk Northeastern beach tiger beetle Blue crab NE MAMMAL: Species Harbor porpoise Bottlenose dolphin TILE: Species	S F Conc.	Ј Х	 X X	X X X X X X X X X X X X X X X X X X	- X X X X X X X X X X X X X X X X X X X	J A :	 x x s o 1	X X X X X X X X X X X X X X X X X X X				ing Juvenil	 V - V MAY-NOV

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

Virginia: ESIMAP 24 (cont.)

BIOLOGICAL RESOURCES: (cont.)

REPTILE: (cont.)

HUMAN USE RESOURCES:

AQUACULTURE:

MANAGEMENT AREA:

 HUN#
 Name
 Contact
 Phone

 122
 WM. B. TROWER BAYSHORE NAT. AREA PR.
 VA DCR DNH
 757/787-5576

BIOLOGICAL RESOURCES:

BIRD	:
------	---

IRD	:									
AR#	Species	S F Conc.		м ј ј	ASON	D Nesting	Migrating	Molting		
8	Brown pelican	С	X X	ххх	X X X X	_	_	_		
	Common loon		XXX		X		-	-		
	Northern gannet	HIGH	X X X		X		-	-		
	Red-breasted merganser	VERY HIGH	XXX		X	х –	-	_		
	Red-necked grebe Red-throated loon		X X X X X		Х	_ v _	_	_		
14	Black scoter	HIGH	XXXX		X		_	_		
	Surf scoter		XXXX		X		_	_		
	White-winged scoter		XXXX		X		_	_		
_ ~	-									
ISH										
AR#	Species	S F Conc.	JFMA	мјј	ASON	D Spawning	Eggs	Larvae	Juveniles	Adults
18	Alewife		X X X	 x x					_	FEB-JUN
	American eel		XXXX		X X X X	х -	_	_	JAN-DEC	SEP-DEC
	American shad		XXXX	ХХ	X	x -	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker			XXX	X X X X	X -	-		AUG-DEC	MAY-NOV
	Atlantic mackerel		X X			-	-	-	-	MAR-APR
	Atlantic menhaden				X X X X		-		JAN-DEC	MAY-OCT
	Atlantic silverside		XXXX	XXX		X MAR-JUL	-		JAN-DEC	JAN-DEC
	Atlantic spadefish				XXXX	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	XXXX			-	_	- -	- TAN DEG	JAN-OCT JAN-DEC
	Bay anchovy Black drum				XXXX	X APR-SEP APR-JUN	- APR-JUN		JAN-DEC APR-NOV	APR-NOV
	Black sea bass				XXXX	JUN-OCT	- TIN OUN		APR-OCT	APR-NOV APR-OCT
	Blueback herring		XXXX		^ ^ X		_		NOV-MAR	JAN-JUN
	Bluefish				XXXX	_	_		MAY-NOV	APR-NOV
	Butterfish				XXXX	_	_		JUL-NOV	MAR-NOV
	Clearnose skate				XXXX	-	-	-	-	MAY-NOV
	Gobies		XXXX	ххх	X X X X	X APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish				X X X	-	-		JUL-OCT	APR-OCT
	Hickory shad		XXXX		X		-		NOV-MAR	JAN-JUN
	Hogchoker					X MAY-SEP	MAY-SEP		JAN-DEC	JAN-DEC
	Inland silverside					X APR-MAY	-		JAN-DEC	JAN-DEC
	Minnows					X APR-AUG	-		JAN-DEC	JAN-DEC
	Mummichog					X APR-AUG -	_	_	JAN-DEC -	JAN-DEC
	Northern kingfish Northern pipefish				XXX		_		- JAN-DEC	APR-OCT
	Northern puffer				XXXX	X MAY-JUN MAY-AUG	_		MAR-OCT	JAN-DEC MAR-OCT
	Northern searobin				XXX	MAY-JUL	_	_	MAK-0C1 -	MAR-OCT
	Red drum				XXXX	JUL-NOV	_		AUG-SEP	MAY-NOV
	Red hake		XXX		XXX	-	_		FEB-MAY	FEB-MAY
										SEP-NOV
	Sandbar shark			ххх	X X X	_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)		XX	ххх	X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		XXXX	X	ΧX	X -	-	-	-	OCT-MAY
	Silver perch		XXXX	XXX	X X X X	X APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot		XXXX	X X X	X X X X	X -	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		XX	ХХ	XXX	-	-	-	MAR-JUN	MAR-JUN
										SEP-NOV
	Spotted seatrout				XXXX		-		APR-NOV	APR-NOV
	Striped bass				XXXX		-		JAN-DEC	JAN-DEC
	Striped killifish Summer flounder				X X X X X X X X X X X X X X X X X X X	X APR-SEP X -	_		JAN-DEC JAN-DEC	JAN-DEC APR-OCT
	Tautog		XXXX	ллх	XXXX		_	OCT-MAY	JAN-DEC -	OCT-APR
	Threadfin shad		XXX	v	XXX		_	_	_	FEB-MAY
	IIIICadIIII Silad		n n n	21	21 21 21					SEP-NOV
	Weakfish		X	XXX	X X X X	APR-AUG	_	MAY-AUG	APR-NOV	APR-NOV
IVE	RTEBRATE:									
R#	Species	S F Conc.	JFMA	мјј	${\tt A} \; {\tt S} \; {\tt O} \; {\tt N}$	D Spawning	Eggs	Larvae	Juveniles	Adults
1.0	Warrach a such									T737 555
ΤЯ	Horseshoe crab				XXXX		-		JAN-DEC	JAN-DEC
1.0	Knobbed whelk Blue crab				XXXX		- MAY-SEP		JAN-DEC	JAN-DEC
1 J	Channeled whelk				X X X X X	X MAY-OCT X -	MAY-SEP -		JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
28	Blue crab				XXXXX		- MAY-SEP		JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
			21 21 21 A				ОП	1,0 v		01111 DEC
RI	NE MAMMAL:									
R#	Species	S F Conc.	J F M A	мјј	ASON	D Mating	Calving	Pupping	Moltina	
18	Harbor porpoise		XXXX	X		x -	_	-	_	
	Bottlenose dolphin				X X X	_	_	-	-	
יייםי	ILE:									
		S F Conc	T 12 M 3 1	M T T	A C O M	D Noatine	Watch:	Intomment:	na Tur	les Adult
	Species	S F Conc.	J F M A .	 M J J		D Nesting	naccning	Internesti	ng Juveni.	Les Aduli
23	Green sea turtle	т т		ххх	X X X X		_	_	MAY-NOV	7 –
-	Kemp's ridley sea turtle	E E			XXXX	_	_	_	MAY-NOV	
	Leatherback sea turtle	E E			X X X X	_	-	_	-	
								_		
	Loggerhead sea turtle	T T		ххх	X X X X	_	_	_	MAY-NOV	/ MMI_I

Virginia: ESIMAP 26 BIOLOGICAL RESOURCES:

BIRD:

BIRD								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	_	
106	American black duck		$\times \times $	APR-JUN	-	-		
	American wigeon		XXXX XXX	-	-	-		
	Black-necked stilt Blue-winged teal		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Brant			-	-	-		
	Canada goose Glossy ibis	С	X X X X X X X X X X X X X X X X X X X	APR-JUN	_	_		
	Great blue heron	C	$X \times X \times X \times X$	-	_	-		
	Great egret	C	X X X X X	-	-	-		
	Green-winged teal Mallard		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-JUL	_	_		
	Northern harrier	C	$\times \times $	MAR-MAY	-	-		
	Osprey Red-shouldered hawk		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_		
	Saltmarsh sharp-tailed sparrow	С	X X X X X X X X X X X X		_	-		
	Sedge wren	C	XXXXXX	MAY-JUL -	-	-		
	Snow goose Snowy egret		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_		
	Striated heron		X X	-	-	-		
	Tricolored heron Yellow-crowned night-heron	C C	X X X X X X	_	_	_		
107	Brant	VERY HIGH	XXXX XXX	-	-	-		
	Brown pelican Bufflehead	С	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Canvasback	HIGH	X X X X X X X X	_	_	_		
	Common goldeneye		$X\ X\ X\ X$	-	-	-		
	Common loon Double-crested cormorant		$\begin{array}{c} X \ X \\ X \ X \ X \end{array}$	_	_	_		
	Long-tailed duck		X X X X X X X X	-	-	-		
	Mergansers Ruddy duck		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Scaup	HIGH	X X X X X X X X X	-	_	-		
	Scoters	HIGH	X X X X X X X X X	_	-	-		
108	Tundra swan American oystercatcher		X X X X	_	_	_		
	Black skimmer		X X	-	-	-		
	Common tern Great black-backed gull		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Laughing gull		XXXX	_	_	_		
	Least tern	C	X X	-	-	-		
	Lesser yellowlegs Piping plover	ТТ	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Royal tern		X X	-	-	-		
	Sandwich tern Short-billed dowitcher	С	X X X X X X	_	_	_		
	Willet		XXXX	-	_	-		
430	Great blue heron	40 NESTS	X X X X X X X X X X X X X		_	-		
	Great blue heron Peregrine falcon	30 NESTS T	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAR-AUG	_	_		
FISH								
		S E Cons	TEMAMITIA SOND	Snawning	Face	Larvae	Juveniles	Adul+e
			J F M A M J J A S O N D					
18	Alewife American eel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	- JAN-DEC	FEB-JUN SEP-DEC
	American shad		XXXXXXXXXXX				NOV-MAR	JAN-JUN
	Atlantic croaker		X X X X X X X X	-	-	- - -	AUG-DEC -	MAY-NOV
	Atlantic mackerel Atlantic menhaden		X X X X X X X X X X X X X X	_	_	- MAY-NOV	- JAN-DEC	MAR-APR MAY-OCT
	Atlantic silverside		$\times \times $	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish Atlantic sturgeon	С	$\begin{smallmatrix} & & & \times & \times & \times & \times \\ & & \times & \times & \times & \times$	-	_	-	AUG-OCT	AUG-NOV JAN-OCT
	Bay anchovy	Ŭ	X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Black drum Black sea bass		X X X X X X X X	APR-JUN JUN-OCT	APR-JUN -	APR-JUN -	APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	NOV-MAR	JAN-JUN
	Bluefish		X X X X X X X X		-	-	MAY-NOV	APR-NOV
	Butterfish Clearnose skate		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	JUL-NOV -	MAR-NOV MAY-NOV
	Gobies				_		_	
	Harvestfish				APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	HICKORY SDAG		$X\;X\;X\;X\;X\;X\;X\;X$	-	APR-SEP	APR-OCT	JAN-DEC JUL-OCT	APR-OCT
	Hickory shad Hogchoker			- -	APR-SEP - - MAY-SEP	APR-OCT MAY-SEP	JAN-DEC	
	Hogchoker Inland silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-SEP APR-MAY	APR-SEP - -	APR-OCT MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC
	Hogchoker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-SEP APR-MAY	APR-SEP - MAY-SEP -	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC	APR-OCT JAN-JUN JAN-DEC
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish		X X X X X X X X X X X X X X X X X X X	- MAY-SEP APR-MAY	APR-SEP - MAY-SEP -	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish		X X X X X X X X X X X X X X X X X X X	- MAY-SEP APR-MAY	APR-SEP - MAY-SEP -	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin		X X X X X X X X X X X X X X X X X X X	- MAY-SEP APR-MAY	APR-SEP - MAY-SEP -	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum		X X X X X X X X X X X X X X X X X X X	- MAY-SEP APR-MAY	APR-SEP - MAY-SEP -	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC MAR-OCT - AUG-SEP	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin		X X X X X X X X X X X X X X X X X X X	- MAY-SEP APR-MAY	APR-SEP - MAY-SEP	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark		X X X X X X X X X X X X X X X X X X X	- MAY-SEP APR-MAY	APR-SEP - MAY-SEP -	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy)		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV -	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC MAR-OCT - AUG-SEP FEB-MAY	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV JAN-DEC
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake			MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - MAY-JUL	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - MAY-JUL -	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG — MAY-JUN MAY-AUG MAY-JUL JUL-NOV — — — — APR-MAY — APR-MAY — APR-SEP —	APR-SEP MAY-SEP	APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC APR-OCT
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG — MAY-JUN MAY-AUG MAY-JUL JUL-NOV — — — — APR-MAY — — APR-MAY — APR-SEP — —	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-NOV JAN-DEC JAN-DEC APR-OCT OCT-APR
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY - APR-SEP	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG — MAY-JUN MAY-AUG MAY-JUL JUL-NOV — — — — APR-MAY — — APR-MAY — APR-SEP — —	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY
	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE:		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY - APR-SEP APR-AUG	APR-SEP MAY-SEP	APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV APR-NOV
RAR#	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species	S F Conc.	X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY - APR-SEP APR-AUG	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC JAN-DEC APR-NOV APR-NOV JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV APR-NOV APR-NOV APR-NOV
RAR#	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-SEP APR-AUG Spawning	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV APR-NOV
RAR# 18	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Horseshoe crab Knobbed whelk Blue crab		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-SEP APR-AUG APR-AUG Spawning	APR-SEP MAY-SEP	APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC JAN-DEC APR-NOV APR-NOV JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV APR-NOV APR-NOV APR-NOV
RAR# 18	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Horseshoe crab Knobbed whelk Blue crab Channeled whelk		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-SEP APR-AUG APR-AUG Spawning - MAY-OCT - MAY-OCT	APR-SEP MAY-SEP	APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV
RAR# 18 19	Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Horseshoe crab Knobbed whelk Blue crab		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-SEP APR-AUG Spawning - MAY-OCT MAY-OCT	APR-SEP MAY-SEP	APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV

Virginia: ESIMAP 26 (cont.)

BIOLOGICAL RESOURCES: (cont.)

MARINE MAMMAL:

RAR#	Species	S F Conc.	JFM	IAMJJASON	D	Mating	Calving	Pupping	Molting
				. – – – – – – –	-				
18	Harbor porpoise		X X X	XX	Χ	-	-	-	-
20	Bottlenose dolphin			X X X X X X X		-	-	-	-

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
23	Green sea turtle	ТТ	$x \times x \times x \times x$	_	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	т т	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV

HUMAN USE RESOURCES:

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
158	PLUM TREE ISLAND NWR	U.S. FISH AND WILDLIFE SERVICE	757/721-2412

BIOLOGICAL RESOURCES:

Sandbar shark

BIRD	:
------	---

RAR# Species

	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	ì	
106	7							
106	American black duck		X X X X X X X X X X X X X X X X X X X		-	_		
	American wigeon		X X X X X X X X X X X X X X X X X X X	-	-	_		
	Black-necked stilt		X X X X X X	_	-	_		
	Blue-winged teal		X X	-	-	_		
	Brant		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Canada goose			APR-JUN	-	_		
	Glossy ibis	С	X X	-	-	-		
	Great blue heron		X X X X X X	-	-	_		
	Great egret	C	X X X X X	-	_	_		
	Green-winged teal		X X X X X X X X	-	-	_		
	Mallard		$\times \times $		_	_		
	Northern harrier	С	X X X X X X X X X	MAR-MAY	_	_		
	Osprey	9	XXXX	_	_	_		
	Red-shouldered hawk		XXX	_	_	_		
		С						
	Saltmarsh sharp-tailed sparrow		X X X X X X X X X X X X X X X X X X X		-	_		
	Sedge wren	С	XXXXXX	MAY-JUL	_	_		
	Snow goose		XXXX XXX	-	-	_		
	Snowy egret		X X X X X X X X	-	-	_		
	Striated heron		X X	-	-	-		
	Tricolored heron	C	X X X	-	-	_		
	Yellow-crowned night-heron	C	X X X	-	-	_		
107	Brant	VERY HIGH	$X \ X \ X \ X \ X \ X \ X$	-	-	_		
	Brown pelican	C	X X X X X X	-	_	_		
	Bufflehead	HIGH	X X X X X X X X X X X X X X X X X X X	-	_	_		
	Canvasback		X X X X X X X X X X X X X X X X X X X	_	_	_		
	Common goldeneye		X X X X X X X X X		_	_		
	Common loon		X X	_	_	_		
	Double-crested cormorant		XXXX	_	_	_		
	Long-tailed duck		XXXX XXX		_	_		
	Mergansers		X X X X X X X X X		_	_		
	Ruddy duck		X X X X X X X X X		_	_		
		IIIGII			_	_		
	Scaup	HIGH	X X X X X X X X X X X X X X X X X X X		_	_		
	Scoters	HIGH			-	_		
40-	Tundra swan		X X X X X X X X X		-	-		
108	American oystercatcher		X X X X X	-	-	-		
	Black skimmer		X X	-	-	-		
	Common tern		X X X X	-	-	_		
	Great black-backed gull		$X\;X\;X\;X\;X\;X$	-	-	-		
	Laughing gull		XXXX	-	-	-		
	Least tern	C	X X	-	-	_		
	Lesser yellowlegs		X X X X X X X	-	_	_		
	Piping plover	ТТ	X X X X	-	-	_		
	Royal tern		X X	-	_	_		
	Sandwich tern	С	X X	_	_	_		
	Short-billed dowitcher	Č	X X X X	_	_	_		
	Willet		XXXX	_	_	_		
131	Brown pelican	С	XXXXXX	_	_	_		
131	Bufflehead	VERY HIGH	XXXX XXX		_	_		
	Canvasback	VEIXI IIIOII	X X X X X X X X X	_	_	_		
	Common goldeneye		X X X X X X X X X	_	_	_		
	Common loon		XXX	_	_	_		
	Double-crested cormorant		XXXX	_	_	_		
	Long-tailed duck		X X X X X X X X		_	_		
	=				_	_		
	Mergansers		X X X X X X X X X		-	_		
	Scaup		X X X X X X X X X		-	_		
	Scoters	VERY HIGH	X X X X X X X X X X X X X X X X X X X		-	_		
	Mallard		$X\ X\ X$		-	_		
136	Bufflehead	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	_		
	Long-tailed duck		$X \ X \ X \ X \ X \ X \ X$	-	-	-		
	Mergansers		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Scaup		$X \ X \ X \ X \ X \ X \ X$	-	-	_		
	Scoters	MODERATE	X X X X X X X X X X X X X X X X X X X	-	_	_		
137	American black duck		X X X X X X X X X X X X X X X X X X X	-	_	_		
	American wigeon		X X X X X X X X X X X X X X X X X X X	_	_	_		
	Brant		X X X X X X X X		_	_		
	Bufflehead	MODERATE	X X X X X X X X		_	_		
	Canada goose	1102514115	X X X X X X X X		_	_		
	Long-tailed duck		X X X X X X X X		_	_		
	Mallard		X X X X X X X X X		_	_		
			X X X X X X X X X					
	Mergansers				_	_		
	Scaup		X X X X X X X X X X X X X X X X X X X	_	-	_		
420	Scoters	10 177070	X X X X X X X X X X		-	_		
	Great blue heron	10 NESTS	X X X X X X X X X X X X X		-	_		
562	Peregrine falcon	T	X X X X X X	MAR-AUG	-	-		
ETCH								
FISH								
RAR#	Species	S F Conc.	J F M A M J J A S O N D			Larvae	Juveniles	Adults
	71							
Т8	Alewife		XXXXX	-		-	- TAN DEG	FEB-JUN
	American eel		X X X X X X X X X X X X X		-	-	JAN-DEC	SEP-DEC
	American shad		X X X X X X X X X X		-	-	NOV-MAR	JAN-JUN
	Atlantic croaker		$X\;X\;X\;X\;X\;X\;X\;X$	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	-	-	-	-	MAR-APR
	Atlantic menhaden		$X \; X \; $	-	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		$X\ X\ X\ X\ X\ X\ X\ X\ X\ X\ X$	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish		XXXX	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	C	$\times \times $	-	-	-	-	JAN-OCT
	Bay anchovy			APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum		X X X X X X X	APR-JUN		APR-JUN	APR-NOV	APR-NOV
	Black sea bass		$X \times X \times X \times X$	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring		XXXXXXXXXX	-	_	_	NOV-MAR	JAN-JUN
	Bluefish		XXXXXXXX	_	_	_	MAY-NOV	APR-NOV
	Butterfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	JUL-NOV	MAR-NOV
	Clearnose skate		x	_	_	_	- JOT-NOA	MAX-NOV MAY-NOV
	Gobies		X X X X X X X X X X X X X			APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X X X X X X X X X X X X X	- TIV. OEL	APK-SEP	APR-OCT	JUL-OCT	APR-OCT
	Hickory shad		X X X X X X X X X X X X X X X X X X X	_	_	_	NOV-MAR	JAN-JUN
	-		X X X X X X X X X X X X X X X X X X X			- MAY-SEP	JAN-DEC	
	Hogchoker							JAN-DEC
	Inland silverside Minnows		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish		X X X X X X X X X X X X X X X X X X X	APK-AUG -	_	_	JAN-DEC -	APR-OCT
	Northern pipefish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Northern puffer		XXXXXXXX	MAY-AUG	_	_	MAR-OCT	MAR-OCT
	Northern searobin		XXXXXXXX	MAY-JUL	_	_	-	MAR-OCT
	Red drum		XXXXXXX	JUL-NOV	_	_	AUG-SEP	MAY-NOV
	Red hake		XXXX XXX	-	_	_	FEB-MAY	FEB-MAY
			** ** **				==	SEP-NOV

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

X X X X X X - - -

MAY-OCT

Virginia: ESIMAP 27 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH: (cont.)

	: (cont.) Species	S F Conc.					3 C C N		O	W	T	T		3 41	
		S F Cone.						<u>-</u>	Spawning	Eggs	Larvae		eniles	Adul	
18	Scup (porgy) Silver hake				X X X	ХХ	X X X	Х	-	_	-		-OCT -	MAR- OCT-	
	Silver perch					ХХ			APR-MAY	-	-		-DEC	JAN-	
	Spot						XXXX		-	-	DEC-APR -		-NOV	MAR-	
	Spotted hake			2	XXX	Χ	XXX		_	_	_	MAK	-JUN	MAR- SEP-	
	Spotted seatrout						X X X X		MAY-JUL	-	-		-NOV	APR-	
	Striped bass Striped killifish						XXXX		- APR-SEP	_	-		-DEC -DEC	JAN- JAN-	
	Summer flounder						XXXX		-	-	OCT-MAY		-DEC	APR-	
	Tautog Threadfin shad			XXX	XXX		X X X X X		-	-	-		_ _	OCT-	
	inreadin shad			Χ 2	XXX		XXX		_	_	_		_	FEB- SEP-	
	Weakfish						X X X X		APR-AUG	-	MAY-AUG		-NOV	APR-	
132	Alewife American eel				XXX		XXXX	v	-	_	_		- -DEC	FEB-	
	American shad				XXX		21 21 21 21	. 21	-	-	-		-	FEB-	
	Atlantic croaker Atlantic mackerel				X X X	ХХ	XXXX	X	-	-	-		-DEC -	MAR-	
	Atlantic mackerer Atlantic menhaden					ХХ	X X X X	Х	-	-	MAY-NOV		- -DEC	MAY-	
	Atlantic silverside			ХХХ	XXX		X X X X X X X X X X X X X X X X X X X		MAR-JUL -	-	-		-DEC	JAN-	
	Atlantic spadefish Atlantic sturgeon	С		ххх	XXX		XXXX		-	-	_		-OCT -	AUG- JAN-	
	Bay anchovy			ХХХ					APR-SEP				-DEC	JAN-	
	Black drum Black sea bass						X X X X X X X X X X X X X X X X X X X		APR-JUN JUN-OCT	APR-JUN -	APR-JUN -		-NOV -OCT	APR- APR-	
	Blueback herring			ХΣ	XXX	Х			-	-	-		_	FEB-	-JUN
	Bluefish Butterfish			_			X X X X X X X X X X X X X X X X X X X		_	_	-		-NOV	APR- MAR-	
	Clearnose skate			2			XXXX		-	_	-		-NOV -	MAY-	
	Gobies			ХХХ				X	APR-SEP	APR-SEP	APR-OCT		-DEC	JAN-	
	Harvestfish Hickory shad			ХУ	XX		XXX		_	_	-		-OCT -	APR- FEB-	
	Hogchoker			ХХХ	XXX	ХХ			MAY-SEP	MAY-SEP	MAY-SEP		-DEC	JAN-	-DEC
	Inland silverside Minnows								APR-MAY APR-AUG	_	_		-DEC -DEC	JAN- JAN-	
	Mummichog								APR-AUG APR-AUG	-	-	JAN	-DEC	JAN-	
	Northern kingfish			V V V			XXX	. 37	- MAY TIM	-	-		- DEG	APR-	
	Northern pipefish Northern puffer						XXXX	. X	MAY-JUN MAY-AUG	_	_		-DEC -OCT	JAN- MAR-	
	Northern searobin			Σ			X X X		MAY-JUL	-	-		-	MAR-	
	Red drum Red hake			X X	X X X X		X X X X X X X X X X X X X X X X X X X		JUL-NOV -	_	_		-SEP -MAY	MAY- FEB-	
														SEP-	NOV-
	Sandbar shark Scup (porgy)			2			X X X X X X X X X X X X X X X X X X X		_	_	_		-OCT -OCT	MAY- MAR-	
	Silver hake				XXX	21 21	XX	Х	-	-	-		-	OCT-	
	Silver perch						XXXX		-	-	- DEC 3.DD		-DEC	JAN-	
	Spot Spotted hake				X X X		X X X X X X X X X X X X X X X X X X X		_	_	DEC-APR -		-NOV -JUN	JAN- MAR-	
	-													SEP-	
	Spotted seatrout Striped bass			v v v	X X X X X		X X X X X X		MAY-JUL -	_	_		-NOV -	APR- OCT-	
	Striped killifish								APR-SEP	-	-		-DEC	JAN-	
	Summer flounder					ХХ	XXXX		-	-	-		-DEC -	- 00m	
	Tautog Threadfin shad			X X X	XXX		X X X X X		_	_	_		_	OCT- FEB-	
														SEP-	
	Weakfish			ХХХ	X X X	ХХ	XXXX	X	-	-	-	AUG	-NOV	JAN-	DEC
	RTEBRATE:														
RAR#	Species	S F Conc.		J F N	1 A M	ЈЈ 	ASON	D _	Spawning	Eggs	Larvae		eniles	Adul	
18	Horseshoe crab						X X X X		-	-	-		-DEC	JAN-	
128	Knobbed whelk Blue crab						X X X X X X X X X X X X X X X X X X X		_	- MAY-SEP	- MAY-NOV		-DEC -DEC	JAN- JAN-	
	Horseshoe crab						XXXX		-	- MAI 3EI			-DEC	JAN-	
104	Northern quahog (hard clam)								MAY-OCT	MAY-OCT	MAY-OCT		-DEC	JAN-	
134	Blue crab			XXX	X X X	ХХ	XXXX	. X.	-	MAY-SEP	MAY-NOV	JAN	-DEC	JAN-	DEC
MARII	NE MAMMAL:														
RAR#	Species	S F Conc.		JFN	A A A	J J	ASON	D	Mating	Calving	Pupping	Mol	ting		
18	Harbor porpoise			ххх	XXX			Х	-	-	_		_		
	Bottlenose dolphin						XXX		-	-	-		-		
133	Bottlenose dolphin Harbor porpoise			ххх	X X X		XXX	Х	-	-	-		- -		
REPT:	TT.E.														
	Species	S F Conc.		JFN	1 A M	JЈ	ASON	D	Nesting	Hatching	Internes	ting	Juvenil	Les	Adults
								-							
23	Green sea turtle Kemp's ridley sea turtle	T T E E					X X X X X X X X X X X X X X X X X X X		_	_	-		MAY-NOV MAY-NOV		- MAY-NOV
	Leatherback sea turtle	E E					XXXX		-	-	-				MAY-NOV
100	Loggerhead sea turtle	ТТ					XXXX		-	-	-		MAY-NOV		MAY-NOV
133	Green sea turtle Kemp's ridley sea turtle	T T E E					X X X X X		-	_	_		MAY-NOV MAY-NOV		_
	Leatherback sea turtle	ΕE			X	ХХ	X X X X		-	-	-		-		MAY-NOV
====	Loggerhead sea turtle	T T ===================================			X ====	х X ===	XXXX		- 	- 	- 		MAY-NOV	====:	- ======
HUMAI	N USE RESOURCES:														
AQUA	CULTURE:														
HUN#	Name		Contact							Pl	hone				
 57	AUITACIII TIIDE • HADD CI AMS														
5 <i>1</i> 58	AQUACULTURE: HARD CLAMS AQUACULTURE: OYSTERS														
MANA	GEMENT AREA:														
HUN#	Name		Contact							Pl	hone				
106	GRAFTON PONDS NATURAL AREA PRES	SERVE	VA DCR I								 04/445-911				
		→ □1. V □	AV DCK I	>1411						81	∪ 1, 11J−911	,			
NATIO	ONAL PARK: Name		Contact							F-1	hone				
	Name										none 				
126	COLONIAL NATIONAL HISTORICAL PA	ARK	NATIONAL	L PARK	SERV	ICE				75	57/898-340	0			

BIOLOGICAL RESOURCES:

BIRD:

BIRD			L G						20.71		
RAR#	Species		Conc.	J F M		S O N	D Nestin	g Migrating	g Molting 	-	
138	Bufflehead Canvasback		MODERATE HIGH	X X X X X X X X X X X X X X X X X X X		X X X X		-	-		
	Eared grebe		111011	X X X	X	ХХ	Х -	_	-		
	Horned grebe Mergansers			X X X X X X X X X X X X X X X X X X X		X X X X			-		
	Ring-necked duck		HIGH	X X X	X	ХХ	Х -	-	-		
	Ruddy duck Scaup		HIGH MODERATE	X X X X X X X X X X X X X X X X X X X		X X X X		_	-		
	Tundra swan		MODERATE	XXX		XX		_	-		
165	American black duck		MODERATE	XXX		XX		_	-		
	American wigeon Canada goose		MODERATE	X X X X X X X X X X X X X X X X X X X		X X X X		_	-		
	Green-winged teal			XXX		ХХ		-	-		
401	Mallard Great blue heron		7 NESTS	X X X X		X X X X	X - X MAY-JU	_ L –	-		
423	Great blue heron	~	196 NESTS				X MAY-JU		-		
562	Great egret Peregrine falcon	C T	25 NESTS		X X X X X X X X X X X X X X X X X X X	ххх	MAY-JU MAR-AU		-		
FISH	-										
RAR#	Species	S F	'Conc.	JFM	AMJJA	SON	D Spawni	ng Eggs	Larvae	Juveniles	Adults
89	Summer flounder Weakfish				X X X X X X X X X X X X X X X X X X X			_	-	JAN-DEC JAN-DEC	-
	White perch			X X X	X X X X X	X X X	Х -	-	-	JAN-DEC	JAN-DEC
	American eel American shad				X X X X X X X X X X X X X X X X X X X		X -	_	_	JAN-DEC FEB-OCT	-
	Atlantic croaker				XXXXX		х -	_	-	JAN-DEC	-
	Atlantic menhaden			1, 1, 1,	XXXX			-	-	MAY-NOV	-
	Atlantic silverside Atlantic sturgeon	С			X X X X X X X X X X X X X X X X X X X		X MAR-JU X -	ь - -	_	JAN-DEC JAN-DEC	JAN-DEC APR-NOV
	Bay anchovy				X X X X X		X APR-SE		-	JAN-DEC	JAN-DEC
	Black sea bass Hogchoker			XXX	X X X X X X	XXY	X MAY-SE	- P MAY-SEP	- MAY-SEP	APR-AUG JAN-DEC	- JAN-DEC
	Mummichog			X X X	X X X X X	X X X	X APR-AU		-	JAN-DEC	JAN-DEC
	Silver perch				X X X X X			-	- DEC=1 DD	JAN-DEC	JAN-DEC
	Spot Striped bass			лхХ	X X X X X X X X X X X X X X X X X X X			-	DEC-APR -	APR-NOV MAY-OCT	-
114	Alewife				X X X X X	ХХ	-	-	-	FEB-OCT	FEB-JUN
	American eel American shad				X X X X X X X X X X X X X X X X X X X		X -	_ _	_	JAN-DEC FEB-OCT	- FEB-JUN
	Atlantic croaker				X X X X X		х -	-	-	JAN-DEC	-
	Atlantic menhaden Atlantic silverside			V V V	XXXX		- X MAR-JU	-	_	MAY-NOV JAN-DEC	- JAN-DEC
	Atlantic sturgeon	С			XXXXX			_	-	JAN-DEC	APR-NOV
	Bay anchovy						X APR-SE	P -	-	JAN-DEC	JAN-DEC
	Blueback herring Channel catfish				X X X X X X X X X X X X X X X X X X X		X MAR-MA	– Y –	_	FEB-OCT JAN-DEC	FEB-JUN JAN-DEC
	Gizzard shad				XXXXX			-	-	JAN-DEC	-
	Hickory shad Hogchoker				XXXXX		- WAY OF	- P MAY-SEP	- MAY-SEP	MAR-SEP JAN-DEC	FEB-JUN JAN-DEC
	Minnows						X MAY-SE X APR-AU		MAI-SEP	JAN-DEC	JAN-DEC JAN-DEC
	Mummichog						X APR-AU	G -	-	JAN-DEC	JAN-DEC
	Silver perch Spot				X X X X X X X X X X X X X X X X X X X			_	- DEC-APR	JAN-DEC APR-NOV	JAN-DEC -
	Striped bass				XXXXX		-	-	_	MAY-OCT	FEB-JUN
	Weakfish White catfish				X X X X X			_	-	JAN-DEC	- JAN-DEC
	White perch				XXXXX		X MAY-JU		_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
132	Alewife			XX	X X X		-	-	-	-	FEB-JUN
	American eel American shad				X X X X X X X X X X X X X X X X X X X	XXX	X -	-	-	JAN-DEC -	- FEB-JUN
	Atlantic croaker				X X X X X	ххх	Х -	-	-	JAN-DEC	-
	Atlantic mackerel Atlantic menhaden				X $X X X X X$	v v v	- X -	-	- MAY-NOV	- JAN-DEC	MAR-APR MAY-OCT
	Atlantic menhaden Atlantic silverside						X MAR-JU		MAI -NOV -	JAN-DEC	JAN-DEC
	Atlantic spadefish	~				X X X		-	- -	AUG-OCT	AUG-NOV
	Atlantic sturgeon Bay anchovy	С			X X X X X X X X X X X X X X X X X X X		- X APR-SE		_	- JAN-DEC	JAN-OCT JAN-DEC
	Black drum				X X X X X	X X X	APR-JU	N APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass Blueback herring				X X X X X X X X X X X X X X X X X X X	ХХ	JUN-OC	r – –	-	APR-OCT	APR-OCT FEB-JUN
	Bluefish				X X X X X	ххх	-	-	-	MAY-NOV	APR-NOV
	Butterfish Clearnose skate			X	$\begin{array}{cccccccccccccccccccccccccccccccccccc$			-	_	JUL-NOV -	MAR-NOV MAY-NOV
	Gobies			XXX			X APR-SE		APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish Hickory shad			17 11	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ХХ	-	-	-	JUL-OCT -	APR-OCT FEB-JUN
	Hogchoker					ххх	X MAY-SE		- MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside						X APR-MA		-	JAN-DEC	JAN-DEC
	Minnows Mummichog						X APR-AU X APR-AU		-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish			21 21 21	XXXXX		-		-	-	APR-OCT
	Northern pipefish						X MAY-JU		-	JAN-DEC	JAN-DEC
	Northern puffer Northern searobin				X X X X X X X X X X X X X X X X X X X		MAY-AU MAY-JU		_	MAR-OCT	MAR-OCT MAR-OCT
	Red drum				X X X X	X X X			-	AUG-SEP	MAY-NOV
	Red hake			XX	X X	XXX	-	_	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark				X X X X	ХХ	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)				X X X X X	$\begin{array}{cccc} X & X & & & \\ & X & X & & & \end{array}$	- x -	-	-	JUN-OCT	MAR-OCT
	Silver hake Silver perch			X X X X X X X X X X X X X X X X X X X	XXXXXX			-	-	- JAN-DEC	OCT-MAY JAN-DEC
	Spot			X X X	X X X X X	X X X	х -	-	DEC-APR	MAR-NOV	JAN-DEC
	Spotted hake			X	XXX	XXX	-	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout				x x x x x	ххх	MAY-JU	L -	_	APR-NOV	APR-NOV
	Striped bass				X X X	ХХ	х -		-	-	OCT-JUN
	Striped killifish Summer flounder				X X X X X X X X X X X X X X X X X X X		X APR-SE X -	- -	_	JAN-DEC JAN-DEC	JAN-DEC -
	Tautog			X X X	X	ХХ	Х -	-	-	-	OCT-APR
	Threadfin shad			ХХ	X X	X X X	-	-	-	-	FEB-MAY SEP-NOV
	Weakfish			ххх	X	ххх	х -	-	-	AUG-NOV	JAN-DEC
TNVE	RTEBRATE:										
	Species	SF	'Conc.	JFM	AMJTA	SON	D Spawni	ng Egas	Larvae	Juveniles	Adults
89	Blue crab			XXX	X X X X X	X X X	Х -	-	MAY-NOV	JAN-DEC	JAN-DEC

Virginia: ESIMAP 28 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
89	Eastern oyster		X X X X X X X X X X X X	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
114	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC
115	Eastern oyster		$\times \times $	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
133	Horseshoe crab		$\times \times $	-	-	_	JAN-DEC	JAN-DEC
	Northern quahog (hard clam)		$\times \times $	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
134	Blue crab		$\times \times $	-	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
139	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
133	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Harbor porpoise		$X \ X \ X \ X \ X $	-	-	-		
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internes	ting Juveni	les Adults

X X X X X X X

X X X X X X X

757/898-3400

MAY-NOV

MAY-NOV

Leatherback sea turtle Loggerhead sea turtle

HUMAN USE RESOURCES:

133 Green sea turtle

Kemp's ridley sea turtle

COLONIAL NATIONAL HISTORICAL PARK

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
98 106	BALTHROPE MARSH WILDLIFE MANAGEMENT AREA GRAFTON PONDS NATURAL AREA PRESERVE	VA DCR DNH	804/445-9117
NATIC	NAL PARK:		
HUN#	Name	Contact	Phone

NATIONAL PARK SERVICE

T T E E E E

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BIOLOGICAL RESOURCES:

46	Species Canada goose	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	Ī	
46	Canada goose						_	
		VERY HIGH	X X X X X X X X X X X X X X X X X X X	-	_			
	American black duck	MODERATE	X X X X X X X X		-	_		
	American wigeon	MODERATE	X X X X X X X X	_	_	_		
	Gadwall	MODERATE	X X X X X X X X	_	-	_		
	Green-winged teal	MODERATE	X X X X X X X X X	-	-	_		
	Mallard	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	_		
	Northern pintail		X X X X X X X X X X X X X X X X X X X	-	-	_		
	Northern shoveler		X X X X X X X X X	-	-	_		
141	Bufflehead		X X X X X X X X X X	-	-	-		
	Canvasback	MODERATE	X X X X X X X X X X	-	-	-		
	Common goldeneye		$X X X X \qquad \qquad X X X$	-	-	_		
	Mergansers		$X X X X \qquad \qquad X X X$	-	-	_		
	Ring-necked duck	HIGH	X X X X X X X X X	-	-	_		
	Ruddy duck	HIGH	$X X X X \qquad \qquad X X X$	-	-	_		
	Scaup	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	_		
	Tundra swan	MODERATE	X X X X X X X X X X	-	-	-		
393	Great blue heron	2 NESTS	imes ime	MAY-JUL	-	-		
400	Great blue heron	22 NESTS	imes ime	MAY-JUL	-	-		
412	Great blue heron	6 NESTS	imes ime	MAY-JUL	-	-		
562	Peregrine falcon	T	X X X X X X	MAR-AUG	-	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Alewife		X X X X X X X X			-	FEB-OCT	FEB-JUN
	American eel		X	_	_	_	JAN-DEC	_
	American shad		X X X X X X X X X	_	_	_	FEB-OCT	FEB-JUN
	Atlantic croaker		x	_	_	_	JAN-DEC	_
	Atlantic menhaden		X X X X X X X	_	_	_	MAY-NOV	_
	Atlantic silverside		X	MAR-JUL	_	_	JAN-DEC	JAN-DEC
	Atlantic sturgeon	С	X		-	_	JAN-DEC	APR-NOV
	Bay anchovy		X	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X	_	_	_	FEB-OCT	FEB-JUN
	Channel catfish		X	MAR-MAY	_	_	JAN-DEC	JAN-DEC
	Gizzard shad		X		-	_	JAN-DEC	_
	Hickory shad		X X X X X X X X	_	_	_	MAR-SEP	FEB-JUN
	Hogchoker		$X \ X \ X \ X \ X \ X \ X \ X \ X \ X \$	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Minnows		$X \ X \ X \ X \ X \ X \ X \ X \ X \ X \$	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog		X	APR-AUG	-	_	JAN-DEC	JAN-DEC
	Silver perch		x		_	_	JAN-DEC	JAN-DEC
	Spot		imes ime	-	-	DEC-APR	APR-NOV	-
	Striped bass		X X X X X X X X X X	-	-	-	MAY-OCT	FEB-JUN
	Weakfish		imes ime	-	-	-	JAN-DEC	-
	White catfish		x		_	_	JAN-DEC	JAN-DEC
	White perch		$\times \times $				JAN-DEC	JAN-DEC
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Blue crab		X X X X X X X X X X X X X X X X X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
115	Eastern oyster		imes ime	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
109	HOG ISLAND WILDLIFE MANAGEMENT AREA	VDGIF	804/367-1000

NATIONAL PARK:

HUN#	Name	Contact	Phone
126	COLONIAL NATIONAL HISTORICAL PARK	NATIONAL PARK SERVICE	757/898-3400

PARK:

HUN#	Name	Contact	Phone
136	CHIPPOKES PLANTATION STATE PARK	VA DCR	757/294-3625

BIOLOGICAL RESOURCES:

ъ	TDD	
\mathbf{D}	$_{\rm LKD}$	

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
	American black duck	MODERATE	X	_	_	_		
	American coot	MODERATE	$X \ X \ X \ X $	-	-	-		
	American wigeon	MODERATE	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Bufflehead		X X X X X X X X	-	-	-		
	Canada goose	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Common goldeneye Gadwall		X X X X X X X X	_	_	_		
	Green-winged teal	MODERATE	X X X X X X X X	_	_	_		
	Mallard	HIGH	$X \ X \ X \ X$	-	-	_		
	Mergansers	MODERATE	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Northern pintail	HTCH	XXXX	_	_	_		
	Ring-necked duck Ruddy duck	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Scaup		X X X X X X X X X	_	_	_		
394	Great blue heron	9 NESTS	$\times \times $	MAY-JUL	-	-		
	Great blue heron	12 NESTS	$\times \times $	MAY-JUL	-	-		
	Great blue heron	184 NESTS	X X X X X X X X X X X X X		-	_		
	Great blue heron Great blue heron	20 NESTS 135 NESTS	X X X X X X X X X X X X X X X X X X X		_	_		
520	Great brue heron	133 NES13		MAI UUL				
FISH	:							
	Species	S F Conc.				Larvae	Juveniles	Adults
111	Alewife		X X X X X X X X X				FEB-OCT	FEB-JUN
114	American eel		X X X X X X X X X X X X X	_	_	_	JAN-DEC	- EB-00N
	American shad		X X X X X X X X X	_	_	_	FEB-OCT	FEB-JUN
	Atlantic croaker		$\times \times $	-	-	-	JAN-DEC	-
	Atlantic menhaden		X X X X X X X	-	-		MAY-NOV	-
	Atlantic silverside	С	X X X X X X X X X X X X X X X X X X X	MAR-JUL -	_	_	JAN-DEC JAN-DEC	JAN-DEC
	Atlantic sturgeon Bay anchovy	C	X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	APR-NOV JAN-DEC
	Blueback herring		XXXXXXXXX	-	_	_	FEB-OCT	FEB-JUN
	Channel catfish		$\times \times $	MAR-MAY	-	-	JAN-DEC	JAN-DEC
	Gizzard shad		$X\;X\;X\;X\;X\;X\;X\;X\;$	-	-	-	JAN-DEC	-
	Hickory shad		X	- MAY CED	- MAY CED		MAR-SEP	FEB-JUN
	Hogchoker Minnows		X X X X X X X X X X X X X X X X X X X		MAY-SEP -	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		$X \times X \times X \times X \times X \times X \times X \times X$		_	_	JAN-DEC	JAN-DEC
	Silver perch		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Spot		$\times \times $	-	-		APR-NOV	-
	Striped bass Weakfish		X X X X X X X X X	_	_	_	MAY-OCT	FEB-JUN -
	White catfish		X X X X X X X X X X X X X X X X X X X	MAY-JIIN	_	_	JAN-DEC JAN-DEC	JAN-DEC
	White perch		\times	-	_	_	JAN-DEC	JAN-DEC
143	Alewife		X X X X X X X X X	-	-	-	FEB-OCT	FEB-JUN
	American eel		$\times \times $	-	-	-	JAN-DEC	-
	American shad		X X X X X X X X X	-	-	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden Atlantic sturgeon	С	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FER-JUN	_	_	MAY-NOV JAN-DEC	- APR-NOV
	Banded killifish	C	X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X	-	-	-	FEB-OCT	FEB-JUN
	Bluegill		$\times \times $		-	-	-	JAN-DEC
	Channel catfish		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Gizzard shad Hogchoker		X X X X X X X X X X X X X X X X X X X	- -	_	_	JAN-DEC JAN-DEC	JAN-DEC -
	Inland silverside		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Longnose gar		$\times \times $		_	_	JAN-DEC	JAN-DEC
	Minnows		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Pumpkinseed Redbreast sunfish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Striped bass		XXXXXXXXX	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Tessellated darter		\times		-	-	-	JAN-DEC
	Threadfin shad		$X\ X\ X$	-	-	-	JAN-DEC	FEB-MAY
	White catfish		X	MAV- TIINI	_	_	JAN-DEC	SEP-NOV
	White catlish White perch		X X X X X X X X X X X X X X X X X X X			- APR-JUN	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
T 217 210 1	-		1				-	-
	RTEBRATE:	C E Cons	T E M A M T T A C C Y P	Cno	Page	T 0 mr-0 0	Turreni 1	Adul+-
RAR#	Species	S F Conc.	J F M A M J J A S O N D	spawning	Eggs 	Larvae	Juveniles	Adults
	Blue crab	.======================================	X X X X X X X X X X X X	_	_	MAY-NOV	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

NATIONAL PARK:

 HUN#
 Name
 Contact
 Phone

 126
 COLONIAL NATIONAL HISTORICAL PARK
 NATIONAL PARK SERVICE
 757/898-3400

Virginia: ESIMAP 31 BIOLOGICAL RESOURCES:

BIRD:

Mathematical Albahan	BIKD	• Species	S F Conc.	JEMAM JJASONI) Nesting	Migrating	Molting		
Professor of the content of the co								_	
Marie	142					-	-		
Marchest							_		
Company			MODERATE				_		
Marchest			HIGH						
Company Control Cont							_		
Michael			MODERATE				_		
Marchand girt _						-	_		
Manuface of Stock 1900		3	MODERATE			-	_		
Marie Mari		<u> </u>	HIGH				_		
Mary Standard Debter design							-		
Mile		±					-		
	144					_	_		
Procedure Processed Proc			Hobbiani			-	_		
Capacity						-	-		
Common			MODERATE			_	_		
Company			MODERATE			_	_		
Mary Service			MODERATE			-	_		
Machiner gincall			HIGH				_		
Manufaced Storms		2					_		
Second S		-				-	-		
Security Property		3					-		
Monte comment		— — — — — — — — — — — — — — — — — — —					_		
Marcines			111011				_		
Manufact anglement Manufact							-		
Canabar gener	145						- -		
Cambol MOMERNITE X X X X X X X X X X X X X X X X X X		3					-		
Mail arm		Gadwall	MODERATE	XXXXXXXXX		-	-		
Maintenended douck SDUBARGE X X X X X X X X X X X X X X X X X X						- -	-		
March Marc						-	-		
Comman goldnerge		Canada goose	VERY HIGH	X X X X X X X X X X X X X X X X X X X		-	-		
Community of Jensey	147					-	-		
Marganeries Miss X X X X X X X X X S C C C C C C C C C			MODERATE			_	_		
March Marc			HIGH			-	-		
Decay		· · · · · · · · · · · · · · · · · · ·				-	-		
Type		— — — — — — — — — — — — — — — — — — —			=		_		
Socia Very NICH X X X X X X X X X X X X X X X X X X		-					_		
Victoria rail View Rick	168	· · · · · · · · · · · · · · · · · · ·				-	-		
Make							_		
Second S		2	VERI HIGH				_		
	ETCH	•							
Alevife	_		S.F. Cong	TEMAMITACONI) Charming	Faas	T 2 **** 2 0	Turronilos	Adul+a
Mareican shad									
Marcian shad	114						-		
Atlantic croaker									
Atlantic silverside									
Allantic sturgeon		Atlantic menhaden		11 11 11 11 11 11 11 11 11 11 11 11				MAV_NOU	
Bay anchory				$\times \times \times \times \times \times \times$.TAN-DEC
Blueback herring			G	$\begin{array}{c} & \times $	K MAR-JUL	-	-	JAN-DEC	
Sizeard shad		Atlantic sturgeon	С	X X X X X X X X X X X X X X X X X X X	K MAR-JUL K -	-	-	JAN-DEC JAN-DEC	APR-NOV
Microry shad		Atlantic sturgeon Bay anchovy	С	X X X X X X X X X X X X X X X X X X X	X MAR-JUL X - X APR-SEP	-	- - -	JAN-DEC JAN-DEC JAN-DEC	APR-NOV JAN-DEC
Hogchoker		Atlantic sturgeon Bay anchovy Blueback herring Channel catfish	С	X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-MAY	- - - -	- - - -	JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC
Mummichog		Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad	С	X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP - K MAR-MAY K -</pre>	- - - - -	- - - - -	JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC
Silver perch		Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad	С	X X X X X X X X X X X X X X X X X X X	K MAR-JUL K - K APR-SEP - K MAR-MAY K -	- - - - - -	- - - - -	JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC MAR-SEP	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN
Spot		Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows	С	X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP</pre>	- - - - - - MAY-SEP	- - - - - - MAY-SEP	JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC MAR-SEP JAN-DEC JAN-DEC JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC
Striped bass		Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog	С	X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP</pre>	- - - - - - MAY-SEP	- - - - - - MAY-SEP	JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC
White catfish		Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot	С	X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP</pre>	- - - - - - MAY-SEP - - -	- - - - - - MAY-SEP - - DEC-APR	JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC
White perch		Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass	C	X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP</pre>	- - - - - - MAY-SEP - - -	- - - - - - MAY-SEP - - DEC-APR	JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC MAR-SEP JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-JUN
143 Alewife		Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish	C	X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP</pre>	- - - - - - MAY-SEP - - -	- - - - - - MAY-SEP - - - DEC-APR	JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC MAR-SEP JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-JUN -
American shad		Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish	c	X X X X X X X X X X X X X X X X X X X	<pre></pre>	- - - - - - MAY-SEP - - - -		JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC MAR-SEP JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
Atlantic menhaden Atlantic sturgeon C	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife	C	X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP</pre>	- - - - - - MAY-SEP - - - - -		JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC MAR-SEP JAN-DEC JEN-DEC JEN-DEC JEN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC
Blueback herring	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel	C	X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP - K MAR-MAY K - C MAY-SEP K APR-AUG K APR-AUG K - K - K - K MAY-JUN K - K - K - K - K - K - K - K - K - K -</pre>	- - - - - - - - - - - - -		JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC - FEB-JUN JAN-DEC FEB-JUN
Blueback herring	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad	C	X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP - K MAR-MAY K - K MAY-SEP K APR-AUG K APR-AUG K - K - K - K - K - K - K - K - K - K -</pre>	- - - - - - - - - - - - - -		JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC FEB-OCT	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC - FEB-JUN - JAN-DEC FEB-JUN - FEB-JUN
Channel catfish	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon		X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP</pre>	- - - - - - - - - - - - - -		JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC MAR-SEP JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC - FEB-JUN - JAN-DEC
Channel catfish	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish		X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP</pre>	- - - - - - - - - - - - - - - - -		JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC MAR-SEP JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-JUN - FEB-JUN - TAN-DEC FEB-JUN - APR-NOV JAN-DEC
Hogchoker	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring		X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP</pre>	- - - - - - - - - - - - - - - - - - -		JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC MAR-SEP JAN-DEC FEB-OCT MAY-NOV JAN-DEC JAN-DEC FEB-OCT FEB-OCT	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-JUN - APR-NOV JAN-DEC FEB-JUN
Longnose gar	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish		X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K</pre>	- - - - - - - - - - - - - - - - - - -		JAN-DEC FEB-OCT MAY-NOV JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-JUN - FEB-JUN - FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC JAN-DEC
Longnose gar	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad		X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP - K MAR-MAY K - K MAY-SEP K APR-AUG K APR-AUG K - K - K - K - K - K - K - K - K - K -</pre>	- - - - - - - - - - - - - - - - - - -		JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC
Mummichog	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hogchoker		X X X X X X X X X X X X X X X X X X X	<pre>K MAR-JUL K - K APR-SEP - K MAR-MAY K - K MAY-SEP K APR-AUG K APR-AUG K - K - K - K - K - K - K - K - K - K -</pre>	- - - - - - - - - - - - - - - - - - -		JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-JUN - FEB-JUN - FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC JAN-DEC JAN-DEC FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch TINVERTEBRATE: RAR# Species	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hogchoker Inland silverside Longnose gar		X X X X X X X X X X X X X X X X X X X	K MAR-JUL K - K APR-SEP K MAR-MAY K - K MAY-SEP K APR-AUG K APR-AUG K APR-AUG K - K - K - K - K - K - K - K	- - - - - - - - - - - - - - - - - - -		JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC
Redreast sunfish Striped bass Striped bass Tessellated darter Threadfin shad White catfish White perch RAR# Species SF Conc. REDRATE: REDRATE: REDRATE: REDRATE: REDRATE STRIPED BASS SECONC. REDRATE STRIPED BASK STRIPE	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hogchoker Inland silverside Longnose gar Minnows		X X X X X X X X X X X X X X X X X X X	K MAR-JUL K - K APR-SEP K MAR-MAY K - K MAY-SEP K APR-AUG K APR-AUG K - K - K - K - K - K - K - K	- - - - - - - - - - - - - - - - - - -		JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC MAR-SEP JAN-DEC FEB-OCT MAY-NOV JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC
Tessellated darter Threadfin shad XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hogchoker Inland silverside Longnose gar Minnows Mummichog		X X X X X X X X X X X X X X X X X X X	K MAR-JUL K - K APR-SEP - K MAR-MAY K - K MAY-SEP K APR-AUG K APR-AUG K - K - K - K - K - K - K - K - K - K -	- - - - - - - - - - - - - - - - - - -		JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC MAR-SEP JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC
Threadfin shad XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish		X X X X X X X X X X X X X X X X X X X	K MAR-JUL K - K APR-SEP K MAR-MAY K - K MAY-SEP K APR-AUG K APR-AUG K APR-AUG K - K - K - K MAY-JUN K - K - K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-MAY K - K APR-MAY K APR-MAY K APR-AUG K AP	- - - - - - - - - - - - - - - - - - -		JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-SEP JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC
White catfish White perch XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass		X X X X X X X X X X X X X X X X X X X	K MAR-JUL K - K APR-SEP K MAR-MAY K - K MAY-SEP K APR-AUG K APR-AUG K APR-AUG K - K - K - K - K - K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-MAY K - K APR-MAY K APR-MAY K APR-MAY K APR-AUG K APR-MAY K APR-AUG K APR-MAY K APR-AUG K APR-AUG K APR-AUG K APR-AUG K APR-AUG K APR-AUG K MAY-JUN K APR-AUG K MAY-JUN K APR-AUG K MAR-JUN K JUN-JUL FEB-JUN			JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC FEB-JUN - APR-NOV JAN-DEC FEB-JUN
White catfish White perch XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter		X X X X X X X X X X X X X X X X X X X	K MAR-JUL K APR-SEP K MAR-MAY K APR-AUG K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-MAY K APR-MAY K APR-AUG K APR-JUN K APR-JUN K APR-JUN			JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC FEB-JUN - APR-NOV JAN-DEC
INVERTEBRATE: RAR# Species SFConc. JFMAMJJASOND Spawning Eggs Larvae Juveniles Adults 114 Blue crab XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter		X X X X X X X X X X X X X X X X X X X	K MAR-JUL K APR-SEP K MAR-MAY K APR-AUG K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-MAY K APR-MAY K APR-AUG K APR-JUN K APR-JUN K APR-JUN			JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC
RAR# Species S F Conc. J F M A M J J A S O N D Spawning Eggs Larvae Juveniles Adults 114 Blue crab X X X X X X X X X X X X X X X X X X X	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish		X X X X X X X X X X X X X X X X X X X	K MAR-JUL K - K APR-SEP - K MAR-MAY K - K MAY-SEP K APR-AUG K APR-AUG K - K - K - K - K MAY-JUN K - K - K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-AUG K			JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC MAR-SEP JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC
114 Blue crab X X X X X X X X X X X X X X X X X X X	143	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish		X X X X X X X X X X X X X X X X X X X	K MAR-JUL K - K APR-SEP - K MAR-MAY K - K MAY-SEP K APR-AUG K APR-AUG K - K - K - K - K MAY-JUN K - K - K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-AUG K			JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC MAR-SEP JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC
		Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch		X X X X X X X X X X X X X X X X X X X	K MAR-JUL K - K APR-SEP - K MAR-MAY K - K MAY-SEP K APR-AUG K APR-AUG K - K - K - K - K MAY-JUN K - K - K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-AUG K			JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-OCT JAN-DEC JAN-DEC MAR-SEP JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC
	INVE	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch RTEBRATE:	C	X X X X X X X X X X X X X X X X X X X	K MAR-JUL K - K APR-SEP - K MAR-MAY K - K MAY-SEP K APR-AUG K APR-AUG K - K MAY-JUN K - K MAY-JUN K - K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-MAY K APR-MAY K APR-MUG K APR-AUG K APR-JUN			JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC - FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-JUN - APR-NOV JAN-DEC
	INVE	Atlantic sturgeon Bay anchovy Blueback herring Channel catfish Gizzard shad Hickory shad Hogchoker Minnows Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch RTEBRATE: Species	C	X X X X X X X X X X X X X X X X X X X	K MAR-JUL K APR-SEP K MAR-MAY K APR-AUG K APR-SEP K APR-SEP K APR-SEP K APR-SEP K APR-AUG K APR-MAY K APR-AUG K APR-MAY K APR-AUG K APR-JUN			JAN-DEC	APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-MAY SEP-NOV JAN-DEC JAN-DEC

BIOLOGICAL RESOURCES:

BIRD	:
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14	Black scoter		HIGH	X X X	X		ХХ	-	-	-		
	Surf scoter			X X X			ХХ	-	-	_		
	White-winged scoter			X X X	Χ		ХХ	_	_	_		
26	American woodcock			ХХ		7	XXXX	_	_	_		
	Black-bellied plover			Х	ххх		XXX		_	_		
	Dunlin			X X X			XXXX		_	_		
	Greater yellowlegs					X X X X		_	_	_		
	Killdeer					XXX		_	_	_		
	Least sandpiper			Y		XXXX	v v v	_	_	_		
	Lesser yellowlegs					XXXX		_	_	_		
	Pectoral sandpiper			Λ		 		_	_	_		
	Red knot			v	XXX		Λ Λ Λ	_	_	_		
								_	_	_		
	Ruddy turnstone				XXX		v v v v	_	_	_		
	Sanderling						XXXX	_	_	_		
	Semipalmated plover						XXX	-	_	_		
	Semipalmated sandpiper						XXX		-	_		
	Short-billed dowitcher			XXX			XXXX	-	-	_		
	Stilt sandpiper					X X X		-	-	_		
	Western sandpiper					X X X	XXX	-	-	_		
	Whimbrel				XXX	XX		-	-	-		
	White-rumped sandpiper			X	ХХ			-	-	-		
	Willet			X X X	XXX	X X Z	X X X X	-	-	_		
94	Clapper rail		HIGH	X X X	XXX	(X X)	X X X X	APR-AUG	-	-		
	King rail			X X X	XXX	(XX)	X X X X	-	-	-		
	Sora			X	ХХ	2	XXX	-	-	-		
	Virginia rail			X X X	ХХХ	(XX)	X X X X	APR-JUN	_	_		
	Whimbrel		HIGH	X	ХХ	ХΣ	X X	-	-	-		
	Willet		HIGH	X X X	ххх	(XX)	XXXX	APR-SEP	-	_		
95	American black duck		HIGH					MAR-JUL	_	_		
	American wigeon		MODERATE	X X X	Х		ххх	_	_	_		
	Brant		HIGH	X X X			ххх		_	_		
	Canada goose		HIGH			(APR-JUN	_	_		
	Gadwall		MODERATE					APR-JUN	_	_		
	Green-winged teal		MODERATE	XXX		21 2	XXX		_	_		
	Mallard		MODERATE			, x x ,		MAY-JUL	_	_		
	Northern pintail		MODERATE	XXX			x		_	-		
	Northern shoveler		LOW	XXX			XXX		_	_		
									_	_		
0.0	Snow goose		HIGH	XXX			XXX		_	_		
96	Bufflehead		HIGH	XXX			XXX		-	_		
	Long-tailed duck		MODERATE	XXX			XXX		_	-		
	Mergansers		HIGH	X X X			XXX		-	_		
	Scoters		HIGH	XXX			XXX		-	-		
	Tundra swan		MODERATE	X X X			XXX		-	-		
	American oystercatcher		4 ADULTS			X X X		MAR-JUL	-	-		
148	Bufflehead		MODERATE	X X X	X		XXX	-	-	_		
	Long-tailed duck			X X X	X		X X X	-	-	-		
	Mergansers			X X X	Χ		X X X	-	-	_		
	Scoters			X X X	X		X X X	-	-	-		
149	American bittern			X X X	ХХХ	(XX)	X X X X	APR-JUN	-	-		
	Black rail			X	ХХХ	XXX	XXX	APR-JUN	-	-		
	Least bittern			X X X	ХХХ	X X Z	X X X X	APR-JUN	-	-		
150	American black duck		HIGH	X X X	ххх	(XX)	XXXX	MAR-JUL	-	_		
	American wigeon		MODERATE	X X X	X		X X X	-	_	_		
	Brant		HIGH	X X X	X		X X X	-	_	_		
	Canada goose		MODERATE			(xxxx	APR-JUN	_	_		
	Gadwall		MODERATE					APR-JUN	_	_		
	Green-winged teal			XXX			XXX		_	_		
	Mallard		MODERATE			. x x .		MAY-JUL	_	_		
	Northern pintail		HODERVIE	XXX		. 21 21 2	XXX		_	_		
	Northern shoveler			XXX			XXX		_	_		
151	American oystercatcher		67 BIRDS	XXX		4	XXXX		_	_		
101	American oystercatcher		7 ADULTS			X X X X		MAR-JUL	_	_		
150	American oystercatcher		8 ADULTS			XXXX		MAR-JUL	_	_		
	Great black-backed gull		13 ADULTS					MAY-JUL	_	_		
213	_								_	_		
274	Herring gull		346 ADULTS					MAY-JUL	_	_		
2/4	Black-crowned night-heron	C	8 ADULTS					MAY-JUL MAY-JUL	_	_		
	=		14 ADULTS			< X X X			_	_		
		C	6 ADULTS					MAY-JUL	_	_		
		~	4 ADULTS			$\langle X X \rangle$						
		С						MAY-JUL	-	_		
	Snowy egret		4 ADULTS			XXX	XXX	MAY-JUL	-	-		
			4 ADULTS 13 ADULTS				XXX		- - -	- - -		
ETCU	Snowy egret Tricolored heron						XXX	MAY-JUL	- - -	- - -		
FISH	Snowy egret Tricolored heron	С	13 ADULTS	XXX	XXX	(X X)	X	MAY-JUL MAY-JUL	- - -	- -		
	Snowy egret Tricolored heron : Species	C S F	13 ADULTS Conc.	X	XXX	JJAS	X	MAY-JUL MAY-JUL Spawning		- - Larvae	Juveniles	Adults
	Snowy egret Tricolored heron	C S F	13 ADULTS Conc.	X	XXX	JJAS	X	MAY-JUL MAY-JUL Spawning	- - - Eggs	Larvae	Juveniles	Adults
RAR#	Snowy egret Tricolored heron : Species	C S F	13 ADULTS Conc.	Х X X Ј F M 	X X X X X X X X X X X X X X X X X X X	, , , , , , , , , , , , , , , , , , ,	X	MAY-JUL MAY-JUL Spawning			AUG-DEC	MAY-NOV
RAR#	Snowy egret Tricolored heron : Species	C S F	13 ADULTS Conc.	Х X X Ј F M 	X X X	, , , , , , , , , , , , , , , , , , ,	X X X X X X X S O N D	MAY-JUL MAY-JUL Spawning	-	 - -		
RAR#	Snowy egret Tricolored heron :: Species	C S F	13 ADULTS Conc.	J F M	A M J X X X X X X	J J A S	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning			AUG-DEC - JAN-DEC	MAY-NOV MAR-APR MAY-OCT
RAR#	Snowy egret Tricolored heron :: Species	C S F	13 ADULTS Conc.	J F M	A M J	J J A S	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning	- - - -	 - - -	AUG-DEC - JAN-DEC -	MAY-NOV MAR-APR MAY-OCT APR-OCT
RAR#	Snowy egret Tricolored heron :: Species	C S F	13 ADULTS Conc.	J F M	A M J	J J A S	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning	-	 - - - -	AUG-DEC - JAN-DEC	MAY-NOV MAR-APR MAY-OCT
RAR#	Snowy egret Tricolored heron :: Species	C S F	13 ADULTS Conc.	J F M X X X X	A M J X X X X X X X X X X X X X X X X	J J A S	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning JUN-OCT	- - - - - -	- - - - - -	AUG-DEC - JAN-DEC -	MAY-NOV MAR-APR MAY-OCT APR-OCT
RAR#	Snowy egret Tricolored heron :: Species	C S F	13 ADULTS Conc.	Х X X J F M	A M J	J J A S	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning	- - - -	 - - - - - -	AUG-DEC - JAN-DEC - APR-OCT	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT
RAR#	Snowy egret Tricolored heron Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack	C S F	13 ADULTS Conc.	X X X J F M X X X X	A M J X	J J A S	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning JUN-OCT -	- - - - - -	 - - - - - - -	AUG-DEC - JAN-DEC - APR-OCT MAY-NOV	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV
RAR#	Snowy egret Tricolored heron :: Species	C S F	13 ADULTS Conc.	J F M	A M J X	J J A S	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning JUN-OCT -	- - - - - -	 - - - - - - - -	AUG-DEC - JAN-DEC - APR-OCT MAY-NOV JUL-NOV	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV
RAR#	Snowy egret Tricolored heron Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack	C S F	13 ADULTS Conc.	X X X J F M X X X X	A M J X X X X X X X X X X X X X X	J J A S	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning JUN-OCT	 - - - - - - - -	 - - - - - - -	AUG-DEC - JAN-DEC - APR-OCT MAY-NOV JUL-NOV JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV
RAR#	Snowy egret Tricolored heron Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin	C S F	13 ADULTS Conc.	J F M	A M J X X X X X X X X X X X X X X X	J J A S	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG -	 - - - - - - - -	 - - - - - - - -	AUG-DEC - JAN-DEC - APR-OCT MAY-NOV JUL-NOV JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT
RAR#	Snowy egret Tricolored heron Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish	C S F	13 ADULTS Conc.	X X X J F M X X X X	A M J	J J A S	S O N D X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG -			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC -	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT
RAR#	Snowy egret Tricolored heron Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock	C S F	13 ADULTS Conc.	X X X J F M	A M J	J J A S	S O N D X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG -			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - - -	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV APR-OCT MAR-OCT DEC-APR
RAR#	Snowy egret Tricolored heron Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum	C S F	13 ADULTS Conc.	X X X J F M	A M J	J J A S	S O N D X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV APR-OCT MAR-OCT DEC-APR MAY-NOV
RAR#	Snowy egret Tricolored heron Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum	C S F	13 ADULTS Conc.	X X X J F M	A M J X	J J A S	S O N D X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV
RAR#	Snowy egret Tricolored heron I: Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark	C S F	13 ADULTS Conc.	J F M X X X X X X X X X	A M J	J J A S A A A A A A A A A A A A A A A A	S O N D X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - - FEB-MAY MAY-OCT	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT
RAR#	Snowy egret Tricolored heron I: Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy)	C S F	13 ADULTS Conc.	J F M X X X X X X X X X X X X	A M J	J J A S S S S S S S S S S S S S S S S S	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - - - FEB-MAY	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT
RAR#	Snowy egret Tricolored heron Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake	C S F	13 ADULTS Conc.	X X X J F M X X X X X X X X X X X X X X X	A M J	J J A S	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - FEB-MAY MAY-OCT JUN-OCT	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY
RAR#	Snowy egret Tricolored heron Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting)	C S F	13 ADULTS Conc.	X X X J F M X X X X X X X X X X X X	A M J	J J A S S S S S S S S S S S S S S S S S	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - - FEB-MAY MAY-OCT JUN-OCT - - - - - - - - - - - - -	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT
RAR#	Snowy egret Tricolored heron Species	C S F	13 ADULTS Conc.	X X X J F M X X X X X X X X X X X X	A M J	J J A S	S O N D X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - FEB-MAY MAY-OCT JUN-OCT	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-NOV MAR-NOV — APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-OCT
RAR#	Snowy egret Tricolored heron Species	C S F	13 ADULTS Conc.	J F M	A M J	J J A S	S O N D X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-MAY NOV-APR
RAR#	Snowy egret Tricolored heron Species	C S F	13 ADULTS Conc.	J F M	A M J	J J A S	S O N D D D D D D D D D D D D D D D D D D	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV		- - - - - - - - - - - - - - - - - - -	AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-OCT APR-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV
RAR#	Snowy egret Tricolored heron Species	C S F	13 ADULTS Conc.	J F M	A M J	J J A S	S O N D X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN
RAR#	Snowy egret Tricolored heron Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted hake	C S F	13 ADULTS Conc.	J F M X X X X X X X X X X X X X X X X X X	A M J	J J A S	S O N D D D D D D D D D D D D D D D D D D	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV		- - - - - - - - - - - - - - - - - - -	AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV
RAR#	Snowy egret Tricolored heron Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted seatrout	C S F	13 ADULTS Conc.	J F M X X X X X X X X X X X X X X X X X X	A M J	J J A S	S O N D D D D D D D D D D D D D D D D D D	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV
RAR#	Snowy egret Tricolored heron Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted seatrout Summer flounder	C S F	13 ADULTS Conc.	X X X J F M X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	A M J	J J A S S S S S S S S S S S S S S S S S	S O N D D D D D D D D D D D D D D D D D D	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-NOV APR-OCT
RAR#	Snowy egret Tricolored heron Species Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted hake Spotted seatrout Summer flounder Tautog	C S F	13 ADULTS Conc.	X X X J F M X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	A M J	J J A S	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - - FEB-MAY MAY-OCT JUN-OCT - MAR-NOV MAR-JUN APR-NOV - - - - - MAR-NOV - - - MAR-NOV - - - - - - - - - - - - -	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT OCT-MAY APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT APR-NOV APR-OCT APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-OCT JAN-DEC
RAR# 25	Snowy egret Tricolored heron Species	C S F	13 ADULTS Conc.	J F M	A M J	J J A S	S O N D	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - - FEB-MAY MAY-OCT JUN-OCT - - MAR-NOV MAR-JUN APR-NOV APR-NOV	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV
RAR# 25	Snowy egret Tricolored heron Species	C S F	13 ADULTS Conc.	J F M	A M J	J J A S A A A A A A A A A A A A A A A A	S O N D	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG JUL-NOV	- - - - - - - - - - - - - - - - - - -		AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - - FEB-MAY MAY-OCT JUN-OCT - MAR-NOV MAR-JUN APR-NOV JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT APR-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV JAN-DEC
RAR# 25	Snowy egret Tricolored heron Species	C S F	13 ADULTS Conc.	X X X J F M X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	A M J	J J A S	S O N D D D D D D D D D D D D D D D D D D	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG JUL-NOV	- - - - - - - - - - - - - - - - - - -		AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - - FEB-MAY MAY-OCT JUN-OCT - MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC - APR-NOV JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-NOV APR-OCT JAN-DEC APR-NOV JAN-DEC FEB-JUN
RAR# 25	Snowy egret Tricolored heron Species	C S F	13 ADULTS Conc.	X X X J F M X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	A M J	**************************************	S O N D D D D D D D D D D D D D D D D D D	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV JAN-DEC APR-NOV JAN-DEC JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV APR-OCT JAN-DEC FEB-JUN JAN-DEC
RAR# 25	Snowy egret Tricolored heron Species	C S F	13 ADULTS Conc.	X X X J F M X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	A M J	**************************************	S O N D X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV - APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV JAN-DEC FEB-JUN JAN-DEC JAN-DEC JAN-DEC
RAR# 25	Snowy egret Tricolored heron Species	C S F	13 ADULTS Conc.	X X X J F M X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	A M J	J J A S	S O N D X	MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
RAR# 25	Snowy egret Tricolored heron Species	C S F	13 ADULTS Conc.	X X X J F M X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	A M J	J J A S	S O N D	MAY-JUL MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-OCT JAN-DEC APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
RAR# 25	Snowy egret Tricolored heron Species	C S F	13 ADULTS Conc.	X X X J F M X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	A M J	J J A S	S O N D X	MAY-JUL MAY-JUL MAY-JUL Spawning JUN-OCT MAY-AUG - JUL-NOV			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV APR-NOV APR-NOV APR-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC

RAR# Species S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

Virginia: ESIMAP 32 (cont.)

BIOLOGICAL RESOURCES: (cont.)

	: (cont.)							
R#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Northern searobin						JUN-AUG	JUN-AUG
, 0	Pollock		XXXX	_	_	_	- NON AUG	DEC-APR
	Red drum		XXXXXX	JUL-NOV	_	_	AUG-SEP	MAY-NOV
	Red hake		XXXX XXX	_	_	_	FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark		X X X X X X	_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	_	_	_	JUN-OCT	MAR-OCT
	Silver hake		X X X X X X X X X X X X X X X X X X X	-	-	-	-	OCT-MAY
	Silver perch		imes ime	APR-MAY	APR-MAY	APR-JUN	JAN-DEC	JAN-DEC
	Silversides			MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
	Spanish mackerel		X X	_	-	-	-	APR-MAY
	Spot		X X X X X X X	_	-	-	APR-OCT	JUL-SEE
	Spotted hake		$X X X X \qquad X X X$	_	-	-	OCT-APR	_
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped anchovy		X X X X X X X X	APR-SEP	-	-	APR-NOV	APR-NOV
	Summer flounder		X X X X X X X X	_	-	-	APR-NOV	APR-NOV
	Tautog		X X X X X X X X X X X X X X X X X X X	-	-	-	-	OCT-APF
	Weakfish		X X X X X X X X	APR-AUG	-	-	MAR-OCT	APR-OCT
	White hake		$X X X \qquad X X X$	-	-	-	-	MAR-MAY
								SEP-NOV
	White perch		$\times \times $	APR-JUN	APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Winter flounder		X X X X X X X X X	-	-	-	DEC-JUL	DEC-MAY
	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel		imes ime	-	-	-	JAN-DEC	-
	American shad		X X X X X	-	-	-	-	FEB-JUN
	Atlantic croaker		X X X X X X X X	-	-	-	MAY-DEC	-
	Atlantic herring		X X X X X	-	-	-	-	FEB-JUN
	Atlantic mackerel		X X	-	-	-	-	MAR-API
	Atlantic menhaden		X X X X X X X	-	-	-	MAY-NOV	MAY-OCT
	Bay anchovy		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum		X X X X X X X	_	-	-	-	APR-OCT
	Black sea bass		X X X X X X	_	-	-	APR-SEP	APR-SEF
	Blueback herring		X X X X X X X X X	-	-	FEB-JUN	FEB-OCT	FEB-JUN
	Bluefish		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Crevalle jack		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	-	JAN-DEC	_
	ma m							
	TAT:							
₹#	Species	S F Conc.	J F M A M J J A S O N D					
	<u>-</u>							
27	Maritime dune scrub		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$					
	Native coastal strand vegetation		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$					
	Sea-beach knotweed		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$					
	Carrette and the anti-							
	Southern beach spurge		X X X X X X X X X X X X X X X X X X X					
			X X X X X X X X X X X X X					
	RTEBRATE:							
		S F Conc.	X X X X X X X X X X X X X X X X X X X	Spawning	Eggs	Larvae	Juveniles	Adults
۲# 	RTEBRATE: Species	S F Conc.	J F M A M J J A S O N D		Eggs			
۲# 	RTEBRATE: Species Blue crab	S F Conc.	J F M A M J J A S O N D	-	-	MAY-NOV	JAN-DEC	JAN-DEC
R# 25	RTEBRATE: Species Blue crab Channeled whelk	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X			MAY-NOV	JAN-DEC JAN-DEC	JAN-DEC
R# 25	RTEBRATE: Species Blue crab Channeled whelk Blue crab	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X	<u>-</u> - -	- MAY-SEP	MAY-NOV MAY-NOV	JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC
R# 25	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X	<u>-</u> - - -	- - - MAY-SEP	MAY-NOV - MAY-NOV -	JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
R# 25	RTEBRATE: Species Blue crab Channeled whelk Blue crab	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X	<u>-</u> - - -	- MAY-SEP	MAY-NOV MAY-NOV	JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
3# 25	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam)	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X	<u>-</u> - - -	- - - MAY-SEP	MAY-NOV - MAY-NOV -	JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
R# 25 30	RTEBRATE: Species Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL:		J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	 - - - - MAY-OCT	MAY-SEP MAY-OCT	MAY-NOV - MAY-NOV - MAY-OCT	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
# - 5 0	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X	 - - - - MAY-OCT	- - - MAY-SEP	MAY-NOV - MAY-NOV -	JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
# - 5 0 RI	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	 - - - - MAY-OCT	MAY-SEP MAY-OCT	MAY-NOV - MAY-NOV - MAY-OCT	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
# - 5 0 RI	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	 - - - - MAY-OCT	MAY-SEP MAY-OCT	MAY-NOV - MAY-NOV - MAY-OCT	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
# - 5 0	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	MAY-OCT	MAY-SEP MAY-OCT	MAY-NOV - MAY-NOV - MAY-OCT	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
*# 5 0 RI	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise	S F Conc.	J F M A M J J A S O N D	MAY-OCT Mating	MAY-SEP - MAY-OCT Calving	MAY-NOV - MAY-NOV - MAY-OCT	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
*# 5 0 RI	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal	S F Conc.	J F M A M J J A S O N D	MAY-OCT Mating	MAY-SEP - MAY-OCT Calving	MAY-NOV - MAY-NOV - MAY-OCT	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
RI 25 30	RTEBRATE: Species Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X	MAY-OCT Mating	MAY-SEP - MAY-OCT Calving	MAY-NOV - MAY-NOV - MAY-OCT	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
RI 25 30	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	MAY-OCT Mating	MAY-SEP - MAY-OCT Calving	MAY-NOV - MAY-NOV - MAY-OCT	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
R# :5 :0 RI R# 	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	MAY-OCT Mating	MAY-SEP - MAY-OCT Calving	MAY-NOV - MAY-NOV - MAY-OCT	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
RI 25 30	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	MAY-OCT Mating	MAY-SEP - MAY-OCT Calving	MAY-NOV - MAY-NOV - MAY-OCT	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
R# 225 330 RI R# 225	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	MAY-OCT Mating	MAY-SEP - MAY-OCT Calving	MAY-NOV - MAY-NOV - MAY-OCT	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	Adults JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
*# 25 30 RI *# 25	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	Mating	MAY-SEP MAY-OCT Calving JAN-DEC	MAY-NOV - MAY-NOV - MAY-OCT Pupping	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
*# 25 30 RI *# 25	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal	S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	Mating	MAY-SEP MAY-OCT Calving JAN-DEC	MAY-NOV - MAY-NOV - MAY-OCT	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
*# -25 30 RI *# -25 30 PT	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Humptor porpoise Harbor seal Humptor porpoise Harbor seal Harbor seal Harbor seal HILE: Species	S F Conc. E E S F Conc.	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	Mating	MAY-SEP MAY-OCT Calving JAN-DEC	MAY-NOV - MAY-NOV - MAY-OCT Pupping	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
*# -25 30 RI *# -25 30 PT	RTEBRATE: Species Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Species Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor seal HILE: Species Green sea turtle	S F Conc. E E S F Conc. T T	J F M A M J J A S O N D X X X X X X X X X X X X X X X	Mating	MAY-SEP MAY-OCT Calving JAN-DEC	MAY-NOV - MAY-NOV - MAY-OCT Pupping	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEC JAN-DEC JAN-DEC JAN-DEC
*# -25 30 RI *# -25 30 PT	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle	S F Conc. E E S F Conc. T T E E	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	Mating	MAY-SEP MAY-OCT Calving JAN-DEC	MAY-NOV - MAY-NOV - MAY-OCT Pupping	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
# :5 :5 :0 RI # :5 :5 :0	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle	S F Conc. E E S F Conc. T T E E E E	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	MAY-OCT Mating	MAY-SEP MAY-OCT Calving JAN-DEC	MAY-NOV - MAY-NOV - MAY-OCT Pupping	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC V V MAY
##25 80 RI #25 80 PT	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle	S F Conc. E E S F Conc. T T E E	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	MAY-OCT Mating	MAY-SEP MAY-OCT Calving JAN-DEC	MAY-NOV - MAY-NOV - MAY-OCT Pupping	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
##55 00 RI ##55 17	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin	S F Conc. E E S F Conc. T T E E E E T T	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	MAY-OCT Mating	MAY-SEP MAY-OCT Calving JAN-DEC	MAY-NOV - MAY-NOV - MAY-OCT Pupping	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC V MAN V MAN V MAN
R# 5 30 RI	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal ILE: Species Green sea turtle Leatherback sea turtle Loggerhead sea turtle Diamondback terrapin Green sea turtle	S F Conc. E E S F Conc. T T E E E E T T T T	J F M A M J J A S O N D	MAY-OCT Mating	MAY-SEP MAY-OCT Calving JAN-DEC	MAY-NOV - MAY-NOV - MAY-OCT Pupping	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEG JAN-DEG JAN-DEG JAN-DEG JAN-DEG V V MAN
##55 00 RI ##55 17	RTEBRATE: Species Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Loggerhead sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle	S F Conc. E E S F Conc. T T E E E E T T T T E E	J F M A M J J A S O N D	MAY-OCT Mating	MAY-SEP MAY-OCT Calving JAN-DEC	MAY-NOV - MAY-NOV - MAY-OCT Pupping	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEG JAN-DEG JAN-DEG JAN-DEG JAN-DEG V V MAN
R# 25 30 RI R# 25 30 PT R# 25 27	RTEBRATE: Species Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Leatherback sea turtle Leatherback sea turtle Leatherback sea turtle	S F Conc. E E S F Conc. T T E E E E T T T T E E E E E	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X	Mating MAY-OCT Mating	MAY-SEP MAY-OCT Calving JAN-DEC	MAY-NOV MAY-NOV MAY-OCT Pupping	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC V V MAY MAY V MAY V MAY V MAY V MAY MAY V MAY
R# -25 30 RI + -25 30 PT + -25 27 30	RTEBRATE: Species Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Common dolphin Harbor porpoise Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Loggerhead sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle	S F Conc. E E S F Conc. T T E E E E T T T T E E	J F M A M J J A S O N D	MAY-OCT Mating	MAY-SEP MAY-OCT Calving JAN-DEC	MAY-NOV - MAY-NOV - MAY-OCT Pupping	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC Molting	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC V V MAY MAY V MAY MAY V MAY MAY V MAY MAY V MAY MAY V MAY MAY V MAY MAY V MAY MAY V MAY MAY V MAY MAY V MAY MAY V MAY V MAY MAY V MAY V MAY V MAY V MAY V MAY MAY V MAY MAY MAY V MAY MAY V MAY MAY MAY MAY V MAY

HUMAN USE RESOURCES:

AQUACULTURE:

57 AQUACULTURE: HARD CLAMS

BIOLOGICAL RESOURCES:

BIRD:

BIRD	:					
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
14	Black scoter	HIGH	X X X X X X X X	-		-
	Surf scoter		$X \ X \ X \ X$	-	-	-
0.5	White-winged scoter		XXXX	-	-	-
26	American woodcock Black-bellied plover		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	-
	Dunlin		X X X X X X X X X X	_	_	_
	Greater yellowlegs		X X X X X X X X X	-	-	-
	Killdeer		X X X	-	-	-
	Least sandpiper		X	-	-	-
	Lesser yellowlegs Pectoral sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_
	Red knot		X X X X X X	-	-	-
	Ruddy turnstone		X X X X X X	-	-	-
	Sanderling		X X X X X X X X X X X X X	-	_	-
	Semipalmated plover Semipalmated sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_
	Short-billed dowitcher		$\times \times $	-	_	-
	Stilt sandpiper		X X X X X X	-	-	-
	Western sandpiper		X X X X X X	-	-	-
	Whimbrel White-rumped sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_
	Willet		X X X X X X X X X X X X X X X X X X X	_	_	_
94	Clapper rail	HIGH	$\times \times $	APR-AUG	-	-
	King rail		X X X X X X X X X X X X	-	-	-
	Sora Virginia rail		X X X	- 7 DD _ TIIN	_	_
	Whimbrel	HIGH	X X X X X X X	- AFK-00N	_	_
	Willet	HIGH	$\times \times $	APR-SEP	-	_
95	American black duck	HIGH	$\times \times $	MAR-JUL	-	-
	American wigeon	MODERATE	X X X X X X X X	-	-	-
	Brant Canada goose	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JIIN	_	_
	Gadwall	MODERATE	X X X X X X X X X X X X X		_	-
	Green-winged teal	MODERATE		-	-	-
	Mallard	MODERATE	X X X X X X X X X X X X X		-	-
	Northern pintail Northern shoveler	MODERATE LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_
	Northern shoveler Snow goose	LOW HIGH	X X X X X X X X X X X X X X X X X X X	_	_	-
96	Bufflehead	HIGH	X X X X X X X X	-	-	_
	Long-tailed duck	MODERATE	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-
	Mergansers	HIGH	X X X X X X X X	_	-	-
	Scoters Tundra swan	HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_
116	American kestrel	ABUNDANT	XXX	_	_	_
	Broad-winged hawk	COMMON	X X X	-	-	-
	Merlin	COMMON	X X X	-	-	-
	Red-tailed hawk Sharp-shinned hawk	ABUNDANT ABUNDANT	X X X X X X X X X X X X X X X X X X X	_	_	-
117	Gulls	ADUNDANI	XXXXXX	MAY-JUL	_	_
119	Piping plover	т т	X X X X X X X	APR-SEP	-	-
149	American bittern		$X\;X\;X\;X\;X\;X\;X\;X\;$		-	-
	Black rail		X X X X X X X X X	APR-JUN	-	-
154	Least bittern American oystercatcher	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL	- -	_
	Least tern	C	XXXXXXX	MAY-JUL	_	_
156	American oystercatcher	46 ADULTS	X X X X X X X	MAR-JUL	-	-
	American oystercatcher	12 ADULTS	X X X X X X X	MAR-JUL	-	-
	American oystercatcher	24 ADULTS	XXXXXX	MAR-JUL	-	-
159	Black skimmer Common tern		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_
	Gull-billed tern	Т	XXXXXXXX	MAY-JUL	_	_
	Royal tern		X X X X X X X X	MAY-JUL	-	-
160	Black skimmer	644 ADULTS	X X X X X X X X	MAY-JUL	-	-
	Common tern Gull-billed tern	390 ADULTS T 121 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_
	Royal tern	3500 ADULTS	XXXXXXXX	MAY-JUL	_	_
	Sandwich tern	C 444 ADULTS	X X X X X X X	MAY-JUL	-	-
267	Forster's tern	58 ADULTS	X X X X X X X X	MAY-JUL	-	-
	Gull-billed tern	T 1 ADULT	X	MAY-JUL	_	_
268	Laughing gull Forster's tern	24 ADULTS 25 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	-
	Laughing gull	1000 ADULTS	XXXXXXXXX	MAY-JUL	-	-
	Laughing gull	140 ADULTS	X X X X X X X X X	MAY-JUL	-	-
	Laughing gull Great black-backed gull	700 ADULTS 2 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL	- -	-
∠ / ⊥	Herring gull	2 ADULTS 50 ADULTS	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL	-	-
	Laughing gull	1700 ADULTS	$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $	MAY-JUL	-	-
	Laughing gull	15 ADULTS	$\times \times $	MAY-JUL	-	-
276	Herring gull	1 ADULT	X	MAY-JUL	_	-
277	Laughing gull Common tern	30 ADULTS 3 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_
2 / /	Gull-billed tern	T 67 ADULTS	XXXXXXXX	MAY-JUL	_	_
278	Forster's tern	15 ADULTS	X X X X X X X X	MAY-JUL	-	-
a = :	Laughing gull	300 ADULTS	X X X X X X X X X	MAY-JUL	-	-
279	Great black-backed gull	5 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	-
	Herring gull Laughing gull	20 ADULTS 3000 ADULTS	x x x x x x x x x x x x x x x x x x x	MAY-JUL MAY-JUL	_	_
280	Forster's tern	50 ADULTS	XXXXXXXX	MAY-JUL	_	-
	Great black-backed gull	2 ADULTS	$\times \times $	MAY-JUL	-	-
	Herring gull	15 ADULTS	XXXXXX	MAY-JUL	-	-
282	Laughing gull Laughing gull	500 ADULTS	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL	_	-
	Laughing gull Laughing gull	120 ADULTS 80 ADULTS	$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	MAY-JUL MAY-JUL	_	-
	Laughing gull	100 ADULTS	XXXXXXXXX	MAY-JUL	_	-
285	Laughing gull	800 ADULTS	$\times \times $	MAY-JUL	-	-
	Laughing gull	400 ADULTS	X X X X X X X X X	MAY-JUL	-	-
.,07	Forster's tern Great black-backed gull	54 ADULTS 15 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	-	-
	OLCAL DIACK-DACKER RAIL	15 ADULTS C 15 ADULTS	X X X X X X X X X X X X X X X X X X X		-	-
			XXXXXXX	MAY-JUL	_	-
	Great egret Herring gull	97 ADULTS				
	Great egret Herring gull Laughing gull	97 ADULTS 300 ADULTS	$\times \times $	MAY-JUL	-	-
288	Great egret Herring gull Laughing gull Snowy egret	97 ADULTS 300 ADULTS 26 ADULTS	$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	MAY-JUL	-	-
288	Great egret Herring gull Laughing gull Snowy egret Laughing gull	97 ADULTS 300 ADULTS 26 ADULTS 31 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	- - -	- - -
288 289 290	Great egret Herring gull Laughing gull Snowy egret Laughing gull Forster's tern	97 ADULTS 300 ADULTS 26 ADULTS 31 ADULTS 27 ADULTS	$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	MAY-JUL MAY-JUL MAY-JUL	-	- - - -
288 289 290 292 293	Great egret Herring gull Laughing gull Snowy egret Laughing gull Forster's tern Laughing gull Forster's tern	97 ADULTS 300 ADULTS 26 ADULTS 31 ADULTS	$\begin{array}{c} X \; X \\ X \; X \;$	MAY-JUL MAY-JUL	- - -	- - - - -
288 289 290 292 293	Great egret Herring gull Laughing gull Snowy egret Laughing gull Forster's tern Laughing gull	97 ADULTS 300 ADULTS 26 ADULTS 31 ADULTS 27 ADULTS 200 ADULTS	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL MAY-JUL MAY-JUL	- - -	- - - - -

Virginia: ESIMAP 33 (cont.)

BIOLOGICAL RESOURCES: (cont.)

Bay anchovy

Black sea bass

Crevalle jack

Blueback herring

Black drum

Bluefish

Atlantic croaker

Atlantic herring

Atlantic mackerel

Atlantic menhaden

BIOL	OGICAL RESOURCES: (cont.)												
BIRD	: (cont.)												
RAR#	Species	s	F Conc.	JFI	мам	JJA	so	N D	Nesting	Migrating	Molting	g	
298	Laughing gull Forster's tern		22 ADULTS		XXX				MAY-JUL MAY-JUL	_	-		
233	Herring gull		15 ADULTS 5 ADULTS	4	X X X	XXX		•	MAY-JUL	_	_		
	Laughing gull		300 ADULTS	2	ХХХ			X	MAY-JUL	_	_		
300	Herring gull		17 ADULTS		ХХ	X X X	X		MAY-JUL	_	-		
	Laughing gull		600 ADULTS		X X X				MAY-JUL	-	-		
	Laughing gull		675 ADULTS		X X X				MAY-JUL	-	-		
302	Forster's tern		30 ADULTS 300 ADULTS		XXX				MAY-JUL	_	_		
303	Laughing gull Laughing gull		225 ADULTS		X X X X X X X X X X X X X X X X X X X				MAY-JUL MAY-JUL	_	_		
	Forster's tern		150 ADULTS		XXX				MAY-JUL	_	_		
	Great black-backed gull		46 ADULTS						MAY-JUL	-	_		
	Herring gull		261 ADULTS		ХХ	X X X	X		MAY-JUL	-	-		
312	Black skimmer		310 ADULTS		XXX				MAY-JUL	-	_		
	Common tern		106 ADULTS		XXX				MAY-JUL	-	_		
313	Royal tern Black skimmer		2 ADULTS 11 ADULTS		X X X X X X X X X X X X X X X X X X X				MAY-JUL MAY-JUL	_	_		
313	Common tern		143 ADULTS		XXX				MAY-JUL	_	_		
	Great black-backed gull		2 ADULTS						MAY-JUL	-	-		
	Gull-billed tern	T	13 ADULTS	2	X X X	X X X	XXX		MAY-JUL	-	-		
	Laughing gull		131 ADULTS		XXX				MAY-JUL	-	-		
	Laughing gull		900 ADULTS		XXX				MAY-JUL	-	_		
315	Forster's tern Laughing gull		30 ADULTS 400 ADULTS		X X X X X X X X X X X X X X X X X X X				MAY-JUL MAY-JUL	_	_		
316	Forster's tern		50 ADULTS		XXX				MAY-JUL	_	_		
	Laughing gull		1100 ADULTS		XXX				MAY-JUL	_	_		
317	Common tern		29 ADULTS	2	ххх	X X X	XXX		MAY-JUL	-	_		
	Gull-billed tern	T	21 ADULTS		X X X				MAY-JUL	-	_		
210	Laughing gull		200 ADULTS		XXX				MAY-JUL	-	-		
	Laughing gull Laughing gull		70 ADULTS 30 ADULTS		X X X X X X X X X X X X X X X X X X X				MAY-JUL MAY-JUL	_	_		
	Laughing gull		40 ADULTS		XXX				MAY-JUL	_	_		
	Laughing gull		130 ADULTS		XXX				MAY-JUL	_	_		
	Laughing gull		125 ADULTS		ххх				MAY-JUL	-	-		
	Laughing gull		190 ADULTS	2	X X X	X X X	XXX	X	MAY-JUL	-	-		
	Laughing gull		300 ADULTS	2	XXX			X	MAY-JUL	-	_		
325	Herring gull		2 ADULTS	,		XXX		. 37	MAY-JUL	_	-		
338	Laughing gull Laughing gull		200 ADULTS 325 ADULTS		X X X X X X X X X X X X X X X X X X X				MAY-JUL MAY-JUL	_	_		
	Laughing gull		275 ADULTS		XXX				MAY-JUL	_	_		
	Laughing gull		50 ADULTS		X X X				MAY-JUL	_	_		
341	Forster's tern		35 ADULTS	2	X X X	X X X	XXX		MAY-JUL	-	-		
	Herring gull		1 ADULT		ХХ	X X X	X		MAY-JUL	-	-		
0.40	Laughing gull		100 ADULTS		XXX				MAY-JUL	-	-		
	Laughing gull Black-crowned night-heron		60 ADULTS 90 ADULTS		XXX				MAY-JUL	_	_		
332	Brown-headed cowbird		120 ADULTS	Λ Λ Δ	XX	XXX	. A A		MAY-JUL MAY-JUL	_	_		
	Cattle egret		12 ADULTS		XX	XXX	XX		MAY-JUL	_	_		
	Glossy ibis	C	120 ADULTS 12 ADULTS 32 ADULTS 166 ADULTS		ХХ	X X X	X		MAY-JUL	-	-		
	Great egret	C	166 ADULTS	XXX	ххх	X X X	XXX	XX	MAY-JUL	-	-		
	Herring gull		1044 ADULTS 8 ADULTS		XX	XXX	X		MAY-JUL	-	_		
	Danial tares			,		XXX				_	_		
	Royal tern Sandwich tern	С		4					MAY-JUL MAY-JUL	_	_		
	Snowy egret	C	48 ADULTS	3					MAY-JUL	_	_		
	Tricolored heron	С	58 ADULTS						MAY-JUL	-	_		
	White ibis				ХХ	X X X	X		MAY-JUL	-	-		
	Forster's tern		200 ADULTS		XXX				MAY-JUL	-	-		
	Forster's tern		30 ADULTS		XXX					-	_		
333	Black skimmer Common tern		332 ADULTS 210 ADULTS		X X X				MAY-JUL MAY-JUL	_	_		
	Gull-billed tern	Т	16 ADULTS	2	XXX	XXX	 . x x		MAY-JUL	_	_		
	Least tern	С	210 ADULTS 16 ADULTS 50 ADULTS	2	ХХХ	XXX	X		MAY-JUL	-	_		
361	American oystercatcher Peregrine falcon		HIGH						-	-	-		
562	Peregrine falcon	T		2	XXX	X X X	ζ		MAR-AUG	-	-		
FISH	•												
			E Cono	T 17 1	w 2 w	T T 7		N D	C	Ease	T	Turnon i loo	341+4
	Species				M A M 				spawning	Eggs	Larvae	Juveniles	Adults
	Atlantic croaker				X	XXX	XXX	XX	-	_	-	AUG-DEC	MAY-NOV
_~	Atlantic mackerel			2	хх	2			-	- -		JAN-DEC	MAR-APR
	Atlantic menhaden			XXX	ххх	X X X	XXX	XX	-	-	-		MAY-OCT
	Black drum				X X	X X X	X X X		- JUN-OCT	-	-	-	APR-OCT
	Black sea bass Bluefish				XX	XXX	X X		JUN-OCT -	_	_	APR-OCT MAY-NOV	APR-OCT
	Butterfish			•	X X X				-	- -	_	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Crevalle jack			XXX	XXX	XXX	XX	XX	-	_	_	JAN-DEC	-
	Northern kingfish								MAY-AUG	-		-	APR-OCT
	Northern searobin			2	X X X	X X X	XXX		-	-	-	-	MAR-OCT
	Pollock			XXX	ХХ							-	DEC-APR
	Red drum					XXX					_	- EED MAY	MAY-NOV
	Red hake			X X	XXX		ΧХ	. X	-	-	_	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark				x	XXX	(X X		_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)			2	XXX	XXX	^		-	_		JUN-OCT	MAR-OCT
	Silver hake			XXX	ХХХ		X	XX	-	-	_	-	OCT-MAY
	Southern kingfish (whiting)				ХХ	X X X	XXX		-	-	-	-	APR-OCT
	Spanish mackerel			** *-	ХХ				-	_	-	-	APR-MAY
	Spiny dogfish			XXX					-	- -	- DEC-APR	- MAR-NOV	NOV-APR MAR-NOV
	Spot Spotted hake			A X Z	X X X X X X X X X X X X X X X X X X X	A A X	XX	XX	-	_	DEC-APR	MAR-NOV MAR-JUN	MAR-NOV MAR-JUN
				4	1 /1								SEP-NOV
	Spotted seatrout				ХХ	XXX	ХХХ	X	MAY-JUL	-	_	APR-NOV	APR-NOV
	Summer flounder				ххх	X X X	XXX	XX	-	-	OCT-MAY	-	APR-OCT
	Tautog			XXX					APR-AUG	-	- MAN ALIC	-	JAN-DEC
30	Weakfish Alewife			v ·	$\begin{array}{c} X \ X \\ X \ X \end{array}$	XXX	XXX	. X	APR-AUG -	_	MAY-AUG	APR-NOV -	APR-NOV FEB-JUN
J ()	American eel				x x x		XXX	XX	_	_	_	JAN-DEC	FEB-JUN
	American shad				XXX		43		-	-	_	-	FEB-JUN
	Atlantic croaker				Y	x x x	. v v	Y Y	_	_	_	MAY-DEC	_

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

XX

X X X X X X X X

X X X X X X X

XXXXXXX

X X X X X X

X X X X X X

X X X X X X X X X X

X X X X X X X X X X X X APR-SEP

X X X X X

FEB-JUN MAR-APR

MAY-OCT

JAN-DEC

APR-OCT

APR-SEP

FEB-JUN

MAY-OCT

MAY-DEC

MAY-NOV

JAN-DEC

APR-SEP

FEB-OCT

MAY-OCT

JAN-DEC

FEB-JUN

Virginia: ESIMAP 33 (cont.)

BIOLOGICAL RESOURCES: (cont.)

113 MOCKHORN WILDLIFE MANAGEMENT AREA

	: (cont.)														
	Species	S F Conc.	J	FM	1 A	м Ј	JA	s o		Spawning		Larvae		eniles	Adults
30	Gobies		x		·	 x x	 x x	·		APR-SEP	APR-SEP	APR-OCT		 I-DEC	JAN-DEC
	Hickory shad			XX						-	-	-		-	FEB-JUN
	Hogchoker									MAY-SEP	MAY-SEP	MAY-SEP		-DEC	JAN-DEC
	Killifish									MAR-SEP	-	-		-DEC	JAN-DEC
	Minnows Mummichog									APR-AUG APR-AUG	_	_		I-DEC I-DEC	JAN-DEC JAN-DEC
	Northern pipefish							XX		AFN-AUG	_	_		-DEC	JAN-DEC
	Northern searobin		2.	. 21 21			XX	21 21 .		_	_	_		-AUG	JUN-AUG
	Pollock		X	ХХ	X				Х	_	-	_		-	DEC-APR
	Red drum							ХХ		JUL-NOV	-	-	AUG	-SEP	MAY-NOV
	Red hake			ХХ	X X :	X		X X	X	-	-	-	FEB	-MAY	FEB-MAY SEP-NOV
	Sandbar shark							ХХ		-	-	-		-OCT	MAY-OCT
	Scup (porgy)					Х Х	ХХ			-	-	_		-OCT	MAR-OCT
	Silver hake Silver perch			X X			v v		XX	- APR-MAY	- APR-MAY			- I-DEC	OCT-MAY JAN-DEC
	Silversides									MAR-JUL	MAR-JUL	APR-SEP		-DEC	JAN-DEC
	Spanish mackerel				X					-	-	-		-	APR-MAY
	Spot				Х	ХХ	ХХ	ХХ		-	-	-	APR	-OCT	JUL-SEP
	Spotted hake		X	XX	X			X :	ХХ	-	-	-	OCT	-APR	-
	Spotted seatrout							X X			-	-		-NOV	APR-NOV
	Striped anchovy							X X :		APR-SEP	-	-		-NOV	APR-NOV
	Summer flounder Tautog		77	XX			ΧХ	XX	X X X	-	_	_		-NOV	APR-NOV OCT-APR
	Weakfish		Λ				хх	X X		- APR-AUG	-	_		- L-OCT	APR-OCT
	White hake					X		X X		- -	_	_		-	MAR-MAY
															SEP-NOV
	White perch		X	XX	X X	ХХ	ХХ	ХХ	ХХ	APR-JUN	APR-JUN	APR-JUN	JAN	-DEC	JAN-DEC
	Winter flounder		X	XX	X X :	ХХ	X		Χ	-	-	-	DEC	-JUL	DEC-MAY
ABI	TAT:														
R#	Species	S F Conc.		FM	1 A	м Ј	JA	s o	N D						
07	Manife in a decrease and														
21	Maritime dune scrub Native coastal strand vegetation							X X X							
	Sea-beach knotweed							XX							
	Southern beach spurge							XX							
	RTEBRATE:														
AR#	Species	S F Conc.	J	FM	1 A	м Ј	JA	s o	N D	Spawning	Eggs	Larvae	Juv	eniles	Adults
				·	:			:							
25	Blue crab Channeled whelk							X X X		_	-	MAY-NOV -		I-DEC I-DEC	JAN-DEC JAN-DEC
30	Blue crab							XX		_	MAY-SEP	MAY-NOV		-DEC	JAN-DEC
	Channeled whelk							XX			-	-		-DEC	JAN-DEC
	Northern quahog (hard clam)									MAY-OCT	MAY-OCT	MAY-OCT			JAN-DEC
ART	NE MAMMAL:														
	Species	S F Conc.	J	FM	1 A I	мј	JA	s o i	N D	Mating	Calving	Pupping	Mol	ting	
25	Bottlenose dolphin							XX		-	-	-		-	
	Common dolphin		v	хх			ХХ	ХХ	Х		-	-		_	
	Harbor porpoise Harbor seal			X		Λ			ХХ		_	_		_	
	Humpback whale	ΕE			X X :	ХХ	ХХ	X X			JAN-DEC	_		_	
30	Bottlenose dolphin							ХХ			_	_		_	
	Harbor porpoise		X	XX	X X	X			Χ	-	-	-		-	
	Harbor seal		X	X				X	XX	-	-	-		-	
EPT	ILE:														
AR#	Species	S F Conc.										Internest			
25	Green sea turtle	тт		. – –										MAY-NOV	
۷۵		T T E E						X X X		_	_	_		MAY-NOV MAY-NOV	
	Leatherback sea turtle	E E						X X		_	_	_		MAI-NOV -	
	Loggerhead sea turtle	T T						XX		-	-	_		MAY-NOV	
	Diamondback terrapin			Х	X X	ХХ	ХХ	ХХ	X		-	-		MAR-NOV	MAR-1
30	Green sea turtle	T T						ХХ		-	-	-		MAY-NOV	
	1 2	EE						X X		-	-	-		MAY-NOV	
	Leatherback sea turtle	EE						XX		-	_	_		- M7\V_NO\7	MAY-I
94	Loggerhead sea turtle Diamondback terrapin	ТТ		Х				X X X		-	-	-		MAY-NOV MAR-NOV	
===						-===			===				===		
	N USE RESOURCES:														
	CULTURE:										=	.			
UN#	Name		ontact									hone 			
57	AQUACULTURE: HARD CLAMS														
57	AQUACULTURE: HARD CLAMS GEMENT AREA:														
57	-	c	contact								ρl	hone			

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

VDGIF

804/367-1000

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD		C.E.Cono	TEMAM T TACOND	Nootina	Wi anahi na	Wolting		
	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
26	American woodcock		X X X X X X	-	-	_		
	Black-bellied plover		X X X X X X X X X	-	-	-		
	Dunlin Greater yellowlegs		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Killdeer		XXX	_	_	_		
	Least sandpiper		$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$	-	-	-		
	Lesser yellowlegs		$\times \times $	-	-	-		
	Pectoral sandpiper		X X X X X X	-	-	-		
	Red knot		XXXXXX	-	-	-		
	Ruddy turnstone Sanderling		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Semipalmated plover		XXXXXXXXX	_	_	_		
	Semipalmated sandpiper		X X X X X X X X X	-	_	_		
	Short-billed dowitcher		$\times \times $	-	-	-		
	Stilt sandpiper		X X X X X X	-	-	-		
	Western sandpiper		XXXXX	_	_	_		
	Whimbrel White-rumped sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Willet		X X X X X X X X X X X X X	_	_	_		
94	Clapper rail	HIGH	\times	APR-AUG	_	_		
	King rail		imes ime	-	-	-		
	Sora		$X X X \qquad X X X$	-	-	-		
	Virginia rail	штен	X X X X X X X X X X X X X		-	-		
	Whimbrel Willet	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- APR-SEP	_	_		
9.5	American black duck	HIGH	X X X X X X X X X X X X X X X X X X X		_	_		
	American wigeon	MODERATE	X X X X X X X X	-	_	_		
	Brant	HIGH	$X \ X \ X \ X$ $X \ X \ X$	-	-	-		
	Canada goose	HIGH	\times		-	-		
	Gadwall	MODERATE	X X X X X X X X X X X X X		-	_		
	Green-winged teal Mallard	MODERATE MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	– MΔV=.TIIT.	_	_		
	Northern pintail	MODERATE	X X X X X X X X X X X X X X X X X X X	-	_	_		
	Northern shoveler	LOW	X X X X X X X X X X	-	_	_		
	Snow goose	HIGH	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		
96	Bufflehead	HIGH	X X X X X X X X		-	-		
	Long-tailed duck	MODERATE	X X X X X X X X X X X X X X X X X X X		-	_		
	Mergansers Scoters	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Tundra swan	MODERATE	X X X X X X X X X	_	_	_		
100	Brown pelican	C	X X X X X X X X	-	_	_		
	Gulls		$\times \times $	-	-	-		
	Loons		X X X X	-	-	-		
	Mergansers		XXXX XXX	-	_	_		
	Osprey Scoters	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Terns	111011		_	_	_		
116	American kestrel	ABUNDANT	XXX	-	-	-		
	Broad-winged hawk	COMMON	X X X	-	-	-		
	Merlin	COMMON	XXX	-	-	-		
	Red-tailed hawk	ABUNDANT ABUNDANT	X X X X X X	_	-	_		
124	Sharp-shinned hawk Bald eagle	T T	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- FEB-MAY	_	_		
	American black duck	HIGH	\times		_	_		
	American wigeon		$X X X X \qquad X X X$	-	-	-		
	Canada goose	HIGH	$\times \times $		-	-		
	Gadwall		X X X X X X X X	-	-	-		
	Green-winged teal	MODEDAME	X X X X X X X X X X X X X X X X X X X	— MAY TIIT	-	_		
	Mallard Snow goose	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MA1-JUL -	_	_		
127	Scoters	HIGH	X X X X X X X X	_	_	_		
	Tundra swan		$X X X X \qquad X X X$	-	-	-		
	Bufflehead	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$		-	-		
	Long-tailed duck		X X X X X X X X X	-	-	-		
	Mergansers Ring-necked duck		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_		_		
	Scaup		X X X X X X X X X	_	_	_		
154	American oystercatcher	HIGH	XXXXXXX	MAR-JUL	_	_		
291	Laughing gull	75 ADULTS	$\times \times $	MAY-JUL	-	-		
	Forster's tern	21 ADULTS	X X X X X X X X	MAY-JUL	-	-		
	Forster's tern Forster's tern	15 ADULTS 28 ADULTS	$\begin{smallmatrix} X & X & X & X & X & X & X \\ X & X & X &$	MAY-JUL MAY-JUL	_	_		
221	Laughing gull	3 ADULTS	X X X X X X X X X	MAY-JUL	_	_		
332	Forster's tern	14 ADULTS	$X \times X \times X \times X \times X$	MAY-JUL	_	_		
	Laughing gull	3 ADULTS	$\times \times $	MAY-JUL	-	-		
333	Forster's tern	33 ADULTS	X X X X X X X X	MAY-JUL	-	-		
331	Laughing gull Forster's tern	17 ADULTS 61 ADULTS	$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $	MAY-JUL MAY-JUL	_	_		
	Forster's tern	57 ADULTS	XXXXXXXX	MAY-JUL	_	_		
	Forster's tern	60 ADULTS	$X \times X \times X \times X \times X$	MAY-JUL	_	_		
350	Common tern	2 ADULTS	X X X X X X X X	MAY-JUL	-	-		
		T 26 ADULTS	X X X X X X X X X	MAY-JUL	-	-		
	American oystercatcher	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Great blue heron Peregrine falcon	28 NESTS T	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAR-AUG		_		
502	reregrine rareon	1	AAAAAA	111111 1100				
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs 1	Larvae 3	Juveniles	Adults
18	Alewife		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	- - 3	-	FEB-JUN
	American eel American shad		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	_	_		JAN-DEC NOV-MAR	SEP-DEC JAN-JUN
	Atlantic croaker		XXXXXXX	_	_		AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	-	_	_	_	MAR-APR
	Atlantic menhaden		$\times \times $	-	- 1		JAN-DEC	MAY-OCT
	Atlantic silverside		X X X X X X X X X X X X		-		JAN-DEC	JAN-DEC
	Atlantic sturgeon	С	$\begin{smallmatrix} & & & \times & $	_	_	- P	AUG-OCT -	AUG-NOV JAN-OCT
	Atlantic sturgeon Bay anchovy		X X X X X X X X X X X X X X X X X X X		_		- JAN-DEC	JAN-OCT JAN-DEC
	Black drum		XXXXXXXX	APR-JUN		-	APR-NOV	APR-NOV
	Black sea bass		$X \times X \times X \times X$	JUN-OCT	-		APR-OCT	APR-OCT
	Blueback herring		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-		NOV-MAR	JAN-JUN
	Bluefish		X X X X X X X X	-	-		VON-YAN	APR-NOV
	Butterfish Clearnose skate		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	- -	- 3	JUL-NOV -	MAR-NOV MAY-NOV
	Gobies		X X X X X X X X X X X X X X X X X X X				- JAN-DEC	MAY-NOV JAN-DEC
	Harvestfish		XXXXXXX		- ATK 5ET 7		JUL-OCT	APR-OCT
	Hickory shad			-	-	- N	NOV-MAR	JAN-JUN
	Hogchoker		\times	MAY-SEP	MAY-SEP I	MAY-SEP 3	JAN-DEC	JAN-DEC

Virginia: ESIMAP 34 (cont.)

BIOLOGICAL RESOURCES: (cont.)

	: (cont.) Species	S F Conc.							Spawning		Larvae	Juveniles		ılts
18	Inland silverside								APR-MAY		-	JAN-DEC		N-DEC
	Minnows Mummichog								APR-AUG APR-AUG	_	_	JAN-DEC JAN-DEC		N-DEC N-DEC
	Northern kingfish			Σ	XXX	XX	ХХ	X	-	-	-	-	APF	R-OCT
	Northern pipefish Northern puffer		Х		X X X X X X				MAY-JUN MAY-AUG	_	-	JAN-DEC MAR-OCT		N-DEC R-OCT
	Northern searobin Red drum			ΧУ	XXX				MAY-JUL	-	-	- AUC 0ED		R-OCT
	Red hake			ххх		. X 2		X X X X	JUL-NOV -	-	-	AUG-SEP FEB-MAY		Y-NOV B-MAY
	Sandbar shark				y y	· v s	X X X	v	_	_	_	MAY-OCT		P-NOV Y-OCT
	Scup (porgy)				XXX		X X	X	-	-	-	JUN-OCT	MAF	R-OCT
	Silver hake Silver perch			XXX		X X X		X X X X X X X X X X X X X X X X X X X	- APR-MAY	-	-	- JAN-DEC		Γ-MAY N-DEC
	Spot		Х	XXX	X			X X X X X	-	-	DEC-APR	MAR-NOV MAR-JUN		R-NOV
	Spotted hake			Α 2	^ ^ ^		Λ.	Λ Λ	_	_	_	MAK-JUN		R-JUN P-NOV
	Spotted seatrout Striped bass		X	X X X				X X x x x		_	_	APR-NOV JAN-DEC		R-NOV N-DEC
	Striped killifish		X	ХХХ	XXX	XX	X X	ххх	APR-SEP	-	-	JAN-DEC	JAN	N-DEC
	Summer flounder Tautog			X X X		(X)		X X X X X X X X X X X X X X X X X X X		_	OCT-MAY -	JAN-DEC -		R-OCT F-APR
	Threadfin shad			ХХХ	XX		X	ХХ	-	-	-	-		B-MAY
	Weakfish			Σ	XXX	XXX	ХХХ	ХХ	APR-AUG	-	MAY-AUG	APR-NOV		P-NOV R-NOV
30	Alewife American eel		X	X X X			x x ·	x x x	-	-	-	- JAN-DEC	FEE	B-JUN -
	American shad		21	XXX	X X X				-	-	-	-	FEE	3-JUN
	Atlantic croaker Atlantic herring			ххх			X X I	XXX	-	-	-	MAY-DEC -	FEE	- B-JUN
	Atlantic mackerel Atlantic menhaden			ΧУ		, ,, ,	v v ·	vv	-	-	-	- MAY-NOV		R-APR
	Bay anchovy		Х	ххх			X		APR-SEP	-	-	JAN-DEC		Z-OCT N-DEC
	Black drum Black sea bass				X				_	-	_	- APR-SEP		R-OCT R-SEP
	Blueback herring			XXX	XXX	XX	ХХ	X	-	-	FEB-JUN	FEB-OCT	FEE	B-JUN
	Bluefish Crevalle jack		Х	ххх			XXX XXX		-	-	-	MAY-OCT JAN-DEC		Z-OCT -
	Gobies		Х				X X I	X X X	APR-SEP	APR-SEP	APR-OCT	JAN-DEC -		N-DEC
	Hickory shad Hogchoker		Х	X X X			X X I	ххх	MAY-SEP	- MAY-SEP	- MAY-SEP	JAN-DEC		3-JUN N-DEC
	Killifish Minnows								MAR-SEP APR-AUG	-	-	JAN-DEC JAN-DEC		N-DEC N-DEC
	Mummichog		Х	ХХХ	XXX	XX	X X	ххх	APR-AUG	-	-	JAN-DEC	JAN	N-DEC
	Northern pipefish Northern searobin		Х	ххх		X X X		XXX	-	-	-	JAN-DEC JUN-AUG		N-DEC N-AUG
	Pollock Red drum		Х	ххх		, ,, ,	v v ·	X	- JUL-NOV	-	-	- AUG-SEP		C-APR
	Red hake			ххх			X X I	x x	- 00T-NOA	-	-	FEB-MAY		Y-NOV B-MAY
	Sandbar shark				хх	. x >	X X X	X	_	_	_	MAY-OCT		P-NOV Y-OCT
	Scup (porgy)				XXX		X X	X	-	-	-	JUN-OCT	MAF	R-OCT
	Silver hake Silver perch			XXX		X X X		X X X X X X X X X X X X X X X X X X X	- APR-MAY	- APR-MAY	- APR-JUN	- JAN-DEC		Γ-MAY N-DEC
	Silversides Spanish mackerel		Х		X X X	XX	X X I	X X X	MAR-JUL -	MAR-JUL -	APR-SEP	JAN-DEC -		N-DEC
	Spot					XX	X X I	X		-	-	APR-OCT		R-MAY L-SEP
	Spotted hake Spotted seatrout		Х	XXX		. x 3			- MAY-JUL	-	-	OCT-APR APR-NOV		- R-NOV
	Striped anchovy			Σ	XXX	XX	X X	ХХ	APR-SEP	-	-	APR-NOV	APF	R-NOV
	Summer flounder Tautog		Х	XXX		(X)		X X X X	-	-	-	APR-NOV -		R-NOV F-APR
	Weakfish White hake				X X X X X			X X X	APR-AUG -	_	-	MAR-OCT		R-OCT R-MAY
	white make			Λ 2	ΛΛ		Λ.	Λ Λ						P-NOV
	White perch Winter flounder								APR-JUN -			JAN-DEC DEC-JUL		N-DEC C-MAY
HABI														
RAR#	Species	S F Conc.		F M 7	A M J	. <i></i>	AS (OND						
161	Maritime dune scrub		Х	ХХХ	XXX	XXX	X X I	XXX						
	RTEBRATE:													
RAR#	Species	S F Conc.	J 	F M A	A M J	Г Ј 2	AS (о N D	Spawning	Eggs	Larvae	Juveniles		ılts
16	Northern quahog (hard clam)		X	ХХХ	XXX	XX	X X	X X X	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC		N-DEC
18	Horseshoe crab Knobbed whelk			XXX						_	-	JAN-DEC JAN-DEC		N-DEC
19	Blue crab Channeled whelk			X X X X					MAY-OCT -	MAY-SEP	MAY-NOV -	JAN-DEC JAN-DEC		N-DEC N-DEC
30			Х	ХХХ	XXX	XX	ХХ	ххх	-	MAY-SEP	MAY-NOV	JAN-DEC	JAN	N-DEC
30	Blue crab		X	XXX					- MAY-OCT	- MAY-OCT	- MAY-OCT	JAN-DEC JAN-DEC		N-DEC N-DEC
30	Channeled whelk		Х	X X Y	ΧХХ				-	MAY-SEP		JAN-DEC		N-DEC
						XX	X X			PHIL DEL	1111 1101			
128	Channeled whelk Northern quahog (hard clam)					XXX	X X I			rmii Obi	1111 1101			
128 MARI I	Channeled whelk Northern quahog (hard clam) Blue crab NE MAMMAL:	S F Conc.	Х	XXX	XXX			O N D				Molting		
128 MARII RAR# 18	Channeled whelk Northern quahog (hard clam) Blue crab NE MAMMAL: Species	S F Conc.	Х 	F M F	Х X X A M J 	г Ј 2	A S (X	Mating 			Molting 		
128 MARII RAR# 18 20	Channeled whelk Northern quahog (hard clam) Blue crab NE MAMMAL: Species	S F Conc.	Х 	F M F	X X X A M J X X	г Ј 2 	A S (X X	Mating - -	Calving	Pupping	Molting - - -		
128 MARII RAR# 18 20	Channeled whelk Northern quahog (hard clam) Blue crab NE MAMMAL: Species	S F Conc.	х х	F M F X X X X X X X X X X X X X X X X X X X	A M J	Τ J 2 - Χ Χ Σ	A S (X X X	Mating - - -	Calving 	Pupping - -	- -		
128 MARII RAR# 18 20	Channeled whelk Northern quahog (hard clam) Blue crab NE MAMMAL: Species Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise Harbor seal	S F Conc.	х х	F M F X X X X X X X X X X X X X X X X X X X	A M J	Τ J 2 - Χ Χ Σ	A S (X X X	Mating - - - -	Calving - - -	Pupping - - -	- -		
128 MARII RAR# 18 20 30	Channeled whelk Northern quahog (hard clam) Blue crab NE MAMMAL: Species Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise Harbor seal	S F Conc.	х х х	F M F X X X X X X	A M J	л Ј 2 	A S (X X X X X X	Mating - - - -	Calving - - - - -	Pupping - - -	- - - -	iles	Adults
128 MARII RAR# 18 20 30 REPT	Channeled whelk Northern quahog (hard clam) Blue crab NE MAMMAL: Species Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise Harbor seal ILE: Species Green sea turtle	S F Conc. T T	х х х	F M F X X X X X X	A M J X X	T J Z	A S (X X X X X X X X X O N D 	Mating - - - - -	Calving - - - - -	Pupping - - - - -	- - - - - - MAY-N	 OV	Adults
128 MARII RAR# 18 20 30 REPT	Channeled whelk Northern quahog (hard clam) Blue crab NE MAMMAL: Species Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise Harbor seal ILE: Species	S F Conc. 	х х х	F M F X X X X X X	A M J X X - X X	J J Z X X X X X X X X X X X X X X X X X	A S (X X X X X X X X X X X X X X X X X X X	Mating - - - - -	Calving - - - - -	Pupping - - - - -	- - - - - - Juven	OV OV	
128 MARII RAR# 18 20 30 REPT: RAR# 23	Channeled whelk Northern quahog (hard clam) Blue crab NE MAMMAL: Species Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle	S F Conc	х х х	F M F X X X X X X	A M J X X - X X	J J J J J J J J J J J J J J J J J J J	A S (X X X X X X X X X X X X X X X X X X X	Mating - - - - -	Calving - - - - -	Pupping - - - - -	- - - - - - - - - - - - - - - - - - -	OV OV	Adults MAY-NOV MAY-NOV MAY-NOV
128 MARII RAR# 18 20 30 REPT: RAR# 23	Channeled whelk Northern quahog (hard clam) Blue crab NE MAMMAL: Species Harbor porpoise Bottlenose dolphin Bottlenose dolphin Harbor porpoise Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle	S F Conc. T T E E E E	х х х	F M F X X X X X X	A M J X X - X	T J 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	A S (X X X X X X X X X X X X X X X X X X X	Mating - - - - -	Calving - - - - -	Pupping - - - - -	- - - - - - - - - - - - - - - - - - -	OV OV OV	Adults MAY-NOV MAY-NOV
128 MARII RAR# 18 20 30 REPT: RAR# 23	Channeled whelk Northern quahog (hard clam) Blue crab NE MAMMAL: Species	S F Conc. T T E E E E T T T T	х х х	F M F X X X X X X	X X X X X X X X X X X X X X X X X X X	T J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	AA S (X X X X X X X X X X X X X X X X X X X	Mating - - - - -	Calving - - - - -	Pupping - - - - -	- - - - - - - - - - - - - - - - - - -	OV OV OV OV	Adults MAY-NOV MAY-NOV MAY-NOV

Virginia: ESIMAP 34 (cont.)

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
57	AQUACULTURE: HARD CLAMS		
MANAG	EMENT AREA:		
HUN#	Name	Contact	Phone

VDGIF 113 MOCKHORN WILDLIFE MANAGEMENT AREA 804/367-1000

BIOLOGICAL RESOURCES:

BIRD		0 E 0	T 17 W 7			0 N D	Washins.	W :	Walting.		
AR#	Species	S F Conc.	J F M A		J A S		Nesting	Migrating	Molting 	=	
100	Brown pelican Gulls	С	X X X X	XXXX			-	-	_		
	Loons		XXXX			X X X	-	-	-		
	Mergansers Osprey		X X X X	X X X X I		X X X	-	-	_		
	Scoters	HIGH	XXXX			XXX	-	-	-		
125	Terns American black duck	HIGH	хххх		X X X	X X X	- MAR-JUL	- -	-		
	American wigeon Canada goose	HIGH		X X X	X X X		- APR-JUN	-	- -		
	Gadwall Green-winged teal		X X X X X X X X X X X X X X X X X X X			X X X X X X X X X X X X X X X X X X X	-	_	_		
	Mallard	MODERATE					MAY-JUL	-	-		
127	Snow goose Bufflehead	HIGH	X X X X X X X X X X X X X X X X X X X			X X X X X X X X X X X X X X X X X X X	-	-	_		
	Long-tailed duck		X X X X	X		X X X	-	-	-		
	Mergansers Ring-necked duck		X X X X X X X X X X X X X X X X X X X			X X X X X X X X X X X X X X X X X X X	_	_	_		
	Scaup		X X X X	X		X X X	-	-	-		
	Scoters Tundra swan	HIGH	X X X X X X X X X X X X X X X X X X X			X X X X X	_	-	_		
'ISH				•							
-		S F Conc.	J F M I	A M J	JAS	O N D	Spawning	Eggs	Larvae	Juveniles	Adults
18	Alewife		X X X	·			-			-	FEB-JUN
	American eel		XXXX				-	-		JAN-DEC	SEP-DEC
	American shad Atlantic croaker		ХХХХ			X X X	-	-		NOV-MAR AUG-DEC	JAN-JUN MAY-NOV
	Atlantic mackerel		XX	X			-	-	-	-	MAR-APR
	Atlantic menhaden Atlantic silverside		X X X X X X X X X X X X X X X X X X X				- MAR-JUL	-	MAY-NOV -	JAN-DEC JAN-DEC	MAY-OCT JAN-DEC
	Atlantic spadefish				ХХ	ХХ	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon Bay anchovy	С	X X X X X X X X X X X X X X X X X X X				- APR-SEP	-	-	- JAN-DEC	JAN-OCT JAN-DEC
	Black drum		Σ	X X X :	X X X	XX	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass Blueback herring		X X X X	X	XXX	X X X	JUN-OCT -	-		APR-OCT NOV-MAR	APR-OCT JAN-JUN
	Bluefish		Σ	XXX		ХХ	-	-	-	MAY-NOV	APR-NOV
	Butterfish Clearnose skate		XΣ	XXXX	X X X X X X X X X X		-	-	-	JUL-NOV	MAR-NOV MAY-NOV
	Gobies		хххх				APR-SEP	APR-SEP		JAN-DEC	JAN-DEC
	Harvestfish Hickory shad		X X X X	X X X X	XXX	X X X	_	-	_	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Hogchoker		XXXX	X X X :		X X X	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside Minnows						APR-MAY APR-AUG	-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		хххх	X X X	X X X	X X X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish			XXX			- MAY-JUN	-	-	- JAN-DEC	APR-OCT JAN-DEC
	Northern puffer			X X X			MAY-AUG	-		MAR-OCT	MAR-OCT
	Northern searobin Red drum		ХΣ	XXX		X X X	MAY-JUL JUL-NOV	-	-	- AUG-SEP	MAR-OCT MAY-NOV
	Red hake		ХХХ				-	-	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark				ххх		-	-		MAY-OCT	MAY-OCT
	Scup (porgy) Silver hake		X X X X	XXXX xx		X X X X	-	-	-	JUN-OCT	MAR-OCT OCT-MAY
	Silver perch		X X X X	X X X	X X X	X X X	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot Spotted hake		X X X X X X	X			-	-		MAR-NOV MAR-JUN	MAR-NOV MAR-JUN
	-										SEP-NOV
	Spotted seatrout Striped bass		X X X X			X X X X X		-		APR-NOV JAN-DEC	APR-NOV JAN-DEC
	Striped killifish		XXXX	XXX	ХХХ	X X X	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder Tautog		X X X X X X X X X X X X X X X X X X X			X X X X X	-	-	OCT-MAY	JAN-DEC -	APR-OCT OCT-APR
	Threadfin shad		X X X			ХХ		-	-	-	FEB-MAY
	Weakfish		Σ	XXX	ххх	хх	APR-AUG	-	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
ABI	TAT:										
AR#	Species	S F Conc.	J F M #	A M Ј	J A S	O N D					
97	Maritime dune scrub		хххх	X X X	X X X	X X X					
	Maritime dune scrub Maritime dune scrub		X X X X X X X X X X X X X X X X X X X								
	RTEBRATE:				- 21	21					
AR#	Species	S F Conc.					Spawning		Larvae	Juveniles	Adults
	Northern quahoq (hard clam)						MAY-OCT	MAY-OCT		JAN-DEC	JAN-DEC
	Horseshoe crab		XXXX	XXX	ХХХ	X X X	-	-	-	JAN-DEC	JAN-DEC
97	Knobbed whelk Northeastern beach tiger beetle	тт	X X X X X				- JUN-SEP	- JUN-SEP		JAN-DEC JAN-DEC	JAN-DEC JUN-OCT
128	Blue crab		XXXX				- -	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
162	Northeastern beach tiger beetle	T T VERY HIGH	хххх	ΧΧΧ	XXX	X X X	JUN-SEP	JUN-SEP	-	JAN-DEC	JUN-OCT
	NE MAMMAL:	S E Cons		A 24 -	T 7 ~	0 27 7	Wo ti	Col	Dumma	Molti	
AR# 	Species	S F Conc.					Mating	_	Pupping		
	Harbor porpoise		XXXX			X		-	-	-	
	Bottlenose dolphin		Σ	X X X	A X X	Λ	-	-	_	-	
	ILE: Species	S F Conc.	J F M I	A M J	JAS	OND	Nesting	Hatching	Internesti	ing Juvenil	es Adult
	Green sea turtle	T T			 X X X				-	MAY-NOV	
20	Kemp's ridley sea turtle	E E		X X	X X X	XX	-	-	-	MAY-NOV	MAY-NC
		E E		XX	XXX	XX	-	-	-	-	MAY-NC
	Leatherback sea turtle Loggerhead sea turtle	 Т Т			ХХХ	XX	_	_	_	MAY-NOV	MAY-NC

AQUACULTURE:

Phone HUN# Contact

AQUACULTURE: HARD CLAMS

Virginia: ESIMAP 35 (cont.)

HUMAN USE RESOURCES: (cont.)

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
101	CAPE CHARLES COASTAL HAB. NAT. AREA PR.	VA DCR	757/678-0477
120	SAVAGE NECK NATURAL AREA PRESERVE	VA DCR DNH	757/787-5576

BIOLOGICAL RESOURCES:

BIRD	:
------	---

IRD								
AR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	_	
	Bufflehead	HIGH	X X X X X X X X X	_	_	_		
	Canvasback	MODERATE	X X X X X X X X	-	-	-		
	Common goldeneye		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Long-tailed duck	MODERATE	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Mergansers		X X X X X X X X X	-	-	-		
	Mute swan		X X X X X X X X X	-	-	-		
	Ring-necked duck	MODERATE	X X X X X X X X X X X X X X X X X X X	_	-	_		
	Ruddy duck	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Scaup	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Scoters	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Tundra swan	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	_		
CSH	:							
R#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eaas	Larvae	Juveniles	Adults
18	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	-	JAN-DEC	SEP-DEC
	American shad		$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker		$X\ X\ X\ X\ X\ X\ X$	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	-	-	-	-	MAR-APR
	Atlantic menhaden		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		$\times \times $	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish		X X X X	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	X X X X X X X X X X	-	_	-	_	JAN-OCT
	Bay anchovy		X X X X X X X X X X X X X	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Black drum		XXXXXXX	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		XXXXXXX	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring		XXXXXXXXXX	- -	_	_	NOV-MAR	JAN-JUN
	Bluefish		X	_	_	_	MAY-NOV	APR-NOV
	Butterfish		X	_	_	_	JUL-NOV	MAR-NOV
	Clearnose skate		x x x x x x x x x x x x x x x x x x x	_	_	_	- JOT-NOA	MAX-NOV MAY-NOV
	Gobies Harvestfish		X X X X X X X X X X X X X X X X X X X	APR-SEP	APR-SEP -	APR-OCT	JAN-DEC	JAN-DEC
				_			JUL-OCT	APR-OCT
	Hickory shad		X X X X X X X X X X X X X X X X X X X		-		NOV-MAR	JAN-JUN
	Hogchoker		X X X X X X X X X X X X X		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		$X\;X\;X\;X\;X\;X\;X\;X\;$		-	-	JAN-DEC	JAN-DEC
	Minnows		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Mummichog		$X\;X\;X\;X\;X\;X\;X\;X\;$		_	-	JAN-DEC	JAN-DEC
	Northern kingfish		X X X X X X X	-	-	-	-	APR-OCT
	Northern pipefish			MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin		X X X X X X X X	MAY-JUL	-	-	-	MAR-OCT
	Red drum		X X X X X X X	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake		X X X X	-	-	-	FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		X X X X X X X X X X X X X X X X X X X	-	-	-	-	OCT-MAY
	Silver perch		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	APR-MAY	-	_	JAN-DEC	JAN-DEC
	Spot		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		X X X X	-	-	-	MAR-JUN	MAR-JUN
								SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	-	JAN-DEC	JAN-DEC
	Striped killifish		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder		$\times \times $	-	-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog		X X X X X X X X X X X X X X X X X X X		_	_	_	OCT-APR
	Threadfin shad		XXXX XXX		_	_	_	FEB-MAY
								SEP-NOV
	Weakfish		$\times \times \times \times \times \times \times \times$	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
VE:	RTEBRATE:							
	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Egas	Larvae	Juveniles	Adults
-								
6	Northern quahog (hard clam)		$\times \times $	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
8	Horseshoe crab		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Knobbed whelk		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
5	Eastern oyster		$\times \times $	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
	Blue crab		$\times \times $			MAY-NOV	JAN-DEC	JAN-DEC
RT.	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
							-	
	Harbor porpoise		XXXXXXXXX		-	-	-	
	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	ILE:							
	Species	S F Conc.						
	Green sea turtle	т т	X X X X X X				MAY-NOV	
	Kemp's ridley sea turtle	E E	X	_	_	_	MAY-NOV	
		п п				_		
		C C						
	Leatherback sea turtle Loggerhead sea turtle	E E T T	$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\\ X\;X\;X\;X\;X\;X\;X\end{array}$		_	_	– MAY-NOV	

BIOLOGICAL RESOURCES:

BIRD:

RAR# Species

MANAGEMENT AREA:

114 NEW POINT COMFORT NATURAL AREA PRESERVE

HUN# Name

AR# Species 	S F Conc.	J F M A M J J A S O N D		Migrating	Molting		
L63 American black duck	MODERATE	X X X X X X X X X	-	_	_	_	
American wigeon	MODERATE		_	-	_		
Brant	WTO:	X X X X X X X X X	-	-	_		
Canada goose Gadwall	HIGH MODERATE	$egin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
Mallard	MODERATE	X X X X X X X X	-	-	-		
.64 Bufflehead	HIGH	XXXX	-	-	-		
Canvasback Common goldeneye	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
Long-tailed duck	MODERATE	X X X X X X X X	_	-	_		
Mergansers		XXXX	-	-	-		
Mute swan Ring-necked duck	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
Ruddy duck	HIGH	X X X X X X X X X	_	_	_		
Scaup	MODERATE		_	-	_		
Scoters	HIGH	X X X X X X X X X	-	-	_		
Tundra swan 93 Great blue heron	MODERATE 2 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-,TIII,	-	_		
101 Great blue heron	7 NESTS	$\times \times $		-	_		
126 Great blue heron	15 NESTS	X X X X X X X X X X X X X		-	-		
130 Great blue heron 139 Great blue heron	40 NESTS 8 NESTS	X X X X X X X X X X X X X X X X X X X		-	_		
140 Herring gull	3 NESTS	X X X X X X X X X X X X		-	_		
142 Herring gull	11 NESTS	$\times \times $		-	-		
Snowy egret	80 NESTS	$X \ X \ X \ X \ X \ X \ X \ X \ X$	MAY-JUL	-	-		
ISH:							
AR# Species 	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
18 Alewife American eel		X X X X X	-	-	-	- TAN_DEC	FEB-JUN
American eei American shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC NOV-MAR	SEP-DEC JAN-JUN
Atlantic croaker		$\times \times $		-	-	AUG-DEC	MAY-NOV
Atlantic mackerel		XX	-	-	- NOV NOV	-	MAR-APR
Atlantic menhaden Atlantic silverside		X X X X X X X X X X X X X X X X X X X	- MAR-JUL	-	MAY-NOV -	JAN-DEC JAN-DEC	MAY-OCT JAN-DEC
Atlantic spadefish		XXXX	-	-	-	AUG-OCT	AUG-NOV
Atlantic sturgeon	С	X X X X X X X X X X	- CED	-	-	-	JAN-OCT
Bay anchovy Black drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP APR-JUN	- APR-JUN	- APR-JUN	JAN-DEC APR-NOV	JAN-DEC APR-NOV
Black sea bass		XXXXXXX	JUN-OCT	- -	- -	APR-OCT	APR-OCT
Blueback herring		X X X X X X X X X X	-	-	-	NOV-MAR	JAN-JUN
Bluefish Butterfish		$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\;X\\ X\;X\;X\;X\;X\;X\;X\;X\;$	_	_	_	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
Clearnose skate		X X X X X X X X	_	_	_	- 00T-NOA	MAY-NOV MAY-NOV
Gobies		$\times \times $	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
Hickory shad Hoqchoker		$egin{array}{cccccccccccccccccccccccccccccccccccc$		- MAY-SEP	- MAY-SEP	NOV-MAR JAN-DEC	JAN-JUN JAN-DEC
Inland silverside		X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
Minnows		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
Mummichog Northern kingfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG -	_	_	JAN-DEC -	JAN-DEC APR-OCT
Northern pipefish		X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
Northern puffer		X X X X X X X X	MAY-AUG	-	-	MAR-OCT	MAR-OCT
Northern searobin		X X X X X X X X		-	-	-	MAR-OCT
Red drum Red hake		X X X X X X X X X X X X X X X X X X X		_	_	AUG-SEP FEB-MAY	MAY-NOV FEB-MAY
nea nane		11 11 11 11 11 11 11				122 1111	SEP-NOV
Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
Scup (porgy) Silver hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_	JUN-OCT -	MAR-OCT OCT-MAY
Silver make Silver perch		X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
Spot		$\times \times $		-	DEC-APR		MAR-NOV
Spotted hake		$X \ X \ X \ X \ X \ X \ X$	-	-	-	MAR-JUN	MAR-JUN
Spotted seatrout		x	MAY-JUL	_	_	APR-NOV	SEP-NOV APR-NOV
Striped bass		X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
Striped killifish		$\times \times $		-	-	JAN-DEC	JAN-DEC
Summer flounder Tautog		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	OCT-MAY	JAN-DEC -	APR-OCT OCT-APR
Threadfin shad		X X X X X X X X		_	_	_	FEB-MAY
							SEP-NOV
Weakfish		$X\;X\;X\;X\;X\;X\;X\;X\;$	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
NVERTEBRATE:	S F Conc	.T F M A M .T .T A S O N D	Snawning	Faas	Larvae	Juveniles	Adults
R# Species 							
16 Northern quahog (hard clam)		$\times \times $			MAY-OCT	JAN-DEC	JAN-DEC
18 Horseshoe crab Knobbed whelk		X X X X X X X X X X X X X X X X X X X	-	-	_	JAN-DEC JAN-DEC	JAN-DEC
15 Eastern oyster		X X X X X X X X X X X X X X X X X X X			JUN-SEP		JAN-DEC JAN-DEC
.28 Blue crab		$\times \times $		MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
ARTNE MAMMAT.		J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
ARINE MAMMAL:	C E Conc	J F M A M J J A S O N D	macing			moreing	
ARINE MAMMAL: AR# Species	S F Conc.			_	 	-	
AR# Species 18 Harbor porpoise	S F Conc.	$X \ X \ X \ X \ X \ X$	-	_			
AR# Species	S F Conc.			-			
AR# Species	S F Conc.	X	- Nesting	- Hatching	Internest	ing Juvenil	les Adults
AR# Species 18 Harbor porpoise 20 Bottlenose dolphin EPTILE: AR# Species	S F Conc.	J F M A M J J A S O N D	- Nesting		Internest		
AR# Species 18 Harbor porpoise 20 Bottlenose dolphin EPTILE: AR# Species 23 Green sea turtle	S F Conc. T T	J F M A M J J A S O N D X X X X X X	Nesting	-		VON-YAM	J –
AR# Species 18 Harbor porpoise 20 Bottlenose dolphin EPTILE: AR# Species	S F Conc. T T	J F M A M J J A S O N D	Nesting		Internest		J J - J MAY-NOV
AR# Species 18 Harbor porpoise 20 Bottlenose dolphin EPTILE: AR# Species 23 Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle	S F Conc. T T E E E E T T	J F M A M J J A S O N D X X X X X X X X X X X X X X X X	Nesting	 - - -	 - - -	MAY-NOV MAY-NOV - MAY-NOV	/
AR# Species 18 Harbor porpoise 20 Bottlenose dolphin EPTILE: AR# Species 23 Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle	S F Conc. T T E E E E T T	J F M A M J J A S O N D X X X X X X X X X X X X X X X X	Nesting	 - - -	 - - -	MAY-NOV MAY-NOV - MAY-NOV	/
18 Harbor porpoise 20 Bottlenose dolphin EPTILE: AR# Species 23 Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle	S F Conc. T T E E E E T T	J F M A M J J A S O N D X X X X X X X X X X X X X X X X	Nesting	 - - -	 - - -	MAY-NOV MAY-NOV - MAY-NOV	/
AR# Species 18 Harbor porpoise 20 Bottlenose dolphin EPTILE: AR# Species 23 Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle UMAN USE RESOURCES: QUACULTURE:	S F Conc. T T E E E E T T	J F M A M J J A S O N D X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	Nesting	 - - - - -		MAY-NOV MAY-NOV - MAY-NOV	/
18 Harbor porpoise 20 Bottlenose dolphin EPTILE: AR# Species 23 Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle	S F Conc. T T E E E E T T	J F M A M J J A S O N D X X X X X X X X X X X X X X X X	Nesting	 - - - - -	 - - -	MAY-NOV MAY-NOV - MAY-NOV	J M. M. V M.

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

THE NATURE CONSERVANCY

Phone

434/295-6106

Contact

BIOLOGICAL RESOURCES:

BIRD								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
137	American black duck		X X X X X X X X	-	-	_	_	
	American wigeon			-	-	-		
	Brant Bufflehead	MODERAGE	X X X X X X X X X	-	-	-		
	Canada goose	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Long-tailed duck		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Mallard		X X X X X X X X	-	-	-		
	Mergansers Scaup		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_		
	Scoters		X X X X X X X X	-	-	_		
163	American black duck	MODERATE	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	American wigeon	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Brant Canada goose	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Gadwall	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
1.64	Mallard	MODERATE	X X X X X X X X X	-	-	-		
164	Bufflehead Canvasback	HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Common goldeneye	HOBERTIE	X X X X X X X X	-	-	_		
	Long-tailed duck	MODERATE	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Mergansers Mute swan		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Ring-necked duck	MODERATE	X X X X X X X X X	_	_	_		
	Ruddy duck	HIGH		-	-	-		
	Scaup	MODERATE	X X X X X X X X X	-	-	-		
	Scoters Tundra swan	HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
394	Great blue heron	9 NESTS	$\times \times $	MAY-JUL	_	-		
395	Great blue heron	12 NESTS	$\times \times $		-	-		
411	Great blue heron Great blue heron	3 NESTS 20 NESTS	X X X X X X X X X X X X X X X X X X X		_	-		
433	Great egret	C 4 NESTS	X X X X X X X X X X X	MAY-JUL	_	_		
	-			- ,-				
FISH								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
18	Atlantic spadefish		XXXX	-	-	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	$\times \times $	-	-	-	-	JAN-OCT
	Bay anchovy		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Black drum Black sea bass		$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\;X\\ X\;X\;X\;X\;X\;X\;X\end{array}$	APR-JUN JUN-OCT	APR-JUN -	APR-JUN -	APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring		XXXXXXXXXX	-	-	-	NOV-MAR	JAN-JUN
	Bluefish		$\times \times $	-	-	-	MAY-NOV	APR-NOV
	Butterfish		X	-	-	-	JUL-NOV -	MAR-NOV
	Clearnose skate Gobies		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- APR-SEP		APR-OCT	JAN-DEC	MAY-NOV JAN-DEC
	Harvestfish		XXXXXX	-	-	-	JUL-OCT	APR-OCT
	Hickory shad		$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-	NOV-MAR	JAN-JUN
	Hogchoker Inland silverside		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		MAY-SEP -	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern kingfish		X X X X X X X	-	-	-	-	APR-OCT
	Northern pipefish Northern puffer		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUN MAY-AUG	_	_	JAN-DEC MAR-OCT	JAN-DEC MAR-OCT
	Northern searobin		XXXXXXXX	MAY-JUL	-	-	-	MAR-OCT
	Red drum		$\times \times \times \times \times \times \times$	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake		X X X X	-	-	-	FEB-MAY	FEB-MAY
	Sandbar shark		X X X X X X	_	_	_	MAY-OCT	SEP-NOV MAY-OCT
	Scup (porgy)		$X \times X \times X \times X \times X$	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		$X \ X \ X \ X \ X \ X \ X$		-	-	-	OCT-MAY
	Silver perch Spot		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-MAY	-	- DEC-APR	JAN-DEC MAR-NOV	JAN-DEC MAR-NOV
	Spotted hake		XXXXXXXXXX	-	_	-	MAR-JUN	MAR-JUN
	_							SEP-NOV
	Spotted seatrout		X X X X X X X X		-	_	APR-NOV	APR-NOV
	Striped bass Striped killifish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Summer flounder		X X X X X X X X X X X X		-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog		X X X X X X X X X X X X X X X X X X X		-	-	-	OCT-APR
	Threadfin shad		XXXXXXXXX	-	-	-	-	FEB-MAY SEP-NOV
	Weakfish		X X X X X X X X	APR-AUG	_	MAY-AUG	APR-NOV	APR-NOV
	Alewife		$X \ X \ X \ X \ X$	-	-	-	-	FEB-JUN
	American eel American shad		$egin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JAN-DEC NOV-MAR	SEP-DEC JAN-JUN
	Atlantic croaker		XXXXXXX		_	_	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	-	-	-	-	MAR-APR
	Atlantic menhaden		X X X X X X X X X X X X X		-	MAY-NOV -	JAN-DEC	MAY-OCT
132	Atlantic silverside Alewife		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAK-JUL -	-	_	JAN-DEC -	JAN-DEC FEB-JUN
102	American eel		$\times \times $	-	-	-	JAN-DEC	-
	American shad		$X \ X \ X \ X \ X$	-	-	-	-	FEB-JUN
	Atlantic croaker Atlantic mackerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	JAN-DEC -	- MAR-APR
	Atlantic menhaden		X X X X X X X X X X X X X	_		- MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		$\times \times $	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish		X X X X	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon Bay anchovy	С	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- 7 DD_GFD	-	-	- JAN-DEC	JAN-OCT JAN-DEC
	Black drum		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			APR-JUN	APR-NOV	APR-NOV
	Black sea bass		$\times \times \times \times \times \times \times$	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring		XXXXX	-	-	_	- MAY-NOU	FEB-JUN
	Bluefish Butterfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-		MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Clearnose skate		XXXXXXX	-		-	-	MAY-NOV
	Gobies		X X X X X X X X X X X X X				JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	_	JUL-OCT	APR-OCT
	Hickory shad Hogchoker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-SEP	- MAY-SEP	- MAY-SEP	- JAN-DEC	FEB-JUN JAN-DEC
	Inland silverside		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Minnows		$\times \times $			-	JAN-DEC	JAN-DEC
	Mummichog Northern kingfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG -		_	JAN-DEC -	JAN-DEC APR-OCT
	Northern kinglish		x x x x x x x x x x x x x x x x x x x			-	- JAN-DEC	JAN-DEC
	Northern puffer		$\times \times \times \times \times \times \times \times \times$	MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$			-	-	MAR-OCT
	Red drum		$X \; X \; X \; X \; X \; X \; X$	OOT-NOA	-	-	AUG-SEP	MAY-NOV

Virginia: ESIMAP 38 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH	: (cont.)							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
132	Red hake		X X X X X X X X	-	-	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		X X X X X X X X X X X X X X X X X X X	-	-	-	-	OCT-MAY
	Silver perch		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	-	JAN-DEC	JAN-DEC
	Spot		$\times \times $	-	-	DEC-APR	MAR-NOV	JAN-DEC
	Spotted hake		X X X X	-	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass		X X X X X X X X X X X X X X X X X X X	-	-	-	-	OCT-JUN
	Striped killifish		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	-	JAN-DEC	-
	Tautog		$X X X X \qquad \qquad X X X$	-	-	-	-	OCT-APR
	Threadfin shad		X X X X X X X X X	-	-	-	-	FEB-MAY
								SEP-NOV
	Weakfish		x x x x x x x x x x x x x	-	-	-	AUG-NOV	JAN-DEC
	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
16	Northern quahog (hard clam)		x x x x x x x x x x x x	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
	Horseshoe crab		X		-	-	JAN-DEC	JAN-DEC
	Knobbed whelk		X	_	_	_	JAN-DEC	JAN-DEC
115	Eastern oyster		X	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
	Blue crab		X	-	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
133	Horseshoe crab		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Northern quahog (hard clam)		$\times \times $	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
134	Blue crab		x x x x x x x x x x x x x	-	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
	Harbor porpoise		X X X X X X	-	-	-	-	
20	Bottlenose dolphin		X X X X X X X	-	-	-	-	
133	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Harbor porpoise		X X X X X X	-	-	-	-	
REPI	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internest	ing Juvenil	les Adults
23	Green sea turtle	тт	x x x x x x x	-	-	-	JON-YAM	7 –
	Kemp's ridley sea turtle	ΕE	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	ТТ	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
133	Green sea turtle	ТТ	$X\;X\;X\;X\;X\;X\;X\;X$	-	-	-	MAY-NOV	7 –
	Kemp's ridley sea turtle	E E	$X\;X\;X\;X\;X\;X\;X$	-	-	-	MAY-NOV	7 –
	Leatherback sea turtle	E E	$X\;X\;X\;X\;X\;X\;X$	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	ТТ	X X X X X X X	-	-	-	MAY-NOV	7 –

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
58	AQUACULTURE: OYSTERS		

BIOLOGICAL RESOURCES:

В	I	R	D	:

BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	Ť	
138	Bufflehead	MODERATE	X X X X				_	
130	Canvasback	HIGH	X X X X X X X X		_	_		
	Eared grebe	111-011	X X X X X X X X X		_	_		
	Horned grebe		$X X X X \qquad X X X$		-	-		
	Mergansers		X X X X X X X X X X X X X X X X X X X		-	-		
	Ring-necked duck	HIGH	X X X X X X X X X		-	-		
	Ruddy duck	HIGH MODERATE	X X X X X X X X X X X X X X X X X X X		_	_		
	Scaup Tundra swan	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
165	American black duck	MODERATE	X X X X X X X X		_	_		
	American wigeon		$X X X X \qquad X X X$		-	_		
	Canada goose	MODERATE	$X \ X \ X \ X$ $X \ X \ X$	-	-	-		
	Green-winged teal		X X X X X X X X X X X X X X X X X X X		-	_		
	Mallard	0	X X X X X X X X X X	_	-	-		
393 395	Great blue heron Great blue heron	2 NESTS 12 NESTS	X X X X X X X X X X X X X X X X X X X		-	_		
393	Great blue heron	12 NESIS 14 NESTS	X X X X X X X X X X X X X X X X X X X		_	_		
409	Great blue heron	55 NESTS	X X X X X X X X X X X X X X X X X X X		_	_		
412	Great blue heron	6 NESTS	imes ime		-	_		
421	Great blue heron	55 NESTS	$X \ X \ X \ X \ X \ X \ X \ X \ X \ X \$	MAY-JUL	-	-		
	Great egret	C 2 NESTS	X X X X X X X X X X	MAY-JUL	-	_		
	Great egret	C 14 NESTS	X X X X X X X X X	MAY-JUL	-	-		
425	Great blue heron	14 NESTS	X X X X X X X X X X X X X X X X X X X		-	_		
	Great egret	C 115 NESTS	X X X X X X X X X	MAY-JUL	_	_		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
132	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel		$\times \times $	-	-	-	JAN-DEC	-
	American shad		X X X X X	-	-	-	-	FEB-JUN
	Atlantic croaker		X X X X X X X X X X X X X X X X X X X	_	-	_	JAN-DEC -	— MAD – ADD
	Atlantic mackerel Atlantic menhaden		X X X X X X X X X X X X X X	_	_	- MAY-NOV	- JAN-DEC	MAR-APR MAY-OCT
	Atlantic silverside		X X X X X X X X X X X X X X X X X X X	MAR-IIII	_	- MAI -NOV	JAN-DEC	JAN-DEC
	Atlantic spadefish		XXXX	-	_	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	X X X X X X X X X X	-	-	_	_	JAN-OCT
	Bay anchovy		$X \ X \ X \ X \ X \ X \ X \ X \ X \ X \$	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum		$\times \times $	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		X X X X X X X	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring		XXXXX	-	-	-	- NOV	FEB-JUN
	Bluefish Butterfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Clearnose skate		XXXXXXX	_	_	_	-	MAY-NOV
	Gobies		X X X X X X X X X X X X	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad		X X X X X	-	-	-	-	FEB-JUN
	Hogchoker		X X X X X X X X X X X X X X		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Mummichog Northern kingfish		X X X X X X X X X X X X X X X X X X X	APR-AUG	_	_	JAN-DEC -	JAN-DEC APR-OCT
	Northern pipefish		$\begin{smallmatrix} & & \times & \times & \times & \times & \times & \times \\ & \times & \times & \times$		_	_	JAN-DEC	JAN-DEC
	Northern puffer		XXXXXXXXX	MAY-AUG	_	_	MAR-OCT	MAR-OCT
	Northern searobin		X X X X X X X X	MAY-JUL	-	-	_	MAR-OCT
	Red drum		X X X X X X X	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake		X X X X X X X X X	-	-	-	FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X X	_	_	-	JUN-OCT	MAR-OCT
	Silver hake Silver perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	- JAN-DEC	OCT-MAY JAN-DEC
	Spot		X X X X X X X X X X X X X X X X X X X		_	DEC-APR	MAR-NOV	JAN-DEC
	Spotted hake		XXXXXXXXX	_	_	-	MAR-JUN	MAR-JUN
	-							SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	-	OCT-JUN
	Striped killifish		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Summer flounder		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	- A DD
	Tautog Threadfin shad		$egin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	-	OCT-APR FEB-MAY
	IIII GUULIII SIIUU							SEP-NOV
	Weakfish		x	_	_	_	AUG-NOV	JAN-DEC
166	Alewife		XXXXX	-	-	-	-	FEB-JUN
	American eel		X X X X X X X X	-	-	-	JAN-DEC	-
	American shad		X X X X X	-	-	-	-	FEB-JUN
	Atlantic croaker		X X X X X X X X X X X X X X X X X X X	-	-	-	JAN-DEC	-
	Atlantic menhaden		X X X X X X X	- MAD 7111	_	-	MAY-NOV	-
	Atlantic silverside Bay anchovy		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Blueback herring		XXXXX	- 2111 000	_	_	_	FEB-JUN
	Hickory shad		XXXXX	_	_	-		FEB-JUN
	Hogchoker		imes ime	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Silver perch		$\times \times $		-	_	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X X X X X X X		-	DEC-APR	APR-NOV	-
	Striped bass		X X X X X X X X X X X X X X X X X X X		_	_	_ TAN_DEC	OCT-JUN
	Striped killifish Summer flounder		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC -
	Weakfish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	_
	White perch		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	-		11 11 11 11 11 11 11				220	220
INVE	RTEBRATE:							
	Species	S F Conc.	J F M A M J J A S O N D			Larvae	Juveniles	Adults
RAR#	-							
139	Blue crab Blue crab			-		MAY-NOV MAY-NOV		JAN-DEC JAN-DEC

HUMAN USE RESOURCES:

AQUACULTURE:

HUN# Name Contact Phone
58 AQUACULTURE: OYSTERS

NATIONAL PARK:

 HUN#
 Name
 Contact
 Phone

 126
 COLONIAL NATIONAL HISTORICAL PARK
 NATIONAL PARK SERVICE
 757/898-3400

BIOLOGICAL RESOURCES:

BIRD	:
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BIKD												
RAR#	Species	S F	Conc.	J F M	[AMJJ.	A S	O N D	Nesting	Migrating	Molting	_	
138	Bufflehead		MODERATE	ххх	X		ххх	_	_	_		
	Canvasback		HIGH	ХХХ	X		ХХХ	-	-	-		
	Eared grebe			XXX	X		X X X	-	-	-		
	Horned grebe			XXX	X		X X X	-	-	-		
	Mergansers			XXX			XXX		-	-		
	Ring-necked duck		HIGH	XXX			XXX		-	-		
	Ruddy duck		HIGH	XXX			XXX		-	_		
	Scaup Tundra swan		MODERATE	X X X X X X			X X X X X X X X X X X X X X X X X X X		_	_		
165	American black duck		MODERATE	XXX			XXX		_	_		
100	American wigeon		HODEIGITE	XXX			XXX		_	_		
	Canada goose		MODERATE	XXX			ххх		_	_		
	Green-winged teal			X X X	X		ххх	-	-	-		
	Mallard			XXX	X		ХХХ	-	-	-		
	Great blue heron		12 NESTS	XXX	XXXX	ХХ	X X X	MAY-JUL	-	-		
	Great blue heron		32 NESTS		XXXX				-	-		
	Great blue heron	~	4 NESTS		XXXXX				-	-		
413	Yellow-crowned night-heron	C	3 NESTS	X	XXXX	X X	X X	MAY-JUL	-	-		
FISH	:											
RAR#	Species	SF	Conc.	JFM	AMJJ.	AS	OND	Spawning	Eggs	Larvae	Juveniles	Adults
114	Alewife			ХХ	X X X X	ХХ	X	-	-	-	FEB-OCT	FEB-JUN
	American eel			XXX	XXXX	ХХ	ХХХ	-	-	-	JAN-DEC	-
	American shad			XX	X X X X X	ХХ	X	-	-	-	FEB-OCT	FEB-JUN
	Atlantic croaker			XXX	XXXX			-	-	-	JAN-DEC	-
	Atlantic menhaden			37 37 37	XXX			- MAD TIII	-	-	MAY-NOV	-
	Atlantic silverside Atlantic sturgeon	С			XXXX			MAK-JUL -	_	_	JAN-DEC JAN-DEC	JAN-DEC APR-NOV
	Bay anchovy	C			XXXX				_	_	JAN-DEC	JAN-DEC
	Blueback herring				XXXX			-	_	_	FEB-OCT	FEB-JUN
	Channel catfish				XXXX			MAR-MAY	-	-	JAN-DEC	JAN-DEC
	Gizzard shad			XXX	XXXX	ХХ	ХХХ	-	-	-	JAN-DEC	-
	Hickory shad				XXXX			-	-	-	MAR-SEP	FEB-JUN
	Hogchoker				XXXX					MAY-SEP	JAN-DEC	JAN-DEC
	Minnows				XXXXX				-	-	JAN-DEC	JAN-DEC
	Mummichog				XXXXX			APR-AUG -	_	-	JAN-DEC	JAN-DEC
	Silver perch				XXXXX			_	_	- DEC-APR	JAN-DEC	JAN-DEC -
	Spot Striped bass				XXXX			_	_	DEC-APR	APR-NOV MAY-OCT	- FEB-JUN
	Weakfish				XXXX			_	_	_	JAN-DEC	
	White catfish				XXXX				_	-	JAN-DEC	JAN-DEC
	White perch				X X X X				-	-	JAN-DEC	JAN-DEC
132	Alewife			ХХ	XXX			-	-	-	_	FEB-JUN
	American eel			XXX	XXXX	ХХ	X X X	-	-	-	JAN-DEC	-
	American shad				XXX			-	-	-	-	FEB-JUN
	Atlantic croaker				XXXX	ХХ	XXX	-	-	-	JAN-DEC	-
	Atlantic mackerel Atlantic menhaden				XXXXX	v v	vvv	_	-	- MAY-NOV	- JAN-DEC	MAR-APR MAY-OCT
	Atlantic memmaden Atlantic silverside				XXXXX			MAR-JIII.	_	MAI-NOV	JAN-DEC	JAN-DEC
	Atlantic spadefish			21 21 21		XX		-	_	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С		ххх	XXXX			_	_	_	-	JAN-OCT
	Bay anchovy				X X X X			APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum				$X \times X \times X$	ХХ	ХХ	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass				$X \times X \times X$	ХХ	X	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring			ХХ	XXX			-	-	-	-	FEB-JUN
	Bluefish				XXXX			-	-	-	MAY-NOV	APR-NOV
	Butterfish Clearnose skate			X	XXXX			_	_	-	JUL-NOV -	MAR-NOV
	Gobies			v v v	$\begin{array}{cccccccccccccccccccccccccccccccccccc$					APR-OCT	JAN-DEC	MAY-NOV JAN-DEC
	Harvestfish			AAA	XXXX			- AIN SEI	AIR SEI	- AIN OCI	JUL-OCT	APR-OCT
	Hickory shad			ХХ	XXX			_	_	_	-	FEB-JUN
	Hogchoker			ХХХ	X X X X	ХХ	ХХХ	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside			XXX	$X \times X \times X$	ХХ	X X X	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Minnows				XXXX				-	-	JAN-DEC	JAN-DEC
	Mummichog			XXX	XXXX				-	-	JAN-DEC	JAN-DEC
	Northern kingfish			17 17 17	XXXX			-	_	-	-	APR-OCT
	Northern pipefish Northern puffer				XXXXX			MAY-JUN MAY-AUG	_	_	JAN-DEC MAR-OCT	JAN-DEC MAR-OCT
	Northern searobin							MAY-JUL	_	_	-	MAR-OCT
	Red drum			21	XXX				_	_	AUG-SEP	MAY-NOV
	Red hake			ХХ	XX		XX	-	-	_	FEB-MAY	FEB-MAY
												SEP-NOV
	Sandbar shark				XXX			_	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)				XXXX			-	-	-	JUN-OCT	MAR-OCT
	Silver hake Silver perch			XXX	XXX		XXX		_	-	- JAN-DEC	OCT-MAY JAN-DEC
	Spot				XXXXX				_		MAR-NOV	JAN-DEC JAN-DEC
	Spotted hake				XXXX		XX	_	_	-	MAR-JUN	MAR-JUN
	-						•				- +	SEP-NOV
	Spotted seatrout				X X X X	ХХ	ХХ	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass				XXX		X X X	-	-	-	-	OCT-JUN
	Striped killifish				XXXX				-	-	JAN-DEC	JAN-DEC
	Summer flounder				XXXX			-	-	_	JAN-DEC	-
	Tautog Threadfin shad			XXX			XXX	_	-	-	-	OCT-APR FEB-MAY
	Threadin shad			X X	XX	Х	XX	_	-	_	_	
	Weakfish			y	XXXX	v v	V V V	_	_	_	AUG-NOV	SEP-NOV JAN-DEC
166	Weakiish Alewife				. x x x x . . x x x	A A	A A X	_	_	_	AUG-NOV	JAN-DEC FEB-JUN
± 0 0	American eel				XXXXX	ХХ	XXX	_	_	-	JAN-DEC	- -
	American shad				XXX			-	-	-	-	FEB-JUN
	Atlantic croaker				XXXX	XX	ххх	-	-	-	JAN-DEC	-
	Atlantic menhaden				XXX	ХХ	ХХ	-	-	-	MAY-NOV	-
	Atlantic silverside							MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Bay anchovy				XXXX	ХХ	X X X		-	-	JAN-DEC	JAN-DEC
	Blueback herring				XXX			-	-	-	-	FEB-JUN
	Hickory shad				XXX	.,	37 37	- MAY CED	- MAY CED	- MAY CED	- TAN DEC	FEB-JUN
	Hogchoker Mummi chog				XXXXX				MAY-SEP -	MAY-SEP	JAN-DEC	JAN-DEC
	Mummichog Silver perch				X X X X X X X X X X X X X X X X X X X			APR-AUG -	_	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Spot				XXXXX				_	- DEC-APR	APR-NOV	JAN-DEC
	Striped bass				XXXX		XXX	_	_	-	- -	OCT-JUN
	Striped killifish							APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder				X X X X X				-	-	JAN-DEC	-
	Weakfish				XXXX				-	-	JAN-DEC	-
	White perch			XXX	XXXX	ХХ	X X X	-	-	-	JAN-DEC	JAN-DEC

Virginia: ESIMAP 40 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
114	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC
115	Eastern oyster		$X\ X\ X$	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
139	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC
166	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

NATIONAL PARK:

HUN#	Name	Contact	Phone
126	COLONIAL NATIONAL HISTORICAL PARK	NATIONAL PARK SERVICE	757/898-3400

S F Conc.

BIOLOGICAL RESOURCES:

BIRD:

RAR# Species

	Inland silverside		X X X X X X X	X X X X X X	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Hogchoker		X X X X X X X		-	-	-	JAN-DEC	-
	Gizzard shad		X X X X X X X X	X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Channel catfish		X X X X X X X X	X X X X X X	MAR-MAY	-	-	JAN-DEC	JAN-DEC
	Bluegill		X X X X X X X X	X X X X X X	APR-SEP	-	-	-	JAN-DEC
	Blueback herring		X X X X X X	XXX	-	-	-	FEB-OCT	FEB-JUN
	Banded killifish		X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Atlantic sturgeon	C	X X X X X X X	X X X X X X	FEB-JUN	-	-	JAN-DEC	APR-NOV
	Atlantic menhaden		XXX	XXXX	-	-	-	MAY-NOV	-
	American shad		X X X X X X		-	-	FEB-JUN	FEB-OCT	FEB-JUN
	American eel		X X X X X X X X		-	-	-	JAN-DEC	-
143	Alewife		X X X X X X		-	-		FEB-OCT	FEB-JUN
RAR#	Species	S F Conc.	J F M A M J J				Larvae	Juveniles	Adults
FISH	l:								
522	Great blue heron	11 NESTS	XXXXXXX	XXXXX	MAY-JUL	-	-		
	Great blue heron	16 NESTS	X X X X X X X X			-	-		
	Great blue heron	18 NESTS	X X X X X X X X			-	-		
	Great blue heron	3 NESTS	X X X X X X X X			-	-		
	Great blue heron	7 NESTS	X X X X X X X			-	-		
	Wood duck		X X X X X X X X			-	-		
	Virginia rail	VERY HIGH	X X X X X X X X			-	-		
	Sora	VERY HIGH	X X X X X X X X		-	-	-		
168	King rail	VERY HIGH	X X X X X X X X		APR-MAY	-	-		
	Northern pintail		X X X X	X X X	-	-	-		
	Mallard	HIGH	X X X X	X X X	-	-	-		
	Green-winged teal	MODERATE	X X X X	X X X	-	-	-		
	Gadwall		X X X X	X X X	-	-	-		
	Canada goose	HIGH	X X X X	X X X	-	-	-		
	American wigeon	MODERATE	X X X X	X X X	-	-	-		
167	American black duck	MODERATE	X X X X	XXX	-	-	-		
	Scaup		X X X X	XXX	-	-	-		
	Ruddy duck		X X X X	X X X	-	-	_		
	Ring-necked duck	HIGH	X X X X	X X X	-	-	_		
	Northern pintail		X X X X	XXX	_	_	_		
	Mergansers	MODERATE	XXXX	XXX	_	_	_		
	Mallard	HIGH	XXXX	XXX	_	_	_		
	Green-winged teal	MODERATE	XXXX	XXX	_	_	_		
	Gadwall		XXXX	XXX	_	_	_		
	Common goldeneye	nign	XXXX	XXX	_	_	_		
	Canada goose	HIGH	XXXX	XXX	_	_	_		
	American wigeon Bufflehead	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_		
	American coot	MODERATE	XXXX	XXX	_	-	_		
	7	MODEDARE	37 37 37 37	37 37 37					

X X X X X X X X X X X X MAY-JUN

X X X X X X X X X X X APR-AUG

X X X X X X X X X X X X APR-AUG

X X X X X X X X X X X X MAR-JUN

 $\hbox{\tt X} \hbox{\tt X} \\$

X X X X X X X X X X X APR-JUN

X X X X X X X X X FEB-JUN

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

FEB-OCT

JAN-DEC

JAN-DEC

JAN-DEC

FEB-JUN FEB-JUN

APR-JUN APR-JUN

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

FEB-JUN

JAN-DEC

FEB-MAY SEP-NOV

JAN-DEC

JAN-DEC

JFMAMJJASOND Nesting Migrating Molting

Longnose gar Minnows

Mummichog

Pumpkinseed

Striped bass

Threadfin shad

White catfish

Redbreast sunfish

Tessellated darter

NATIONAL PARK:

HUN#	Name	Contact	Phone
126	COLONIAL NATIONAL HISTORICAL PARK	NATIONAL PARK SERVICE	757/898-3400

BIOLOGICAL RESOURCES:

D	т	D	ь.	
ь	_	\mathbf{r}	u	

BIRD RAR#	: Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Moltin	Ŧ	
1.40		MODERN ME						
142	American black duck American coot	MODERATE MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	American wigeon	MODERATE	X X X X X X X X X		_	_		
	Bufflehead	MODEIVALE	X X X X X X X X		_	_		
	Canada goose	HIGH	XXXX XXX		_	_		
	Common goldeneye		$X \ X \ X \ X $	-	-	-		
	Gadwall		$X \ X \ X \ X$	-	-	-		
	Green-winged teal	MODERATE	X X X X X X X X X X X X X X X X X X X		-	-		
	Mallard	HIGH	X X X X X X X X X		-	-		
	Mergansers	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Northern pintail Ring-necked duck	HIGH	X X X X X X X X X		_	_		
	Ruddy duck		X X X X X X X X		-	_		
	Scaup		X X X X X X X X X X		-	-		
144	American black duck	MODERATE	$X \ X \ X \ X$	-	-	-		
	American wigeon	MODERATE	X X X X X X X X X X X X X X X X X X X		-	-		
	Bufflehead	MDA HICH	X X X X X X X X X		-	_		
	Canada goose Canvasback	VERY HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Common goldeneye	HODBIATE	X X X X X X X X		_	_		
	Gadwall	MODERATE	X X X X X X X X		_	_		
	Green-winged teal	MODERATE	X X X X X X X X X X		-	-		
	Mallard	HIGH	$X \ X \ X \ X$ $X \ X \ X \ X$	-	-	-		
	Mergansers		X X X X X X		-	-		
	Northern pintail		X X X X X X X X X		-	-		
	Northern shoveler	MODERAGE	X X X X X X X X X		_	-		
	Ring-necked duck	MODERATE HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Ruddy duck Scaup	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Snow goose	111 011	X X X X X X X X X		_	_		
	Tundra swan	MODERATE	X X X X X X X X		_	_		
146	Canada goose	VERY HIGH	X X X X		-	-		
147	Bufflehead	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Canvasback	MODERATE	X X X X X X X X X X X X X X X X X X X		-	-		
	Common goldeneye		X X X X X X X X X		_	-		
	Mergansers	HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_		
	Ring-necked duck Ruddy duck	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Scaup	HIGH	X X X X X X X X X		-	_		
	Tundra swan	MODERATE	X X X X X X X X		_	_		
167	American black duck	MODERATE	X X X X X X X X X X	-	-	-		
	American wigeon	MODERATE	X X X X X X X X X X X X X X X X X X X		-	-		
	Canada goose	HIGH	X X X X X X X X X		-	-		
	Gadwall	MODERATE	X X X X X X X X X		-	-		
	Green-winged teal Mallard	MODERATE HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Northern pintail	nign	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
168	Wood duck		X X X X X X X X X X X X X		_	_		
	King rail	VERY HIGH	X X X X X X X X X X X X X		_	_		
	Sora	VERY HIGH	imes ime	-	-	-		
	Virginia rail	VERY HIGH	$X \; X \; $	APR-MAY	-	-		
169	American black duck	MODERATE	X X X X X X X X X X X X X X X X X X X		-	-		
	American wigeon	MODERATE	X X X X X X X X X		_	_		
	Canada goose Gadwall	VERY HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Green-winged teal	MODERATE	X X X X X X X X X			_		
	Mallard	HIGH	X X X X X X X X		-	_		
	Northern pintail		X X X X X X X X X		-	_		
	Northern shoveler		$X \ X \ X \ X $	_	-	_		
	Snow goose		X X X X X X X X X X X X X X X X X X X		-	-		
	Tundra swan	HIGH	X X X X X X X X X X X		-	_		
	Great blue heron Great blue heron	7 NESTS	X X X X X X X X X X X X X X X X X X X		-	-		
400	Great blue heloh	44 NESTS	X X X X X X X X X X X X X X X X X X X	MAI-UUL	_	_		
FISH	:							
	Species	S F Conc.	J F M A M J J A S O N D			Larvae	Juveniles	Adults
	Alewife						FEB-OCT	FEB-JUN
-	American eel		\times	-	-	-	JAN-DEC	-
	American shad		$\times \times \times \times \times \times \times \times \times \times$	-		FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden		X X X X X X X		-	-	MAY-NOV	-
	Atlantic sturgeon	С	X X X X X X X X X X X X X X X X X X X			-	JAN-DEC	APR-NOV
	Banded killifish		X X X X X X X X X X X X X X X X X X X		_	-	JAN-DEC	JAN-DEC
	Blueback herring Bluegill		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- APR-SEP	<u>-</u> -	_	FEB-OCT -	FEB-JUN JAN-DEC
	Channel catfish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Gizzard shad		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Hogchoker		imes ime		-	-	JAN-DEC	_
	Inland silverside		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Longnose gar		x			-	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X X X X X X X		- -	_	JAN-DEC	JAN-DEC
	Pumpkinseed Redbreast sunfish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Striped bass		X X X X X X X X X X X	FEB-JUN		- FEB-JUN	FEB-OCT	FEB-JUN
	Tessellated darter		\times		-	-	-	JAN-DEC
	Threadfin shad		X X X X X X X X		-	-	JAN-DEC	FEB-MAY
								SEP-NOV

HUMAN USE RESOURCES:

White catfish

Blueback herring

White perch

MANAGEMENT AREA:

172 Alewife

HUN#	Name	Contact	Phone
102	CHICKAHOMINY WILDLIFE MANAGEMENT AREA	VDGIF	804/367-1000

X X X X X

X X X X X

X X X X X X X X X X X X MAY-JUN

X X X X X X X X X X X X APR-JUN

JAN-DEC

JAN-DEC

APR-JUN

FEB-JUN FEB-JUN

FEB-JUN

FEB-JUN

APR-JUN

FEB-MAY SEP-NOV

JAN-DEC

JAN-DEC FEB-JUN

FEB-JUN

S F Conc.

BIOLOGICAL RESOURCES:

ъ	TDD	

RAR# Species

RAR#	species	S F Conc.	JFMAMJJASOND	Nesting	Migrating	Molting		
	Bald eagle	T T HIGH	X X X X X X X X				•	
	Bufflehead	MODERATE			_	_		
-11	Canvasback	MODERATE	X X X X X X X X		_	_		
	Common goldeneye	HODERTIE	X X X X X X X X X		_	_		
	Mergansers	HIGH	X X X X X X X X X		_	_		
	Ring-necked duck	MODERATE	X X X X X X X X X		_	_		
	Ruddy duck	HIGH	X X X X X X X X X		_	_		
	Scaup	HIGH	X X X X X X X X X		_	_		
	Tundra swan	MODERATE	X X X X X X X X X		_	_		
160	American black duck	MODERATE	X X X X X X X X			_		
100	American wigeon	MODERATE	X X X X X X X X X		_	_		
	Canada goose	VERY HIGH			_	_		
	Gadwall	MODERATE	X X X X X X X X X		_	_		
	Green-winged teal	MODERATE	X X X X X X X X X		_	_		
	Mallard	HIGH	X X X X X X X X X		_	_		
	Northern pintail	111 G11	X X X X X X X X X		_	_		
	Northern shoveler		X X X X X X X X X		_	_		
	Snow goose		X X X X X X X X X		_	_		
	Tundra swan	HIGH	X X X X X X X X		_	_		
170	Canada goose	VERY HIGH		_	_	_		
170	Tundra swan	HIGH	X X X X X X X X X	_	_	_		
411	Great blue heron	3 NESTS	X X X X X X X X X X X X		_	_		
	Great blue heron	6 NESTS	$\begin{array}{c} \times \times$		_	_		
	Great blue heron	105 NESTS			_	_		
	Great egret	C 3 NESTS	XXXXXXXX	MAY-JUL	_	_		
	Great egret	C 6 NESTS	XXXXXXXXX	MAY-JUL	_	_		
010	Great egret	C C NEETS		1111 001				
FISH	l:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
143	Alewife		X X X X X X X X X	-	-	-	FEB-OCT	FEB-JUN
	American eel		X X X X X X X X X X X X X		_	-	JAN-DEC	-
	American shad		X X X X X X X X	-	-	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden	_	X X X X X X		_	-	MAY-NOV	-
	Atlantic sturgeon	С	X X X X X X X X X X X X X		-	-	JAN-DEC	APR-NOV
	Banded killifish		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X	-	-	-	FEB-OCT	FEB-JUN
	Bluegill		X X X X X X X X X X X X X		-	-		JAN-DEC
	Channel catfish		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Gizzard shad		X	-	-	-	JAN-DEC	JAN-DEC
	Hogchoker		X	-	-	-	JAN-DEC	- -
	Inland silverside		X		_	_	JAN-DEC	JAN-DEC JAN-DEC
	Longnose gar		X		_	_	JAN-DEC	
	Minnows Mummichog		X		_	_	JAN-DEC	JAN-DEC
	Pumpkinseed		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Redbreast sunfish		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Striped bass			FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Tessellated darter		$\begin{array}{c} \mathbf{X} \ $		- LED OON	- CON	-	JAN-DEC
	Threadfin shad		X X X X X X X X X X X X X X X X X X X	- AIN OON	_	_	JAN-DEC	FEB-MAY
	Inicaalin bhaa						OTHV DEC	SEP-NOV
	White catfish		X	MIITVAM	_	_	JAN-DEC	JAN-DEC
	White perch		X X X X X X X X X X X X X X X X X X X		APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
171	Alewife		XXXXXXXXX	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
1/1	American eel		X X X X X X X X X X X X	_	-	-	JAN-DEC	-
	American shad		XXXXXXXX	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden		XXXXXXX	-	-	-	MAY-NOV	-
	Atlantic sturgeon	C	$\times \times $		_	_	JAN-DEC	APR-NOV
	Banded killifish	Ğ	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	JAN-DEC	JAN-DEC
	Blue catfish		X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Blueback herring		XXXXXXXX	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		X X X X X X X X X X X X X				-	JAN-DEC
	Channel catfish		X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Gizzard shad		$X \times X \times X \times X \times X \times X \times X$	_	_	_	JAN-DEC	JAN-DEC
	Hickory shad		XXXXXXXXX	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		X X X X X X X X X X X X X		-	-	JAN-DEC	-
	Inland silverside		X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Longnose gar		X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Minnows		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	JAN-DEC	JAN-DEC
	Mummichog		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	JAN-DEC	JAN-DEC
	Pumpkinseed		$X \times X \times X \times X \times X \times X \times X$		_	_	JAN-DEC	JAN-DEC
	Redbreast sunfish		$\times \times $		-	_	JAN-DEC	JAN-DEC
	Striped bass		X X X X X X X X X		FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN

JFMAMJJASOND Nesting Migrating Molting

HUMAN USE RESOURCES:

Blueback herring

White catfish

White perch

Tessellated darter Threadfin shad

MANAGEMENT AREA:

172 Alewife

HUN#	Name	Contact	Phone
111	KITTEWAN WILDLIFE MANAGEMENT AREA		

X X X X X X X X X X FEB-JUN X X X X X X X X X X X X X APR-JUN

X X X X X X X X X X X X MAY-JUN

X X X X X X X X X X X X APR-JUN

X X X X X FEB-JUN

X X X X X

JAN-DEC

FEB-MAY SEP-NOV

JAN-DEC

JAN-DEC

FEB-JUN

FEB-JUN

JAN-DEC

JAN-DEC

JAN-DEC

APR-JUN APR-JUN

FEB-JUN

FEB-JUN

FEB-JUN

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
153	JAMES RIVER NATIONAL WILDLIFE REFUGE	U.S. FISH AND WILDLIFE SERVICE	804/333-1470

BIOLOGICAL RESOURCES:

BIRD:

DIKD	'•									
RAR#	Species	S F	Conc.	JFMAMJJ	A S O N D	Nesting	Migrating	Molting	3	
42	Bald eagle	 т т	HIGH	X X X X X X X	 X					
	Canada goose	1 1	VERY HIGH	XXXXX	XXX	_	_	_		
	Bufflehead		MODERATE	XXXX	XXX	_	_	_		
11/	Canvasback		MODERATE	XXXX	XXX	_	_	_		
	Common goldeneye		HODDIWITE	XXXX	XXX	_	_	_		
	Mergansers		HIGH	XXXX	XXX	_	_	_		
	Ring-necked duck		MODERATE	XXXX	XXX	_	_	_		
	Ruddy duck		HIGH	XXXX	XXX	_	_	_		
	Scaup		HIGH	XXXX	XXX	_	_	_		
	Tundra swan		MODERATE	XXXX	XXX	_	_	_		
169	American black duck		MODERATE	XXXX	XXX	_	_	_		
100	American wigeon		MODERATE	XXXX	XXX	_	_	_		
	Canada goose		VERY HIGH	XXXX	XXX	_	_	_		
	Gadwall		MODERATE	XXXX	XXX	_	_	_		
	Green-winged teal		MODERATE	XXXX	XXX	_	_	_		
	Mallard		HIGH	XXXX	XXX	_	_			
	Northern pintail		піби	XXXX	XXX	_	_			
	Northern shoveler			XXXX	XXX	_	_	_		
						_	_	_		
	Snow goose Tundra swan		IITCII	XXXX	XXX	_	_	_		
177			HIGH	XXXX	XXX	_	_	_		
1/3	American black duck		HIGH	XXXX	XXX	_	_	_		
	American wigeon			XXXX	XXX	_	_	_		
	Bufflehead			XXXX	XXX	-	-	_		
	Canada goose		HIGH	XXXX	XXX	-	-	_		
	Gadwall			XXXX	XXX	-	-	_		
	Green-winged teal			XXXX	XXX	-	-	_		
	Mallard		HIGH	XXXX	XXX	-	-	_		
	Mergansers		MODERATE	XXXX	XXX	-	-	_		
	Northern pintail			XXXX	XXX	-	-	_		
	Ring-necked duck		HIGH	XXXX	XXX	-	-	_		
	Snow goose		LOW	XXXX	XXX	-	-	_		
	Tundra swan		MODERATE	X X X X	XXX	-	-	-		
	Great egret	С	5 NESTS	X X X X X		MAY-JUL	-	-		
562	Peregrine falcon	Т		X X X X X	X	MAR-AUG	_	-		
FISH	I:									
RAR#	Species	S F	Conc.	JFMAMJJ	A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
171	Alewife			X X X X X X	 v v v		FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
1/1	American eel					_	- HD-00N	- -	JAN-DEC	- EB-00N
	American shad			X X X X X X X X		FEB-JUN	FEB-JUN	FEB-JUN		FEB-JUN
	Atlantic menhaden			XXXXXX		- -	FED-JUN	- -	FEB-OCT	- ED-JUN
		С			XXXX		_	_	MAY-NOV	
	Atlantic sturgeon	C		XXXXXXX			-	-	JAN-DEC	APR-NOV
	Banded killifish			XXXXXXX			-	_	JAN-DEC	JAN-DEC
	Blue catfish			XXXXXXX			_ 		JAN-DEC	JAN-DEC
	Blueback herring			XXXXX		-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill			XXXXXXX			-	-	-	JAN-DEC
	Channel catfish			X X X X X X X			-	_	JAN-DEC	JAN-DEC
	Gizzard shad			X X X X X X X		-	-	-	JAN-DEC	JAN-DEC
	Hickory shad			X X X X X X		FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker			X X X X X X X		-	-	-	JAN-DEC	-
	Inland silverside			X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Longnose gar			X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Minnows			X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Mummichog			X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Pumpkinseed			X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish			X X X X X X X	X X X X X		-	-	JAN-DEC	JAN-DEC
	Striped bass			X X X X X X		FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Tessellated darter			X X X X X X X		APR-JUN	-	-	-	JAN-DEC
	Threadfin shad			X X X X X X X	X X X X X	-	-	-	JAN-DEC	FEB-MAY
										SEP-NOV
	White catfish			X X X X X X X			-	-	JAN-DEC	JAN-DEC
	White perch			X X X X X X X	X X X X X		APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
1 7 0	λlowife			V V V V V		FFR - TIIN	FFR - TIIN			FFR - TIIN

X X X X X FEB-JUN X X X X X FEB-JUN

X X X X X X X X FEB-JUN

X X X X X X X X X X X X FEB-JUN

X X X X X X X X X X X X APR-SEP

X X X X X X X X X X X X APR-JUN

X X X X X X X X X X X X APR-SEP

 $\hbox{\tt X} \ \hbox{\tt MAR-MAY}$

X X X X X X X X X X X X APR-MAY

X X X X X X X X X X X X MAY-JUN

X X X X X X X X X X X APR-AUG

X X X X X X X X X X X X APR-AUG

X X X X X X X X X X X X MAR-JUN

X X X X X X X X X X X X APR-JUL

 $\hbox{X X X X X X X X X X X X X APR-JUL}$

X X X X X X X X X X X X MAY-JUN

FEB-JUN

APR-JUN

X X X X X X X X X X X APR-JUN APR-JUN APR-JUN

X X X X X X X X X X

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X X X X X X X X X X X X X

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FEB-JUN

FEB-JUN

FEB-JUN

FEB-JUN

FEB-JUN FEB-JUN

FEB-JUN FEB-JUN

FEB-JUN

FEB-JUN

FEB-OCT

JAN-DEC

FEB-OCT

MAY-NOV

JAN-DEC

JAN-DEC

JAN-DEC

FEB-OCT

JAN-DEC

JAN-DEC

FEB-OCT

JAN-DEC

FEB-JUN

FEB-JUN

FEB-JUN

FEB-JUN

APR-NOV

JAN-DEC

JAN-DEC

FEB-JUN

JAN-DEC

JAN-DEC

FEB-JUN

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

FEB-MAY SEP-NOV

JAN-DEC JAN-DEC

HUMAN USE RESOURCES:

White perch

WILDLIFE REFUGE:

172 Alewife

174 Alewife

Blueback herring

Atlantic menhaden

Atlantic sturgeon Banded killifish

Blueback herring

Channel catfish

Inland silverside

Shorthead redhorse

Threadfin shad

White catfish

С

American eel

Blue catfish

Gizzard shad

Hickory shad

Longnose gar

Hoachoker

Minnows

Mummichog

Pumpkinseed

Ouillback

Bluegill

American shad

HUN#	Name	Contact	Phone
152	HARRISON LAKE NATIONAL FISH HATCHERY	U.S. FISH AND WILDLIFE SERVICE	804/829-2421
153	JAMES RIVER NATIONAL WILDLIFE REFUGE	U.S. FISH AND WILDLIFE SERVICE	804/333-1470
159	PRESQUILE NATIONAL WILDLIFE REFUGE	U.S. FISH AND WILDLIFE SERVICE	804/333-1470

BIOLOGICAL RESOURCES:

BIRD	:
------	---

BIRD								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
42	Bald eagle	T T HIGH	X X X X X X X X X X	-	-	-		
146	Canada goose	VERY HIGH	X X X X X X X X	-	-	-		
147	Bufflehead Canvasback	MODERATE MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Common goldeneye		X X X X X X X X	-	-	-		
	Mergansers	HIGH	X X X X X X X X X	-	-	-		
	Ring-necked duck Ruddy duck	MODERATE HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Scaup	HIGH	X X X X X X X X	-	-	-		
160	Tundra swan American black duck	MODERATE MODERATE	X X X X X X X X X	-	-	-		
109	American wigeon	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Canada goose	VERY HIGH	$X \ X \ X \ X \\ $	-	-	-		
	Gadwall Green-winged teal	MODERATE MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Mallard	HIGH	X X X X X X X X X	_	_	_		
	Northern pintail		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Northern shoveler Snow goose		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Tundra swan	HIGH	X X X X X X X X X	-	-	-		
173	American black duck	HIGH	$X \ X \ X \ X \\ $	-	-	-		
	American wigeon Bufflehead		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Canada goose	HIGH	X X X X X X X X X	-	-	-		
	Gadwall		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Green-winged teal Mallard	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Mergansers	MODERATE	X X X X X X X X X	_	_	_		
	Northern pintail		$X \ X \ X \ X \\ $	-	-	-		
	Ring-necked duck Snow goose	HIGH LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Tundra swan	MODERATE	X X X X X X X X X	-	-	-		
175	American black duck	MODERATE		-	-	-		
	American wigeon	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Canada goose Gadwall	MODERATE MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Green-winged teal	MODERATE	$X \ X \ X \ X \\ $	-	-	-		
	Mallard Northern pintail	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Northern shoveler		X X X X X X X X	_	_	_		
	Snow goose		$X\ X\ X\ X$	-	-	-		
392	Tundra swan Great blue heron	MODERATE 13 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	— МЛ V — . ТІІТ	_	_		
395	Great blue heron	12 NESTS	X X X X X X X X X X X X X		-	-		
431	Great blue heron	85 NESTS	$\times \times $		-	-		
131	Great egret Great blue heron	C 5 NESTS 220 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL	_	_		
404	Great egret	C 5 NESTS	XXXXXXXXX	MAY-JUL	_	_		
	Great blue heron	240 NESTS	$\times \times $		-	-		
	Double-crested cormorant Peregrine falcon	267 NESTS T	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAR-AUG	-	_		
	-	1	AAAAA	MAIN AUG				
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D				Juveniles	Adults
	Alewife						FEB-OCT	FEB-JUN
	Alewife American eel		$\begin{smallmatrix} & \times & $	-	FEB-JUN I	FEB-JUN -	FEB-OCT JAN-DEC	FEB-JUN -
	Alewife American eel American shad		$ \begin{array}{c} & \times \\ \times & \times &$	- - FEB-JUN	FEB-JUN I - FEB-JUN I	FEB-JUN - FEB-JUN	FEB-OCT JAN-DEC FEB-OCT	FEB-JUN - FEB-JUN
	Alewife American eel	С	$\begin{smallmatrix} & \times & $	- - FEB-JUN -	FEB-JUN I	FEB-JUN - FEB-JUN -	FEB-OCT JAN-DEC	FEB-JUN -
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish		$\begin{array}{c} & \times \\ \times & \times &$	- FEB-JUN - FEB-JUN APR-SEP	FEB-JUN I FEB-JUN I - - -	FEB-JUN - FEB-JUN - - -	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish		X X X X X X X X X X X X X X X X X X X	- FEB-JUN - FEB-JUN APR-SEP APR-JUN	FEB-JUN I - FEB-JUN I - - -	FEB-JUN - FEB-JUN - - -	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC JAN-DEC JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC JAN-DEC
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish		$\begin{array}{c} & \times \\ \times & \times &$	- FEB-JUN - FEB-JUN APR-SEP APR-JUN	FEB-JUN I - FEB-JUN I - - -	FEB-JUN - FEB-JUN - - -	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish		X X X X X X X X X X X X X X X X X X X	- FEB-JUN - FEB-JUN APR-SEP APR-JUN - APR-SEP MAR-MAY	FEB-JUN I FEB-JUN I FEB-JUN I FEB-JUN I	FEB-JUN - FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC JAN-DEC JAN-DEC FEB-OCT - JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC JAN-DEC FEB-JUN JAN-DEC JAN-DEC
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY	FEB-JUN II FEB-JUN II FEB-JUN II	FEB-JUN - FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	FEB-JUN FEB-JUN APR-NOV JAN-DEC JAN-DEC FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-SEP MAR-MAY FEB-JUN	FEB-JUN II FEB-JUN II FEB-JUN II	FEB-JUN - FEB-JUN FEB-JUN - FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC JAN-DEC JAN-DEC FEB-OCT - JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC JAN-DEC FEB-JUN JAN-DEC JAN-DEC
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-MAY	FEB-JUN II	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC JAN-DEC FEB-JUN JAN-DEC JAN-DEC JAN-DEC FEB-JUN - JAN-DEC
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP APR-SEP MAR-MAY FEB-JUN APR-MAY MAY-JUN	FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC FEB-JUN - JAN-DEC JAN-DEC JAN-DEC
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-MAY APR-MAY MAY-JUN APR-AUG	FEB-JUN II	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC JAN-DEC FEB-JUN JAN-DEC JAN-DEC JAN-DEC FEB-JUN - JAN-DEC
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-MAY MAY-JUN APR-AUG APR-AUG MAR-JUN	FEB-JUN II	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-MAY MAY-JUN APR-AUG APR-AUG MAR-JUN JUN-JUL	FEB-JUN II	FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY APR-AUG APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN	FEB-JUN II	FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-MAY MAY-JUN APR-AUG APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN APR-JUN	FEB-JUN II	FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC FEB-OCT	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-MAY MAY-JUN APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN APR-JUN APR-JUN	FEB-JUN II	FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC FEB-MAY SEP-NOV
	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-MAY MAY-JUN APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN APR-JUN APR-JUN APR-JUN APR-JUN APR-JUN APR-JUN	FEB-JUN II	FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY APR-AUG APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN APR-JUN APR-JUN APR-JUN FEB-JUN APR-JUN FEB-JUN FEB-JUN	FEB-JUN II	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-MAY SEP-NOV JAN-DEC JAN-DEC FEB-JUN
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-MAY MAY-JUN APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN APR-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN	FEB-JUN II	FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC JAN-DEC JAN-DEC FEB-JUN FEB-JUN FEB-JUN
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY APR-AUG APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN APR-JUN APR-JUN APR-JUN FEB-JUN APR-JUN FEB-JUN FEB-JUN	FEB-JUN II	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-MAY SEP-NOV JAN-DEC JAN-DEC FEB-JUN
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY FEB-JUN APR-AUG APR-AUG APR-AUG APR-AUG APR-JUN JUN-JUL FEB-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN	FEB-JUN II	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC FEB-OCT - JAN-DEC JAN-DEC FEB-OCT FEB-OCT FEB-OCT JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife American eel American shad Atlantic menhaden	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-MAY MAY-JUN APR-AUG APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN FEB-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN	FEB-JUN II	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC FEB-OCT - JAN-DEC JAN-DEC FEB-OCT JAN-DEC FEB-OCT JAN-DEC FEB-OCT JAN-DEC FEB-OCT JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-MAY MAY-JUN APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN	FEB-JUN II	FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC FEB-OCT - JAN-DEC JAN-DEC FEB-OCT FEB-OCT FEB-OCT JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-MAY MAY-JUN APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN	FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II APR-JUN II FEB-JUN II	FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN COMBAN-DEC FEB-JUN
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY MAY-JUN APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN FEB-JUN	FEB-JUN	FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC FEB-OCT JAN-DEC JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-MAY MAY-JUN APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN APR-JUN FEB-JUN APR-JUN FEB-JUN APR-SEP APR-SEP	FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II APR-JUN II FEB-JUN II	FEB-JUN - FEB-JUN - FEB-JUN - FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN COMBAN-DEC FEB-JUN
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-SEP MAY-JUN APR-AUG APR-AUG APR-AUG APR-JUN JUN-JUL FEB-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN APR-SEP APR-SEP MAR-MAY	FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II APR-JUN II FEB-JUN II	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY MAY-JUN APR-AUG APR-AUG APR-AUG APR-JUN JUN-JUL FEB-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN APR-JUN C FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY	FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II FEB-JUN II APR-JUN II FEB-JUN II	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN JAN-DEC
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-MAY MAY-JUN APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY MAY-JUN APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN FEB-JUN APR-SEP APR-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY	FEB-JUN	FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY MAY-JUN APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN FEB-JUN APR-SEP APR-JUN APR-SEP APR-JUN APR-SEP MAR-MAY APR-SEP MAR-MAY APR-AUG	FEB-JUN	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN - FEB-JUN JAN-DEC
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP MAR-MAY APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY APR-AUG APR-AUG APR-AUG APR-JUN APR-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY APR-AUG APR-AUG APR-AUG APR-AUG APR-AUG APR-AUG APR-AUG MAR-JUN	FEB-JUN	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Quillback	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP MAR-MAY APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY APR-AUG APR-AUG APR-AUG MAR-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY	FEB-JUN	FEB-JUN FEB-JUN	FEB-OCT JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP MAR-MAY APR-SEP MAR-MAY FEB-JUN APR-AUG APR-AUG APR-AUG MAR-JUN APR-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN APR-SEP APR-JUN APR-SEP	FEB-JUN	FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Quillback Shorthead redhorse	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP MAR-MAY APR-AUG APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN APR-JUN APR-JUN APR-JUN APR-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN APR-SEP APR-JUN APR-AUG APR-AUG APR-AUG APR-JUL APR-JUL APR-JUL	FEB-JUN	FEB-JUN FEB-JUN	FEB-OCT JAN-DEC FEB-OCT MAY-NOV JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Quillback Shorthead redhorse Tessellated darter Threadfin shad	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP MAR-MAY APR-SEP MAR-MAY FEB-JUN APR-AUG APR-AUG MAR-JUN APR-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN APR-SEP APR-JUN APR-AUG APR-AUG APR-AUG APR-AUG APR-JUL APR-JUL APR-JUL	FEB-JUN FEB-JU	FEB-JUN FEB-JUN	FEB-OCT JAN-DEC	FEB-JUN - APR-NOV JAN-DEC FEB-JUN JAN-DEC
171	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Quillback Shorthead redhorse Tessellated darter Threadfin shad White catfish	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP MAR-MAY APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY MAY-JUN APR-AUG APR-AUG MAR-JUN JUN-JUL FEB-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN FEB-JUN APR-SEP APR-JUN APR-SEP APR-JUN APR-SEP APR-JUN APR-SEP APR-JUN APR-SEP APR-JUN APR-SEP MAR-MAY APR-SEP MAR-MAY MAY-JUN APR-AUG APR-AUG APR-AUG APR-AUG APR-AUG APR-JUN	FEB-JUN FEB-JU	FEB-JUN FEB-JUN	FEB-OCT JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC FEB-JUN - TAN-DEC JAN-DEC
171 172 174	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Quillback Shorthead redhorse Tessellated darter Threadfin shad White catfish White perch Alewife White catfish Wummichog Pumpkinseed Quillback Shorthead redhorse Tessellated darter Threadfin shad White catfish White catfish White perch Alewife	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP MAR-MAY APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY MAY-JUN APR-AUG APR-AUG APR-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN APR-JUN FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY APR-SEP MAR-MAY APR-SEP MAR-MAY APR-SEP MAR-MAY APR-SEP MAR-MAY APR-JUN APR-JU	FEB-JUN	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC
171 172 174	Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Redbreast sunfish Striped bass Tessellated darter Threadfin shad White catfish White perch Alewife Blueback herring Alewife American eel American shad Atlantic menhaden Atlantic sturgeon Banded killifish Blue catfish Blueback herring Bluegill Channel catfish Gizzard shad Hickory shad Hogchoker Inland silverside Longnose gar Minnows Mummichog Pumpkinseed Quilback Shorthead redhorse Tessellated darter Threadfin shad White catfish White catfish Wummichog Pumpkinseed Quilback Shorthead redhorse Tessellated darter Threadfin shad White catfish White catfish White catfish	C	X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-SEP MAR-MAY APR-SEP MAR-MAY FEB-JUN APR-SEP MAR-MAY MAY-JUN APR-AUG APR-AUG APR-JUN APR-JUN FEB-JUN FEB-JUN FEB-JUN APR-JUN FEB-JUN APR-SEP APR-JUN APR-SEP MAR-MAY APR-SEP MAR-MAY APR-SEP MAR-MAY APR-SEP MAR-MAY APR-SEP MAR-MAY APR-JUN APR-JU	FEB-JUN	FEB-JUN FEB-JUN FEB-JUN	FEB-OCT JAN-DEC	FEB-JUN - FEB-JUN - APR-NOV JAN-DEC

Virginia: ESIMAP 45 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
591	American shad		X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden		$\times \times \times \times \times \times \times$	-	-	-	MAY-NOV	-
	Atlantic sturgeon	С	$\times \times $	FEB-JUN	-	-	JAN-DEC	APR-NOV
	Banded killifish		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Blue catfish		$\times \times $	APR-JUN	_	_	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X	FEB-JUN	FEB-JUN	-	-	FEB-JUN
	Bluegill		$\times \times $	APR-SEP	-	-	-	JAN-DEC
	Channel catfish		$\times \times $	MAR-MAY	_	_	JAN-DEC	JAN-DEC
	Gizzard shad		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Hickory shad		$X \ X \ X \ X \ X \ X \ X \ X \ X$	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		$\times \times $	-	-	-	JAN-DEC	-
	Inland silverside		$\times \times $	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Longnose gar		$\times \times $	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Minnows		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Pumpkinseed		$\times \times $	MAR-JUN	-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish		$\times \times $	JUN-JUL	-	-	JAN-DEC	JAN-DEC
	Striped bass		$X \ X \ X \ X \ X \ X \ X \ X \ X$	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Tessellated darter		$\times \times $	APR-JUN	-	-	-	JAN-DEC
	Threadfin shad		$\times \times $	-	-	-	JAN-DEC	FEB-MAY
								SEP-NOV
	White catfish		$\times \times $	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	White perch		$\times \times $	APR-JUN	APR-JUN	APR-JUN	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

NATIONAL PARK:

HUN#	Name	Contact	Phone
130 132	PETERSBURG NATIONAL BATTLEFIELD PARK RICHMOND NATIONAL BATTLEFIELD PARK	NATIONAL PARK SERVICE NATIONAL PARK SERVICE	804/732-3531 804/226-1981
WILDI	LIFE REFUGE:		
HUN#	Name	Contact	Phone
159	PRESQUILE NATIONAL WILDLIFE REFUGE	U.S. FISH AND WILDLIFE SERVICE	804/333-1470

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	ı	
	American black duck	MODERATE	X X X X X X X X	-				
	American wigeon	MODERATE	X X X X X X X X	_	_	_		
	Canada goose	VERY HIGH	X X X X X X X X	_	_	_		
	Gadwall	MODERATE	X X X X X X X X	_	_	_		
	Green-winged teal	MODERATE	X X X X X X X X	_	_	_		
	Mallard	HTGH	X X X X X X X X	_	_	_		
	Northern pintail	112011	X X X X X X X X	_	_	_		
	Northern shoveler		X X X X X X X X	_	_	_		
	Snow goose		X X X X X X X X	_	_	_		
	Tundra swan	HIGH	X X X X X X X X	_	_	_		
176	Canada goose	MODERATE-HIGH	X X X X X X X X	_	_	_		
469	Great blue heron	35 NESTS	X X X X X X X X X X X X X	MAV = TIIT	_	_		
562	Peregrine falcon	Т	XXXXXX	MAR-AUG	_	_		
		ī	A A A A A A	MAK-AUG	_	_		
FISH	Species	S F Conc.	J F M A M J J A S O N D	Smarmina	E acas	Larvae	Juveniles	Adults
	species	S F Conc.	J F M A M J J A S O N D		Eggs			Adults
172	Alewife		X X X X X	FEB-JUN	FEB-JUN	-	_	FEB-JU
	Blueback herring		X X X X X	FEB-JUN	FEB-JUN	-	-	FEB-JU
174	Alewife		X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JU
	American eel		$\times \times $	-	-	-	JAN-DEC	-
	American shad		X X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JU
	Atlantic menhaden		X X X X X X X	_	-	-	MAY-NOV	_
	Atlantic sturgeon	С	X X X X X X X X X X X X X X	FEB-JUN	-	-	JAN-DEC	APR-NO
	Banded killifish		X X X X X X X X X X X X X X	APR-SEP	-	-	JAN-DEC	JAN-DE
	Blue catfish		X X X X X X X X X X X X X	APR-JUN	-	-	JAN-DEC	JAN-DE
	Blueback herring		X X X X X X X X X	_	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JU
	Bluegill		imes ime	APR-SEP	_	_	-	JAN-DE
	Channel catfish		imes ime	MAR-MAY	_	_	JAN-DEC	JAN-DE
	Gizzard shad		imes ime	_	_	_	JAN-DEC	_
	Hickory shad		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JU
	Hogchoker		X X X X X X X X X X X X	_	_	_	JAN-DEC	_
	Inland silverside		X X X X X X X X X X X X	APR-MAY	_	_	JAN-DEC	JAN-DE
	Longnose gar		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DE
	Minnows		X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DE
	Mummichog		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DE
	Pumpkinseed		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DE
	Quillback		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DE
	Shorthead redhorse		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DE JAN-DE
	Tessellated darter		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DE JAN-DE
	resserrated darter		X X X X X X X X X X X X X X X X X X X	APK-JUN -	_	_	- JAN-DEC	
	mbroadfin abad			_	_	_	JAN-DEC	FEB-MA
	Threadfin shad							CED-NO
	Threadfin shad White catfish White perch		X X X X X X X X X X X X X X X X X X X	MAY-JUN	- APR-JUN	- APR-JUN	JAN-DEC	SEP-NOV JAN-DEO JAN-DEO

HUMAN USE RESOURCES:

NATIONAL PARK:

HUN#	Name	Contact	Phone
132	RICHMOND NATIONAL BATTLEFIELD PARK	NATIONAL PARK SERVICE	804/226-1981

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	Ī	
397	Great blue heron	14 NESTS	x x x x x x x x x x x x	MAY-JUL	-		· -	
447	Great blue heron	16 NESTS	$X\;X\;X\;X\;X\;X\;X\;X\;$	MAY-JUL	-	-		
562	Peregrine falcon	T	X X X X X X	MAR-AUG	-	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D			Larvae	Juveniles	Adults
172	Alewife		X X X X X	FEB-JUN	FEB-JUN			FEB-JUN
1/2	Blueback herring		XXXXX	FEB-JUN	FEB-JUN	_	_	FEB-JUN
174	White catfish		X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
1,1	White perch		X X X X X X X X X X X X X		APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Alewife		XXXXXXXXX	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American eel		X X X X X X X X X X X X X	_	-	-	JAN-DEC	_
	American shad		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden		X X X X X X X	_	_	_	MAY-NOV	_
	Atlantic sturgeon	С	X X X X X X X X X X	FEB-JUN	-	_	JAN-DEC	APR-NOV
	Banded killifish		X X X X X X X X X X	APR-SEP	-	_	JAN-DEC	JAN-DEC
	Blue catfish		X	APR-JUN	-	-	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		X X X X X X X X X X	APR-SEP	_	_	_	JAN-DEC
	Channel catfish			MAR-MAY	-	-	JAN-DEC	JAN-DEC
	Gizzard shad		X X X X X X X X X X X X X	-	-	-	JAN-DEC	-
	Hickory shad		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	_	JAN-DEC	_
	Inland silverside		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Longnose gar		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Minnows		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Pumpkinseed		$\times \times $	MAR-JUN	-	-	JAN-DEC	JAN-DEC
	Quillback		$\times \times $	APR-JUL	-	-	JAN-DEC	JAN-DEC
	Shorthead redhorse		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	APR-JUL	-	-	JAN-DEC	JAN-DEC
	Tessellated darter		$\times \times $	APR-JUN	-	-	-	JAN-DEC
	Threadfin shad			-	-	-	JAN-DEC	FEB-MAY
								SEP-NOV

HUMAN USE RESOURCES:

NATIONAL PARK:

HUN#	Name	Contact	Phone
129	MAGGIE L. WALKER NAT. HISTORICAL SITE	NATIONAL PARK SERVICE	804/771-2808
132	RICHMOND NATIONAL BATTLEFIELD PARK	NATIONAL PARK SERVICE	804/226-1981

BIOLOGICAL RESOURCES:

BIRD	:
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D3D#	:							
KAK#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
1.4	Black scoter	HIGH	X X X X X X X X				-	
14	Surf scoter	nign	X X X X X X X X	_	_	_		
	White-winged scoter		X X X X X X X X X	-	-	_		
26	American woodcock		X X X X X X	-	-	-		
	Black-bellied plover Dunlin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Greater yellowlegs		XXXXXXXXX	_	_	_		
	Killdeer		X X X	-	-	-		
	Least sandpiper		$\times \times $	-	-	-		
	Lesser yellowlegs Pectoral sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Red knot		XXXXXX	_	_	_		
	Ruddy turnstone		X X X X X X	-	-	-		
	Sanderling			-	-	-		
	Semipalmated plover Semipalmated sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Short-billed dowitcher		X X X X X X X X X X X X X	_	_	_		
	Stilt sandpiper		X X X X X X	-	-	_		
	Western sandpiper		X X X X X X	-	-	-		
	Whimbrel White-rumped sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_		
	Willet		X X X X X X X X X X X X X	-	_	_		
94	Clapper rail	HIGH	X X X X X X X X	APR-AUG	-	-		
	King rail		X X X X X X X X X X X X X	-	-	_		
	Sora Virginia rail		X X X	– Δ PR – .ΤΙΙΝΙ	_	_		
	Whimbrel	HIGH	X X X X X X X X X	- ALK OON	_	_		
	Willet	HIGH	$\times \times $	APR-SEP	-	-		
148	Bufflehead	MODERATE	X X X X X X X X X	-	-	_		
	Long-tailed duck		$egin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	- =		
	Mergansers Scoters		X X X X X X X X X X X X X X X X X X X	-	-	_		
149	American bittern		X X X X X X X X X X X X	APR-JUN	-	-		
	Black rail		$\times \times $	APR-JUN	-	-		
150	Least bittern	нтсп	X X X X X X X X X X X X X X X X X X X		<u>-</u> -	-		
TOU	American black duck American wigeon	HIGH MODERATE	X X X X X X X X X X X X X X X X X X X	MAR-JUL -	-	_		
	Brant	HIGH	X X X X X X X X	-	_	_		
	Canada goose	MODERATE	$\times \times $		-	-		
	Gadwall	MODERATE	X X X X X X X X X X X X X	APR-JUN -	-	-		
	Green-winged teal Mallard	MODERATE	$egin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Northern pintail	110 2214112	X X X X X X X X X	-	_	_		
	Northern shoveler			-	-	-		
	American oystercatcher	HIGH	X X X X X X X	MAR-JUL	-	_		
177 178	Double-crested cormorant American oystercatcher	10 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAR-JUL	_	_		
	American oystercatcher	13 ADULTS	XXXXXXX	MAR-JUL	_	_		
	American oystercatcher	2 ADULTS	X X X X X X X	MAR-JUL	-	-		
	Laughing gull	31 ADULTS	X	MAY-JUL	-	_		
	Forster's tern Forster's tern	40 ADULTS 6 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
	Forster's tern	8 ADULTS	XXXXXXXX	MAY-JUL	_	_		
338	Laughing gull	325 ADULTS	$\times \times $	MAY-JUL	-	-		
	Forster's tern	30 ADULTS	X X X X X X X X	MAY-JUL	-	-		
	American oystercatcher Laughing gull	HIGH 10 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-JUL	_	_		
	Forster's tern	102 ADULTS	XXXXXXXX	MAY-JUL	_	_		
	Laughing gull	429 ADULTS	$\times \times $	MAY-JUL	-	-		
371	Forster's tern	15 ADULTS	X X X X X X X X	MAY-JUL	-	_		
	Herring gull Laughing gull	2 ADULTS 16 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
374	Common tern	18 ADULTS	$X \times X \times X \times X \times X$	MAY-JUL	_	_		
375	Black skimmer	2 ADULTS	$\times \times \times \times \times \times \times \times \times$	MAY-JUL	-	-		
277	Common tern Black skimmer	3 ADULTS 6 ADULTS	X	MAY-JUL	<u> </u>	_		
	Laughing gull	6 ADULTS 68 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
	Forster's tern	88 ADULTS	X X X X X X X X	MAY-JUL	-	-		
	Herring gull	10 ADULTS	$\times \times $		-	-		
300	Laughing gull Laughing gull	850 ADULTS 240 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	-	_		
	Great black-backed gull	240 ADULTS 82 ADULTS	X X X X X X X X X X X X X X X X X X X		_	_		
	Great blue heron	2 ADULTS	X X X X X X X X X X X X		-	-		
	Great egret	C 64 ADULTS	$\times \times $		-	-		
	Herring gull Snowy egret	554 ADULTS 16 ADULTS	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL	_ _	_		
390	Herring gull	60 ADULTS	X X X X X X X X X X X X X		_	-		
	Forster's tern	68 ADULTS	$\times \times \times \times \times \times \times \times$	MAY-JUL	-	-		
E 2 C	Laughing gull	10 ADULTS	X	MAY-JUL	-	-		
	Laughing gull Laughing gull	36 ADULTS 180 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	-	_		
	Black skimmer	3 ADULTS	X	MAY-JUL	_	_		
-	Common tern	102 ADULTS	$\times \times \times \times \times \times \times \times \times$	MAY-JUL	-	-		
F 0 -	Gull-billed tern	T 8 ADULTS	X X X X X X X X	MAY-JUL	-	-		
	Herring gull Black skimmer	21 ADULTS 22 ADULTS	X X X X X X X X X X X X X X X X X X X	MAY-JUL MAY-JUL	-			
J#U	Common tern	22 ADULTS 48 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
	Least tern	C 26 ADULTS	XXXXXXX	MAY-JUL	-	-		
	Laughing gull	234 ADULTS	\times \times \times \times \times \times \times \times	MAY-JUL	-	-		
542	Forster's tern Laughing gull	44 ADULTS 94 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
543	Forster's tern	94 ADULTS 11 ADULTS	x	MAY-JUL MAY-JUL	_	_		
	Forster's tern	14 ADULTS	XXXXXXXX	MAY-JUL	-	-		
	Laughing gull	52 ADULTS	X X X X X X X X X X	MAY-JUL		-		
	Laughing gull	21 ADULTS	X	MAY-JUL	_	-		
	Laughing gull Peregrine falcon	42 ADULTS T	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAR-AUG	-	_		
	Forster's tern	162 ADULTS	XXXXXXXX	MAY-JUL	-	-		
	Forster's tern	10 ADULTS	$\times \times \times \times \times \times \times \times$	MAY-JUL	-	-		
	Laughing gull	2 ADULTS		MAY-JUL	-	-		
E 77	Great black-backed gull Herring gull	6 ADULTS 202 ADULTS	$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		-	_		
571			X X X X X X X X X X	MAY-JUL	-	_		
	Common tern	26 ADULTS						
572		26 ADULTS						
572 FISH	:		_	_	_	_	_	
572 FISH		S F Conc.	JFMAMJJASOND			Larvae	Juveniles	Adults

Virginia: ESIMAP 48 (cont.)

BIOLOGICAL RESOURCES: (cont.)

	: (cont.) Species	S F Conc.	.т 🗁 за	1 2 34	деч		יי זא (Spawning	Egge	Larvae	Juvenile	_ ·	Adults
	<u>-</u>	5 F CORG.							Eggs				
25	Atlantic menhaden Black drum		XXX		X X X X			-	_	_	JAN-DEC -		MAY-OCT
	Black sea bass				XXX			JUN-OCT	-	-	APR-OCT		APR-OCT
	Bluefish Butterfish		v		XXX			_	-	_	MAY-NOV JUL-NOV		APR-NOV MAR-NOV
	Crevalle jack		XXX	XXX				-	_	_	JAN-DEC	IV	- AR-NOV
	Northern kingfish				X X X			MAY-AUG	-		-		APR-OCT
	Northern searobin		X X X X	XXX	XXX	(X)	ζ X	-	_	_	_		MAR-OCT DEC-APR
	Red drum		21 21 21		X X X	X X X		JUL-NOV	-	-	-		MAY-NOV
	Red hake		XX	XXX		ΧУ	X	-	-	-	FEB-MAY		EB-MAY
	Sandbar shark			Х	ххх	(X)	₹	_	_	_	MAY-OCT		SEP-NOV MAY-OCT
	Scup (porgy)		X	XXX				-	-	-	JUN-OCT		MAR-OCT
	Silver hake		XXX		V V V		XXX	-	-	-	-		OCT-MAY
	Southern kingfish (whiting) Spanish mackerel			XX	XXX	\ X 2	7	_	_	_	_		APR-OCT APR-MAY
	Spiny dogfish		XXX				ХХ	-	-	-	-	N	IOV-APR
	Spot Spotted hake		XXX	X X X			X X X	_	_	DEC-APR	MAR-NOV MAR-JUN		1AR-NOV 1AR-JUN
	Spotted make		Δ		Λ	Λ. /	ν Λ				MAK-JUN		SEP-NOV
	Spotted seatrout				ХХХ			MAY-JUL	-	-	APR-NOV		APR-NOV
	Summer flounder Tautog		XXX					- APR-AUG	_	OCT-MAY	_		APR-OCT JAN-DEC
	Weakfish		A A A		XXX			APR-AUG	_	MAY-AUG	APR-NOV		APR-NOV
0	Alewife			XXX				-	-	-	-	F	EB-JUN
	American eel American shad		XXX	X X X X X X X X X X X X X X X X X X X		(X)	XXX	_	_	_	JAN-DEC -	F	- FEB-JUN
	Atlantic croaker		ΛΛ			(X)	XXX	_	_	_	MAY-DEC	Ľ	- -
	Atlantic herring			XXX	Χ			-	-	-	-		EB-JUN
	Atlantic mackerel Atlantic menhaden		Х	X X	ххх	(X)	ΧХ	-	-	_	- MAY-NOV		IAR-APR IAY-OCT
	Bay anchovy		ххх	XXX	ХХХ	X X	XXX	APR-SEP	-	-	JAN-DEC	J	JAN-DEC
	Black drum				XXX		ζ	-	-	-	- 100-9FD		APR-OCT
	Black sea bass Blueback herring		ХХ	XX	X X X		ζ	-	-	- FEB-JUN	APR-SEP FEB-OCT		APR-SEP FEB-JUN
	Bluefish			X	X X X	X X	ζ	-	-	-	MAY-OCT		MAY-OCT
	Crevalle jack Gobies		XXX					- APR-SEP	- APR-SEP	- APR-OCT	JAN-DEC JAN-DEC	-	– JAN-DEC
	Hickory shad			XXX		. ^ }	. A X	APK-SEP -	APK-SEP -	APR-OCT	JAN-DEC -		FEB-JUN
	Hogchoker							MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC		JAN-DEC
	Killifish Minnows							MAR-SEP APR-AUG	_	_	JAN-DEC JAN-DEC		JAN-DEC JAN-DEC
	Mummichog							APR-AUG	-	-	JAN-DEC		JAN-DEC
	Northern pipefish		XXX				XXX	-	-	-	JAN-DEC		JAN-DEC
	Northern searobin Pollock		ххх		XXX	ζ	Х	_	_	_	JUN-AUG -		JUN-AUG DEC-APR
	Red drum				X X X	X X		JUL-NOV	-	-	AUG-SEP		MAY-NOV
	Red hake		XX	XXX		ΧУ	X	-	-	-	FEB-MAY		EB-MAY
	Sandbar shark			Х	ххх	(X)	₹	_	_	_	MAY-OCT		SEP-NOV MAY-OCT
	Scup (porgy)		Х	XXX				-	-	-	JUN-OCT		IAR-OCT
	Silver hake		XXX				XXX	- ADD MAY	- ADD MAY	- TIM	- TAN DEG		OCT-MAY
	Silver perch Silversides							APR-MAY MAR-JUL	APR-MAY MAR-JUL	APR-JUN APR-SEP	JAN-DEC JAN-DEC		JAN-DEC JAN-DEC
	Spanish mackerel			ХХ				-	-	-	-		APR-MAY
	Spot Spotted hake		XXX		XXX		K K X X	_	-	_	APR-OCT OCT-APR		JUL-SEP -
	Spotted make Spotted seatrout		A A A		ххх			MAY-JUL	_	_	APR-NOV		- APR-NOV
	Striped anchovy							APR-SEP	-	-	APR-NOV		APR-NOV
	Summer flounder Tautog		ххх				X X X X X	_	_	-	APR-NOV		APR-NOV OCT-APR
	Weakfish						ζ		-	-	MAR-OCT		APR-OCT
	White hake		X	XXX		ХΣ	X	-	-	-	-		MAR-MAY
	White perch		x x x	. x x	x x x	7 X S	. x x	APR-JUN	APRTIIN	APRTIIN	.TAN-DEC		SEP-NOV JAN-DEC
	Winter flounder		XXX						-		DEC-JUL		DEC-MAY
ВT	TAT:												
		S F Conc.	JFM	1 A M	дда	A S C	ם זו כ						
	Species												
7	Maritime dune scrub		XXX										
	Native coastal strand vegetation Sea-beach knotweed		X X X X X X										
	Southern beach spurge		XXX										
VΕ	RTEBRATE:												
#	Species	S F Conc.	JFM	1 A M	JJA	a s c) N D	Spawning	Eggs	Larvae	Juvenile	es A	Adults
-													
5	Blue crab Channeled whelk		X X X						-	MAY-NOV -	JAN-DEC JAN-DEC		JAN-DEC JAN-DEC
0	Blue crab		XXX						MAY-SEP	MAY-NOV	JAN-DEC		JAN-DEC JAN-DEC
	Channeled whelk		XXX					-	-	-	JAN-DEC		JAN-DEC
	Northern quahog (hard clam)		XXX	XXX	XXX	(X)	XXX	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	J	JAN-DEC
	NE MAMMAL:												
#	Species	S F Conc.	JFM	MAI	JJA	A S C	ND	Mating	Calving	Pupping	-		
	Bottlenose dolphin				 x x x							-	
~	Common dolphin				ХХХ	(X)	ζ	-	-	-	-		
	Harbor porpoise		XXX	XXX			X		-	- -	-		
	Harbor seal Humpback whale	E E	X X X X X	XXX	x x x		XXX		- JAN-DEC	_	-		
0	Bottlenose dolphin			ХХ	X X X		ζ	-		-	-		
	Harbor porpoise		XXX	XXX			X	-	-	-	-		
	Harbor seal		ХХ			Σ	XXX	-	-	-	-		
рπ	ILE:												
	Species	S F Conc.	JFM	MAI	JJA	A S C	ND	Nesting	Hatching	Internest	-	eniles	
		T T		 X	 X X X	 (X)	 X X	-	-	-		 -NOV	
#	Green sea turtle				XXX			-	-	-	MAY:	-NOV	MAY
#	Kemp's ridley sea turtle	E E											1/17/17
#	Kemp's ridley sea turtle Leatherback sea turtle	E E			XXX			-	_	-		- NO77	
14 15	Kemp's ridley sea turtle		×	Х	ХХХ	X X	ХХ	- - MAY-JUL	- - -	- - -	MAY	- -NOV -NOV	MAY
2.5	Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle	E E	X	X X X X	ХХХ	X X X	X X X X	-	- - -	- - -	MAY: MAR:	-NOV	MAY MAR
2.5	Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle Diamondback terrapin	Е Е Т Т	Х	X X X X	X X X	X X X X X X X X X X X X X X X X X X X	< X < X < X < X < X < X < X < X < X < X	- MAY-JUL	- - - -	- - - -	MAY MAR MAY MAY	-NOV -NOV	MAY MAY MAR MAY MAY

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

Virginia: ESIMAP 48 (cont.)

BIOLOGICAL RESOURCES: (cont.)

REPTILE: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
	Diamondback terrapin Loggerhead sea turtle	тт	$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	- MAY-NOV	- -	- -	MAR-NOV -	MAR-NOV MAY-NOV

HUMAN USE RESOURCES:

AQUACULTURE:

HUN# Name Contact Phone
57 AQUACULTURE: HARD CLAMS

MANAGEMENT AREA:

HUN# Name Contact Phone
116 PARRAMORE ISLAND NATURAL AREA PRESERVE THE NATURE CONSERVANCY 757/442-3049

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	3	
26	American woodcock		X X X X X X X	-		-		
	Black-bellied plover		$\times \times $	-	-	-		
	Dunlin Greater yellowlegs		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	-		
	Killdeer		XXXX	-	-	_		
	Least sandpiper		X X X X X X X X X	-	-	-		
	Lesser yellowlegs Pectoral sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Red knot		XXXXXX	-	-	-		
	Ruddy turnstone		X X X X X X	-	-	-		
	Sanderling Semipalmated plover		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Semipalmated sandpiper		\times \times \times \times \times \times \times	-	-	-		
	Short-billed dowitcher		X X X X X X X X X X X X	-	-	-		
	Stilt sandpiper Western sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Whimbrel		$X \times X \times X \times X$	-	-	-		
	White-rumped sandpiper		XXX	-	-	-		
94	Willet Clapper rail	HIGH	X X X X X X X X X X X X X X X X X X X	- APR-AUG	_	_		
-	King rail		X X X X X X X X X X X X	-	-	-		
	Sora		X X X X X X X	-	_	-		
	Virginia rail Whimbrel	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APK-JUN -	_	_		
	Willet	HIGH	$\times \times $	APR-SEP	-	-		
95	American black duck	HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL -	-	_		
	American wigeon Brant	MODERATE HIGH	XXXX XXX	_	_	_		
	Canada goose	HIGH	$\times \times $	APR-JUN	-	-		
	Gadwall	MODERATE MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN -	-	_		
	Green-winged teal Mallard	MODERATE	X X X X X X X X X X X X X		_	_		
	Northern pintail	MODERATE		-	-	-		
	Northern shoveler	LOW	X X X X X X X X	-	-	-		
96	Snow goose Bufflehead	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Long-tailed duck	MODERATE			-	-		
	Mergansers	HIGH	X X X X X X X X	-	-	-		
	Scoters Tundra swan	HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
124	Bald eagle	тт		FEB-MAY	-	-		
148	Bufflehead	MODERATE	X X X X X X X X X	-	-	-		
	Long-tailed duck Mergansers		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Scoters		X X X X X X X X X	-	-	-		
150	American black duck	HIGH	X X X X X X X X X X X X X X X X X X X	MAR-JUL	-	-		
	American wigeon Brant	MODERATE HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Canada goose	MODERATE	$\times \times $		-	-		
	Gadwall	MODERATE	X X X X X X X X X X X X X		-	-		
	Green-winged teal Mallard	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-JUL	_	_		
	Northern pintail		X X X X X X X X	-	-	-		
154	Northern shoveler		X X X X X X X X X	-	-	-		
	American oystercatcher Laughing gull	HIGH 205 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL MAY-JUL	_	_		
	Forster's tern	85 ADULTS	X X X X X X X X	MAY-JUL	-	-		
	Herring gull	1 ADULT	X X X X X X X X X X X X		-	-		
306	Laughing gull Laughing gull	160 ADULTS 175 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
	American oystercatcher	HIGH	x x x	-	-	-		
366	Black skimmer	56 ADULTS	X X X X X X X X	MAY-JUL	-	-		
	Caspian tern Common tern	C 2 ADULTS 6 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
	Herring gull	3 ADULTS	$\times \times $		-	-		
	Laughing gull	6 ADULTS	X	MAY-JUL	-	-		
529	Royal tern Laughing gull	69 ADULTS 150 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
	Great black-backed gull	2 ADULTS	X X X X X X X X		-	-		
	Herring gull	2 ADULTS	X X X X X X X X X X X X X		-	-		
531	Laughing gull Herring gull	673 ADULTS 5 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
	Laughing gull	60 ADULTS	$\times \times $	MAY-JUL	-	-		
548	Great black-backed gull	2 ADULTS	X X X X X X X X X X X X X X X X X X X		-	-		
	Herring gull Laughing gull	6 ADULTS 190 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	-	-		
	Laughing gull	127 ADULTS	$\times \times $	MAY-JUL	-	-		
550	Forster's tern Laughing gull	11 ADULTS 31 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
574	Laughing gull	807 ADULTS	X	MAY-JUL	_	_		
	Laughing gull	93 ADULTS	$\times \times $	MAY-JUL	-	-		
FISH	:							
	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
30	Alewife American eel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	- JAN-DEC	FEB-JUN -
	American eei American shad		X X X X X X X X X X X X X X X X X X X	-	_	_	JAN-DEC -	- FEB-JUN
	Atlantic croaker		X X X X X X X X	-	-	-	MAY-DEC	-
	Atlantic herring Atlantic mackerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	-	FEB-JUN MAR-APR
	Atlantic mackerer Atlantic menhaden		x x	_	_	_	- MAY-NOV	MAY-OCT
	Bay anchovy		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum		X X X X X X X	-	-	-	- 7 DD_CED	APR-OCT
	Black sea bass Blueback herring		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-		- FEB-JUN	APR-SEP FEB-OCT	APR-SEP FEB-JUN
	Bluefish		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Crevalle jack		X X X X X X X X X X X X X X X X X X X		- and adv	- л DD_ОСП	JAN-DEC	- TAN-DEC
	Gobies Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP -	APR-SEP -	APR-OCT	JAN-DEC -	JAN-DEC FEB-JUN
	Hogchoker		$\times \times $		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Killifish Minnows		X X X X X X X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
	Minnows Mummichog		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern pipefish		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Northern searobin Pollock		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-	JUN-AUG -	JUN-AUG
	Pollock Red drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$			-	- AUG-SEP	DEC-APR MAY-NOV

Virginia: ESIMAP 49 (cont.)

BIOLOGICAL RESOURCES: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O 1	D Spawning	Eggs	Larvae	Juveniles	Adults
30	Red hake		XXXX	-	-	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark		X X X X X X	_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	_	-	_	JUN-OCT	MAR-OCT
	Silver hake		X X X X X X X X X X X X X X X X X X X	Х -	-	_	_	OCT-MAY
	Silver perch		X X X X X X X X X X X X X X X X X X X	X APR-MAY	APR-MAY	APR-JUN	JAN-DEC	JAN-DEC
	Silversides		X X X X X X X X X X X X X X X X X X X	X MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
	Spanish mackerel		X X	_	_	_	_	APR-MAY
	Spot		$\times \times \times \times \times \times \times$	_	_	_	APR-OCT	JUL-SEP
	Spotted hake		XXXXXXXX	х -	_	_	OCT-APR	_
	Spotted seatrout		X X X X X X X X X	MAY-JUL	_	_	APR-NOV	APR-NOV
	Striped anchovy		X X X X X X X X		_		APR-NOV	APR-NOV
	Summer flounder		X X X X X X X X		_		APR-NOV	APR-NOV
	Tautog		XXXXXXXXX		_	_	_	OCT-APR
	Weakfish		XXXXXXX	APR-AUG	_	_	MAR-OCT	APR-OCT
	White hake		X X X X X X X		_	_	-	MAR-MAY
	WIII CO HUNC		11 11 11 11 11 11 11 11					SEP-NOV
	White perch		X X X X X X X X X X X X X X X X X X X	V ADD_TIIN	APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Winter flounder		XXXXXXX	X AIR OON	AIR OON	AIN OON	DEC-JUL	DEC-MAY
			AAAAAA	Λ			DEC OOL	DEC MAI
NVE	RTEBRATE:							
AR#	Species	S F Conc.	J F M A M J J A S O 1	D Spawning	Eggs	Larvae	Juveniles	Adults
30	Blue crab		X X X X X X X X X X X X X X X X X X X	X -	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
30			X X X X X X X X X X X X X X X X X X X		MAY-SEP -	MAY-NOV -		
30	Blue crab Channeled whelk Northern quahog (hard clam)		X X X X X X X X X X X X X X X X X X X	- X			JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC
	Channeled whelk Northern quahog (hard clam)		X X X X X X X X X X X X X X X X X X X	- X	-	-	JAN-DEC	JAN-DEC
ARI AR#	Channeled whelk	S F Conc.	X X X X X X X X X X X X X X X X X X X	X - X MAY-OCT	-	- MAY-OCT	JAN-DEC	JAN-DEC
ARI AR#	Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species	S F Conc.	J F M A M J J A S O P	X - X MAY-OCT	- MAY-OCT	- MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC
ARI AR#	Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin	S F Conc.	J F M A M J J A S O P	X - X MAY-OCT D Mating	- MAY-OCT	- MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC
ARI AR#	Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species	S F Conc.	J F M A M J J A S O P	X - X MAY-OCT D Mating X -	- MAY-OCT	- MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC
ARI AR# 30	Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Harbor porpoise	S F Conc.	J F M A M J J A S O F X X X X X X X X X X X X X X X X X X	X - X MAY-OCT D Mating X -	- MAY-OCT	- MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC
ARI AR# 30	Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species	S F Conc.	J F M A M J J A S O F X X X X X X X X X X X X X X X X X X	X - X MAY-OCT D Mating X - X -	MAY-OCT Calving	MAY-OCT Pupping	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
ARI AR# 30 EPT AR#	Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Harbor porpoise Harbor seal TILE: Species	S F Conc.	J F M A M J J A S O P X X X X X X X X X X X X X X X X X X	X	MAY-OCT Calving	MAY-OCT Pupping	JAN-DEC JAN-DEC Molting ing Juveni	JAN-DEC JAN-DEC
ARI AR# 30 EPT AR#	Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Harbor porpoise Harbor seal TLE: Species Green sea turtle	S F Conc.	J F M A M J J A S O F X X X X X X X X X X X X X X X X X X	X - X MAY-OCT D Mating X - X - X - D Nesting	MAY-OCT Calving Hatching	Pupping Internest:	JAN-DEC JAN-DEC Molting ing Juveni: MAY-NOV	JAN-DEC JAN-DEC Les Adult
ARI AR# 30 EPT AR#	Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Harbor porpoise Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle	S F Conc. T T E E	J F M A M J J A S O P X X X X X X X X X X X X X X X X X X	X - X MAY-OCT D Mating X - X - X	MAY-OCT Calving	MAY-OCT Pupping	JAN-DEC JAN-DEC Molting MAY-NOV MAY-NOV	JAN-DEC JAN-DEC JAN-DEC Adult MAY-N
IARI AR# 30 EPT AR#	Channeled whelk Northern quahog (hard clam) NE MAMMAL: Species Bottlenose dolphin Harbor porpoise Harbor seal TLE: Species Green sea turtle	S F Conc.	J F M A M J J A S O F X X X X X X X X X X X X X X X X X X	X - X MAY-OCT D Mating X - X - X - D Nesting	MAY-OCT Calving Hatching	Pupping Internest:	JAN-DEC JAN-DEC Molting ing Juveni: MAY-NOV	JAN-DEC JAN-DEC JAN-DEC Adult MAY-N MAY-N

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone

57 AQUACULTURE: HARD CLAMS

BIOLOGICAL RESOURCES:

BIRD	:
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RAR# Species

RAR#	Species	SFO	conc.	JFM	IAM	J J 1	AS	OND	Nesting	Migrating	Molting	J 	
26	American woodcock			x x			 x	x x x		_			
20	Black-bellied plover				XXX	y y y			_	_	_		
	Dunlin			XXX		21 21 2		XXX	_	_	_		
	Greater yellowlegs				XXX	v v 1			_	_	_		
	Killdeer			Δ		л л <i>2</i> Х Х Х		ΛΛ	_	_	_		
	Least sandpiper			v	XXX			v v	_	_	_		
	Lesser yellowlegs				XXX				_	_	_		
	Pectoral sandpiper			21		XXX			_	_	_		
	Red knot			v	XXX			ΛΛ	_	_			
									_	_	_		
	Ruddy turnstone				XXX			ххх	_	_	_		
	Sanderling Semipalmated plover								_	-	_		
					XXX				_	_	_		
	Semipalmated sandpiper Short-billed dowitcher				XXX					_	_		
				A A A				XXX	_	_	_		
	Stilt sandpiper					XXX			_	_	_		
	Western sandpiper			7.1		XXX		XX	_	-	_		
	Whimbrel				XXX	X X 2	K.		-	_	_		
	White-rumped sandpiper				XXX	., ., .	, ,,	17 17 17	-	_	_		
0.4	Willet							XXX	-	_	_		
94	Clapper rail		HIGH						APR-AUG	_	_		
	King rail					X X X		XXX	-	-	_		
	Sora				XXX			XX		_	_		
	Virginia rail	_							APR-JUN	-	-		
	Whimbrel		HIGH		XXX		XX		-	_	_		
0.5	Willet		HIGH						APR-SEP	_	-		
95	American black duck		HIGH			X X 2			MAR-JUL	_	_		
	American wigeon		MODERATE	XXX				X X X	_	-	-		
	Brant		HIGH	XXX				XXX	-	_	_		
	Canada goose		HIGH						APR-JUN	-	_		
	Gadwall		MODERATE			X X 2			APR-JUN	-	_		
	Green-winged teal		MODERATE	XXX				XXX	-	_	_		
	Mallard		MODERATE			X X 2			MAY-JUL	_	_		
	Northern pintail		MODERATE	XXX				XXX	-	-	_		
	Northern shoveler		LOW	XXX				XXX	-	-	_		
	Snow goose		HIGH	XXX				X X X		-	-		
96	Bufflehead		HIGH	XXX				X X X		-	_		
	Long-tailed duck		MODERATE	XXX				X X X		-	-		
	Mergansers		HIGH	XXX				X X X		-	_		
	Scoters		HIGH	XXX				X X X	-	-	-		
	Tundra swan		MODERATE	XXX				X X X	-	-	-		
100	Brown pelican	С			XXX				-	-	-		
	Gulls					XXX		XXX	-	-	-		
	Loons			XXX				XXX		-	-		
	Mergansers			XXX	X			XXX	-	-	_		
	Osprey			X	XXX	ХХΣ	X	XX	-	-	-		
	Scoters]	HIGH	XXX				X X X	-	-	-		
	Terns				XXX				-	-	-		
125	American black duck]	HIGH			XXX			MAR-JUL	-	-		
	American wigeon			XXX	XX			X X X	-	-	-		
	Canada goose]	HIGH	XXX	XXX	X X X	ХХ	X X X	APR-JUN	-	-		
	Gadwall			XXX	XX			X X X	-	-	-		
	Green-winged teal			XXX	X			X X X	-	-	-		
	Mallard	1	MODERATE			XXX	ΧX	X X X	MAY-JUL	-	-		
	Snow goose			XXX	X			X X X	-	-	-		
127	Scaup			XXX	X			X X X	-	-	-		
	Scoters]	HIGH	XXX	X			X X X	-	-	-		
	Tundra swan			XXX	X			X X X	-	-	-		
	Bufflehead]	HIGH	XXX	X			X X X	-	-	-		
	Long-tailed duck			XXX	X			X X X	-	-	-		
	Mergansers			XXX	X			X X X	-	-	-		
	Ring-necked duck			XXX	X			X X X	-	-	-		
437	Great blue heron		30 NESTS	XXX	XXX	ххх	ΧХ	ххх	MAY-JUL	_	_		
	Great blue heron		43 NESTS	XXX	XXX	ххх	ΧХ	X X X	MAY-JUL	_	_		
486	Crost blue bores		75 NESTS						MAY-JUL	_	_		
	Great blue heron				XXX	v v v	Z		MAR-AUG				
487		Т		X		$\Lambda \Lambda \lambda$				_	_		
487	Peregrine falcon			X		A A 2	7			_	-		
487	Peregrine falcon			X		A A 2	7			_	-		
487 562 FISH	Peregrine falcon	Т	Conc.		1 A M			OND	Spawning	Eggs	- Larvae	Juveni les	Adults
487 562 FISH	Peregrine falcon : Species	T S F (Conc.	JFM	1 A M	J J 1	A S		Spawning		Larvae	Juveniles	Adults
487 562 FISH RAR#	Peregrine falcon	T S F (J F M		Ј Ј 2 	A S						
487 562 FISH RAR#	Peregrine falcon : Species	T S F (J F M	 X X X	ЈЈ 1 	A S		-				FEB-JUN
487 562 FISH RAR#	Peregrine falcon : Species	T S F (J F M X X X X X	 X X X X X X	ЈЈ Д Д Д Д Д Д Д Д Д Д	A S	 x x x	-			JAN-DEC	FEB-JUN SEP-DEC
487 562 FISH RAR#	Peregrine falcon : Species	T S F (J F M X X X X X	X X X X X X X X X X X X X X X X X X X	J J 2 X X X X X	A S 	 x x x x x	- - -		 - -	JAN-DEC	FEB-JUN SEP-DEC JAN-JUN
487 562 FISH RAR#	Peregrine falcon : Species	T S F (J F M X X X X X	X X X X X X X X X X X X X X X X X X X	J J 2 X X X X X	A S 	 x x x	- - -		 - - -	JAN-DEC	FEB-JUN SEP-DEC
487 562 FISH RAR#	Peregrine falcon : Species	T S F (J F M	X X X X X X X X X X X X X X X X	J J J J J Z X X X X X X X X X X X X X X	A S < X	 x x x x x	- - -		 - - -	JAN-DEC NOV-MAR AUG-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV
487 562 FISH RAR#	Peregrine falcon : Species	T S F (J F M	X X X X X X X X X X X X X X X X	J J J 2	A S	 X X X X X X X X X X X			 - - - -	JAN-DEC NOV-MAR AUG-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR
487 562 FISH RAR#	Peregrine falcon : Species	T S F (J F M	X X X X X X X X X X X X X X X X	J J J 2 X X X X X X X X X X X X X	A S X X X X X X X X X X X X X X X X	 X X X X X X X X X X X		 - - - - -		JAN-DEC NOV-MAR AUG-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT
487 562 FISH RAR#	Peregrine falcon : Species	T S F (J F M		J J J 2 X X X X X X X X X X X X X	A S X X X X X X X X X X X X X X X X	 x x x x x x x x x x x x x x x x x	- - - - - - - MAR-JUL	 - - - - -		JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M		J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	A S X X X X X X X X X X X X X X X X X	 x x x x x x x x x x x x x x x x x x	- - - - - - - MAR-JUL	 - - - - -		JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC AUG-OCT	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M		J J J Z Z X X X X X X X X X X X X X X X	A S < X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- - - - - - MAR-JUL	 - - - - - - - - -		JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M	X X X X X X X X X X X X X X X X X X X	J J J 2 X X X X X X X X X X X X X X X X X X X	A S	x				JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC AUG-OCT - JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M	X X X X X X X X X X X X X X X X X	J J J 2 X X X X X X X X X X X X X X X X X X X	A S	x		- - - - - - - - - - - - - - - - - - -		JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M	X X X X X X X X X X X X X X X X	J J J 2 X X X X X X X X X X X X X X X X X X X	A S	X X X X X X X X X X X X X X X X		- - - - - - - - - - - - - - - - - - -		JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M	X X X X X X X X X X X X X X X X	J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	A S			- - - - - - - - - - - - - - - - - - -		JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M	X X X X X X X X X X X X X X X X	J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	A S			- - - - - - - - - - - - - - - - - - -		JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M	X X X X X X X X X X X X X X X X	J J J J J J J J J J J J J J J J J J J	A S	X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-MOV APR-OCT JAN-JUN APR-NOV MAR-NOV
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M	X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	A S	X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV MAY-NOV
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M		X X X X X X X X X X X X X X X X X X X	A S	X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV MAY-NOV JAN-DEC
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	A S	X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV MAR-NOV JAN-DEC APR-NOV JAN-DEC APR-NOV JAN-DEC APR-NOV
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	A S	X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV MAY-NOV JAN-DEC APR-NOV JAN-DEC APR-NOV JAN-DEC APR-NOV JAN-DEC APR-NOV JAN-DEC APR-OCT JAN-JUN
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M X X X X X X X X X X X X X X X		J J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	A S	X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JUL-NOV JUL-OCT NOV-MAR JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-JUN APR-DOV JAN-DEC APR-OCT JAN-JUN JAN-DEC
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	A S	X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JUL-OCT NOV-MAR	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-JUN JAN-DEC JAN-JUN JAN-DEC JAN-JUN JAN-DEC
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M X X X X X X X X X X X X X X X		J J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	A S	X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JUL-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M X X X X X X X X X X X X X X X		J J J J Z Z X X X X X X X X X X X X X X	A S					JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-NOV MAP-NOV MAY-NOV JAN-DEC APR-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	A S					JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JUL-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC JAN-DEC APR-OCT JAN-DEC
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M X X X X X X X X X X X X X X X		J J J J Z Z X X X X X X X X X X X X X X	A S	X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-MAY APR-MAY APR-MAY APR-AUG APR-AUG APR-AUG APR-AUG APR-AUG			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-NOV MAR-NOV MAR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT JAN-DEC MAR-OCT
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	**************************************	X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAR-OCT
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M X X X X X X X X X X X X X X X		J J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	A S	X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-MAY APR-MAY APR-MAY APR-AUG APR-AUG APR-AUG APR-AUG APR-AUG			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JUL-OCT NOV-MAR JAN-DEC AMAR-OCT AUG-SEP	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M X X X X X X X X X X X X X X X		J J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	A S	X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DE
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M X X X X X X X X X X X X X X X		J J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	* * * * * * * * * * * * * * * * * * *	X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC MAR-OCT - AUG-SEP FEB-MAY	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC
487 562 FISH RAR#	Peregrine falcon Species Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark	S F (J F M X X X X X X X X X X X X X X X		J J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	**************************************	X X X X X X X X X X X X X X X X	APR-SEP APR-JUN JUN-OCT APR-SEP APR-JUN JUN-OCT APR-SEP APR-MAY APR-AUG APR-AU			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC AN-DEC JAN-DEC JAN-DEC AN-DEC JAN-DEC AN-DEC AN-DEC AN-DEC AN-DEC JAN-DEC AN-DEC AN-DEC MAR-OCT AUG-SEP FEB-MAY	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV
487 562 FISH RAR#	Peregrine falcon Species Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy)	S F (J F M X X X X X X X X X X X X X X X		J J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	* * * * * * * * * * * * * * * * * * *	X X X X X X X X X X X X X X X X	APR-SEP APR-JUN JUN-OCT APR-SEP APR-JUN JUN-OCT APR-SEP APR-MAY APR-AUG APR-			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC AN-DEC JAN-DEC AN-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-NOV MAY-NOV JAN-DEC APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT
487 562 FISH RAR#	Peregrine falcon Species Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake	S F (J F M		J J J Z Z X X X X X X X X X X X X X X X	* * * * * * * * * * * * * * * * * * *		MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG APR-AUG JUL JUL-NOV			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-NOV MAY-NOV JAN-DEC MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY
487 562 FISH RAR#	Peregrine falcon Species Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch	S F (J F M		J J J J Z Z X X X X X X X X X X X X X X	* * * * * * * * * * * * * * * * * * *		MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-AUG APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAY-OCT MAR-OCT OCT-MAY JAN-DEC
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M		X X X X X X X X X X X X X X X X X X X	**************************************		MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-MAY APR-AUG APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV JAN-DEC APR-NOV MAY-NOV JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT
487 562 FISH RAR#	Peregrine falcon Species Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch	S F (J F M		X X X X X X X X X X X X X X X X X X X	**************************************		MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-AUG APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M		J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	* * * * * * * * * * * * * * * * * * *		MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JAN-DEC MAR-NOV MAR-JUN	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC OCT MAY-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M X X X X X X X X X X X X X X X		J J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	* * * * * * * * * * * * * * * * * * *					JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JUL-OCT NOV-MAR JAN-DEC MAR-OCT JAN-DEC MAR-OCT JAN-DEC MAR-OCT JAN-DEC MAR-OCT JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-NOV MAY-NOV MAY-NOV JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-NOV MAR-JUN SEP-NOV APR-NOV
487 562 FISH RAR#	Species	S F (J F M		J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	* * * * * * * * * * * * * * * * * * *		MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-MAY APR-AUG APR-AUG APR-AUG APR-AUG APR-AUG APR-AUG APR-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - JAN-DEC MAR-OCT - JAN-DEC MAR-OCT JUL-OCT - JAN-DEC MAR-OCT JUN-OCT JUN-OCT JAN-DEC MAR-NOV MAR-NOV MAR-NOV JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV MAR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-OCT MAY-OCT MAY-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAR-OCT MAY-NOV MAY-NOV MAR-OCT MAY-NOV MAR-OCT MAY-NOV MAY-OCT MAY-NOV MAR-OCT MAY-NOV MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC
487 562 FISH RAR#	Peregrine falcon : Species	S F (J F M		J J J Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	* * * * * * * * * * * * * * * * * * *					JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JUL-OCT NOV-MAR JAN-DEC MAR-OCT JAN-DEC MAR-OCT JAN-DEC MAR-OCT JAN-DEC MAR-OCT JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-NOV MAY-NOV MAY-NOV JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-NOV MAR-JUN SEP-NOV APR-NOV

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

Virginia: ESIMAP 50 (cont.)

Northern quahog (hard clam)

128 Blue crab

97 Northeastern beach tiger beetle

RAR#	: (cont.) Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
1.0	Summer flounder					OCT-MAY	JAN-DEC	APR-OCT
10	Tautog Threadfin shad		X X X X X X X X X X X X X X X X X X X	- -	- - -	- -	JAN-DEC - -	OCT-APF
	Weakfish		$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x}$	APR-AUG	-	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
30	Alewife		XXXXX	-	-	-	-	FEB-JUN -
	American eel American shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JAN-DEC -	- FEB-JUN
	Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	MAY-DEC -	-
	Atlantic herring Atlantic mackerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	-	-	FEB-JUN MAR-APF
	Atlantic menhaden		X X X X X X X	-	-	-	MAY-NOV	MAY-OCT
	Bay anchovy Black drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP	_	_	JAN-DEC -	JAN-DEC APR-OCT
	Black sea bass		X X X X X X	-	-	-	APR-SEP	APR-SEF
	Blueback herring Bluefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	FEB-JUN -	FEB-OCT MAY-OCT	FEB-JUN MAY-OCT
	Crevalle jack		$\times \times $	-	-	-	JAN-DEC	-
	Gobies Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP	APR-SEP	APR-OCT	JAN-DEC -	JAN-DEC
	Hogchoker		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Killifish Minnows		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC
	Northern pipefish		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Northern searobin Pollock		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	JUN-AUG -	JUN-AUG DEC-APF
	Red drum		x x x x x x x	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake		X X X X X X X X	-	-	-	FEB-MAY	FEB-MAY
	Sandbar shark		X X X X X X	_	_	_	MAY-OCT	SEP-NOV MAY-OCT
	Scup (porgy)		$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-	JUN-OCT	MAR-OCT
	Silver hake Silver perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- APR-MAY	- APR-MAY	- APR-JUN	- JAN-DEC	OCT-MAY
	Silversides		X X X X X X X X X X X X X X X X X X X	MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DE
	Spanish mackerel		XX	-	-	-	-	APR-MAY
	Spot Spotted hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_	APR-OCT OCT-APR	JUL-SEI -
	Spotted seatrout		$\times \times \times \times \times \times \times \times$	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped anchovy Summer flounder		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP -	_	-	APR-NOV APR-NOV	APR-NOV
	Tautog		XXXX XXXX	_	_	_	- -	OCT-API
	Weakfish		X X X X X X X X X	APR-AUG	-	-	MAR-OCT	APR-OC
	White hake		XXX XXX	-	-	-	-	MAR-MAY SEP-NOV
	White perch		$\times \times $		APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
01	Winter flounder Alewife		X X X X X X X X	-	-	-	DEC-JUL -	DEC-MAY
181	American eel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JAN-DEC	FEB-JUN SEP-DEC
	American shad		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker Atlantic mackerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	AUG-DEC -	MAY-NOV MAR-APF
	Atlantic menhaden		\times	-	_	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		X X X X X X X X X X X X	MAR-JUL -	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish Atlantic sturgeon	С	$\begin{smallmatrix} & & & & \times & \times & \times & \times \\ & & & \times & \times & \times$	-	-	-	AUG-OCT -	AUG-NOV
	Bay anchovy		$\times \times $		-	-	JAN-DEC	JAN-DE
	Black drum Black sea bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN JUN-OCT	APR-JUN -	APR-JUN -	APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring		$X \times X \times$	-	-	-	NOV-MAR	JAN-JUI
	Bluefish Butterfish		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	-	-	-	MAY-NOV JUL-NOV	APR-NOV
	Clearnose skate		X X X X X X X X	_	_	_	- 00T-NOA	MAY-NO
	Gobies		$\times \times $		APR-SEP	APR-OCT	JAN-DEC	JAN-DE
	Harvestfish Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	JUL-OCT NOV-MAR	APR-OCT
	Hogchoker		$\times \times $	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DE
	Inland silverside Minnows		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC JAN-DEC	JAN-DEO
	Mummichog		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DE
	Northern kingfish		X X X X X X X	-	-	-	_	APR-OC
	Northern pipefish Northern puffer		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUN MAY-AUG	_	-	JAN-DEC MAR-OCT	JAN-DEO MAR-OC'
	Northern searobin		$X \ X \ X \ X \ X \ X \ X \ X$	MAY-JUL	-	-	-	MAR-OC'
	Red drum Red hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUL-NOV -	-	-	AUG-SEP FEB-MAY	MAY-NO' FEB-MA'
	Neu liake						red MAI	SEP-NO
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy) Silver hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JUN-OCT -	MAR-OCT OCT-MAY
	Silver perch		$\times \times $		-	-	JAN-DEC	JAN-DE
	Spot Spotted hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	DEC-APR	MAR-NOV MAR-JUN	MAR-NOV MAR-JUN
	opocica nake			•	-	-	T.T.T.V OOIN	SEP-NOV
	Spotted seatrout		X X X X X X X X X	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass Striped killifish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- APR-SEP	-	-	JAN-DEC JAN-DEC	JAN-DEO JAN-DEO
	Summer flounder		$\times \times $	-	-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog Threadfin shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	-	OCT-API FEB-MA
	INICAULIN SNAU		^ ^ ^ X X X	-	-	-	-	SEP-NOV
	Weakfish		$X\;X\;X\;X\;X\;X\;X\;X$	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
ABI'	TAT:							
AR#	Species	S F Conc.	J F M A M J J A S O N D					
	Maritime dune scrub		X X X X X X X X X X X X X X X X X X X					
	Maritime dune scrub		X X X X X X X X X X X X					
NVE. AR#	RTEBRATE: Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	<u>-</u>							
	Northern quahog (hard clam) Horseshoe crab		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-OCT -	MAY-OCT -	MAY-OCT -	JAN-DEC JAN-DEC	JAN-DEC
	Knobbed whelk		X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
30	Blue crab Channeled whelk		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	MAY-SEP -	MAY-NOV -	JAN-DEC JAN-DEC	JAN-DEC
	Northern quahoq (hard clam)		X X X X X X X X X X X X X X X X X X X	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

JUN-SEP

MAY-SEP MAY-NOV JAN-DEC

X X X X X X X X X X X X JUN-SEP

JAN-DEC

JUN-OCT

JAN-DEC

Virginia: ESIMAP 50 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae J	uveniles	Adults
181	Blue crab		X X X X X X X X X X X X X	-	-	MAY-NOV J	AN-DEC	JAN-DEC
182	Knobbed whelk		X X X X X X X X X X X X X	-	-	– J	AN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping M	olting	
18	Harbor porpoise		X X X X X X X	-	-	-	_	
20	Bottlenose dolphin		X X X X X X X	_	_	_	_	
30	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Harbor porpoise		X X X X X X X X	-	-	-	-	
	Harbor seal		X X X X X	-	-	-	_	
181	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Harbor porpoise		X X X X X X	-	-	-	_	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internestin	g Juvenile	s Adults
23	Green sea turtle	тт	X X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	_	MAY-NOV	MAY-NOV
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	T T	X X X X X X X	-	-	_	MAY-NOV	MAY-NOV
30	Green sea turtle	TT	X X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	ТТ	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
39	Green sea turtle	T T	X X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	-
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle Diamondback terrapin	T T	$\begin{smallmatrix} & & \times & \times & \times & \times & \times & \times \\ & \times & \times & \times$	-	-	-	MAY-NOV MAR-NOV	- MAR-NOV

HUMAN USE RESOURCES:

AQUACULTURE:

57 AQUACULTURE: HARD CLAMS 58 AQUACULTURE: OYSTERS

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD RAR#	: Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
	Brown pelican						_	
	Gulls		$\times \times $		-	-		
	Loons Mergansers		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Osprey Scoters	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		
	Terns		$\times \times \times \times \times \times \times \times$	-	-	-		
FISH								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs 	Larvae	Juveniles	Adults
18	Alewife American eel		$\begin{array}{c} \mathbf{X} \ \mathbf{X} \ \mathbf{X} \ \mathbf{X} \ \mathbf{X} \\ \mathbf{X} \ \mathbf{X} \\ \end{array}$	-	-	-	- JAN-DEC	FEB-JUN SEP-DEC
	American shad Atlantic croaker		X X X X X X X X X X X X X X X X X X X	-	-	- -	NOV-MAR AUG-DEC	JAN-JUN MAY-NOV
	Atlantic mackerel		X X	-	-	-	-	MAR-APR
	Atlantic menhaden Atlantic silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAR-JUL	-	MAY-NOV -	JAN-DEC JAN-DEC	MAY-OCT JAN-DEC
	Atlantic spadefish Atlantic sturgeon	C	$\begin{smallmatrix} & & & & \times & \times & \times & \times \\ & & & \times & \times & \times$	_	-	-	AUG-OCT	AUG-NOV JAN-OCT
	Bay anchovy	Ŭ	$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum Black sea bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN JUN-OCT	APR-JUN -	APR-JUN -	APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring Bluefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-	NOV-MAR MAY-NOV	JAN-JUN APR-NOV
	Butterfish Clearnose skate		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	-	-	-	JUL-NOV	MAR-NOV MAY-NOV
	Gobies		$\times \times $	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Hogchoker Inland silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		MAY-SEP -	MAY-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows Mummichog		X X X X X X X X X X X X X X X X X X X	APR-AUG	-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish		X X X X X X X	-		-	-	APR-OCT
	Northern pipefish Northern puffer		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC MAR-OCT	JAN-DEC MAR-OCT
	Northern searobin Red drum		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$		-	-	- AUG-SEP	MAR-OCT MAY-NOV
	Red hake		XXXX XXX	-		-	FEB-MAY	FEB-MAY
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	SEP-NOV MAY-OCT
	Scup (porgy) Silver hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	JUN-OCT -	MAR-OCT OCT-MAY
	Silver perch		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $	APR-MAY	-	- DEC-APR	JAN-DEC MAR-NOV	JAN-DEC
	Spott Spotted hake		X X X X X X X X X X	-	-	-	MAR-JUN	MAR-NOV MAR-JUN
	Spotted seatrout		X	MAY-JUL	_	_	APR-NOV	SEP-NOV APR-NOV
	Striped bass Striped killifish		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $	- 100-970	-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Summer flounder		$\times \times $	-	-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog Threadfin shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	- -	OCT-APR FEB-MAY
	Weakfish		X	APR-AUG	_	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
181	Alewife American eel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	- JAN-DEC	FEB-JUN SEP-DEC
	American shad			-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker Atlantic mackerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	AUG-DEC -	MAY-NOV MAR-APR
	Atlantic menhaden Atlantic silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAR-JUI	-	MAY-NOV -	JAN-DEC JAN-DEC	MAY-OCT JAN-DEC
	Atlantic spadefish	С	$\begin{smallmatrix} & & & & & & & & & & & & & & & & & & &$	-	-	-	AUG-OCT	AUG-NOV JAN-OCT
	Atlantic sturgeon Bay anchovy	C	$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum Black sea bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN JUN-OCT	APR-JUN -	APR-JUN -	APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring Bluefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	- -	NOV-MAR MAY-NOV	JAN-JUN APR-NOV
	Butterfish		$\times \times $	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate Gobies		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		APR-SEP	APR-OCT	JAN-DEC	MAY-NOV JAN-DEC
	Harvestfish Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Hogchoker Inland silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		MAY-SEP	MAY-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog Northern kingfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JAN-DEC -	JAN-DEC APR-OCT
	Northern pipefish Northern puffer		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUN MAY-AUG	-	-	JAN-DEC MAR-OCT	JAN-DEC MAR-OCT
	Northern searobin Red drum		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	MAY-JUL JUL-NOV	-	-	- AUG-SEP	MAR-OCT MAY-NOV
	Red hake		XXXX XXXX	-	-	-	FEB-MAY	FEB-MAY
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	SEP-NOV MAY-OCT
	Scup (porgy) Silver hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JUN-OCT	MAR-OCT OCT-MAY
	Silver perch		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $	APR-MAY	-	- DEC-APR	JAN-DEC	JAN-DEC
	Spot Spotted hake		X X X X X X X X X X X X X X X X X X X	-	-	DEC-APR	MAR-NOV MAR-JUN	MAR-NOV MAR-JUN
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	-	APR-NOV	SEP-NOV APR-NOV
	Striped bass Striped killifish		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $	- APR-SEP	-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Summer flounder		$\times \times $	-	-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog Threadfin shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$			-	-	OCT-APR FEB-MAY
	Weakfish		X	APR-AUG	-	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
INVE	RTEBRATE:		1 1 1 1 1	-100		-100		,,,,
RAR#	Species	S F Conc.	J F M A M J J A S O N D			Larvae	Juveniles	Adults
	Northern quahog (hard clam)				MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
	Horseshoe crab Knobbed whelk		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Blue crab		$\times \times $	-	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
181	Blue crab		X X X X X X X X X X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC

Virginia: ESIMAP 51 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae Ju	veniles A	dults
182	Knobbed whelk		X X X X X X X X X X X X X X X X X X X	-	-	– JA	N-DEC J	AN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping Mo	olting	
18	Harbor porpoise		x x x x x x x	-	-	-	-	
20	Bottlenose dolphin		X X X X X X X	-	-	-	-	
181	Bottlenose dolphin Harbor porpoise		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	-	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	g Juveniles	Adults
23	Green sea turtle	тт	X X X X X X	-	-	-	MAY-NOV	
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
	Leatherback sea turtle	E E	$X\;X\;X\;X\;X\;X\;X$	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	T T	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
39	Green sea turtle	T T	X X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	-
	Leatherback sea turtle	E E	$X\ X\ X\ X\ X\ X$	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	ТТ	X X X X X X X	_	_	_	MAY-NOV	_

BIOLOGICAL RESOURCES:

BIRD:

RAR# Species

RAR#	Species		Conc.							Migrating		_	
	Bufflehead		HIGH	XXX				x x x		-	-		
	Canvasback		MODERATE	XXX				XXX		-	-		
	Common goldeneye Long-tailed duck		MODERATE	XXX				X X X X X X X X X X X X X X X X X X X			_		
	Mergansers			XXX							-		
	Mute swan		MODEDAME	XXX				XXX	- - -	-	-		
	Ring-necked duck Ruddy duck		MODERATE HIGH	XXX				XXX	- - -	_	_		
	Scaup		MODERATE	XXX				XXX	-	-	-		
	Scoters		HIGH MODERATE	XXX					-	-	-		
	Tundra swan		MODERATE	XXX	X			XXX	-	_	_		
FISH													
RAR#	Species	SF	Conc.	JFM	1 A	МЈ	JAS	SOND	Spawning	Eggs	Larvae	Juveniles	Adults
18	Alewife					X			-	-	-	-	FEB-JUN
	American eel							X X X		-	-	JAN-DEC	SEP-DEC
	American shad Atlantic croaker			XXX				$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	NOV-MAR AUG-DEC	JAN-JUN MAY-NOV
	Atlantic mackerel			X	Х		21 21 2	1 11 11 11	-	_	-	-	MAR-APR
	Atlantic menhaden							X X X		_	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside Atlantic spadefish			XXX	X	ХХ		XXX	MAR-JUL -	_	_	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic sturgeon	С		XXX					-	-	-	-	JAN-OCT
	Bay anchovy Black drum			XXX				X X X X X X X X X X X X X X X X X X X	APR-SEP APR-JUN	- APR-JUN	- APR-JUN	JAN-DEC APR-NOV	JAN-DEC APR-NOV
	Black sea bass						XXX		JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring			XXX				X X	-	-	-	NOV-MAR	JAN-JUN
	Bluefish Butterfish			X				X X X X X X	_	_	_	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Clearnose skate							XXX	-	-	-	-	MAY-NOV
	Gobies Harvestfish			XXX			X X X X		APR-SEP	APR-SEP -	APR-OCT	JAN-DEC JUL-OCT	JAN-DEC APR-OCT
	Hickory shad			XXX				XX		-	_	NOV-MAR	JAN-JUN
	Hogchoker								MAY-SEP		MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside Minnows								APR-MAY APR-AUG	-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog				Х	ХХ	X X X	X X X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern kingfish			V V V			XXX		- MAN TIM	-	-	- TAN DEG	APR-OCT
	Northern pipefish Northern puffer						XXX		MAY-JUN MAY-AUG	-	-	JAN-DEC MAR-OCT	JAN-DEC MAR-OCT
	Northern searobin			X			X X X		MAY-JUL	-	-	_	MAR-OCT
	Red drum Red hake			ХХ				XXX	JUL-NOV -	_	_	AUG-SEP FEB-MAY	MAY-NOV FEB-MAY
	ned have			21 21	1 21	21	2	1 21 21				I DD PRII	SEP-NOV
	Sandbar shark						XXX		-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy) Silver hake			XXX			XXX	X X X	-	-	_	JUN-OCT -	MAR-OCT OCT-MAY
	Silver perch			XXX	Х	ХХ	X X X	XXXX	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot Spotted hake							X X X X X X X X X X X X X X X X X X X	-	-	DEC-APR -		MAR-NOV
	spotted make			Δ	. A	ХХ	2		_	_	_	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout							XXX		-	-	APR-NOV	APR-NOV
	Striped bass Striped killifish							X	- APR-SEP	_	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Summer flounder							XXXX		_	OCT-MAY	JAN-DEC	APR-OCT
	Tautog			XXX				X X X		-	-	-	OCT-APR
	Threadfin shad			ХХ	X	Х	Σ	XXX	-	-	-	_	FEB-MAY SEP-NOV
	Weakfish				Χ	ХХ	ХХХ	XXX	APR-AUG		MAY-AUG	APR-NOV	APR-NOV
181	Alewife					ХХ		, ,, ,, ,,	-	-	_	- TAN DEG	FEB-JUN
	American eel American shad							X X X X X X X X X		_	_	JAN-DEC NOV-MAR	SEP-DEC JAN-JUN
	Atlantic croaker						X X X	X X X	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel Atlantic menhaden				X		x x x	XXXX	_	-	- MAY-NOV	- JAN-DEC	MAR-APR MAY-OCT
	Atlantic silverside								MAR-JUL		-	JAN-DEC	JAN-DEC
	Atlantic spadefish	0		17 17 1	, ,,	17 17		XXX	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon Bay anchovy	С		X X X X X X					- APR-SEP	-	_	- JAN-DEC	JAN-OCT JAN-DEC
	Black drum				Х	ХХ	X X X	XXX	APR-JUN	APR-JUN		APR-NOV	APR-NOV
	Black sea bass Blueback herring			v v v			XXX	X X X X	JUN-OCT -	-	-	APR-OCT NOV-MAR	APR-OCT JAN-JUN
	Bluefish			21 21 21				XXX	-	-	-	MAY-NOV	APR-NOV
	Butterfish			X				XXX	-	-	_	JUL-NOV -	MAR-NOV
	Clearnose skate Gobies			XXX				X X X X X X X X X X X X X X X X X X X	- APR-SEP	- APR-SEP	- APR-OCT	- JAN-DEC	MAY-NOV JAN-DEC
	Harvestfish						X X X		-	-	-	JUL-OCT	APR-OCT
	Hickory shad Hogchoker							X X X X X	- MAY-SEP	- MAY-SEP	- MAY-SEP	NOV-MAR JAN-DEC	JAN-JUN JAN-DEC
	Inland silverside			XXX	Х	ХХ	X X X	XXXX	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Minnows Mummichog								APR-AUG APR-AUG	-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish			ллХ			XXX		APR-AUG	-	-	JAN-DEC	APR-OCT
	Northern pipefish				Х	ХХ	X X X	XXXX	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer Northern searobin						XXXX		MAY-AUG MAY-JUL	-	-	MAR-OCT -	MAR-OCT MAR-OCT
	Red drum					ХХ	X X X	XXX	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake			X X	X	Х	X	XXX	-	-	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark					ХХ	X X X	XX	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)						X X X		-	-	-	JUN-OCT	MAR-OCT
	Silver hake Silver perch			X X X			X X X		- APR-MAY	-	_	- JAN-DEC	OCT-MAY JAN-DEC
	Spot			XXX	Х	ХХ	X X X	XXXX	-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake			X	ХХ	ХХ	X	XXX	-	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout				Х	ХХ	XXX	XXX	MAY-JUL	_	_	APR-NOV	SEP-NOV APR-NOV
	Striped bass				Х	ХХ	X X X	XXXX	-	-	-	JAN-DEC	JAN-DEC
	Striped killifish Summer flounder							X X X X X X X X X X X X X X X X X X X	APR-SEP -	_	- OCT-MAY	JAN-DEC JAN-DEC	JAN-DEC APR-OCT
	Tautog			XXX	Х			X X X		-	-	-	OCT-APR
	Threadfin shad			XX	X	Χ	X	XXX	-	-	-	-	FEB-MAY
	Weakfish				Х	ХХ	ххх	XXX	APR-AUG	_	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
T 2 TT T							2		1100		_ 1100		2.0 v
	RTEBRATE:		'Conc.	.T 12 **	<i>(</i>	м т	т х с	2 0 27 5	Cnar	Face	T. 2 **** 2	Juren: 1	Adults
KAK#	Species			∪ r M	- A	 M J			Spawning		Larvae	Juveniles	Aduits
16	Northern quahog (hard clam)			XXX	Х	ХХ	X X X	XXXX	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

Virginia: ESIMAP 52 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae J	uveniles	Adults
18	Horseshoe crab		x x x x x x x x x x x x x	-	-	– J	AN-DEC	JAN-DEC
	Knobbed whelk		$X\;X\;X\;X\;X\;X\;X\;X\;$	-	-	- J	AN-DEC	JAN-DEC
115	Eastern oyster		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	JUN-SEP	JUN-SEP	JUN-SEP J	AN-DEC	JAN-DEC
128	Blue crab		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	MAY-SEP	MAY-NOV J	AN-DEC	JAN-DEC
181	Blue crab		$X\;X\;X\;X\;X\;X\;X\;X\;$	-	-	MAY-NOV J	AN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping M	olting	
18	Harbor porpoise		X X X X X X X	-	-	_	-	
20	Bottlenose dolphin		X X X X X X X	_	-	_	_	
181	Bottlenose dolphin		X X X X X X X	-	-	-	_	
	Harbor porpoise		$X \ X \ X \ X \ X \qquad \qquad X$	-	-	-	-	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internestin	g Juvenile	es Adults
23	Green sea turtle	тт	X X X X X X	-	-	-	MAY-NOV	
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	т т	$X \ X \ X \ X \ X \ X$	-	-	-	MAY-NOV	MAY-NOV
39	Leatherback sea turtle	E E	$X \ X \ X \ X \ X \ X$	-	-	-	_	MAY-NOV
	Loggerhead sea turtle	TT	X X X X X X X	-	-	-	MAY-NOV	_
	Green sea turtle	TT	X X X X X X X	-	-	-	MAY-NOV	_
	Kemp's ridley sea turtle	E E	$\times \times \times \times \times \times \times$	-	-	-	MAY-NOV	-

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
99	BETHEL BEACH NATURAL AREA PRESERVE	VA DCR DNH	804/445-9117

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD	:											
RAR#	Species	S F	Conc.	JFM	IAMJJ	JAS	OND	Nesting	Migrating	Molting		
163	American black duck		MODERATE	 X X X	·		 X X X				-	
103	American wigeon		MODERATE	XXX			XXX	_	_	_		
	Brant		1102214112	XXX			XXX	_	_	_		
	Canada goose		HIGH	XXX	XX		X X X	-	-	-		
	Gadwall		MODERATE	XXX			X X X	-	-	-		
161	Mallard Bufflehead		MODERATE HIGH	XXX			X X X X X X X X X X X X X X X X X X X		_	-		
104	Canvasback		MODERATE	XXX			XXX		_	_		
	Common goldeneye			XXX			XXX		_	_		
	Long-tailed duck		MODERATE	XXX			X X X		-	-		
	Mergansers			XXX			XXX		-	-		
	Mute swan Ring-necked duck		MODERATE	XXX			X X X X X X X X X X X X X X X X X X X		_	-		
	Ruddy duck		HIGH	XXX			XXX		-	_		
	Scaup		MODERATE	XXX			X X X	-	-	-		
	Scoters		HIGH	XXX			XXX	-	-	-		
394	Tundra swan Great blue heron		MODERATE 9 NESTS	XXX		x x x	XXX	- MAY-JUL	_	_		
	Great blue heron		3 NESTS					MAY-JUL	_	_		
412	Great blue heron		6 NESTS	XXX	XXXXX	X X X	X X X	MAY-JUL	-	-		
444	Great blue heron		24 NESTS					MAY-JUL	-	-		
447 460	Great blue heron Great blue heron		16 NESTS 110 NESTS					MAY-JUL MAY-JUL	_	_		
400	Great blue heloh		IIO NESIS	AAA	AAAA	A A A	AAA	MAI OUL				
FISH	:											
RAR#	•		Conc.	JFM	IAMJJ	JAS	OND	Spawning	Eggs	Larvae	Juveniles	Adults
1.0	Alewife			 v v	 :							FEB-JUN
10	American eel				XXXXX	XXX	ххх	_	_	_	JAN-DEC	SEP-DEC
	American shad			XXX	XXXX		ХХ	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker					XXX	XXX	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel Atlantic menhaden				X X X X X X X	v v v	v v v	_	_	- MAY-NOV	- JAN-DEC	MAR-APR MAY-OCT
	Atlantic silverside							MAR-JUL	_	-	JAN-DEC	JAN-DEC
	Atlantic spadefish					ХХ		-	-	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С			XXXXX			-	-	-	-	JAN-OCT
	Bay anchovy Black drum			XXX	X			APR-SEP APR-JUN	- APR-JUN	- APR-JUN	JAN-DEC APR-NOV	JAN-DEC APR-NOV
	Black sea bass				XXXXX			JUN-OCT	- 171 I/ O O IN	- '71' 1/ OOM	APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring			XXX	XXXX		XX	-	-	-	NOV-MAR	JAN-JUN
	Bluefish				XXXX			-	-	-	MAY-NOV	APR-NOV
	Butterfish Clearnose skate			Х	XXXXX			_	_	_	JUL-NOV -	MAR-NOV
	Gobies			x x x		X X X X X X X X X X X X X X X X X X X		- APR-SEP	APR-SEP	APR-OCT	JAN-DEC	MAY-NOV JAN-DEC
	Harvestfish			21 21 2	XXXX			-	-	-	JUL-OCT	APR-OCT
	Hickory shad			XXX	XXXX		ХХ	-	-	-	NOV-MAR	JAN-JUN
	Hogchoker							MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside Minnows							APR-MAY APR-AUG	_	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog							APR-AUG	_	_	JAN-DEC	JAN-DEC
	Northern kingfish				X X X X			-	-	-	-	APR-OCT
	Northern pipefish							MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer Northern searobin				$X \times X \times$			MAY-AUG MAY-JUL	_	-	MAR-OCT	MAR-OCT MAR-OCT
	Red drum			21		XXX		JUL-NOV	_	_	AUG-SEP	MAY-NOV
	Red hake			XX	XXX			-	-	-	FEB-MAY	FEB-MAY
	_ , , ,											SEP-NOV
	Sandbar shark Scup (porgy)			v	X			_	_	_	MAY-OCT JUN-OCT	MAY-OCT MAR-OCT
	Silver hake			XXX			XXX		_	_	- -	OCT-MAY
	Silver perch							APR-MAY	-	_	JAN-DEC	JAN-DEC
	Spot				XXXXX				-		MAR-NOV	MAR-NOV
	Spotted hake			Х	XXXX	Х	ХХ	-	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout				XXXX	x x x	x x	MAY-JUL	_	_	APR-NOV	APR-NOV
	Striped bass			XXX	XXXXX				-	-	JAN-DEC	JAN-DEC
	Striped killifish							APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder				X				_	OCT-MAY	JAN-DEC	APR-OCT
	Tautog Threadfin shad			XXX	XXX		X X X X X X X X X X X X X X X X X X X	_	_	_	-	OCT-APR FEB-MAY
	Inicadiii bhad			21 2	1 11 11	21	21 21					SEP-NOV
	Weakfish				X X X X	X X X	ХХ	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
181	Alewife				XXXX			-	-	-	-	FEB-JUN
	American eel American shad				X	XXX	XXX		_	-	JAN-DEC NOV-MAR	SEP-DEC JAN-JUN
	Atlantic croaker			ΔΛΛ		ххх	XXX		-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel				X			_	-	-	-	MAR-APR
	Atlantic menhaden				XXXXX			- MAD TIII			JAN-DEC	MAY-OCT
	Atlantic silverside Atlantic spadefish			ххх	XXXX	X X X X X		MAR-JUL -	_	-	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic spacerism Atlantic sturgeon	С		ххх	XXXXX			-	-	-	AUG-UCI -	JAN-OCT
	Bay anchovy				XXXXX	X X X	X X X	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum				XXXX			APR-JUN			APR-NOV	APR-NOV
	Black sea bass Blueback herring			V V **	XXXX		X X X	JUN-OCT -	_	-	APR-OCT	APR-OCT
	Bluefish			AXX	$\begin{array}{cccccccccccccccccccccccccccccccccccc$			-	_	_	NOV-MAR MAY-NOV	JAN-JUN APR-NOV
	Butterfish			Х	XXXXX			-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate					X X X		-	= .	-	-	MAY-NOV
	Gobies Harvestfish			XXX	X X X X X X X X X X X X X X X X X X X			APR-SEP	APR-SEP	APR-OCT	JAN-DEC JUL-OCT	JAN-DEC APR-OCT
	Harvestiish Hickory shad			XXX	XXXX XXXX	. A X	X X X	_	_	_	NOV-MAR	JAN-JUN
	Hogchoker					X X X		MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside							APR-MAY	-	-	JAN-DEC	JAN-DEC
	Minnows Mummichog							APR-AUG APR-AUG	_	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish								_		JAN-DEC -	APR-OCT
	Northern pipefish							MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer			X	XXXXX	X X X	X	MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin			Х				MAY-JUL	-	-	-	MAR-OCT
	Red drum Red hake			ΛΛ	XXX XXX		X X X X	JUL-NOV -	_	-	AUG-SEP FEB-MAY	MAY-NOV FEB-MAY
	ICA HARE			A X	Δ Λ Λ	X	ΛΛ	=	-	-	T HII – UII I	SEP-NOV
	Sandbar shark				XXX			-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)				XXXXX			-	-	-	JUN-OCT	MAR-OCT
	Silver hake Silver perch				X		XXX	- APR-MAY	_	-	- JAN-DEC	OCT-MAY JAN-DEC
	Spot				XXXXX				_		MAR-NOV	MAR-NOV
	Spotted hake				XXXX			-	-	-	MAR-JUN	MAR-JUN
	Constitution of the contract o				77 · · ·	.,	.,	14777			1DD 110	SEP-NOV
	Spotted seatrout				XXXX	ххх	хх	MAY-JUL	-	-	APR-NOV	APR-NOV

Virginia: ESIMAP 53 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH	: (cont.)							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae d	Juveniles	Adults
181	Striped bass		X X X X X X X X X X X X X X X X X X X	-	-		JAN-DEC	JAN-DEC
	Striped killifish		imes ime	APR-SEP	-		JAN-DEC	JAN-DEC
	Summer flounder		imes ime	-	-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog		$X X X X \qquad \qquad X X X$	-	-	-	_	OCT-APR
	Threadfin shad		X X X X X X X X	-	-	-	-	FEB-MAY
	Weakfish		X X X X X X X X	APR-AUG	_	MAY-AUG A	APR-NOV	SEP-NOV APR-NOV
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae d	Juveniles	Adults
16	Northern quahog (hard clam)			MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
	Horseshoe crab		$\times \times $		_		JAN-DEC	JAN-DEC
	Knobbed whelk		imes ime	-	-	- 3	JAN-DEC	JAN-DEC
115	Eastern oyster		imes ime	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
128	Blue crab		imes ime	-	MAY-SEP	MAY-NOV .	JAN-DEC	JAN-DEC
181	Blue crab		$\times \times $	-	-	MAY-NOV .	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping 1	Molting	
18	Harbor porpoise		X	-	-	-	-	
20	Bottlenose dolphin		X X X X X X X	-	-	-	-	
181	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Harbor porpoise		X X X X X X	-	-	_	_	
REPT	'ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesti	ng Juvenil	es Adults
23	Green sea turtle	тт	X X X X X X X	-	-	-	MAY-NOV	
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	т т	X X X X X X X	_	-	_	MAY-NOV	MAY-NOV
39	Green sea turtle	т т	X X X X X X X	_	-	_	MAY-NOV	_
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	_
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	ТТ	X X X X X X X	-	-	-	MAY-NOV	_

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
58 59	AQUACULTURE: OYSTERS SEA FARMS, INC.: HARD CLAM RELAY	RON SOPKO	804/725-9113
MANAG	EMENT AREA:		

HUN#	Name	Contact	Phone
99	BETHEL BEACH NATURAL AREA PRESERVE	VA DCR DNH	804/445-9117

BIOLOGICAL RESOURCES:

В	I	R	D	:

BIRD		C. F. Cono	TEM	2 M T	T 3 C	0 N D	Nachina	Wi anahi na	. Waltin	_	
	Species	S F Conc.	J F M 2	A M J	J A S (Nesting	Migrating	Molting		
163	American black duck	MODERATE	XXXX			X X X X X X X X X X X X X X X X X X X		-	-		
	American wigeon Brant	MODERATE	XXXX			x x x		_	_		
	Canada goose	HIGH	$X \times X \times X$			X X X		-	-		
	Gadwall Mallard	MODERATE MODERATE	$\begin{array}{c} X \ X \ X \ X \end{array}$			X X X X X X X X X X X X X X X X X X X		_	_		
64	Bufflehead	HIGH	XXXX			XXX		-	-		
	Canvasback	MODERATE	XXXX			XXX		-	-		
	Common goldeneye Long-tailed duck	MODERATE	$\begin{array}{c} X \ X \ X \ X \end{array}$			X X X X X X X X X X X X X X X X X X X		_	_		
	Mergansers	1102211112	XXXX			XXX		-	-		
	Mute swan		X X X X			XXX		-	-		
	Ring-necked duck Ruddy duck	MODERATE HIGH	$\begin{array}{c} X & X & X & X \\ X & X & X & X \end{array}$			X X X X X X X X X X X X X X X X X X X		- -	_		
	Scaup	MODERATE	XXXX			XXX		-	-		
	Scoters	HIGH	XXXX			XXX	-	-	-		
392	Tundra swan Great blue heron	MODERATE 13 NESTS	XXXX			X X X X X X X X X X X X X X X X X X X	- MAY-JUL	_	_		
ISH		S.E.Cono	TEM	2 M T	T 3 C	0 N D	Cmarmina	Tana	T aa	Turnami laa	Adults
\R# 	Species	S F Conc.	J F M 1	A M J			Spawning	Eggs	Larvae	Juveniles	Adults
18	Alewife			ххх			-	-	-	-	FEB-JUN
	American eel				XXXX			-	-	JAN-DEC	SEP-DEC
	American shad Atlantic croaker		XXXX		XXXX	X X X X X X X X X X X X X X X X X X X		_	_	NOV-MAR AUG-DEC	JAN-JUN MAY-NOV
	Atlantic mackerel		X X	X			-	-	-	-	MAR-APR
	Atlantic menhaden				XXXX		— MAD 3113	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside Atlantic spadefish		XXXX	x x x	XXXX		MAR-JUL -	_	-	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic sturgeon	С	X X X X	ххх	XXXX		-	-	-	-	JAN-OCT
	Bay anchovy						APR-SEP	- TIM	- 7.DD TIM	JAN-DEC	JAN-DEC
	Black drum Black sea bass				XXXX		APR-JUN JUN-OCT	APR-JUN -	APR-JUN -	APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring		XXXX			ХХ		-	-	NOV-MAR	JAN-JUN
	Bluefish				XXXX		-	-	-	MAY-NOV	APR-NOV
	Butterfish Clearnose skate		X 2		XXXXX		_	_	_	JUL-NOV -	MAR-NOV MAY-NOV
	Gobies		XXXX				APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish				XXXX		-	_	-	JUL-OCT	APR-OCT
	Hickory shad Hogchoker		XXXX			XX	- MAY-SEP	- MAY-SEP	- MAY-SEP	NOV-MAR JAN-DEC	JAN-JUN JAN-DEC
	Inland silverside						APR-MAY	-	-	JAN-DEC	JAN-DEC
	Minnows						APR-AUG	_	-	JAN-DEC	JAN-DEC
	Mummichog Northern kingfish				XXXX		APR-AUG -	_	_	JAN-DEC -	JAN-DEC APR-OCT
	Northern pipefish						MAY-JUN	_	-	JAN-DEC	JAN-DEC
	Northern puffer				XXXX		MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin Red drum		X 2		XXXXX			_	_	- AUG-SEP	MAR-OCT MAY-NOV
	Red hake		XXX			ХХ	-	-	-	FEB-MAY	FEB-MAY
						_					SEP-NOV
	Sandbar shark Scup (porgy)		X S		XXXX		-	_	_	MAY-OCT JUN-OCT	MAY-OCT MAR-OCT
	Silver hake		XXXX			XXX	-	-	-	-	OCT-MAY
	Silver perch						APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot Spotted hake				XXXX		_	_	DEC-APR -	MAR-NOV MAR-JUN	MAR-NOV MAR-JUN
	Trouble training										SEP-NOV
	Spotted seatrout				XXXX			-	-	APR-NOV	APR-NOV
	Striped bass Striped killifish				XXXX		- APR-SEP	_	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Summer flounder				XXXX			-		JAN-DEC	APR-OCT
	Tautog		XXXX			XXX		_	-	-	OCT-APR
	Threadfin shad		XXX	XX	X 2	XX	-	_	-	_	FEB-MAY SEP-NOV
	Weakfish		2	X X X	X X X 3	ХХ	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
JVF:	RTEBRATE:										
	Species	S F Conc.	JFM	A M J	JAS	OND	Spawning	Eaas	Larvae	Juveniles	Adults
	Northern quahog (hard clam) Horseshoe crab		X				MAY-OCT -	MAY-OCT	MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
10	Knobbed whelk				XXXX			_	_	JAN-DEC JAN-DEC	JAN-DEC
	Eastern oyster							JUN-SEP		JAN-DEC	JAN-DEC
.28	Blue crab		XXXX	XXX	XXXX	XXX	-	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
ARI	NE MAMMAL:										
	Species	S F Conc.					Mating	Calving		Molting	
	Harbor porpoise Bottlenose dolphin		X X X X	ХХ		Х		-	-	- - -	
EPT	ILE:										
AR#	Species	S F Conc.					Nesting		Internest	ting Juvenil	es Adults
	Green sea turtle	ТТ			XXXX		-	_	-	MAY-NOV	
		E E			XXXX			-	-	MAY-NOV	
		E E		ΧХ	X X X X	ΧХ	-	-	-	-	
	Leatherback sea turtle Loggerhead sea turtle	T T		χv	X X X X	X X	_	_	_	MAY-NOV	MAY-NO

AQUACULTURE:

HUN#	Name	Contact	Phone
58	AQUACULTURE: OYSTERS		

BIOLOGICAL RESOURCES:

В	I	R	D	:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
138	Bufflehead	MODERATE	X X X X X X X X X	-	-		_	
	Canvasback	HIGH	$X \ X \ X \ X$ $X \ X \ X$	-	-	-		
	Eared grebe		$X \ X \ X \ X $	-	-	-		
	Horned grebe		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Mergansers		X X X X X X X X	-	-	-		
	Ring-necked duck Ruddy duck	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Scaup	MODERATE	X X X X X X X X X	_	_	_		
	Tundra swan	HOBERTE	X X X X X X X X	_	_	_		
165	American black duck	MODERATE	$X X X X \qquad \qquad X X X$	-	-	-		
	American wigeon		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Canada goose	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Green-winged teal		X X X X X X X X X	-	-	-		
105	Mallard Bufflehead	MODERATE	X X X X X X X X X X X X X X X X X X X	_	_	_		
100	Canvasback	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Mergansers	111011	X X X X X X X X	_	_	_		
	Ring-necked duck	HIGH	$X X X X \qquad \qquad X X X$	-	-	-		
	Ruddy duck	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Scaup	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
204	Tundra swan	0 NEGEG	X X X X X X X X X	-	-	-		
	Great blue heron Great blue heron	9 NESTS 32 NESTS	X X X X X X X X X X X X X X X X X X X		_	_		
404	Great blue heron	27 NESTS	X X X X X X X X X X X X X		_	_		
	Great blue heron	5 NESTS	X X X X X X X X X X X X		_	_		
	Great blue heron	3 NESTS	$\times \times $		-	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
166	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel		imes ime	-	-	_	JAN-DEC	_
	American shad		X X X X X	-	-	-	-	FEB-JUN
	Atlantic croaker		$\times \times $	-	-	-	JAN-DEC	-
	Atlantic menhaden		X X X X X X X	-	-	-	MAY-NOV	-
	Atlantic silverside Bay anchovy		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Blueback herring		XXXXX	AIR SEI	_	_	- DEC	FEB-JUN
	Hickory shad		XXXXX	_	_	_	_	FEB-JUN
	Hogchoker		$\mathbf{X} \ \mathbf{X} \ \mathbf{X}$	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Silver perch		X X X X X X X X X X X X X	-	-		JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X X X X X X X	-	-	DEC-APR	APR-NOV -	- -
	Striped bass Striped killifish		X X X X X X X X X X X X X X X X X X X	- APR-SEP	_	_	JAN-DEC	OCT-JUN JAN-DEC
	Summer flounder		X X X X X X X X X X X X X	-	_	_	JAN-DEC	-
	Weakfish		imes ime	-	-	_	JAN-DEC	_
	White perch		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
184	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel American shad		X X X X X X X X X X X X X X X X X X X	-	_	_	JAN-DEC -	- -
	Atlantic croaker		$\begin{array}{c} X\;X\;X\;X\;X\;X\\ X\;X\;X\;X\;X\;X\;X\;X\;$	_	_	_	JAN-DEC	FEB-JUN -
	Atlantic menhaden		XXXXXXX	_	_	_	MAY-NOV	-
	Atlantic silverside		imes ime	MAR-JUL	-	_	JAN-DEC	JAN-DEC
	Bay anchovy		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X	-	-	-	-	FEB-JUN
	Channel catfish		X X X X X X X X X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Hickory shad Hogchoker		X X X X X X X X X X X X X X X X X X X	_	_	_	- JAN-DEC	FEB-JUN -
	Longnose gar		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Silver perch		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Spot		$\times \times $	-	-	DEC-APR	MAR-NOV	JAN-DEC
	Striped bass		X X X X X X X X X X X		-	-		OCT-JUN
	Striped killifish		X X X X X X X X X X X X X X X X X X X	APR-SEP	_	_	JAN-DEC JAN-DEC	JAN-DEC -
	Summer flounder Weakfish		X X X X X X X X X X X X X X X X X X X	_	_	_	JAN-DEC JAN-DEC	_
	White catfish		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	White perch		X X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Blue crab		X X X X X X X X X X X X X X X X X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Blue crab		XXXXXXXXXXX	-	- 	MAY-NOV	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

PARK:

HUN#	Name	Contact	Phone
144	YORK RIVER STATE PARK	VA DCR	757/566-3036

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	Г	
165	American black duck	MODERATE	X X X X X X X X X X	-	-	-	· -	
	American wigeon		$X X X X \qquad X X X$	-	-	-		
	Canada goose	MODERATE	$X X X X \qquad X X X$	-	-	-		
	Green-winged teal		$X \ X \ X \ X$ $X \ X \ X$	-	-	_		
	Mallard		$X \ X \ X \ X$ $X \ X \ X \ X$	_	-	_		
185	Bufflehead	MODERATE	$X \ X \ X \ X$ $X \ X \ X \ X$	_	-	_		
	Canvasback	HIGH	$X \ X \ X \ X$ $X \ X \ X$	-	-	_		
	Mergansers		$X \ X \ X \ X$ $X \ X \ X$	-	-	_		
	Ring-necked duck	HIGH	$X \ X \ X \ X$ $X \ X \ X$	-	-	_		
	Ruddy duck	HIGH	$X X X X \qquad X X X$	-	-	_		
	Scaup	MODERATE	$X X X X \qquad X X X$	-	-	_		
	Tundra swan		$X X X X \qquad X X X$	-	-	_		
393	Great blue heron	2 NESTS	X	MAY-JUL	-	_		
411	Great blue heron	3 NESTS	X X X X X X X X X X X X	MAY-JUL	-	_		
521	Great blue heron	65 NESTS	imes ime	MAY-JUL	-	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
184	Alewife		XXXXX	-	-	-	-	FEB-JUN
	American eel		imes ime	-	-	-	JAN-DEC	-
	American shad		X X X X X	-	-	-	-	FEB-JUN
	Atlantic croaker		imes ime	-	-	-	JAN-DEC	_
	Atlantic menhaden		X X X X X X X	-	-	_	MAY-NOV	_
	Atlantic silverside		X X X X X X X X X X X X	MAR-JUL	-	_	JAN-DEC	JAN-DEC
	Bay anchovy		X X X X X X X X X X X X	APR-SEP	-	_	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X	-	-	_	_	FEB-JUN
	Channel catfish		x	_	_	_	_	JAN-DEC
	Hickory shad		X X X X X	_	_	_	_	FEB-JUN
	Hogchoker		x	_	_	_	JAN-DEC	_
	Longnose gar		x		_	_	_	JAN-DEC
	Mummichog		x		_	_	JAN-DEC	JAN-DEC
	Silver perch		x		_	_	JAN-DEC	JAN-DEC
	Spot		x		_	DEC-APR	MAR-NOV	JAN-DEC
	Striped bass		X X X X X X X X X X		_	_	_	OCT-JUN
	Striped killifish		x x x x x x x x x x x x x	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Summer flounder		X X X X X X X X X X X X		_	_	JAN-DEC	_
	Weakfish		X X X X X X X X X X X X		_	_	JAN-DEC	_
	White catfish		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	White perch		x x x x x x x x x x x x x		-	-	JAN-DEC	JAN-DEC
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
184	Blue crab					MAY-NOV	JAN-DEC	JAN-DEC

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD	:							
RAR#	Species S	F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	_	
165	American black duck	MODERATE	$\mathbf{x} \; \mathbf{x} \; \mathbf{x} \; \mathbf{x} \qquad \qquad \mathbf{x} \; \mathbf{x} \; \mathbf{x}$	_	_	_		
	American wigeon		$\times \times $	-	-	-		
	Canada goose Green-winged teal	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Mallard		X X X X X X X X X	-	_	-		
168	King rail	VERY HIGH	X X X X X X X X X X X X X	APR-MAY	-	-		
	Sora Virginia rail	VERY HIGH VERY HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- APR-MAY	_	_		
	Wood duck	VERTIFICATION	$\times \times $		-	-		
185	Bufflehead	MODERATE	X X X X X X X X	-	-	-		
	Canvasback Mergansers	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Ring-necked duck	HIGH	X X X X X X X X	-	-	-		
	Ruddy duck	HIGH	X X X X X X X X	-	-	-		
	Scaup Tundra swan	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
212	American black duck	HIGH		-	-	-		
	American wigeon	IITCII	X X X X X X X X	-	-	-		
	Canada goose Canvasback	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Green-winged teal	MODERATE	$X\;X\;X\;X$	-	_	-		
	Mallard	HIGH	X X X X X X X X X	-	-	-		
	Mergansers Northern pintail		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Ring-necked duck	MODERATE		-	-	-		
212	Tundra swan	MODEDATE	X X X X X X X X	-	-	-		
213	American black duck American wigeon	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Canada goose	HIGH	$X\;X\;X\;X$	-	_	-		
	Canvasback		X X X X X X X X	-	-	-		
	Gadwall Green-winged teal		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Mallard	MODERATE	$X\;X\;X\;X$	-	_	-		
200	Ring-necked duck	CO NIDOMO	X X X X X X X X X X X X X X X X X X X	- MAN TIIT	-	-		
	Great blue heron Great blue heron	63 NESTS 6 NESTS	X X X X X X X X X X X X X X X X X X X		_	_		
FISH								
RAR#	Species S	F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
55	Alewife		X X X X X	FEB-JUN	FEB-JUN	-	_	FEB-JUN
	Blueback herring		X X X X X	FEB-JUN	FEB-JUN	-	-	FEB-JUN
184	Alewife American eel		X X X X X X X X X X X X X X X X X X X	_	_	_	- JAN-DEC	FEB-JUN -
	American shad		XXXXX	-	_	-	-	FEB-JUN
	Atlantic croaker		$\times \times $	-	-	-	JAN-DEC	-
	Atlantic menhaden Atlantic silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAR-JIII.	_	_	MAY-NOV JAN-DEC	- JAN-DEC
	Bay anchovy		$X \times X \times X \times X \times X \times X \times X \times X$		_	-	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X	-	-	-	-	FEB-JUN
	Channel catfish Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	-	JAN-DEC FEB-JUN
	Hogchoker		$X \times X \times$	-	_	-	JAN-DEC	
	Longnose gar		X X X X X X X X X X X X X		-	-	_	JAN-DEC
	Mummichog Silver perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG -	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Spot		\times	-	_		MAR-NOV	JAN-DEC
	Striped bass		$\times \times $	-	-	-	-	OCT-JUN
	Striped killifish Summer flounder		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP -	-	_	JAN-DEC JAN-DEC	JAN-DEC -
	Weakfish		\times	-	_	-	JAN-DEC	-
	White catfish		X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
214	White perch Alewife		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	- FEB-JUN	- FEB-JUN	JAN-DEC FEB-OCT	JAN-DEC FEB-JUN
211	American eel		$\times \times $		-	-	JAN-DEC	-
	American shad		X X X X X X X X X	-	FEB-JUN		FEB-OCT	FEB-JUN
	Atlantic croaker Atlantic menhaden		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	JAN-DEC MAY-NOV	-
	Bay anchovy		\times		_	-	JAN-DEC	JAN-DEC
	Black crappie		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Blue catfish Blueback herring		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN -	- FEB-JUN	- FEB-JUN	JAN-DEC FEB-OCT	JAN-DEC FEB-JUN
	Bluegill		$\times \times $		-	-	-	JAN-DEC
	Channel catfish		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Hickory shad Hogchoker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	FEB-JUN -	FEB-JUN -	FEB-OCT JAN-DEC	FEB-JUN -
	Inland silverside		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Largemouth bass		X X X X X X X X X X X X X		-	-	- TAN DEG	JAN-DEC
	Longnose gar Minnows		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	- -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$		-	-	JAN-DEC	JAN-DEC
	Pumpkinseed		X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish Striped bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUN-JUL FEB-JUN	- FEB-JUN	- FEB-JUN	JAN-DEC FEB-OCT	JAN-DEC FEB-JUN
	Tessellated darter		$\times \times $		-	-	-	JAN-DEC
	White catfish		X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	White perch Yellow perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
215	American eel		$\times \times $		-	-	JAN-DEC	-
	American shad Atlantic croaker		X X X X X X X X X	-	FEB-JUN -	FEB-JUN -	FEB-OCT	-
	Atlantic croaker Atlantic menhaden		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	JAN-DEC MAY-NOV	-
	Bay anchovy		\times \times \times \times \times \times \times \times \times		-	-	JAN-DEC	JAN-DEC
	Black crappie		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Blue catfish Bluegill		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	JAN-DEC -	JAN-DEC JAN-DEC
	Channel catfish		$\times \times $	MAR-MAY	-	-	JAN-DEC	JAN-DEC
	Hickory shad		X X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker Inland silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- APR-MAY	-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Largemouth bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	-	JAN-DEC
	Longnose gar		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Minnows Mummichoq		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Pumpkinseed		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		- EED TIIN	-	JAN-DEC	JAN-DEC
	Striped bass Tessellated darter		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FEB-JUN APR-JUN	FEB-JUN -	FEB-JUN -	FEB-OCT	FEB-JUN JAN-DEC
	Weakfish		X X X X X X X X X X X X X X X X X X X	-	-	-	JAN-DEC	-

Virginia: ESIMAP 57 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH: (cont.)

1 101	· (COIIC.)									
RAR#	Species	S F Conc.	JFMA	MJJA	S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
215	White catfish White perch Yellow perch Alewife		X X X X X	X	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUN - APR-JUN -	- - - -	- - - -	JAN-DEC JAN-DEC JAN-DEC FEB-OCT	JAN-DEC JAN-DEC JAN-DEC
INVE	RTEBRATE: Species	S F Conc.	J F M F	M J J A	s o n d	Spawning	Eggs	Larvae	Juveniles	Adults
184 214	Blue crab Blue crab			X X X X X X X X X X X X X X X X X X X			-	MAY-NOV MAY-NOV	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC

BIOLOGICAL RESOURCES:

ъ	т	D	_	

BIRD	:										
RAR#	Species	S F Conc.	J F M	AMS	JJA	SONE	Nesting	Migrating	Molting	_	
	King rail Sora	VERY HIGH VERY HIGH				XXXXX	APR-MAY	 -	-		
	Virginia rail	VERY HIGH					APR-MAY	_	_		
	Wood duck				X X X		APR-JUN	-	-		
212	American black duck	HIGH	X X X X X X X X X X X X X X X X X X X			XXX		-	-		
	American wigeon Canada goose	HIGH	XXX			XXX		_	_		
	Canvasback		XXX			XXX		_	_		
	Green-winged teal	MODERATE	X X X	Χ		XXX		-	-		
	Mallard	HIGH	XXX			XXX		-	-		
	Mergansers Northern pintail		X X X X X X			XXX		_	_		
	Ring-necked duck	MODERATE	XXX			XXX		_	_		
	Tundra swan		X X X	Х		XXX		-	-		
217	Canada goose	HIGH	XXX			XXX		-	-		
394	Tundra swan Great blue heron	9 NESTS	XXX		. v .	XXX	 MAY-JUL	_	_		
	Great blue heron	10 NESTS					MAY-JUL	_	_		
439	Great blue heron	8 NESTS	X X X	ХХХ	X X X	XXXXX	MAY-JUL	-	-		
rish	:										
RAR#	Species	S F Conc.	J F M	A M S	JJA	SONE	Spawning	Eggs	Larvae	Juveniles	Adults
55	Alewife	 	X X	XXX	Κ -		FEB-JUN	FEB-JUN	_	-	FEB-JUN
	Blueback herring			ΧХΣ			FEB-JUN	FEB-JUN			FEB-JUN
214	Alewife American eel			XXX			_	FEB-JUN	FEB-JUN -	FEB-OCT JAN-DEC	FEB-JUN -
	American eel American shad			XXX		<pre></pre>	. -	- FEB-JUN	- FEB-JUN	JAN-DEC FEB-OCT	- FEB-JUN
	Atlantic croaker					XXXXX	_	-	-	JAN-DEC	-
	Atlantic menhaden					XXXX	-	-	-	MAY-NOV	-
	Bay anchovy Black crappie						APR-SEP MAR-JUL	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Blue catfish						APR-JUN	_	_	JAN-DEC	JAN-DEC
	Blueback herring			ХХХ			-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill						APR-SEP	-	-	-	JAN-DEC
	Channel catfish						MAR-MAY	- FEB-JUN	- FEB-JUN	JAN-DEC FEB-OCT	JAN-DEC FEB-JUN
	Hickory shad Hogchoker			XXX		X X X X	- -	- -	- -	JAN-DEC	- GB-JUN
	Inland silverside						APR-MAY	_	_	JAN-DEC	JAN-DEC
	Largemouth bass						MAR-MAY	-	-	-	JAN-DEC
	Longnose gar Minnows						MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Mummichog						APR-AUG APR-AUG	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Pumpkinseed						MAR-JUN	_	_	JAN-DEC	JAN-DEC
	Redbreast sunfish		X X X	ХХХ	X X X	XXXXX	JUN-JUL	-	-	JAN-DEC	JAN-DEC
	Striped bass			XXX			FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Tessellated darter White catfish						APR-JUN MAY-JUN	_	-	- JAN-DEC	JAN-DEC JAN-DEC
	White perch					XXXXX		_	_	JAN-DEC	JAN-DEC
	Yellow perch						APR-JUN	-	-	JAN-DEC	JAN-DEC
216	Alewife			XXX			-	FEB-JUN		FEB-OCT	FEB-JUN
	American shad Atlantic croaker			XXX		x x x x x x x x	- : -	FEB-JUN -	FEB-JUN -	FEB-OCT JAN-DEC	FEB-JUN -
	Banded killifish						APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black crappie						MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Blue catfish Blueback herring						APR-JUN -	– FFD_ TIIN	- FFD_ TIIN	JAN-DEC	JAN-DEC
	Bluegill			X X X			- APR-SEP	FEB-JUN -	FEB-JUN -	FEB-OCT -	FEB-JUN JAN-DEC
	Channel catfish						MAR-MAY	-	-	JAN-DEC	JAN-DEC
	Hickory shad			ХХХ			_	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker Inland silverside					X X X X X	- APR-MAY	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Largemouth bass						MAR-MAY	-	-	JAN-DEC	JAN-DEC JAN-DEC
	Longnose gar						MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Minnows						APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog Pumpkinseed						APR-AUG	_	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Redbreast sunfish						MAR-JUN JUN-JUL	-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Striped bass					XXX	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Tessellated darter						APR-JUN	-	-	-	JAN-DEC
	Weakfish White catfish					(-	-	JAN-DEC	- TAN-DEC
	White perch						MAY-JUN -	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Yellow perch						APR-JUN	-	-	JAN-DEC	JAN-DEC
NVF:	RTEBRATE:										
	Species	S F Conc.	JFM	АМЗ	JJA	ASONE	Spawning	Eggs	Larvae	Juveniles	Adults
21/	Plue crah		V V V	77 77 7	/ 37 3	7 V V V V			MAV-MOM	TAN-DEC	TAN-DEC

HUMAN USE RESOURCES:

MANAGEMENT AREA:

214 Blue crab

HUN#	Name	Contact	Phone
103	CUMBERLAND MARSH NATURAL AREA PRESERVE	THE NATURE CONSERVANCY	434/295-6106

X X X X X X X X X X X X X X — - MAY-NOV JAN-DEC JAN-DEC

BIOLOGICAL RESOURCES:

BIRD:

Martin	BIRD	:						
	RAR#	Species	S F Conc.		J F M A M J J A S O N D	Nesting	Migrating	Molting
The property of the property								
Description	26	American woodcock			X X X X X X	-	-	_
Mathematical		Black-bellied plover			X X X X X X X X X X	-	-	-
Marchane		Dunlin			X X X X X X X X X X X X X X X X X X X	-	-	-
Manual		Greater yellowlegs			X X X X X X X X X X	-	-	-
Section Sect		Killdeer			X X X	-	-	-
Manufact		Least sandpiper			X X X X X X X X X X	-	-	-
Martin M		Lesser yellowlegs			X X X X X X X X X	-	-	_
March 1 1 1 1 1 1 1 1 1 1		Pectoral sandpiper			X X X X X X	-	-	-
Mathematical process		Red knot			X X X X X X	-	-	-
Management		Ruddy turnstone			X X X X X X	-	-	-
Ministrictory		Sanderling			X X X X X X X X X X X X X	-	-	-
Ministrictory					X X X X X X X X X	_	_	_
State controlled						_	_	_
Marie						_	_	_
Company						_	_	_
Michael						_	_	_
Minertanged samply pay						_	_	_
Millor						_	_	_
Many main						_	_	_
Marchannes	9.4		нтсн				_	_
Source	24	= =	111011				_	_
Mintered						_	_	_
Mile						7 DD _ TIIN	_	_
Motifiched Mot		2	HTCH				_	_
140 Double-mailed duch							-	_
Lance	1.40						-	-
Mary State	148		MODERATE				-	-
Manufaces Note No		-					-	-
155		=					-	_
Modelcon slopeon							-	_
Memory	150						-	-
Cannel goose		=				-	-	-
Content Cont		Brant	HIGH		X X X X X X X X X	-	-	-
Mailand		Canada goose	MODERATE		$\times \ \times \$	APR-JUN	-	-
Marbor M		Gadwall	MODERATE		$\times \times $	APR-JUN	-	-
Numbers pinted=1		Green-winged teal			X X X X X X X X X X X X X X X X X X X	-	-	-
Nothern absorber		Mallard	MODERATE		$\times \times $	MAY-JUL	-	-
154		Northern pintail			X X X X X X X X X X X X X X X X X X X	-	-	-
190		Northern shoveler			X X X X X X X X X	-	-	-
186	154	American oystercatcher	HIGH		X X X X X X X	MAR-JUL	_	_
Memorican wigeon	180	American oystercatcher	2 ADULTS		X X X X X X X	MAR-JUL	_	_
Dearet	186	American black duck	HIGH		X X X X X X X X X X X X X	MAR-JUL	-	-
Dearet		American wigeon			X X X X X X X X	-	_	_
Canada goose		-	HIGH		X X X X X X X X	-	_	_
Gadwall			HIGH		x	APR-JUN	_	_
Moderate Moderate X X X X X X X X X X X X X X X X X X		-					_	_
Mailand							_	_
Northern pintail			MODERATE			MAY-JUI	_	_
Brow goose			11000111111			-	_	_
Secretary Secr			HTGH			_	_	_
Ring-necked duck X X X X X X X X	187					_	_	_
Scaup	107		HODDIVITE				_	
Solders		-					_	
Sectors		±					_	_
Sea ducks	1.00						-	_
American oystercatcher	188						-	_
Piping plower T T HIGH	400		HIGH				-	_
Milson's plover E HIGH		——————————————————————————————————————					-	-
1922 American oystercatcher 18 ADULTS	191						-	_
183 American oystercatcher		<u> </u>					-	-
194 American oystercatcher			7 ADULTS		X X X X X X X		-	-
293 Forster's tern	193	American oystercatcher	18 ADULTS		X X X X X X X	MAR-JUL	-	-
24 Laughing gull 300 ADULTS	194	American oystercatcher	121 ADULTS		X X X X X X X	MAR-JUL	-	_
361 American oystercatcher HIGH X X X X X X X X X AM -UL - - 362 Laughing gull 35 ADUTS X X X X X X X X X X X MAY-UL - - 364 Laughing gull 1 38 ADUITS X X X X X X X X X X X MAY-UL - - 367 Laughing gull 1 38 ADUITS X X X X X X X X X X MAY-UL - - 372 Laughing gull 1 33 ADUITS X X X X X X X X X MAY-UL - - 373 Forster's tern 5 ADUITS X X X X X X X X X MAY-UL - - 378 Least tern C 15 ADUTS X X X X X X X X X MAY-UL - - 28 BLOCK-cowned night-heron 1 16 ADUTS X X X X X X X X X MAY-UL - - 302 BLOCK-cowned night-heron 1 16 ADUITS X X X X X X X X X MAY-UL - - 4 Cattle egret C 26 ADUTS X X X X X X X X X X MAY-UL - - 5 Great blue heron 1 ADUIT X X X X X X X X X X X MAY-UL - -	293	Forster's tern	10 ADULTS		X X X X X X X X	MAY-JUL	-	-
10 ADULTS	324	Laughing gull	300 ADULTS		X X X X X X X X X X	MAY-JUL	-	-
1	361	American oystercatcher	HIGH		X X X X X X X X X X X X X X X X X X X	-	-	-
ABOULT	362	Laughing gull	10 ADULTS		X X X X X X X X X X	MAY-JUL	-	-
Laughing gull 138 ADULTS	364	Laughing gull	35 ADULTS		X X X X X X X X X X	MAY-JUL	-	-
1 20 20 20 20 20 20 20	365	Herring gull	1 ADULT		$\times \times $	MAY-JUL	-	-
1372 Laughing gull		Laughing gull	138 ADULTS		X X X X X X X X X	MAY-JUL	-	-
373 Forster's tern	367	Laughing gull	20 ADULTS		X X X X X X X X X	MAY-JUL	-	-
373 Forster's tern							-	_
1878 Least tern							_	_
Black-crowned night-heron							_	_
Cattle egret							_	_
Double-crested cormorant		-	16 ADULTS				_	_
Glossy ibis C 26 ADULTS							_	_
Great blue heron			C 26 ADULTS	•			_	_
Great egret		-					_	_
Herring gull							_	_
Laughing gull 23 ADULTS							_	_
Snowy egret							_	_
383 Common tern 27 ADULTS X X X X X X X X X MAY-JUL - - 523 Black skimmer 496 ADULTS X X X X X X X X MAY-JUL - - 526 Gull-billed tern T 60 ADULTS X X X X X X X X MAY-JUL - - 527 Forster's tern 7 ADULTS X X X X X X X X X MAY-JUL - - 528 Forster's tern 7 ADULTS X X X X X X X X X MAY-JUL - - 529 Forster's tern 7 ADULTS X X X X X X X X X MAY-JUL - - 6ull-billed tern T 66 ADULTS X X X X X X X X X MAY-JUL - - 528 Common tern 56 ADULTS X X X X X X X X X MAY-JUL - - 529 Laughing gull 5 ADULTS X X X X X X X X X MAY-JUL - - 532 Laughing gull 5 ADULTS X X X X X X X X X MAY-JUL - - 532 Laughing gull 5 ADULTS X X X X X X X X X MAY-JUL - - 532 Herring gull			23 ADULTS				- -	_
Second S	202		07 3000				_	_
Common tern							_	_
Second	523						-	_
Laughing gull 61 ADULTS	F. 6 . 7						-	-
Forster's tern	526						-	-
Gull-billed tern							-	_
Laughing gull 900 ADULTS X X X X X X X X X X MAY-JUL	527				X X X X X X X X X	MAY-JUL	-	-
528 Common tern 56 ADULTS X X X X X X X X X X X X X X MAY-JUL - - 529 Laughing gull 150 ADULTS X X X X X X X X X X X MAY-JUL - - 532 Laughing gull 5 ADULTS X X X X X X X X X X MAY-JUL - - 533 Common tern 13 ADULTS X X X X X X X X X MAY-JUL - - Gull-billed tern T 1 ADULT X X X X X X X X X X MAY-JUL - - Laughing gull 26 ADULTS X X X X X X X X X X X X MAY-JUL - - 534 Herring gull 341 ADULTS X X X X X X X X X X X X MAY-JUL - - 551 Laughing gull 145 ADULTS X X X X X X X X X X X MAY-JUL - - 562 Peregrine falcon T X X X X X X X X X X X X X X X X MAY-JUL - - 564 Herring gull 40 ADULTS X X X X X X X X X X X X X MAY-JUL - - 575 Common tern 26 ADULTS X X X X X X X X X X X X MAY-JUL - - 573 Laughing gull						MAY-JUL	-	-
529 Laughing gull 150 ADULTS X X X X X X X X X X X X X MAY-JUL - - 532 Laughing gull 5 ADULTS X X X X X X X X X X X MAY-JUL - - 533 Common tern 13 ADULTS X X X X X X X X X X MAY-JUL - - Gull-billed tern T 1 ADULT X X X X X X X X X X MAY-JUL - - Laughing gull 26 ADULTS X X X X X X X X X X MAY-JUL - - 534 Herring gull 341 ADULTS X X X X X X X X X X MAY-JUL - - 551 Laughing gull 341 ADULTS X X X X X X X X X X X MAY-JUL - - 551 Laughing gull 145 ADULTS X X X X X X X X X X X X MAY-JUL - - 562 Peregrine falcon T X X X X X X X X X X X X X X X MAY-JUL - - 564 Herring gull 40 ADULTS X X X X X X X X X X X X X X MAY-JUL - - 575 Common tern 26 ADULTS X X X X X X X X X X X X X MAY-JUL - - 573 Laughing gull 107 ADULTS X X X X X X X X X X X X X X X X MAY-JUL - - <td></td> <td>Laughing gull</td> <td></td> <td></td> <td>$\times \times$</td> <td>MAY-JUL</td> <td>-</td> <td>-</td>		Laughing gull			$\times \times $	MAY-JUL	-	-
532 Laughing gull 5 ADULTS X X X X X X X X X X X X X MAY-JUL - - 533 Common tern 13 ADULTS X X X X X X X X X X MAY-JUL - - Gull-billed tern T 1 ADULT X X X X X X X X X X MAY-JUL - - Laughing gull 26 ADULTS X X X X X X X X X X X X X MAY-JUL - - 534 Herring gull 341 ADULTS X X X X X X X X X X X MAY-JUL - - 551 Laughing gull 145 ADULTS X X X X X X X X X X X MAY-JUL - - 562 Peregrine falcon T X X X X X X X X X X X X X X X MAY-JUL - - 564 Herring gull 40 ADULTS X X X X X X X X X X X X MAY-JUL - - 565 Forster's tern 3 ADULTS X X X X X X X X X X X X X MAY-JUL - - 572 Common tern 26 ADULTS X X X X X X X X X X X X MAY-JUL - - 573 Laughing gull 107 ADULTS X X X X X X X X X X X MAY-JUL - - 589 Herring gull	528	Common tern	56 ADULTS		X X X X X X X X X	MAY-JUL	-	-
532 Laughing gull 5 ADULTS X X X X X X X X X X X X X MAY-JUL - - 533 Common tern 13 ADULTS X X X X X X X X X X MAY-JUL - - Gull-billed tern T 1 ADULT X X X X X X X X X X MAY-JUL - - Laughing gull 26 ADULTS X X X X X X X X X X X X X MAY-JUL - - 534 Herring gull 341 ADULTS X X X X X X X X X X X MAY-JUL - - 551 Laughing gull 145 ADULTS X X X X X X X X X X X MAY-JUL - - 562 Peregrine falcon T X X X X X X X X X X X X X X X MAY-JUL - - 564 Herring gull 40 ADULTS X X X X X X X X X X X X MAY-JUL - - 565 Forster's tern 3 ADULTS X X X X X X X X X X X X X MAY-JUL - - 572 Common tern 26 ADULTS X X X X X X X X X X X X MAY-JUL - - 573 Laughing gull 107 ADULTS X X X X X X X X X X X MAY-JUL - - 589 Herring gull			150 ADULTS		$X\;X\;X\;X\;X\;X\;X\;X\;$	MAY-JUL	-	_
533 Common tern 13 ADULTS X X X X X X X X X X X X X X MAY-JUL - - Gull-billed tern T 1 ADULT X X X X X X X X X X X X MAY-JUL - - Laughing gull 26 ADULTS X X X X X X X X X X X X X X MAY-JUL - - 534 Herring gull 341 ADULTS X X X X X X X X X X X X MAY-JUL - - 551 Laughing gull 145 ADULTS X X X X X X X X X X X X MAY-JUL - - 562 Peregrine falcon T X X X X X X X X X X X X X MAY-JUL - - 564 Herring gull 40 ADULTS X X X X X X X X X X X MAY-JUL - - 565 Forster's tern 3 ADULTS X X X X X X X X X X X MAY-JUL - - 572 Common tern 26 ADULTS X X X X X X X X X X X X X X MAY-JUL - - 573 Laughing gull 107 ADULTS X X X X X X X X X X X X X X MAY-JUL - - 589 Herring gull 32 ADULTS X X X X X X X X X X X X X X X X X X X			5 ADULTS		X X X X X X X X X X	MAY-JUL	-	-
Gull-billed tern T 1 ADULT X X X X X X X X X X X X X X X X X X X							-	-
Laughing gull 26 ADULTS X X X X X X X X X X X X X X X X X X A X	•						_	_
534 Herring gull 18 ADULTS X X X X X X X X X X X X X X X X X X A X							_	_
Laughing gull 341 ADULTS X X X X X X X X X X X X X A MAY-JUL	534			,				_
551 Laughing gull 145 ADULTS X X X X X X X X X X X MAY-JUL - - 562 Peregrine falcon T X X X X X X X X X X X X X X X X X X X	J J I	= =					_	_
562 Peregrine falcon T X X X X X X X X X X X X X X X X X X X	551						_	_
564 Herring gull 40 ADULTS X X X X X X X X X X X X X X X MAY-JUL - - 565 Forster's tern 3 ADULTS X X X X X X X X X X X MAY-JUL - - 572 Common tern 26 ADULTS X X X X X X X X X X X X MAY-JUL - - 573 Laughing gull 107 ADULTS X X X X X X X X X X X X X X X MAY-JUL - - 589 Herring gull 32 ADULTS X X X X X X X X X X X X X X X X MAY-JUL - - Laughing gull 722 ADULTS X X X X X X X X X X X X X X X X X X X							- -	_
565 Forster's tern 3 ADULTS X X X X X X X X X X X X MAY-JUL - - 572 Common tern 26 ADULTS X X X X X X X X X X X X MAY-JUL - - 573 Laughing gull 107 ADULTS X X X X X X X X X X X X X X MAY-JUL - - 589 Herring gull 32 ADULTS X X X X X X X X X X X X X X X MAY-JUL - - Laughing gull 722 ADULTS X X X X X X X X X X X X X X X X X X X		2					-	_
572 Common tern 26 ADULTS X X X X X X X X X X X X X X X X X X X		3 3					-	_
573 Laughing gull 107 ADULTS X X X X X X X X X X X MAY-JUL - - 589 Herring gull 32 ADULTS X X X X X X X X X X X X X X MAY-JUL - - Laughing gull 722 ADULTS X X X X X X X X X X X X X X X X X X X								_
589 Herring gull 32 ADULTS X X X X X X X X X X X X X X X X X X X								_
Laughing gull 722 ADULTS X X X X X X X X X MAY-JUL							-	-
	589	3 3					-	-
590 Forster's tern 18 ADULTS X X X X X X X X X MAY-JUL							-	_
	590	Forster's tern	18 ADULTS		X X X X X X X X X	MAY-JUL	-	-

Virginia: ESIMAP 59 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH RAR#	: Species	S F Conc.	J	FМ	а м	JJ	ASO	OND	Spawning	Eggs	Larvae	Juve	eniles	Adu	lts
25	Atlantic croaker Atlantic mackerel			Х		хх	X X .	XXX	-	-	-		-DEC -		-NOV -APR
	Atlantic menhaden Black drum		Χ				X X X X X X X X X X X X X X X X X X X	XXX	-	-	-		-DEC -		-OCT -OCT
	Black sea bass						XXX		JUN-OCT	_	-		-OCT		-0CT
	Bluefish Butterfish						X X X X		-	-	-		-NOV -NOV		-NOV -NOV
	Crevalle jack		Х	ХХ	ХХ	ХХ	XX	X X X		-	-	JAN-	-DEC		_
	Northern kingfish Northern searobin						X X X X		MAY-AUG -	_	_		_		-OCT -OCT
	Pollock		Х	ХХ	X			X		-	-		-	DEC	-APR
	Red drum Red hake			ХХ		ХХ	XXX	X X X X	JUL-NOV -	_	_		- -MAY		-NOV -MAY
														SEP	-NOV
	Sandbar shark Scup (porgy)			Х			XXX		-	-	_		-OCT -OCT		-OCT -OCT
	Silver hake		Х	ХХ	ХХ		2	X X X	-	-	-		-	OCT	-MAY
	Southern kingfish (whiting) Spanish mackerel				XX	ХХ	XXX	X	-	-	_		- -		-OCT -MAY
	Spiny dogfish			ХХ		37 37	V V 1	XX	-	-	- DEC 3.DD		- NO11		-APR
	Spot Spotted hake		Χ		XX			X X X X	-	-	DEC-APR -		-NOV -JUN		-NOV -JUN
	Spotted seatrout				v v	v v	XXX	v v	MAY-JUL	_	_	7, DD.	-NOV		-NOV -NOV
	Summer flounder		Х					XXX		-	OCT-MAY		- 1100		-NOV -OCT
	Tautog Weakfish		Χ				XXX		APR-AUG APR-AUG	-	- MAY-AUG	, DD,	- -NOV		-DEC -NOV
30	Alewife				XX		AA	ΛΛ	-	-	-		-		-JUN
	American eel American shad		Χ		X X X X		XX	XXX	-	-	-		-DEC -		- -JUN
	Atlantic croaker				Х	ХХ	хх	X X X	-	-	-		-DEC		_
	Atlantic herring Atlantic mackerel			X X	X X X	X			-	-	_		_		-JUN -APR
	Atlantic menhaden						X X 2		-	-	-		-NOV		-OCT
	Bay anchovy Black drum		Х				XXX		APR-SEP -	-	-		-DEC -		-DEC -OCT
	Black sea bass				XX			v	-	-	- FEB-JUN		-SEP -OCT		-SEP
	Blueback herring Bluefish			Α Α			X X X		-	-	- -		-0CT		-JUN -OCT
	Crevalle jack Gobies							XXX	- APR-SEP	- APR-SEP	- APR-OCT		-DEC -DEC		- -DEC
	Hickory shad			ХХ	X X	X			-	- AFK-3EF	-		- -		-JUN
	Hogchoker Killifish								MAY-SEP MAR-SEP	MAY-SEP	MAY-SEP -		-DEC -DEC		-DEC -DEC
	Minnows		Х	ХХ	ХХ	ХХ	XX	X X X	APR-AUG	-	-	JAN-	-DEC	JAN	-DEC
	Mummichog Northern pipefish							X X X X X X X X X X X X X X X X X X X	APR-AUG -	-	-		-DEC -DEC		-DEC -DEC
	Northern searobin		17	., .,		ХХ	Χ	17	-	-	-		-AUG		-AUG
	Pollock Red drum		Х	ХХ		ХХ	XX	X X	- JUL-NOV	-	_		- -SEP		-APR -NOV
	Red hake			ХХ	ХХ		X	ХХ	-	-	-	FEB.	-MAY		-MAY
	Sandbar shark				Х	ХХ	XX	X	-	-	-	MAY	-OCT		-NOV -OCT
	Scup (porgy) Silver hake		v	X X X		ХХ	XX	X X X X	-	-	-		-OCT -		-OCT -MAY
	Silver perch						-		APR-MAY		APR-JUN		-DEC		-DEC
	Silversides Spanish mackerel		Χ		X X X X	ХХ	XX	XXX	MAR-JUL -	MAR-JUL -	APR-SEP		-DEC -		-DEC -MAY
	Spot				ХХ	ХХ		X	-	-	-	APR-	-OCT	JUL	-SEP
	Spotted hake Spotted seatrout		Χ	ХХ		ΧХ		X X X	- MAY-JUL	-	_		-APR -NOV	APR	- -NOV
	Striped anchovy				ХХ	ХХ	XX	ХХ	APR-SEP	-	-	APR-	-NOV	APR	-NOV
	Summer flounder Tautog		Х	хх				X X X X		-	_	APR.	-NOV -		-NOV -APR
	Weakfish							X		-	-		-OCT		-OCT
	White hake			Х	ХХ		X	хх	-	-	-		-		-MAY -NOV
	White perch								APR-JUN -	APR-JUN -	APR-JUN				-DEC
	Winter flounder		Λ	Λ Λ	Α Α .	Λ Λ		Х	_	_	_	DEC.	-JUL	DEC	-MAY
HABI	FAT: Species	S F Conc.	.т	FМ	ΣМ	лл	a	OND							
27	Maritime dune scrub Native coastal strand vegetation							X X X X X X X X X X X X X X X X X X X							
	Sea-beach knotweed		Х	ХХ	ХХ	ХХ	XX	X X X							
	Southern beach spurge		Х	ХХ	XX	хх	XX	XXX							
	RTEBRATE:	0 E 0	-					0 N D	C	W	T	T		3 4	14-
	Species	S F Conc.							Spawning		Larvae		eniles		
25	Blue crab Channeled whelk							X X X X X X X X X X X X X X X X X X X		-	MAY-NOV -		-DEC -DEC		-DEC -DEC
30	Blue crab							XXX		MAY-SEP					-DEC -DEC
	Channeled whelk Northern quahog (hard clam)							X X X	- MAY-OCT	- МДУ-ОСТ	- М∆У-ОСТ		-DEC -DEC		-DEC -DEC
MADTI			21	21 21	21 21	21 21			1111 001	1111 001	1111 001	01114	DEC	01111	DEC
	NE MAMMAL: Species	S F Conc.	J	FМ	а м	ј ј	ASO	OND	Mating	Calving	Pupping	Mol	ting		
										_					
25	Bottlenose dolphin Common dolphin						XXX		_	-	_		_		
	Harbor porpoise			ХХ				X	-	-	-	-	-		
	Harbor seal Humpback whale	E E		X X X	ХХ	ХХ		X X X X		- JAN-DEC	-		-		
30	Bottlenose dolphin		37			ХХ	XX		-	-	-		_		
	Harbor porpoise Harbor seal			X X X	ΛХ		2	X X X X		-	-		- -		
REPT:	ILE:														
RAR#	Species	S F Conc.	J	F M	АМ	JЈ	AS	OND	Nesting	Hatching	Internes	ting	Juvenil	es	Adults
 25	Green sea turtle	т т	-		 x		·	 x x					MAY-NOV	7	
25	<pre>Kemp's ridley sea turtle</pre>	E E			Х	ХХ	XX	ХХ	-	-	-		MAY-NOV	7	MAY-NOV
	Leatherback sea turtle Loggerhead sea turtle	E E T T					X X X X X X X X X X X X X X X X X X X		-	-	-		- MAY-NOV		MAY-NOV MAY-NOV
	Diamondback terrapin			Х	ХХ	ХХ	XX	ХХ	MAY-JUL	-	-		MAR-NOV	7	MAR-NOV
30	Green sea turtle Kemp's ridley sea turtle	T T E E					XXX		-	-	-		MAY-NOV MAY-NOV		- MAY-NOV
	-														

Virginia: ESIMAP 59 (cont.)

BIOLOGICAL RESOURCES: (cont.)

REPTILE: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
30	Leatherback sea turtle Loggerhead sea turtle	E E T T	X X X X X X X X X X X X X X X X X X X	-	- -	-	- MAY-NOV	MAY-NOV MAY-NOV
94	Diamondback terrapin		$\times \times $	-	-	-	MAR-NOV	MAR-NOV

HUMAN USE RESOURCES:

7 (7)	A	miti	ъ.
AUU	ACUI	7T OE	œ:

HUN#	Name	Contact	Phone		
57	AQUACULTURE: HARD CLAMS				

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
116	PARRAMORE ISLAND NATURAL AREA PRESERVE	THE NATURE CONSERVANCY	757/442-3049

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone		
147	CHINCOTEAGUE ISLAND NWR	U.S. FISH AND WILDLIFE SERVICE	757/336-6122		

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
26	American woodcock		X X X X X				-	
20	Black-bellied plover		X X X X X X X X X X X X X X X X X X X	_	_	_		
	Dunlin		X X X X X X X X X X X X X X X X X X X	_	-	_		
	Greater yellowlegs		$X\ X\ X\ X\ X\ X\ X\ X\ X\ X$	-	-	-		
	Killdeer		XXX	-	-	-		
	Least sandpiper Lesser yellowlegs		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Pectoral sandpiper		XXXXX	_	-	_		
	Red knot		$X \ X \ X \ X \ X$	-	-	-		
	Ruddy turnstone		XXXXX	-	-	-		
	Sanderling Semipalmated plover		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Semipalmated sandpiper		$X \times X \times X \times X \times X$	_	_	_		
	Short-billed dowitcher		$\times \times $	-	-	-		
	Stilt sandpiper		XXXXX	-	-	-		
	Western sandpiper Whimbrel		$\begin{smallmatrix} & & \times & \times & \times & \times & \times & \times \\ & & \times & \times &$	_	_	_		
	White-rumped sandpiper		XXX	_	_	_		
	Willet		$\times \times $	-	-	-		
94	Clapper rail	HIGH	X X X X X X X X X X X X X		-	-		
	King rail Sora		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Virginia rail		X X X X X X X X X X X X	APR-JUN	_	_		
	Whimbrel	HIGH	X X X	-	-	-		
4.40	Willet	HIGH	X X X X X X X X X X X X X	APR-SEP	-	-		
148	Bufflehead Long-tailed duck	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Mergansers		X X X X X X X X	_	_	_		
	Scoters		XXXX	-	-	-		
150	American black duck	HIGH	$\times \times $		-	-		
	American wigeon	MODERATE	X X X X X X X X	-	-	-		
	Brant Canada goose	HIGH MODERATE	$f X \ X \ X \ X \ X \ X \ X \ X \ X \ X $	APR=.TIIN	_	_		
	Gadwall	MODERATE	X X X X X X X X X X X X X X X X X X X		_	_		
	Green-winged teal		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Mallard	MODERATE	X X X X X X X X X X X X X		-	-		
	Northern pintail Northern shoveler		X X X X X X X X X	_	-	_		
195	American black duck	VERY HIGH	$f X \ X \ X \ X \ X \ X \ X \ X \ X \ X $		_	_		
	American wigeon	HIGH	XXXX	-	-	_		
	Brant		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Canada goose	HIGH	X X X X X X X X X X X X X		-	-		
	Gadwall Green-winged teal	LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN -	_	_		
	Mallard	HIGH	X X X X X X X X X X X X X		_	_		
	Northern pintail		X X X X X X X X X X X X X X X X X X X	-	-	-		
400	Snow goose		X X X X X X X X	-	-	-		
196	Bufflehead Canvasback	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Common goldeneye	nign	X X X X X X X X X	_	_	_		
	Long-tailed duck		X X X X X X X X X	-	-	-		
	Redhead	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Ring-necked duck	LOW	X X X X X X X X	_	-	_		
	Ruddy duck Scaup	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Scoters	MODERATE	X X X X X X X X X	_	_	_		
	Tundra swan	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
480	Great blue heron	44 NESTS	$\times \times $	MAY-JUL	-	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eaas	Larvae	Juveniles	Adults
30	Tautog		X X X X X X X X X X X X X X X X X X X	-	-	-	-	OCT-APR
	Weakfish White hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG -	- -	_	MAR-OCT	APR-OCT MAR-MAY
	Willie Hake		A A A A A A	_	_	_	_	SEP-NOV
	White perch		imes ime	APR-JUN	APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Winter flounder			-	-	-	DEC-JUL	DEC-MAY
	Alewife		XXXXX	-		_	-	FEB-JUN
	American eel American shad		X X X X X X X X X X X X X		-		TAN DEC	
			\times \times \times \times	_	- - -	-	JAN-DEC -	FEB-JUN
	Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- - -	- - -	- - -	JAN-DEC - MAY-DEC	- FEB-JUN -
	Atlantic herring		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- - -	- - -	- - -	- MAY-DEC -	FEB-JUN - FEB-JUN
	Atlantic herring Atlantic mackerel		$\begin{array}{c} & \times $	- - - -	-	-	- MAY-DEC - -	FEB-JUN - FEB-JUN MAR-APR
	Atlantic herring Atlantic mackerel Atlantic menhaden		X X X X X X X X X X X X X X X X X X X	- - -	- - -	- - -	MAY-DEC MAY-NOV	FEB-JUN - FEB-JUN MAR-APR MAY-OCT
	Atlantic herring Atlantic mackerel		$\begin{array}{c} & \times $	- - -	- - -	- - - -	- MAY-DEC - -	FEB-JUN - FEB-JUN MAR-APR
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass		X X X X X X X X X X X X X X X X X X X	- - -	- - - - - -	- - - - - -	- MAY-DEC - - MAY-NOV JAN-DEC - APR-SEP	FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring		X X X X X X X X X X X X X X X X X X X	- - -	- - - - - -	- - - - - - - FEB-JUN	- MAY-DEC MAY-NOV JAN-DEC - APR-SEP FEB-OCT	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish		X X X X X X X X X X X X X X X X X X X	- - - APR-SEP - - -	- - - - - -	- - - - - - - FEB-JUN	- MAY-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring		X X X X X X X X X X X X X X X X X X X	- - - APR-SEP - - - -	- - - - - - - -	- - - - - - - FEB-JUN	- MAY-DEC MAY-NOV JAN-DEC - APR-SEP FEB-OCT	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad		X X X X X X X X X X X X X X X X X X X	- - - APR-SEP - - - -	- - - - - - - -	- - - - - - - FEB-JUN	- MAY-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker		X X X X X X X X X X X X X X X X X X X	- - - APR-SEP - - - - - - APR-SEP - MAY-SEP	- - - - - - - - - APR-SEP	- - - - - - FEB-JUN - - APR-OCT	MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT - JAN-DEC FEB-JUN JAN-DEC
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish		X X X X X X X X X X X X X X X X X X X		- - - - - - - - - - APR-SEP	- - - - - - FEB-JUN - - - APR-OCT	MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-SEP - MAY-SEP MAR-SEP APR-AUG	- - - - - - - - - APR-SEP	- - - - - - FEB-JUN - - APR-OCT	MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish		X X X X X X X X X X X X X X X X X X X	APR-SEP	- - - - - - - - - APR-SEP	- - - - - - FEB-JUN - - APR-OCT - MAY-SEP	MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin		X X X X X X X X X X X X X X X X X X X	APR-SEP - APR-SEP - APR-SEP - MAY-SEP MAR-SEP APR-AUG APR-AUG	- - - - - - - - - APR-SEP	- - - - - - FEB-JUN - - APR-OCT - MAY-SEP	MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC JUN-AUG
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-SEP APR-SEP - MAY-SEP MAR-SEP APR-AUG APR-AUG		- - - - - - FEB-JUN - - APR-OCT - MAY-SEP - - -	MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT - JAN-DEC
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin		X X X X X X X X X X X X X X X X X X X	APR-SEP - APR-SEP - APR-SEP - MAY-SEP MAR-SEP APR-AUG APR-AUG	- - - - - - - - - APR-SEP	- - - - - - FEB-JUN - - APR-OCT - MAY-SEP - -	MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT - JAN-DEC
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum		X X X X X X X X X X X X X X X X X X X	APR-SEP - APR-SEP - APR-SEP - MAY-SEP MAR-SEP APR-AUG APR-AUG JUL-NOV		- - - - - - - - - - - - - - - - - - -	MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT - JAN-DEC
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake Sandbar shark		X X X X X X X X X X X X X X X X X X X	APR-SEP		- - - - - - - - - - - - - - - - - - -	MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC JAN
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy)		X X X X X X X X X X X X X X X X X X X	APR-SEP - APR-SEP - APR-SEP - MAY-SEP MAR-SEP APR-AUG APR-AUG JUL-NOV		- - - - - - - - - - - - - - - - - - -	MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC JAN
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-SEP APR-SEP - MAY-SEP MAR-SEP APR-AUG APR-AUG JUL-NOV		- - - - - - - FEB-JUN - - APR-OCT - MAY-SEP - - - - - -	MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC JAN
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy)		X X X X X X X X X X X X X X X X X X X	APR-SEP		- - - - - - - - - - - - - - - - - - -	MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC JAN
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Silversides Spanish mackerel		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-SEP APR-SEP APR-AUG			MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-OEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT - JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC JAN-DEC APR-MAY
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Silversides Spanish mackerel Spot		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-SEP APR-SEP MAY-SEP MAY-SEP APR-AUG APR-AUG - - JUL-NOV - APR-MAY MAR-JUL - - - APR-MAY			MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC APR-OCT	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT - JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT ANAL JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC APR-MAY JUL-SEP
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Silversides Spanish mackerel Spot Spotted hake		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-SEP APR-SEP APR-SEP MAY-SEP MAY-SEP APR-AUG APR-AUG - - JUL-NOV - APR-MAY MAR-JUL - - - - - - - - - - - - -			MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC JAN-DEC JAN-DEC APR-MAY JUL-SEP
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Silversides Spanish mackerel Spot		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-SEP APR-SEP MAY-SEP MAY-SEP APR-AUG APR-AUG - - JUL-NOV - APR-MAY MAR-JUL - - - APR-MAY			MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC APR-OCT	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT - JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT ANAL JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC APR-MAY JUL-SEP
	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Silversides Spanish mackerel Spot Spotted hake Spotted seatrout Striped anchovy Summer flounder		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-SEP APR-SEP APR-SEP MAY-SEP MAY-SEP APR-AUG APR-AUG - JUL-NOV - APR-MAY MAR-JUL APR-SEP MAY-JUL APR-SEP -			MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC AWAY-OCT JAN-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC APR-MAY JAN-DEC JAN-DEC APR-MAY JAN-DEC APR-NOV APR-NOV
181	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Silversides Spanish mackerel Spot Spotted hake Spotted seatrout Striped anchovy Summer flounder Alewife		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-SEP APR-SEP APR-SEP MAY-SEP MAY-SEP APR-AUG APR-AUG - JUL-NOV - APR-MAY MAR-JUL MAY-JUL APR-SEP MAY-JUL APR-SEP - MAY-JUL APR-SEP - -			MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC APR-OCT OCT-APR APR-NOV APR-NOV APR-NOV	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC APR-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC JAN-DEC JAN-DEC APR-MAY JAN-DEC APR-MOV APR-NOV APR-NOV FEB-JUN
181	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Silversides Spanish mackerel Spot Spotted hake Spotted seatrout Striped anchovy Summer flounder Alewife American eel		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-SEP APR-SEP APR-SEP MAY-SEP MAY-SEP MAY-SEP APR-AUG JUL-NOV APR-MAY MAR-JUL MAY-JUL APR-SEP			- MAY-DEC - MAY-NOV JAN-DEC - APR-SEP FEB-OCT MAY-OCT JAN-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC APR-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC JAN-DEC APR-MAY JUL-SEP APR-NOV APR-NOV APR-NOV FEB-JUN SEP-DEC
181	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Silversides Spanish mackerel Spot Spotted hake Spotted seatrout Striped anchovy Summer flounder Alewife		X X X X X X X X X X X X X X X X X X X	APR-SEP - APR-SEP - APR-SEP - MAY-SEP MAY-SEP APR-AUG JUL-NOV APR-MAY MAR-JUL MAY-JUL APR-SEP			MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC APR-OCT OCT-APR APR-NOV APR-NOV APR-NOV	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC APR-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC APR-MAY JUL-SEP APR-NOV APR-NOV APR-NOV FEB-JUN
181	Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Silversides Spanish mackerel Spot Spotted hake Spotted seatrout Striped anchovy Summer flounder Alewife American eel American shad		X X X X X X X X X X X X X X X X X X X	APR-SEP - APR-SEP - APR-SEP - MAY-SEP MAY-SEP APR-AUG JUL-NOV APR-MAY MAR-JUL MAY-JUL APR-SEP			MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC NOV-MAR	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC APR-MAY JAN-DEC APR-MAY JAN-DEC APR-MAY JAN-DEC APR-MAY JUL-SEP APR-NOV APR-NOV APR-NOV APR-NOV FEB-JUN SEP-DEC JAN-JUN

Virginia: ESIMAP 60 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH:	(cont.)
D3D# (

RAR#	Species	S F Conc.	JF	M A	м ј	JA	SOND	Spawning	Eggs	Larvae	Juve	eniles	Adults
181	Atlantic menhaden		ХХ	ХХ	X X	x x	x x x x	-	-	MAY-NOV	JAN-	-DEC	MAY-OCT
	Atlantic silverside		XX	ХХ	ХХ			MAR-JUL	-	-		-DEC	JAN-DEC
	Atlantic spadefish	_					XXX	-	-	-	AUG-		AUG-NOV
	Atlantic sturgeon	С		ХХ				- ann ann	_	-		- DEG	JAN-OCT
	Bay anchovy Black drum		X X				XXXX	APR-SEP APR-JUN	- APR-JUN	- APR-JUN	JAN- APR-		JAN-DEC APR-NOV
	Black sea bass				XX			JUN-OCT	-	-	APR-		APR-OCT
	Blueback herring		ХХ	ХХ			ХХ		-	_	NOV-		JAN-JUN
	Bluefish			Χ	ХХ	ХХ	X X X	-	-	-	MAY-	-NOV	APR-NOV
	Butterfish			ХХ	ХХ	X X	X X X	-	-	-	JUL-	-NOV	MAR-NOV
	Clearnose skate						X X X	-	-	-		-	MAY-NOV
	Gobies		XX					APR-SEP	APR-SEP	APR-OCT	JAN-		JAN-DEC
	Harvestfish		37. 37		XX	ХХ	X X	-	_	_	JUL-		APR-OCT JAN-JUN
	Hickory shad Hogchoker			XX		v v		- MAY-SEP	MAY-SEP	MAY-SEP	NOV- JAN-		JAN-DEC
	Inland silverside						XXXX		- MAI 3EI		JAN-		JAN-DEC
	Minnows							APR-AUG	_	_	JAN-		JAN-DEC
	Mummichog							APR-AUG	-	_	JAN-		JAN-DEC
	Northern kingfish			Χ	ХХ	ХХ	X X	-	-	-	-	-	APR-OCT
	Northern pipefish		ХХ	ХХ	ХХ	ХХ	X X X X	MAY-JUN	-	-	JAN-	-DEC	JAN-DEC
	Northern puffer				ХХ			MAY-AUG	_	_	MAR-		MAR-OCT
	Northern searobin			ХХ	XX			MAY-JUL	-	-		-	MAR-OCT
	Red drum Red hake		37	37 37			X X X X X X X X X X X X X X X X X X X	JUL-NOV -	-	-	AUG- FEB-		MAY-NOV
	Red nake		Χ	ХХ	X		XXX	-	_	_	FEB-	-MA1	FEB-MAY SEP-NOV
	Sandbar shark				ХХ	y y	y y	_	_	_	MAY-	-ОСТ	MAY-OCT
	Scup (porgy)			хх	XX			_	_	_	JUN-		MAR-OCT
	Silver hake		хх	XX		21 21	XXX		_	_		-	OCT-MAY
	Silver perch					ХХ		APR-MAY	-	_	JAN-	-DEC	JAN-DEC
	Spot		XX	ХХ	ХХ	ХХ	X X X X	_	-	DEC-APR	MAR-	-NOV	MAR-NOV
	Spotted hake			ХХ	ХХ		X X X	-	-	-	MAR-	-JUN	MAR-JUN
													SEP-NOV
	Spotted seatrout						XXX	MAY-JUL	-	-	APR-		APR-NOV
	Striped bass						XXXX		_	_	JAN-		JAN-DEC
	Striped killifish							APR-SEP	-		JAN-		JAN-DEC
	Summer flounder Tautog			XX		XX	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	OCT-MAY	JAN-		APR-OCT OCT-APR
	Threadfin shad			XX			XXX	_	_	_			FEB-MAY
	Infoddfin biidd												SEP-NOV
	Weakfish			X	ХХ	ХХ	X X X	APR-AUG	-	MAY-AUG	APR-	-NOV	APR-NOV
INVE	RTEBRATE:												
RAR#	Species	S F Conc.		M A	мј	JA	SOND	Spawning	Eggs	Larvae		eniles	Adults
16	Northern quahog (hard clam)			x x			x x x x	MAY-OCT	MAY-OCT	MAY-OCT	JAN-		JAN-DEC
	Blue crab						XXXX		MAY-SEP	MAY-NOV	JAN-		JAN-DEC
	Channeled whelk		ХХ	ХХ	ХХ	ХХ	X X X X	_	-	_	JAN-	-DEC	JAN-DEC
	Northern quahog (hard clam)		ХХ	ХХ	ХХ	ХХ	X X X X	MAY-OCT	MAY-OCT	MAY-OCT	JAN-	-DEC	JAN-DEC
181							X X X X		-	MAY-NOV	JAN-		JAN-DEC
182	Knobbed whelk		ХХ	ХХ	ХХ	ХХ	XXXX	-	-	-	JAN-	-DEC	JAN-DEC
MARI	NE MAMMAL:												
RAR#	Species	S F Conc.	JБ	ма	мј	JA	SOND	Mating	Calving	Pupping	Molt	ting	
RAR#	Species		J F 					Mating 	Calving	Pupping 	Molt	ting 	
RAR#	Species Bottlenose dolphin				 X X			-	Calving - -	Pupping - -	Mol1	ting - -	
RAR#	Species			 X X X	 X X		 X X	 - -	Calving - - -	Pupping - - -	Mol1	ting - -	
RAR# 30	Species Bottlenose dolphin Harbor porpoise		 x x	 X X X	 X X X	 x x	 x x x	 - -	Calving - - - -	Pupping - - - -	Mol1	ting - - -	
RAR# 30	Species Bottlenose dolphin Harbor porpoise Harbor seal		X X X X X	 X X X	 X X X	 x x x x	 X X X X	 - - -	Calving	Pupping - - - - -	Molt	ting - - - -	
RAR# 30 181	Species Bottlenose dolphin Harbor porpoise Harbor seal Bottlenose dolphin		X X X X X	 X X X	 X X X	 x x x x	 X X X X X X X X	 - - -	Calving - - - - -	Pupping - - - - -	Molt	ting - - -	
RAR# 30 181 REPI	Species Bottlenose dolphin Harbor porpoise Harbor seal Bottlenose dolphin Harbor porpoise PILE: Species	S F Conc.	x x x x x x	X X X X X	 X X X X	 x x x x	X X X X X X X X X X	 - - -	<u>-</u> - - - - - -	Pupping Internest	 - - -		es Adults
RAR# 30 181 REPT RAR#	Species Bottlenose dolphin Harbor porpoise Harbor seal Bottlenose dolphin Harbor porpoise TLE: Species	S F Conc.	x x x x x x	X X X X X	X X X X X X X X X X X X X X X X X	X X X X X	X X X X X X X X X X X X X X X	 - - - - -	<u>-</u> - - - - - -		 - - -	Juvenil	
RAR# 30 181 REPT RAR#	Species Bottlenose dolphin Harbor porpoise Harbor seal Bottlenose dolphin Harbor porpoise FILE: Species Green sea turtle	S F Conc.	x x x x x x	X X X X X	X X X X X X X X X X X X X X X X X X	X X X X X X X	X X X X X X X X X X	 - - - - -	<u>-</u> - - - - - -		 - - -		 · -
RAR# 30 181 REPT RAR#	Species Bottlenose dolphin Harbor porpoise Harbor seal Bottlenose dolphin Harbor porpoise TLE: Species	S F Conc.	x x x x x x	X X X X X		X X X X X X X X X X X	X X X X X X X X X X X X X X X	 - - - - -	<u>-</u> - - - - - -		 - - -	Juvenil	 · -
RAR# 30 181 REPT RAR#	Species Bottlenose dolphin Harbor porpoise Harbor seal Bottlenose dolphin Harbor porpoise TILE: Species Green sea turtle Kemp's ridley sea turtle	S F Conc. T T E E	x x x x x x	X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X	 - - - - -	<u>-</u> - - - - - -		 - - -	Juvenil MAY-NOV	MAY-NOV

HUMAN USE RESOURCES:

AQUACULTURE:

57 AQUACULTURE: HARD CLAMS

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
100	Brown pelican		X X X X X X X X				-	
100	Gulls		\times	-	_	-		
	Loons		X X X X X X X X	-	-	-		
	Mergansers Osprey		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	<u> </u>	-		
	Scoters	HIGH	$X \times X \times$	-	-	-		
105	Terns American black duck	HIGH	X X X X X X X X	- MAR-JUL	_	-		
125	American black duck American wigeon	nign	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAK-JUL -	_	-		
	Canada goose	HIGH	X	APR-JUN	-	-		
	Gadwall Green-winged teal		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	-		
	Mallard	MODERATE	\times	MAY-JUL	_	-		
107	Snow goose		X X X X X X X X	-	-	-		
127	Bufflehead Long-tailed duck	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_ _	-		
	Mergansers			-	-	-		
	Ring-necked duck Scaup		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	-		
	Scoters	HIGH	X X X X X X X X X	-	_	-		
105	Tundra swan	MDA HIGH	XXXXXXXXXXX	- MAD TIIT	_	-		
195	American black duck American wigeon	VERY HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL -	_	_		
	Brant			-	-	-		
	Canada goose Gadwall	HIGH LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN APR-JUN	_	_		
	Green-winged teal	HOW	XXXXXXXXXXXX	-	_	-		
	Mallard	HIGH	\times	MAY-JUL	-	-		
	Northern pintail Snow goose		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_ _	-		
196	Bufflehead	HIGH	X X X X X X X X	-	-	-		
	Canvasback	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Common goldeneye Long-tailed duck		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	-		
	Redhead	HIGH		-	-	-		
	Ring-necked duck Ruddy duck	LOW HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	-		
	Scaup	111011	X X X X X X X X X	-	_	-		
	Scoters	MODERATE	X X X X X X X X	-	_	-		
197	Tundra swan Dabbling ducks	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Wading birds		XXXXXX	-	-	-		
411	Wood duck	2 NECEC	X X X X X X X X X X X X X		-	-		
	Great blue heron Great blue heron	3 NESTS 6 NESTS	X X X X X X X X X X X X X X X X X X X		_	-		
414	Great blue heron	18 NESTS	$\times \times $	MAY-JUL	-	-		
	Great blue heron Great blue heron	10 NESTS 100 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	-		
	Peregrine falcon	T	XXXXXX	MAR-AUG	_	-		
FISH								
RAR#		S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
181	Alewife American eel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	- JAN-DEC	FEB-JUN SEP-DEC
	American shad		X X X X X X X X X X			-	NOV-MAR	JAN-JUN
	Atlantic croaker Atlantic mackerel		$\begin{smallmatrix} & & \times $	-	-	_	AUG-DEC -	MAY-NOV
	Atlantic mackerer Atlantic menhaden		X X X X X X X X X X X X X	-		- MAY-NOV	JAN-DEC	MAR-APR MAY-OCT
	Atlantic silverside		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish Atlantic sturgeon	С	$\begin{smallmatrix} & & & & \times & \times & \times & \times \\ & & & \times & \times & \times$	-	_	_	AUG-OCT	AUG-NOV JAN-OCT
	Bay anchovy		\times			-	JAN-DEC	JAN-DEC
	Black drum Black sea bass		X	APR-JUN JUN-OCT	APR-JUN -	APR-JUN -	APR-NOV	APR-NOV
	Blueback herring		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	-	APR-OCT NOV-MAR	APR-OCT JAN-JUN
	Bluefish		$\times \times $	-	-		MAY-NOV	APR-NOV
	Butterfish Clearnose skate		X X X X X X X X X	_	-	_	JUL-NOV	MAR-NOV
			$\times \times \times \times \times \times \times$	_	_		-	MAY-NOV
	Gobies		$\begin{smallmatrix}&&&&X&X&X&X&X&X\\X&X&X&X&X&X&X&X&X&X&X&X$	- APR-SEP	- APR-SEP	- APR-OCT		MAY-NOV JAN-DEC
	Harvestfish		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	APR-SEP -	-	- APR-OCT	- JAN-DEC JUL-OCT	JAN-DEC APR-OCT
			$\times \times $	APR-SEP - -		- APR-OCT	- JAN-DEC	JAN-DEC
	Harvestfish Hickory shad Hogchoker Inland silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP MAY-SEP APR-MAY	-	- APR-OCT - -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG	- - MAY-SEP	- APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG	- - MAY-SEP - -	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN	- - MAY-SEP - -	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG	- - MAY-SEP - -	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV	- - MAY-SEP - -	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAR-OCT MAY-NOV
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL	- - - - - - - - - -	- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV	- MAY-SEP - - - - - - - -	- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy)		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV	- - - - - - - - - -	- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV	- MAY-SEP - - - - - - - -	- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY		- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-AUG APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY	- - - - - - - - - - - - -	- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY		- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-NOV
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass			APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - MAY-JUL -		- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OC
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout			APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - MAY-JUL -	- - - - - - - - - - - - - - -	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAY-OCT MAY-OCT MAY-OCT MAR-OCT MAY-OCT MAY-OCT MAR-OCT MAY-OCT MAY-OCT MAR-OCT MAY-OCT MAR-OCT MAY-OCT MAR-OCT MAY-OCT MAR-OCT MAY-OCT MAR-OCT MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-NOV MAR-JUN SEP-NOV APR-NOV
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog			APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - MAY-JUL -		- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-NOV JAN-DEC APR-OCT OCT-APR
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY - APR-SEP -		- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAY-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog			APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY - APR-SEP -		APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-NOV JAN-DEC APR-OCT OCT-APR
ט איי די די די	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-SEP		APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV
HABI	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish TAT:	S.E.Cong		APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-SEP		APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV
	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad	S F Conc.	X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-SEP		APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV
RAR#	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern pefer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish TAT: Species		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-SEP		APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV
RAR# 97	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish TAT: Species		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-SEP		APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV
RAR# 97 INVE	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish TAT: Species Maritime dune scrub RTEBRATE: Species	S F Conc.	X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-SEP APR-AUG		APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV
RAR# 97 INVE RAR# 	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish TAT: Species	S F Conc.	X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY - APR-SEP APR-AUG APR-AUG		APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV
RAR# 97 INVE RAR# 16	Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish TAT: Species ————————————————————————————————————	S F Conc.	X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-SEP APR-AUG APR-AUG Spawning MAY-OCT		APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV APR-NOV

Virginia: ESIMAP 61 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae J	uveniles A	dults
181	Blue crab		X X X X X X X X X X X X	-	-	MAY-NOV J	AN-DEC J	AN-DEC
182	Knobbed whelk		$\times \times $	-	-	– J	AN-DEC J	AN-DEC
198	Northeastern beach tiger beetle	ТТ	$\times \times $	JUN-SEP	JUN-SEP	– J	AN-DEC J	UN-OCT
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping M	olting	
181	Bottlenose dolphin		X X X X X X	-	-	-	_	
	Harbor porpoise		X X X X X X	-	-	-	_	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internestin	g Juveniles	Adults
39	Green sea turtle	т т	X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	-
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NO
	Loggerhead sea turtle	т т	X X X X X X X	-	-	-	MAY-NOV	_

HUMAN USE RESOURCES:

AQUACULTURE:

57 AQUACULTURE: HARD CLAMS

BIOLOGICAL RESOURCES:

FISH:

– E	- FEB-JUN
JAN-DEC S	N-DEC SEP-DEC
NOV-MAR 3	V-MAR JAN-JUN
JAN-DEC 3	N-DEC JAN-DEC
JUL-OCT A	JL-OCT APR-OCT
NOV-MAR	OV-MAR JAN-JUN
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=	
	SEP-NOV
MAR-NOV N	AR-NOV MAR-NOV
MAR-JUN M	R-JUN MAR-JUN
5	SEP-NOV
APR-NOV A	PR-NOV APR-NOV
	SEP-NOV
APR-NOV A	PR-NOV APR-NOV
Juveniles A	veniles Adults
JAN-DEC 3	N-DEC JAN-DEC
Moltina	lting
Molting	orting
_	_
-	-
ing Juveniles	Juveniles Adul
MAY-NOV	MAY-NOV -
MAY-NOV	MAY-NOV -
-	- MAY-
MAY-NOV	MAY-NOV -
	τ.

BIOLOGICAL RESOURCES:

FISH:

RAR#	Species 	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
181	Alewife		X X X X X	-	-	_	_	FEB-JUN
	American eel		imes ime	-	-	-	JAN-DEC	SEP-DEC
	American shad		X X X X X X X X X X X X X X X X X X X		-	-	NOV-MAR	JAN-JUN
	Atlantic croaker		X X X X X X X X	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	-	-	-	-	MAR-APR
	Atlantic menhaden		X X X X X X X X X X X X X X		-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish	_	X X X X	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	X X X X X X X X X X	-	-	-	-	JAN-OCT
	Bay anchovy		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Black drum Black sea bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN JUN-OCT	APR-JUN -	APR-JUN -	APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring		X X X X X X X X X X X X X X X X X X X	-	-	-	NOV-MAR	JAN-JUN
	Bluefish		X X X X X X X X	-	-	-	MAY-NOV	APR-NOV
	Butterfish		X X X X X X X X X X	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate		X X X X X X X	-	-	-	-	MAY-NOV
	Gobies		X X X X X X X X X X X X X X		APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad		X X X X X X X X X X X X X X X X X X X		-	-	NOV-MAR	JAN-JUN
	Hogchoker		x x x x x x x x x x x x x		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Northern kingfish		X X X X X X X	-	-	_	-	APR-OCT
	Northern pipefish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC MAR-OCT	JAN-DEC
	Northern puffer Northern searobin		X	MAY-AUG	-	_	MAR-OCT	MAR-OCT
	Red drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL JUL-NOV	_	_	AUG-SEP	MAR-OCT MAY-NOV
	Red hake		X X X X X X X X X X X X X X X X X X X	- 20T-NOA	_	_	FEB-MAY	FEB-MAY
	neu liake						red-MAI	SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		$X \ X \ X \ X \ X \ X \ X \ X \ X$	-	-	_	-	OCT-MAY
	Silver perch		imes ime	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot		imes $ imes$ $ ime$	-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		X X X X	-	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-JUL	_	_	APR-NOV	APR-NOV
	Striped bass		\times		_	_	JAN-DEC	JAN-DEC
	Striped killifish		\times		_	_	JAN-DEC	JAN-DEC
	Summer flounder		x x x x x x x x x x x x		_	OCT-MAY	JAN-DEC	APR-OCT
	Tautog		X X X X X X X X		-	_	_	OCT-APR
	Threadfin shad		X X X X	_	-	_	_	FEB-MAY
								SEP-NOV
	Weakfish		X X X X X X X X	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
	RTEBRATE:				_	_		
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
181	Blue crab		X X X X X X X X X X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O N D	_	Calving	Pupping	Molting	
181	Bottlenose dolphin							
101	Harbor porpoise		XXXXXXXXXX	-	-	_	-	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internest	ing Juveni	les Adults
							ON-YAM	··
39	Green sea turtle	TT	X X X X X X X	_	_	_	MAI-NO	,
39		T T E E	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	MAY-NO	
39				- -	- -	- -		7 –

BIOLOGICAL RESOURCES:

Bay anchovy Black drum

Bluefish

Gobies

Butterfish

Black sea bass

Blueback herring

Clearnose skate

BIRD:

BIRD	:								
RAR#	Species	S F Conc.	JFMAMJJA:	SOND	Nesting	Migrating	Molting	ī	
								-	
163	American black duck	MODERATE	X X X X	XXX		-	-		
	American wigeon	MODERATE	XXXX	XXX		-	_		
	Brant Canada goose	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X X X X X X X X X X X X X X X X X X X		_	_		
	Gadwall	MODERATE	XXXX	XXX		_	_		
	Mallard	MODERATE	X X X X	X X X		-	-		
164	Bufflehead	HIGH	X X X X	X X X	-	-	-		
	Canvasback	MODERATE	X X X X	X X X		-	-		
	Common goldeneye		XXXX	XXX		-	-		
	Long-tailed duck	MODERATE	XXXX	X X X X X X X X X X X X X X X X X X X		_	_		
	Mergansers Mute swan		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	XXX		_	_		
	Ring-necked duck	MODERATE	XXXX	XXX		_	_		
	Ruddy duck	HIGH	X X X X	X X X		-	-		
	Scaup	MODERATE	X X X X	X X X	-	-	-		
	Scoters	HIGH	X X X X	X X X		-	_		
000	Tundra swan	MODERATE	XXXX	XXX		-	-		
203	American black duck Bufflehead	MODERATE MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X X X X X X X X X X X X X X X X X X X		_	_		
	Canada goose	HIGH	XXXX	XXX		_	_		
	Canvasback	HIGH	XXXX	XXX		_	_		
	Common goldeneye		X X X X	X X X	-	-	_		
	Green-winged teal		X X X X	X X X		-	-		
	Long-tailed duck		XXXX	XXX		-	-		
	Mallard	MODERATE	XXXX	XXX		-	_		
	Mergansers Mute swan	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X X X X X X X X X X X X X X X X X X X		_	_		
	Ring-necked duck	MODERATE	XXXX	XXX		_	_		
	Ruddy duck	HIGH	XXXX	XXX		_	_		
	Scaup	MODERATE	X X X X	X X X	-	-	-		
	Tundra swan	MODERATE	X X X X	X X X	-	-	-		
231	Bufflehead	MODERATE	XXXX	XXX		-	-		
	Common goldeneye		XXXX	XXX		-	-		
	Long-tailed duck Mergansers		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X X X X X X X X X X X X X X X X X X X		-	-		
	Mute swan		XXXX	XXX		_	_		
	Ruddy duck		XXXX	XXX		_	_		
	Scaup		X X X X	X X X		-	_		
	Scoters		X X X X	X X X	-	-	-		
411	Great blue heron	3 NESTS	X X X X X X X X X X	X X X X	MAY-JUL	-	-		
FISH									
RAR#		C. F. Comp.			Q	W	T	T	Adults
	Species	S F Conc.	JFMAMJJA S		Spawning	Eggs	Larvae	Juveniles	Adults
181	Alewife		X X X X X		_	_	_	_	FEB-JUN
	American eel		X X X X X X X X X X	X X X X	-	-	-	JAN-DEC	SEP-DEC
	American shad		X X X X X X	XX	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker		X X X X X	X X X X	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X		-	-	_		MAR-APR
	Atlantic menhaden Atlantic silverside		X X X X X X X X X X X X X X X X X X X			_	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic sliverside Atlantic spadefish			x	MAK-JUL -	_	_	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic sturgeon	С	XXXXXXXXX		_	_	_	#0G-0C1 -	JAN-OCT
	Bay anchovy		XXXXXXXXX		APR-SEP	_	_	JAN-DEC	JAN-DEC
	Black drum		X X X X X X	XXX		APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		XXXXXX		JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring Bluefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	XX	-	_	_	NOV-MAR MAY-NOV	JAN-JUN APR-NOV
	Butterfish		XXXXXXX		_	_	_	JUL-NOV	MAR-NOV
	Clearnose skate		XXXXX		_	_	_	-	MAY-NOV
	Gobies		XXXXXXXXX		APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X	X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad		X X X X X X	X X		-	-	NOV-MAR	JAN-JUN
	Hogchoker		X X X X X X X X X X				MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside Minnows		XXXXXXXXX			-	-	JAN-DEC	JAN-DEC
	Minnows Mummichoq		X X X X X X X X X X X X X X X X X X X			_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish		XXXXXX		AFK-AUG -	_	_	JAN-DEC	APR-OCT
	Northern pipefish		XXXXXXXXX			-	-	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X		MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin		XXXXXXX			-	-	- AUC CED	MAR-OCT
	Red drum Red hake				JUL-NOV -	- -	_	AUG-SEP	MAY-NOV
	Ned liake		XXXX	XXX	-	-	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark		XXXXX	хх	_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)		XXXXXXX		-	_	-	JUN-OCT	MAR-OCT
	Silver hake		XXXXX	XXX		-	-	-	OCT-MAY
	Silver perch		X X X X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X			-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		XXXX	XXX	-	-	-	MAR-JUN	MAR-JUN
	Snotted seatrout		V V V V V V	V V V	MAY-JUL	_	_	DD=MOV	SEP-NOV APR-NOV
	Spotted seatrout Striped bass		X X X X X X X X X X X X X X X X X X X			_	_	APR-NOV JAN-DEC	JAN-DEC
	Striped bass Striped killifish		XXXXXXXXX			_	_	JAN-DEC	JAN-DEC
	Summer flounder		XXXXXXXXX			_	OCT-MAY	JAN-DEC	APR-OCT
	Tautog		XXXX	XXX		-	-	-	OCT-APR
	Threadfin shad		XXXX	XXX	-	-	-	-	FEB-MAY
	1 64 1								SEP-NOV
100	Weakfish		XXXXXX		APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
199	Threadfin shad		XXXX	XXX	-	-	-	-	FEB-MAY
	Weakfish		XXXXXX	v v v	ADD-AIIC	_	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
	Weakiish Alewife		X X X X X X X X X X X X X X X X X X X	A A A	AFK-AUG -	_	MAY-AUG -	APR-NOV -	APR-NOV FEB-JUN
	American eel		X X X X X X X X X X	xxxx	_	_	_	JAN-DEC	SEP-DEC
	American shad		X X X X X X	ХХ	-	_	-	NOV-MAR	JAN-JUN
	Atlantic croaker		X X X X X	X X X X	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X		-	-	-	-	MAR-APR
	Atlantic menhaden		XXXXXXXXX			-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		XXXXXXXXX			-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish Atlantic sturgeon	С	X X X X X X X X X X	X X X x x	-	-	_	AUG-OCT	AUG-NOV JAN-OCT
		○							02111 001
	Bay anchovy		X X X X X X X X X X	XXXX	APR-SEP	_	_	JAN-DEC	JAN-DEC

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

 $\mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}$

 $\mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}$

X X X X X X X

X X X X X X X X APR-JUN

JUN-OCT

X X X X X X X X X X X X APR-SEP APR-SEP APR-OCT

APR-NOV

APR-OCT

NOV-MAR MAY-NOV

JUL-NOV

JAN-DEC

APR-JUN APR-JUN

APR-NOV

APR-OCT

JAN-JUN

APR-NOV MAR-NOV

MAY-NOV

JAN-DEC

Virginia: ESIMAP 64 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH: (cont.) RAR# Species J F M A M J J A S O N D Spawning Eggs Larvae Adults S F Conc. Juveniles 199 Harvestfish X X X X X X XJUL-OCT APR-OCT JAN-JUN NOV-MAR Hickory shad Hoachoker X X X X X X X X X X X X MAY-SEP MAY-SEP MAY-SEP JAN-DEC JAN-DEC Inland silverside X X X X X X X X X X X APR-MAY JAN-DEC JAN-DEC JAN-DEC Minnows X X X X X X X X X X X APR-AUG JAN-DEC X X X X X X X X X X X APR-AUG JAN-DEC Mummichog JAN-DEC Northern kingfish X X X X X X XAPR-OCT X X X X X X X X X X X X MAY-JUN JAN-DEC Northern pipefish JAN-DEC X X X X X X X X MAY-AUG X X X X X X X X MAY-JUL MAR-OCT Northern puffer MAR-OCT Northern searobin MAR-OCT X X X X X X X XAUG-SEP Red drum JUL-NOV MAY-NOV X X XRed hake X X X XFEB-MAY FEB-MAY SEP-NOV Sandbar shark X X X X X XMAY-OCT MAY-OCT ---Scup (porgy) X X X X X X X XJUN-OCT MAR-OCT Silver hake X X X X XX X XOCT-MAY Silver perch JAN-DEC JAN-DEC DEC-APR MAR-NOV JAN-DEC Spot MAR-JUN Spotted hake $X \ X \ X \ X \ X \ X \ X \ X$ MAR-JUN SEP-NOV Spotted seatrout X X X X X X X X MAY-JUL APR-NOV _ Striped bass $\mathsf{X} \; \mathsf{X} \;$ JAN-DEC JAN-DEC Striped killifish X X X X X X X X X X X X APR-SEP JAN-DEC JAN-DEC Summer flounder OCT-MAY JAN-DEC APR-OCT Tautog $\mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}$ OCT-APR American shad X X X X XFEB-JUN Hickory shad X X X X XX X X FEB-JUN X X X X X XOCT-JUN Striped bass 201 American eel JAN-DEC Atlantic menhaden X X X X X X XMAY-NOV X X X X X X X X X X X X APR-SEP JAN-DEC Bay anchovy JAN-DEC X X X X X X X X X X X X MAY-SEP JAN-DEC MAY-SEP MAY-SEP JAN-DEC Hogchoker X X X X X X X X X X X X MAR-SEP JAN-DEC JAN-DEC Killifish X X X X X X X X X X X X APR-AUG JAN-DEC JAN-DEC Mummichog MAR-JUL APR-SEP JAN-DEC JAN-DEC X X X X X X X X X X X X MAR-JUL Silversides INVERTEBRATE: RAR# Species S F Conc. JFMAMJJASOND Spawning Eggs Adults Larvae X X X X X X X X X X X X MAY-OCT MAY-OCT Northern quahog (hard clam) MAY-OCT JAN-DEC JAN-DEC Eastern oyster X X X X X X X X X X X X JUN-SEP JUN-SEP JUN-SEP JAN-DEC JAN-DEC 115 181 Blue crab JAN-DEC _ MAY-NOV JAN-DEC 199 Blue crab MAY-NOV JAN-DEC JAN-DEC X X X X X X X X X X X X JUN-SEP JUN-SEP Eastern oyster JUN-SEP JAN-DEC JAN-DEC Horseshoe crab _ JAN-DEC JAN-DEC Northern quahog (hard clam) X X X X X X X X X X X X MAY-OCT MAY-OCT JAN-DEC JAN-DEC 209 Blue crab X X X X X X X X X X X X XMAY-NOV JAN-DEC JAN-DEC MARINE MAMMAL: JFMAMJJASOND Mating RAR# Species S F Conc. Calving Pupping Molting ______ ---------------181 Bottlenose dolphin X X X X X X XX X X X XHarbor porpoise Bottlenose dolphin X X X X XHarbor porpoise 209 Bottlenose dolphin X X X X XHarbor porpoise REPTILE: J F M A M J J A S O N D Nesting Hatching Internesting Juveniles Adults RAR# Species S F Conc. Green sea turtle -Kemp's ridley sea turtle X X X X X X XMAY-NOV Kemp's ridley sea call
Leatherback sea turtle X X X X X X XMAY-NOV MAY-NOV Loggerhead sea turtle X X X X X X XGreen sea turtle $\mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}\ \mathsf{X}$ MAY-NOV Kemp's ridley sea turtle X X X X X X XMAY-NOV Leatherback sea turtle ΕE X X X X X X XMAY-NOV Loggerhead sea turtle тт X X X X X X XMAY-NOV 209 Green sea turtle ТТ X X X X X X XMAY-NOV Kemp's ridley sea turtle EΕ X X X X X X XMAY-NOV Leatherback sea turtle ΕE X X X X X X XMAY-NOV \times \times \times \times \times \times MAY-NOV Loggerhead sea turtle ТТ

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
45	Bald eagle	тт	X X X X				-	
10	Common moorhen	C	XXXX	-	_	_		
	Great blue heron		XXXX	-	-	-		
	Greater yellowlegs		X X X X	-	-	-		
	Green heron King rail		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Least bittern		XXXX	-	_	_		
	Marsh wren		$X \ X \ X \ X$	-	-	-		
	Osprey		XXXXXX	MAR-AUG	-	-		
	Sora Swamp sparrow		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Virginia rail		XXXX	_	_	_		
	Wood duck		$\times \times $	APR-JUN	-	-		
164	Bufflehead	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Canvasback	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	-		
	Common goldeneye Long-tailed duck	MODERATE	X X X X X X X X	_	_	_		
	Mergansers	HOBERTE	X X X X X X X X	_	_	_		
	Mute swan			-	-	-		
	Ring-necked duck	MODERATE	X X X X X X X X	-	-	-		
	Ruddy duck Scaup	HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Scoters	HIGH	X X X X X X X X	_	_	_		
	Tundra swan	MODERATE	$X X X X \qquad X X X$	-	-	-		
204	Bufflehead	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Canvasback	HIGH	XXXX XXX	-	_	-		
	Common goldeneye Long-tailed duck	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Mergansers	HIGH	X X X X X X X X	_	_	_		
	Ring-necked duck	LOW		-	-	-		
	Ruddy duck	VERY HIGH	X X X X X X X X	-	-	-		
394	Scaup Great blue heron	HIGH 9 NESTS	X X X X	– мау_ тит	_	_		
406	Great blue heron	5 NESTS	X X X X X X X X X X X X X	MAY-JUL	_	_		
430	Great blue heron	40 NESTS	$\times \times $	MAY-JUL	-	-		
432	Great blue heron	10 NESTS	$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$		-	-		
562	Peregrine falcon	Т	X X X X X X	MAR-AUG	-	-		
FISH	l :							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
68	Alewife		XXXXX	-	-	_	-	FEB-JUN
	American shad Blueback herring		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	_	FEB-JUN FEB-JUN
	Hickory shad		X	_	_	_	_	FEB-JUN
	Striped bass		X X X X X X X X X X	_	_	_	_	OCT-JUN
199	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	-	JAN-DEC	SEP-DEC
	American shad		X X X X X X X X X X	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker Atlantic mackerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	-	AUG-DEC -	MAY-NOV MAR-APR
	Atlantic mackerer Atlantic menhaden		x x	_	_	- MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		X X X X X X X X X X X X X X X X X X X		_	-	JAN-DEC	JAN-DEC
	Atlantic spadefish		X X X X	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	C	$\times \times $	-	-	-	-	JAN-OCT
	Bay anchovy		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Black drum		X	APR-JUN	APR-JUN -	APR-JUN -	APR-NOV	APR-NOV
	Black sea bass Blueback herring		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUN-OCT -	_	_	APR-OCT NOV-MAR	APR-OCT JAN-JUN
	Bluefish		XXXXXXXX	_	_	_	MAY-NOV	APR-NOV
	Butterfish		X X X X X X X X X	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate		$\times \times \times \times \times \times \times$	-	-	-	-	MAY-NOV
	Gobies		X X X X X X X X X X X X		APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Hogchoker		X X X X X X X X X X X X X		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Minnows		$X\ X\ X$		-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish		$\begin{smallmatrix} & & \times & \times & \times & \times & \times & \times \\ & \times & \times & \times$	– MAV – TIIN	_	-	- JAN-DEC	APR-OCT JAN-DEC
	Northern puffer		XXXXXXXXX	MAY-AUG	_	_	MAR-OCT	MAR-OCT
	Northern searobin		X X X X X X X X	MAY-JUL	-	-	-	MAR-OCT
	Red drum		$\times \times \times \times \times \times \times$	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake		X X X X	-	_	-	FEB-MAY	FEB-MAY
	Sandbar shark		X X X X X X	_	_	_	MAY-OCT	SEP-NOV MAY-OCT
	Scup (porgy)		X X X X X X X X	_	_	_	JUN-OCT	MAR-OCT
	Silver hake			-	-	-	-	OCT-MAY
	Silver perch		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	-	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X	-	-		MAR-NOV	JAN-DEC
	Spotted hake		X X X X	-	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-JUL	_	_	APR-NOV	APR-NOV
	Striped bass		imes ime	-	_	_	JAN-DEC	JAN-DEC
	Striped killifish		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder		X X X X X X X X X X X X X	-	-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog Threadfin shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	-	-	OCT-APR FEB-MAY
	INICAGIII SHAQ			*				SEP-NOV
	Weakfish		X X X X X X X X	APR-AUG	_	MAY-AUG	APR-NOV	APR-NOV
200	American shad		X X X X X	-	-	-	-	FEB-JUN
	Hickory shad		XXXX	-	-	-	-	FEB-JUN
0.01	Striped bass		X X X X X X X X X X X X X X X X X X X	-	-	-	- TAN DEC	OCT-JUN
∠01	American eel Atlantic menhaden		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	JAN-DEC MAY-NOV	_
	Bay anchovy		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Hogchoker		X X X X X X X X X X X X X		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Killifish		X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $		-	-	JAN-DEC	JAN-DEC
005	Silversides		X X X X X X X X X X X X X		MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
∠∪5	American shad Hickory shad		$egin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	-	FEB-JUN FEB-JUN
	Striped bass		x x x x x x x x x x x x x x x x x x x	- FEB-JUN	- FEB-JUN	- FEB-JUN	- FEB-OCT	FEB-JUN FEB-JUN
206	American shad		XXXXXXXXX	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hickory shad		$\times \times $	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Largemouth bass		X X X X X X X X X X X X		-	-	-	JAN-DEC
207	Striped bass		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
∠∪/	American shad		^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN

Virginia: ESIMAP 65 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH	: (cont.)							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
207	Hickory shad		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Largemouth bass		$\times \times $	MAR-MAY	-	-	-	JAN-DEC
208	American eel		imes ime	-	-	-	JAN-DEC	-
	Atlantic croaker		$\times \times $	-	-	-	JAN-DEC	-
	Atlantic menhaden		X X X X X X X	-	-	-	MAY-NOV	-
	Atlantic silverside		$\times \times $	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Bay anchovy		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Hogchoker		$\times \times $	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Silver perch		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X	-	-	DEC-APR	APR-NOV	-
	Striped bass		X X X X X X	-	-	-	MAY-OCT	-
	Summer flounder		$\times \times $	-	-		JAN-DEC	-
	Weakfish		X X X X X X X X X X X X X	-	-	-	JAN-DEC	-
	White perch		X X X X X X X X X X X X X	-	-	-	JAN-DEC	-
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
139	Blue crab		X X X X X X X X X X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
199	Blue crab		$X\;X\;X\;X\;X\;X\;X\;X\;$	-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		X X X X X X X X X X X X X	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
	Horseshoe crab		$X\;X\;X\;X\;X\;X\;X\;X\;$	-	-	-	JAN-DEC	JAN-DEC
	Northern quahog (hard clam)		$X\;X\;X\;X\;X\;X\;X\;X\;$	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
208	Blue crab		$X\;X\;X\;X\;X\;X\;X\;X\;$	-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		imes ime	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
209	Blue crab		x	-	-	MAY-NOV	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
	Bottlenose dolphin		x x x x x x x	-	-	-	_	
	Harbor porpoise		X X X X X X	-	-	-	-	
208	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Harbor porpoise		X X X X X X	-	-	-	-	
209	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Harbor porpoise		X X X X X X X	-	-	-	-	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesti	ng Juvenil	es Adults
199	Green sea turtle	т т	x x x x x x x	_	_	_	MAY-NOV	
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	_
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	T T	X X X X X X X	-	-	-	MAY-NOV	_
209	Green sea turtle	ТТ	X X X X X X X	-	-	_	MAY-NOV	_
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	_
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	ТТ	X X X X X X X	-	-	-	MAY-NOV	_
====								

BIOLOGICAL RESOURCES:

BIRD	:
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March Marc	BIRD	:							
Common Processor Common Proc	RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	, Molting	ī	
Common Processor Common Proc								· -	
Control March Date	45				-	-	_		
Part			C		_	_	_		
Company					_	_	_		
Total Color					-	_	_		
March strome				X X X X	-	-	-		
March					-	-	-		
Part						-	-		
Processor					MAK-AUG	_	_		
Marchan Marc					_	_	_		
16. P. P. P. P. P. P. P.		= =			-	-	-		
Commence of the content of the con					APR-JUN	-	-		
Marcines	164				-	-	-		
December			MODERATE		-	-	_		
March			MODERATE		_	_	_		
		=	1102214112		-	-	_		
Tright		Mute swan			-	-	-		
Second		-			-	-	-		
Professor		-			_	_	_		
Trustane season					_	_	_		
Marchemode Mar					_	_	_		
Common of Common growshape Morphagh Mo	204				-	-	-		
Marciana and control					-	-	-		
## Management Ma			MODERATE		-	-	-		
Many - mechad douck 100		=	нтсн		_	-	_		
Scale Scal		=			_	-	-		
Secure Fig. Secure Sec		=			-	-	-		
Note Series		Scaup		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
Mond drock MODISADY X X X X X X X X X X X C C C C	210					-	-		
Marcine Marc						-	_		
Description	235					_	_		
Second	200					_	_		
Mailerain MODERATE		Canada goose	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
Mace seam					-	-	-		
Ridge-mecked duck			MODERATE		-	-	-		
Rundra swam RIGH			MODERATE			_	_		
Mood duck		=				_	_		
395 Great blue heron 12 NESTS X X X X X X X X X X X X X X X X X X						-	_		
Fight Figh	392	Great blue heron	13 NESTS	$\times \times $	MAY-JUL	-	_		
FISH: FRARE SPECIOS						-	_		
RAME Species S F Conc. J F M A M J J A S O N D Spawning Eggs Larvae Juveniles Adults	406	Great blue heron	5 NESTS	X X X X X X X X X X X X X	MAY-JUL	-	_		
American shad	FISH	:							
American shad	RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eaas	Larvae	Juveniles	Adults
American shad									
Blueback herring	68				-	-	-	-	
Hickory shad					-	-	-	-	
Striped bass		<u> </u>			_	_	_	_	
					_	_	_	_	
Bay anchovy	201				-	-	-	JAN-DEC	
Hogchoker						-	-		-
		<u> </u>							
Mummichog									
Silversides									
Hickory shad						MAR-JUL	APR-SEP		
Argemouth bass	207	American shad		X X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
American eel									
Atlantic croaker	200					_	_		
Atlantic menhaden	200					_	_		
Atlantic silverside					_	_			
Hogchoker		Atlantic silverside		$\times \times $	MAR-JUL	-	-	JAN-DEC	JAN-DEC
Mummichog									
Silver perch		=							
Spot						_			
Summer flounder		<u> -</u>			-	-			
Weakfish White perch XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		Striped bass		$X \ X \ X \ X \ X$	-	-	-	MAY-OCT	-
White perch Largemouth bass X X X X X X X X X X X X X X X X X X					-	-			-
INVERTEBRATE: RAR# Species SF Conc. JFMAMJJASOND Spawning Eggs Larvae Juveniles Adults 139 Blue crab					-	-			
INVERTEBRATE: RAR# Species SF Conc. JFMAMJJASOND Spawning Eggs Larvae Juveniles Adults 139 Blue crab Blue crab Blue crab Eastern oyster SF Conc. XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	211					-			
RAR# Species SFConc. JFMAMJJASOND Spawning Eggs Larvae Juveniles Adults 139 Blue crab 208 Blue crab Eastern oyster SFConc. JFMAMJJASOND MATING MARTHE MAMMAL: RAR# Species SFConc. JFMAMJJASOND MATING Calving Pupping Molting 208 Bottlenose dolphin SFConc. JFMAMJJASOND MATING CALVING Pupping Molting XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		-			THIS SHALL				OTH DEC
139 Blue crab 208 Blue crab Eastern oyster NARINE MAMMAL: RAR# Species SF Conc. SF	INVE	RTEBRATE:							
Blue crab	RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
Blue crab									
Eastern oyster X X X X X X X X X X X X X X X X X X X					_	_			
MARINE MAMMAL: RAR# Species SF Conc. JF M A M J J A S O N D Mating Calving Pupping Molting	∠∪४								
RAR# Species S F Conc. J F M A M J J A S O N D Mating Calving Pupping Molting 208 Bottlenose dolphin X X X X X X X X X X X X X X X X X X X		<u>-</u>			OOM OUI	OOM OHE	OOM DEEL	J1111 DIO	OTTA DEC
208 Bottlenose dolphin	MARI	NE MAMMAL:							
208 Bottlenose dolphin X X X X X X X X —		Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
		P. 11 1							
MULDOL POLPOTOC AAAAA A	208				-	-	_	-	

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD								
RAR#	Species	S F Conc.			Migrating	Molting	ı	
14	Black scoter	HIGH	X X X X X X X	-	-	-		
	Surf scoter		XXXX	-	-	-		
	White-winged scoter		$X \ X \ X \ X \qquad \qquad X \ X$		-	-		
26	American woodcock Black-bellied plover		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Dunlin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-		
	Greater yellowlegs		$\times \times $	-	-	-		
	Killdeer Least sandpiper		$\begin{smallmatrix} & & \times & \times & \times \\ & \times & \times & \times & \times & \times \\ \end{smallmatrix}$	_	-	_		
	Lesser yellowlegs		X X X X X X X X X	_	_	_		
	Pectoral sandpiper		X X X X X X	-	-	-		
	Red knot		XXXXXX	-	-	-		
	Ruddy turnstone Sanderling		$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\\ X\;X\;X\;X\;X\;X\;X\;X\;$	_	_	_		
	Semipalmated plover		$\times \times $	-	-	-		
	Semipalmated sandpiper		$\times \times $	-	-	-		
	Short-billed dowitcher Stilt sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Western sandpiper		X X X X X X	_	_	_		
	Whimbrel		X X X X X X	-	-	-		
	White-rumped sandpiper		XXX	-	-	-		
94	Willet Clapper rail	HIGH	X X X X X X X X X X X X X X X X X X X	APR-AUG	-	_		
3.1	King rail	112 011	$\times \times $	-	-	-		
	Sora		$X X X \qquad X X X$	-	-	-		
	Virginia rail Whimbrel	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN -	-	_		
	Willet	HIGH	X X X X X X X X X X X X X		-	_		
	American oystercatcher	HIGH	X X X X X X X	MAR-JUL	-	-		
186	American black duck	HIGH	X X X X X X X X X X X X X	MAR-JUL -	-	-		
	American wigeon Brant	HIGH	$egin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Canada goose	HIGH	$\times \times $	APR-JUN	-	-		
	Gadwall		X X X X X X X X X X X X X		-	-		
	Green-winged teal Mallard	MODERATE	X X X X	– ΜΔΥ–.ΤΙΙΤ.	_	_		
	Northern pintail	UODIMITE	X X X X X X X X X X X X X X X X X X X	MAI-JUL -	-	-		
	Snow goose	HIGH			-	-		
187	Bufflehead Ping-necked duck	MODERATE	X X X X X X X X X X X X X X X X X X X		-	-		
	Ring-necked duck Scaup		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Scoters		X X X X X X X X	_	-	-		
191	Piping plover	T T HIGH	X X X X X X X	APR-SEP	-	-		
10/	Wilson's plover American oystercatcher	E HIGH 121 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP MAR-JUL	_	_		
	American black duck	HIGH	X X X X X X X X X X X X X X X X X X X		_	_		
	American wigeon			-	-	-		
	Brant Canada goose	HIGH MODERATE	X	- TIM	-	-		
	Gadwall	MODERALE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Green-winged teal		XXXX	-	-	-		
	Mallard		X X X X X X X X X X X X X	MAY-JUL	-	-		
	Northern pintail Snow goose		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
219	Bufflehead		X X X X X X X X		-	_		
	Mergansers				-	-		
	Brown pelican	C HIGH	X X X X X X X X X	-	-	-		
	Bald eagle Shorebirds	T T VERY HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	American oystercatcher	VERY HIGH 171 ADULTS	XXXXXXX	MAR-JUL	-	-		
	Forster's tern	9 ADULTS	$\times \times \times \times \times \times \times \times \times$	MAY-JUL	-	-		
	American oystercatcher Least tern	HIGH C 23 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-JUL	-	-		
	Black skimmer	206 ADULTS	X X X X X X X X	MAY-JUL	_	_		
	Common tern	307 ADULTS	X X X X X X X X	MAY-JUL	-	-		
	Gull-billed tern	T 19 ADULTS	X X X X X X X X	MAY-JUL	-	-		
	Herring gull Least tern	4 ADULTS C 74 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL	_	_		
552	Forster's tern	24 ADULTS	X X X X X X X X	MAY-JUL	-	-		
	Herring gull	31 ADULTS	X X X X X X X X X X X X X		-	-		
	Forster's tern Forster's tern	12 ADULTS 4 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	-	_		
	Black skimmer	34 ADULTS	XXXXXXXX	MAY-JUL	-	_		
	Common tern	21 ADULTS	X X X X X X X X	MAY-JUL	-	-		
	Gull-billed tern Least tern	T 6 ADULTS C 12 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	-	_		
559	Forster's tern	37 ADULTS	XXXXXXXX	MAY-JUL	-	-		
	Peregrine falcon	Т	$X \ X \ X \ X \ X \ X$	MAR-AUG	-	-		
FISH	:							
_	· Species	S F Conc.	J F M A M J J A S O N D	Spawning	Egas	Larvae	Juveniles	Adults
25	Atlantic croaker		X X X X X X X X	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel Atlantic menhaden		$\begin{smallmatrix} X & X \\ X & X & X & X & X & X & X & X &$	_	- -	_	- JAN-DEC	MAR-APR MAY-OCT
	Black drum		X X X X X X X X X	-	_	-	JAN-DEC	APR-OCT
	Black sea bass		$\times \times \times \times \times \times \times$	JUN-OCT	-	-	APR-OCT	APR-OCT
	Bluefish		X X X X X X X X	-	-	-	MAY-NOV	APR-NOV
	Butterfish Crevalle jack		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	_	-	-	JUL-NOV JAN-DEC	MAR-NOV -
	Northern kingfish		XXXXXX	MAY-AUG	-	-	-	APR-OCT
	Northern searobin		X X X X X X X X	_	-	-	-	MAR-OCT
	Pollock Red drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- JUL-NOV	-	_	<u> </u>	DEC-APR MAY-NOV
	Red hake		X	- JOT-NOA	-	-	- FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy) Silver hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-	JUN-OCT -	MAR-OCT OCT-MAY
	Southern kingfish (whiting)		XXXXXXX	_	-	_	_	APR-OCT
	Spanish mackerel		XX	-	-	-	-	APR-MAY
	Spiny dogfish Spot		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	- DEC-APR	- MAR-NOV	NOV-APR MAR-NOV
	Spotted hake		X X X X X X X X X X X X X X X X X X X	-	-	DEC-APK	MAR-NOV MAR-JUN	MAR-NOV MAR-JUN
	-							SEP-NOV
	Spotted seatrout Summer flounder		X X X X X X X X	MAY-JUL -	_	– ОСП-МЛУ	APR-NOV	APR-NOV
	Tautog		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		-	OCT-MAY -	_	APR-OCT JAN-DEC
	Weakfish		XXXXXXXX	APR-AUG		MAY-AUG	APR-NOV	APR-NOV

Virginia: ESIMAP 67 (cont.)

BIOLOGICAL RESOURCES: (cont.)

	: (cont.) Species		J F M A M J J A S O N D				Juveniles	Adults
30	Spanish mackerel							APR-MAY
50	Spot		XXXXXX	-	-		APR-OCT	JUL-SEP
	Spotted hake		XXXX XXX		-		OCT-APR	- ADD NOW
	Spotted seatrout Striped anchovy		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_		APR-NOV APR-NOV	APR-NOV APR-NOV
	Summer flounder		$X \times X \times X \times X \times X$		-	- I	APR-NOV	APR-NOV
	Tautog		X X X X X X X X		-		-	OCT-APR
	Weakfish White hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG -	-	– r	MAR-OCT -	APR-OCT MAR-MAY SEP-NOV
	White perch		$\times \times $		APR-JUN		JAN-DEC	JAN-DEC
	Winter flounder Alewife		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_		DEC-JUL -	DEC-MAY FEB-JUN
	American eel		X	_	_		JAN-DEC	- -
	American shad		X X X X X		-		-	FEB-JUN
	Atlantic croaker Atlantic herring		X X X X X X X X X X X X X X X X X X X	<u>-</u>	_	- N	MAY-DEC -	- FEB-JUN
	Atlantic mackerel		XX	_	_		_	MAR-APR
	Atlantic menhaden		$X\;X\;X\;X\;X\;X\;X\;X$	-	-	- I	MAY-NOV	MAY-OCT
	Bay anchovy		X	APR-SEP	-	- 3	JAN-DEC -	JAN-DEC
	Black drum Black sea bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_		- APR-SEP	APR-OCT APR-SEP
	Blueback herring		$X \times X \times X \times X \times X$	-	-		FEB-OCT	FEB-JUN
	Bluefish		X X X X X X	-	-		MAY-OCT	MAY-OCT
	Crevalle jack Gobies		X X X X X X X X X X X X X X X X X X X		- APR-SEP		JAN-DEC JAN-DEC	- JAN-DEC
	Hickory shad		XXXXX	- AFN-SEF	- -	-	-	FEB-JUN
	Hogchoker		$\times \times $		MAY-SEP		JAN-DEC	JAN-DEC
	Killifish Minnows		X X X X X X X X X X X X X X X X X X X		_		JAN-DEC JAN-DEC	JAN-DEC
	Minnows Mummichog		x x x x x x x x x x x x x x x x x x x		_	- 3	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern pipefish		X X X X X X X X X X X X X		-	- 3	JAN-DEC	JAN-DEC
	Northern searobin		XXX	-	-		JUN-AUG	JUN-AUG
	Pollock Red drum		X	- JUL-NOV	_		- AUG-SEP	DEC-APR MAY-NOV
	Red hake		X X X X X X X X X	- 20T-MOA	-		FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark		X X X X X X	-	_		MAY-OCT	MAY-OCT
	Scup (porgy) Silver hake		X X X X X X X X X X X X X X X X X X X	- -	_		JUN-OCT -	MAR-OCT OCT-MAY
	Silver perch		X X X X X X X X X X X X X	APR-MAY	APR-MAY	APR-JUN 3	JAN-DEC	JAN-DEC
	Silversides		X X X X X X X X X X X X X X X X X X X	MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
BI'	TAT:							
۲#	Species	S F Conc.	J F M A M J J A S O N D					
	March Control of the Control							
2 /	Maritime dune scrub Native coastal strand vegetation		X X X X X X X X X X X X X X X X X X X					
	Sea-beach knotweed		X X X X X X X X X X X X X X X X X X X					
	Southern beach spurge		$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$					
	RTEBRATE: Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eaas	Larvae 3	Juveniles	Adults
:5	Blue crab		X X X X X X X X X X X X X X X X X X X		-		JAN-DEC	JAN-DEC
:0	Channeled whelk Blue crab		X X X X X X X X X X X X X X X X X X X		- MAY-SEP		JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Channeled whelk		\times		-		JAN-DEC	JAN-DEC
	Northern quahog (hard clam)		imes ime	MAY-OCT	MAY-OCT	MAY-OCT 3	JAN-DEC	JAN-DEC
RI	NE MAMMAL:							
#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping N	Molting	
5	Bottlenose dolphin		X X X X X X	-			-	
	Common dolphin		X X X X X X	-	-	-	-	
	Harbor porpoise		XXXXX		-	-	-	
	Harbor seal Humpback whale	ЕЕ	X X		- JAN-DEC	<u> </u>	_	
0	Bottlenose dolphin		XXXXXXX	-	-	-	-	
	Harbor porpoise		XXXXX		-	-	-	
	Harbor seal		X X X X X	_	-	-	-	
	ILE: Species	S F Conc.	J F M A M J J A S O N D	Neetine	Hatchine	Internestin	na Juwani i	les Adul
							. <u> </u>	
.5	Green sea turtle Kemp's ridley sea turtle	T T E E	$\begin{array}{c} X \; X \; X \; X \; X \; X \; X \\ X \; X \; X \; X \; X \; X \; X \end{array}$	-	-	-	/ON-YAM /ON-YAM	
	Leatherback sea turtle	EE	X X X X X X X	-	-	_	MA1-NOV	
_	Loggerhead sea turtle	TT	$\times \times \times \times \times \times \times$	-	-	-	MAY-NOV	
	Diamondback terrapin Green sea turtle	тт	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL -	-	_	MAR-NOV MAY-NOV	
U	Kemp's ridley sea turtle	T T E E	X X X X X X X X X X X X X X X X X X X	_	_	_	NON-YAM	
	Leatherback sea turtle	E E	XXXXXX	-	-	-	-	MAY-
Λ	Loggerhead sea turtle	ТТ	$\begin{array}{c} \mathbf{X} \ \mathbf{X} \ \mathbf{X} \ \mathbf{X} \ \mathbf{X} \ \mathbf{X} \end{array}$	-	-	-	ON-YAM	
	Diamondback terrapin		X X X X X X X X X X	_ =======	-	- :======	MAR-NOV	V MAR-
	N USE RESOURCES:							
UA	CULTURE:							
1 #	Name		Contact			none		
- - 57	AQUACULTURE: HARD CLAMS							
8	AQUACULTURE: HARD CLAMS AQUACULTURE: OYSTERS							
'ע.ן	LIFE REFUGE:							
			Contract					
1#	Name		Contact			none 		

Biological information shown on the maps represents known concentration areas or occurrences, but does not
necessarily represent the full distribution or range of each species. This is particularly important to recognize
when considering potential impacts to protected species.

BIOLOGICAL RESOURCES:

BIRD	:
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RAR# Species

	Species	SF	Conc.				SOND	Nesting	Migrating	Molting		
94	Clapper rail		HIGH					APR-AUG			-	
51	King rail			XXXX				-	_	_		
	Sora			ХХ	Χ		XXX	-	-	-		
	Virginia rail			X X X X	ХХ	ХХ	X X X X	APR-JUN	-	-		
	Whimbrel		HIGH	X X			X X	-	-	-		
104	Willet		HIGH					APR-SEP	-	-		
	Bald eagle American black duck	ΤТ	итси	XXXX				FEB-MAY	_	_		
100	American black duck American wigeon		HIGH	XXXX		ΛΛ	XXX	MAR-JUL -	_	_		
	Brant		HIGH	XXXX			XXX	_	_	_		
	Canada goose		HIGH			ХХ		APR-JUN	_	-		
	Gadwall							APR-JUN	-	-		
	Green-winged teal			X X X X			X X X	-	-	-		
	Mallard		MODERATE	X X X X	ХХ	ХХ	X X X X	MAY-JUL	-	-		
	Northern pintail			XXXX			X X X	-	-	-		
100	Snow goose		HIGH	XXXX			XXX		-	-		
187	Bufflehead		MODERATE	XXXX			XXX		-	-		
	Ring-necked duck			X X X X X X X X X X X X X X X X X X X			X X X X X X X X X X X X X X X X X X X	_	_	_		
	Scaup Scoters			XXXX			XXX	_	_	_		
195	American black duck		VERY HIGH			хх		MAR-JUL	_	_		
130	American wigeon		HIGH	XXXX			XXX	-	-	_		
	Brant			X X X X			X X X	-	-	-		
	Canada goose		HIGH	X X X X	ХХ	ХХ	X X X X	APR-JUN	-	-		
	Gadwall		LOW			ХХ		APR-JUN	-	-		
	Green-winged teal			XXXX			XXX	-	-	_		
	Mallard		HIGH			ХХ		MAY-JUL	-	_		
	Northern pintail			XXXX			XXX	-	_	-		
196	Snow goose Bufflehead		HIGH	X X X X X X X X X X X X X X X X X X X			$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
100	Canvasback		HIGH	XXXX			XXX		_	_		
	Common goldeneye			XXXX			XXX		_	_		
	Long-tailed duck			X X X X			X X X	_	_	_		
	Redhead		HIGH	X X X X			X X X	-	-	-		
	Ring-necked duck		LOW	X X X X			X X X	-	-	-		
	Ruddy duck		HIGH	XXXX			X X X		-	-		
	Scaup			XXXX			XXX		-	-		
	Scoters		MODERATE	XXXX			XXX	-	-	_		
330	Tundra swan Forster's tern		HIGH 15 ADULTS	XXXX	хх	v v	XXX	- MAY-JUL	_	_		
330	roister's term		IJ ADOLIS	ΛΛ	ΛΛ	ΛΛ	Λ Λ	MAI-UUL	_	_		
FISH	:											
RAR#	Species	SF	Conc.	JFMA	мј	JΑ	SOND	Spawning	Eggs	Larvae	Juveniles	Adults
30	Alewife			XXX	ХХ			_	_	_	_	FEB-JUN
	American eel			X X X X	ХХ	ХХ	X X X X	-	-	-	JAN-DEC	_
	American shad			XXX				-	-	-	-	FEB-JUN
	Atlantic croaker					ХХ	X X X X	-	-	-	MAY-DEC	-
	Atlantic herring			XXX				_	-	_	-	FEB-JUN
	Atlantic mackerel Atlantic menhaden			X X		V V	v v v	_	_	-	- MAY-NOV	MAR-APR
	Bay anchovy			V V V V			XXX	APR-SEP	_	_	JAN-DEC	MAY-OCT JAN-DEC
	Black drum				XX			- AFK-3EF	_	_	-	APR-OCT
	Black sea bass				XX			_	_	_	APR-SEP	APR-SEP
	Blueback herring			XXX				-	-	FEB-JUN	FEB-OCT	FEB-JUN
	Bluefish				ХХ	ХХ	ХХ	-	-	-	MAY-OCT	MAY-OCT
	Crevalle jack			X X X X	ХХ	ХХ	X X X X	-	-	-	JAN-DEC	-
	Gobies					ХХ	XXXX	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Hickory shad			XXX				-	-	-	-	FEB-JUN
	Hogchoker							MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Killifish Minnows							MAR-SEP APR-AUG	-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog							APR-AUG	_	_	JAN-DEC	JAN-DEC
	Northern pipefish			XXXX				-	_	_	JAN-DEC	JAN-DEC
	Northern searobin					ХХ		_	_	_	JUN-AUG	JUN-AUG
	Pollock			X X X X			X	-	-	-	-	DEC-APR
	Red drum				ХХ	ХХ	XXX	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake			XXX	Χ		XXX	-	-	-	FEB-MAY	FEB-MAY
												SEP-NOV
	Sandbar shark					ХХ		-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy) Silver hake				ХХ	ХХ		_	-	_	JUN-OCT -	MAR-OCT
	Silver make Silver perch			XXXX		v v	XXX	- APR-MAY	- APR-MAY	- APR-JUN	JAN-DEC	OCT-MAY JAN-DEC
	Silversides							MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
	Spanish mackerel				Х			_	_	-	-	APR-MAY
	Spot			X	ХХ	ХХ	ХХ	-	-	-	APR-OCT	JUL-SEP
	Spotted hake			X X X X			X X X	-	-	-	OCT-APR	-
	Spotted seatrout							MAY-JUL	-		APR-NOV	APR-NOV
	Striped anchovy						X X X	APR-SEP	-	-	APR-NOV	APR-NOV
	Summer flounder					ХХ	XXX	-	-	-	APR-NOV	APR-NOV
	Tautog Weakfish			XXXX	ХХ	v v	XXX	- APR-AUG	_	_	- MAR-OCT	OCT-APR APR-OCT
	White hake			XX			XXX	AFN-AUG	_	_	- MAK-0C1	MAR-MAY
	wiffee make			21 21	21		21 21 21					SEP-NOV
	White perch			X X X X	ХХ	ХХ	X X X X	APR-JUN	APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Winter flounder			X X X X	ХХ	Χ	X	-	-	-	DEC-JUL	DEC-MAY
181	Alewife			XXX	ХХ			-	-	-	-	FEB-JUN
	American eel			X X X X		ХХ			-	-	JAN-DEC	SEP-DEC
	American shad			XXXX			ХХ		-	-	NOV-MAR	JAN-JUN
	Atlantic croaker			17 17		ХХ	XXXX	-	-	_	AUG-DEC	MAY-NOV
	Atlantic mackerel			XX		37 37	V V V	-	_	- MAY NOU	-	MAR-APR
	Atlantic menhaden Atlantic silverside			XXXX				- MAR-JUL	-	MAY-NOV -	JAN-DEC JAN-DEC	MAY-OCT JAN-DEC
	Atlantic sliverside Atlantic spadefish			VVVV	ΛΛ		x	MAK-JUL -	_	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С		XXXX	ХХ			_	_	_	AUG-UC1 -	JAN-OCT
	Bay anchovy	-						APR-SEP	_	-	JAN-DEC	JAN-DEC
	Black drum						XXX	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass				ХХ			JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring			X X X X			X X	-	-	-	NOV-MAR	JAN-JUN
	Bluefish						XXX	-	-	-	MAY-NOV	APR-NOV
	Butterfish			X X			XXX	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate			v v v ···			XXX	- 7 DD - CED	- 7 DD_CFD	- л пр_ост	- TAN-DEC	MAY-NOV
				$\wedge \wedge \times \times$	ΛX	ΛX	A A X X	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Gobies				ΧV	ΧV	X X	_	_	_	TITE-OCT	APR-OOM
	Gobies Harvestfish			X	X X X X			-	-	_	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Gobies			X X X X	ХХ		X X				JUL-OCT NOV-MAR JAN-DEC	APR-OCT JAN-JUN JAN-DEC
	Gobies Harvestfish Hickory shad			X X X X X X X X X X X X X X X X X X X	$\begin{array}{ccc} X & X \\ X & X \end{array}$	ХХ	X X X X	_	-	-	NOV-MAR	JAN-JUN
	Gobies Harvestfish Hickory shad Hogchoker			$\begin{array}{c} & & \times \\ \times & \times & \times \\ \times & \times & \times \\ \times & \times &$	X X X X X X	X X X X	X X X X X X X X X X X X X X X X X X X	- MAY-SEP	- MAY-SEP	- MAY-SEP	NOV-MAR JAN-DEC	JAN-JUN JAN-DEC
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside			X X X X X X X X X X X X X X X X X X	X X X X X X X X	X X X X X X	X X X X X X X X X X X X X X X X X X X	- MAY-SEP APR-MAY	- MAY-SEP -	- MAY-SEP -	NOV-MAR JAN-DEC JAN-DEC	JAN-JUN JAN-DEC JAN-DEC

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

Virginia: ESIMAP 68 (cont.)

BIOLOGICAL RESOURCES: (cont.)

RAR#	Species	S F Conc.	J	F	M	I A	1	M.	J	J	A	١.	3	оир	Spawning	Eggs
181	Northern kingfish			_	_	· -		- X	- Х	- Х	X		X	 X	-	
	Northern pipefish		X	Х	Х	Σ >	< 2	X :	Χ	Χ	Χ	()	Χ	ххх	MAY-JUN	_
	Northern puffer				Х	Σ >	< 2	X :	Χ	Χ	Χ	()	Χ	X	MAY-AUG	_
	Northern searobin				Х	Σ >	()	Χ	Χ	Х	Х		Χ	X	MAY-JUL	-
	Red drum						2	Χ	Χ	Χ	Х	()	Χ	ХХ	JUL-NOV	-
	Red hake			Χ	Х	Σ >	< 2	Χ				2	Χ	ХХ	-	-
	Sandbar shark						2	X.	Х	Х	Х	()	X	X	_	_
	Scup (porgy)				Х	Σ >	()	Χ	Χ	Χ	Х	2	Χ	X	-	-
	Silver hake		X	Χ	Х	Σ >	()	Χ						ХХХ	-	-
	Silver perch		X	Χ	Х	Σ >	()	Χ	Χ	Χ	Х	2	Χ	ХХХ	APR-MAY	-
	Spot		X	Χ	Х	Σ >	()	Χ	Χ	Χ	Х	2	Χ	ХХХ	-	_
	Spotted hake				Х	Σ >	()	X .	Χ			2	Χ	ХХ	-	-
	Spotted seatrout					Σ	< 1	X.	Х	Х	Х	()	Χ	ХХ	MAY-JUL	_

INVERTEBRATE:

Tautog

Weakfish

Striped bass

Striped killifish

Summer flounder

Threadfin shad

RAR#	Species	S F Conc.	JFM	AMJ	JAS	OND	Spawning	Eggs	Larvae	Juveniles	Adults
16	Northern quahog (hard clam)		x x x			X X X	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
30	Blue crab		X X X	X X X	X X X	X X X	-	MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
	Channeled whelk		X X X	X X X	X X X	X X X	-	-	-	JAN-DEC	JAN-DEC
	Northern quahog (hard clam)		X X X	X X X	X X X	X X X	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
181	Blue crab		X X X	X X X	X X X	X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
182	Knobbed whelk		X X X	X X X	X X X	X X X	-	-	-	JAN-DEC	JAN-DEC

 $\mathbf{x} \ \mathbf{x} \ \mathbf{x}$

 $\mathsf{X} \; \mathsf{X} \; \mathsf{X} \; \mathsf{X} \qquad \qquad \mathsf{X} \; \mathsf{X} \; \mathsf{X}$

X X X X

 $\hbox{X X X X X X X X X X X X X APR-SEP}$

X X X

X X X X X X X X APR-AUG

Adults

APR-OCT

JAN-DEC

MAR-OCT MAR-OCT

MAY-NOV FEB-MAY

SEP-NOV

MAY-OCT

MAR-OCT OCT-MAY

JAN-DEC

MAR-NOV

MAR-JUN

SEP-NOV

APR-NOV

JAN-DEC

JAN-DEC

APR-OCT

OCT-APR

FEB-MAY SEP-NOV

APR-NOV

Juveniles

JAN-DEC

MAR-OCT

AUG-SEP

FEB-MAY

MAY-OCT

JUN-OCT

JAN-DEC

MAR-NOV

MAR-JUN

APR-NOV

JAN-DEC

JAN-DEC

JAN-DEC

Larvae

DEC-APR

OCT-MAY

MAY-AUG APR-NOV

MARINE MAMMAL:

RAR#	Species	S F Conc.	JFM	AMJ	JASO	N D	Mating	Calving	Pupping	Molting
30	Bottlenose dolphin			XXX	X X X X		-	-	-	-
	Harbor porpoise		XXX	XX		X	-	-	-	-
	Harbor seal		XX		X	ХХ	-	-	-	-
181	Bottlenose dolphin			X X X X	X X X X		-	-	-	-
	Harbor porpoise		XXX	XX		Х	-	-	-	-

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
30	Green sea turtle	т т	X X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	т т	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
94	Diamondback terrapin		X X X X X X X X X X	-	-	-	MAR-NOV	MAR-NOV

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone

57 AQUACULTURE: HARD CLAMS

BIOLOGICAL RESOURCES:

BIRD	:
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	: Species	S F Conc	л	FMAM.	T.T A S O N	ID Nestin	, Migrating	Molting		
	species								_	
100	Brown pelican	С			XXXX	-	-	-		
	Gulls Loons			XXXXX	X		_	_		
	Mergansers			XXX		X -	_	_		
	Osprey				X X X X X X		-	-		
	Scoters Terns	HIGH	I X		X X X X X X	X -	-	-		
124	Bald eagle	тт	X			X FEB-MAY	<i>-</i>	_		
152	American oystercatcher		DULTS	X X X X		MAR-JUI		-		
	American oystercatcher American black duck		DULTS HIGH X		XXXX	MAR-JUI		-		
193	American black duck American wigeon	HIGH		XXXX	X X	X MAR-JUI X -		_		
	Brant			XXX	X X		-	-		
	Canada goose	HIGH				X APR-JUI		-		
	Gadwall Green-winged teal	LOW		XXXXX	. x x x x x X X	X APR-JUI		-		
	Mallard	HIGH				X MAY-JUI		-		
	Northern pintail			X X X		- X	-	-		
196	Snow goose Bufflehead	HIGH		X X X X X X X X X X X X X X X X X X X	XX	X –	_	_		
100	Canvasback	HIGH		XXX		X -	_	-		
	Common goldeneye			X X X		- X	-	-		
	Long-tailed duck	штен		XXX		X -	-	-		
	Redhead Ring-necked duck	HIGH LOW		X X X X X X X X X X X X X X X X X X X		X -	_	_		
	Ruddy duck	HIGH		XXX		- X	-	-		
	Scaup			X X X		- X	-	-		
	Scoters Tundra swan	MODE: HIGH		XXX	X X X X		_	_		
224	Clapper rail	niign				X APR-AUG	-	_		
	Willet		X			X APR-SE	_	-		
225	Henslow's sparrow	T T	•••	XXX	XXX		-	-		
	Peregrine falcon Saltmarsh sharp-tailed sparrow	T C	X		:	. x – JUN-AU(-		
228	American oystercatcher		DULTS	XXXX		MAR-JUI		-		
	Wood duck					X APR-JUI		-		
230	Clapper rail Henslow's sparrow	Т	X	XXXXX	X	X APR-JUI	I –	_		
	Saltmarsh sharp-tailed sparrow	C		XXX	ΛΛΛ	. – –	_	_		
	Great blue heron	19 N	IESTS X	X X X X X	X X X X X X	X MAY-JUI	_	-		
	Forster's tern	T			XXXXX	MAY-JUI MAR-AUG		-		
362	Peregrine falcon	T		XXXX	. A A	MAK-AU	-	-		
FISH	:									
RAR#	Species	S F Conc		FMAMJ	JASON	D Spawnin	ng Eggs	Larvae	Juveniles	Adults
181	Alewife			X X X X X						FEB-JUN
101	American eel		X		XXXXXX	- x	_	_	JAN-DEC	SEP-DEC
	American shad		X		X		-	-	NOV-MAR	JAN-JUN
	Atlantic croaker Atlantic mackerel			X X		X -	-	_	AUG-DEC -	MAY-NOV MAR-APR
	Atlantic menhaden		X		XXXXX			MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside					X MAR-JUI	_	-	JAN-DEC	JAN-DEC
	Atlantic spadefish	G.	37	17 17 17 17 17 1	XXXX			-	AUG-OCT	AUG-NOV
	Atlantic sturgeon Bay anchovy	С		XXXXXX		- X APR-SEI			- JAN-DEC	JAN-OCT JAN-DEC
	Black drum					APR-JUI			APR-NOV	APR-NOV
	Black sea bass				X X X X X	JUN-OC	-	-	APR-OCT	APR-OCT
	Blueback herring Bluefish		X	XXXXXX	X		_	_	NOV-MAR MAY-NOV	JAN-JUN APR-NOV
				21 21 2:					1.11.7.1 IAOA	
	Butterfish				X X X X X X		-	-	JUL-NOV	MAR-NOV
	Butterfish Clearnose skate			X X	X X X X X	_	-	-	JUL-NOV -	MAX-NOV MAY-NOV
	Butterfish Clearnose skate Gobies		х	X X X X X	X	: - X APR-SEI	- APR-SEP	- APR-OCT	- JAN-DEC	MAY-NOV JAN-DEC
	Butterfish Clearnose skate Gobies Harvestfish			X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X APR-SEI	- P APR-SEP -	-	- JAN-DEC JUL-OCT	MAY-NOV JAN-DEC APR-OCT
	Butterfish Clearnose skate Gobies		X	X X X X X X X X X X X X X X X X X X X		X APR-SEI	- P APR-SEP - -	APR-OCT - -	- JAN-DEC	MAY-NOV JAN-DEC
	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside		X X X	X X X X X X X X X X X X X X X X X X X		X APR-SEH X APR-SEH X - X MAY-SEH X APR-MAY	- APR-SEP 	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC
	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows		X X X	X X X X X X X X X X X X X X X X X X X		X APR-SEI X - X - X - X APR-MAX	APR-SEP	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC
	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog		X X X	X X X X X X X X X X X X X X X X X X X		X APR-SEI X - X - X - X APR-MAX	APR-SEP	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC
	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish		X X X	X X X X X X X X X X X X X X X X X X X		X APR-SEI X - X - X - X APR-MAX	APR-SEP	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC
	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer		X X X	X X X X X X X X X X X X X X X X X X X		X APR-SEI X - X - X - X APR-MAX	APR-SEP	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT
	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish		X X X	X X X X X X X X X X X X X X X X X X X		X APR-SEI X - X - X - X APR-MAX	APR-SEP	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT
	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin		X X X	X X X X X X X X X X X X X X X X X X X		X APR-SEI X - X - X - X APR-MAX	APR-SEP	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY
	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake		X X X	X X X X X X X X X X X X X X X X X X X		X APR-SEI X - X - X - X APR-MAX	- APR-SEP	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC AN-DEC MAR-OCT AUG-SEP FEB-MAY	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV
	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark		X X X	X X X X X X X X X X X X X X X X X X X		X APR-SEI X - X - X - X APR-MAX	APR-SEP	APR-OCT - MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT
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	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE:		x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X		X APR-SEI X APR-AU X APR-AU X APR-AU X APR-AU X APR-AU X APR-AU MAY-JUI MAY-AU MAY-JUI JUL-NO X APR-MAX X X APR-MAX X X APR-MAX X X APR-SEI X X APR-SEI X APR-AU APR-A	- APR-SEP	APR-OCT APR-OCT APR-OCT DEC-APR COCT-MAY MAY-AUG	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC AN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV
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RAR#	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species	S F Conc	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-SEI	- APR-SEP	- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC AN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV APR-NOV
RAR# 16	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE:	S F Conc	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-SEI	- APR-SEP	- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC AN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAR-OCT OCT-MAY JAN-DEC MAR-NOV APR-NOV JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV
RAR# 16 181 182	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Northern quahog (hard clam) Blue crab Knobbed whelk		x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X APR-SEI X APR-MAY X APR-MAY X APR-MAY X APR-AU X APR-AU X APR-AU MAY-JUI JUL-NO X X APR-MAY X APR-MAY X APR-MAY X APR-MAY X APR-MAY X APR-SEI X APR-SEI X APR-AU X APR-AU X APR-AU X APR-SEI X APR-SEI X APR-AU	APR-SEP APR-SEP MAY-SEP APR-SEP APR	- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV APR-NOV
RAR# 16 181 182	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Northern quahog (hard clam) Blue crab	S F Conc 	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-AU APR-SEI X APR-AU APR-AU X APR-AU X APR-AU APR-AU MAY-JUI JUL-NO X APR-MAY X APR-MAY X APR-MAY X APR-MAY X APR-MAY X APR-MAY X APR-SEI X APR-SEI X APR-AU APR-AU X APR-SEI X APR-AU X APR-AU X APR-AU X APR-SEI X APR-AU X APR-AU	APR-SEP APR-SEP MAY-SEP APR-SEP APR	- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV APR-NOV
RAR# 16 181 182 226	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Northern quahog (hard clam) Blue crab Knobbed whelk		x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X APR-SEI X APR-MAY X APR-MAY X APR-MAY X APR-AU X APR-AU X APR-AU MAY-JUI JUL-NO X X APR-MAY X APR-MAY X APR-MAY X APR-MAY X APR-MAY X APR-SEI X APR-SEI X APR-AU X APR-AU X APR-AU X APR-SEI X APR-SEI X APR-AU	APR-SEP APR-SEP MAY-SEP APR-SEP APR	- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAY-NOV APR-NOV JAN-DEC APR-NOV APR-NOV JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV
RAR# 16 181 182 226 MARI RAR#	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Northeastern beach tiger beetle NE MAMMAL: Species	T T	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X APR-SEI X APR-MAY X APR-MAY X APR-MAY X APR-AU X APR-AU X APR-AU MAY-JUI JUL-NO X X APR-MAY X APR-MAY X APR-MAY X APR-MAY X APR-MAY X APR-SEI X APR-SEI X APR-AU X APR-AU X APR-AU X APR-SEI X APR-SEI X APR-AU	APR-SEP APR-SEP MAY-SEP APR-SEP APR	- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAY-NOV APR-NOV JAN-DEC APR-NOV APR-NOV JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV
RAR# 16 181 182 226 MARI RAR#	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Northeastern beach tiger beetle NE MAMMAL: Species	T T	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-SEI	APR-SEP	- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV APR-NOV
RAR# 16 181 182 226 MARI RAR#	Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Northeastern beach tiger beetle NE MAMMAL: Species	T T	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	APR-SEI	APR-SEP	- APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV APR-NOV

Virginia: ESIMAP 69 (cont.)

BIOLOGICAL RESOURCES: (cont.)

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
39	Green sea turtle	тт	X X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	-
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	ТТ	X X X X X X X	-	-	-	MAY-NOV	-
227	Diamondback terrapin	VERY HIGH	X X X X X X X X X X	MAY-JUL	-	-	MAR-NOV	MAR-NOV

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
58	AQUACULTURE: OYSTERS		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
115	PARKERS MARSH NATURAL AREA PRESERVE	VA DCR DNH	757/787-5576

BIOLOGICAL RESOURCES:

BIRD	:
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RAR# Species

RAR#	Species	S F Conc.	J F M A M J J A S O N I	Nesting	Migrating	Molting		
	Brown pelican	C	X X X X X X X X	-	-			
	Gulls		imes ime	-	-	-		
	Loons		XXXX XXX		-	-		
	Mergansers Osprey		X X X X		_	_ _		
	Scoters	HIGH	XXXX XXXX		_	_		
	Terns		XXXXXXX	-	-	-		
195	American black duck	VERY HIGH	$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $		-	-		
	American wigeon	HIGH	XXXX XXX		-	-		
	Brant Canada goose	HIGH	X X X X		_	_		
	Gadwall	LOW	XXXXXXXXXXX		_	_		
	Green-winged teal		X X X X X X X X X	- ×	-	_		
	Mallard	HIGH	X X X X X X X X X X X X X X X X X X X		-	-		
	Northern pintail Snow goose		X X X X X X X X X X X X X X X X X X X		_	_		
196	Bufflehead	HIGH	X X X X X X X X X		_	_		
	Canvasback	HIGH	x x x x x x x x x x x x x x x x x x x		-	-		
	Common goldeneye		XXXX X XX		-	-		
	Long-tailed duck		XXXX XXX		-	-		
	Redhead Ring-necked duck	HIGH LOW	X X X X X X X X X X X X X X X X X X X		_	_		
	Ruddy duck	HIGH	XXXX		_	_		
	Scaup		X X X X X X X X X		-	_		
	Scoters	MODERATE	XXXX		-	-		
220	Tundra swan	HIGH	XXXX XXX		-	-		
230	Clapper rail Henslow's sparrow	Т	X X X X X X X X X X X X X X X X X X X	APR-JUN	_	_		
	Saltmarsh sharp-tailed sparrow	C	XXX	_	_	_		
411	Great blue heron	3 NESTS	x x x x x x x x x x x x x x x x x x x	K MAY-JUL	-	-		
гтец								
FISH		C E C	T B W & W T T T C C		De	T	Tours of 3	3 d 1 ± ·
RAR#	Species	S F Conc.	JFMAMJJASONI	spawning	rggs	Larvae ,	Juveniles	Adults
	Alewife		X X X X X					FEB-JUN
	American eel		XXXXXXXXXXX	- Σ	-		JAN-DEC	SEP-DEC
	American shad		X X X X X X X X X X X X X X X X X X X		-		NOV-MAR	JAN-JUN
	Atlantic croaker		X X X X X X X X X	- ·	-		AUG-DEC	MAY-NOV
	Atlantic mackerel Atlantic menhaden		X X X X X X X X X X X X X X X	_ 	_	- MAY-NOV	- JAN-DEC	MAR-APR MAY-OCT
	Atlantic silverside		XXXXXXXXXXXX		_		JAN-DEC	JAN-DEC
	Atlantic spadefish		X X X X	_	-		AUG-OCT	AUG-NOV
	Atlantic sturgeon	C	$\times \times $	-	-	-	-	JAN-OCT
	Bay anchovy		X X X X X X X X X X X X X X X X X X X		-		JAN-DEC	JAN-DEC
	Black drum Black sea bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN JUN-OCT	APR-JUN -		APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring		XXXXXXXXXXX		_	-	NOV-MAR	JAN-JUN
	Bluefish		$\times \times \times \times \times \times \times \times$	-	-	- !	MAY-NOV	APR-NOV
	Butterfish		X X X X X X X X X	-	-		JUL-NOV	MAR-NOV
	Clearnose skate Gobies		X X X X X X X X X X X X X X X X X X X		- 7 DD_GFD		- JAN-DEC	MAY-NOV JAN-DEC
	Harvestfish			-	-		JUL-OCT	APR-OCT
	Hickory shad		X X X X X X X X X X X X X X X X X X X	ζ –	-	- 1	NOV-MAR	JAN-JUN
	Hogchoker		X X X X X X X X X X X X X X X X X X X		MAY-SEP		JAN-DEC	JAN-DEC
	Inland silverside		X X X X X X X X X X X X X X X X X X X		-		JAN-DEC	JAN-DEC
	Minnows Mummichog		X X X X X X X X X X X X X X X X X X X		_		JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish			-	_	_	-	APR-OCT
	Northern pipefish		imes ime		-	_	JAN-DEC	JAN-DEC
	Northern puffer		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	MAY-AUG	_		MAR-OCT	MAR-OCT
	Northern searobin Red drum		X X X X X X X X X X X X X X X X X X X		_	_	- AUG-SEP	MAR-OCT MAY-NOV
	Red hake		XXXX XXX		_		FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark		X X X X X X	-	-		MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	- < -	-	-	JUN-OCT	MAR-OCT
	Silver hake Silver perch		X X X X X X X X X X X X X X X X X X X	=	_	_	- JAN-DEC	OCT-MAY JAN-DEC
	Spot		XXXXXXXXXXXX			DEC-APR I		MAR-NOV
	Spotted hake		X X X X X X X X		-	- 1	MAR-JUN	MAR-JUN
								SEP-NOV
	Spotted seatrout		X X X X X X X X				APR-NOV	APR-NOV
	Striped bass Striped killifish		X X X X X X X X X X X X X X X X X X X				JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Summer flounder		XXXXXXXXXXXX		-	- OCT-MAY		APR-OCT
	Tautog		XXXX	-	-	-	-	OCT-APR
	Threadfin shad		X X X X	-	-	-	-	FEB-MAY
	Weakfish		X	ADR=NIIC	_	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
				1111 AUG		1111 1100	INO A	111 1 1 V V
	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N I	Spawning	Eggs	Larvae	Juveniles	Adults
							JAN-DEC	
	Northern quahog (hard clam) Blue crab		X X X X X X X X X X X X X X X X X X X				JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Knobbed whelk		XXXXXXXXXXXX				JAN-DEC	JAN-DEC
	NE MAMMAL:						_	
AR#	Species	S F Conc.	J F M A M J J A S O N I) Mating	Calving	Pupping !	Molting	
	Bottlenose dolphin		X X X X X X X					
TOT	Harbor porpoise		X X X X X X X X X X X X X X X X X X X		_	_	_	
				-				
	ILE:							
	Species	S F Conc.	J F M A M J J A S O N I	Nesting	Hatching	Internesti	ng Juvenil	es Adults
RAR#								
	Green sea turtle	T T E E	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	MAY-NOV MAY-NOV	
	Kemp's ridley see turtle		^ ^ ^ ^ ^ ^	_				
	Kemp's ridley sea turtle Leatherback sea turtle			-	_	-	_	MAY-NOV
	Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle	E E T T	$\begin{array}{c} \mathbf{X} \ \mathbf{X} \end{array}$	-	-	-	- MAY-NOV	MAY-NOV

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

BIOLOGICAL RESOURCES:

FISH:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
181	Striped bass		X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Striped killifish		imes ime	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Summer flounder		x	_	_	OCT-MAY	JAN-DEC	APR-OCT
	Tautog		X X X X X X X X	_	_	_	_	OCT-APR
	Threadfin shad		X X X X X X X X	_	_	_	_	FEB-MAY
								SEP-NOV
	Weakfish		X X X X X X X X	APR-AUG	_	MAY-AUG	APR-NOV	APR-NOV
	Alewife		X X X X X	_	_	_	_	FEB-JUN
	American eel		x	_	_	_	JAN-DEC	SEP-DEC
	American shad		X X X X X X X X X X X X X X X X X X X	_	_	_	NOV-MAR	JAN-JUN
	Atlantic croaker		XXXXXXX	_	_	_	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	_	_	_	-	MAR-APR
	Atlantic menhaden		x x x x x x x x x x x x x	_	_	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		X X X X X X X X X X X X	MAR-JUI	_	_	JAN-DEC	JAN-DEC
	Atlantic spadefish		XXXX	_	_	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	X X X X X X X X X X	_	_	_	-	JAN-OCT
	Bay anchovy	0	X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Black drum		XXXXXXXXX	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		XXXXXXX	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring		XXXXXXXXXX	-	_	_	NOV-MAR	JAN-JUN
	Bluefish		X X X X X X X X	_	_	_	MAY-NOV	
	Butterfish			_	_	_		APR-NOV
			X	-	_	_	JUL-NOV	MAR-NOV
	Clearnose skate		X X X X X X X	-			-	MAY-NOV
	Gobies		$\times \times $	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		$X\;X\;X\;X\;X\;X\;X$	_	-	_	JUL-OCT	APR-OCT
	Hickory shad		X X X X X X X X X X X X X X X X X X X	-	-	-	NOV-MAR	JAN-JUN
	Hogchoker		$X\;X\;X\;X\;X\;X\;X\;X\;$		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		$X\;X\;X\;X\;X\;X\;X\;X\;$	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Minnows		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog			APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern kingfish		X X X X X X X	-	-	-	-	APR-OCT
	Northern pipefish		$\times \times $	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin		X X X X X X X X	MAY-JUL	-	_	_	MAR-OCT
	Red drum		X X X X X X X	JUL-NOV	-	_	AUG-SEP	MAY-NOV
	Red hake		X X X X X X X X X	-	-	-	FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark		X X X X X X	_	-	_	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	_	_	_	JUN-OCT	MAR-OCT
	Silver hake		X	_	_	_	_	OCT-MAY
	Silver perch		x x x x x x x x x x x x x	APR-MAY	_	_	JAN-DEC	JAN-DEC
	Spot		\times	-	_	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		XXXXXXXX	_	_	_	MAR-JUN	MAR-JUN
	Spococa nane						IIIIC OON	SEP-NOV
	Spotted seatrout		$\times \times \times \times \times \times \times \times$	MAY-JUL	-	-	APR-NOV	APR-NOV
NVE	RTEBRATE:							
AR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
 181	Blue crab					MAY-NOV	JAN-DEC	JAN-DEC
	NE MAMMAL:							
						_		
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
181	Bottlenose dolphin		X X X X X X X	_	-	_	_	
	Harbor porpoise		$\times \times $	-	-	-	-	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internest	ting Juveni	les Adults
39	Green sea turtle	тт		-			MAY-NO	
	Kemp's ridley sea turtle	E E	XXXXXXX	_	_	_	MAY-NO	
	Leatherback sea turtle	E E	XXXXXXX	_	_	_	-	
	Loggerhead sea turtle	T T	XXXXXXX	_	_	_	MAY-NO	
	noggernead sea fulfie	т т	ΑΑΑΑΑΧ	_	-	-	MAI-NO	v

BIOLOGICAL RESOURCES:

FISH:

RAR#	Species	S F Conc.	J F M A M J J A S O N	Spawning	Eggs	Larvae	Juveniles	Adults
	Alewife		XXXXX	-	-	-	-	FEB-JUN
	American eel		imes ime	ζ –	-	-	JAN-DEC	SEP-DEC
	American shad		X X X X X X X X X X X X X X X X X X X	ζ –	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker		X X X X X X X X	ζ –	-	_	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	-	-	_	-	MAR-APR
	Atlantic menhaden		X X X X X X X X X X X X X X X X X X X	ζ –	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		X X X X X X X X X X X X X X X X X X X	K MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish		X X X X	_	_	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	\times \times \times \times \times \times \times \times	_	_	_	_	JAN-OCT
	Bay anchovy		XXXXXXXXXXX	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Black drum		$\times \times $	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		$X \times X \times X \times X$	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring		XXXXXXXXXX		_	_	NOV-MAR	JAN-JUN
	Bluefish		XXXXXXXX			_	MAY-NOV	APR-NOV
	Butterfish			_	_	_		
			X X X X X X X X X	_	_	_	JUL-NOV -	MAR-NOV
	Clearnose skate		X X X X X X X	_				MAY-NOV
	Gobies		X X X X X X X X X X X X X X X X X X X	K APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	_	-	-	JUL-OCT	APR-OCT
	Hickory shad		X X X X X X X X X X X X X X X X X X X		-	-	NOV-MAR	JAN-JUN
	Hogchoker		X X X X X X X X X X X X X X X X X X X	K MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		X X X X X X X X X X X X X X X X X X X	K APR-MAY	-	-	JAN-DEC	JAN-DEC
	Minnows		\times	K APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X X X X X X X	K APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern kingfish		X X X X X X X	_	-	_	_	APR-OCT
	Northern pipefish		X X X X X X X X X X X X X X X X X X X	X MAY-JUN	_	_	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	_	_	MAR-OCT	MAR-OCT
	Northern searobin		$X \times X \times X \times X \times X$	MAY-JUL	_	_	-	MAR-OCT
	Red drum		XXXXXXX	JUL-NOV	_	_	AUG-SEP	MAY-NOV
	Red hake		XXXX XXXX	-	_	_	FEB-MAY	FEB-MAY
	Red Hake		A A A A A A A A	_	_	_	red-Mai	
								SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		XXXXXXXXXX	ζ –	-	-	-	OCT-MAY
	Silver perch		X X X X X X X X X X X X X X X X X X X	K APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X X X X X X X	ζ –	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		X X X X	-	-	-	MAR-JUN	MAR-JUN
								SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	_	APR-NOV	APR-NOV
	Striped bass		x x x x x x x x x x x x x		_	_	JAN-DEC	JAN-DEC
	Striped killifish		XXXXXXXXXXX		_	_	JAN-DEC	JAN-DEC
	Summer flounder		XXXXXXXXXXX		_	OCT-MAY	JAN-DEC	APR-OCT
	Tautog		XXXX		_	OCI MAI	- OAN DEC	OCT-APR
	Threadfin shad		XXXX XXX	_	_	_	_	
	Threadilh shad		X X X X X X X	_	_	-	-	FEB-MAY
	Weakfish		$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $	APR-AUG	_	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
NTS 21 2			* * * * * * * * *	AFR-AUG	_	MAI-AUG	APR-NOV	APR-NOV
	RTEBRATE:							
AR#	Species	S F Conc.	JFMAMJJASONI	Spawning	Eggs 	Larvae	Juveniles	Adults
181	Blue crab		X X X X X X X X X X X X X X X X X X X	- ·	-	MAY-NOV	JAN-DEC	JAN-DEC
ARI	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O N 1		Calving	Pupping	Molting	
181	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Harbor porpoise		XXXXX	ζ –	-	-	-	
EPT	ILE:							
AR#	Species	S F Conc.	J F M A M J J A S O N 1		Hatching	Internest	ing Juveni	les Adults
39	Green sea turtle	т т	X X X X X X X				MAY-NO	v -
		E E	XXXXXXX	_	_	_	MAY-NO	
				_				
		r r	V V V V V V	_	_	_	_	N/7\ ₩ _ NT/
	Leatherback sea turtle Loggerhead sea turtle	E E T T	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	- MAY-NO	

BIOLOGICAL RESOURCES:

BIRD	:
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RAR# Species

RAR#	Species	SF	Conc.	JFM	IAMJJAS	OND	Nesting	Migrating	Molting		
	American black duck		MODERATE			. _				_	
203	Bufflehead		MODERATE	XXX		XXX	_	_	_		
	Canada goose		HIGH	XXX		XXX		_	_		
	Canvasback		HIGH	XXX		XXX		_	_		
	Common goldeneye		111011	XXX		XXX		_	_		
	Green-winged teal			XXX		XXX		_	_		
	Long-tailed duck			XXX		XXX		_	_		
	Mallard		MODERATE	XXX		XXX		_	_		
	Mergansers		MODERATE	XXX		XXX		_	_		
	Mute swan		1105214112	XXX		XXX		_	_		
	Ring-necked duck		MODERATE	XXX		XXX		_	_		
	Ruddy duck		HIGH	XXX		XXX		_	_		
	Scaup		MODERATE	XXX		XXX		_	_		
	Tundra swan		MODERATE	XXX		XXX		_	_		
231	Bufflehead		MODERATE	XXX		XXX		_	_		
201	Common goldeneye		1102214112	XXX		XXX		_	_		
	Long-tailed duck			XXX		XXX		_	_		
	Mergansers			XXX		XXX		_	_		
	Mute swan			XXX		XXX		_	_		
	Ruddy duck			XXX		XXX		_	_		
	Scaup			XXX		XXX		_	_		
	Scoters			XXX		XXX		_	_		
232	American black duck			XXX		XXX		_	_		
202	American wigeon			XXX		XXX		_	_		
	Canada goose		HIGH	XXX		XXX		_	_		
	Mallard		111011	XXX		XXX		_	_		
	Tundra swan		HIGH	XXX		XXX		_	_		
233	American black duck		111011	XXX		XXX	_	_	_		
200	Interior black duck			21 21 21	. 21	21 21 21					
FISH	:										
D7D#	Species	c =	Conc.	TEM	AMJJAS	- A M D	Cnauning	Faaa	Larvae	Juveniles	Adults
	species								Larvae	Juveniles	Adults
	Alewife				XXX						FEB-JUN
101	American eel					, A A A	_	_	_	JAN-DEC	SEP-DEC
	American shad				XXXX	XX		_	_	NOV-MAR	JAN-JUN
	Atlantic croaker			XXX			-	-	_	AUG-DEC	MAY-NOV
				V	XXXXX		_	_	_	AUG-DEC	
	Atlantic mackerel Atlantic menhaden				X	· v v v	_	_	- MAY-NOV	JAN-DEC	MAR-APR MAY-OCT
	Atlantic mennaden Atlantic silverside						— МЛD — ттт	_	MAY-NOV -	JAN-DEC JAN-DEC	JAN-DEC
	Atlantic silverside Atlantic spadefish			лхХ	XXXXXX	XXX	MAR-JUL -	_	_	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
		С		v v v			_	_	_	AUG=UC1	JAN-OCT
	Atlantic sturgeon	C			XXXXXX		משט ממג	_	_		
	Bay anchovy Black drum			ΛΛΛ	X		APR-JUN	APR-JUN	APR-JUN	JAN-DEC APR-NOV	JAN-DEC APR-NOV
	Black sea bass						JUN-OCT	- -	- AFK-00N	APR-OCT	
				37 37 37	XXXXXX		JUN-0C1	_	_		APR-OCT
	Blueback herring			XXX	XXX	XX	_	_	_	NOV-MAR	JAN-JUN
	Bluefish			3.7	XXXXXX		-	_	_	MAY-NOV	APR-NOV
	Butterfish			X	XXXXXX		-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate Gobies			v v v	XXXXX			APR-SEP	APR-OCT	JAN-DEC	MAY-NOV JAN-DEC
	Harvestfish			A A A	XXXXXX		APR-SEP	APK-SEP	APR-OCI	JUL-OCT	APR-OCT
	Hickory shad			v v v	X X X X X X X X X X X X X X X X X X X	XX	_	_	_	NOV-MAR	JAN-JUN
	Hogchoker							MAY-SEP	MAY-SEP		JAN-DEC
	Inland silverside							MAI-SEP	MAI-SEP	JAN-DEC JAN-DEC	
	Minnows				XXXXXX			_	_		JAN-DEC
					XXXXXX			-	-	JAN-DEC	JAN-DEC
	Mummichog			XXX	XXXXXX			-	_	JAN-DEC	JAN-DEC
	Northern kingfish				XXXXXX		-	-		_	APR-OCT
	Northern pipefish				X X X X X X			-	-	JAN-DEC	JAN-DEC
	Northern puffer						MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin			X	X X X X X X		MAY-JUL	-	-	-	MAR-OCT
	Red drum				X X X X X	XX	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake			ΧX	XX	XX	-	-	-	FEB-MAY	FEB-MAY
											SEP-NOV
	Sandbar shark				X X X X X	X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)			X	XXXXXX	X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake			XXX	XX	X X X	-	-	-	-	OCT-MAY
	Silver perch			XXX	X X X X X X	XXXX	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot			XXX	X X X X X X	XXXX	-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake			X	XXX	XX	-	-	-	MAR-JUN	MAR-JUN
											SEP-NOV
	Spotted seatrout				X X X X X X	XX	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass			XXX	X X X X X X	XXXX	-	-	-	JAN-DEC	JAN-DEC
	Striped killifish				XXXXXX		APR-SEP	_	_	JAN-DEC	JAN-DEC
	Summer flounder				XXXXXX		-	_	OCT-MAY	JAN-DEC	APR-OCT
	Tautog			XXX		XXX	-	_	-	-	OCT-APR
	Threadfin shad			ХХ	XXX	XXX	-	-	-	-	FEB-MAY
											SEP-NOV
	Weakfish				X X X X X X	XXX	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
199	Alewife				XXX		-	-	-		FEB-JUN
	American eel				X X X X X X X		-	-	-	JAN-DEC	SEP-DEC
	American shad			XXX	XXX	X X	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker				X X X X X	XXXX	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel				X		-	-	-		MAR-APR
	Atlantic menhaden			XXX	X X X X X X X	XXXX	-	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside			XXX	X X X X X X			-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish				X X	XX	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С			X X X X X X X		-	-	-	-	JAN-OCT
	Bay anchovy			XXX	X X X X X X			-	-	JAN-DEC	JAN-DEC
	Black drum				X X X X X X	XXX	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass				X X X X X X		JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring			XXX	XXX	ХХ	-	-	-	NOV-MAR	JAN-JUN
	Bluefish				X X X X X X	XXX	-	-	-	MAY-NOV	APR-NOV
	Butterfish			X	X X X X X X		-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate				X X X X X		-	-	-	-	MAY-NOV
	Gobies			ххх	X X X X X X			APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish				X X X X X X		-	-	-	JUL-OCT	APR-OCT
	Hickory shad			ххх	XXX	ХХ	-	_	_	NOV-MAR	JAN-JUN
	Hogchoker				XXXXXX			MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside				$\times \times \times \times \times \times \times$			_	_	JAN-DEC	JAN-DEC
	Minnows				XXXXXX			_	_	JAN-DEC	JAN-DEC
	Mummichog				XXXXXX			_	_	JAN-DEC	JAN-DEC
	Northern kingfish			11 A	XXXXXX		AIN AUG	_	_	-	APR-OCT
	Northern pipefish			XXX	XXXXXX			_	_	JAN-DEC	JAN-DEC
	Northern puffer						MAY-AUG	_	_	MAR-OCT	MAR-OCT
	Northern searobin						MAY-JUL	_	_	MAR=0C1 -	MAR-OCT
	Red drum			Λ	XXXXX		JUL-NOV	_	_	AUG-SEP	MAY-NOV
	Red hake			V V		XXX	- 20T-NOA	_	_	FEB-MAY	FEB-MAY
	Ica Hanc			ΛΧ			•			THE LIMI	SEP-NOV
	Sandbar shark				$x \times x \times x$	×	_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)			v			_	_	_	JUN-OCT	MAY-OCT MAR-OCT
	ocab (boral)			Х	. A A A A X		_	_	_	0 014-0C1	MAK-OCT

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

Virginia: ESIMAP 73 (cont.)

BIOLOGICAL RESOURCES: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N	D Spawning	Eggs	Larvae J	uveniles	Adults
199	Silver hake		X X X X X X X X X		-	_	-	OCT-MAY
	Silver perch		X X X X X X X X X X X X X X X X X X X		-		AN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X X X X X X X		-		AR-NOV	JAN-DEC
	Spotted hake		XXXXXXXX	_	_	- M	AR-JUN	MAR-JUN SEP-NOV
	Cratted goatrout		x	MAY-JUL		71	PR-NOV	APR-NOV
	Spotted seatrout Striped bass				-		PK-NOV AN-DEC	JAN-DEC
	Striped bass Striped killifish		X X X X X X X X X X X X X X X X X X X		_		AN-DEC AN-DEC	JAN-DEC JAN-DEC
	Summer flounder		* * * * * * * * * * * * * * * * * * *		-	ū	AN-DEC AN-DEC	APR-OCT
	Tautog		X		_	OCI-MAI J	AN-DEC	OCT-APR
	Threadfin shad		X X X X X X X X X X X X X X X X X X X		_	_	_	FEB-MAY
	Infeadin Shad		****	_	_	_	_	SEP-NOV
	Weakfish		x	APR-AUG	_	MAY-AUG A	PR-NOV	APR-NOV
			22 22 22 22 22 22 22 22					
	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N	D Spawning	Eggs	Larvae J	uveniles	Adults
181	Blue crab		x	х -	_	MAY-NOV J	AN-DEC	JAN-DEC
199	Blue crab		imes ime	Х -	-	MAY-NOV J	AN-DEC	JAN-DEC
	Eastern oyster		imes ime	X JUN-SEP	JUN-SEP	JUN-SEP J	AN-DEC	JAN-DEC
	Horseshoe crab		imes ime	Х -	-	- J	AN-DEC	JAN-DEC
	Northern quahog (hard clam)		imes ime	X MAY-OCT	MAY-OCT	MAY-OCT J	AN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N	D Mating	Calving	Pupping M	olting	
101	Bottlenose dolphin							
101	Harbor porpoise		$\begin{array}{c} & \times $	x -	_	_	_	
1 0 0	Bottlenose dolphin		XXXXXXX	_	_	_	_	
100	Harbor porpoise		XXXXX	х -	_	_	_	
			11 11 11 11	21				
	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N	D Nesting	Hatching	Internestin	g Juvenil 	les Adults
39	Green sea turtle	TT	$x \times x \times x \times x$	-	-		MAY-NOV	<i>J</i> –
	Kemp's ridley sea turtle	ΕE	X X X X X X X X	-	-	-	/ON-YAM	<i>J</i> –
	Leatherback sea turtle	E E	X X X X X X X X	-	-	-	-	MAY-NO
	Loggerhead sea turtle	т т	X X X X X X X X	-	-	-	/ON-YAM	7 –
199	Green sea turtle	т т	X X X X X X X X	-	-	-	/ON-YAM	7 –
	Kemp's ridley sea turtle	E E	X X X X X X X X	-	-	-	/ON-YAM	7 –
	Leatherback sea turtle	E E	X X X X X X X X	-	-	_	-	MAY-NO

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
110	HUGHLETT POINT NATURAL AREA PRESERVE	VA DCR DNH	804/445-9117

BIOLOGICAL RESOURCES:

ъ	TDD	٠.
Д	TLT	

BIRD	:							
RAR#	Species	S F Conc.		Nesting	Migrating	Molting	† 	
	Bald eagle	тт	X X X X	-	-	-	_	
	Common moorhen	С	X X X X	-	-	-		
	Great blue heron		XXXX	-	-	-		
	Greater yellowlegs Green heron		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	King rail		XXXX	-	_	_		
	Least bittern		XXXX	-		-		
	Marsh wren		XXXX	- MAD ALIC	-	-		
	Osprey Sora		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-AUG -	_	_		
	Swamp sparrow		XXXX	_	_	-		
	Virginia rail		XXXX	-		-		
222	Wood duck		X X X X X X X X X X X X X X X X X X X	APR-JUN	-	-		
232	American black duck American wigeon		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Canada goose	HIGH	X X X X X X X X	-	-	_		
	Mallard		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
420	Tundra swan	HIGH	XXXXXXXXXXX	- MAN TIII	-	-		
432	Great blue heron	10 NESTS	X X X X X X X X X X X X	MAY-JUL	_	-		
FISH	:							
RAR#		S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
68	Alewife American shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	_	FEB-JUN FEB-JUN
	Blueback herring		XXXXX	_	_	_	_	FEB-JUN
	Hickory shad		X X X X X	-	-	-	_	FEB-JUN
	Striped bass		X X X X X X X X X X X X X X X X X X X	-	-	-	-	OCT-JUN
181	Alewife American eel		X X X X X X X X X X X X X X X X X X X	_	_	_	- JAN-DEC	FEB-JUN SEP-DEC
	American shad		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	_	_	_	NOV-MAR	JAN-JUN
	Atlantic croaker		$\times \times $	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		XX	-	-	-	- -	MAR-APR
	Atlantic menhaden Atlantic silverside		X X X X X X X X X X X X X X X X X X X	— МДР — ТТТТ	_	MAY-NOV	JAN-DEC JAN-DEC	MAY-OCT JAN-DEC
	Atlantic sliverside Atlantic spadefish		X	– ⊓∩∩–′ייטיי	_	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	\times \times \times \times \times \times \times \times	-	-	-	-	JAN-OCT
	Bay anchovy		X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Black drum Black sea bass		$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\;X\\ X\;X\;X\;X\;X\;X\;X\end{array}$	APR-JUN JUN-OCT	APR-JUN	APR-JUN -	APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring		X X X X X X X X X X X X X X X X X X X	JUN-0CT	_	_	NOV-MAR	JAN-JUN
	Bluefish		XXXXXXXX	-	-	-	MAY-NOV	APR-NOV
	Butterfish		$\times \times $	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate		X X X X X X X	- -	- -	- APR-OCT	- TAN DEG	MAY-NOV
	Gobies Harvestfish		X X X X X X X X X X X X X X X X X X X	APK-SEP	APR-SEP -	APR-OCT	JAN-DEC JUL-OCT	JAN-DEC APR-OCT
	Hickory shad		$X \times X \times$	_	_	_	NOV-MAR	JAN-JUN
	Hogchoker		$\times \times $			MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside Minnows		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish		XXXXXX	-	_	-	-	APR-OCT
	Northern pipefish		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Northern puffer Northern searobin		X X X X X X X X	MAY-AUG	-	_	MAR-OCT	MAR-OCT
	Red drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL JUL-NOV	_	_	- AUG-SEP	MAR-OCT MAY-NOV
	Red hake		XXXX XXX	-	_	_	FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy) Silver hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	-	JUN-OCT -	MAR-OCT OCT-MAY
	Silver perch		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Spot		$\times \times $	-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		X X X X X X X X	-	-	-	MAR-JUN	MAR-JUN
	Spotted seatrout		X X X X X X X X	MAYTIIT.	_	_	APR-NOV	SEP-NOV APR-NOV
	Striped bass		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Striped killifish		$\times \times $	APR-SEP		-	JAN-DEC	JAN-DEC
	Summer flounder		X X X X X X X X X X X X X	-	-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog Threadfin shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_		-	-	OCT-APR FEB-MAY
	Inicadiin Shad		A A A A A A A					SEP-NOV
	Weakfish			APR-AUG		MAY-AUG	APR-NOV	APR-NOV
199	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel American shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	JAN-DEC NOV-MAR	SEP-DEC JAN-JUN
	American snad Atlantic croaker		X X X X X X X X X X X X X X X X X X X		_	-	NOV-MAR AUG-DEC	MAY-NOV
	Atlantic mackerel		XX	-	-	-	-	MAR-APR
	Atlantic menhaden		$\times \times $	-		MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside Atlantic spadefish		X X X X X X X X X X X X X X X X X X X	MAR-JUL -	-	_	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic spaderish Atlantic sturgeon	С	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	AUG-OCT	AUG-NOV JAN-OCT
	Bay anchovy	<u> </u>	X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
	Black drum		$\times \times \times \times \times \times \times \times$	APR-JUN		APR-JUN	APR-NOV	APR-NOV
	Black sea bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUN-OCT -	-	-	APR-OCT NOV-MAR	APR-OCT
	Blueback herring Bluefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-	NOV-MAR MAY-NOV	JAN-JUN APR-NOV
	Butterfish		X X X X X X X X X	_	_	_	JUL-NOV	MAR-NOV
	Clearnose skate		X X X X X X X	-	-	-	_	MAY-NOV
	Gobies		X X X X X X X X X X X X X		APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Hogchoker		X X X X X X X X X X X X			MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		$\times \times $	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Mummichog Northern kingfish		X X X X X X X X X X X X X X X X X X X	APR-AUG -	-	-	JAN-DEC -	JAN-DEC APR-OCT
	Northern kinglish		X X X X X X X X X X X X X X X X X X X		-	_	- JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin		$\times \times \times \times \times \times \times \times$	MAY-JUL	-	-	_	MAR-OCT
	Red drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUL-NOV -	-	_	AUG-SEP	MAY-NOV
	Red hake		XXXX XXX	-	-	_	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark		X X X X X X	_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake			-	-	-	-	OCT-MAY
	Silver perch		X X X X X X X X X X X X		-	- DEC ADD	JAN-DEC	JAN-DEC
	Spot Spotted hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	DEC-APR -	MAR-NOV MAR-JUN	JAN-DEC MAR-JUN
	Ir Joseph Mane						O O I V	SEP-NOV

Virginia: ESIMAP 74 (cont.)

BIOLOGICAL RESOURCES: (cont.)

LST	: (cont.)							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
199	Spotted seatrout		X X X X X X X X X	MAY-JUL			APR-NOV	APR-NOV
	Striped bass		\times		_	_	JAN-DEC	JAN-DEC
	Striped killifish		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Summer flounder		\times		_	OCT-MAY	JAN-DEC	APR-OCT
	Tautog		X X X X X X X X X		_	-	-	OCT-APR
	Threadfin shad		XXXX	_	-	-	-	FEB-MAY SEP-NOV
	Weakfish		X X X X X X X X	APR-AUG	_	MAY-AUG	APR-NOV	APR-NOV
0.8	American eel		\times		_	-	JAN-DEC	_
	Atlantic croaker		X X X X X X X X X X X X X		_	_	JAN-DEC	_
	Atlantic menhaden		XXXXXX	_	_	_	MAY-NOV	_
	Atlantic silverside		\times		_	_	JAN-DEC	JAN-DEC
	Bay anchovy		XXXXXXXXXXXX		_	_	JAN-DEC	JAN-DEC
	Hogchoker		XXXXXXXXXXXX		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	-		XXXXXXXXXXXX			-	JAN-DEC	JAN-DEC
	Mummichog				_	_		
	Silver perch		X X X X X X X X X X X X X X X X X X X		_		JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X	_	-	DEC-APR -	APR-NOV	-
	Striped bass		X X X X X X	_	_		MAY-OCT	_
	Summer flounder		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	-
	Weakfish		X X X X X X X X X X X X X X X X X X X		_	-	JAN-DEC	-
	White perch		X X X X X X X X X X X X X	_	-	-	JAN-DEC	-
	RTEBRATE:							
R#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
81	Blue crab		x x x x x x x x x x x x x	_	_	MAY-NOV	JAN-DEC	JAN-DEC
	Blue crab		X X X X X X X X X X X X X		_	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		\times		JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
	Horseshoe crab		XXXXXXXXXXXX		-	-	JAN-DEC	JAN-DEC
	Northern quahog (hard clam)		XXXXXXXXXXXX		MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
n 0					MAI-0CI -			
00	Blue crab		X X X X X X X X X X X X X X X X X X X		JUN-SEP	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		X X X X X X X X X X X X X	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
	NE MAMMAL:	0 T C		Matina.	G-1i	P	Walkins	
R# 	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
81	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Harbor porpoise		X X X X X X	-	-	-	-	
99	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Harbor porpoise		XXXXX	_	-	_	_	
08	Bottlenose dolphin		X X X X X X X	_	_	_	_	
	Harbor porpoise		XXXXX	_	-	-	-	
PT	ILE:							
R#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internest	ing Juvenil	les Adult
39	Green sea turtle	т т	X X X X X X X				/ON-YAM	7 –
J J	Kemp's ridley sea turtle	E E	XXXXXXX	_	_	_	/ON TAM /ON-YAM	
	Leatherback sea turtle	E E		_	_	_	MAI -NO\ -	
			X		_	_		
	Loggerhead sea turtle Green sea turtle	TT	XXXXXX	_	_	_	/ON-YAM	
$\cap \cap$	Green sea turtle	TT	X X X X X X X	_	_	_	MAY-NOV	7 –
99							3 - 2 - 2	7
99	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	/ON-YAM	
.99				- -	-	-	/ON-YAM - /ON-YAM	MAY-N

HUMAN USE RESOURCES:

AQUACULTURE:

58 AQUACULTURE: OYSTERS

BIOLOGICAL RESOURCES:

BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
							-	
45	Bald eagle	ТТ	X X X X	-	-	-		
	Common moorhen	C	X X X X	-	-	-		
	Great blue heron		X X X X	-	-	-		
	Greater yellowlegs		XXXX	-	-	_		
	Green heron King rail		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Least bittern		XXXX	_	_	_		
	Marsh wren		XXXX	_	_	_		
	Osprey		X X X X X X	MAR-AUG	-	_		
	Sora		X X X X	-	_	_		
	Swamp sparrow		X X X X	-	-	-		
	Virginia rail		X X X X	-	-	-		
204	Wood duck	HICH	X X X X X X X X X X X X X X X X X X X	APR-JUN	_	_		
204	Bufflehead Canvasback	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Common goldeneye	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Long-tailed duck	HODBIUTE	X X X X X X X X	_	_	_		
	Mergansers	HIGH	X X X X X X X X X	_	-	_		
	Ring-necked duck	LOW	X X X X X X X X X X X X X X X X X X X	-	_	_		
	Ruddy duck	VERY HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
005	Scaup	HIGH	X X X X X X X X	-	-	-		
235	American black duck	MODERATE	X X X X X X X X	-	_	_		
	Bufflehead	MODERATE	X X X X X X X X X	_	-	_		
	Canada goose Green-winged teal	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Mallard	MODERATE	X X X X X X X X	_	_	_		
	Mute swan		X X X X X X X X	-	_	-		
	Ring-necked duck	MODERATE	X X X X	-	-	-		
	Tundra swan	HIGH		-	-	-		
	Wood duck			APR-JUN	-	-		
	Tundra swan	HIGH	X X X X X X X X X X	-	-	-		
394	Great blue heron	9 NESTS	X X X X X X X X X X X X X		-	_		
402 406	Great blue heron Great blue heron	32 NESTS 5 NESTS	$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		_	_		
411	Great blue heron	3 NESTS	X X X X X X X X X X X X X		_	_		
	Great Drac Heron	3 112010		1111 001				
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
68	Alewife American shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-	-	FEB-JUN FEB-JUN
	Blueback herring		XXXXX	_	_	_	_	FEB-JUN
	Hickory shad		XXXXX	_	_	_	_	FEB-JUN
	Striped bass		X X X X X X X X X X	_	_	_	_	OCT-JUN
208	American eel		$\mathbf{X} \ \mathbf{X} \ \mathbf{X}$	-	-	-	JAN-DEC	-
	Atlantic croaker		$\times \times $	-	-	-	JAN-DEC	-
	Atlantic menhaden		$X\ X\ X\ X\ X\ X\ X$	-	-	-	MAY-NOV	-
	Atlantic silverside		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Bay anchovy Hogchoker		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		- MAY-SEP	- MAY-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		X X X X X X X X X X X X X		MAI-SEF	- AMI - SEF	JAN-DEC	JAN-DEC
	Silver perch		X X X X X X X X X X X X	-	_	_	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X	-	_	DEC-APR	APR-NOV	-
	Striped bass		X X X X X X	-	-	-	MAY-OCT	-
	Summer flounder			-	-	-	JAN-DEC	-
	Weakfish		X X X X X X X X X X X X X		-	-	JAN-DEC	-
004	White perch		X X X X X X X X X X X X		-	-	JAN-DEC	- -
234	Atlantic menhaden Atlantic silverside		$\begin{smallmatrix} & & & & \times & \times & \times & \times & \times & \times \\ & & & \times & \times$	— МЛ D — ТПТ	_	_	MAY-NOV JAN-DEC	JAN-DEC
	Bay anchovy		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Blue catfish		X X X X X X X X X X X X X X X X X X X	- AIN 3EI	_	_	JAN-DEC	-
	Channel catfish		\times	-	-	-	JAN-DEC	-
	Hogchoker		$\times \times $		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Silver perch		X X X X X X X X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X X X X X X X	_	_	DEC-APR -	APR-NOV	<u>-</u> -
	Striped bass Weakfish		$\begin{smallmatrix} & & & & \times & \times & \times & \times & \times \\ & & & \times & \times$	_	_	_	MAY-OCT JAN-DEC	_
	White catfish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	_
	White perch		X X X X X X X X X X X X X		_	-	JAN-DEC	JAN-DEC
	Atlantic croaker		$\times \times $		-	-	JAN-DEC	MAY-NOV
TMVE	RTEBRATE:							
	Species	S F Conc.	J F M A M J J A S O N D	Snorming	Faaa	Larvae	Juveniles	Adults
208	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		$\times \times $		JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
234	Blue crab		X X X X X X X X X X X X X X X X X X X	-	- TUN CED	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		X X X X X X X X X X X X	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
208	Bottlenose dolphin		X X X X X X					
200	Harbor porpoise		X X X X X X X X X X X X X X X X X X X	_	_	_	_	

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	ı	
14	Black scoter Surf scoter	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	White-winged scoter		X X X X X X X	_	_	_		
26	American woodcock		X X X X X	-	-	-		
	Black-bellied plover		X X X X X X X X X X	-	-	-		
	Dunlin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_		
	Greater yellowlegs Killdeer		XXXX	_	_	_		
	Least sandpiper		$X \times X \times X \times X \times X$	_	_	_		
	Lesser yellowlegs		$\times \times $	-	-	-		
	Pectoral sandpiper		XXXXX	-	-	-		
	Red knot Ruddy turnstone		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Sanderling		\times	_	_	_		
	Semipalmated plover		$\times \times $	-	-	-		
	Semipalmated sandpiper		X X X X X X X X X	-	-	-		
	Short-billed dowitcher Stilt sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Western sandpiper		XXXXXX	_	_	_		
	Whimbrel		X X X X X X	_	-	-		
	White-rumped sandpiper		XXX	-	-	-		
28	Willet Piping plover	T T HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- APR-SEP	_	_		
	American black duck	HIGH	X X X X X X X X X X X X X X X X X X X		_	_		
~ -	American wigeon	MODERATE	XXXX	-	_	_		
	Brant	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Canada goose	HIGH	X X X X X X X X X X X X X		-	-		
	Gadwall Green-winged teal	MODERATE MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APK-JUN -	_	_		
	Mallard	MODERATE	$X \times X \times$		_	_		
	Northern pintail	MODERATE	$X \ X \ X \ X $	_	-	-		
	Northern shoveler		X X X X X X X X X X	-	-	-		
32	Snow goose Bufflehead	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
32	Common goldeneye	nign	X X X X X X X X	_	_	_		
	Mergansers	HIGH	X X X X X X X X X	-	-	-		
	Ruddy duck		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Scaup	MODEDARE	X X X X X X X X X X X X X X X X X X X	_	-	-		
33	Tundra swan Clapper rail	MODERATE HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
33	King rail	111011	\times	-	_	-		
	Sora		$X X X \qquad X X X$	-	-	-		
	Virginia rail		X X X X X X X X X X X X X		-	-		
	Whimbrel Willet	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- 7 DD_CED	_	_		
119	Piping plover	T T	XXXXXXX	APR-SEP	_	_		
	American oystercatcher	12 ADULTS	X X X X X X X	MAR-JUL	-	-		
218	American black duck	HIGH	$\times \times $		-	-		
	American wigeon	штен	X X X X X X X X X		-	-		
	Brant Canada goose	HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	– APR–JUN	_	_		
	Gadwall		\times		_	_		
	Green-winged teal			-	-	-		
	Mallard		$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$		-	-		
	Northern pintail Snow goose		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
219	Bufflehead		X X X X X X X X X		_	_		
	Mergansers		X X X X X X X X		-	-		
239	Saltmarsh sharp-tailed sparrow	C	X X X	-	-	-		
241	American oystercatcher	3 ADULTS 2 ADULTS	XXXXXX	MAR-JUL	-	-		
330	Black skimmer Least tern	C 100 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
359		C 40 ADULTS	XXXXXXX	MAY-JUL MAY-JUL	_	_		
563	Common tern	110 ADULTS	$X \times X \times X \times X \times X$		-	-		
FISH								
		S F Conc.	TEMAMITACOND	Snorming	Faaa	Larvae	Juveniles	Adults
25	Atlantic croaker		X X X X X X X X	_	_	_	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	-	-	-	-	MAR-APR
	Atlantic menhaden		X X X X X X X X X X X X X		-	-	JAN-DEC	MAY-OCT
	Black drum Black sea bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	- APR-OCT	APR-OCT APR-OCT
	Bluefish		XXXXXXXX	-	_	_	MAY-NOV	APR-NOV
	Butterfish		$\times \times $	-	-	-	JUL-NOV	MAR-NOV
	Crevalle jack		X X X X X X X X X X X X		-	-	JAN-DEC	
	Northern kingfish Northern searobin		X X X X X X X	MAY-AUG -	_	_	-	APR-OCT
	Pollock		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	_	MAR-OCT DEC-APR
	Red drum		X X X X X X X		_	_	_	MAY-NOV
	Red hake		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-	FEB-MAY	FEB-MAY
	Condition of the city		T7 T7 T7 T7				MAN 000	SEP-NOV
	Sandbar shark		$\begin{smallmatrix} & & \times & \times & \times & \times & \times \\ & \times & \times & \times & \times$	_	-	_	MAY-OCT JUN-OCT	MAY-OCT
	Scup (porgy) Silver hake		X X X X X X X X X X X X X X X X X X X		_	-	JUN-OCT -	MAR-OCT OCT-MAY
	Southern kingfish (whiting)		XXXXXX	_	_	_	_	APR-OCT
	Spanish mackerel		X X	-	-	-	-	APR-MAY
	Spiny dogfish		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		-	-	-	NOV-APR
	Spot Spotted hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	DEC-APR -	MAR-NOV MAR-JUN	MAR-NOV MAR-JUN
	Spotted make		X X X X X X X				IIII OON	MAR-JUN SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	-	APR-NOV	APR-NOV
	Summer flounder		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		-	OCT-MAY	-	APR-OCT
	Tautog		X X X X X X X X X X X X X	APR-AUG APR-AUG	-	- MAV-AIIC	- 7 DD - NOV	JAN-DEC
30	Weakfish Alewife		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APK-AUG -	-	MAY-AUG -	APR-NOV -	APR-NOV FEB-JUN
50	American eel		X X X X X X X X X X X X X X X X X X X	-	-	-	JAN-DEC	- -
	American shad		X X X X X	-	-	-	-	FEB-JUN
	Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	MAY-DEC	- TIM
	Atlantic herring Atlantic mackerel		X X X X X X X X X X X X X X X X X X X	_	-	_	-	FEB-JUN MAR-APR
	Atlantic mackerer Atlantic menhaden		x x	_	_	_	- MAY-NOV	MAY-OCT
	Bay anchovy		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum		X X X X X X X	-	-	-	-	APR-OCT
	Black sea bass Blueback herring		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	- FFB-JUN	APR-SEP FER-OCT	APR-SEP
	Bluefish		X X X X X X X X X X X X X X X X X X X	_	_	FEB-JUN -	FEB-OCT MAY-OCT	FEB-JUN MAY-OCT
	Crevalle jack		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC	
	Gobies		$\times \times $	APR-SEP	APR-SEP	APR-OCT		JAN-DEC

Virginia: ESIMAP 76 (cont.)

BIOLOGICAL RESOURCES: (cont.)

HUN#

147

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Name

CHINCOTEAGUE ISLAND NWR

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	: (cont.)	0.7.0		.	=	-		2.1.1.
RAR#	Species	S F Conc.	J F M A M J J A S O N D		Eggs	Larvae	Juveniles	Adults
	Hickory shad		X X X X X	_	-	_	_	FEB-JUN
	Hogchoker		imes ime	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Killifish		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Minnows Mummichoq		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern pipefish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Northern searobin		X X X	-	-	-	JUN-AUG	JUN-AUG
	Pollock		XXXX		-	_		DEC-APR
	Red drum		X X X X X X X	JUL-NOV -	-	-	AUG-SEP	MAY-NOV
	Red hake		XXXX XXX	_	_	_	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark		X X X X X X	_	_	_	MAY-OCT	MAY-OCT
	Scup (porgy)		$\times \times $	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		X X X X X X X X X X X X X X X X X X X		-	-	-	OCT-MAY
	Silver perch Silversides		X X X X X X X X X X X X X X X X X X X		APR-MAY MAR-JUL	APR-JUN APR-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Spanish mackerel		XX	- HAIN 00L	-	- AIN SEI	-	APR-MAY
	Spot		X X X X X X X	-	-	-	APR-OCT	JUL-SEP
	Spotted hake		X X X X X X X X X X X X X X X X X X X		-	-	OCT-APR	-
	Spotted seatrout		X X X X X X X X X	MAY-JUL	-	_	APR-NOV	APR-NOV
	Striped anchovy Summer flounder		$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\;X\;$	APR-SEP -	_	_	APR-NOV APR-NOV	APR-NOV APR-NOV
	Tautog		XXXX XXXX		_	_	-	OCT-APR
	Weakfish		X X X X X X X X	APR-AUG	-	-	MAR-OCT	APR-OCT
	White hake		X X X	-	-	-	-	MAR-MAY
	White perch		V V V V V V V V V V V V V V V V V V V	זאווד ממג	זאיזי ממג	זייד ממו	JAN-DEC	SEP-NOV
	White perch Winter flounder		X X X X X X X X X X X X X X X X X X X		APR-JUN -	APR-JUN -	JAN-DEC DEC-JUL	JAN-DEC DEC-MAY
HABI			_					
RAR#	Species	S F Conc.	J F M A M J J A S O N D					
27	Maritime dune scrub		X X X X X X X X X X X X X X X X X X X					
2 /	Native coastal strand vegetation		X X X X X X X X X X X X X X X X X X X					
	Sea-beach knotweed		imes ime					
	Southern beach spurge		X X X X X X X X X X X X X X X X X X X					
INVE	RTEBRATE:							
RAR#		S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
25	Blue crab		imes ime	-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Channeled whelk		X X X X X X X X X X X X X X X X X X X			_	JAN-DEC	JAN-DEC
30	Blue crab Channeled whelk		X X X X X X X X X X X X X X X X X X X		MAY-SEP -	MAY-NOV -	JAN-DEC	JAN-DEC
	Northern quahog (hard clam)		X X X X X X X X X X X X X X X X X X X		- MAY-OCT	MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
237	Horseshoe crab		XXXX	APR-JUL	-	-	-	MAY-JUL
240	Spectral tiger beetle		imes ime	JUN-SEP	JUN-SEP	-	JAN-DEC	JUN-OCT
MARI	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
25	Bottlenose dolphin		X X X X X X X	-	-	-	-	
	Common dolphin		XXXXXX	-	-	-	-	
	Harbor porpoise Harbor seal		X X X X X X X X X X X X X X X X X X X		_	_	_	
	Humpback whale	ЕЕ	X X X X X X X X X X X X X X X X X X X		JAN-DEC	_	_	
30	Bottlenose dolphin		X X X X X X X		-	-	-	
	Harbor porpoise		X X X X X X		-	-	-	
0.20	Harbor seal		X X X X X X		-	_	-	
238	Harbor seal		X X X X X	_	_	_	-	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D					les Adults
	Cman and turtle							
25	Green sea turtle Kemp's ridley sea turtle	T T E E	$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\;X\\ X\;X\;X\;X\;X\;X\;X\;X\end{array}$	_	_	_	MAY-NO' MAY-NO'	
	Leatherback sea turtle	EE	X X X X X X X	_	_	_	MAI-NO	
	Loggerhead sea turtle	T T	XXXXXXX	-	-	-	MAY-NO	
	Diamondback terrapin		$\times \times $		-	-	MAR-NO	V MAR-NO
30	Green sea turtle	ТТ	$X \times X \times X \times X$	-	-	-	MAY-NO	
	± ±	E E	X X X X X X X X X X X X X X X X X X X	-	_	_	MAY-NO'	
	Leatherback sea turtle Loggerhead sea turtle	E E T T	$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\;X\\ X\;X\;X\;X\;X\;X\;X\;X\end{array}$	-	_	_	MAY-NO	
33	Diamondback terrapin	VERY HIGH	$\times \times $	-	-	-	MAR-NO	
238	Loggerhead sea turtle	TT	$\times \times \times \times \times \times \times$		-	-	-	
576	Loggerhead sea turtle	ТТ	$\times \times \times \times \times \times \times$	MAY-NOV	-	-	-	MAY-NO
TERR	ESTRIAL MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D					
	<u></u>							
	Northern river otter		X X X X X X X X X X X X X X X X X X X					
	 N USE RESOURCES:							
NATI	ONAL PARK:							
HUN#	Name	Co	ntact		ם י	hone		
125	ASSATEAGUE ISLAND NATIONAL SEASHO	RE NA	TIONAL PARK SERVICE		7	57/336-657	7	
WILD	LIFE REFUGE:							

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

Contact

CHINCOTEAGUE ISLAND NWR

WALLOPS ISLAND NATIONAL WILDLIFE REFUGE

U.S. FISH AND WILDLIFE SERVICE

U.S. FISH AND WILDLIFE SERVICE

U.S. FISH AND WILDLIFE SERVICE

Phone

757/336-6122

757/336-6122

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
14	Black scoter	HIGH	X X X X X X X X X				_	
14	Surf scoter	nign	X X X X X X X	_	_	_		
	White-winged scoter		X X X X X X X X X X X X X X X X X X X	-	-	-		
26	American woodcock		X X X X X X X	-	-	-		
	Black-bellied plover Dunlin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Greater yellowlegs		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	-		
	Killdeer		X X X	-	-	-		
	Least sandpiper		X X X X X X X X X	-	-	-		
	Lesser yellowlegs Pectoral sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Red knot		$X \times X \times X \times X$	-	-	-		
	Ruddy turnstone		X X X X X X	-	-	-		
	Sanderling		X X X X X X X X X X X X	-	-	-		
	Semipalmated plover Semipalmated sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Short-billed dowitcher		\times	_	_	-		
	Stilt sandpiper		X X X X X X	-	-	-		
	Western sandpiper		XXXXX	-	-	-		
	White-rumped sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Willet		\times	-	-	-		
33	Clapper rail	HIGH	$\times \times $	APR-AUG	-	-		
	King rail		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	-		
	Sora Virginia rail		X X X X X X X X X X X X		_	_		
	Whimbrel	HIGH	XXXXXX	-	-	-		
	Willet	HIGH	$\times \times $		-	-		
94	Clapper rail	HIGH	X X X X X X X X X X X X X	APR-AUG	-	-		
	King rail Sora		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Virginia rail		$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$	APR-JUN	-	-		
	Whimbrel	HIGH	X X X X X X	-	-	-		
1 0 1	Willet Pining ployer	HIGH	X X X X X X X X X X X X X		_	-		
T 2 T	Piping plover Wilson's plover	T T HIGH E HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP APR-SEP	_	_		
218	American black duck	HIGH	\times		-	-		
	American wigeon		$X \ X \ X \ X \\ X \ X \ X$	-	-	-		
	Brant Canada googa	HIGH	X X X X X X X X X X X X X X X X X X X	- 7 DD - TIIN	-	-		
	Canada goose Gadwall	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Green-winged teal		X X X X X X X X X	-	_	-		
	Mallard		$\times \times $	MAY-JUL	-	-		
	Northern pintail		X X X X X X X X	-	-	-		
219	Snow goose Bufflehead		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
217	Mergansers		X X X X X X X X X	_	_	_		
	Bald eagle	ТТ	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	American oystercatcher	171 ADULTS	X X X X X X X X	MAR-JUL	-	-		
242	American oystercatcher Laughing gull		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-JUL	_	-		
244	American oystercatcher	26 ADULTS	XXXXXXX	MAR-JUL	_	_		
	Black-necked stilt		XXXXXX	MAY-JUL	-	-		
	Forster's tern	8 ADULTS	X X X X X X X X X	MAY-JUL	-	-		
	American oystercatcher Least tern	HIGH C 4 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-JUL	_	-		
		C 7 ADULTS	XXXXXXX	MAY-JUL	_	_		
FISH	•							
RAR#	Species	S F Conc.	J F M A M J J A S O N D			Larvae	Juveniles	Adults
	Species				Eggs 	Larvae 		
	Species		J F M A M J J A S O N D		 - -			
	Atlantic croaker Atlantic mackerel Atlantic menhaden					 - - -	AUG-DEC - JAN-DEC	MAY-NOV MAR-APR MAY-OCT
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum		X X X X X X X X X X X X X X X X X X X	- - - -	- - - -	 - - -	AUG-DEC - JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT
	Atlantic croaker Atlantic mackerel Atlantic menhaden				 - -	 - - -	AUG-DEC - JAN-DEC	MAY-NOV MAR-APR MAY-OCT
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish		X X X X X X X X X X X X X X X X X X X	- - - - - JUN-OCT	- - - -	 - - - -	AUG-DEC - JAN-DEC - APR-OCT MAY-NOV JUL-NOV	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack		X X X X X X X X X X X X X X X X X X X	 - - - JUN-OCT - -	- - - -		AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish		X X X X X X X X X X X X X X X X X X X		- - - -	 - - - - -	AUG-DEC - JAN-DEC - APR-OCT MAY-NOV JUL-NOV	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack		X X X X X X X X X X X X X X X X X X X	 - - - JUN-OCT - -	- - - -		AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum		X X X X X X X X X X X X X X X X X X X		- - - -		AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV MAR-NOV DEC-APR MAY-NOV
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock		X X X X X X X X X X X X X X X X X X X		- - - -		AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC -	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum		X X X X X X X X X X X X X X X X X X X		- - - -		AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake				- - - -		AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake		X X X X X X X X X X X X X X X X X X X		- - - -		AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting)		X X X X X X X X X X X X X X X X X X X		- - - -		AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - FEB-MAY MAY-OCT JUN-OCT	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel				- - - -		AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - FEB-MAY MAY-OCT JUN-OCT	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-OCT
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting)		X X X X X X X X X X X X X X X X X X X				AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - - FEB-MAY MAY-OCT JUN-OCT	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish						AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV APR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-OCT APR-OCT MAR-OCT OCT-MAY APR-OCT APR-OCT APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted hake					- - - - - - - - - - - - - - - - - - -	AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-OCT APR-OCT MAR-OCT OCT-MAY APR-OCT APR-OCT APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted seatrout						AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAY-NOV MAY-NOV APR-NOV APR-NOV
	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted hake					- - - - - - - - - - - - - - - - - - -	AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-OCT APR-OCT MAR-OCT OCT-MAY APR-OCT APR-OCT APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV
25	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted seatrout Summer flounder Tautog Weakfish						AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV - APR-NOV	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT OCT-MAY APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT JAPR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV
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25	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic menhaden Bay anchovy Black drum						AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV - APR-NOV MAY-DEC MAY-DEC MAY-DEC MAY-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-NOV APR-NOV APR-NOV FEB-JUN FEB-JUN FEB-JUN MAR-APR
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25	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker						AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV - APR-NOV - APR-NOV - JAN-DEC - MAY-DEC - APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC - JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-OCT APR-OCT MAR-NOV - APR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT OCT-MAY APR-OCT APR-OCT APR-OCT APR-OCT APR-OCT OCT-MAY APR-OCT APR-MOV APR-OCT APR-NOV APR-NOV APR-NOV APR-NOV FEB-JUN - FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC FEB-JUN MAY-OCT JAN-DEC
25	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad						AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - - FEB-MAY MAY-OCT JUN-OCT - MAR-NOV MAR-JUN APR-NOV - APR-NOV - APR-NOV - MAY-DEC - MAY-DEC - MAY-DEC - APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV APR-OCT APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAY-OCT JAN-DEC APR-OCT JAN-DEC FEB-JUN MAY-OCT JAN-DEC FEB-JUN
25	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog			JUN-OCT			AUG-DEC AUG-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV - APR-NOV - APR-NOV - JAN-DEC - MAY-DEC - MAY-NOV JAN-DEC - APR-SEP FEB-OCT MAY-OCT JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAY-OCT APR-MOV APR-NOV APR-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC
25	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish			JUN-OCT			AUG-DEC JAN-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC - FEB-MAY MAY-OCT JUN-OCT - MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC MAY-DEC - MAY-DEC JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-OCT JAN-DEC
25	Atlantic croaker Atlantic mackerel Atlantic menhaden Black drum Black sea bass Bluefish Butterfish Crevalle jack Northern kingfish Northern searobin Pollock Red drum Red hake Sandbar shark Scup (porgy) Silver hake Southern kingfish (whiting) Spanish mackerel Spiny dogfish Spot Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog			JUN-OCT			AUG-DEC AUG-DEC APR-OCT MAY-NOV JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV - APR-NOV - APR-NOV - JAN-DEC - MAY-DEC - MAY-NOV JAN-DEC - APR-SEP FEB-OCT MAY-OCT JAN-DEC	MAY-NOV MAR-APR MAY-OCT APR-OCT APR-OCT APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAY-OCT APR-MOV APR-NOV APR-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC

Virginia: ESIMAP 77 (cont.)

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BIOLOGICAL RESOURCES: (cont.)

	: (cont.)															
RAR#	Species	S F Conc.		JF	M A	мј	JA	S	DND	Spawning	Eggs	Larvae		niles	Adult	
	Pollock			 x x	 x x			_	 X						DEC-A	
50	Red drum			21 21		ХХ	ХХ	X		JUL-NOV	_	_	AUG-		MAY-N	
	Red hake			Х	ХХ	Х		Х	ХХ	-	-	-	FEB-	MAY	FEB-M	ΙΑΥ
															SEP-N	VO
	Sandbar shark					ХХ				-	-	-	MAY-	OCT	MAY-O	CT
	Scup (porgy)				ХХ		ХХ			-	-	-	JUN-		MAR-O	
	Silver hake				ХХ				XXX		-	-			OCT-M	
	Silver perch									APR-MAY	APR-MAY	APR-JUN	JAN-		JAN-D	
	Silversides			XX			ХХ	Х.	XXX	MAR-JUL -	MAR-JUL	APR-SEP	JAN-		JAN-D	
	Spanish mackerel				X	X X X	vv		v	_	-	-	APR-		APR-M	
	Spot Spotted hake			v v	XX		ΛΛ		A X X X	_	_	_	OCT-		JUL-S -	
	Spotted make Spotted seatrout			21 21			хх		XX		_	_	APR-		APR-N	
	Striped anchovy					ХХ				APR-SEP	_	_	APR-		APR-N	
	Summer flounder				Х	ХХ	ХХ	X	ХХ	-	-	-	APR-	NOV	APR-N	OV
	Tautog			XX	ХХ				X X X	-	-	-	-		OCT-A	.PR
	Weakfish						ХХ		X	APR-AUG	-	-	MAR-		APR-O	CT
	White hake				ХХ	Χ		X	XX	-	-	-	-	•	MAR-M	
															SEP-N	
	White perch										APR-JUN		JAN-		JAN-D	
	Winter flounder			XX	ХХ	ХХ	Χ		Χ	-	-	-	DEC-	JUL	DEC-M	.AY
HABI	TAT:															
	Species	S F Conc.		T 17	M A	мт	т л		o n c							
27	Maritime dune scrub								ххх							
2 /	Native coastal strand vegetation								XXX							
	Sea-beach knotweed								XXX							
	Southern beach spurge								ххх							
243	Sea level fen			ХХ	ХХ	ХХ	ХХ	X	ххх							
INVE	RTEBRATE:															
RAR#	Species	S F Conc.		JF	M A	м Ј	JA	s	O N D	Spawning	Eggs	Larvae	Juve	niles	Adult	.s
								-								
25	Blue crab								XXX		-	MAY-NOV	JAN-		JAN-D	
	Channeled whelk								XXX		-	-	JAN-		JAN-D	
30	Blue crab								XXX		MAY-SEP	MAY-NOV	JAN-		JAN-D	
	Channeled whelk								XXX		- MAY-OCT	- MAY-OCT	JAN- JAN-		JAN-D	
	Northern quahog (hard clam)			ΛΛ	ΛΛ	ΛΛ	ΛΛ	. А.		MAY-OCT	MAI-OCI	MAI-OCI	JAN-	.DEC	JAN-D	EC
MARI	NE MAMMAL:															
RAR#	Species	S F Conc.		JF	ма	м Ј	JA	s	O N D	Mating	Calving	Pupping	Molt	ing		
	-							-								
25	Bottlenose dolphin				X	ХХ	ХХ	X	X	-	-	-	-			
	Common dolphin					ХХ	ХХ	X	X	-	-	-	-			
	Harbor porpoise				ХХ	Χ			X		_	_	-			
	Harbor seal			ХХ					XXX		-	-	-			
2.0	Humpback whale	ΕE		XX					XXX	_	JAN-DEC	_	-	•		
30	Bottlenose dolphin			17 17		XX	ХХ	Х.		_	-	-	_	•		
	Harbor porpoise				ХХ	Χ			X		-	_	_			
	Harbor seal			ХХ					XXX	_	-	_	_			
REPT	ILE:															
RAR#	Species	S F Conc.		чτ	ма	м .т	.T A	S	оио	Nesting	Hatching	Internes	tina	Juvenil	es A	dults
								_								
25	Green sea turtle	ТТ				ХХ	ХХ	X	ХХ	_	_	_		MAY-NOV	7	_
	Kemp's ridley sea turtle	E E				ХХ				_	_	_		MAY-NOV		IAY-NO
	Leatherback sea turtle	E E				ХХ				-	-	-		-	М	IAY-NO
	Loggerhead sea turtle	T T				ХХ	ХХ	X	ХХ	-	-	-		MAY-NOV	7 M	IAY-NO
27	Diamondback terrapin				ХХ	ХХ	ХХ	X :	ХХ	MAY-JUL	-	-		MAR-NOV	7 M	IAR-NO
30	Green sea turtle	ТТ				ХХ	ХХ	X	ХХ	-	-	-		MAY-NOV	7	-
	Kemp's ridley sea turtle	E E				ХХ				-	-	-		MAY-NOV		IAY-NC
	Leatherback sea turtle	E E				ХХ				-	-	-		-		IAY-NO
0.0	Loggerhead sea turtle	T T				XX				-	-	-		MAY-NOV		IAY-NO
	Diamondback terrapin	VERY HIGH			XX					-	-	-		MAR-NOV		IAR-NO
	Diamondback terrapin				ХХ	ХХ	ХХ	. х.	XX	_	-	_		MAR-NOV		IAR-NO
	======================================		======		====	===:		===								
AUQA	CULTURE:															
IUN#	Name		Contact								P	hone				
58	AQUACULTURE: OYSTERS															
	LIFE REFUGE:															
HUUH	Name		Contact								_ P	hone 				
147	CHINCOTEAGUE ISLAND NWR		U.S. FIS	SH AN	D WI	LDL	IFE	SER	VICE		7	57/336-612	2			

U.S. FISH AND WILDLIFE SERVICE

757/336-6122

BIOLOGICAL RESOURCES:

BIRD	:
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BIKD	: Species	S F Conc.	J F M A M J J A S O N D	Nosting	Migrating	Molting		
		5 F COIIC.			migracing	MOICING	_	
100	Brown pelican	C	X X X X X X X X	-	-	-		
	Gulls		X X X X X X X X X X X X X X X X X X X	_	_	-		
	Loons Mergansers		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Osprey		X X X X X X X X X	-	-	-		
	Scoters	HIGH	XXXX XXX	-	-	-		
124	Terns Bald eagle	ТТ	X X X X X X X X X X X X X X X X X X X	- FEB-MAY	_	_		
	American oystercatcher	8 ADULTS	XXXXXXX	MAR-JUL	-	-		
	American oystercatcher	2 ADULTS	X X X X X X X	MAR-JUL	-	-		
195	American black duck American wigeon	VERY HIGH HIGH	X X X X X X X X X X X X X X X X X X X	MAR-JUL -	_	_		
	Brant	111 011	X X X X X X X X	-	_	-		
	Canada goose	HIGH	X X X X X X X X X X X X X		-	-		
	Gadwall Green-winged teal	LOW	X X X X X X X X X X X X X X X X X X X	APR-JUN -	_	_		
	Mallard	HIGH	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		_	-		
	Northern pintail		X X X X X X X X X	-	-	-		
196	Snow goose Bufflehead	HIGH	$egin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
100	Canvasback	HIGH	X X X X X X X X X	_	_	_		
	Common goldeneye		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Long-tailed duck Redhead	HIGH	$egin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Ring-necked duck	LOW	X X X X X X X X X	-	_	-		
	Ruddy duck	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Scaup Scoters	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Tundra swan	HIGH	X X X X X X X X X	_	_	_		
246	Great black-backed gull		$\times \times $		-	-		
247	Herring gull Common tern		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
	American oystercatcher	11 ADULTS	XXXXXXXX	MAR-JUL	_	_		
249	American oystercatcher	5 ADULTS	X X X X X X X	MAR-JUL	-	-		
496	Great black-backed gull	32 ADULTS 92 ADULTS	$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		-	- -		
498	Herring gull Great black-backed gull	23 ADULTS	X X X X X X X X X X X X X X X X X X X		-	-		
	Herring gull	63 ADULTS	$\times \times $		-	-		
499	Common tern	28 NESTS 312 NESTS	X	MAY-JUL MAY-JUL	_	_		
500	Forster's tern Great black-backed gull	50 ADULTS	$\begin{array}{c} \times \times$		_	_		
	Herring gull	120 ADULTS	$\times \times $		-	-		
501	Black-crowned night-heron	7 ADULTS	X X X X X X X X X X X X X		-	-		
	Cattle egret Glossy ibis	20 ADULTS C 109 ADULTS	$\begin{array}{c} \mathbf{X} \ \mathbf{X} \end{array}$	MAY-JUL MAY-JUL	_	_		
	Great egret	C 76 ADULTS	\times \times \times \times \times \times \times	MAY-JUL	-	-		
	Little blue heron	C 9 ADULTS	X X X X X X X X X	MAY-JUL	-	-		
502	Snowy egret Great black-backed gull	89 ADULTS 12 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
		4 ADULTS 45 NESTS	$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	MAY-JUL	-	-		
505	Herring gull Great blue heron	45 NESTS	x x x x x x x x x x x x x	MAY-JUL	-	-		
FISH								
_		S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
RAR#	Species	S F Conc.						
RAR#	Species	S F Conc.	$\times \times $	-	-	MAY-NOV	JAN-DEC	MAY-OCT
RAR#	Species	S F Conc.		-	-			
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon	S F Conc.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAR-JUL - -	- - -	MAY-NOV - -	JAN-DEC JAN-DEC AUG-OCT	MAY-OCT JAN-DEC AUG-NOV JAN-OCT
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAR-JUL - - APR-SEP	- - - -	MAY-NOV - - -	JAN-DEC JAN-DEC AUG-OCT - JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAR-JUL - - APR-SEP	- - - -	MAY-NOV - - -	JAN-DEC JAN-DEC AUG-OCT	MAY-OCT JAN-DEC AUG-NOV JAN-OCT
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring		X X X X X X X X X X X X X X X X X X X	- MAR-JUL - - APR-SEP APR-JUN JUN-OCT	- - - - - APR-JUN -	MAY-NOV APR-JUN	JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish		X X X X X X X X X X X X X X X X X X X	- MAR-JUL - - APR-SEP APR-JUN JUN-OCT -	- - - - - APR-JUN - -	MAY-NOV - - - - - APR-JUN - -	JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT	- - - - - APR-JUN - - -	MAY-NOV APR-JUN	JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies		X X X X X X X X X X X X X X X X X X X	- MAR-JUL APR-SEP APR-JUN JUN-OCT 	- - - - APR-JUN - - - - - - APR-SEP	MAY-NOV APR-JUN APR-JUN APR-OCT	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV MAY-NOV JAN-DEC
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP	- - - - APR-JUN - - - - - APR-SEP	MAY-NOV APR-JUN APR-CT -	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV MAY-NOV JAN-DEC APR-OCT
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP	- - - - APR-JUN - - - - - APR-SEP	MAY-NOV APR-JUN APR-JUN APR-OCT	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV MAY-NOV JAN-DEC
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-JUN JUN-OCT APR-SEP APR-JWN JUN-OCT MAY-SEP APR-MAY	APR-JUN APR-SEP MAY-SEP	MAY-NOV APR-JUN APR-OCT - MAY-SEP	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-JUN JAN-DEC JAN-DEC
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-SEP APR-MAY APR-AIIG	APR-JUN	MAY-NOV APR-JUN APR-OCT - MAY-SEP -	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-SEP APR-MAY APR-AIIG	APR-JUN	MAY-NOV APR-JUN APR-OCT - MAY-SEP -	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-SEP APR-MAY APR-AIIG	APR-JUN	MAY-NOV APR-JUN APR-OCT - MAY-SEP -	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-SEP APR-MAY APR-AIIG	APR-JUN	MAY-NOV APR-JUN APR-OCT - MAY-SEP -	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG APR-AUG MAY-JUN MAY-JUN MAY-JUL JUL-NOV		MAY-NOV APR-JUN APR-OCT MAY-SEP	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC AN-DEC MAR-OCT - AUG-SEP	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAY-NOV MAY-NOV MAY-NOV
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pupefish Northern pufer Northern searobin		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-SEP APR-MAY APR-AIIG		MAY-NOV APR-JUN APR-OCT MAY-SEP	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG APR-AUG MAY-JUN MAY-JUN MAY-JUL JUL-NOV		MAY-NOV APR-JUN APR-OCT MAY-SEP	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC AN-DEC MAR-OCT - AUG-SEP	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAY-NOV MAY-NOV MAY-NOV
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy)		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG APR-AUG JUL JUL-NOV - - - - - - - - - - - - -		MAY-NOV APR-JUN APR-OCT MAY-SEP	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV MAY-OCT MAR-OCT
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG APR-AUG JUL JUL-NOV - - - - - - - - - - - - -		MAY-NOV APR-JUN APR-OCT MAY-SEP	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY SCP-NOV MAY-OCT MAR-OCT OCT-MAY
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG APR-AUG JUL JUL-NOV - - - - - - - - - - - - -		MAY-NOV APR-JUN APR-OCT MAY-SEP	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC JAN-DEC AUG-SEP FEB-MAY	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAY-OCT MAR-OCT OCT-MAY JAN-DEC
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake		X X X X X X X X X X X X X X X X X X X	- MAR-JUL APR-SEP APR-JUN JUN-OCT		MAY-NOV APR-JUN APR-OCT MAY-SEP	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP MAY-SEP APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY		MAY-NOV APR-JUN APR-OCT MAY-SEP DEC-APR	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spotted hake		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG APR-AUG MAY-JUN MAY-JUL JUL-NOV APR-MAY - MAY-JUL MAY-JUL MAY-JUL MAY-JUL MAY-JUL MAY-JUL MAY-JUL		MAY-NOV APR-JUN APR-OCT MAY-SEP DEC-APR	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-NOV MAR-JUN SEP-NOV APR-NOV
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RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-MAY APR-AUG APR-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY		MAY-NOV APR-JUN APR-OCT MAY-SEP DEC-APR OCT-MAY	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV MAY-OCT MAR-OCT
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY APR-MAY APR-MAY APR-MAY		MAY-NOV APR-JUN APR-OCT MAY-SEP DEC-APR	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OC
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY APR-MAY APR-MAY APR-MAY		MAY-NOV APR-JUN APR-OCT MAY-SEP DEC-APR OCT-MAY	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV MAY-OCT MAR-OCT
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-AUG APR-AUG APR-AUG MAY-JUN MAY-JUL JUL-NOV APR-MAY		MAY-NOV APR-JUN MAY-SEP	JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV APR-NOV JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV
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RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-AUG APR-AUG APR-AUG MAY-JUN MAY-JUL JUL-NOV APR-MAY		MAY-NOV APR-JUN MAY-SEP	JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV APR-NOV
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish Alewife American eel American shad Atlantic croaker			MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-AUG APR-AUG APR-AUG MAY-JUN MAY-JUL JUL-NOV APR-MAY		MAY-NOV APR-JUN MAY-SEP	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC NOV-MAR AUG-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-OV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-JUN MAY-NOV
RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish Alewife American eel American shad		X X X X X X X X X X X X X X X X X X X	MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-AUG APR-AUG APR-AUG MAY-JUN MAY-JUL JUL-NOV APR-MAY		MAY-NOV APR-JUN MAY-SEP	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC NOV-MAR	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-OCT OCT-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV APR-NOV APR-NOV FEB-MAY SEP-NOV APR-NOV FEB-MAY SEP-NOV APR-NOV FEB-JUN SEP-DEC JAN-JUN
RAR# 181	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish Alewife American eel American shad Atlantic croaker			MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-SEP APR-AUG APR-AUG APR-AUG MAY-JUN MAY-JUL JUL-NOV APR-MAY		MAY-NOV APR-JUN MAY-SEP	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC NOV-MAR AUG-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-OV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-JUN MAY-NOV
RAR# 181 INVE: RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish Alewife American eel American shad Atlantic croaker Atlantic mackerel			MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-MAY APR-AUG APR-AUG MAY-JUL JUL-NOV APR-MAY - - - - - - - - - - - - -		MAY-NOV APR-JUN MAY-SEP	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC NOV-MAR AUG-DEC	MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-OCT MAY-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-OV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-JUN MAY-NOV
INVE: RAR#	Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern puffer Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish Alewife American eel American shad Atlantic croaker Atlantic mackerel RTEBRATE:	C		MAR-JUL APR-SEP APR-JUN JUN-OCT APR-SEP APR-SEP APR-MAY APR-AUG APR-AUG MAY-JUL JUL-NOV APR-MAY - - - - - - - - - - - - -		MAY-NOV APR-JUN	JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-D	MAY-OCT JAN-DEC AUG-NOV JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-JUN MAY-NOV MAR-APR

Virginia: ESIMAP 78 (cont.)

BIOLOGICAL RESOURCES: (cont.)

MARINE MAMMAL:

RAI	# Species	S F Conc.	JFMAMJJAS	OND	Mating	Calving	Pupping	Molting	
18	1 Bottlenose dolphin		x x x x x x	X	-	-	-	-	
	Harbor porpoise		X X X X X	Х	-	-	-	-	
RE	PTILE:								

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
39	Green sea turtle	т т	X X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	-
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	T T	X X X X X X X	-	-	-	MAY-NOV	-
227	Diamondback terrapin	VERY HIGH	$X \; X \; X$	MAY-JUL	-	-	MAR-NOV	MAR-NOV

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
107	GUARD SHORE WILDLIFE MANAGEMENT AREA		
121	SAXIS WILDLIFE MANAGEMENT AREA	VDGIF	804/367-1000

BIOLOGICAL RESOURCES:

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BIRD	: Species	S F Conc.	T F M A M T T A C O N D	Noating	Migrating	Molting		
			J F M A M J J A S O N D	nesting	Migrating	Molting	-	
100	Brown pelican Gulls	С	$\begin{smallmatrix} & & \times $	-	-	-		
	Loons		XXXX XXXXXX		-	-		
	Mergansers		XXXX XXX	-	-	-		
	Osprey Scoters	HIGH	X X X X X X X X X X X X X X X X X X X	_	-	_		
	Terns		$\times \times \times \times \times \times \times \times$	-	-	-		
124 152	Bald eagle American oystercatcher	T T 8 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FEB-MAY MAR-JUL	-	-		
	American black duck	VERY HIGH	X X X X X X X X X X X X X X X X X X X		-	_		
	American wigeon	HIGH	XXXX		-	-		
	Brant Canada goose	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	-		
	Gadwall	LOW	X X X X X X X X X X X X X X X X X X X		_	_		
	Green-winged teal		X X X X X X X X X X X X X X X X X X X		-	-		
	Mallard Northern pintail	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Snow goose		X X X X X X X X X		_	_		
196	Bufflehead	HIGH	X X X X X X X X X X X X X X X X X X X		-	-		
	Canvasback Common goldeneye	HIGH	$egin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Long-tailed duck		XXXX XXX		_	-		
	Redhead	HIGH	X X X X X X X X X X X X X X X X X X X		-	-		
	Ring-necked duck Ruddy duck	LOW HIGH	$egin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Scaup	111 G11	X X X X X X X X X		_	_		
	Scoters	MODERATE	X X X X X X X X X X X X X X X X X X X		-	-		
0.47	Tundra swan	HIGH	XXXX XXX		-	-		
494	Common tern Forster's tern	98 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
495	Forster's tern	200 NESTS	$\times \times \times \times \times \times \times \times$	MAY-JUL	-	-		
562	Peregrine falcon	T	X X X X X X	MAR-AUG	-	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Alewife	= 4	X X X X X	-		-	-	FEB-JUN
	American eel		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	SEP-DEC
	American shad Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	NOV-MAR AUG-DEC	JAN-JUN MAY-NOV
	Atlantic Groaker Atlantic mackerel		XXX	-	_	_	AUG-DEC	MAR-APR
	Atlantic menhaden		imes ime	-	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		X X X X X X X X X X X X X	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish Atlantic sturgeon	С	$\begin{smallmatrix} & & & & & & & & & & & & & & & & & & &$	_	_	_	AUG-OCT -	AUG-NOV JAN-OCT
	Bay anchovy		x x x x x x x x x x x x	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum		X X X X X X X X	APR-JUN	APR-JUN -	APR-JUN	APR-NOV	APR-NOV
	Black sea bass Blueback herring		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	APR-OCT NOV-MAR	APR-OCT JAN-JUN
	Bluefish		XXXXXXX	-	-	-	MAY-NOV	APR-NOV
	Butterfish		X X X X X X X X X	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate Gobies		$\begin{smallmatrix} & & & \times & $		- APR-SEP	- APR-OCT	- JAN-DEC	MAY-NOV JAN-DEC
	Harvestfish		XXXXXXX	-	-	-	JUL-OCT	APR-OCT
	Hickory shad		X X X X X X X X X X X X X X X X X X X		-	-	NOV-MAR	JAN-JUN
	Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X		MAY-SEP -	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Mummichog		$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$		-	-	JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish		$\begin{smallmatrix} & & & \times & \times & \times & \times & \times & \times \\ & & \times & \times$	– ΜΔΥ–.ΤΙΙΝ	_	_	- JAN-DEC	APR-OCT JAN-DEC
	Northern puffer		XXXXXXXX	MAY-AUG	_	-	MAR-OCT	MAR-OCT
	Northern searobin		X X X X X X X X		-	-	-	MAR-OCT
	Red drum Red hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	AUG-SEP FEB-MAY	MAY-NOV FEB-MAY
	ned liake		A A A A A A A				TED MAI	SEP-NOV
	Sandbar shark		$\times \times \times \times \times \times$	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy) Silver hake		X	-	-	_	JUN-OCT	MAR-OCT OCT-MAY
	Silver make Silver perch		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Spot		imes ime				MAR-NOV	MAR-NOV
	Spotted hake		X X X X	-	-	-	MAR-JUN	MAR-JUN
	Spotted seatrout		$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $	MAY-JUL	_	_	APR-NOV	SEP-NOV APR-NOV
	Striped bass		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Striped killifish Summer flounder		X X X X X X X X X X X X X X X X X X X		-	- OCT-MAY	JAN-DEC	JAN-DEC
	Tautog		X X X X X X X X X X X X X X X X X X X		_	OCT-MAY	JAN-DEC -	APR-OCT OCT-APR
	Threadfin shad		X X X X	-	-	-	-	FEB-MAY
	Weakfish		X	7 DD _ 7 IIC	_	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
			* * * * * * * * *	AFK-AUG	_	MAI-AUG	AFK-NOV	AFK-NOV
	RTEBRATE:	0 F C	T	Ow · ·	W	T a	Terre 2.3 :	Adm1+
RAR#	Species	S F Conc.	J F M A M J J A S O N D	spawning	ьggs 	Larvae		Adults
16	Northern quahog (hard clam)		imes ime	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
181	Blue crab		x x x x x x x x x x x x x	-	-	MAY-NOV	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
1.81	Bottlenose dolphin		X X X X X X X					
TOT	Harbor porpoise		X X X X X X X X X X X X X X X X X X X		-	-	_	
REPT								
RAR#		S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internest	ing Juvenil	es Adults
	Green sea turtle	ТТ	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	MAY-NOV	-
			x x x X X X X	_	-	-	MAY-NOV	
	Kemp's ridley sea turtle Leatherback sea turtle	E E E E	$X \times X \times X \times X$	-	-	-	-	MAY-NOV
39	Kemp's ridley sea turtle			- - MAY-JUL	-	-	- MAY-NOV MAR-NOV	

BIOLOGICAL RESOURCES:

RIKD:

D7D#	:							
LAAL!	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	1	
100	Brown pelican	C	$X\ X\ X\ X\ X\ X\ X\ X$	-	-	-		
	Gulls		$X\ X\ X$	-	-	-		
	Loons		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Mergansers		X X X X X X X X X	_	-	_		
	Osprey Scoters	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Terns	112011	XXXXXXXX	_	_	_		
195	American black duck	VERY HIGH	$\times \times $	MAR-JUL	-	_		
	American wigeon	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Brant		$X X X X \qquad X X X$	-	-	-		
	Canada goose	HIGH	X X X X X X X X X X X X X X X X X X X		_	_		
	Gadwall	LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN -	_	_		
	Green-winged teal Mallard	HIGH	X X X X X X X X X X X X X		_	_		
	Northern pintail		X X X X X X X X	-	_	_		
	Snow goose		$X \ X \ X \ X$	-	-	-		
196	Bufflehead	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Canvasback	HIGH	X X X X X X X X	-	-	-		
	Common goldeneye Long-tailed duck		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Redhead	HIGH	X X X X X X X X	_	_	_		
	Ring-necked duck	LOW	X X X X X X X X	_	_	_		
	Ruddy duck	HIGH	X X X X X X X X X X	-	-	-		
	Scaup		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Scoters	MODERATE	X X X X X X X X	-	-	_		
101	Tundra swan	HIGH 12 ADULTS	XXXX XXX	- M7 V TIIT	-	-		
404	Black-crowned night-heron Great egret	C 2 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL	_	_		
	Snowy egret	7 ADULTS	XXXXXXXXX	MAY-JUL	_	_		
485	Black-crowned night-heron	21 ADULTS	$X \times X \times$		_	_		
	Glossy ibis	C 16 ADULTS	$\times \times $	MAY-JUL	-	-		
	Great blue heron	4 ADULTS	X X X X X X X X X X X X		-	-		
	Great egret	C 20 ADULTS	X	MAY-JUL	_	-		
	Little blue heron	C 14 ADULTS 13 ADULTS	X	MAY-JUL MAY-JUL	_	_		
490	Snowy egret Herring gull	48 NESTS	X X X X X X X X X X X X X X X X X X X		_	_		
491	Great black-backed gull	6 NESTS	X X X X X X X X X X X X X X X X X X X		_	-		
	Herring gull	82 NESTS	$\times \times $		-	_		
492	Black-crowned night-heron	10 NESTS	$\times \times $	MAY-JUL	-	-		
	Glossy ibis	C 24 NESTS	$\times \times $	MAY-JUL	-	_		
	Great blue heron	80 NESTS	X X X X X X X X X X X X		-	-		
	Great egret Little blue heron	C 385 NESTS C 38 NESTS	$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	MAY-JUL MAY-JUL	_	_		
	Snowy egret	57 NESTS	X X X X X X X X X	MAY-JUL	_	_		
	Yellow-crowned night-heron	C 4 NESTS	XXXXXXXXX	MAY-JUL	_	_		
562	Peregrine falcon	T	X X X X X X	MAR-AUG	-	_		
FISH								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Alewife		X X X X X					FEB-JUN
101	American eel		X X X X X X X X X X X X X	_	_	_	JAN-DEC	SEP-DEC
	American shad		$X \ X \ X \ X \ X \ X \ X$	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker		$\times \times $	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	-	-	-	-	MAR-APR
	Atlantic menhaden		X X X X X X X X X X X X X		-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside Atlantic spadefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL -	_	-	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic sturgeon	С	X X X X X X X X X	_	_	_	AUG-UC1 -	JAN-OCT
	Bay anchovy		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Black drum		$\times \times $	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		X X X X X X X	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring		X X X X X X X X X X	-	-	_	NOV-MAR	JAN-JUN
	Bluefish Butterfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
							-	MAY-NOV
	Clearnose skate			_	_	_		
	Clearnose skate Gobies		X X X X X X X X X X X X X X X X X X X		- APR-SEP	- APR-OCT	JAN-DEC	JAN-DEC
	Gobies Harvestfish		X X X X X X X		APR-SEP		JAN-DEC JUL-OCT	
	Gobies Harvestfish Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP - -	APR-SEP - -	APR-OCT	JAN-DEC JUL-OCT NOV-MAR	JAN-DEC APR-OCT JAN-JUN
	Gobies Harvestfish Hickory shad Hogchoker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP - - MAY-SEP	APR-SEP - - MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY	APR-SEP - -	APR-OCT MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC
	Gobies Harvestfish Hickory shad Hogchoker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP - MAY-SEP APR-MAY APR-AUG	APR-SEP - - MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG	APR-SEP - - MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN	APR-SEP - - MAY-SEP	APR-OCT MAY-SEP -	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG	APR-SEP - - MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC A JAN-DEC MAR-OCT	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL	APR-SEP - - MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG	APR-SEP - - MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC A JAN-DEC MAR-OCT	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV	APR-SEP - - MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC A JAN-DEC A A A A A A A A A A A A A A A A A A A	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV	APR-SEP - - MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC - AN-DEC MAR-OCT - AUG-SEP FEB-MAY	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy)		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-JUN MAY-JUL JUL-NOV	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC - AUG-SEP FEB-MAY MAY-OCT JUN-OCT	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-JUL JUL-NOV	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC AN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAY-OCT
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-JUL JUL-NOV	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAY-OCT OCT-MAY JAN-DEC MAR-OCT
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - MAY-JUL	APR-SEP MAY-SEP	APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-NOV MAR-JUN SEP-NOV APR-NOV
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - MAY-JUL -	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-NOV JAN-DEC
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY - APR-SEP	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT JAN-DEC JAN-DEC JAN-DEC
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - MAY-JUL -	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-JUN SEP-NOV APR-NOV APR-NOV APR-NOV JAN-DEC JAN-DEC APR-OCT
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY - APR-SEP	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-NOV APR-NOV JAN-DEC APR-OCT OCT-APR
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY - APR-SEP	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC APR-OCT
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY - APR-SEP	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT OCT-MAY JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY
TMTPF	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY - APR-SEP	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-NOV JAN-DEC APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE:	S. F. Cong	X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-SEP APR-AUG	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC APR-NOV	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT JAN-DEC MAR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV APR-NOV
	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish	S F Conc.	X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-SEP APR-AUG	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-NOV JAN-DEC APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV
RAR# 181	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Blue crab		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-SEP APR-AUG	APR-SEP MAY-SEP	APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV APR-NOV
RAR# 181	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY - APR-SEP APR-AUG APR-AUG Spawning	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC JAN-DEC APR-NOV JAN-DEC JAN-DEC JAN-DEC APR-NOV JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY SEP-NOV APR-NOV APR-NOV
RAR# 181 251	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Blue crab Eastern oyster		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY - APR-MAY - APR-SEP APR-AUG APR-AUG Spawning	APR-SEP MAY-SEP	APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-NOV APR-NOV
RAR# 181 251 MARI	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Blue crab Eastern oyster NE MAMMAL:	LOW-MED	X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-SEP APR-AUG Spawning - JUN-SEP	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-NOV APR-NOV
RAR# 181 251 MARI	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Blue crab Eastern oyster	LOW-MED S F Conc.	X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-SEP APR-AUG Spawning - JUN-SEP	APR-SEP MAY-SEP	APR-OCT	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-NOV APR-NOV
RAR# 181 251 MARI RAR#	Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species Blue crab Eastern oyster NE MAMMAL: Species	LOW-MED S F Conc.	X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-SEP APR-AUG Spawning - JUN-SEP	APR-SEP MAY-SEP	APR-OCT MAY-SEP	JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-NOV APR-NOV

Virginia: ESIMAP 80 (cont.)

BIOLOGICAL RESOURCES: (cont.)

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
39	Green sea turtle	T T	X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle Leatherback sea turtle	E E E E	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_		MAY-NOV -	- MAY-NOV
	Loggerhead sea turtle	TT	XXXXXXX	-	-	_	MAY-NOV	-
227	Diamondback terrapin	VERY HIGH	X X X X X X X X X	MAY-JUL			MAR-NOV	MAR-NOV

BIOLOGICAL RESOURCES:

RIKD:

BIRD:								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
	Brown pelican	C	X X X X X X X X	-	-	-		
	Gulls		$\times \times $	-	-	-		
	Loons		X X X X X X X X		-	-		
	Mergansers Osprey		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Scoters	HIGH	X X X X X X X X	-	-	-		
	Terns		X X X X X X X X	_	-	-		
195	American black duck American wigeon	VERY HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL	_	_		
	Brant	111011	X X X X X X X X	_	_	_		
	Canada goose	HIGH	$\times \times $		-	-		
	Gadwall Green-winged teal	LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN	_	_		
	Mallard	HIGH	X X X X X X X X X X X X	MAY-JUL	_	_		
	Northern pintail			-	_	_		
100	Snow goose		X X X X X X X X		-	-		
196	Bufflehead Canvasback	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Common goldeneye		$X \ X \ X \ X$		-	-		
	Long-tailed duck		X X X X X X X X	-	-	-		
	Redhead Ring-necked duck	HIGH LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Ruddy duck	HIGH	X X X X X X X X		_	_		
	Scaup		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Scoters Tundra swan	MODERATE HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
474	Great black-backed gull	10 NESTS	X X X X X X X X X X X X	MAY-JUL	_	_		
	Herring gull	5 NESTS	${\sf x} \; {\sf x}$		-	-		
ISH:								
	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Alewife		X X X X X	-	-	-		FEB-JUN
	American eel American shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	JAN-DEC NOV-MAR	SEP-DEC JAN-JUN
	Atlantic croaker		X X X X X X X X	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	-	-	-	-	MAR-APR
	Atlantic menhaden Atlantic silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	– M∆D TITT	-	MAY-NOV -	JAN-DEC JAN-DEC	MAY-OCT JAN-DEC
	Atlantic silverside Atlantic spadefish		XXXX	- MAK-00L	_	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$	_	-	-	=	JAN-OCT
	Bay anchovy		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Black drum Black sea bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-JUN JUN-OCT	APR-JUN -		APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring		XXXXXXXXXXX		_		NOV-MAR	JAN-JUN
	Bluefish		X X X X X X X X X	-	-	-	MAY-NOV	APR-NOV
	Butterfish Clearnose skate		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	JUL-NOV -	MAR-NOV MAY-NOV
	Gobies		X X X X X X X X X X X X		APR-SEP	APR-OCT		JAN-DEC
	Harvestfish		X X X X X X X	-	-		JUL-OCT	APR-OCT
	Hickory shad Hogchoker		XXXXXXXXXXX		- MAY CED		NOV-MAR	JAN-JUN
	Inland silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		MAY-SEP -		JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows		X X X X X X X X X X X X		-		JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X		-		JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish		$\begin{array}{c} & \times $	– мл v – тим	_		- JAN-DEC	APR-OCT JAN-DEC
	Northern puffer		XXXXXXXX		_		MAR-OCT	MAR-OCT
	Northern searobin		$X \ X \ X \ X \ X \ X \ X \ X$		-		-	MAR-OCT
	Red drum Red hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_		AUG-SEP FEB-MAY	MAY-NOV FEB-MAY
	Red Hake		***	_	_	_	reb-MAI	SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X X	-	-		JUN-OCT	MAR-OCT
	Silver hake Silver perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$				- JAN-DEC	OCT-MAY JAN-DEC
	Spot		X X X X X X X X X X X X		-		MAR-NOV	MAR-NOV
	Spotted hake			-	-	-	MAR-JUN	MAR-JUN
	Spotted seatrout		X	MAY-JUL	_	_	APR-NOV	SEP-NOV APR-NOV
	Striped bass		X X X X X X X X X X X X		_		JAN-DEC	JAN-DEC
	Striped killifish		${\sf x} \; {\sf x}$	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder		X X X X X X X X X X X X X X X X X X X		-	OCT-MAY	JAN-DEC -	APR-OCT
	Tautog Threadfin shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		OCT-APR FEB-MAY
								SEP-NOV
	Weakfish		X X X X X X X X X	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
IVE	RTEBRATE:							
	Species	S F Conc.		Spawning	Eggs	Larvae	Juveniles	Adults
	Blue crab						JAN-DEC	JAN-DEC
	Eastern oyster	LOW-MED	x		JUN-SEP		JAN-DEC	JAN-DEC
ARIN	IE MAMMAL:							
AR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
	Dettlerer delabis							
	Bottlenose dolphin Harbor porpoise		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-	_	
EPT]	.止 ៥: Species	S F Conc.	J F M A M J J A S O N D	Nestina	Hatching	Internecti	ing Juwenil	es Adulta
AR#								
		ТТ	X X X X X X X		-	-	11111 1101	
39	Green sea turtle						77 T T T T T T T T T T T T T T T T T T	7 –
39	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	_	MAY-NOV -	
39		E E			- - -	- - -	MAY-NOV - MAY-NOV	MAY-NO

BIOLOGICAL RESOURCES:

BIRD	:
------	---

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
231	Bufflehead	MODERATE	X X X X X X X X X	-			_	
	Common goldeneye		X X X X X X X X		-	_		
	Long-tailed duck		X X X X X X X X X		-	_		
	Mergansers		$X X X X \qquad \qquad X X X$		-	-		
	Mute swan				-	-		
	Ruddy duck		X X X X X X X X X X X X X X X X X X X		-	-		
	Scaup		X X X X X X X X X		-	_		
122	Scoters	10 NEGEG	XXXX XXX	_ MAX_TIIT	-	_		
	Great blue heron	10 NESTS	X X X X X X X X X X X X X	MAY-JUL	-	-		
ISH	: Species	S F Conc.	J F M A M J J A S O N D	Snawning	Eggs	Larvae	Juveniles	Adults
181	Alewife		X X X X X	_	-	_	-	FEB-JUN
	American eel American shad		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC NOV-MAR	SEP-DEC JAN-JUN
	Atlantic croaker		XXXXXXX		_	_	AUG-DEC	MAY-NOV
	Atlantic mackerel		XX	_	_	_	-	MAR-APR
	Atlantic menhaden		X X X X X X X X X X X X	_	_	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		X X X X X X X X X X X X		_	-	JAN-DEC	JAN-DEC
	Atlantic spadefish		XXXX	_	_	_	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	X X X X X X X X X X	-	-	-	-	JAN-OCT
	Bay anchovy			APR-SEP	-	_	JAN-DEC	JAN-DEC
	Black drum		$\times \times $	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		$X\;X\;X\;X\;X\;X\;X\;X$	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring			-	-	-	NOV-MAR	JAN-JUN
	Bluefish		$\times \times $	-	-	-	MAY-NOV	APR-NOV
	Butterfish		X X X X X X X X	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate		X X X X X X X	-	-	-	-	MAY-NOV
	Gobies		X X X X X X X X X X X X X		APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad		X X X X X X X X X X X X X X X X X X X	- MAY CED	- MAY CED	- MAY CED	NOV-MAR	JAN-JUN
	Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X		MAY-SEP -	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC
	Minnows		X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Northern kingfish		XXXXXXXX	AIN AUG	_	_	-	APR-OCT
	Northern pipefish		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Northern puffer		XXXXXXXX	MAY-AUG	_	_	MAR-OCT	MAR-OCT
	Northern searobin		$X \times X \times X \times X \times X$	MAY-JUL	_	_	_	MAR-OCT
	Red drum		X X X X X X X	JUL-NOV	-	_	AUG-SEP	MAY-NOV
	Red hake		X X X X	-	-	-	FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		$X \ X \ X \ X \ X \ X \ X$		-	-	-	OCT-MAY
	Silver perch				-	-	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X	-	-		MAR-NOV	MAR-NOV
	Spotted hake		X X X X	-	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass				-	_	JAN-DEC	JAN-DEC
	Striped killifish		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder		$\times \times $		-	OCT-MAY		APR-OCT
	Tautog		$X \ X \ X \ X \qquad \qquad X \ X \ X$		-	-	-	OCT-APR
	Threadfin shad		X X X X	-	-	-	-	FEB-MAY
	Weakfish		X X X X X X X X	APR-AUG	_	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
NVE	RTEBRATE:							
	Species	S F Conc.	J F M A M J J A S O N D				Juveniles	
181	Blue crab						JAN-DEC	JAN-DEC
	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O N D	Matine	Colmina	Dunn:	Moltin-	
				_				
181	Bottlenose dolphin Harbor porpoise		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	-	
EPT:	ILE:							
AR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internest	ing Juvenil	les Adult
	Green sea turtle	тт	X X X X X X	_	_	_	7ON-YAM	<i>J</i> –
	Kemp's ridley sea turtle	E E	XXXXXXX	_	_	_	VON-YAM	
55			11 11 11 11 11 11				111111110	
33	Leatherback sea turtle	E E	X X X X X X X	-	-	-	_	MAY-No

BIOLOGICAL RESOURCES:

В	I	R	D	:

AR#		S F Conc.		JFMAN	4 J J A S O	N D	Nesting	Migrating	Molting	Г	
231	Bufflehead	MODERATE		X X X X	X	 X X	-	-		-	
	Common goldeneye			X X X X		ХХ	-	-	_		
	Long-tailed duck			X X X X	X	ХХ		-	-		
	Mergansers			XXXX		ХХ		-	-		
	Mute swan			XXXX		X X		_	_		
	Ruddy duck Scaup			X X X X X X X X X X X X X X X X X X X		XX		_	_		
	Scoters			XXXX		XX		_	_		
232	American black duck			XXXX		ХХ		-	_		
	American wigeon			X X X X	X	ХХ	-	-	-		
	Canada goose	HIGH		$X \ X \ X \ X$		ХХ		-	-		
	Mallard			X X X X		ХХ		-	-		
22	Tundra swan American black duck	HIGH		X X X X X X X X X X X X X X X X X X X		X X X X		_	_		
233	American black duck			A A A A	Λ	Λ Λ	_	_	_		
ISH	:										
ır#	Species	S F Conc.			4 J J A S O	N D	Spawning		Larvae	Juveniles	Adults
Q 1	Bay anchovy				X X X X X X X	 v v	ADD_GED			JAN-DEC	JAN-DEC
OI	Black drum				X		APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass				X X X X X X		JUN-OCT	_	_	APR-OCT	APR-OCT
	Blueback herring			X X X X X	ΧX	ХХ	-	_	_	NOV-MAR	JAN-JUN
	Bluefish			X X	X X X X X	Χ	-	-	-	MAY-NOV	APR-NOV
	Butterfish			х х х	X X X X X X	X	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate			Σ	X X X X X X	Χ	-	-	-	-	MAY-NOV
	Gobies				X X X X X			APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish				X X X X X X		-	-	-	JUL-OCT	APR-OCT
	Hickory shad			XXXXX		ХХ	-	-	-	NOV-MAR	JAN-JUN
	Hogchoker				X			MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside Minnows				X			-	-	JAN-DEC	JAN-DEC
	Munnows Mummichoq				X X X X X X X X X X X X			_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish				<pre></pre>		APR-AUG -	_	_	JAN-DEC -	APR-OCT
	Northern pipefish							_	_	JAN-DEC	JAN-DEC
	Northern puffer				X		MAY-AUG	_	-	MAR-OCT	MAR-OCT
	Northern searobin				X X X X X X		MAY-JUL	-	-	-	MAR-OCT
	Red drum			Σ	X	Χ	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake			X X X X	X X	Χ	-	-	-	FEB-MAY	FEB-MAY
											SEP-NOV
	Sandbar shark			Σ	X X X X X X		-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)			X X X	X X X X X X		-	-	-	JUN-OCT	MAR-OCT
	Silver hake			X X X X X		ХХ	-	-	-	-	OCT-MAY
	Silver perch				X		APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot				X X X X X		-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake			X X X	X X X X	Х	-	-	-	MAR-JUN	MAR-JUN
											SEP-NOV
	Spotted seatrout				X X X X X			-	-	APR-NOV	APR-NOV
	Striped bass				X			-	_	JAN-DEC	JAN-DEC
	Striped killifish Summer flounder				X			-	- OCT-MAY	JAN-DEC JAN-DEC	JAN-DEC APR-OCT
	Tautog				$\begin{array}{cccccccccccccccccccccccccccccccccccc$			_	OCI-MAI	JAN-DEC	OCT-APR
	Threadfin shad				X X X			_	_	_	FEB-MAY
	IIII OddIIII Olida					••					SEP-NOV
	Weakfish			X X	X X X X X	Х	APR-AUG	_	MAY-AUG	APR-NOV	APR-NOV
	Alewife			X X X X			_	-	_	_	FEB-JUN
	American eel			X X X X X	XXXXX	ХХ	-	_	_	JAN-DEC	SEP-DEC
	American shad			X X X X X	XX	ХХ	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker			Σ	X X X X X X	ХХ	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel			X X			-	-	-	-	MAR-APR
	Atlantic menhaden				X X X X X			-	MAY-NOV		MAY-OCT
	Atlantic silverside			X X X X X	X X X X X			-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish			77 77 77			_	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	С		ххххх	XXXXXX		_	-	_	-	JAN-OCT
IVE	RTEBRATE:										
₹#	Species	S F Conc.		JFMAN	M J J A S O	N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Blue crab									JAN-DEC	
	NE MAMMAL:			•		=				-	
	NE MAMMAL: Species	S F Conc.		JFMAN	4 J J A S O	N D	Mating	Calving	Puppina	Molting	
81	Bottlenose dolphin				XXXXX		- -	-	-	-	
	Harbor porpoise			ххххх	Κ	Х	_	-	-	_	
	ILE:										
R#	Species	S F Conc.		JFMAN	4 J J A S O	N D	Nesting	Hatching	Internest	ing Juveni.	les Adult
39	Green sea turtle	T T			X X X X X			-	-	MAY-NOV	
	Kemp's ridley sea turtle				X			-	-	7ON-YAM	
	Leatherback sea turtle Loggerhead sea turtle	E E T T			X X X X X X X X X X X X X X X X X X X			-	-	- MAY-NOV	
	Loggernead sea turtie							- :=======			
JMA	N USE RESOURCES:										
AU(CULTURE:										
N#	Name		Contact					Ph	none		
58	AQUACULTURE: OYSTERS										
777	GEMENT AREA:										
í#	Name		Contact					Ph	one		

 HUN#
 Name
 Contact
 Phone

 104
 DAMERON MARSH NATURAL AREA PRESERVE
 VA DCR DNH
 804/445-9117

BIOLOGICAL RESOURCES:

BIRD:

BIRD	:							
	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	Г	
232	American black duck		X X X X X X X X X	-				
	American wigeon		XXXX	-	-	-		
	Canada goose	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Mallard	WT CV	X X X X X X X X X	-	-	-		
233	Tundra swan American black duck	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Great blue heron	220 NESTS	\times	MAY-JUL	_	_		
	-							
FISH					_	_	,	
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
181	Alewife		X X X X X	_	_	_	_	FEB-JUN
	American eel		$\times \times $	-	-	-	JAN-DEC	SEP-DEC
	American shad		X X X X X X X X X X	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker Atlantic mackerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	AUG-DEC -	MAY-NOV MAR-APR
	Atlantic menhaden		X X X X X X X X X X X X	_	_	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		$\times \times $	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish		X X X X	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon Bay anchovy	С	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- 7 DD_GFD	_	_	- JAN-DEC	JAN-OCT JAN-DEC
	Black drum		XXXXXXXXX	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		$X \times X \times X \times X$	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring		$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-	NOV-MAR	JAN-JUN
	Bluefish		X X X X X X X X X X X X X X X X X X X	_	_	_	MAY-NOV	APR-NOV
	Butterfish Clearnose skate		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_	JUL-NOV -	MAR-NOV MAY-NOV
	Gobies		X X X X X X X X X X X X X		APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad		X X X X X X X X X X X X X X X X X X X	-	- MAY CED	- -	NOV-MAR	JAN-JUN
	Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X		MAY-SEP	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Northern kingfish		$\times \times \times \times \times \times \times$	-	-	-	-	APR-OCT
	Northern pipefish		X X X X X X X X X X X X X X X X X X X		-	_	JAN-DEC MAR-OCT	JAN-DEC
	Northern puffer Northern searobin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-AUG MAY-JUL	_	_	MAR-OCT	MAR-OCT MAR-OCT
	Red drum		X X X X X X	JUL-NOV	-	_	AUG-SEP	MAY-NOV
	Red hake		X X X X X X X X X	-	-	-	FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark		$\begin{array}{c} \times \times$	_	_	_	MAY-OCT JUN-OCT	MAY-OCT MAR-OCT
	Scup (porgy) Silver hake		X X X X X X X X X X	_	_	_		OCT-MAY
	Silver perch		$\times \times $	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot		$\times \times $	-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		X X X X	_	-	-	MAR-JUN	MAR-JUN
	Spotted seatrout		X	MAY-JUL	_	_	APR-NOV	SEP-NOV APR-NOV
	Striped bass		\times	-	_	_	JAN-DEC	JAN-DEC
	Striped killifish		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder		X X X X X X X X X X X X X	-	-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog Threadfin shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_	-	OCT-APR FEB-MAY
	IIIICaaliii Silaa		A A A A A A A A					SEP-NOV
	Weakfish		X X X X X X X X	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
208	American eel		$\times \times $	-	-	-	JAN-DEC	-
	Atlantic croaker		X X X X X X X X X X X X X	-	-	_	JAN-DEC	_
	Atlantic menhaden Atlantic silverside		$\begin{array}{c} \times \times$	MAR-ITIT	_	_	MAY-NOV JAN-DEC	- JAN-DEC
	Bay anchovy		X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
	Hogchoker		$\times \times $	MAY-SEP		MAY-SEP	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Silver perch Spot		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $	_	_	- DEC-APR	JAN-DEC	JAN-DEC -
	Striped bass		X X X X X X X X X X X X X X X X X X X	_	_	DEC-APR	MAY-OCT	_
	Summer flounder		$\times \times $	-	-	-	JAN-DEC	-
	Weakfish		X X X X X X X X X X X X X		-	-	JAN-DEC	-
	White perch		X X X X X X X X X X X X	-	-	-	JAN-DEC	-
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D		Eggs	Larvae	Juveniles	Adults
	Blue crab		X X X X X X X X X X X X X X X X X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
208	Blue crab Eastern oyster		X X X X X X X X X X X X X X X X X X X	- JUN-SEP	- JUN-SEP	MAY-NOV JUN-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	_		^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^	AGC. NOO	OON DEF	OON SEF	OTHN DEC	O VIV - DEC
1ARI	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O N D		Calving	Pupping	Molting	
101								
ΤΩΤ	Bottlenose dolphin Harbor porpoise		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	_	
208	Bottlenose dolphin		XXXXXXX	_	-	_	-	
	=							
	Harbor porpoise		X X X X X X	-	-	-	-	

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
100	BUSH MILL STREAM NATURAL AREA PRESERVE	VA DCR DNH	804/445-9117
108	HICKORY HOLLOW NATURAL AREA PRESERVE	VA DCR DNH	804/445-9117

BIOLOGICAL RESOURCES:

ъ	TDD	٠.
Д	TLT	

RAR#	: Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	Į.	
45	Bald eagle	T T	X X X X					
	Common moorhen	С	X X X X	-	-	-		
	Great blue heron		XXXX	-	-	-		
	Greater yellowlegs		X X X X	-	-	_		
	Green heron		XXXX	-	-	-		
	King rail Least bittern		XXXX	-	-	_		
	Marsh wren		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Osprey		XXXXXX	MAR-AUG	_	_		
	Sora		XXXX	-	_	_		
	Swamp sparrow		XXXX	_	_	_		
	Virginia rail		XXXX	-	_	_		
	Wood duck		$\times \times $	APR-JUN	_	_		
204	Bufflehead	HIGH	$X \ X \ X \ X \ X \ X \ X$	-	-	_		
	Canvasback	HIGH	$X \ X \ X \ X \ X \ X \ X$	-	-	_		
	Common goldeneye	MODERATE	$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-		
	Long-tailed duck		X X X X X X X X X X X X X X X X X X X		-	_		
	Mergansers	HIGH	X X X X		-	-		
	Ring-necked duck	LOW	X X X X X X X X		-	-		
	Ruddy duck	VERY HIGH	X X X X X X X X X		-	_		
33E	Scaup	HIGH	X X X X X X X X X X X X X X X X X X X		_	_		
∠33	American black duck Bufflehead	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Canada goose	MODERATE HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	-		
	Green-winged teal	111 G11	X X X X X X X X X		_	_		
	Mallard	MODERATE	X X X X X X X X		_	_		
	Mute swan	11000111111	X X X X X X X X X		_	_		
	Ring-necked duck	MODERATE	X X X X X X X X	_	_	_		
	Tundra swan	HIGH	X X X X X X X X X	_	_	_		
	Wood duck	-	X X X X X X X X X X X X	APR-JUN	-	_		
252	Canada goose	HIGH	XXXX	-	-	_		
397	Great blue heron	14 NESTS	X X X X X X X X	MAY-JUL	-	-		
rish	:							
	Species	S F Conc.	J F M A M J J A S O N D	Spawning		Larvae	Juveniles	Adults
68	Alewife		X X X X X	-		-		FEB-JUN
00	American shad		XXXXX	_	_	_	_	FEB-JUN
	Blueback herring		X X X X X	_	_	_	_	FEB-JUN
	Hickory shad		X X X X X	-	-	-	_	FEB-JUN
	Striped bass		X X X X X X X X X X X X X X X X X X X	-	-	-	_	OCT-JUN
208	American eel		$\times \times $	_	_	_	JAN-DEC	_
	Atlantic croaker		$\times \times $	-	-	-	JAN-DEC	_
	Atlantic menhaden		$X \ X \ X \ X \ X \ X$	-	-	-	MAY-NOV	_
	Atlantic silverside		$\times \times $	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Bay anchovy		$X\;X\;X\;X\;X\;X\;X\;X\;$	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Hogchoker		$X\;X\;X\;X\;X\;X\;X\;X\;$		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Mummichog		$X\ X\ X$		-	-	JAN-DEC	JAN-DEC
	Silver perch		X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X		-	DEC-APR		-
	Striped bass		X X X X X X		-	-	MAY-OCT	-
	Summer flounder		X X X X X X X X X X X X X		_	-	JAN-DEC	-
	Weakfish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	-
234	White perch		X X X X X X X X X X X X X X X X X X X				JAN-DEC	- M7 V−NOU
4 <i>پ</i>	Atlantic croaker Atlantic menhaden		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_	JAN-DEC MAY-NOV	MAY-NOV -
	Atlantic menhaden Atlantic silverside		X X X X X X X X X X X X X				JAN-DEC	JAN-DEC
	Bay anchovy		X X X X X X X X X X X X X			_	JAN-DEC	JAN-DEC
	Blue catfish		X X X X X X X X X X X X		_	_	JAN-DEC	-
	Channel catfish		X X X X X X X X X X X X		_	_	JAN-DEC	_
	Hogchoker		X X X X X X X X X X X X X					JAN-DEC
	Mummichog		$\times \times $			-	JAN-DEC	JAN-DEC
	Silver perch		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Spot		$\times \times $	-	-	DEC-APR	APR-NOV	-
	Striped bass		X X X X X X	-	-	-	MAY-OCT	-
	Weakfish		$\times \times $	-	-	-	JAN-DEC	-
	White catfish		$\times \times $	-	-	-	JAN-DEC	-
	White perch		X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	RTEBRATE:				_	_	_	
	Species	S F Conc.				Larvae	Juveniles	
	Blue crab		X X X X X X X X X X X X X		-	MAY-NOV		JAN-DEC
208	mark to the contract of the co		X X X X X X X X X X X X X				JAN-DEC	JAN-DEC
	Eastern oyster		X X X X X X X X X X X X X			MAY-NOV	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Blue crab		X X X X X X X X X X X X X	THIN-GED	THM=GED	. -		
234	Blue crab Eastern oyster		X X X X X X X X X X X X X	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	01111 220
234 MARII RAR#	Blue crab Eastern oyster NE MAMMAL: Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping		01111 320
234 (ARI) (AR#	Blue crab Eastern oyster NE MAMMAL:		J F M A M J J A S O N D	Mating	Calving	Pupping		0 220

HUMAN USE RESOURCES:

AQUACULTURE:

HUN# Phone Name Contact _____ AQUACULTURE: OYSTERS 58

PARK:

HUN# Name Contact Phone -----804/462-5030 133 BELLE ISLE STATE PARK VA DCR CHILTON WOODS STATE FOREST VA DEPT. OF FORESTRY 135

BIOLOGICAL RESOURCES:

BIRD:

RAR#		S F Conc.			g Migratin	g Moltin	9	
 45	Bald eagle		X X X X					
40	Common moorhen	C	XXXX	_	_	_		
	Great blue heron	Č	XXXX	_	_	_		
	Greater yellowlegs		XXXX	_	_	_		
	Green heron		XXXX	_	_	_		
	King rail		XXXX	_	_	_		
	Least bittern		XXXX	_	_	_		
	Marsh wren		XXXX	_	_	_		
	Osprey		X X X X X X	MAR-AU	_ 			
			XXXX	MAK-AU	- -	_		
	Sora		XXXX	_	_	_		
	Swamp sparrow		XXXX	_	_			
	Virginia rail			-		_		
204	Wood duck Bufflehead	HIGH	X X X X X X X X X X X X X X X X X X X	X X APR-JU	N –	_		
204					_	_		
	Canvasback	HIGH		X X -	-	-		
	Common goldeneye	MODERATE		X X -	-	-		
	Long-tailed duck			X X -	-	-		
	Mergansers	HIGH		X X -	_	_		
	Ring-necked duck	LOW		X X -	_	_		
	Ruddy duck	VERY HIGH		X X -	-	_		
	Scaup	HIGH		X X -	-	-		
235	American black duck	MODERATE		X X -	-	_		
	Bufflehead	MODERATE		X X -	-	-		
	Canada goose	HIGH		X X -	-	-		
	Green-winged teal		X X X X	X X -	-	-		
	Mallard	MODERATE	X X X X	X X -	-	-		
	Mute swan		X X X X	X X -	-	-		
	Ring-necked duck	MODERATE	X X X X	X X -	-	-		
	Tundra swan	HIGH	XXXX	X X -	-	-		
	Wood duck		X X X X X X X X X X X	X X APR-JU	N -	-		
394	Great blue heron	9 NESTS	X X X X X X X X X X X	X X MAY-JU	L -	-		
412	Great blue heron	6 NESTS	X X X X X X X X X X X	X X MAY-JU	L -	-		
'ISH	•							
	· Species	S F Conc.	J F M A M J J A S O	N D Spawni	na Eaas	Larvae	Juveniles	Adults
68	Alewife		X X X X X	_	_	-	_	FEB-JUN
	American shad		X X X X X	_	_	-	_	FEB-JUN
	Blueback herring		X X X X X	_	_	_	_	FEB-JUN
	Hickory shad		X X X X X	_	-	_	_	FEB-JUN
	Striped bass			х х –	_	_	_	OCT-JUI
234	Atlantic croaker		x		_	_	JAN-DEC	MAY-NOV
	Atlantic menhaden		X X X X X X		_	_	MAY-NOV	_
	Atlantic silverside		x		т. –	_	JAN-DEC	JAN-DE(
	Bay anchovy		\times \times \times \times \times \times \times \times \times			_	JAN-DEC	JAN-DEC
	Blue catfish		XXXXXXXXXX		_	_	JAN-DEC	-
	Channel catfish		XXXXXXXXXX			_	JAN-DEC	_
	Hogchoker		XXXXXXXXXX			MAY-SEP	JAN-DEC	JAN-DE
	Mummichog		XXXXXXXXXX			MAI-SEF	JAN-DEC	JAN-DE
	Silver perch		XXXXXXXXXX			_	JAN-DEC	JAN-DE
	Spot Spot		X X X X X X X X X X X X X X X X X X X		_	DEC-APR		JAN-DE
			XXXXXX		_	DEC-AFK		_
	=		X		_	-	MAY-OCT	_
	Striped bass						JAN-DEC	_
	Striped bass Weakfish		X X X X X X X X X X X X		-		TAM-DEC	
	Striped bass Weakfish White catfish		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	X X -	- - -	-	JAN-DEC	- TAN-DE
	Striped bass Weakfish White catfish White perch		X X X X X X X X X X X X	X X -	- - -	- -	JAN-DEC JAN-DEC	
	Striped bass Weakfish White catfish White perch RTEBRATE:		X X X X X X X X X X X X X X X X X X X	X X - X X -	- -	-	JAN-DEC	JAN-DE(
	Striped bass Weakfish White catfish White perch	S F Conc.	$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	X X - X X -		- Larvae	JAN-DEC Juveniles	JAN-DEC
AR#	Striped bass Weakfish White catfish White perch RTEBRATE: Species		X X X X X X X X X X X X X X X X X X X	X X - X X - Spawni		- Larvae	JAN-DEC Juveniles	JAN-DEG

BIOLOGICAL RESOURCES:

BIRD:

RAR#		S F Conc.		Nesting	Migrating	Molting	ī -	
45	Bald eagle	тт	XXXX	-	-			
	Common moorhen	C	X X X X	-	-	_		
	Great blue heron		X X X X	-	-	-		
	Greater yellowlegs		X X X X	-	_	_		
	Green heron		X X X X	-	_	_		
	King rail		X X X X	_	_	_		
	Least bittern		X X X X	_	_	_		
	Marsh wren		XXXX	_	_	_		
	Osprey		XXXXXX	MAR-AUG	_	_		
	Sora		XXXX	- MAIN AUG	_	_		
				_	_	_		
	Swamp sparrow		XXXX	_	-	_		
	Virginia rail		X X X X	-	-	_		
	Wood duck		X X X X X X X X X X X X X X		-	-		
235	American black duck	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Bufflehead	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Canada goose	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Green-winged teal		$X \ X \ X \ X $	-	-	-		
	Mallard	MODERATE	X X X X X X X X X X X X X X X X X X X	_	-	_		
	Mute swan		X X X X X X X X	-	_	_		
	Ring-necked duck	MODERATE	X X X X X X X X X X X X X X X X X X X	_	_	_		
	Tundra swan	HIGH	X X X X X X X X	_	_	_		
	Wood duck	111 011	\times		_	_		
307	Great blue heron	14 NESTS	\times		_	_		
	Great blue heron	6 NESTS			_	_		
		0 NESIS	X X X X X X X X X X X X	MAI-00L	_	_		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D			Larvae	Juveniles	Adults
68	Alewife		X X X X X	_	_	_	_	FEB-JU
0.0	American shad		XXXXX	_	_	_	_	FEB-JU
	Blueback herring		XXXXX	_	_	_	_	FEB-JU
	-				_		_	
	Hickory shad				_	_	_	FEB-JU
004	Striped bass		X X X X X X X X X X X		-	-		OCT-JU
234	Atlantic croaker		X X X X X X X X X X X X X	-	-	_	JAN-DEC	MAY-NC
	Atlantic menhaden		X X X X X X X	-	-	-	MAY-NOV	-
	Atlantic silverside		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DE
	Bay anchovy		X X X X X X X X X X X X X X	APR-SEP	-	-	JAN-DEC	JAN-DE
	Blue catfish		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	-	JAN-DEC	-
					_	_	JAN-DEC	_
	Channel catfish		X X X X X X X X X X X X X X	-	_			JAN-DE
					- MAY-SEP	MAY-SEP	JAN-DEC	
	Hogchoker		$\times \times $	MAY-SEP		MAY-SEP -		
	Hogchoker Mummichog		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $	MAY-SEP APR-AUG			JAN-DEC	JAN-DE
	Hogchoker Mummichog Silver perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-SEP APR-AUG -	MAY-SEP -	-	JAN-DEC JAN-DEC	JAN-DE
	Hogchoker Mummichog Silver perch Spot		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-SEP APR-AUG - -	MAY-SEP - -	- - DEC-APR	JAN-DEC JAN-DEC APR-NOV	JAN-DE JAN-DE -
	Hogchoker Mummichog Silver perch Spot Striped bass		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-AUG - -	MAY-SEP - -	- DEC-APR	JAN-DEC JAN-DEC APR-NOV MAY-OCT	JAN-DE JAN-DE
	Hogchoker Mummichog Silver perch Spot Striped bass Weakfish		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-AUG - - -	MAY-SEP - - - -	- DEC-APR - -	JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC	JAN-DE JAN-DE - -
	Hogchoker Mummichog Silver perch Spot Striped bass Weakfish White catfish		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-AUG - - - -	MAY-SEP - -	- DEC-APR	JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC JAN-DEC	JAN-DE JAN-DE - - -
	Hogchoker Mummichog Silver perch Spot Striped bass Weakfish		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-AUG - - - -	MAY-SEP - - - -	- DEC-APR - -	JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC	JAN-DE JAN-DE - -
NVE	Hogchoker Mummichog Silver perch Spot Striped bass Weakfish White catfish		X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-AUG - - - -	MAY-SEP - - - -	- DEC-APR - -	JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC JAN-DEC	JAN-DE JAN-DE - - -
AR#	Hogchoker Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch	S F Conc.	X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-AUG - - - - - -	MAY-SEP - - - - - - -	- DEC-APR - -	JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC JAN-DEC	JAN-DE JAN-DE JAN-DE
RAR#	Hogchoker Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch RTEBRATE: Species	S F Conc.	X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-AUG - - - - - - - Spawning	MAY-SEP	DEC-APR Larvae	JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DE JAN-DE JAN-DE
RAR#	Hogchoker Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch RTEBRATE:	S F Conc.	X X X X X X X X X X X X X X X X X X X	MAY-SEP APR-AUG - - - - - - Spawning	MAY-SEP	- DEC-APR - - -	JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DE JAN-DE JAN-DE

BIOLOGICAL RESOURCES:

BIRD	:
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RAR# Species

RAR#	Species	S F Conc.	J F M A M J J A S O N D		Migrating	Molting	J	
	Black scoter	HIGH	X X X X X X X X				- <u>-</u>	
	Surf scoter		X X X X X X X		-	-		
	White-winged scoter		$X \ X \ X \ X \qquad \qquad X \ X$		-	-		
26	American woodcock		XXXXXXXX		_	-		
	Black-bellied plover Dunlin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Greater yellowlegs		XXXXXXXXX	_	_	-		
	Killdeer		X X X	_	-	-		
	Least sandpiper		$\times \times $	-	-	_		
	Lesser yellowlegs		$X \ X \ X \ X \ X \ X \ X \ X \ X$	-	-	_		
	Pectoral sandpiper Red knot		$\begin{array}{c} & \times $	_	_	_		
	Ruddy turnstone		XXXXXX	_	_	_		
	Sanderling		$\times \times $	-	-	_		
	Semipalmated plover		$\times \times $		-	-		
	Semipalmated sandpiper		X X X X X X X X X		-	_		
	Short-billed dowitcher Stilt sandpiper		X X X X X X X X X X X X X X X X X X X	_	_	_		
	Western sandpiper		XXXXXX	_	_	_		
	Whimbrel		X X X X X X	-	-	_		
	White-rumped sandpiper		X X X	-	-	-		
	Willet		$\times \times $		-	_		
	Piping plover American black duck	T T HIGH	XXXXXXX	APR-SEP	-	_		
31	American wigeon	HIGH MODERATE	X X X X X X X X X X X X X X X X X X X		_	_		
	Brant	HIGH	X X X X X X X X X		_	_		
	Canada goose	HIGH	$\times \times $		-	-		
	Gadwall	MODERATE	$\times \times $	APR-JUN	-	-		
	Green-winged teal	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	_		
	Mallard	MODERATE	X X X X X X X X X X X X X		-	_		
	Northern pintail Northern shoveler	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Snow goose	HIGH	X X X X X X X X		_	_		
32	Bufflehead	HIGH	X X X X X X X X		-	-		
	Common goldeneye			-	-	-		
	Mergansers	HIGH	X X X X X X X X X X X X X X X X X X X		-	_		
	Ruddy duck		X X X X X X X X X X X X X X X X X X X		-	_		
	Scaup Tundra swan	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
33	Clapper rail	MODERATE HIGH	X X X X X X X X X X X X X X X X X X X		_	_		
00	King rail		X X X X X X X X X X X X	-	_	_		
	Sora		$X X X \qquad X X X$	-	-	_		
	Virginia rail		$\times \times $		-	_		
	Whimbrel	HIGH	X X X X X X	-	-	_		
120	Willet	HIGH	X X X X X X X X X X X X X X X X X X X		_	_		
	American oystercatcher Bald eagle	тт	X X X X X X X X X X X X X X X X X X X	MAR-JUL FEB-MAY	_	_		
152	American oystercatcher		X X X X X X X	MAR-JUL	_	_		
157	American oystercatcher American oystercatcher American oystercatcher American oystercatcher Sea ducks American black duck	12 ADULTS	X X X X X X X	MAR-JUL MAR-JUL	-	-		
228	American oystercatcher	6 ADULTS	X X X X X X X	MAR-JUL	-	-		
241	American oystercatcher	3 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL	-	-		
253	Sea ducks	VERY HIGH	X X X X X X X X X X X X X X X X X X X	-	-	_		
234	American black duck Dabbling ducks	VERY HIGH 25,000-40,000	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_		
	Malland	VERY HIGH	X X X X X X X X	_	_	_		
	Northern pintail	VERY HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_		
	Snow goose	50000 HIGH T T T T	$X \ X \ X \ X$ $X \ X \ X \ X$	-	-	_		
0.5.5	Tundra swan	HIGH			-	_		
255	Bald eagle Piping plover	TT	X X X X X X X X X X X			_		
257 258	American ovstercatcher	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP		_		
357	American oystercatcher Black skimmer	36 ADULTS	37 37 37 37 37 37 37 37	MAY-JUL		_		
	Common tern	24 ADULTS	X X X X X X X X	MAY-JUL	-	-		
	Least tern	C 200 ADULTS	X X X X X X X	MAY-JUL	-	-		
360	Common tern Least tern Least tern Black skimmer	C 20 ADULTS	X X X X X X X X X X X X X X X X X X X	MAY-JUL	-	-		
377	Black skimmer Yellow-crowned night-heron	6 ADULTS	XXXXXXX	MAY-JUL	-	_		
384	Great black-backed gull	4 ADULTS	X X X X X X X X X X X X X X X X X X X	MAY-JUL	_	_		
001	Great black-backed gull Herring gull	4 ADULTS 50 ADULTS	X X X X X X X X X X X X X			_		
385	Black-crowned night-heron	4 ADULTS	X X X X X X X X X X	MAY-JUL	_	-		
	Great egret	C 10 ADULTS	X X X X X X X X			-		
E CO	Black-crowned night-heron Great egret Snowy egret Peregrine falcon Forster's term	4 ADULTS	X			_		
579	Forster's tern	35 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
313	roister s tein	33 ADOLIS	AAAAAAA	MAI OOL				
FISH								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
							AUG-DEC	MV-NOV
∠5	Atlantic croaker Atlantic mackerel		X X X X X X X X X X X X X X X X X X X	_	_	_	AUG-DEC -	MAY-NOV MAR-APR
	Atlantic menhaden		$\begin{smallmatrix}&&&X&X\\X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	_	_	- - -	JAN-DEC	MAY-OCT
	Black drum		$\begin{array}{c} \times \times$	-	-	-	-	APR-OCT
	Black sea bass		X X X X X X X	JUN-OCT	-	-		APR-OCT
	Bluefish		$\begin{array}{c} \times \times$	-	-	-	MAY-NOV	APR-NOV
	Butterfish Crevalle jack		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	_	_	_	JUL-NOV JAN-DEC	MAR-NOV -
	Northern kingfish		X X X X X X X X X X X X X X X X X X X		_	-	JAN-DEC	APR-OCT
	Northern searobin			-		_	_	MAR-OCT
	Pollock		X X X X X X	-	-	-	-	DEC-APR
	Red drum		$X\;X\;X\;X\;X\;X\;X$			-	-	MAY-NOV
	Red hake		X X X X X X X X	-	-	-	FEB-MAY	FEB-MAY
	Sandhar charl-		V V V V V V		_	_	MAV. OCT	SEP-NOV
	Sandbar shark		$\begin{array}{c} & \times $	-		_	MAY-OCT JUN-OCT	MAY-OCT MAR-OCT
	Scup (porgy) Silver hake		X X X X X X X X X X X X X X X X X X X		_	_	- -	OCT-MAY
	Southern kingfish (whiting)		X X X X X X X	-	-	-	_	APR-OCT
	- · · · · · · · · · · · · · · · · · · ·		X X	-	-	-	-	APR-MAY
	Spanish mackerel		$X \ X \ X \ X \qquad \qquad X \ X$	-	-	-	-	NOV-APR
	Spiny dogfish					202 200	MAR-NOV	MAR-NOV
	Spiny dogfish Spot		X X X X X X X X X X X X X	_	_	DEC-APR		
	Spiny dogfish		X X X X X X X X X X X X X X X X X X X	-	-	DEC-APR -	MAR-JUN	MAR-JUN
	Spiny dogfish Spot Spotted hake		X X X X X X X X	_ _ МДУТІІТ	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spiny dogfish Spot			- - MAY-JUL -	- - - -			MAR-JUN
	Spiny dogfish Spot Spotted hake Spotted seatrout		x x x x x x x x	-		-	MAR-JUN APR-NOV	MAR-JUN SEP-NOV APR-NOV
	Spiny dogfish Spot Spotted hake Spotted seatrout Summer flounder Tautog Weakfish		X X X X X X X X X X X X X X X X X X X	- APR-AUG APR-AUG	- - -	- OCT-MAY - MAY-AUG	MAR-JUN APR-NOV APR-NOV	MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV
30	Spiny dogfish Spot Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Hogchoker		X X X X X X X X X X X X X X X X X X X	- APR-AUG APR-AUG MAY-SEP	- - - MAY-SEP	- OCT-MAY - MAY-AUG MAY-SEP	MAR-JUN APR-NOV - APR-NOV JAN-DEC	MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV JAN-DEC
30	Spiny dogfish Spot Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Hogchoker Killifish		X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG MAY-SEP MAR-SEP	- - - MAY-SEP -	- OCT-MAY - MAY-AUG MAY-SEP	MAR-JUN APR-NOV - APR-NOV JAN-DEC JAN-DEC	MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV JAN-DEC JAN-DEC
30	Spiny dogfish Spot Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Hogchoker Killifish Minnows		X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG MAY-SEP MAR-SEP APR-AUG	- - - MAY-SEP	- OCT-MAY - MAY-AUG MAY-SEP	MAR-JUN APR-NOV - APR-NOV JAN-DEC JAN-DEC JAN-DEC	MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV JAN-DEC JAN-DEC JAN-DEC
30	Spiny dogfish Spot Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Hogchoker Killifish		X X X X X X X X X X X X X X X X X X X	APR-AUG APR-AUG MAY-SEP MAR-SEP APR-AUG	- - - MAY-SEP -	- OCT-MAY - MAY-AUG MAY-SEP -	MAR-JUN APR-NOV - APR-NOV JAN-DEC JAN-DEC	MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV JAN-DEC JAN-DEC

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

Virginia: ESIMAP 88 (cont.)

BIOLOGICAL RESOURCES: (cont.)

	: (cont.) Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Northern pipefish						JAN-DEC	JAN-DEC
	Northern searobin Pollock		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JUN-AUG -	JUN-AUG DEC-APR
	Red drum Red hake		X X X X X X X X X X X X X X X X X X X	JUL-NOV -	- -	- -	AUG-SEP FEB-MAY	MAY-NOV FEB-MAY SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy) Silver hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- -	-	- -	JUN-OCT -	MAR-OCT OCT-MAY
	Silver perch Silversides		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		APR-MAY	APR-JUN APR-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Spanish mackerel		X X	_	-	-	-	APR-MAY
	Spot Spotted hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	APR-OCT OCT-APR	JUL-SEP -
	Spotted seatrout		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	MAY-JUL APR-SEP	-	-	APR-NOV APR-NOV	APR-NOV APR-NOV
	Striped anchovy Summer flounder		X X X X X X X X	-	-	-	APR-NOV	APR-NOV
	Tautog Weakfish White hake		X X X X X X X X X X X X X X X X X X X	- APR-AUG -	- - -	- - -	- MAR-OCT -	OCT-APR APR-OCT MAR-MAY
	White perch		X	APR-JUN	APR-JUN	APR-JUN	JAN-DEC	SEP-NOV JAN-DEC
	Winter flounder Alewife		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	DEC-JUL	DEC-MAY
	American eel		X X X X X X X X X X X X X X X X X X X	-	-	-	JAN-DEC	FEB-JUN -
	American shad Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	-	- MAY-DEC	FEB-JUN -
	Atlantic herring		XXXXX	-	-	-	-	FEB-JUN
	Atlantic mackerel Atlantic menhaden		$\begin{smallmatrix} X & X \\ & & X & X & X & X & X \end{smallmatrix}$	-	-	-	- MAY-NOV	MAR-APR MAY-OCT
	Bay anchovy Black drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP	_	-	JAN-DEC -	JAN-DEC APR-OCT
	Black sea bass		X X X X X X	-	<u>-</u>	-	APR-SEP	APR-SEP
	Blueback herring Bluefish		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	-	-	FEB-JUN -	FEB-OCT MAY-OCT	FEB-JUN MAY-OCT
	Crevalle jack		$\times \times $	-	-	-	JAN-DEC	-
	Gobies Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP -	APR-SEP	APR-OCT	JAN-DEC -	JAN-DEC FEB-JUN
ABI	TAT:							
AR#	Species	S F Conc.	J F M A M J J A S O N D					
27	Maritime dune scrub		$\times \times $					
	Native coastal strand vegetation Sea-beach knotweed		$\begin{array}{cccccccccccccccccccccccccccccccccccc$					
256	Southern beach spurge	Т	$\begin{array}{cccccccccccccccccccccccccccccccccccc$					
	Seabeach amaranth	1						
	RTEBRATE: Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
 25	Blue crab		X X X X			MAY-NOV	JAN-DEC	JAN-DEC
23	Channeled whelk		X X X X X X X X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
30	Blue crab Channeled whelk		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	MAY-SEP -	MAY-NOV -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
007	Northern quahog (hard clam)		${\sf X} \; {\sf X}$		MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
	Horseshoe crab		XXXX	APR-JUL	-	-	-	MAY-JUL
IAKI. AR#	NE MAMMAL: Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
24	Harbor seal							
	Bottlenose dolphin		XXXXXXX	_	_	_	_	
	Common dolphin Harbor porpoise		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	-	
				-	_		_	
	Harbor seal		X X X X X			_		
30	Harbor seal Humpback whale	E E	$\times \times $	-	JAN-DEC -	- - -	- -	
30	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise	E E	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- - -		- - -	- - -	
	Harbor seal Humpback whale Bottlenose dolphin	E E	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- - - -		- - - - -	- - - -	
238	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal	E E	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- - - - -		- - - -	- - - -	
238 REPT	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal	S F Conc.	X X X X X X X X X X X X X X X X X X X	-	JAN-DEC - - - -	- - - - Internest	- - - - - cing Juvenil	
238 REPT RAR#	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal ILE: Species	S F Conc. 	X X X X X X X X X X X X X X X X X X X	-	JAN-DEC - - - -	- - - - - - Internest	MAY-NOV	 7 -
238 EPT AR# 	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal ILE: Species	S F Conc.	X X X X X X X X X X X X X X X X X X X	-	JAN-DEC - - - -	Internest		7 — ———— 7 — MAY-NO
238 REPT AR# 25	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Loggerhead sea turtle	S F Conc. 	X X X X X X X X X X X X X X X X X X X	Nesting	JAN-DEC	 - - -	MAY-NOV MAY-NOV - MAY-NOV	MAY-NC MAY-NC MAY-NC
238 REPT AR# 25	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle	S F Conc	X X X X X X X X X X X X X X X X X X X	Nesting	JAN-DEC	- - -	MAY-NOV MAY-NOV -	MAY-NC MAY-NC MAY-NC MAY-NC MAY-NC
238 REPT AR# 25	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle	S F Conc	X X X X X X X X X X X X X X X X X X X	Nesting MAY-JUL	JAN-DEC	 - - -	MAY-NOV MAY-NOV - MAY-NOV MAY-NOV MAR-NOV	MAY-NO MAY-NO MAY-NO MAY-NO MAY-NO MAR-NO MAR-NO MAY-NO
238 EPT AR# 25	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle Loggerhead sea turtle Loggerhead sea turtle	S F Conc. T T E E E E T T T E E E E T T	X X X X X X X X X X X X X X X X X X X	Nesting MAY-JUL	JAN-DEC	 - - - - -	MAY-NOV MAY-NOV MAY-NOV MAR-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV	MAY-NC MAY-NC MAY-NC MAR-NC MAR-NC MAY-NC MAY-NC MAY-NC MAY-NC
238 EPT AR# 25 27 30	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Logerhead sea turtle Leatherback sea turtle Kemp's ridley sea turtle Leatherback sea turtle	S F Conc. T T E E E E T T T T E E E E E	X X X X X X X X X X X X X X X X X X X	Nesting MAY-JUL	JAN-DEC	 - - - - - -	MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV	MAY-NC MAY-NC MAY-NC MAR-NC MAR-NC MAY-NC MAY-NC MAY-NC MAY-NC MAY-NC MAY-NC MAY-NC
238 EPT AR# 25 27 30 33 238 576	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle Diamondback sea turtle Diamondback terrapin Green sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Diamondback terrapin Loggerhead sea turtle Diamondback terrapin Loggerhead sea turtle Loggerhead sea turtle	S F Conc. T T E E E E T T T T T E E E E T T T T T T	X X X X X X X X X X X X X X X X X X X	- Nesting MAY-JUL MAY-NOV MAY-NOV	JAN-DEC	 - - - - - - - -	MAY-NOV MAY-NOV MAY-NOV MAR-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV	MAY-NC
238 EPT AR# 25 27 30 33 238 577	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle Diamondback terrapin Green sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle Diamondback terrapin Loggerhead sea turtle	S F Conc. T T E E E T T T T T E E E T T T VERY HIGH T T	X X X X X X X X X X X X X X X X X X X	- Nesting MAY-JUL MAY-NOV	JAN-DEC	 - - - - - - - -	MAY-NOV MAY-NOV MAY-NOV MAR-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV	MAY-NO
238 REPT LAR# 25 27 30 33 238 576 577	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle Diamondback sea turtle Diamondback terrapin Green sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Diamondback terrapin Loggerhead sea turtle Diamondback terrapin Loggerhead sea turtle Loggerhead sea turtle	S F Conc. T T E E E E T T T T T E E E E T T T T T T	X X X X X X X X X X X X X X X X X X X	- Nesting MAY-JUL MAY-NOV MAY-NOV	JAN-DEC	 - - - - - - - -	MAY-NOV MAY-NOV MAY-NOV MAR-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV	MAY-NO MAY-NO MAY-NO MAY-NO MAR-NO MAY-NO MAY-NO MAY-NO MAY-NO MAY-NO MAY-NO MAY-NO MAY-NO MAY-NO
238 REPT LAR# 25 27 30 33 238 576 577 PERR LAR#	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle Diamondback terrapin Green sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle Diamondback terrapin Loggerhead sea turtle	S F Conc. T T E E E E T T T T T E E E C T T T T T T T T T T T T T T T T T T T	X X X X X X X X X X X X X X X X X X X	- Nesting MAY-JUL MAY-NOV MAY-NOV	JAN-DEC	 - - - - - - - -	MAY-NOV MAY-NOV MAY-NOV MAR-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV	MAY-NO
238 REPT AR# 25 27 30 33 238 576 577 RERR AR# 34	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle Diamondback terrapin Green sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle Diamondback terrapin Loggerhead sea turtle Estrial Mammal: Species Northern river otter	S F Conc. T T E E E E T T T T T E E E C T T T T T T T T T T T T T T T T T T T	X X X X X X X X X X X X X X X X X X X	- Nesting MAY-JUL MAY-NOV MAY-NOV	JAN-DEC	 - - - - - - - -	MAY-NOV MAY-NOV MAY-NOV MAR-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV	MAY-NC MAY-NC MAY-NC MAY-NC MAR-NC MAY-NC MAY-NC MAY-NC MAY-NC MAY-NC MAY-NC MAY-NC
238 REPT AR# 25 27 30 33 238 576 577 FERR RAR# 34 HUMA	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle Diamondback sea turtle Diamondback terrapin Green sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle Diamondback terrapin Loggerhead sea turtle ESTRIAL MAMMAL: Species Northern river otter	S F Conc. T T E E E E T T T T T E E E C T T T T T T T T T T T T T T T T T T T	X X X X X X X X X X X X X X X X X X X	- Nesting MAY-JUL MAY-NOV MAY-NOV	JAN-DEC	 - - - - - - - -	MAY-NOV MAY-NOV MAY-NOV MAR-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV	MAY-NO
238 REPT AR# 25 27 30 33 238 576 577 PERR AR# 34 34	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle Diamondback terrapin Green sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle Diamondback terrapin Loggerhead sea turtle Estrial Mammal: Species Northern river otter	S F Conc. T T E E E E T T T T T E E E C T T T T T T T T T T T T T T T T T T T	X X X X X X X X X X X X X X X X X X X	- Nesting MAY-JUL MAY-NOV MAY-NOV	JAN-DEC	 - - - - - - - -	MAY-NOV MAY-NOV MAY-NOV MAR-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV	MAY-NO
238 REPT AR# 25 27 30 33 238 576 577 PERR AR# 34 1UMA QUA	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Eatherback sea turtle Diamondback terrapin Green sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle Estrial Mammal: Species Northern river otter N USE RESOURCES: CULTURE: Name	S F Conc. T T E E E E T T T T E E E E T T T T VERY HIGH T T T T T T T T T T T T T T T T T T T	X X X X X X X X X X X X X X X X X X X	- Nesting MAY-JUL MAY-NOV MAY-NOV	JAN-DEC		MAY-NOV MAY-NOV MAY-NOV MAR-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV	MAY-NC
238 EPT AR# 25 27 30 33 238 576 577 ERR AR# 34 57	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Leatherback sea turtle Loggerhead sea turtle Loggerhead sea turtle Diamondback terrapin Loggerhead sea turtle Estrial Mammal: Species Northern river otter N USE RESOURCES: CULTURE: Name AQUACULTURE: HARD CLAMS	S F Conc. T T E E E E T T T T E E E E T T T T VERY HIGH T T T T T T T T T T T T T T T T T T T	X X X X X X X X X X X X X X X X X X X	- Nesting MAY-JUL MAY-NOV MAY-NOV	JAN-DEC		MAY-NOV MAY-NOV MAY-NOV MAR-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV	MAY-NO
238 EPT AR# 25 27 30 33 238 576 577 ERR AR# 1UMA QUA QUA 57	Harbor seal Humpback whale Bottlenose dolphin Harbor porpoise Harbor seal Harbor seal Harbor seal ILE: Species Green sea turtle Kemp's ridley sea turtle Leatherback sea turtle Diamondback terrapin Green sea turtle Eatherback sea turtle Diamondback terrapin Green sea turtle Loggerhead sea turtle Loggerhead sea turtle Loggerhead sea turtle Estrial Mammal: Species Northern river otter N USE RESOURCES: CULTURE: Name	S F Conc. T T E E E E T T T T E E E E T T T T VERY HIGH T T T T T T T T T T T T T T T T T T T	X X X X X X X X X X X X X X X X X X X	- Nesting MAY-JUL MAY-NOV MAY-NOV	JAN-DEC Hatching		MAY-NOV MAY-NOV MAY-NOV MAR-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV MAY-NOV	MAY-NO MAY-NO MAY-NO MAR-NO MAY-NO MAR-NO MAY-NO MAY-NO MAY-NO MAY-NO

Virginia: ESIMAP 88 (cont.)

HUMAN USE RESOURCES: (cont.)

NATIONAL PARK:

 HUN#
 Name
 Contact
 Phone

 125
 ASSATEAGUE ISLAND NATIONAL SEASHORE
 NATIONAL PARK SERVICE
 757/336-6577

WILDLIFE REFUGE:

HUN#NameContactPhone147CHINCOTEAGUE ISLAND NWRU.S. FISH AND WILDLIFE SERVICE757/336-6122

BIOLOGICAL RESOURCES:

BIRD:

BIRD	:					
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting

26	American woodcock Black-bellied plover		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_
	Dunlin		X X X X X X X X X X X	_	_	_
	Greater yellowlegs		X X X X X X X X X	-	-	_
	Killdeer		X X X	-	-	-
	Least sandpiper		X	_	-	_
	Lesser yellowlegs Pectoral sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_
	Red knot		XXXXXX	_	_	_
	Ruddy turnstone		X X X X X X	-	-	-
	Sanderling		X X X X X X X X X X X X	-	-	_
	Semipalmated plover		X	_	-	_
	Semipalmated sandpiper Short-billed dowitcher		$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\;X\;$	_	-	_
	Stilt sandpiper		XXXXXX	_	_	_
	Western sandpiper		X X X X X X	-	-	-
	Whimbrel		X X X X X X	-	-	-
	White-rumped sandpiper		X X X	-	-	_
2.8	Willet Piping plover	T T HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- APR-SEP	_	_
	American black duck	HIGH	X X X X X X X X X X X X X X X X X X X		_	_
	American wigeon	MODERATE	XXXX	-	-	-
	Brant	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-
	Canada goose	HIGH	X X X X X X X X X X X X X		-	-
	Gadwall Green-winged teal	MODERATE MODERATE	X X X X X X X X X X X X X X X X X X X	APR-JUN -	_	_
	Mallard	MODERATE	X X X X X X X X X X X X X		_	_
	Northern pintail	MODERATE	X X X X X X X X	-	_	_
	Northern shoveler		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-
	Snow goose	HIGH	X X X X X X X X	-	-	-
32	Bufflehead	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_
	Common goldeneye Mergansers	HIGH	X X X X X X X X	_	_	_
	Ruddy duck	111 011	X X X X X X X X	_	_	_
	Scaup		$X \ X \ X \ X$	_	-	_
	Tundra swan	MODERATE	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-
33	Clapper rail	HIGH	X X X X X X X X X X X X X	APR-AUG	-	_
	King rail Sora		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_
	Virginia rail		X X X X X X X X X X X X	APR-JUN	_	_
	Whimbrel	HIGH	XXXXXXX	-	-	_
	Willet	HIGH	$\times \times $	APR-SEP	-	-
	American oystercatcher		X X X X X X X	MAR-JUL	-	-
	Bald eagle	T T		FEB-MAY	-	_
	American oystercatcher American oystercatcher	12 ADULTS HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL -	-	_
259	Shorebirds	HIGH	XXXXXXXX	_	_	_
	Wading birds	HIGH	X X X	-	-	_
	Forster's tern	50 ADULTS	$\times \times $	MAY-JUL	-	-
	Laughing gull	100 ADULTS	X	MAY-JUL	-	-
	Laughing gull Laughing gull	175 ADULTS 50 ADULTS	$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\;X\;$	MAY-JUL MAY-JUL	_	_
	Forster's tern	30 ADULTS	XXXXXXXXX	MAY-JUL	_	_
	American oystercatcher	HIGH	X X X X X X X X	-	-	_
	Laughing gull	550 ADULTS	$\times \times $	MAY-JUL	-	-
369	Herring gull	150 ADULTS	$X \; X \; $		-	-
270	Laughing gull	750 ADULTS	X X X X X X X X X	MAY-JUL	-	_
370	Herring gull Laughing gull	100 ADULTS 300 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	-	_
376	Herring gull	40 ADULTS	X X X X X X X X X X X X X		_	_
	Laughing gull	240 ADULTS	$\times \times $	MAY-JUL	-	-
524	Black skimmer	24 ADULTS	$\times \times $	MAY-JUL	-	-
	Forster's tern	7 ADULTS	X X X X X X X X	MAY-JUL	-	-
525	Gull-billed tern Forster's tern	T 75 ADULTS 16 ADULTS	$\begin{array}{c} X \; X \\ X \; X \end{array}$	MAY-JUL MAY-JUL	-	_
	Laughing gull	150 ADULTS	XXXXXXXXX	MAY-JUL	_	_
	Black-crowned night-heron	66 ADULTS	$\times \times $		-	-
	Cattle egret	440 ADULTS	$\times \times $	MAY-JUL	-	-
	Glossy ibis	C 612 ADULTS	X X X X X X X X X	MAY-JUL	-	_
	Great egret Little blue heron	C 175 ADULTS C 150 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	-	_
	Snowy egret	665 ADULTS	X	MAY-JUL	_	_
	Tricolored heron	C 226 ADULTS	X X X X X X X X X	MAY-JUL	-	_
561	Great black-backed gull	5 ADULTS	X X X X X X	MAY-JUL	-	-
	Peregrine falcon	T	X X X X X X	MAR-AUG	-	-
568	Black-crowned night-heron Cattle egret	36 ADULTS 25 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	-	_
	Glossy ibis	C 59 ADULTS	X X X X X X X X X	MAY-JUL	_	_
	Great egret	C 9 ADULTS	$\times \times $		-	_
	Herring gull	160 ADULTS	$\times \times $	MAY-JUL	-	-
	Little blue heron	C 8 ADULTS	X X X X X X X X X	MAY-JUL	-	-
	Snowy egret	40 ADULTS	X	MAY-JUL MAY-JUL	-	_
578	Tricolored heron Yellow-crowned night-heron	C 10 ADULTS C 14 ADULTS	$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\;X\;$	MAY-JUL	_	_
	Black-crowned night-heron	49 ADULTS	X X X X X X X X X X X X X		_	_
	Glossy ibis	C 14 ADULTS	$\times \times $	MAY-JUL	-	_
	Great egret	C 39 ADULTS	$X\;X\;X\;X\;X\;X\;X\;X\;$		-	-
	Laughing gull	400 ADULTS	X	MAY-JUL	-	-
	Snowy egret Tricolored heron	247 ADULTS C 5 ADULTS	$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	MAY-JUL MAY-JUL	_	_
581	Laughing gull	2000 ADULTS	XXXXXXXXX	MAY-JUL	_	_
582	Laughing gull	1500 ADULTS	X X X X X X X X X	MAY-JUL	-	_
	Laughing gull	350 ADULTS	$\times \times $	MAY-JUL	-	-
584	Forster's tern	50 ADULTS	X	MAY-JUL	-	-
585	Laughing gull Herring gull	1200 ADULTS 100 ADULTS	$\begin{array}{c} \times \times$	MAY-JUL MAY-JUL	-	_
505	Laughing gull	1300 ADULTS	XXXXXXXXXX	MAY-JUL	_	_
586	Herring gull	30 ADULTS	$\times \times $		-	-
	Laughing gull	730 ADULTS	$\times \times $	MAY-JUL	-	-
587	Black skimmer	4 ADULTS	X	MAY-JUL	-	-
	Common tern Snowy egret	60 ADULTS 1 ADULT	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	- -	_
	Tricolored heron	C 1 ADULT	X	MAY-JUL MAY-JUL	-	-
588	Black skimmer	4 ADULTS	XXXXXXXX	MAY-JUL	-	_
	Caspian tern	C 2 ADULTS	$\times \times $	MAY-JUL	-	-
	Common tern	135 ADULTS	X X X X X X X X X	MAY-JUL	-	-
	American oystercatcher	23 ADULTS 2 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL MAR-JUL	-	_
	American oystercatcher American oystercatcher	2 ADULTS 4 ADULTS	$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\;X\\ X\;X\;X\;X\;X\;X\;X\;X\end{array}$	MAR-JUL MAR-JUL	-	_
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Virginia: ESIMAP 89 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH	:
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Ai A	tlantic croaker tlantic mackerel tlantic menhaden lack drum lack sea bass luefish utterfish revalle jack orthern kingfish orthern searobin ollock ed drum ed hake andbar shark cup (porgy) ilver hake outhern kingfish (whiting) panish mackerel piny dogfish pot potted hake potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish innows ummichog orthern pipefish orthern searobin ollock ed drum	S F Cone.							Juveniles	Adults
Ai A	tlantic mackerel tlantic menhaden lack drum lack sea bass luefish utterfish revalle jack orthern kingfish orthern searobin ollock ed drum ed hake andbar shark cup (porgy) ilver hake outhern kingfish (whiting) panish mackerel piny dogfish pot potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish innows ummichog orthern pipefish orthern searobin ollock ed drum						- - - - - - - - - - - - - - - - - - -		APR-NOV APR-NOV JAN-DEC	MAR-APR MAY-OCT APR-OCT APR-NOV MAR-NOV APR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN FEB-JUN FEB-JUN FEB-JUN APR-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC
Ai A	tlantic menhaden lack drum lack sea bass luefish utterfish revalle jack orthern kingfish orthern searobin ollock ed drum ed hake andbar shark cup (porgy) ilver hake outhern kingfish (whiting) panish mackerel piny dogfish pot potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish innows ummichog orthern pipefish orthern searobin ollock ed drum						- - - - - - - - - - - - - - - - - - -		JAN-DEC - APR-OCT MAY-NOV JUL-NOV JUL-NOV JAN-DEC	MAY-OCT APR-OCT APR-OCT APR-NOV MAR-NOV APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN FEB-JUN FEB-JUN TEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC
B: B	lack drum lack sea bass luefish utterfish revalle jack orthern kingfish orthern searobin ollock ed drum ed hake andbar shark cup (porgy) ilver hake outhern kingfish (whiting) panish mackerel piny dogfish pot potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel ttlantic mackerel ttlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish innows dummichog orthern pipefish orthern searobin ollock ed drum					JUN-OCT MAY-AUG JUL-NOV	- - - - - - - - - - - - - - - - - - -		APR-OCT MAY-NOV JUL-NOV JUL-NOV JAN-DEC	APR-OCT APR-NOV MAR-NOV APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN FEB-JUN FEB-JUN FEB-JUN JAN-DEC APR-OCT JAN-DEC FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC
B: Bi	luefish utterfish revalle jack orthern kingfish orthern searobin ollock ed drum ed hake andbar shark cup (porgy) ilver hake outhern kingfish (whiting) panish mackerel piny dogfish pot potted hake potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X			MAY-AUG JUL-NOV JUL-NOV MAY-JUL APR-AUG APR-AUG APR-SEP APR-SEP APR-SEP APR-SEP	- - - - - - - - - - - - - - - - - - -		MAY-NOV JUL-NOV JAN-DEC	APR-OCT APR-NOV MAR-NOV - APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV APR-NOV APR-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC
Bi C: No No No Po Re Re Si	utterfish revalle jack orthern kingfish orthern searobin ollock ed drum ed hake andbar shark cup (porgy) ilver hake outhern kingfish (whiting) panish mackerel piny dogfish pot potted hake potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish tinnows immichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X				- - - - - - - - - - - - - - - - - - -		JUL-NOV JAN-DEC FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV APR-NOV - JAN-DEC - MAY-DEC - APR-SEP FEB-OCT MAY-DEC JAN-DEC JAN-DEC JAN-DEC	MAR-NOV APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC
C: No No No Pre Re Re Re Si	revalle jack orthern kingfish orthern searobin ollock ed drum ed hake andbar shark cup (porgy) ilver hake outhern kingfish (whiting) panish mackerel piny dogfish pot potted hake potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X			MAY-AUG JUL-NOV APR-AUG APR-AUG APR-AUG APR-SEP APR-SEP - APR-SEP	- - - - - - - - - - - - - - - - - - -		JAN-DEC	APR-OCT MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN FEB-JUN FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC
No Po	orthern searobin ollock ed drum ed hake andbar shark cup (porgy) ilver hake outhern kingfish (whiting) panish mackerel piny dogfish pot potted hake potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish innows immichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X				- - - - - - - - - - - - - - - - - - -			MAR-OCT DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-NOV FEB-JUN - FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC
PO Re	collock ed drum ed hake andbar shark cup (porgy) ilver hake outhern kingfish (whiting) panish mackerel piny dogfish pot potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel ttlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish innows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X			- JUL-NOV	- - - - - - - - - - - - - - - - - - -		FEB-MAY MAY-OCT JUN-OCT	DEC-APR MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN - FEB-JUN CCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC
Re Re Re Si	andbar shark cup (porgy) ilver hake outhern kingfish (whiting) panish mackerel piny dogfish pot potted hake potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X				- - - - - - - - - - - - - - - - - - -		FEB-MAY MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV APR-NOV MAY-DEC MAY-DEC MAY-NOV JAN-DEC - APR-SEP FEB-OCT MAY-DEC JAN-DEC JAN-DEC	MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - TEB-JUN TEB-TEB-JUN TEB-TEB-TEB-TEB-TEB-TEB-TEB-TEB-TEB-TEB-
\$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$	andbar shark cup (porgy) ilver hake outhern kingfish (whiting) panish mackerel piny dogfish pot potted hake potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X				- - - - - - - - - - - - - - - - - - -		MAY-OCT JUN-OCT MAR-NOV MAR-JUN APR-NOV APR-NOV MAY-DEC MAY-DEC MAY-NOV JAN-DEC - APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC - JAN-DEC	SEP-NOV MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT
SG SS S	cup (porgy) ilver hake outhern kingfish (whiting) panish mackerel piny dogfish pot potted hake potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X				- - - - - - - - - - - - - - - - - - -		JUN-OCT MAR-NOV MAR-JUN APR-NOV APR-NOV - JAN-DEC - MAY-DEC MAY-NOV JAN-DEC - APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC - JAN-DEC	MAY-OCT MAR-OCT OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN FEB-JUN FEB-JUN AR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC
S: SG	ilver hake outhern kingfish (whiting) panish mackerel piny dogfish pot potted hake potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish linnows fummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X				- - - - - - - - - - - - - - - - - - -	DEC-APR OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC	OCT-MAY APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT
SG SI	outhern kingfish (whiting) panish mackerel piny dogfish pot potted hake potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish innows ummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X				- - - - - - - - - - - - - - - - - - -	DEC-APR OCT-MAY - MAY-AUG		APR-OCT APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-NOV APR-NOV FEB-JUN FEB-JUN FEB-JUN APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT
SI SI SI SI SI SI SI SI SI SI SI SI SI S	panish mackerel piny dogfish pot potted hake potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish innows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X			MAY-JUL - APR-AUG APR-AUG APR-SEP APR-SEP - APR-SEP	- - - - - - - - - - - - - - - - - - -	DEC-APR OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT
Si S	potted hake potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X			MAY-JUL - APR-AUG APR-AUG APR-SEP APR-SEP - APR-SEP	- - - - - - - - - - - - - - - - - - -	DEC-APR OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC	MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT JAN-DEC
Si Si Si Si Si Si Si Si Si Si Si Si Si S	potted seatrout ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker tillifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X			MAY-JUL - APR-AUG APR-AUG APR-SEP APR-SEP - APR-SEP	- - - - - - - - - - - - - - - - - - -	OCT-MAY MAY-AUG - - - - - - - - - - - - -	MAR-JUN APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC	MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT
Si S	potted seatrout ummer flounder autog feakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring tluefish revalle jack obies ickory shad ogchoker tillifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		x x x x x x x x x x x x x x x x x x x			APR-AUG APR-AUG APR-SEP APR-SEP APR-SEP	- - - - - - - - - - - - - - - - - - -	- OCT-MAY - MAY-AUG	APR-NOV APR-NOV - JAN-DEC - MAY-DEC - MAY-NOV JAN-DEC - APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC	SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT
Si Ti Wi 30 A. Ar	ummer flounder autog eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		x x x x x x x x x x x x x x x x x x x			APR-AUG APR-AUG APR-SEP APR-SEP APR-SEP	- - - - - - - - - - - - - - - - - - -	OCT-MAY - MAY-AUG FEB-JUN - APR-OCT	APR-NOV JAN-DEC MAY-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC	APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT
Ti We 30 A: A: Ai	autog deakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		x x x x x x x x x x x x x x x x x x x			APR-AUG APR-AUG APR-SEP APR-SEP	- - - - - - - - - - - - - - - - - - -	- MAY-AUG	APR-NOV JAN-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC	JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN MAY-OCT
We 30 A: Ar	eakfish lewife merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish tinnows tummichog orthern pipefish orthern searobin ollock eed drum		X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	APR-AUG APR-SEP APR-SEP	- - - - - - - - - - - - - - - - - - -	- - - - - - - FEB-JUN - APR-OCT	JAN-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC	APR-NOV FEB-JUN - FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT - JAN-DEC FEB-JUN JAN-DEC
Ar A	merican eel merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	- - - - - APR-SEP - - - - - APR-SEP	- - - - - - - - - - - - - - -	- - - - - - - FEB-JUN - - APR-OCT	JAN-DEC - MAY-DEC - MAY-NOV JAN-DEC - APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC	FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT - JAN-DEC FEB-JUN JAN-DEC
Ar A	merican shad tlantic croaker tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker tillifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	- - - - APR-SEP - - - - - APR-SEP	- - - - - - - - - - - - - - -	- - - - - - FEB-JUN - - APR-OCT	MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC	FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT - JAN-DEC FEB-JUN JAN-DEC
Ai A	tlantic herring tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X			- - - APR-SEP - - - - - APR-SEP	- - - - - - - - APR-SEP	- - - - - FEB-JUN - - APR-OCT	MAY-NOV JAN-DEC - APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC	FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT - JAN-DEC FEB-JUN JAN-DEC
Ai Ai Bi	tlantic mackerel tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-SEP -	- - - - - - - APR-SEP	- - - - FEB-JUN - - - APR-OCT	MAY-NOV JAN-DEC - APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC	MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT - JAN-DEC FEB-JUN JAN-DEC
Ai Bi Bi Bi Bi Bi Bi Gi Gi Hi K: Mi Mi No No Re Si Si Si Si Si	tlantic menhaden ay anchovy lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish innows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-SEP -	- - - - - APR-SEP	- - - FEB-JUN - - - APR-OCT	JAN-DEC - APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC	MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT - JAN-DEC FEB-JUN JAN-DEC
B. B. B. B. C: G. H. K. M. N. N. P. R. S.	lack drum lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish iinnows iummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- - - - - APR-SEP	- - - - - APR-SEP	- FEB-JUN - - - APR-OCT	APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC	APR-OCT APR-SEP FEB-JUN MAY-OCT - JAN-DEC FEB-JUN JAN-DEC
B: B	lack sea bass lueback herring luefish revalle jack obies ickory shad ogchoker illifish innows iummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	- - - APR-SEP -	- - - APR-SEP -	FEB-JUN - - APR-OCT -	APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC	APR-SEP FEB-JUN MAY-OCT - JAN-DEC FEB-JUN JAN-DEC
B: B: B: C: GG H: H: M: M: N: N: R: S:	lueback herring luefish revalle jack obies ickory shad ogchoker dillifish dinnows dummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	- APR-SEP -	- - APR-SEP -	FEB-JUN - - APR-OCT -	FEB-OCT MAY-OCT JAN-DEC JAN-DEC	FEB-JUN MAY-OCT - JAN-DEC FEB-JUN JAN-DEC
C: GG H: HG K: M: Mr NG Re Sc Sc: Sc:	revalle jack obies ickory shad ogchoker dillifish dinnows dummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	- APR-SEP -	- APR-SEP -	- APR-OCT -	JAN-DEC JAN-DEC -	- JAN-DEC FEB-JUN JAN-DEC
GG H: H: K: M: M: N: Pe R: R: S: S: S: S: S: S: S: S: S: S: S:	obies ickory shad ogchoker illifish tinnows tummichog orthern pipefish orthern searobin ollock ed drum		X X X X X X X X X X		x x x x x x	_	APR-SEP	APR-OCT	JAN-DEC -	JAN-DEC FEB-JUN JAN-DEC
HG K: M: M: Mi NG NG RG RG SG SG SG SG SG SG SG	ogchoker Cillifish Cinnows Cummichog Corthern pipefish Corthern searobin Collock ed drum		X X X X X X X X	X						JAN-DEC
K: M: Mi N: N: P: R: S: S: S: S: S: S: S: S: S: S: S: S: S:	dillifish dinnows dummichog forthern pipefish forthern searobin follock ed drum		X X X X X X	X X X X X X		MAY-SEP		MAY-SEP	JAN-DEC	
M: Mi N: N: P: R: S: S: S: S: S: S: S: S: S: S: S: S: S:	innows fummichog forthern pipefish forthern searobin follock ed drum		X X X X			MAR-SEP	MAY-SEP -	_	JAN-DEC	
No No Po Re Re Si Si Si Si Si Si Si Si	orthern pipefish orthern searobin ollock ed drum				XXXXXX		-	-	JAN-DEC	JAN-DEC
No Pe Re Re Si Si Si Si Si Si Si Si	orthern searobin ollock ed drum		X X		X X X X X	APR-AUG	-	-	JAN-DEC	JAN-DEC
PC Re Re SC SC SC SC SC SC SC SC SC SC SC SC SC	ollock ed drum			. x x x x x x x	X X X X X X	_	_	_	JAN-DEC JUN-AUG	JAN-DEC JUN-AUG
R6 S6 S5 S5 S7 S7 S7 S7 S7 S7 S7			X X	XX	Х	-	-	-	-	DEC-APR
\$6 \$5 \$5 \$5 \$5 \$1 \$1 \$1 \$5	ad halta		v	X X X	XXXXX	JUL-NOV -	-		AUG-SEP FEB-MAY	MAY-NOV
Si Si Si Si Si Si Si Si	ed hake		Λ		ΛΛΛ	_	_	_	red-MAI	FEB-MAY SEP-NOV
S: S: SI SI SI SI SI	andbar shark				XXXX	_	_		MAY-OCT	MAY-OCT
S: S: SI SI SI S:	cup (porgy)		vv	XXXXX		-	_	_	JUN-OCT -	MAR-OCT OCT-MAY
SI SI SI SI	ilver hake ilver perch				XXXXX		- APR-MAY		JAN-DEC	JAN-DEC
SI SI SI SI	ilversides			X X X X X X	X X X X X X	MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
S _I S _I St	panish mackerel pot			XX	XXXX	_	_	_	- APR-OCT	APR-MAY JUL-SEP
St	potted hake		ХХ	XXX	XXX	_	_		OCT-APR	-
	potted seatrout				XXXXX		-		APR-NOV	APR-NOV
Q1	triped anchovy ummer flounder				X	APR-SEP -	_		APR-NOV APR-NOV	APR-NOV APR-NOV
	autog		X X	XXX			-	-	-	OCT-APR
	eakfish				XXXX	APR-AUG	-		MAR-OCT	APR-OCT
WI	hite hake			XXX	XXX	-	-	-	-	MAR-MAY SEP-NOV
Wl	hite perch		X X	X X X X X X	X	APR-JUN	APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
W	inter flounder		X X	X X X X X	X X	-	-	-	DEC-JUL	DEC-MAY
HABITA	AT:									
RAR# S	pecies	S F Conc.	J F	'MAMJJ	A S O N D					
27 M:	aritime dunc saruh									
	aritime dune scrub ative coastal strand vegetation				X					
Se	ea-beach knotweed				X X X X X X					
So	outhern beach spurge		X X	XXXXX	XXXXX					
INVERT	TEBRATE:									
RAR# S		S F Conc.			TASOND				Juveniles	Adults
	lue crab				X X X X X X				JAN-DEC	JAN-DEC
	hanneled whelk				XXXXX		-	- MAI - NOV	JAN-DEC	JAN-DEC JAN-DEC
	lue crab				XXXXX		MAY-SEP		JAN-DEC	JAN-DEC
	hanneled whelk orthern quahog (hard clam)				X		- MAY-OCT	- MAY-OCT	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
237 но	orseshoe crab			X X X X	Z	APR-JUL	_	_	-	MAY-JUL
240 S	pectral tiger beetle		X X	XXXXX	X X X X X	JUN-SEP	JUN-SEP	-	JAN-DEC	JUN-OCT
MARINE	E MAMMAL:									
RAR# S	pecies	S F Conc.	J F	мамјј	JASOND	Mating	Calving	Pupping	Molting	
25 B	ottlenge dolphin			· ·	·					
	ottlenose dolphin ommon dolphin			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	XXXX	_	-	-	-	
На	arbor porpoise			XXX	X		-	-	-	
	arbor seal	E E	XX		XXX	_	- TAN-DEC	-	_	
	umpback whale ottlenose dolphin	<u> </u>	X X	X	X	-	JAN-DEC -	-	_	
На	arbor porpoise			XXX	X	-	-	-	-	
На	arbor seal		X X	•	X X X	-	-	-	-	
REPTIL	LE:									
RAR# S		S F Conc.	J F	'мамјј	JASOND	Nesting	Hatching	Internesti	ing Juvenil	les Adults
25 Gi	pecies				· ·				MAW MOT	 V -
		ππ			X X X X X X X X X X X X X X X X X X X	_	-	-	/O//PYAM /O//PYAM	
Le	reen sea turtle emp's ridley sea turtle	T T E E				-	-	-	-	MAY-NOV
	reen sea turtle emp's ridley sea turtle eatherback sea turtle	E E E E		XXX	X X X X			_	MAY-NOV	V MAY-NOV
۷. ا	reen sea turtle emp's ridley sea turtle	E E		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X	- MAY-JUL	_	_	MAR-NOV	

Virginia: ESIMAP 89 (cont.)

BIOLOGICAL RESOURCES: (cont.)

REPTILE: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
30	Green sea turtle	т т	X X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	T T	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
33	Diamondback terrapin	VERY HIGH	X X X X X X X X X X	-	-	-	MAR-NOV	MAR-NOV

TERRESTRIAL MAMMAL:

TERF	CESTRIAL MAMMAL:		
RAR#	Species	S F Conc.	J F M A M J J A S O N D
34	Northern river otter		X X X X X X X X X X X X X

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
57 58	AQUACULTURE: HARD CLAMS AQUACULTURE: OYSTERS		

NATIONAL PARK:

HUN#	Name	Contact	Phone					
125	ASSATEAGUE ISLAND NATIONAL SEASHORE	NATIONAL PARK SERVICE	757/336-6577					
WILDI	WILDLIFE REFUGE:							

22
22
2

BIRD	:
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BIKD	: Species	C.E.Cono	TEMANTTACOND	Nootina	Vienstine	Wolting.		
	species	S F Conc.	J F M A M J J A S O N D	nesting	Migrating	Molting 	_	
100	Brown pelican	C	X X X X X X X X X	-	-	-		
	Gulls		$\times \times $	-	-	-		
	Loons		X X X X X X X X X X X X X X X X X X X		-	-		
	Mergansers Osprey		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_		
	Scoters	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Terns		X X X X X X X X	-	-	-		
	Bald eagle	T T		FEB-MAY	-	-		
195	American black duck American wigeon	VERY HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL -	-	_		
	Brant		X X X X X X X X	_	_	_		
	Canada goose	HIGH	$\times \times $	APR-JUN	-	-		
	Gadwall	LOW	X X X X X X X X X X X X X		-	-		
	Green-winged teal Mallard	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	– ΜΔΥ–.ΤΙΙΤ.	_	_		
	Northern pintail	111 011	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	-	_	_		
	Snow goose			-	-	-		
196	Bufflehead	HIGH	XXXX		-	-		
	Canvasback Common goldeneye	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_		
	Long-tailed duck		X X X X X X X X		_	_		
	Redhead	HIGH	$X \ X \ X \ X$		-	-		
	Ring-necked duck	LOW	$X \ X \ X \ X \qquad \qquad X \ X \ X$		-	-		
	Ruddy duck	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Scaup Scoters	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Tundra swan	HIGH	XXXX	-	-	_		
	American oystercatcher	6 ADULTS	X X X X X X X	MAR-JUL	-	-		
	Rails		X X X X X X X X X X X X X		-	_		
202	Bitterns Black rail		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL APR-JUN	-	_		
	Egrets		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		
	Henslow's sparrow	T		MAY-JUL	-	-		
	Herons		X X X X X X X X X X X X X X X X X X X		-	-		
	King rail Saltmarsh sharp-tailed sparrow	С	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Sora		X X X X X X X X X	-	_	_		
	Virginia rail		$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$	APR-MAY	-	-		
503	Common tern	15 ADULTS	X	MAY-JUL	-	-		
	Forster's tern	25 ADULTS	X X X X X X X X	MAY-JUL	-	_		
504	Herring gull Common tern	12 ADULTS 50 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL	_	_		
	Forster's tern	120 ADULTS	$X \times X \times X \times X \times X$	MAY-JUL	-	_		
562	Peregrine falcon	Т	X X X X X X	MAR-AUG	-	-		
FISH	:							
_	Species	S F Conc.	J F M A M J J A S O N D	Snawning	Eags	Larvae	Juveniles	Adults
181	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel		X X X X X X X X X X X X X	-	-	_	JAN-DEC	SEP-DEC
	American shad Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_	NOV-MAR AUG-DEC	JAN-JUN MAY-NOV
	Atlantic mackerel		XX	_	_	_	-	MAR-APR
	Atlantic menhaden		$\times \times $	-	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish		XXXX	-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon Bay anchovy	С	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP	-	_	JAN-DEC	JAN-OCT JAN-DEC
	Black drum		$\times \times \times \times \times \times \times \times$	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass		X X X X X X X	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring		XXXXXXXXXX	-	-	_	NOV-MAR	JAN-JUN
	Bluefish Butterfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Clearnose skate		XXXXXXX	_	_	_	-	MAY-NOV
	Gobies		$\times \times $	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad Hogchoker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- Mav-sed	- MAY-SEP	- MAY-SEP	NOV-MAR JAN-DEC	JAN-JUN JAN-DEC
	Inland silverside		X X X X X X X X X X X X X			- MAI 3EI	JAN-DEC	JAN-DEC
	Minnows		$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$		-	_	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAYTIIN	_	-	- JAN-DEC	APR-OCT JAN-DEC
	Northern puffer		XXXXXXXX	MAY-AUG	_	_	MAR-OCT	MAR-OCT
	Northern searobin		XXXXXXXX	MAY-JUL	-	-	-	MAR-OCT
	Red drum		X X X X X X X		-	-	AUG-SEP	MAY-NOV
	Red hake		X X X X X X X	-	-	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		X X X X X X X X X X X X X X X X X X X	-	-	-	- TAN DEG	OCT-MAY
	Silver perch Spot		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-MAY -	-	- DEC-APR	JAN-DEC MAR-NOV	JAN-DEC MAR-NOV
	Spotted hake		X X X X X X X X X	_	_	-	MAR-JUN	MAR-JUN
	-							SEP-NOV
	Spotted seatrout		X X X X X X X X	MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass Striped killifish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- 7 DD_CED	-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Summer flounder		X X X X X X X X X X X X X X X X X X X	- ALIV 2E1	_	OCT-MAY	JAN-DEC	APR-OCT
	Tautog			-	-	-	-	OCT-APR
	Threadfin shad		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-	-	FEB-MAY
	Weakfich		V V V V V V V V	מזוג ממוג		MAV. ATTO	ADD_NOT	SEP-NOV
	Weakfish		X X X X X X X X	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Blue crab Northeastern beach tiger beetle	ТТ	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- JIIN-SEP	- JUN-SEP	MAY-NOV -	JAN-DEC JAN-DEC	JAN-DEC JUN-OCT
220	Mortheastern heath tiget beette	± ±	^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^	OON-SEL	OON-SEL	_	OVIN-DEC	O OIN TOCT
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
101	Rottlenose dolphin							
ΤΩΤ	Bottlenose dolphin Harbor porpoise		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_	_	

Virginia: ESIMAP 90 (cont.)

BIOLOGICAL RESOURCES: (cont.)

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
39	Green sea turtle	тт	$x \times x \times x \times x$	-	-	_	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	_	-	-	MAY-NOV	-
	Leatherback sea turtle	E E	X X X X X X X	_	-	-	-	MAY-NOV
	Loggerhead sea turtle	T T	X X X X X X X	-	-	-	MAY-NOV	-
227	Diamondback terrapin	VERY HIGH	X X X X X X X X X X	MAY-JUL	-	-	MAR-NOV	MAR-NOV

HUMAN USE RESOURCES:

7.0	rt7	CT	TT F	וזיו	RE
AU	\mathbf{u}	L	JЪ.	LU	K.C.

HUN#	Name	Contact	Phone
5.8	ACITACIT TIDE · CVCTEDS		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone	
121	SAXIS WILDLIFE MANAGEMENT AREA	VDGIF	804/367-1000	

RIKD:

BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N I	Nesting	Migrating	Molting	T	
100	Brown pelican	C	X X X X X X X X	-	-		_	
	Gulls		$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $		-	-		
	Loons Mergansers		X X X X X X X X X X X X X X X X X X X		_	_		
	Osprey		XXXXXXXXX	_	_	-		
	Scoters	HIGH	X X X X X X X X X	_	-	-		
195	Terns American black duck	VERY HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	– 7 MAR – .TIIT.	_	_		
100	American wigeon	HIGH	XXXX XXX		_	-		
	Brant		XXXX		-	-		
	Canada goose Gadwall	HIGH LOW	X X X X X X X X X X X X X X X X X X X		_	_		
	Green-winged teal	2011	X X X X X X X X X		_	-		
	Mallard	HIGH	X X X X X X X X X X X X X X X X X X X		-	-		
	Northern pintail Snow goose		X X X X X X X X X X X X X X X X X X X		_	_		
196	Tundra swan	HIGH	XXXX		-	-		
	Bufflehead Canvasback	HIGH	X X X X X X X X X X X X X X X X X X X		-	-		
	Common goldeneye	HIGH	X X X X X X X X X X X X X X X X X X X		_	_		
	Long-tailed duck		X X X X X X X X X X X X X X X X X X X		-	-		
	Redhead Ring-necked duck	HIGH LOW	X X X X X X X X X X X X X X X X X X X		_	_		
	Ruddy duck	HIGH	X X X X X X X X X		_	_		
	Scaup		X X X X X X X X X X X X X X X X X X X		-	-		
	Scoters	MODERATE	XXXX	_	-	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N I	Spawning	Eggs	Larvae	Juveniles	Adults
101	Alowifo		·					FFD_ TIIN
T O T	Alewife American eel		X	_ 	_	_	- JAN-DEC	FEB-JUN SEP-DEC
	American shad		X X X X X X X X X X X X X X X X X X X	-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker Atlantic mackerel		X X X X X X X X X X X X X X X X X X X		_	-	AUG-DEC -	MAY-NOV MAR-APR
	Atlantic mackerer Atlantic menhaden		X X X X X X X X X X X X X X X X X X X	_ 	_	- MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		X X X X X X X X X X X X X X X X X X X	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish	C	$\begin{array}{c} & \times $	_	_	_	AUG-OCT	AUG-NOV JAN-OCT
	Atlantic sturgeon Bay anchovy	C	X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Black drum		$\times \times $	APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass Blueback herring		X X X X X X X X X X X X X X X X X X X	JUN-OCT	_	_	APR-OCT NOV-MAR	APR-OCT JAN-JUN
	Bluefish		XXXXXXXX	_	_	_	MAY-NOV	APR-NOV
	Butterfish		$\times \times $	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate Gobies		X X X X X X X X X X X X X X X X X X X	- 7 ADD_QFD	- APR-SEP	- APR-OCT	- JAN-DEC	MAY-NOV JAN-DEC
	Harvestfish		XXXXXXXX	- AIN SEI	-		JUL-OCT	APR-OCT
	Hickory shad		X X X X X X X X X X X X X X X X X X X		-	-	NOV-MAR	JAN-JUN
	Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X		MAY-SEP -	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish		$\begin{smallmatrix} & & & \times & $	- 7 ΜΔΥΤΙΙΝ	_	_	- JAN-DEC	APR-OCT JAN-DEC
	Northern puffer		XXXXXXXX	MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin		$X \times X \times X \times X \times X$		-	-	_	MAR-OCT
	Red drum Red hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	-	AUG-SEP FEB-MAY	MAY-NOV FEB-MAY
	nea nane		11 11 11 11 11 11 11 11				100 1111	SEP-NOV
	Sandbar shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy) Silver hake		X X X X X X X X X X X X X X X X X X X	- (-	_	_	JUN-OCT -	MAR-OCT OCT-MAY
	Silver perch		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X		-	DEC-APR		MAR-NOV
	Spotted hake		X X X X	-	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout		$x \times x \times x \times x \times x$		-	-	APR-NOV	APR-NOV
	Striped bass		X X X X X X X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
	Striped killifish Summer flounder		X X X X X X X X X X X X X X X X X X X		-	- OCT-MAY	JAN-DEC JAN-DEC	JAN-DEC APR-OCT
	Tautog		X X X X X X X X X X X X X X X X X X X		-	-	-	OCT-APR
	Threadfin shad		X X X X	-	-	-	-	FEB-MAY
	Weakfish		$\times \times $	APR-AUG	_	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
T > T 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7								
	RTEBRATE:				_	_		
KAR#	Species	S F Conc.	J F M A M J J A S O N I	Spawning	Eggs	Larvae	Juveniles	Adults
181	Blue crab		X X X X X X X X X X X X X X X X X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
MART	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O N I) Mating	Calving	Pupping	Molting	
					_			
181	Bottlenose dolphin		XXXXXXX	_	-	-	-	
	Harbor porpoise		XXXXX	_	-	-	-	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N I					
	Green sea turtle	тт	X X X X X X X	-		_	MAY-NOV	
55	Kemp's ridley sea turtle		XXXXXXX	-	-	-	MAY-NOV	_
	Leatherback sea turtle	E E	X X X X X X X		-	_	- MAY-NO	
	Inggerhead con turtic	1 1	X X X X X X X	-	_	_	/ON-YAM	_
227	Loggerhead sea turtle Diamondback terrapin	VERY HIGH	$X \times X \times X \times X \times X \times X$	MAY-JUI.	-	_	MAR-NO\	MAR-NOV

BIOLOGICAL RESOURCES:

BIRD	:
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RAR# Species

RAR#	Species	S F Conc.		N D Nesting	Migrating	Molting	_	
100	Brown pelican	С	X X X X X X X X	_	_	_		
	Gulls		X X X X X X X X X X X		-	-		
	Loons			X X -	-	- =		
	Mergansers Osprey		X X X X X X X X X X X X X X X X X X X	x x – x –	-	_		
	Scoters	HIGH	XXXX	X X -	-	-		
٥٢	Terns		X X X X X X X X X	_	-	-		
.95	American black duck American wigeon	VERY HIGH HIGH		x x -	-	-		
	Brant Canada goose	HIGH	X X X X X X X X X X X		-	-		
	Gadwall Green-winged teal	LOW	X X X X X X X X X X X X X X X X X X X	X X APR-JUN X X -	_	_		
	Mallard	HIGH	XXXXXXXXXX		-	_		
	Northern pintail			X X -	-	-		
96	Snow goose Bufflehead	HIGH		X X -	_	_		
	Canvasback	HIGH		X X -	-	-		
	Common goldeneye			X X -	-	-		
	Long-tailed duck Redhead	HIGH		X X -	_	_		
	Ring-necked duck	LOW		X X -	-	-		
	Ruddy duck	HIGH		X X -	-	-		
	Scaup Scoters	MODERATE		X X - X X -	_	_		
	Tundra swan	HIGH		X X -	-	-		
89	Forster's tern	300 ADULTS	X X X X X X X X	MAY-JUL	-	-		
	Great black-backed gull Laughing gull	11 NESTS 540 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Royal tern	1000 ADULTS	XXXXXXXX	MAY-JUL	_	_		
62	Peregrine falcon	T	X X X X X X	MAR-AUG	-	-		
SH	:							
٦#	Species	S F Conc.	JFMAMJJASO:			Larvae	Juveniles	Adults
-								
i⊥	Alewife American eel		X	- × × -	_	_	- JAN-DEC	FEB-JUN SEP-DEC
	American shad			x x -	_	_	NOV-MAR	JAN-JUN
	Atlantic croaker		X X X X X X	< X -	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel Atlantic menhaden		X X X X X X X X X X X X X	- × × -	_	- MAY-NOV	- JAN-DEC	MAR-APR MAY-OCT
	Atlantic silverside		XXXXXXXXXX		_	-	JAN-DEC	JAN-DEC
	Atlantic spadefish		X X X	× -	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon Bay anchovy	С	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- V V NDD_SED	-	_	- JAN-DEC	JAN-OCT JAN-DEC
	Black drum		XXXXXXXX		- APR-JUN	- APR-JUN	APR-NOV	APR-NOV
	Black sea bass		$\times \times \times \times \times \times \times$	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring Bluefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X X -	-	-	NOV-MAR MAY-NOV	JAN-JUN APR-NOV
	Butterfish		XXXXXXXX		_	_	JUL-NOV	MAR-NOV
	Clearnose skate		X X X X X X		-	-	-	MAY-NOV
	Gobies Harvestfish		XXXXXXXXXX	X X APR-SEP	APR-SEP -	APR-OCT	JAN-DEC	JAN-DEC
	Harvestiisn Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- x x -	_	_	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Hogchoker		XXXXXXXXX		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Minnows Mummichog		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish		X X X X X X X	-	-	-	-	APR-OCT
	Northern pipefish		X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Northern puffer Northern searobin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-AUG MAY-JUL	_	_	MAR-OCT	MAR-OCT MAR-OCT
	Red drum			X JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake		XXXX	× -	-	-	FEB-MAY	FEB-MAY
	Sandbar shark		X X X X X X	_	_	_	MAY-OCT	SEP-NOV MAY-OCT
	Scup (porgy)		$\times \times \times \times \times \times \times \times \times$	-	-	-	JUN-OCT	MAR-OCT
	Silver hake			x x -	-	-	-	OCT-MAY
	Silver perch Spot		X X X X X X X X X X X X X X X X X X X		_	- DEC-APR	JAN-DEC MAR-NOV	JAN-DEC MAR-NOV
	Spotted hake		XXXXXXXXX		-	-	MAR-JUN	MAR-JUN
	Chattad asstract		77 77 77 77 77 77	.7 1.67.57			זייני ממע	SEP-NOV
	Spotted seatrout Striped bass		X X X X X X X X X X X X X X X X X X X		-	-	APR-NOV JAN-DEC	APR-NOV JAN-DEC
	Striped killifish		X X X X X X X X X X X X	X X APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder Tautog		$egin{array}{cccccccccccccccccccccccccccccccccccc$	X X - X X -	-	OCT-MAY	JAN-DEC -	APR-OCT OCT-APR
	Threadfin shad		X X X X X X X X		_	_	_	FEB-MAY
								SEP-NOV
	Weakfish		XXXXXXX	⟨ APR-AUG	_	MAY-AUG	APR-NOV	APR-NOV
IVE	RTEBRATE:							
	Species	S F Conc.	JFMAMJJASO:			Larvae	Juveniles	Adults
	Blue crab		X X X X X X X X X X X X X X X X X X X			MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster	LOW-MED	XXXXXXXXXX				JAN-DEC	JAN-DEC
DT1	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O :	VD Mating	Calving	Pupping	Molting	
81	Bottlenose dolphin Harbor porpoise		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- X -	-	-	-	
PT	LE:							
	Species	S F Conc.	JFMAMJJASO:	N D Nesting	Hatching	Internest	ing Juvenil	les Adults
	Green sea turtle	T T	XXXXXXX		_	_	MAY-NOV	
 39	Komple ridler see + + + + + + +	E E	XXXXXX		_	_	MAY-NOV -	/ – MAY-NO
39	Kemp's ridley sea turtle Leatherback sea turtle	E E	X X X X X X	× –				
		E E T T VERY HIGH	X X X X X X X X X X X X X X X X X X X	× -	-	-	MAY-NOV MAR-NOV	7 –

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD		G. F. G		Mantina	W :+:	Walting.		
	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	MOITING	_	
100	Brown pelican	С	$\mathbf{x} \ \mathbf{x} \ \mathbf{x} \ \mathbf{x} \ \mathbf{x} \ \mathbf{x} \ \mathbf{x} \ \mathbf{x}$	-	-	-		
	Gulls		$\times \times $	-	-	-		
	Loons		X X X X X X X X X X X X X X X X X X X	-	-	_		
	Mergansers Osprey		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Scoters	HIGH	$X \ X \ X \ X$ $X \ X \ X$	-	-	-		
	Terns		X X X X X X X X	-	-	-		
195	American black duck American wigeon	VERY HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL -	-	_		
	Brant	nign	X X X X X X X X	_	_	_		
	Canada goose	HIGH	$\times \times $	APR-JUN	-	_		
	Gadwall	LOW	X X X X X X X X X X X X X		-	-		
	Green-winged teal Mallard	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	– ΜΔΥ–.ΤΙΙΤ.	_	_		
	Northern pintail	111011	X X X X X X X X X X X X X X X X X X X	-	_	_		
	Snow goose		$X \ X \ X \ X $	-	-	-		
196	Bufflehead	HIGH	X X X X X X X X X	-	-	-		
	Canvasback Common goldeneye	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Long-tailed duck		X X X X X X X X X	_	_	_		
	Redhead	HIGH	$X \ X \ X \ X $	-	-	-		
	Ring-necked duck	LOW	X X X X X X X X	-	-	-		
	Ruddy duck Scaup	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Scoters	MODERATE	X X X X X X X X X	_	_	_		
	Tundra swan	HIGH		-	-	_		
470	Great black-backed gull	35 NESTS	X X X X X X X X X X X X X		-	-		
171	Herring gull Black skimmer	200 NESTS 35 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	-	_		
4/1	Royal tern	300 NESTS	XXXXXXXX	MAY-JUL	_	_		
472	Great black-backed gull	74 NESTS	$\times \times $		-	_		
4.5.0	Herring gull	10 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		
473	Brown pelican Double-crested cormorant	C 1000 ADULTS 469 NESTS	X X X X X X X X	MAY-JUL	_	_		
	Great black-backed gull	409 NESTS 40 ADULTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		
	Herring gull	220 ADULTS	$\times \times $		-	-		
474	Great black-backed gull	10 NESTS	$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$		-	-		
175	Herring gull Brown pelican	5 NESTS C 679 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL MAY-JUL	_	_		
475	Double-crested cormorant	438 NESTS	\times		-	_		
	Great black-backed gull	10 NESTS	$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$		-	-		
45.6	Herring gull	25 NESTS	X X X X X X X X X X X X		-	-		
	Herring gull Great black-backed gull	65 NESTS 10 NESTS	X X X X X X X X X X X X X X X X X X X		_	_		
7//	Herring gull	30 NESTS	X X X X X X X X X X		_	_		
478	Great black-backed gull	20 NESTS	$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$		-	-		
	Herring gull	25 NESTS	$\times \times $		-	-		
479	Brown pelican Great black-backed gull	C 250 ADULTS 10 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL	_	_		
			X X X X X X X X X X X X X X X X X X X		_	_		
481	Common tern	90 NESTS	$\times \times \times \times \times \times \times$		-	-		
	Forster's tern	360 NESTS	X X X X X X X X	MAY-JUL	-	-		
FISH	:							
FISH		S.F. Conc.	JEMAMJJASOND	Spawning	Eggs	Larvae	Juveniles	Adults
	: Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
RAR#	SpeciesAlewife	S F Conc.	X X X X X	-	Eggs 	-	-	FEB-JUN
RAR#	Species	S F Conc.	$\begin{smallmatrix} & \times & \times & \times & \times \\ & \times & \times & \times & \times & \times &$	- -	Eggs - - -	- -		FEB-JUN SEP-DEC
RAR#	Alewife American eel American shad	S F Conc.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- - -	Eggs - - - -	- - -	- JAN-DEC NOV-MAR	FEB-JUN SEP-DEC JAN-JUN
RAR#	Species	S F Conc.	$\begin{smallmatrix} & \times & \times & \times & \times \\ & \times & \times & \times & \times & \times &$	- - - -	- - - -	- - -		FEB-JUN SEP-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden	S F Conc.	X X X X X X X X X X X X X X X X X X X	- - - - -	- - - -	- - - - - MAY-NOV	JAN-DEC NOV-MAR AUG-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside	S F Conc.	X X X X X X X X X X X X X X X X X X X	- - - - - MAR-JUL	- - - - -	- - - - - MAY-NOV	JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside Atlantic spadefish	S F Conc.	X X X X X X X X X X X X X X X X X X X	- - - - -	- - - -	- - - - - MAY-NOV -	JAN-DEC NOV-MAR AUG-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy		X X X X X X X X X X X X X X X X X X X	- - - - - - MAR-JUL - - - APR-SEP	- - - - - - -	- - - - - MAY-NOV - - -	JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum		X X X X X X X X X X X X X X X X X X X	- - - - MAR-JUL - - APR-SEP APR-JUN	- - - - - - - - - APR-JUN	- - - - - MAY-NOV - - - - - - APR-JUN	JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass		X X X X X X X X X X X X X X X X X X X	- - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT	- - - - - - -	- - - - - MAY-NOV - - - - - APR-JUN	JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum		X X X X X X X X X X X X X X X X X X X	- - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT	- - - - - - - - - APR-JUN	- - - - - MAY-NOV - - - - - APR-JUN	JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish		X X X X X X X X X X X X X X X X X X X	- - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - -	- - - - - - - APR-JUN - -	- - - - MAY-NOV - - - - APR-JUN - - -	JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate		X X X X X X X X X X X X X X X X X X X	- - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - -	- - - - - - - APR-JUN - - -	- - - - MAY-NOV - - - - APR-JUN - - -	JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish		X X X X X X X X X X X X X X X X X X X	- - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - -	- - - - - - - APR-JUN - - -	- - - - MAY-NOV - - - - APR-JUN - - - - - APR-JUN	JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV
RAR#	Alewife American eel American shad Atlantic croaker Atlantic menhaden Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies		X X X X X X X X X X X X X X X X X X X	- - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - - - - APR-SEP	- - - - - - - APR-JUN - - - - - APR-SEP	- - - - - - - - - - - - - - - - - - -	JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV MAY-NOV JAN-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker		X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV MAY-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X	- - - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - - - APR-SEP - MAY-SEP APR-MAY			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-JUN JAN-DEC JAN-DEC JAN-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X	- - - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - - - APR-SEP - MAY-SEP APR-MAY			JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV MAY-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X	- - - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - - - APR-SEP - MAY-SEP APR-MAY			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JUL-NOV JUL-OCT NOV-MAR JAN-DEC JUL-OCT JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish		X X X X X X X X X X X X X X X X X X X	- - - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - - - APR-SEP - MAY-SEP APR-MAY			JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern puffer		X X X X X X X X X X X X X X X X X X X	- - - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - - - APR-SEP - MAY-SEP APR-MAY			JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC MAR-OCT	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish		X X X X X X X X X X X X X X X X X X X	- - - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - - - APR-SEP - MAY-SEP APR-MAY			JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern puffer Northern searobin		X X X X X X X X X X X X X X X X X X X	- - - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - - - APR-SEP - MAY-SEP APR-MAY			JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake		X X X X X X X X X X X X X X X X X X X	- - - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - - - APR-SEP - MAY-SEP APR-MAY			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC ARA-OCT - AUG-SEP FEB-MAY	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake		X X X X X X X X X X X X X X X X X X X	- - - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - - - APR-SEP - MAY-SEP APR-MAY			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JUL-NOV JUL-NOCT NOV-MAR JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV MAR-NOV MAY-NOV JAN-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic menhaden Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake		X X X X X X X X X X X X X X X X X X X	- - - - - MAR-JUL - - APR-SEP APR-JUN JUN-OCT - - - APR-SEP - MAY-SEP APR-MAY			JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC ARA-OCT - AUG-SEP FEB-MAY	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch		X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV MAY-NOV SEP-NOV MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot		X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC MAR-OCT - JAN-DEC MAR-OCT - JAN-DEC MAR-NOV	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch		X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot		X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC MAR-OCT - JAN-DEC MAR-OCT - JAN-DEC MAR-NOV	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT
RAR#	Alewife American eel American shad Atlantic croaker Atlantic menhaden Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass		X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC MAR-OCT - JAN-DEC MAR-OCT JUN-OCT JUN-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-NOV MAR-NOV JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAY-OCT MAR-OCT MAY-OCT MAR-OCT MAY-OCT MAY-OCT MAY-OCT MAR-OCT MAY-OCT MAY-OCT MAR-OCT MAY-OCT MAY-OC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic menhaden Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish		X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC MAR-OCT - JAN-DEC MAR-OCT JUN-OCT JUN-OCT JUN-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic spadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder		X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC JUL-OCT NOV-MAR JAN-DEC MAR-OCT - JAN-DEC MAR-OCT JUN-OCT JUN-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-NOV MAR-NOV JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC MAY-NOV JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-NOV MAR-DEC JAN-DEC APR-OCT
RAR#	Alewife American eel American shad Atlantic croaker Atlantic menhaden Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish		X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC MAR-OCT - JAN-DEC MAR-OCT JUN-OCT JUN-OCT JUN-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad		X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC MAR-OCT - JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY JAN-DEC MAR-OCT MAY-OCT MAR-OCT MAR-OC
RAR#	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog		X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT JUN-OCT JUN-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY-OCT MAY-NOV FEB-MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY-OCT MAR-OCT MA
RAR# 181	Alewife American eel American shad Atlantic croaker Atlantic mackerel Atlantic silverside Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad		X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC MAR-OCT - JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY JAN-DEC MAR-OCT MAY-OCT MAR-OCT MAR-OC
RAR# 181	Alewife American eel American shad Atlantic croaker Atlantic menhaden Atlantic silverside Atlantic syadefish Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish		X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC - JAN-DEC JAN-DEC JAN-DEC AUG-OCT - JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV - JAN-DEC MAR-OCT - JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV APR-OCT JAN-JUN APR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY SEP-NOV APR-NOV JAN-DEC MAR-OCT MAR-OCT MAR-OCT MAY-OCT MAR-OCT MAY-OCT MAR-OCT MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN SEP-NOV
INVE RAR#	Alewife American eel American shad Atlantic croaker Atlantic menhaden Atlantic silverside Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad RTEBRATE: Species	C	X X X X X X X X X X X X X X X X X X X				JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-D	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV MAY-NOV MAY-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY SEP-NOV MAR-OCT MAR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV APR-NOV
INVE RAR# 181	Alewife American eel American shad Atlantic croaker Atlantic menhaden Atlantic silverside Atlantic sturgeon Bay anchovy Black drum Black sea bass Blueback herring Bluefish Butterfish Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted seatrout Striped bass Striped killifish Summer flounder Tautog Threadfin shad Weakfish RTEBRATE: Species	C	X X X X X X X X X X X X X X X X X X X				JAN-DEC NOV-MAR AUG-DEC JAN-DEC JAN-DEC JAN-DEC AUG-OCT JAN-DEC APR-NOV APR-OCT NOV-MAR MAY-NOV JUL-NOV JAN-DEC MAR-OCT JAN-DEC MAR-OCT AUG-SEP FEB-MAY MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC JAN-DEC JAN-DEC MAR-NOV MAR-JUN APR-NOV JAN-DEC	FEB-JUN SEP-DEC JAN-JUN MAY-NOV MAR-APR MAY-OCT JAN-DEC AUG-NOV JAN-OCT JAN-DEC APR-NOV MAR-NOV MAR-NOV MAY-NOV JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC MAY-NOV JAN-DEC MAY-NOV JAN-DEC MAR-OCT MAY-OCT MAY-NOV FEB-MAY SEP-NOV MAY-NOV FEB-MAY SEP-NOV MAR-JUN SEP-NOV MAR-JUN SEP-NOV MAR-JUN SEP-NOV MAR-JUN SEP-NOV JAN-DEC JAN-DEC JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC MAR-NOV

Virginia: ESIMAP 93 (cont.)

BIOLOGICAL RESOURCES: (cont.)

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping Mo	lting	
181	Bottlenose dolphin Harbor porpoise		x x x x x x x x x	- - -	-		-	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
39	Green sea turtle	тт	X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	_
	Leatherback sea turtle	E E	X X X X X X X	_	-	-	-	MAY-NOV
	Loggerhead sea turtle	ТТ	X X X X X X X	-	-	-	MAY-NOV	-
227	Diamondback terrapin	VERY HIGH	X X X X X X X X X	MAY-JUL	_	_	MAR-NOV	MAR-NOV

RAR#	Species	S F Conc.	J F M A M J J A	ASOND	Nesting	Migrating	Molting		
231	Bufflehead	MODERATE	X X X X	X X X					
	Common goldeneye	PIODEIMIE	XXXX	XXX	_	_	_		
	Long-tailed duck		XXXX	XXX	_	_	_		
	Mergansers		XXXX	XXX	-	-	-		
	Mute swan		X X X X	X X X	-	-	-		
	Ruddy duck		X X X X	X X X	-	-	-		
	Scaup		X X X X	X X X	-	-	-		
	Scoters		X X X X	X X X	-	-	_		
'ISH	:								
AR#		S F Conc.	J F M A M J J A	и и о в и	Snawning	Faas	Larvae	Juveniles	Adults
181	Alewife		X X X X X		-	-	-	-	FEB-JUN
	American eel		X X X X X X X X X		-	-		JAN-DEC	SEP-DEC
	American shad		XXXXX	XX	-	-		NOV-MAR	JAN-JUN
	Atlantic croaker			XXXXX	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel Atlantic menhaden		XX	, ,, ,, ,, ,,	_	-		-	MAR-APR
	Atlantic menhaden Atlantic silverside		X			_		JAN-DEC JAN-DEC	MAY-OCT JAN-DEC
	Atlantic spadefish			XXXX	MAK-JUL	_		AUG-OCT	AUG-NOV
	Atlantic sturgeon	С	X X X X X X X X X		_	_	_	-	JAN-OCT
	Bay anchovy	Ŭ	XXXXXXXX			_	_	JAN-DEC	JAN-DEC
	Black drum		XXXXXX		APR-JUN	APR-JUN		APR-NOV	APR-NOV
	Black sea bass		X X X X X		JUN-OCT	-		APR-OCT	APR-OCT
	Blueback herring		X X X X X X	ХХ	-	-		NOV-MAR	JAN-JUN
	Bluefish		$X \times X \times X$	XXXX	-	-		VON-YAM	APR-NOV
	Butterfish		X X X X X X	XXXX	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate		XXXX		-	-	-	-	MAY-NOV
	Gobies		X X X X X X X X X			APR-SEP		JAN-DEC	JAN-DEC
	Harvestfish		X X X X X		-	-		JUL-OCT	APR-OCT
	Hickory shad		X X X X X X	ХХ	-	-		NOV-MAR	JAN-JUN
	Hogchoker		X X X X X X X X			MAY-SEP		JAN-DEC	JAN-DEC
	Inland silverside		X X X X X X X X			-		JAN-DEC	JAN-DEC
	Minnows		XXXXXXXX			-		JAN-DEC	JAN-DEC
	Mummichog		XXXXXXXX		APR-AUG	_	_	JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish		XXXXX			_		- JAN-DEC	APR-OCT JAN-DEC
	Northern puffer		X X X X X X X X X X X X X X X X X X X		MAY-AUG	_		MAR-OCT	MAR-OCT
	Northern searobin		XXXXXX		MAY-JUL	_	_	- -	MAR-OCT
	Red drum		XXXX		JUL-NOV	_		AUG-SEP	MAY-NOV
	Red hake		XXXX	XXX	-	_		FEB-MAY	FEB-MAY
									SEP-NOV
	Sandbar shark		XXXX	XXX	_	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X	XXX	_	_	_	JUN-OCT	MAR-OCT
	Silver hake		X X X X X	X X X	-	-	-	-	OCT-MAY
	Silver perch		X X X X X X X X X	X X X X X	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X	X X X X X	-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		X X X X	X X X	-	-	-	MAR-JUN	MAR-JUN
									SEP-NOV
	Spotted seatrout		X X X X X			-		APR-NOV	APR-NOV
	Striped bass		X X X X X X X X		-	-		JAN-DEC	JAN-DEC
	Striped killifish		XXXXXXXX		APR-SEP	-		JAN-DEC	JAN-DEC
	Summer flounder		XXXXXXXX		-	-	OCT-MAY	JAN-DEC -	APR-OCT
	Tautog		XXXX	XXX	-	-		_	OCT-APR
	Threadfin shad		XXXX	XXX	-	-	-	-	FEB-MAY SEP-NOV
	Weakfish		XXXXX	(APR-AUG	_	MAY-AUG	APR-NOV	APR-NOV
			21 21 21 21 2	1 21 21 21	711 11 7100		1111 1100	11111 1101	11111 110 1
NVE	RTEBRATE:								
AR#	Species	S F Conc.	J F M A M J J A					Juveniles	Adults
191	Blue crab		X X X X X X X X					JAN-DEC	JAN-DEC
тот	Dine Cian		A	A A A A A	-	-	MAY-NOV	JAN-DEC	JAN-DEC
ARI	NE MAMMAL:								
AR#	Species	S F Conc.	J F M A M J J A	ASOND	Mating	Calving	Pupping	Molting	
101	Dottleres delphin								
TRT	Bottlenose dolphin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X X X	_	_	_	_	
	Harbor porpoise		ΛΛΛΛ	Χ	_	_	-	-	
EPT	ILE:								
AR#	Species	S F Conc.	J F M A M J J A						
20	Cross ass turtle								
39	Green sea turtle	TT		XXXX	_	_	_	ON-YAM	
	Kemp's ridley sea turtle	EE		XXXX	_	_	_	/ON-YAM	
	Leatherback sea turtle Loggerhead sea turtle	E E T T		X X X X	_	_	_	- MAY-NOV	
								PIG (- IV())	, –

BIOLOGICAL RESOURCES:

-	_	-	\mathbf{r}	_

RAR# Species

	Great blue heron	2 NESTS	$\times \times $	MAY-JUL	-	-		
ISH:								
R#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Alewife		X X X X X	-	-	_	-	FEB-JUN
	American eel American shad		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	_	_	-	JAN-DEC -	- FEB-JUN
	Atlantic croaker		x x x x x x x x x x x x x	-	-	-	JAN-DEC	MAY-NOV
	Atlantic menhaden		$\times \times \times \times \times \times \times \times$	-	-	-	MAY-NOV	MAY-OCT
	Atlantic sturgeon Banded killifish	С	X X X X X X X X X X X X X X X X X X X	- 7 DD_CFD	_	-	JAN-DEC JAN-DEC	APR-NOV JAN-DEC
	Bay anchovy		X X X X X X X X X X X X X X X X X X X	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Black drum		XXXXXXX	-	_	_	APR-NOV	APR-NOV
	Black sea bass		X X X X X X	-	- -	-	APR-SEP	APR-SEP
	Blueback herring		XXXXX	-	-	_	- TIII NOV	FEB-JUN
	Bluefish Gizzard shad		$\begin{smallmatrix} & & & \times & $		_	_	JUL-NOV JAN-DEC	APR-NOV JAN-DEC
	Gobies		X X X X X X X X X X X X		APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad Hogchoker		X	- MAY CED	- MAY-SEP	- MAY-SEP	- JAN-DEC	FEB-JUN JAN-DEC
	Minnows		X X X X X X X X X X X X X X X X X X X		MAI-SEP		JAN-DEC	JAN-DEC
	Mummichog		$\times \times $	APR-AUG	-	_	JAN-DEC	JAN-DEC
	Northern pipefish		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Northern puffer Northern searobin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	-	MAR-OCT -	MAR-OCT MAR-OCT
	Red drum		XXXXXXX	_	-	_	AUG-SEP	MAY-NOV
	Shortnose sturgeon		$\times \times $	-	-	_	JAN-DEC	JAN-DEC
	Silver perch		X X X X X X X X X X X X X X X X X X X		-		JAN-DEC	JAN-DEC
	Silversides		X X X X X X X X X X X X X X X X X X X		MAR-JUL -	APR-SEP DEC-APR	JAN-DEC	JAN-DEC
	Spot Spotted seatrout		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	DEC-APR -	MAR-NOV APR-NOV	JAN-DEC APR-NOV
	Striped bass		\times \times \times \times \times \times \times \times	-		-	MAY-OCT	FEB-JUN
	Striped killifish		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Summer flounder Weakfish		$\begin{array}{c} \times \times$		_	-	APR-NOV AUG-NOV	APR-NOV JAN-DEC
	White perch		x x x x x x x x x x x x x x x x x x x		_	_	AUG-NOV -	JAN-DEC
	Winter flounder		X X X X X X X X X X X X		FEB-MAY		MAR-NOV	NOV-MAY
	Alewife		X X X X X		-	-		FEB-JUN
	American eel American shad		X X X X X X X X X X X X X X X X X X X		- -	_	JAN-DEC NOV-MAR	SEP-DEC
	American shad Atlantic croaker		X X X X X X X X X X X X X X X X X X X	-	-	_	NOV-MAR AUG-DEC	JAN-JUN MAY-NOV
	Atlantic mackerel		XX	-	-	_	-	MAR-APR
	Atlantic menhaden		$\times \times $			MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		X X X X X X X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
	Atlantic spadefish Atlantic sturgeon	С	$\begin{array}{c} & \times $	-	_	_	AUG-OCT -	AUG-NOV JAN-OCT
	Bay anchovy	C	X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Black drum		$\times \times $		APR-JUN		APR-NOV	APR-NOV
	Black sea bass		X X X X X X X		-	_	APR-OCT	APR-OCT
	Blueback herring Bluefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	NOV-MAR MAY-NOV	JAN-JUN APR-NOV
	Butterfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	JUL-NOV	MAR-NOV
	Clearnose skate		$\times \times $		-	-	-	MAY-NOV
	Gobies		X X X X X X X X X X X X X X X X X X X	APR-SEP	APR-SEP -	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Hogchoker		X X X X X X X X X X X X X		MAY-SEP		JAN-DEC	JAN-DEC
	Inland silverside		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Mummichog Northern kingfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG		_	JAN-DEC -	JAN-DEC APR-OCT
	Northern pipefish		$\begin{array}{c} \times \times$	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG		-	MAR-OCT	MAR-OCT
	Northern searobin Red drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	-	- AUG-SEP	MAR-OCT MAY-NOV
	Red hake		X X X X X X X X X		_	_	FEB-MAY	FEB-MAY
	nou name						122 1111	SEP-NOV
	Sandbar shark		X X X X X X	-	-		MAY-OCT	MAY-OCT
	Scup (porgy)		X X X X X X X X		-	-	JUN-OCT -	MAR-OCT
	Silver hake Silver perch		X X X X X X X X X X X X X X X X X X X				- JAN-DEC	OCT-MAY JAN-DEC
	Spot		X X X X X X X X X X X X X		-	- DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake		$X\;X\;X\;X\;X\qquad X\;X\;X$	-	-	-	MAR-JUN	MAR-JUN
	Conttod occurry		v v v v ··· ·-	M7 17 TTTT			ייסיו מחג	SEP-NOV
	Spotted seatrout Striped bass		$\begin{smallmatrix} & & \times $		_	-	APR-NOV JAN-DEC	APR-NOV JAN-DEC
	Striped killifish		X X X X X X X X X X X X X			-	JAN-DEC	JAN-DEC
	Summer flounder		X X X X X X X X X X X X X X X X X X X			OCT-MAY		APR-OCT
	Tautog Threadfin shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	-	_	OCT-APR
	INICAULIN SNAU		^ ^ ^ X X X	-	-	_	-	FEB-MAY SEP-NOV
	Weakfish		$\mathbf{x} \ \mathbf{x} \ \mathbf{x} \ \mathbf{x} \ \mathbf{x} \ \mathbf{x} \ \mathbf{x}$	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
יק	RTEBRATE:							
	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
		5 I CONG.	J F M A M J J A S O N D				Juveniles	Adults
	Blue crab		$\times \times $		-	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		X X X X X X X X X X X X X X X X X X X				JAN-DEC	JAN-DEC
	Blue crab		x x x x x x x x x x x x x	-	-	MAY-NOV	JAN-DEC	JAN-DEC
11	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
	Bottlenose dolphin		XXXXXXX	-	-	-	-	
	Harbor porpoise Bottlenose dolphin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	-	
	Bottlenose dolphin Harbor porpoise		X	-	-	-	-	
.								
	ILE:	C E Ca	TEMAN T.T	No oti-	Untol-	Tp.L.a · · ·	ting Town	log 3.1
•	Species	S F Conc.	J F M A M J J A S O N D	nesting	natching	ınternest	Ling Juveni	Les Adu
	Green sea turtle	ТТ	$\mathbf{x} \ \mathbf{x} \ \mathbf{x} \ \mathbf{x} \ \mathbf{x} \ \mathbf{x}$	-	-	-	MAY-NO	I
•	orcen bea carere							7
	Kemp's ridley sea turtle Leatherback sea turtle	E E E E	$\begin{array}{c} \times \times$	-	-	_	MAY-NO'	

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

BIOLOGICAL RESOURCES:

BIRD:	:
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BIRD RAR#	: Species	S F	Conc.	JFMAM	JJAS	OND	Nesting	Migrating	Molting		
				 						_	
38	Canada goose Gadwall		HIGH	X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Mallard		MODERATE	$X \ X \ X \ X$		X X X	-	-	-		
	Mergansers American black duck		MODERATE	X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	_	-	_		
	American coot			X X X X		XXX	-	-	-		
	American wigeon Bufflehead		MODERATE	X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	-	-	_		
232	American black duck			X X X X		XXX	_	-	-		
	American wigeon Canada goose		HIGH	X X X X X X X X X X X X X X X X X X X		X X X X X X	-	-	-		
	Mallard Tundra swan		HTCH.	XXXX		XXX	-	-	-		
233	American black duck		HIGH	X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	-	-	-		
263	Bufflehead Canvasback		MODERATE HIGH	X X X X X X X X X X X X X X X X X X X		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Common goldeneye		IIIGII	XXXX		XXX	-	-	-		
	Long-tailed duck Mergansers		MODERATE	X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	-	-	_		
	Mute swan		HODERVIE	XXXX		XXX	-	-	-		
	Ruddy duck Scaup		MODERATE HIGH	X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X	_	_	_		
	Scoters		MODERATE	X X X X		X X X	-	-	-		
	Tundra swan		HIGH	XXXX		XXX	_	-	-		
FISH RAR#	: Species	S F	Conc.	темам	T.TAS	ОИО	Spawning	Eggs	Larvae	Juveniles	Adults
36	Alewife American eel			X X X X X X X X X X X X X X X X X X X		XXX	-	_	_	- JAN-DEC	FEB-JUN -
	American shad			XXXX		V V V	-	-	-	- TANL DEC	FEB-JUN
	Atlantic croaker Atlantic menhaden			X X X X X X X	X X X X X		-	-	_	JAN-DEC MAY-NOV	MAY-NOV MAY-OCT
	Atlantic sturgeon	С		XXXXX			- ADD CED	-	-	JAN-DEC	APR-NOV
	Banded killifish Bay anchovy			X X X X X X				-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Black drum Black sea bass				X X X X X X X X X X X X X X X X X X X	ХХ	-	-	_	APR-NOV APR-SEP	APR-NOV APR-SEP
	Blueback herring			XXXX			-	-	-	APK-SEP	FEB-JUN
	Bluefish Gizzard shad			$\begin{smallmatrix} &&&X&X\\X&X&X&X&X\end{smallmatrix}$	XXXX		-	-	_	JUL-NOV JAN-DEC	APR-NOV JAN-DEC
	Gobies			XXXXX				APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish Hickory shad			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	XXXX	Χ	-	-	-	JUL-OCT	APR-OCT FEB-JUN
	Hogchoker			XXXXX		ххх	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Minnows Mummichog			X X X X X X X X X X X X X X X X X X X				-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern pipefish			XXXXX			MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer Northern searobin				X X X X X X X X X X X X X X X X X X X		MAY-AUG -	_	_	MAR-OCT	MAR-OCT MAR-OCT
	Red drum			X	X X X X	X X	-	-	-	AUG-SEP	MAY-NOV
	Shortnose sturgeon Silver perch			X X X X X X X				_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Silversides						MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
	Spot Spotted seatrout			XXXXX	X X X X X X X X X X X X X X X X X X X		_	-	DEC-APR -	MAR-NOV APR-NOV	JAN-DEC APR-NOV
	Striped bass			X X X X	X X X X	Χ	-	-	-	MAY-OCT	FEB-JUN
	Striped killifish Summer flounder			XXXXX	X X X X X		APR-SEP -	_	_	JAN-DEC APR-NOV	JAN-DEC APR-NOV
	Weakfish			X X X X X	X X X X	X X X	-	-	-	AUG-NOV	JAN-DEC
	White perch Winter flounder			X X X X X X X X X X X X X X X X X X X			- FEB-MAY		- MAR-MAY	- MAR-NOV	JAN-DEC NOV-MAY
181	Alewife American eel			XXXX		V V V	-	-	-	- TANL DEC	FEB-JUN SEP-DEC
	American shad			X X X X X X		XXX		-	-	JAN-DEC NOV-MAR	JAN-JUN
	Atlantic croaker Atlantic mackerel			X X X	X X X X	X X X	-	-	_	AUG-DEC	MAY-NOV MAR-APR
	Atlantic menhaden			XXXXX	X X X X	ххх	-	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside Atlantic spadefish			XXXXX	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		MAR-JUL -	_	-	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic sturgeon	C		X	X X X X	Χ	-	-	-	-	JAN-OCT
	Bay anchovy Black drum			XXXXX	X X X X X X X X X X X X X X X X X X X		APR-SEP APR-JUN	- APR-JUN	- APR-JUN	JAN-DEC APR-NOV	JAN-DEC APR-NOV
	Black sea bass			XX	X X X X	Χ	JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring Bluefish			XXXXX	XXXXX	X X X X	_	_	_	NOV-MAR MAY-NOV	JAN-JUN APR-NOV
	Butterfish			XXX	X X X X	X X	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate Gobies			X X X X X	X X X X X X X X X X X X X X X X X X X		- APR-SEP	- APR-SEP	- APR-OCT	- JAN-DEC	MAY-NOV JAN-DEC
	Harvestfish			X X	X X X X	Χ	-	-	-	JUL-OCT	APR-OCT
	Hickory shad Hogchoker			X X X X X X X X X X X X X X X X X X X		$\begin{array}{ccccc} & X & X \\ X & X & X \end{array}$	- MAY-SEP	- MAY-SEP	- MAY-SEP	NOV-MAR JAN-DEC	JAN-JUN JAN-DEC
	Inland silverside			X X X X X	X X X X	X X X	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Minnows Mummichog			X X X X X X X				-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish			X X	X X X X	Χ	-	-	-	-	APR-OCT
	Northern pipefish Northern puffer			X X X X X X X X X X X X X X X X X X X	XXXX		MAY-JUN MAY-AUG	-	_	JAN-DEC MAR-OCT	JAN-DEC MAR-OCT
	Northern searobin Red drum				XXXX		MAY-JUL JUL-NOV	-	_	-	MAR-OCT
	Red drum Red hake			XXXX	X X X X	XX	- JOT-NOA	-	-	AUG-SEP FEB-MAY	MAY-NOV FEB-MAY
	Sandbar shark			17	X X X X	X	_	_	_	MAY-OCT	SEP-NOV MAY-OCT
	Scup (porgy)				X X X X X		-	-	-	MAY-OCT JUN-OCT	MAY-OCT MAR-OCT
	Silver hake Silver perch			X X X X X X X X X X X X X X X X X X X		X X X		-	-	- JAN-DEC	OCT-MAY JAN-DEC
	Spot			XXXXX				-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake			XXX	X X	ХХ	-	-	-	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout			ХХ	X X X X	ХХ		-	-	APR-NOV	APR-NOV
	Striped bass Striped killifish			X X X X X X X X X X X X X X X X X X X			- Adr-sed	-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Summer flounder			X X X X X			APK-SEP -	-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog Threadfin shad			$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	-	OCT-APR FEB-MAY
				AAAX	Λ	ΛΛ	_	-	_	_	SEP-NOV
	Weakfish			ΧX	X X X X	ХХ	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV

X X X X X X X X APR-AUG - MAY-AUG APR-NOV APR-NOV

Virginia: ESIMAP 96 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae J	veniles A	dults
35	Blue crab		X X X X X X X X X X X X X X X X X X X	-	-	MAY-NOV J	AN-DEC JA	AN-DEC
36	Eastern oyster		X X X X X X X X X X X X X X	JUN-SEP	JUN-SEP	JUN-SEP J	AN-DEC JA	AN-DEC
181	Blue crab		x	-	-	MAY-NOV J	AN-DEC JA	AN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping Mo	olting	
37	Bottlenose dolphin		X X X X X X X	-	-			
	Harbor porpoise		X X X X X X X X X X X X X X X X X X X	_	_	_	_	
181	Bottlenose dolphin		X X X X X X X	-	-	-	_	
	Harbor porpoise		X X X X X X	-	-	-	-	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internestin	g Juveniles	Adults
39	Green sea turtle	тт	X X X X X X X	-	-		MAY-NOV	
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	-
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	ТТ	X X X X X X X	-	-	-	MAY-NOV	-

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
100	BUSH MILL STREAM NATURAL AREA PRESERVE	VA DCR DNH	804/445-9117

BIOLOGICAL RESOURCES:

BIRD:

	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	g 	
45	Bald eagle	тт	X X X X	-	-			
	Common moorhen	C	X X X X	-	_	_		
	Great blue heron		X X X X	-	-	-		
	Greater yellowlegs		X X X X	-	_	_		
	Green heron		X X X X	-	_	_		
	King rail		X X X X	-	-	-		
	Least bittern		X X X X	-	_	_		
	Marsh wren		X X X X	-	-	-		
	Osprey		X X X X X X	MAR-AUG	_	_		
	Sora		X X X X	-	-	-		
	Swamp sparrow		X X X X	-	-	-		
	Virginia rail		X X X X	-	-	-		
	Wood duck		$\times \times $	APR-JUN	_	_		
5	American black duck	MODERATE	$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-		
	Bufflehead	MODERATE	$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-		
	Canada goose	HIGH	$X \ X \ X \ X $	-	-	-		
	Green-winged teal		$X \ X \ X \ X $	-	-	-		
	Mallard	MODERATE	$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-		
	Mute swan		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Ring-necked duck	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Tundra swan	HIGH	$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-		
	Wood duck		$\times \times $	APR-JUN	-	-		
)	Great blue heron	22 NESTS	$\times \times $	MAY-JUL	-	-		
Н	:							
#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adult
	Alewife		X X X X X	-	-	-		FEB-J
	American shad		X X X X X	_	_	_	_	FEB-J
	Blueback herring		X X X X X	_	_	_	_	FEB-J
	Hickory shad		X X X X X	_	_	_	_	FEB-J
	Striped bass		X X X X X X X X X X	_	_	_	_	OCT-J
l	Atlantic croaker		$\times \times $	-	_	_	JAN-DEC	MAY-N
	Atlantic menhaden		X X X X X X X	_	_	_	MAY-NOV	_
							JAN-DEC	JAN-I
	Atlantic silverside		X X X X X X X X X X X X X	MAR-JUL	_	_		
	Atlantic silverside Bay anchovy		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-I
	Atlantic silverside Bay anchovy Blue catfish				- - -	- -		JAN-I -
	Bay anchovy		$\times \times $	APR-SEP	- - -	- - -	JAN-DEC	
	Bay anchovy Blue catfish Channel catfish		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $	APR-SEP - -	- - - - MAY-SEP	- - - - MAY-SEP	JAN-DEC JAN-DEC	-
	Bay anchovy Blue catfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP MAY-SEP	- - - - MAY-SEP	- - - - MAY-SEP	JAN-DEC JAN-DEC JAN-DEC	- JAN-I
	Bay anchovy Blue catfish Channel catfish Hogchoker Mummichog		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP - - MAY-SEP APR-AUG	- - - - MAY-SEP -		JAN-DEC JAN-DEC JAN-DEC JAN-DEC	- JAN-I JAN-I
	Bay anchovy Blue catfish Channel catfish Hogchoker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP - - MAY-SEP APR-AUG	- - - - MAY-SEP - -	-	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	- JAN-I JAN-I
	Bay anchovy Blue catfish Channel catfish Hogchoker Mummichog Silver perch Spot		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-AUG	- - - - MAY-SEP - - -	-	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-I JAN-I JAN-I
	Bay anchovy Blue catfish Channel catfish Hogchoker Mummichog Silver perch		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-AUG	- - - - MAY-SEP - - -	- - DEC-APR	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV	JAN-I JAN-I JAN-I
	Bay anchovy Blue catfish Channel catfish Hogchoker Mummichog Silver perch Spot Striped bass Weakfish		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-AUG	- - - - - MAY-SEP - - - -	- - DEC-APR -	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC	JAN-I JAN-I JAN-I JAN-I
	Bay anchovy Blue catfish Channel catfish Hogchoker Mummichog Silver perch Spot Striped bass		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-AUG	- - - - MAY-SEP - - - - - -	- - DEC-APR -	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT	JAN-I JAN-I JAN-I JAN-I - -
Æ	Bay anchovy Blue catfish Channel catfish Hogchoker Mummichog Silver perch Spot Striped bass Weakfish White catfish		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-AUG	- - - - MAY-SEP - - - - -	- - DEC-APR -	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC JAN-DEC	JAN-I JAN-I JAN-I - -
#	Bay anchovy Blue catfish Channel catfish Hogchoker Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch RTEBRATE: Species	S F Conc.	X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-AUG	- - - - - - Eggs	DEC-APR Larvae	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-I JAN-I JAN-I JAN-I Adult
#	Bay anchovy Blue catfish Channel catfish Hogchoker Mummichog Silver perch Spot Striped bass Weakfish White catfish White perch RTEBRATE: Species	S F Conc.	X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-AUG	- - - - - -	DEC-APR Larvae	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-I JAN-I Adult

BIRD	:
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BIKD		0.7.0		37	****	36.31		
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	_	
45	Bald eagle	тт	XXXX	_	_	_		
	Common moorhen	C	XXXX	_	_	_		
	Great blue heron		X X X X	_	_	_		
	Greater yellowlegs		X X X X	_	-	_		
	Green heron		X X X X	-	-	-		
	King rail		X X X X	-	-	-		
	Least bittern		X X X X	-	-	-		
	Marsh wren		XXXX	-	-	-		
	Osprey		X X X X X X	MAR-AUG	-	_		
	Sora		XXXX	-	-	-		
	Swamp sparrow Virginia rail		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Wood duck		X X X X X X X X X X X X X X X X X X X	APRTIIN	_	_		
46	Canada goose	VERY HIGH	X X X X X X X X X		_	_		
	American black duck	HIGH	X X X X	_	_	_		
	American wigeon		X X X X	_	-	_		
	Canada goose	VERY HIGH	$X X X X \qquad X X X$	-	-	-		
	Gadwall		$X \ X \ X \ X \ X \ X \ X$	-	-	-		
	Green-winged teal	MODERATE	$X \ X \ X \ X \ X$	-	-	-		
	Mallard	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Northern pintail		X X X X X X X X X X X X X X X X X X X		-	-		
235	American black duck	MODERATE	X X X X X X X X		-	-		
	Bufflehead	MODERATE	X X X X X X X X X		-	_		
	Canada goose	HIGH	X X X X X X X X X X X X X X X X X X X		-	-		
	Green-winged teal Mallard	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Mute swan	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Ring-necked duck	MODERATE	X X X X X X X X	_	_	_		
	Tundra swan	HIGH	X X X X X X X X X	_	_	_		
	Wood duck	111 011	\times		_	_		
265	American black duck	HIGH	X X X X	_	_	_		
	American wigeon		X X X X	_	-	_		
	Gadwall		$X X X X \qquad X X X$	-	-	_		
	Green-winged teal	MODERATE	$X X X X \qquad \qquad X X X$	-	-	-		
	Mallard	HIGH	$X \ X \ X \ X \ X \ X \ X$	-	-	-		
	Northern pintail		$X \ X \ X \ X $	-	-	-		
266	Canada goose	VERY HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Ruddy duck	2000	X X X X X X X X X X X X X X X X X X X	-	-	_		
400	Great blue heron	22 NESTS	X X X X X X X X X X X X X X	MAY-JUL	-	_		
FISH								
					_	_	,	
RAR#	Species	S F Conc.	JFMAMJJASOND	Spawning	Eggs	Larvae	Juveniles	Adults
40	Alewife				DDD TIN	DDD TIN	EED OOM	
40	American shad		$f X \ X \ X \ X \ X \ X \ X \ X \ X \ X $	_	FEB-JUN FEB-JUN	FEB-JUN FEB-JUN	FEB-OCT FEB-OCT	FEB-JUN FEB-JUN
	Atlantic menhaden		XXXXXXX	_			MAY-NOV	
	Atlantic silverside		\times		_	_	JAN-DEC	JAN-DEC
	Banded killifish		\times		_	_	JAN-DEC	JAN-DEC
	Bay anchovy		\times		_	_	JAN-DEC	JAN-DEC
	Black crappie		imes ime	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Blue catfish		imes ime	APR-JUN	-	-	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Channel catfish		imes ime	MAR-MAY	-	-	JAN-DEC	JAN-DEC
	Hickory shad		X X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		$\times \times $	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		$\times \times $	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Largemouth bass		$\times \times $	MAR-MAY	-	-	-	JAN-DEC
	Longnose gar		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Striped bass		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Tessellated darter White catfish		X X X X X X X X X X X X X X X X X X X		_	-	- TAN DEC	JAN-DEC
			X X X X X X X X X X X X X X X X X X X			- APR-JUN	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	White perch Yellow perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		AFK-00N -	-	JAN-DEC	JAN-DEC
68	Alewife		XXXXX	- AIN OON	_	_	-	FEB-JUN
	American shad		XXXXX	_	_	_	_	FEB-JUN
	Blueback herring		X X X X X	_	_	_	_	FEB-JUN
	Hickory shad		X X X X X	_	_	_	_	FEB-JUN
	Striped bass		X X X X X X X X X X X X X X X X X X X	_	- -	-	_	OCT-JUN
234	Atlantic croaker		X X X X X X X X X X X X X X	-	-	-	JAN-DEC	MAY-NOV
	Atlantic menhaden		X X X X X X X	-	-	-	MAY-NOV	-
	Atlantic silverside		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Bay anchovy		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Blue catfish		X X X X X X X X X X X X X X		-	-	JAN-DEC	-
	Channel catfish		X X X X X X X X X X X X X		-	-	JAN-DEC	-
	Hogchoker		X X X X X X X X X X X X X X X X X X X			MAY-SEP	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC JAN-DEC
	Silver perch Spot		X X X X X X X X X X X X X X X X X X X		_	DEC-APR	JAN-DEC	JAN-DEC
	Striped bass		XXXXXXX		_	-	MAY-OCT	_
	Weakfish		$X \times X \times$		_	_	JAN-DEC	_
	White catfish		\times		_	_	JAN-DEC	_
	White perch		\times		_	_	JAN-DEC	JAN-DEC
264	Alewife		X X X X X X X X X	_	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American shad		X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic croaker		imes ime	-	-	-	JAN-DEC	MAY-NOV
	Atlantic menhaden		X X X X X X X	-	-	-	MAY-NOV	-
	Atlantic silverside		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Banded killifish		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Bay anchovy		X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Blue catfish		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X	— MAD MAY	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Channel catfish		X X X X X X X X X X X X X		- FED TIM	- TIN	JAN-DEC	JAN-DEC
	Hickory shad		X X X X X X X X X X X X X X X X X X X	- Mav-sed		FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		MAI-SEP	MAY-SEP	JAN-DEC -	JAN-DEC
	Largemouth bass Minnows		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	- JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC JAN-DEC
	Silver perch		X X X X X X X X X X X X X X X X X X X	AFK-AUG	_	_	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X	_	_	DEC-APR	APR-NOV	-
	Striped bass		XXXXXXXXX	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Weakfish		$\times \times $	-	-	-	JAN-DEC	_
	White catfish		$\times \times $		-	-	JAN-DEC	JAN-DEC
	White perch		$\times \times $	-	-	-	JAN-DEC	JAN-DEC

Virginia: ESIMAP 98 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
40	Blue crab		X X X X X X X X X X X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		$X\ X\ X$	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
234	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		$\times \times $	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
264	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		$\times \times $	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
160	RAPPAHANNOCK RIVER VALLEY NWR	U.S. FISH AND WILDLIFE SERVICE	804/333-1470

BIRD	:
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AR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	_	
45	Bald eagle	T T	X X X X	-	-	-		
	Common moorhen Great blue heron	С	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	-		
	Great blue heron Greater yellowlegs		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_		
	Green heron		XXXX	-	-	-		
	King rail		XXXX	-	-	-		
	Least bittern Marsh wren		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Osprey		x	- MAR-AUG	_	_		
	Sora		XXXX	-	-	_		
	Swamp sparrow		$X \ X \ X \ X$	-	-	-		
	Virginia rail		X X X X	-	-	-		
46	Wood duck Canada goose	VERY HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APK-JUN -	_	_		
	American black duck	HIGH	X X X X X X X X	_	_	_		
	American wigeon		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Canada goose	VERY HIGH	X X X X X X X X X	-	-	-		
	Gadwall Green-winged teal	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Mallard	HIGH	X X X X X X X X X	_	_	_		
	Northern pintail		$X X X X \qquad X X X$	-	-	_		
35	American black duck	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Bufflehead	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_		
	Canada goose Green-winged teal	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Mallard	MODERATE	X X X X X X X X	-	-	_		
	Mute swan		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Ring-necked duck	MODERATE	X X X X X X X X	-	-	-		
	Tundra swan Wood duck	HIGH	X X X X X X X X X X X X X X X X X X X	APRTIIN	_	_		
66	Canada goose	VERY HIGH	X X X X X X X X X X X X X X X X X X X	- OON	_	_		
	Ruddy duck	2000	XXXX	-	-	-		
	Great blue heron	12 NESTS	$\times \times $		-	-		
υl	Great blue heron	7 NESTS	X X X X X X X X X X X X	MAY-JUL	-	-		
CSH	:							
R#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
4 N	Alewife		X X X X X X X X		FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
10	American shad		X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden		XXXXXX	-	-	-	MAY-NOV	-
	Atlantic silverside		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Banded killifish		X X X X X X X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
	Bay anchovy Black crappie		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Blue catfish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Channel catfish		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Hickory shad Hogchoker		X	- MAY CED		FEB-JUN MAY-SEP	FEB-OCT	FEB-JUN
	Inland silverside		X X X X X X X X X X X X X X X X X X X		MAI-SEP	MAI-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Largemouth bass		X X X X X X X X X X X X X		_	_	-	JAN-DEC
	Longnose gar		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Minnows		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Striped bass Tessellated darter		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FEB-JUN	FEB-JUN -	FEB-JUN -	FEB-OCT	FEB-JUN JAN-DEC
	White catfish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC JAN-DEC
	White perch		X X X X X X X X X X X X X			APR-JUN	JAN-DEC	JAN-DEC
	Yellow perch		$\times \times $		-	-	JAN-DEC	JAN-DEC
34	Atlantic croaker		$\times \times $	-	-	-	JAN-DEC	MAY-NOV
	Atlantic menhaden Atlantic silverside		X X X X X X X	- MAD TIII	-	-	MAY-NOV	- JAN-DEC
	Bay anchovy		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		_	_	JAN-DEC JAN-DEC	JAN-DEC
	Blue catfish		X X X X X X X X X X X X X	-	_	_	JAN-DEC	- OAN DEC
	Channel catfish		$\times \times $	-	-	-	JAN-DEC	-
	Hogchoker		$\times \times $			MAY-SEP	JAN-DEC	JAN-DEC
	Mummichog Silver perch		X X X X X X X X X X X X X X X X X X X	APR-AUG -	_	_	JAN-DEC	JAN-DEC
	Silver perch Spot		X X X X X X X X X X X X X X X X X X X	-	-	- DEC-APR	JAN-DEC APR-NOV	JAN-DEC -
	Striped bass		XXXXXX	-	-	-	MAY-OCT	_
	Weakfish		$\times \times $		-	-	JAN-DEC	-
	White catfish		X X X X X X X X X X X X X		-	-	JAN-DEC	-
	White perch Alewife		X X X X X X X X X X X X X X X X X X X	-	- FEB-JUN	- FEB-JUN	JAN-DEC FEB-OCT	JAN-DEC FEB-JUN
JI	American shad		X	_		FEB-JUN FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic croaker		X X X X X X X X X X X X X	-	-	-	JAN-DEC	MAY-NOV
	Atlantic menhaden		$\times \times \times \times \times \times \times$	-	-	-	MAY-NOV	-
	Atlantic silverside		X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
	Banded killifish Bay anchovy		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Blue catfish		X X X X X X X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC JAN-DEC
	Blueback herring		X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Channel catfish		X X X X X X X X X X X X X		-		JAN-DEC	JAN-DEC
	Hickory shad		X X X X X X X X X	- MAY CED		FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker Largemouth bass		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		MAY-SEP -	MAY-SEP -	JAN-DEC -	JAN-DEC JAN-DEC
	Minnows		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Silver perch		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X X X X X X X	- EED TIM	- TIM	DEC-APR	APR-NOV	- EED TIIN
	Striped bass Weakfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FEB-JUN -	FEB-JUN -	FEB-JUN -	FEB-OCT JAN-DEC	FEB-JUN -
	White catfish		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC JAN-DEC	JAN-DEC
	White perch		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
13 212 1	RTEBRATE:							
(AC)	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	<u>-</u>							
R#			X X X X X X X X X X X X X X X X X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
R#	Blue crab		X X X X X X X X X X X X	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
R# 40	Eastern oyster		V V V V V V V V V V V V V V V V V V V	_	_			
R# 40	Eastern oyster Blue crab		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $	- JUN-SEP		MAY-NOV JUN-SEP		
R# 40 34	Eastern oyster		X X X X X X X X X X X X X X X X X X X		JUN-SEP	MAY-NOV JUN-SEP MAY-NOV	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD		0 B 0		Washins.	W :	W-1+i		
	Species	S F Conc.	J F M A M J J A S O N D	nesting	Migrating	_	-	
26	American woodcock Black-bellied plover		$f X \ X \ X \ X \ X \ X \ X \ X \ X \ X $	_	-	_		
	Dunlin			-	-	-		
	Greater yellowlegs Killdeer		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Least sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Lesser yellowlegs Pectoral sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_		
	Red knot		XXXXX	-	-	-		
	Ruddy turnstone Sanderling		$\begin{smallmatrix} & & \times & \times & \times & \times & \times \\ & \times & \times & \times & \times$	-	-	-		
	Semipalmated plover Semipalmated sandpiper		$\begin{smallmatrix} X&X&X&X&X&X&X&X\\ X&X&X&X&X&X&X&X&X&X&X&$	-	-	_		
	Short-billed dowitcher		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Stilt sandpiper Western sandpiper		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Whimbrel		XXXXXX	-	-	-		
	White-rumped sandpiper Willet		$\begin{array}{c} & \times \times \times \\ \times \times$	-	-	-		
28	Piping plover	T T HIGH	XXXXXXX	APR-SEP	-	-		
105 254	American oystercatcher American black duck	4 ADULTS VERY HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL -	_			
	Dabbling ducks	25,000-40,000		-	-	-		
	Mallard Northern pintail	VERY HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Snow goose	50000	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Tundra swan	HIGH	X X X X X X X X	_	_	_		
FISH RAR#	: Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eaas	Larvae	Juveniles	Adults
	<u>-</u>							
25	Crevalle jack Northern kingfish		$\begin{smallmatrix} X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&X&$	- MAY-AUG	-	-	JAN-DEC -	- APR-OCT
	Northern searobin		X X X X X X X X	-	-	-	-	MAR-OCT
	Pollock Red drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- JUL-NOV	-	-	_	DEC-APR MAY-NOV
	Red hake		XXXX XXX	-	-	-	FEB-MAY	FEB-MAY
	Sandbar shark		X X X X X X	_	_	_	MAY-OCT	SEP-NOV MAY-OCT
	Scup (porgy)		X X X X X X X X	-	-	-	JUN-OCT	MAR-OCT
	Silver hake Southern kingfish (whiting)		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-	-	OCT-MAY APR-OCT
	Spanish mackerel		X X	-	-	-	-	APR-MAY
	Spiny dogfish Spot		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	- DEC-APR	- MAR-NOV	NOV-APR MAR-NOV
	Spotted hake		X X X X	-	-	-	MAR-JUN	MAR-JUN
	Spotted seatrout		X	MAY-JUL	_	_	APR-NOV	SEP-NOV APR-NOV
	Summer flounder		$\times \times $	-	-	OCT-MAY	-	APR-OCT
	Tautog Weakfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG APR-AUG	_	- MAY-AUG	- APR-NOV	JAN-DEC APR-NOV
	Atlantic croaker		$\times \times $	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel Atlantic menhaden		$\begin{smallmatrix} X & X \\ X & X & X & X & X & X & X & X &$	_	_	-	- JAN-DEC	MAR-APR MAY-OCT
	Black drum		XXXXXXX	-	-	-	-	APR-OCT
	Black sea bass Bluefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUN-OCT -	_	-	APR-OCT MAY-NOV	APR-OCT APR-NOV
	Butterfish		XXXXXXXXX	-	-	-	JUL-NOV	MAR-NOV
HABI	TAT:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D					
27	Maritime dune scrub		$\times \times $					
	Native coastal strand vegetation Sea-beach knotweed		X X X X X X X X X X X X X X X X X X X					
	Southern beach spurge		X X X X X X X X X X X X X					
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
25	Blue crab		X X X X X X X X X X X X X			MAY-NOV	JAN-DEC	JAN-DEC
	Channeled whelk		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	-	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
	Harbor seal		x x x x	-	-	-	-	
25	Bottlenose dolphin Common dolphin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	_ _	
	Harbor porpoise		$X \ X \ X \ X \ X$		-	-	-	
	Harbor seal Humpback whale	E E	$f X \ X \ X \ X \ X \ X \ X \ X \ X \ X $		- JAN-DEC	-	-	
REPT	-							
	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internest	ing Juvenil	es Adults
	Green sea turtle	 тт	X X X X X X				MAY-NOV	
23		E E	X	-	-	-	MAY-NOV MAY-NOV	
	Leatherback sea turtle Loggerhead sea turtle	E E T T	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	- MAY-NOV	MAY-NOV MAY-NOV
	Diamondback terrapin		$\times \times $	- MAY-JUL	-	-	MAR-NOV	
	N IICE DECOIDCEC.		=======================================					
	N USE RESOURCES:							
	ONAL PARK:		-1		=-			
HUN# 	Name	Contac	;u 		Ph: 	one 		
125	ASSATEAGUE ISLAND NATIONAL SEASHO	DRE NATION	NAL PARK SERVICE		75	7/336-6577		
	TEE DEELCE.							

WILDLIFE REFUGE:

 HUN#
 Name
 Contact
 Phone

 147
 CHINCOTEAGUE ISLAND NWR
 U.S. FISH AND WILDLIFE SERVICE
 757/336-6122

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD RAR#	Species	S F Conc.	J F M A M J J A S O N D			Molting		
2.6	American woodcock		X X X X X X X		-		_	
	Black-bellied plover		$\times \times $	-	-	-		
	Dunlin Greater yellowlegs		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Killdeer Least sandpiper		$\begin{smallmatrix} & & \times & \times & \times \\ & \times & \times & \times & \times & \times & \times$	-	-	-		
	Lesser yellowlegs		$\times \times $	-	-	-		
	Pectoral sandpiper Red knot		$\begin{smallmatrix} & & \times & \times & \times & \times & \times \\ & \times & \times & \times & \times$	-	-	-		
	Ruddy turnstone Sanderling		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Semipalmated plover		$\times \times $	-	-	-		
	Semipalmated sandpiper Short-billed dowitcher		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Stilt sandpiper		XXXXXX	-	-	-		
	Western sandpiper Whimbrel		$\begin{array}{c} & \times $	-	-	-		
	White-rumped sandpiper Willet		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-		
	Piping plover	T T HIGH	X X X X X X X X	APR-SEP	-	-		
31	American black duck American wigeon	HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUL -	-	_		
	Brant Canada goose	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	– A PR – .TIIN	-	-		
	Gadwall	MODERATE	$\times \times $	APR-JUN	-	-		
	Green-winged teal Mallard	MODERATE MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY-JUL	-	-		
	Northern pintail	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-		
	Northern shoveler Snow goose	HIGH	X X X X X X X X X		-	_		
32	Bufflehead Common goldeneye	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_		
	Mergansers	HIGH	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Ruddy duck Scaup		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-		
33	Tundra swan Clapper rail	MODERATE HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- APR-AHG	-	-		
	King rail		$\times \times $	-	-	-		
	Sora Virginia rail		X X X	- APR-JUN	-	-		
	Whimbrel Willet	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- 7 DD _ CFD	-	-		
254	American black duck	VERY HIGH	X X X X X X X X X X X X X X X X X X X	APK=5EP -	-	-		
	Dabbling ducks Mallard	25,000-40,000 VERY HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-		
	Northern pintail	HIGH		-	-	-		
	Snow goose Tundra swan	50000 HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D			Larvae	Juveniles	Adults
25	Atlantic croaker		X X X X X X X X	-	-		AUG-DEC	MAY-NOV
	Atlantic mackerel Atlantic menhaden		$\begin{smallmatrix} & & \times & \times \\ & \times & \times & \times & \times & \times & \times \\ & & \times & \times$	-	-	-	- JAN-DEC	MAR-APR MAY-OCT
	Black drum		$X \ X \ X \ X \ X \ X \ X$	-	-	-	-	APR-OCT
	Black sea bass Bluefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUN-OCT -	-	-	APR-OCT MAY-NOV	APR-OCT APR-NOV
	Butterfish Crevalle jack		$\begin{smallmatrix} & & \times \\ & \times & \times$	_	-	-	JUL-NOV JAN-DEC	MAR-NOV
	Northern kingfish		X X X X X X X	MAY-AUG	-	-	-	APR-OCT
	Northern searobin Pollock		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-	_	MAR-OCT DEC-APR
	Red drum Red hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUL-NOV	-	- -	- FEB-MAY	MAY-NOV FEB-MAY
	red liake			_	_	_	red-Mai	SEP-NOV
	Sandbar shark Scup (porgy)		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	MAY-OCT JUN-OCT	MAY-OCT MAR-OCT
	Silver hake			-	-	-	-	OCT-MAY
	Southern kingfish (whiting) Spanish mackerel		X X X X X X X	-				APR-OCT
	Spiny dogfish		X X	-	-	- -	-	APR-MAY
	Snot		$X \ X \ X \ X$		- - -	-	-	APR-MAY NOV-APR
	Spott Spotted hake				- - - -	-		APR-MAY NOV-APR MAR-NOV MAR-JUN
			$\begin{array}{cccccccccccccccccccccccccccccccccccc$		- - - -	- DEC-APR	- MAR-NOV	APR-MAY NOV-APR MAR-NOV
	Spotted hake Spotted seatrout Summer flounder		X X X X X X X X X X X X X X X X X X X	- - MAY-JUL -	-	- DEC-APR - - OCT-MAY	- MAR-NOV MAR-JUN APR-NOV	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT
	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish			- - MAY-JUL - APR-AUG APR-AUG	- - -	- DEC-APR OCT-MAY - MAY-AUG	- MAR-NOV MAR-JUN APR-NOV - - APR-NOV	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV
30	Spotted hake Spotted seatrout Summer flounder Tautog			- MAY-JUL - APR-AUG APR-AUG	- - -	- DEC-APR OCT-MAY	- MAR-NOV MAR-JUN APR-NOV - -	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad			MAY-JUL - APR-AUG APR-AUG	- 0 - 0 - 1 - 1	- DEC-APR OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring			MAY-JUL - APR-AUG APR-AUG	- C	- DEC-APR - OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC MAY-DEC	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel			MAY-JUL - APR-AUG APR-AUG	- 0 - 0 - 1 - 1	- DEC-APR - OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC MAY-DEC -	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy			MAY-JUL APR-AUG APR-AUG	- C	- DEC-APR - OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-NOV JAN-DEC	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN FEB-JUN MAR-APR MAY-OCT JAN-DEC
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden			MAY-JUL APR-AUG APR-AUG	- C	- DEC-APR - OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-DEC MAY-NOV	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring			MAY-JUL APR-AUG APR-AUG	- () () () () () () () () () (DEC-APR OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-DEC APR-NOV JAN-DEC APR-SEP FEB-OCT	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack		X X X X X X X X X X X X X X X X X X X	MAY-JUL - APR-AUG APR-AUG APR-SEP	- 1 - 1 - 1	DEC-APR OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT -
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish		X X X X X X X X X X X X X X X X X X X	MAY-JUL - APR-AUG APR-AUG APR-SEP	- 1 - 1 - 1 - 1 	DEC-APR OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker			MAY-JUL APR-AUG APR-AUG APR-SEP APR-SEP - MAY-SEP	-	DEC-APR OCT-MAY - MAY-AUG APR-OCT	MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-SEP FEB-JUN MAY-OCT JAN-DEC FEB-JUN JAN-DEC
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows		X X X X X X X X X X X X X X X X X X X	MAY-JUL APR-AUG APR-AUG APR-SEP APR-SEP - MAY-SEP MAY-SEP APR-AUG	-	DEC-APR - OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT - JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog		X X X X X X X X X X X X X X X X X X X	MAY-JUL APR-AUG APR-AUG APR-SEP APR-SEP - MAY-SEP MAY-SEP APR-AUG	-	DEC-APR - OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT - JAN-DEC
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin		X X X X X X X X X X X X X X X X X X X	MAY-JUL APR-AUG APR-AUG APR-SEP - APR-SEP - MAY-SEP MAY-SEP MAR-SEP APR-AUG APR-AUG APR-AUG	-	DEC-APR OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC APR-OCT JAN-DEC
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum		X X X X X X X X X X X X X X X X X X X	MAY-JUL APR-AUG APR-AUG APR-SEP - APR-SEP - MAY-SEP MAY-SEP MAR-SEP APR-AUG APR-AUG APR-AUG	-	DEC-APR OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT - JAN-DEC
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock			MAY-JUL APR-AUG APR-AUG APR-SEP APR-SEP - MAY-SEP MAY-SEP APR-AUG APR-AUG APR-AUG APR-AUG	-	DEC-APR OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN - FEB-JUN MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC
30	Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake		X X X X X X X X X X X X X X X X X X X	MAY-JUL APR-AUG APR-AUG APR-SEP APR-SEP MAY-SEP MAY-SEP MAR-SEP APR-AUG APR-AUG APR-AUG APR-AUG APR-AUG	-	- DEC-APR - OCT-MAY - OCT-MAY - OCT-MAY - OCT -	MAR-NOV MAR-JUN APR-NOV APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-NOV JAN-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT - JAN-DEC JA
30	Spotted hake Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake		X X X X X X X X X X X X X X X X X X X	MAY-JUL APR-AUG APR-AUG APR-SEP APR-SEP MAY-SEP MAY-SEP MAR-SEP APR-AUG APR-AUG APR-AUG JUL-NOV	-	DEC-APR OCT-MAY - MAY-AUG	MAR-NOV MAR-JUN APR-NOV APR-NOV APR-NOV JAN-DEC MAY-DEC MAY-DEC APR-SEP FEB-OCT MAY-OCT JAN-DEC	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC
30	Spotted seatrout Summer flounder Tautog Weakfish Alewife American eel American shad Atlantic croaker Atlantic herring Atlantic mackerel Atlantic menhaden Bay anchovy Black drum Black sea bass Blueback herring Bluefish Crevalle jack Gobies Hickory shad Hogchoker Killifish Minnows Mummichog Northern pipefish Northern searobin Pollock Red drum Red hake		X X X X X X X X X X X X X X X X X X X	MAY-JUL APR-AUG APR-AUG APR-SEP APR-SEP MAY-SEP MAY-SEP MAY-SEP APR-AUG		- DEC-APR	- MAR-NOV MAR-JUN APR-NOV	APR-MAY NOV-APR MAR-NOV MAR-JUN SEP-NOV APR-OCT JAN-DEC APR-NOV FEB-JUN - FEB-JUN MAR-APR MAY-OCT JAN-DEC APR-OCT APR-SEP FEB-JUN MAY-OCT JAN-DEC JAN-

Virginia: ESIMAP 101 (cont.)

BIOLOGICAL RESOURCES: (cont.)

RAR# S	(cont.) pecies	S F Conc.	JF	ма	м Ј	JA	s	O N D	Spawning	Eggs	Larvae	Juv	veniles	Adults
 30 St	oanish mackerel			 X	 x									APR-MAY
_	oot				XX	ХХ	XX	X	_	_	_	APF	R-OCT	JUL-SEP
_	potted hake		ХХ	ХХ			>	XXX	-	-	-	OCI	Γ-APR	-
_	potted seatrout				ХХ				MAY-JUL	-	-		R-NOV	APR-NOV
	criped anchovy				XX				APR-SEP -	-	-		R-NOV	APR-NOV
	ummer flounder autog		x x	XX	ХХ	X X		x x x x x	_	_	_		R-NOV -	APR-NOV OCT-APR
	eakfish		21 21	XX		ХХ			APR-AUG	_	_		R-OCT	APR-OCT
Wl	nite hake			ХХ	Χ		ХΣ	X X	-	-	-		-	MAR-MAY
_														SEP-NOV
	nite perch inter flounder			XX			ХΣ	X X X	APR-JUN -	APR-JUN -	APR-JUN -		N-DEC C-JUL	JAN-DEC DEC-MAY
			ΛΛ	ΛΛ	ΛΛ	Λ		Λ				DEC	2 001	DEC MAI
IABITA AR#S1	or: pecies	S F Conc.	JF	ма	мј	JA	sc	O N D						
	aritime dune scrub							X X X						
	ative coastal strand vegetation							XXX						
	ea-beach knotweed outhern beach spurge							X X X X X X X X X X X X X X X X X X X						
	EBRATE:													
	pecies	S F Conc.	JF	ма	м Ј	JA	s	O N D	Spawning	Eggs	Larvae	Jus	veniles	Adults
25 B	lue crab		 x x	 X X	 X X	 X X		 x x x			MAY-NOV		N-DEC	JAN-DEC
	nanneled whelk							XXX	_	-	_		N-DEC	JAN-DEC
	lue crab							XXX	-	MAY-SEP	MAY-NOV		N-DEC	JAN-DEC
	nanneled whelk							XXX	- MANY 000	- MAN 000	- -		N-DEC	JAN-DEC
	orthern quahog (hard clam)		ХХ	ХХ	ХХ	ХХ	. X. 2	XXX	MAY-OCT	MAY-OCT	MAY-OCT	JAI	N-DEC	JAN-DEC
	MAMMAL: Decies	S F Conc.	ят.	ма	м.т	.т а	s c	ח זא כ	Mating	Calving	Pupping	Mol	Lting	
	·													
	arbor seal		ХХ		ХХ	vv		XXX	_	-	_		_	
	ottlenose dolphin ommon dolphin				XX				_	_	_		_	
	arbor porpoise		ХХ	ХХ				X	_	_	_		_	
На	arbor seal		XX				Σ	XXX	-	-	-		-	
	umpback whale	E E	XX					XXX	-	JAN-DEC	-		-	
	ottlenose dolphin arbor porpoise		vv	X X X	XX			X X	_	-	_		-	
	arbor seal		XX		Λ			XXX	-	-	_		_	
REPTIL	E:													
AR# S	pecies	S F Conc.	JF	ма	мј	JA	s	оио	Nesting	Hatching	Internest	ing	Juvenile	es Adult
	reen sea turtle emp's ridley sea turtle	T T E E						X X X X	_	_	_		MAY-NOV MAY-NOV	
	eatherback sea turtle	E E			XX				_	_	_		-	MAY-N
	oggerhead sea turtle	т т						XX	-	-	-		MAY-NOV	MAY-N
	iamondback terrapin							X X		-	-		MAR-NOV	MAR-N
	reen sea turtle	TT						XX	-	-	-		MAY-NOV	- MAY N
	emp's ridley sea turtle eatherback sea turtle	E E E E						X X X X	_	_	_		MAY-NOV -	MAY-N MAY-N
	oggerhead sea turtle	ТТ						XX	-	-	_		MAY-NOV	MAY-N
	iamondback terrapin	VERY HIGH						X X	-	-	-		MAR-NOV	MAR-N
576 Lo	oggerhead sea turtle	ТТ			ХХ	ХХ	ХΣ	X X	MAY-NOV	-	-		-	MAY-N
ERRES!	TRIAL MAMMAL:													
AR# S	pecies	S F Conc.	J F	M A	М J	J A	. s c	D N D						
	orthern river otter		ХХ	ХХ	ХХ	ХХ	ХΣ	X X X						
	USE RESOURCES:			===	===	===	===		======	=====		===	======	======
ATION	AL PARK:													
IUN#	Name	Contact	t								hone			
125	ASSATEAGUE ISLAND NATIONAL SEASHOR	E NATIONA	מוס דע	יום א	DT/T	T.				-	57/336-657	7		

WILDI	IFE REFUGE:		
HUN#	Name	Contact	Phone

1101411	Name	Contact	THORE
147	CHINCOTEAGUE ISLAND NWR	U.S. FISH AND WILDLIFE SERVICE	757/336-6122

BIOLOGICAL RESOURCES:

D	TI	DT	`	
ь		C.	_	•

BIRD											
RAR#	Species	S F Conc.	J I	? M A M	ЈЈА S 	OND	Nesting	Migrating	Molting	_	
31	American black duck	HIGH	ХΣ	XXXX	хххх	X X X	MAR-JUL	-	-		
	American wigeon	MODERATE		XXX		XXX		-	_		
	Brant Canada goose	HIGH HIGH		X	x	XXX	- APR-JUN	_	_		
	Gadwall	MODERATE					APR-JUN	-	_		
	Green-winged teal	MODERATE		XXX		X X X	-	-	-		
	Mallard	MODERATE			XXXX	XXXX	MAY-JUL -	_	_		
	Northern pintail Northern shoveler	MODERATE		X X X X X X X X X X X X X X X X X X X		XXX		_	_		
	Snow goose	HIGH		XXX		XXX		-	-		
32	Bufflehead	HIGH		X X X		X X X		-	-		
	Common goldeneye Mergansers	HIGH		X		X X X X X X X X X X X X X X X X X X X		_	_		
	Ruddy duck	nign		XXX		XXX		_	_		
	Scaup		ΧΣ	XXX		X X X	-	_	_		
2.2	Tundra swan	MODERATE		XXX	17 17 17 1	XXX	-	-	_		
33	Clapper rail King rail	HIGH		x			APR-AUG -	_	_		
	Sora		11 1	XXX		XXX	-	-	_		
	Virginia rail		ХΣ				APR-JUN	-	-		
	Whimbrel Willet	HIGH	V	XXX	XX		- ADD CED	-	-		
	WIIIet	HIGH	Α 2		X	. x x x	APR-SEP	_	_		
FISH	:										
RAR#	Species	S F Conc.		F M A M	JJAS	OND	Spawning		Larvae	Juveniles	
	-1										
30	Alewife American eel			X X X X X X X X X X X X X X X X X X X		(-	_	_	- JAN-DEC	FEB-JUN -
	American shad			XXXX			-	-	-	-	FEB-JUN
	Atlantic croaker			X	хххх	X X X	-	-	-	MAY-DEC	-
	Atlantic herring		Σ	XXXX	X		-	-	-	-	FEB-JUN
	Atlantic mackerel Atlantic menhaden			X X	XXXX	X X X	-	_	-	- MAY-NOV	MAR-APR MAY-OCT
	Bay anchovy		X X				APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum				X X X X		-	-	-	-	APR-OCT
	Black sea bass		•		XXXX		-	-	- EED TIIN	APR-SEP	APR-SEP
	Blueback herring Bluefish		2	XXXX	x		_	_	FEB-JUN -	FEB-OCT MAY-OCT	FEB-JUN MAY-OCT
	Crevalle jack		ΧZ	XXXX			-	-	-	JAN-DEC	-
	Gobies					X X X	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Hickory shad			XXXX		, ,, ,, ,,	- MAY CED	- MAN CED	- MAY CED	- TAN DEC	FEB-JUN
	Hogchoker Killifish						MAY-SEP MAR-SEP	MAY-SEP -	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows						APR-AUG	_	-	JAN-DEC	JAN-DEC
	Mummichog		ХΣ	XXXX	хххх	X X X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern pipefish		ХΣ	XXXX		X X X	-	-	-	JAN-DEC	JAN-DEC
	Northern searobin Pollock		ν,	XXX	XXX	Х	_	_	_	JUN-AUG -	JUN-AUG DEC-APR
	Red drum		Α 2		хххх	XXX	JUL-NOV	_	_	AUG-SEP	MAY-NOV
	Red hake		Σ	X X X X	Σ	X X 2	-	-	-	FEB-MAY	FEB-MAY
	_ ,, ,										SEP-NOV
	Sandbar shark Scup (porgy)				X X X X X X X X X X X X X X X X X X X		_	-	_	MAY-OCT JUN-OCT	MAY-OCT MAR-OCT
	Silver hake		X X	XXXX		XXX	_	_	_	-	OCT-MAY
	Silver perch							APR-MAY	APR-JUN	JAN-DEC	JAN-DEC
	Silversides		ХΣ			X X X	MAR-JUL			JAN-DEC	JAN-DEC
	Spanish mackerel Spot			XX	XXXX	, v	-	-	-	- APR-OCT	APR-MAY JUL-SEP
	Spotted hake		ΧХ	XXX		XXX	_	_	_	OCT-APR	- -
	Spotted seatrout						MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped anchovy					XXX		-		APR-NOV	APR-NOV
	Summer flounder		V	X X X		X X X	-	-		APR-NOV	APR-NOV
	Tautog Weakfish		Λ 2			XX		-	_	MAR-OCT	OCT-APR APR-OCT
	White hake) / / / / · · · · · · · · · · · · · · ·		-		-	-	MAR-MAY
											SEP-NOV
	White perch							APR-JUN -	APR-JUN -		JAN-DEC
	Winter flounder		XΣ	. A A X	A A	X	-	-	-	DEC-JUL	DEC-MAY
NVE	RTEBRATE:										
	Species	S F Conc.					Spawning		Larvae	Juveniles	
30	Blue crab							MAY-SEP	MAY-NOV	JAN-DEC	JAN-DEC
30	Channeled whelk			X X X X X X X X X X X X X X X X X X X				MAY-SEP -	MAY-NOV -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern quahog (hard clam)								MAY-OCT		JAN-DEC
//2 D T '	NE MAMMAL:										
		C E Con-	<u>.</u> .	C 14 2 2	T T T T		Mati	Co.1	D.,	Mo1+:	
AR#	Species	S F Conc.	J I	: M A M	о J A S	, U N D	Mating	Calving	Pupping	Molting	
	Bottlenose dolphin				XXXX		-	_	-	_	
	Harbor porpoise			X X X X		X		-	-	-	
	Harbor seal		ХΣ	X		X X X	-	-	-	-	
REPT	ILE:										
	Species	S F Conc.	J 1	FMAM	JJAS	SOND	Nestina	Hatching	Internest	ing Juveni	les Adults
30	Green sea turtle	T T			XXXX		-	-	-	MAY-NO	
	Kemp's ridley sea turtle					XXX		-	-	MAY-NO	
	Leatherback sea turtle	E E T T				X X X X X X		_	_	- MAY-NO	
	Loggerhead sea turtle	T T									
33	Loggerhead sea turtle Diamondback terrapin					X X .	-	-	-	MAR-NO	V MAR-NO

BIRD	•							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
3.8	American black duck		X X X X X X X X X	_	_	_		
50	American coot		X X X X X X X X X		_	_		
			X X X X X X X X X					
	American wigeon	MODEDAME			_	_		
	Bufflehead	MODERATE	X X X X X X X X		_	_		
	Canada goose	HIGH	XXXX		-	-		
	Gadwall		XXXX		-	_		
	Mallard	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	_		
	Mergansers	MODERATE	X X X X X X X X	_	-	-		
ISH	:							
AR#	Species	S F Conc.	JFMAMJJASOND	Spawning	Eggs	Larvae	Juveniles	Adults
36	Alewife		$x \times x \times x$	-	-	-	-	FEB-JUN
	American eel		X X X X X X X X X X X X X X X X X X X	-	-	-	JAN-DEC	-
	American shad		X X X X X	-	-	-	-	FEB-JUN
	Atlantic croaker		X	_	-	-	JAN-DEC	MAY-NOV
	Atlantic menhaden		XXXXXX	_	_		MAY-NOV	MAY-OCT
		C		_				
	Atlantic sturgeon	С	X X X X X X X X X X X X X X X X X X X		_		JAN-DEC	APR-NOV
	Banded killifish		X X X X X X X X X X X X X X X X X X X		-		JAN-DEC	JAN-DEC
	Bay anchovy		X X X X X X X X X X X X X X X X X X X	APR-SEP	-		JAN-DEC	JAN-DEC
	Black drum		X X X X X X X X	-	-	-	APR-NOV	APR-NOV
	Black sea bass		X X X X X X	_	_	_	APR-SEP	APR-SEP
	Blueback herring		XXXXX	_	_	_	-	FEB-JUN
				_	_	-		
	Bluefish		X X X X X X X X	_	-		JUL-NOV	APR-NOV
	Gizzard shad		X X X X X X X X X X X X X X X X X X X	_	-	-	JAN-DEC	JAN-DEC
	Gobies		X X X X X X X X X X X X	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	_	_	_	JUL-OCT	APR-OCT
	Hickory shad		XXXXX	_	_	_	_	FEB-JUN
	<u> </u>				MAY-SEP			
	Hogchoker		X X X X X X X X X X X X X X X X X X X		MAY-SEP		JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X X X X X X X	APR-AUG	-		JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X X X X X X X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern pipefish		imes ime	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	_	-	MAR-OCT	MAR-OCT
	Northern searobin		$X \times X \times X \times X \times X$	_	_	_	_	MAR-OCT
	Red drum		X X X X X X X	-	-		AUG-SEP	MAY-NOV
	Shortnose sturgeon		X X X X X X X X X X X X X X X X X X X	_	-	-	JAN-DEC	JAN-DEC
	Silver perch		X X X X X X X X X X X X X X X X X X X	_	-	-	JAN-DEC	JAN-DEC
	Silversides		imes ime	MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
	Spot		x		_	DEC-APR	MAR-NOV	JAN-DEC
	Spotted seatrout							
	-		X X X X X X X X	_	_		APR-NOV	APR-NOV
	Striped bass		X X X X X X X X X X	-	-		MAY-OCT	FEB-JUN
	Striped killifish		X X X X X X X X X X X X X X X X X X X	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder		X X X X X X X X	-	-	_	APR-NOV	APR-NOV
	Weakfish		x x x x x x x x x x x x	_	_	_	AUG-NOV	JAN-DEC
	White perch		X X X X X X X X X X X X X		_	_	-	JAN-DEC
			X X X X X X X X X X X X X X X X X X X		FEB-MAY			
	Winter flounder		* * * * * * * * * * * * * * * * * * * *	F.E.B-MAI	FEB-MAY	MAR-MAY	MAR-NOV	NOV-MAY
	RTEBRATE:				_	_		
AR# 	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs 	Larvae	Juveniles	Adults
3.5	Blue crab		x x x x x x x x x x x x x	_	_	MAY-NOV	JAN-DEC	JAN-DEC
36	Eastern oyster		X		JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
	NE MAMMAL:							
	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
	Bottlenose dolphin Harbor porpoise		X X X X X X X X X	- -	-	-	-	
	ILE:							
AR# 	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesti	ng Juvenil	es Adults
39	Green sea turtle	ТТ	X X X X X X X	_	_	_	MAY-NOV	_
00				_	_	_		
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	
			77 77 77 77 77 77 77					
	Leatherback sea turtle Loggerhead sea turtle	E E T T	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	- MAY-NOV	MAY-NC

ъ	TDD	
\mathbf{D}	$_{\rm LKD}$	

BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
38	American black duck		x x x x x x x x	_	_	_		
	American coot		X X X X X X X X		_	_		
	American wigeon		X X X X X X X X		_	_		
	Bufflehead	MODERATE	X X X X X X X X		_	_		
	Canada goose	HIGH	X X X X X X X X		_	_		
	Gadwall		X X X X X X X X		_	_		
	Mallard	MODERATE	X X X X X X X X		_	_		
	Mergansers	MODERATE	X X X X X X X X		_	_		
FISH	-							
		S F Conc.	TEMANTTACOND	Con a som i m a	E	Larvae	Juveniles	Adults
	Species	5 F Conc.	J F M A M J J A S O N D		Eggs			Addits
36	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel		imes ime	-	-	_	JAN-DEC	-
	American shad		X X X X X	_	_	_	_	FEB-JUN
	Atlantic croaker		imes ime	_	_	_	JAN-DEC	MAY-NOV
	Atlantic menhaden		X X X X X X X	_	_	_	MAY-NOV	MAY-OCT
	Atlantic sturgeon	С	\times	_	_		JAN-DEC	APR-NOV
	Banded killifish	<u> </u>	\times		_		JAN-DEC	JAN-DEC
			X X X X X X X X X X X X X				JAN-DEC	
	Bay anchovy			APK-SEP	_			JAN-DEC
	Black drum		X X X X X X X X	-	_		APR-NOV	APR-NOV
	Black sea bass		X X X X X X	-	-	-	APR-SEP	APR-SEP
	Blueback herring		X X X X X	-	-	-	-	FEB-JUN
	Bluefish		X X X X X X X X	-	-	-	JUL-NOV	APR-NOV
	Gizzard shad		imes ime	-	-	-	JAN-DEC	JAN-DEC
	Gobies		imes ime	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	_	JUL-OCT	APR-OCT
	Hickory shad		X X X X X	_	_	_	_	FEB-JUN
	Hogchoker		\times	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X		-		JAN-DEC	JAN-DEC
	Mummichog						JAN-DEC	
	3		X X X X X X X X X X X X X X X X X X X		_			JAN-DEC
	Northern pipefish		X X X X X X X X X X X X X		-		JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	-		MAR-OCT	MAR-OCT
	Northern searobin		X X X X X X X X	-	-	-	-	MAR-OCT
	Red drum		X X X X X X X	-	-		AUG-SEP	MAY-NOV
	Shortnose sturgeon		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JAN-DEC	JAN-DEC
	Silver perch		imes ime	-	-	-	JAN-DEC	JAN-DEC
	Silversides		imes ime	MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
	Spot		X	_	_	DEC-APR	MAR-NOV	JAN-DEC
	Spotted seatrout		X X X X X X X X	_	_		APR-NOV	APR-NOV
	Striped bass		\times \times \times \times \times \times \times \times	_	_		MAY-OCT	FEB-JUN
	Striped killifish		X X X X X X X X X X X X X		_		JAN-DEC	JAN-DEC
	Summer flounder			AFK-SEF			APR-NOV	
			X X X X X X X X	-	_			APR-NOV
	Weakfish		X X X X X X X X X X X X X	-	-		AUG-NOV	JAN-DEC
	White perch		X X X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Winter flounder		X X X X X X X X X X X X X	FEB-MAY	FEB-MAY	MAR-MAY	MAR-NOV	NOV-MAY
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Blue crab		$\times \times $		-		JAN-DEC	JAN-DEC
36	Eastern oyster		x x x x x x x x x x x x x	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
MARI	NE MAMMAL:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting	
37	Bottlenose dolphin							
57	Harbor porpoise		XXXXXXXXXX	-	-	-	-	
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesti	ng Juvenile	es Adults
39	Green sea turtle	тт	X X X X X X X	-	-		MAY-NOV	-
	Kemp's ridley sea turtle	E E	XXXXXXX	_	_	_	MAY-NOV	_
	= = = = = = = = = = = = = = = = = = = =	E E	X	-	_	_	MAI-NOV	MAY-NOV
	Leatherhack sea turtle						_	1-TVT _ INO A
	Leatherback sea turtle Loggerhead sea turtle	ТТ	XXXXXXX	_	_	_	MAY-NOV	_

RAR#	Species	S F Conc.	J F M A M J J A S O N D		Migrating	Molting	ı	
38	American black duck		X X X X X X X X X X X X X X X X X X X				· -	
	American coot		X X X X X X X X		_	_		
	American wigeon		X X X X X X X X	_	_	_		
	Bufflehead	MODERATE	X X X X X X X X		_	_		
	Canada goose	HIGH		_	_	_		
	Gadwall		X X X X X X X X	-	-	_		
	Mallard	MODERATE	X X X X X X X X	_	-	_		
	Mergansers	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	_		
rish	•							
_	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
36	Striped bass		X X X X X X X X X	-	-	-	MAY-OCT	FEB-JUN
	Striped killifish		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Summer flounder		X X X X X X X X	-	-	-	APR-NOV	APR-NOV
	Weakfish		X X X X X X X X X X X X X X X X X X X		-	-	AUG-NOV	JAN-DEC
	White perch		X X X X X X X X X X X X X X X X X X X			-	-	JAN-DEC
	Winter flounder		X X X X X X X X X X X X X X X X X X X	FEB-MAY		MAR-MAY	MAR-NOV	NOV-MAY
	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel		X X X X X X X X X X X X X X X X X X X	-	-	-	JAN-DEC	-
	American shad		X X X X X	-	_	-	_	FEB-JUN
	Atlantic croaker		X X X X X X X X X X X X X X X X X X X	_	-	-	JAN-DEC	MAY-NOV
	Atlantic menhaden	_	X X X X X X X	_	-	-	MAY-NOV	MAY-OCT
	Atlantic sturgeon	С	X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	APR-NOV
	Banded killifish		X X X X X X X X X X X X X X X X X X X		-		JAN-DEC	JAN-DEC
	Bay anchovy		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Black drum		X X X X X X X X	-	-	-	APR-NOV	APR-NOV
	Black sea bass		X X X X X X	_	-		APR-SEP	APR-SEP
	Blueback herring		XXXXX	_	-	-	_	FEB-JUN
	Bluefish		X X X X X X X X	_	-	_	JUL-NOV	APR-NOV
	Gizzard shad		X X X X X X X X X X X X X X X X X X X				JAN-DEC	JAN-DEC
	Gobies		X X X X X X X X X X X X X X X X X X X			APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	_	_	JUL-OCT	APR-OCT
	Hickory shad		X X X X X	-			-	FEB-JUN
	Hogchoker		X X X X X X X X X X X X X X X X X X X			MAY-SEP	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Northern pipefish		X X X X X X X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
	Northern puffer		X	MAY-AUG	-	_	MAR-OCT	MAR-OCT
	Northern searobin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	-	MAR-OCT
	Red drum		X X X X X X X X X X X X X X X X X X X	-	-	_	AUG-SEP	MAY-NOV
	Shortnose sturgeon				_	_	JAN-DEC	JAN-DEC
	Silver perch		X X X X X X X X X X X X X X X X X X X		— MAD TIIT		JAN-DEC	JAN-DEC
	Silversides		X X X X X X X X X X X X X X X X X X X			APR-SEP	JAN-DEC	JAN-DEC
	Spot		X	-	-	DEC-APR	MAR-NOV	JAN-DEC
	Spotted seatrout		$X\;X\;X\;X\;X\;X\;X$	_	_	_	APR-NOV	APR-NOV
	RTEBRATE:	0.7.0			-			
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning		Larvae	Juveniles	Adults
35	Blue crab		imes ime	-	-	MAY-NOV	JAN-DEC	JAN-DEC
2.0	Eastern oyster		imes ime	TIIM_CFD	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC

BIOLOGICAL RESOURCES:

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RAR#	: Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
							=	
	Bald eagle American black duck	T T HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_		
	American wigeon				-	-		
	Canada goose Gadwall	VERY HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_		
	Green-winged teal	HIGH		-	-	-		
	Mallard Northern pintail	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		
44	Bufflehead	HIGH	X X X X X X X X X		-	-		
	Canvasback	HIGH	X X X X X X X X X		-	-		
	Common goldeneye Long-tailed duck	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		
	Mergansers	HIGH	X X X X X X X X X		-	-		
	Ring-necked duck Ruddy duck	VERY HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Tundra swan	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$		-	-		
45	Bald eagle Common moorhen	T T C	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Great blue heron	-	XXXX	-	-	-		
	Greater yellowlegs Green heron		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	-		
	King rail		XXXX	-	-	-		
	Least bittern Marsh wren		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Osprey		XXXXXX	MAR-AUG	-	-		
	Sora		XXXX	-	-	-		
	Swamp sparrow Virginia rail		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
4.6	Wood duck	MDDA MICH	$\times \times $		-	-		
	Canada goose American black duck	VERY HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_		
	American wigeon		$\times \times $		-	-		
	Canada goose Gadwall	VERY HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_		
	Green-winged teal	MODERATE	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Mallard Northern pintail	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
49	Canada goose	VERY HIGH	X X X X X X X X	-	-	-		
160	Tundra swan Great blue heron	HIGH 50 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAY TIIT	-	-		
	Great blue heron	45 NESTS	X X X X X X X X X X X X X X X X X X X		_	-		
519	Great blue heron	61 NESTS	x x x x x x x x x x x x x	MAY-JUL	-	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
40	Alewife		$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American shad Atlantic menhaden		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	FEB-JUN -	FEB-JUN -	FEB-OCT MAY-NOV	FEB-JUN -
	Atlantic silverside		$\times \times $	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Banded killifish		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Bay anchovy Black crappie		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Blue catfish Blueback herring		X X X X X X X X X X X X X	APR-JUN -	- FEB-JUN	- FEB-JUN	JAN-DEC	JAN-DEC
	Channel catfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		- -	-	FEB-OCT JAN-DEC	FEB-JUN JAN-DEC
	Hickory shad		X X X X X X X X X	- MAY CED	FEB-JUN MAY-SEP	FEB-JUN MAY-SEP	FEB-OCT	FEB-JUN
	Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X		- -	- -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Largemouth bass		$\times \times $		-	-	-	JAN-DEC
	Longnose gar Minnows		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		X X X X X X X X X X X X X				JAN-DEC	JAN-DEC
	Striped bass Tessellated darter		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FEB-JUN APR-JUN	FEB-JUN -	FEB-JUN -	FEB-OCT -	FEB-JUN JAN-DEC
	White catfish		$\times \times $	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	White perch Yellow perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		APR-JUN -	APR-JUN -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
41	Alewife		$\times \times $	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American shad Atlantic menhaden		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	FEB-JUN -	FEB-JUN -	FEB-OCT MAY-NOV	FEB-JUN -
	Banded killifish		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Black crappie Blue catfish		X X X X X X X X X X X X X X X X X X X		-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Blueback herring		$\times \times $	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill Channel catfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	-	- JAN-DEC	JAN-DEC JAN-DEC
	Hickory shad		X X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker Inland silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		MAY-SEP -	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Largemouth bass		X X X X X X X X X X X X X		-	-	-	JAN-DEC
	Longnose gar Minnows		X X X X X X X X X X X X X		-	-	JAN-DEC JAN-DEC	JAN-DEC
	Pumpkinseed		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC	JAN-DEC JAN-DEC
	Redbreast sunfish		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Striped bass Tessellated darter		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FEB-JUN APR-JUN	FEB-JUN -	FEB-JUN -	FEB-OCT -	FEB-JUN JAN-DEC
	White catfish		$\times \times $	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	White perch Yellow perch		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		APR-JUN -	APR-JUN -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
40	Blue crab Eastern oyster		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $	- JUN-SEP	- JUN-SEP	MAY-NOV JUN-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Blue crab		$X\ X\ X$	-	- TIIN 085	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		X X X X X X X X X X X X X		JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
160	RAPPAHANNOCK RIVER VALLEY NWR	U.S. FISH AND WILDLIFE SERVICE	804/333-1470

BIOLOGICAL RESOURCES:

BIRD:

BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	_	Migrating	Molting	i 	
42	Bald eagle	T T HIGH	x x x x x x x x x	-	-	_	· -	
43	American black duck	HIGH	$X \ X \ X \ X$	-	-	-		
	American wigeon		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		
	Canada goose	VERY HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Gadwall	117.011	X X X X X X X X	_	_	_		
	Green-winged teal	HIGH HIGH	X X X X X X X X X	_	-	_		
	Mallard Northern pintail	nign	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
44	Bufflehead	HIGH	X X X X X X X X	_	_	_		
7.7	Canvasback	HIGH	X X X X X X X X X	_	_	_		
	Common goldeneye		X X X X X X X X		_	_		
	Long-tailed duck	MODERATE	X X X X X X X X X	_	_	_		
	Mergansers	HIGH	X X X X X X X X X	-	-	-		
	Ring-necked duck	VERY HIGH	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Ruddy duck	HIGH	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		
	Tundra swan	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
45	Bald eagle	ТТ	X X X X	-	-	-		
	Common moorhen	С	XXXX	_	_	_		
	Great blue heron Greater yellowlegs		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_			
	Greater yellowlegs Green heron		X X X X X X X X	_	_	-		
	King rail		XXXX	_	_	_		
	Least bittern		XXXX	_	_	_		
	Marsh wren		XXXX	_	_	_		
	Osprey		X X X X X X	MAR-AUG	_	_		
	Sora		X X X X	-	-	-		
	Swamp sparrow		X X X X	-	-	-		
	Virginia rail		X X X X	-	-	-		
	Wood duck		X X X X X X X X X X X X X		-	-		
	Canada goose	VERY HIGH	X X X X X X X X		-	-		
49	Canada goose	VERY HIGH	X X X X X X X X		-	_		
205	Tundra swan Great blue heron	HIGH	X X X X X X X X X X X X X X X X X X X	— MAN TIT	_	_		
439	Great blue heron	12 NESTS 8 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Great blue heron	42 NESTS	X X X X X X X X X X X X X X X X X X X		-	-		
FISH	:							
_		S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
41	Alewife		X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American shad		X X X X X X X X X	-	FEB-JUN -	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden Banded killifish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- ADD CED	_	-	MAY-NOV JAN-DEC	- JAN-DEC
	Black crappie		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Blue catfish		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Blueback herring		XXXXXXXXX	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		\times	APR-SEP	-	-	_	JAN-DEC
	Channel catfish		imes ime		-	-	JAN-DEC	JAN-DEC
	Hickory shad		X X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		$\times \times $	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		$\times \times $	APR-MAY	-		JAN-DEC	JAN-DEC
	Largemouth bass		$\times \times $		-	-	-	JAN-DEC
	Longnose gar		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Pumpkinseed		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Redbreast sunfish Striped bass		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		- FFR - TIM	- FEB-JUN	JAN-DEC FEB-OCT	JAN-DEC FEB-JUN
	Tessellated darter		X X X X X X X X X X X X X X X X X X X	FEB-JUN APR-JUN	FEB-JUN -	FEB-JUN	- FEB-OCT	JAN-DEC
	White catfish		$X \times X \times$		_	_	JAN-DEC	JAN-DEC
	White perch		$X \times X \times X \times X \times X \times X \times X \times X$		APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Yellow perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC	JAN-DEC
	RTEBRATE:							
INVE								
	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
RAR#				Spawning				
RAR# 41	=			-		Larvae MAY-NOV JUN-SEP		

HUMAN USE RESOURCES:

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
160	RAPPAHANNOCK RIVER VALLEY NWR	U.S. FISH AND WILDLIFE SERVICE	804/333-1470

BIOLOGICAL RESOURCES:

FISH:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
36	Alewife		X X X X X	-	-	-		FEB-JUN
	American eel		$\times \times $	_	-	_	JAN-DEC	_
	American shad		X X X X X	-	_	_	-	FEB-JUN
	Atlantic croaker		$\times \times $	_	_	_	JAN-DEC	MAY-NOV
	Atlantic menhaden		X X X X X X X	_	_	_	MAY-NOV	MAY-OCT
	Atlantic sturgeon	С		-	-	-	JAN-DEC	APR-NOV
	Banded killifish			APR-SEP	-	-	JAN-DEC	JAN-DEC
	Bay anchovy			APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum		X X X X X X X X	-	-	-	APR-NOV	APR-NOV
	Black sea bass		X X X X X X	-	-	-	APR-SEP	APR-SEP
	Blueback herring		X X X X X	-	-	-	-	FEB-JUN
	Bluefish			-	-	-	JUL-NOV	APR-NOV
	Gizzard shad			-	-	-	JAN-DEC	JAN-DEC
	Gobies		$\times \times $	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad		X X X X X	-	-	-	-	FEB-JUN
	Hogchoker		$\times \times $	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Minnows		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern pipefish		$\times \times $	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer		$X \ X \ X \ X \ X \ X \ X$	MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin		X X X X X X X X	-	-	-	-	MAR-OCT
	Red drum		X X X X X X	-	-	-	AUG-SEP	MAY-NOV
	Shortnose sturgeon		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Silver perch		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	-	JAN-DEC	JAN-DEC
	Silversides		$\times \times $	MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
	Spot		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	DEC-APR	MAR-NOV	JAN-DEC
	Spotted seatrout		X X X X X X X X	-	-	-	APR-NOV	APR-NOV
	Striped bass		X X X X X X X X X	-	-	-	MAY-OCT	FEB-JUN
	Striped killifish		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder		X X X X X X X X	-	-	-	APR-NOV	APR-NOV
	Weakfish		$\times \times $	-	-	-	AUG-NOV	JAN-DEC
	White perch			-	-	-	-	JAN-DEC
	Winter flounder		$\times \times $	FEB-MAY	FEB-MAY	MAR-MAY	MAR-NOV	NOV-MAY
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
35	Blue crab		X X X X X X X X X X X X X		-	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster		$\times \times $		JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	JFMAMJ	JASOND	Nesting	Migrating	Molting
38	American black duck		X X X X	X X X	-		-
	American coot		X X X X	X X X	-	-	-
	American wigeon		X X X X	X X X	_	_	-
	Bufflehead	MODERATE	$X \ X \ X \ X$	X X X	-	-	-
	Canada goose	HIGH	$X \ X \ X \ X$	X X X	-	-	-
	Gadwall		$X \ X \ X \ X$	X X X	-	-	-
	Mallard	MODERATE	$X \ X \ X \ X$	X X X	-	-	-
	Mergansers	MODERATE	X X X X	X X X	_	_	-
50	Bufflehead	MODERATE	X X X X	X X X	_	_	-
	Canvasback	HIGH	$X \ X \ X \ X$	X X X	-	-	-
	Common goldeneye		$X \ X \ X \ X$	X X X	-	-	-
	Mergansers	MODERATE	$X \ X \ X \ X$	X X X	-	-	-
	Mute swan		X X X X	XXX	_	_	_
	Ruddy duck	MODERATE	$X \ X \ X \ X$	X X X	-	-	-
	Scaup	HIGH	X X X X	XXX	_	_	_
	Scoters	MODERATE	X X X X	X X X	_	_	-
	Tundra swan	HIGH	X X X X	X X X	_	_	-

FISH:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
36	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel		$\times \times $	-	-	-	JAN-DEC	-
	American shad		X X X X X	-	-	-	-	FEB-JUN
	Atlantic croaker		$\times \times $	-	-	-	JAN-DEC	MAY-NOV
	Atlantic menhaden		X X X X X X X	-	-	-	MAY-NOV	MAY-OCT
	Atlantic sturgeon	C	$\times \times $	-	-	-	JAN-DEC	APR-NOV
	Banded killifish		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Bay anchovy		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum		X X X X X X X X	-	-	-	APR-NOV	APR-NOV
	Black sea bass		X X X X X X	-	-	-	APR-SEP	APR-SEP
	Blueback herring		X X X X X	_	_	_	_	FEB-JUN
	Bluefish		X X X X X X X X	-	-	-	JUL-NOV	APR-NOV
	Gizzard shad		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Gobies		$\times \times $	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	-	-	JUL-OCT	APR-OCT
	Hickory shad		X X X X X	-	-	-	-	FEB-JUN
	Hogchoker		$\times \times $	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Minnows		$\times \times $	APR-AUG	_	_	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $	APR-AUG	_	_	JAN-DEC	JAN-DEC
	Northern pipefish		$\times \times $	MAY-JUN	_	_	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	_	_	MAR-OCT	MAR-OCT
	Northern searobin		X X X X X X X X	_	_	_	_	MAR-OCT
	Red drum		X X X X X X X	_	_	_	AUG-SEP	MAY-NOV
	Shortnose sturgeon		$\times \times $	_	_	_	JAN-DEC	JAN-DEC
	Silver perch		$\times \times $	_	_	_	JAN-DEC	JAN-DEC
	Silversides		$\times \times $	MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
	Spot		$\times \times $	_	_	DEC-APR	MAR-NOV	JAN-DEC
	Spotted seatrout		X X X X X X X X	_	_	_	APR-NOV	APR-NOV
	Striped bass		X X X X X X X X X	_	_	_	MAY-OCT	FEB-JUN
	Striped killifish		$\times \times $	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Summer flounder		$\times \times $	-	_	-	APR-NOV	APR-NOV
	Weakfish		X X X X X X X X X X X X X	-	_	-	AUG-NOV	JAN-DEC
	White perch		X X X X X X X X X X X X X	-	_	-	_	JAN-DEC
	Winter flounder		$\times \times $	FEB-MAY	FEB-MAY	MAR-MAY	MAR-NOV	NOV-MAY
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
35	Blue crab		X X X X X X X X X X X X X	-		MAY-NOV	JAN-DEC	JAN-DEC
36	Eastern oyster		$\times \times $	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
58	AQUACULTURE: OYSTERS		

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	JFMAMJJA S	SOND	Nesting	Migrating	Molting
38	American black duck		X X X X	 x x x			
	American coot		X X X X	X X X	-	_	-
	American wigeon		X X X X	X X X	-	_	-
	Bufflehead	MODERATE	X X X X	X X X	-	-	-
	Canada goose	HIGH	X X X X	X X X	-	-	-
	Gadwall		X X X X	X X X	-	-	-
	Mallard	MODERATE	X X X X	X X X	-	-	-
	Mergansers	MODERATE	X X X X	X X X	-	-	-
50	Bufflehead	MODERATE	X X X X	X X X	-	-	-
	Canvasback	HIGH	X X X X	X X X	-	-	-
	Common goldeneye		X X X X	X X X	-	-	-
	Mergansers	MODERATE	X X X X	X X X	-	-	-
	Mute swan		X X X X	X X X	-	-	-
	Ruddy duck	MODERATE	X X X X	X X X	-	-	-
	Scaup	HIGH	X X X X	X X X	-	-	-
	Scoters	MODERATE	X X X X	X X X	-	-	-
	Tundra swan	HIGH	X X X X	X X X	-	-	-

FISH:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
36	Alewife		X X X X X	-	-	-	-	FEB-JUN
	American eel		$\times \times $	-	-	-	JAN-DEC	-
	American shad		X X X X X	-	-	-	-	FEB-JUN
	Atlantic croaker		$\times \times $	-	-	-	JAN-DEC	MAY-NOV
	Atlantic menhaden		X X X X X X X	-	-	-	MAY-NOV	MAY-OCT
	Atlantic sturgeon	C		-	-	-	JAN-DEC	APR-NOV
	Banded killifish			APR-SEP	-	-	JAN-DEC	JAN-DEC
	Bay anchovy		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum		$\times \times $	-	-	-	APR-NOV	APR-NOV
	Black sea bass		X X X X X X	-	-	-	APR-SEP	APR-SEP
	Blueback herring		$X \ X \ X \ X$	-	-	-	-	FEB-JUN
	Bluefish		$X\;X\;X\;X\;X\;X\;X\;X\;$	-	-	-	JUL-NOV	APR-NOV
	Gizzard shad		$\times \times $	-	_	-	JAN-DEC	JAN-DEC
	Gobies		$\times \times $	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish		X X X X X X X	-	_	-	JUL-OCT	APR-OCT
	Hickory shad		X X X X X	-	_	-	_	FEB-JUN
	Hogchoker		$\times \times $	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X	APR-AUG	_	_	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X	APR-AUG	_	_	JAN-DEC	JAN-DEC
	Northern pipefish		X X X X X X X X X X X X X	MAY-JUN	_	_	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	_	_	MAR-OCT	MAR-OCT
	Northern searobin		X X X X X X X X	_	_	_	_	MAR-OCT
	Red drum		X X X X X X X	_	_	_	AUG-SEP	MAY-NOV
	Shortnose sturgeon		$\times \times $	_	_	_	JAN-DEC	JAN-DEC
	Silver perch		$\times \times $	_	_	_	JAN-DEC	JAN-DEC
	Silversides		X X X X X X X X X X X X X	MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X X	_	_	DEC-APR	MAR-NOV	JAN-DEC
	Spotted seatrout		X X X X X X X X	_	_	_	APR-NOV	APR-NOV
	Striped bass		X X X X X X X X X	_	_	_	MAY-OCT	FEB-JUN
	Striped killifish		X X X X X X X X X X X X X	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Summer flounder		X X X X X X X X	_	_	_	APR-NOV	APR-NOV
	Weakfish		$\times \times $	_	_	_	AUG-NOV	JAN-DEC
	White perch		$\times \times $	_	_	_	_	JAN-DEC
	Winter flounder		X X X X X X X X X X X X	FEB-MAY	FEB-MAY	MAR-MAY	MAR-NOV	NOV-MAY
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning		Larvae	Juveniles	Adults
36	Eastern oyster		X X X X X X X X X X X X X	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

PARK:

HUN#	Name	Contact	Phone
143	WESTMORELAND STATE PARK	VA DCR	804/493-8821

BIOLOGICAL RESOURCES:

BIRD:

RAR#		S F Conc.	J F M A M J J A S O N I	-	Migrating	Moltin	g	
38	American black duck		X X X X X X X X X	 : -	-			
	American coot		XXXX XXX		_	_		
	American wigeon		X X X X X X X X X		_	_		
	Bufflehead	MODERATE	X X X X X X X X X		_	_		
	Canada goose	HIGH	X X X X X X X X X	_	_	_		
	Gadwall		X X X X X X X X X	_	_	_		
	Mallard	MODERATE	X X X X X X X X X	_	-	_		
	Mergansers	MODERATE	X X X X X X X X X	_	_	_		
50	Bufflehead	MODERATE	X X X X X X X X X	_	-	_		
	Canvasback	HIGH	X X X X X X X X X	_	-	_		
	Common goldeneye		X X X X X X X X X	_	-	_		
	Mergansers	MODERATE	X X X X X X X X X X X X X X X X X X X	_	-	_		
	Mute swan		X X X X X X X X X	_	-	_		
	Ruddy duck	MODERATE	X X X X X X X X X X X X X X X X X X X	_	-	_		
	Scaup	HIGH	X X X X X X X X X X X X X X X X X X X	_	-	_		
	Scoters	MODERATE	X X X X X X X X X X X X X X X X X X X	_	-	_		
	Tundra swan	HIGH	X X X X X X X X X X X X X X X X X X X	_	-	_		
52	Canada goose	HIGH	X X X X X X X X X X X X X X X X X X X	_	-	_		
	Canvasback	HIGH	X X X X X X X X X X X X X X X X X X X	_	-	_		
	Scaup	HIGH	X X X X X X X X X X X X X X X X X X X	_	-	_		
	Swans	VERY HIGH	X X X X X X X X X X X X X X X X X X X	_	-	_		
400	Great blue heron	22 NESTS	X X X X X X X X X X X X X X X X X X X	MAY-JUL	-	-		
FISH	I:							
RAR#	Species	S F Conc.				Larvae	Juveniles	Adults
51	Alewife			-				FEB-JUN
	American eel		X X X X X X X X X X X X X X X X X X X	_	-	-	JAN-DEC	_
	American shad		X X X X X	-	-	-	_	FEB-JUN
	Atlantic croaker		X X X X X X X X X X X X X X X X X X X	_	-	-	JAN-DEC	MAY-NOV
	Atlantic menhaden		X X X X X X X	-	- 1	MAY-NOV	MAY-NOV	MAY-OCT
	Atlantic sturgeon	С	X	_	_	_	JAN-DEC	APR-NOV
	B		17 17 17 17 17 17 17 17 17 17 17 17 17 1				TAN DEG	TAN DEC

nciantic Stargeon	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				OTH DEC	711 1 1 1 V V
Banded killifish	$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
Bay anchovy		APR-SEP	_	_	JAN-DEC	JAN-DEC
Blueback herring	X X X X X	-	-	-	-	FEB-JUN
Bluefish	X X X X X X X X	-	-	-	JUL-NOV	APR-NOV
Bluegill	$\times \times $	APR-SEP	-	-	-	JAN-DEC
Brown bullhead	$\times \times $	APR-JUN	-	-	-	JAN-DEC
Chain pickerel	$\times \times $	FEB-APR	-	-	-	JAN-DEC
Common carp	$\times \times $	MAY-AUG	-	-	-	JAN-DEC
Gizzard shad	$\times \times $	-	-	-	JAN-DEC	JAN-DEC
Gobies	$\times \times $	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
Hickory shad	X X X X X	-	-	-	-	FEB-JUN
Hogchoker		MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
Largemouth bass	$\times \times $	MAR-MAY	-	-	-	JAN-DEC
Minnows	$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
Mummichog	$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
Northern pipefish	$\times \times $	MAY-JUN	-	-	JAN-DEC	JAN-DEC
Northern puffer	X X X X X X X X	MAY-AUG	-	-	MAR-OCT	MAR-OCT
Pumpkinseed		MAR-JUN	_	_	JAN-DEC	JAN-DEC
Shortnose sturgeon	$\times \times $	-	-	-	JAN-DEC	JAN-DEC
Silver perch		-	-	_	JAN-DEC	JAN-DEC
Silversides		MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
Spot		-	_	DEC-APR	MAR-NOV	JAN-DEC
Spotted seatrout	X X X X X X X X	-	_	_	APR-NOV	-
Ctriped hass	V V V V V V V V				MAY OCH	MIII CEE

	opococa coacroac					11111	
	Striped bass	X X X X X X X X X X	-	-	_	MAY-OCT	FEB-JUN
	Striped killifish	imes ime	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder	$\times \times $	-	-	-	JAN-DEC	-
	Weakfish	X X X X X X X X	-	-	_	APR-NOV	_
	White catfish	$\times \times $	-	-	-	JAN-DEC	-
	White perch	$\times \times $	-	-	-	-	JAN-DEC
	Winter flounder	$\times \times $	FEB-MAY	FEB-MAY	MAR-MAY	MAR-NOV	NOV-MAY
TATE	TEDMEDDAME.						
TIA	VERTEBRATE:						

Species S F Conc. × × × × × × × × × × · - - -35 Blue crab MAY-NOV JAN-DEC JAN-DEC

JFMAMJJASOND Spawning Eggs

Juveniles Adults

Larvae

804/493-8821

HUMAN USE RESOURCES:

143 WESTMORELAND STATE PARK

NATIONAL PARK:

RAR# Species

HUN#	Name	Contact	Phone
127	GEO. WASHINGTON BIRTHPLACE NATIONAL PARK	NATIONAL PARK SERVICE	804/224-1732
PARK:			
HUN#	Name	Contact	Phone

VA DCR

BIOLOGICAL RESOURCES:

BIRD	:
------	---

BIRD								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting 	† -	
38	American black duck		$X\ X\ X\ X$	-	-	-		
	American coot American wigeon		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Bufflehead	MODERATE	X X X X X X X X X	_	_	_		
	Canada goose	HIGH	X X X X X X X X X	-	-	-		
	Gadwall Mallard	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Mergansers	MODERATE	$X\ X\ X\ X$	-	_	-		
	Bald eagle Bald eagle	T T HIGH T T	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
40	Common moorhen	C	XXXX	_	_	_		
	Great blue heron		X X X X	-	-	-		
	Greater yellowlegs Green heron		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	King rail		X X X X	-	-	-		
	Least bittern Marsh wren		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Osprey		XXXXXX	MAR-AUG	_	-		
	Sora		X X X X	-	-	-		
	Swamp sparrow Virginia rail		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Wood duck		$\times \times $	APR-JUN	-	-		
	Canada goose Canada goose	VERY HIGH VERY HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
4.7	Tundra swan	HIGH	X X X X X X X X X	-	_	-		
53	Mallard	HIGH	X X X X X X X X X	-	-	-		
	Mergansers Mute swan	HIGH	X X X X X X X X X X X X X X X X X X X	_	_	_		
	Northern pintail		$X\ X\ X\ X$	-	-	-		
	Ring-necked duck Ruddy duck	VERY HIGH LOW	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Tundra swan	HIGH	X X X X X X X X	-	_	-		
	American black duck	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	American wigeon Bufflehead	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Canada goose	VERY HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Canvasback Common goldeneye	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Gadwall		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Green-winged teal	HIGH	X X X X X X X X	-	-	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
41	Alewife		$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American shad Atlantic menhaden		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	FEB-JUN	FEB-JUN	FEB-OCT MAY-NOV	FEB-JUN -
	Banded killifish		X X X X X X X X X X X X X		-	_	JAN-DEC	JAN-DEC
	Black crappie		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Blue catfish Blueback herring		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $	APR-JUN -	- FEB-JUN	- FEB-JUN	JAN-DEC FEB-OCT	JAN-DEC FEB-JUN
	Bluegill		$\times \times $		-	-	-	JAN-DEC
	Channel catfish Hickory shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-MAY -	- FEB-JUN	- FEB-JUN	JAN-DEC FEB-OCT	JAN-DEC FEB-JUN
	Hogchoker		X X X X X X X X X X X X X				JAN-DEC	JAN-DEC
	Inland silverside		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Largemouth bass Longnose gar		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	- JAN-DEC	JAN-DEC JAN-DEC
	Minnows		X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Pumpkinseed Redbreast sunfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Striped bass		\times \times \times \times \times \times \times	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Tessellated darter White catfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	- JAN-DEC	JAN-DEC JAN-DEC
	White perch		X X X X X X X X X X X X X			APR-JUN	JAN-DEC	JAN-DEC
E 1	Yellow perch Alewife		X X X X X X X X X X X X X	APR-JUN -	-	-	JAN-DEC -	JAN-DEC
31	American eel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	JAN-DEC	FEB-JUN -
	American shad		X X X X X	-	-	-	-	FEB-JUN
	Atlantic croaker Atlantic menhaden		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	- MAY-NOV	JAN-DEC MAY-NOV	MAY-NOV MAY-OCT
	Atlantic sturgeon	С	$\times \times $	-	-	-	JAN-DEC	APR-NOV
	Banded killifish Bay anchovy		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Blueback herring		XXXXX	-	-	-	-	FEB-JUN
	Bluefish Bluegill		$\begin{smallmatrix} & & & \times \\ & & \times & \times$	- 7 DD_CED	-	_	JUL-NOV -	APR-NOV JAN-DEC
	Brown bullhead		X X X X X X X X X X X X X		_	-	_	JAN-DEC
	Chain pickerel		$\times \times $		-	- -	_	JAN-DEC
	Common carp Gizzard shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-AUG	-	_	JAN-DEC	JAN-DEC JAN-DEC
	Gobies		$\times \times $			APR-OCT	JAN-DEC	JAN-DEC
	Hickory shad Hogchoker		X X X X X X X X X X X X X X X X X	- MAY-SEP	- MAY-SEP	- MAY-SEP	- JAN-DEC	FEB-JUN JAN-DEC
	Largemouth bass		$\times \times $		-	-	-	JAN-DEC
	Minnows Mummichog		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern pipefish		X X X X X X X X X X X X X		_	-	JAN-DEC	JAN-DEC
	Northern puffer		X X X X X X X X	MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Pumpkinseed Shortnose sturgeon		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Silver perch		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Silversides Spot		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		MAR-JUL -	APR-SEP DEC-APR	JAN-DEC MAR-NOV	JAN-DEC JAN-DEC
	Spotted seatrout		X X X X X X X X X X	-	-	-	APR-NOV	-
	Striped bass		X X X X X X X X X X X X X X X X X X X		-	_	MAY-OCT	FEB-JUN
	Striped killifish Summer flounder		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		-	_	JAN-DEC JAN-DEC	JAN-DEC -
	Weakfish		$\times \times $	-	-	-	APR-NOV	-
	White catfish White perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	JAN-DEC -	- JAN-DEC
	Winter flounder		X X X X X X X X X X X X X X X X X X X			MAR-MAY	MAR-NOV	NOV-MAY
INVE	RTEBRATE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
35	Blue crab					MAY-NOV	JAN-DEC	JAN-DEC
41	Blue crab		X X X X X X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
====								

Virginia: ESIMAP 112 (cont.)

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
112	LAND'S END WILDLIFE MANAGEMENT AREA		

WILDLIFE REFUGE:

HUN#	name	Contact	Phone
160	RAPPAHANNOCK RIVER VALLEY NWR	U.S. FISH AND WILDLIFE SERVICE	804/333-1470

BIOLOGICAL RESOURCES:

BIRD:

RAR# Species

RAR#	Species	S F Conc.	J F M A M J J A S O N I		Migrating	Molting	_	
	Bald eagle	T T HIGH		ζ –	_	_		
	Bald eagle	T T	X X X X	-	-	_		
	Common moorhen	C	$X \ X \ X \ X$	-	-	-		
	Great blue heron		XXXX	-	-	-		
	Greater yellowlegs		X X X X	-	-	-		
	Green heron		X X X X	-	-	_		
	King rail		XXXX	-	-	_		
	Least bittern		XXXX	_	-	_		
	Marsh wren		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- MAR-AUG	_	_		
	Osprey Sora		XXXX	MAK-AUG -	_	_		
	Swamp sparrow		XXXX	_	_	_		
	Virginia rail		XXXX	_	_	_		
	Wood duck		X X X X X X X X X X X X X X X X X X X	K APR-JUN	-	_		
49	Canada goose	VERY HIGH	X X X X X X X X X	-	_	_		
	Tundra swan	HIGH	X X X X X X X X X	ζ –	-	_		
53	American black duck	HIGH	XXXX	-	-	-		
	American wigeon		XXXX		-	-		
	Bufflehead	HIGH	XXXX		-	-		
	Canada goose	VERY HIGH	X X X X X X X X X		-	_		
	Canvasback	HIGH	X X X X X X X X X X X X X X X X X X X		-	_		
	Common goldeneye Gadwall		X X X X X X X X X X X X X X X X X X X		_	_		
	Green-winged teal	HIGH	X X X X X X X X X X X X X X X X X X X		_	_		
	Mallard	HIGH	X X X X X X X X X		_	_		
	Mergansers	HIGH	X X X X X X X X X		_	_		
	Mute swan		X X X X X X X X X		-	_		
	Northern pintail		X X X X X X X X X	ζ –	-	_		
	Ring-necked duck	VERY HIGH	X X X X X X X X X	ζ –	-	_		
	Ruddy duck	LOW	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Tundra swan	HIGH	X X X X X X X X X X X X X X X X X X X	ζ –	-	-		
56	American black duck	HIGH	X X X X X X X X X		-	_		
	American wigeon		X X X X X X X X X		-	-		
	Canada goose	VERY HIGH	X X X X X X X X X X X X X X X X X X X		-	_		
	Gadwall	HIGH	XXXX XXX		_	_		
	Green-winged teal Mallard	HIGH	X X X X X X X X X X X X X X X X X X X		_	_		
	Northern pintail	IIIGII	X X X X X X X X X		_	_		
	Tundra swan	HIGH	X X X X X X X X X		_	_		
412	Great blue heron	6 NESTS	x x x x x x x x x x x x x		_	_		
486	Great blue heron	43 NESTS	X X X X X X X X X X X X X X X X X X X		-	_		
FISH								
RAR#	Species	S F Conc.				Larvae	Juveniles	Adults
41	Alewife				FEB-JUN	FEB-JUN		FEB-JUN
4.1	American shad		X X X X X X X X X	_	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden		XXXXXXX		-		MAY-NOV	-
	Banded killifish		x x x x x x x x x x x x x	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black crappie		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Blue catfish		imes ime	K APR-JUN	-	-	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		X X X X X X X X X X X X X X X X X X X		-	-	-	JAN-DEC
	Channel catfish		X X X X X X X X X X X X X X X X X X X				JAN-DEC	JAN-DEC
	Hickory shad		XXXXXXXXX		FEB-JUN MAY-SEP	FEB-JUN MAY-SEP	FEB-OCT	FEB-JUN
	Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X		MAI-SEP	MAI-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Largemouth bass		X X X X X X X X X X X X X X X X X X X		_	_	-	JAN-DEC
	Longnose gar		XXXXXXXXXXXX		_	_	JAN-DEC	JAN-DEC
	Minnows		x x x x x x x x x x x x x		-	-	JAN-DEC	JAN-DEC
	Pumpkinseed		$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $	K MAR-JUN	-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish		imes ime	X JUN-JUL	-	-	JAN-DEC	JAN-DEC
	Striped bass		X X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Tessellated darter		X X X X X X X X X X X X X X X X X X X		-	-		JAN-DEC
	White catfish		X X X X X X X X X X X X X X X X X X X		- -	- -	JAN-DEC	JAN-DEC
	White perch Yellow perch		X X X X X X X X X X X X X X X X X X X		APR-JUN -	APR-JUN -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
5.4	Alewife		XXXXXXXXX	- AIN 00N	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
0 1	American shad		XXXXXXXXX	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden		$X \times X \times X \times X$	-	-	-	MAY-NOV	-
	Banded killifish		$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $	X APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black crappie		imes ime	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		X X X X X X X X X X X X X X X X X X X		-	-	-	JAN-DEC
	Channel catfish		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Hickory shad Hogchoker		X X X X X X X X X X X X X X X X X X X	FEB-JUN	FEB-JUN MAY-SEP	FEB-JUN MAY-SEP	FEB-OCT JAN-DEC	FEB-JUN JAN-DEC
	Inland silverside		X X X X X X X X X X X X X X X X X X X		MAI-SEP	MAI-SEP	JAN-DEC	JAN-DEC
	Largemouth bass		XXXXXXXXXXXX		_	_	-	JAN-DEC
	Longnose gar		XXXXXXXXXXXX		_	_	JAN-DEC	JAN-DEC
	Minnows		x x x x x x x x x x x x x		_	_	JAN-DEC	JAN-DEC
	Pumpkinseed		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish		imes ime		-	-	JAN-DEC	JAN-DEC
	Striped bass		$X \ X \ X \ X \ X$	-	-	-	MAY-OCT	-
	Tessellated darter		X X X X X X X X X X X X X X X X X X X		-	-	-	JAN-DEC
	ESTATE OF THE STATE OF THE STAT		X X X X X X X X X X X X X X X X X X X	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	White catfish			7 7 7 7	7 DD	7 DD		JAN-DEC
	White perch		imes $ imes$ $ ime$		APR-JUN	APR-JUN	JAN-DEC	
55	White perch Yellow perch		X X X X X X X X X X X X X X X X X X X	APR-JUN	-	-	JAN-DEC	JAN-DEC
55	White perch Yellow perch Alewife		X X X X X X X X X X X X X X X X X X X	APR-JUN FEB-JUN	- FEB-JUN			JAN-DEC FEB-JUN
	White perch Yellow perch Alewife Blueback herring		X X X X X X X X X X X X X X X X X X X	APR-JUN	-	-	JAN-DEC -	JAN-DEC
	White perch Yellow perch Alewife		X X X X X X X X X X X X X X X X X X X	APR-JUN FEB-JUN	- FEB-JUN	-	JAN-DEC -	JAN-DEC FEB-JUN

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

HUMAN USE RESOURCES:

Species S F Conc.

MANAGEMENT AREA:

RAR# Species

41 Blue crab

54 Blue crab

HUN# Name Phone Contact -----112 LAND'S END WILDLIFE MANAGEMENT AREA

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone	
160	RAPPAHANNOCK RIVER VALLEY NWR	U.S. FISH AND WILDLIFE SERVICE	804/333-1470	

JFMAMJJASOND Spawning Eggs

Larvae

Juveniles Adults

JAN-DEC

JAN-DEC

JAN-DEC

BIOLOGICAL RESOURCES:

BIRD:

RAR#	· Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	Ī	
						-		
45	Bald eagle	ТТ	X X X X	-	-	-		
	Common moorhen	С	X X X X	-	-	-		
	Great blue heron		X X X X	-	-	-		
	Greater yellowlegs		X X X X	-	-	-		
	Green heron		X X X X	-	-	_		
	King rail		X X X X	-	-	-		
	Least bittern		X X X X	-	-	_		
	Marsh wren		X X X X	-	-	-		
	Osprey		X X X X X X	MAR-AUG	-	_		
	Sora		X X X X	-	-	_		
	Swamp sparrow		X X X X	-	-	_		
	Virginia rail		X X X X	-	-	_		
	Wood duck		$\times \times $		-	-		
49	Canada goose	VERY HIGH	X X X X X X X X X X X X X X X X X X X		-	_		
	Tundra swan	HIGH	X X X X X X X X X X X X X X X X X X X		-	-		
56	American black duck	HIGH	X X X X X X X X X X X X X X X X X X X		-	_		
	American wigeon		X X X X X X X X X X X X X X X X X X X		-	_		
	Canada goose	VERY HIGH	X X X X X X X X X X X X X X X X X X X		-	_		
	Gadwall		X X X X X X X X X X X X X X X X X X X		-	-		
	Green-winged teal	HIGH	X X X X X X X X X X X X X X X X X X X		-	_		
	Mallard	HIGH	X X X X X X X X X X X X X X X X X X X		-	-		
	Northern pintail		X X X X X X X X X X X X X X X X X X X		-	_		
	Tundra swan	HIGH	X X X X X X X X X X X X X X X X X X X		-	_		
	Great blue heron	14 NESTS	X X X X X X X X X X X X X		-	_		
426	Great blue heron	15 NESTS	X X X X X X X X X X X X X	MAY-JUL	_	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Alewife		X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American shad		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden		X X X X X X X	_	_	_	MAY-NOV	_
	Banded killifish		X X X X X X X X X X X X X X	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black crappie		X X X X X X X X X X X X X	MAR-JUL	_	_	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		X X X X X X X X X X X X X X	APR-SEP	-	-	-	JAN-DEC
	Channel catfish		imes ime	MAR-MAY	-	-	JAN-DEC	JAN-DEC
	Hickory shad		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		imes ime	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Largemouth bass		$\times \times $	MAR-MAY	-	-	-	JAN-DEC
	Longnose gar		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Minnows		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Pumpkinseed		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	MAR-JUN	-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish		$\times \times $	JUN-JUL	-	-	JAN-DEC	JAN-DEC
	Striped bass		X X X X X X	-	-	-	MAY-OCT	-
	Tessellated darter		$\times \times $	APR-JUN	-	-	-	JAN-DEC
	White catfish		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	White perch		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	APR-JUN	APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Yellow perch		$\times \times $	APR-JUN	-	-	JAN-DEC	JAN-DEC
55	Alewife		X X X X X	FEB-JUN	FEB-JUN	-	-	FEB-JUN
	Blueback herring		X X X X X	FEB-JUN	FEB-JUN	-	-	FEB-JUN
INVE	RTEBRATE:							
	RTEBRATE: Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
117	PETTIGREW WILDLIFE MANAGEMENT AREA	VDGIF	804/367-1000

ъ	TDD	

### American black duck	PIKD									
American black duck			S F Conc.		SOND	Nesting	Migrating	Molting	_	
Mareflean coot										
Merican wilgoon	50					_	_	_		
Bufflehead							_	_		
Canada goose		=	MODERATE				_	_		
Gadwall Mallard MODERATE							_	_		
Mailard MODERATE		2	111 011				_	_		
Mergansers			MODERATE				_	_		
Bufflehead							_	_		
Canwaback	5.0						_	_		
Common goldeneye	50						_	_		
Moderate			IIIGII				_	_		
Mutc swan NoDERATE			MODERATE				_			
Ruddy duck MODERATE		=	MODENATE				_	_		
Scaup			MODERATE				_	_		
Scoters		-					_	_		
Tundra swan		=				_	_	_		
STEST STES						_	_	_		
Name	420					— MAN TITT	_	_		
Rame	439	Great blue heron	8 NESTS	* * * * * * * * * * * * * * * * * * * *	x	MAY-JUL	-	_		
Description	FISH	:								
Alewife								Larvae	Juveniles	Adults
American shad Atlantic croaker Atlantic menhaden Atlantic sturgeon Atlantic sturgeon Banded killifish C XXXXXXXXXXXXXXXXX APR-SEP Bay anchovy Blueback herring Bluefish C XXXXXXXXXXXX Bluefish Bluefish C XXXXXXXXXXX C Bluefish C Bluefish C XXXXXXXXXX C Bluefish C Bluefish C XXXXXXXXX C Bluefish C Bluefish C Chain pickerel C CMMON carp C Gizzard shad C Gobies C Hickory shad C Mummichog C Mummichog C Mummichog C Northern pipefish S Northern pipefish S Northern bipefish Northern bipefish S Northern bipefish S Spott S Spotted seatrout S Spotted seatrout S Spotted seatrout S Striped killifish XXXXXXXXXXXXXX C C C C Minder Weakfish White catfish White catfish White catfish White perch XXXXXXXXXXXXXXXXXXXX C C C C MAY-N C C C MAY-N C C C MAY-N C C C MAY-N C C C C C C C C C C C C C C C C C C C		Alewife		X X X X X		-	-	-	_	FEB-JUN
Atlantic croaker Atlantic menhaden Atlantic menhaden C XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		American eel		X X X X X X X X X	X X X X	-	-	-	JAN-DEC	-
Atlantic menhaden Atlantic sturgeon C XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		American shad		X X X X X		-	-	-	-	FEB-JUN
Atlantic sturgeon C		Atlantic croaker		X X X X X X X X X	XXXX	_	_	_	JAN-DEC	MAY-NOV
Banded killifish		Atlantic menhaden		XXXX	XXX	_	_	MAY-NOV	MAY-NOV	MAY-OCT
Banded killifish X X X X X X X X X X X X X X APR-SEP - <t< td=""><td></td><td>Atlantic sturgeon</td><td>С</td><td>XXXXXXXX</td><td>XXXX</td><td>_</td><td>_</td><td>-</td><td>JAN-DEC</td><td>APR-NOV</td></t<>		Atlantic sturgeon	С	XXXXXXXX	XXXX	_	_	-	JAN-DEC	APR-NOV
Bay anchovy		-				APR-SEP	_	-	JAN-DEC	JAN-DEC
Blueback herring							_	-	JAN-DEC	JAN-DEC
Bluefish							_	_	_	FEB-JUN
Bluegill		_			x x x	_	_	_	JUL-NOV	APR-NOV
Brown bullhead							_	_	-	JAN-DEC
Chain pickerel X X X X X X X X X X X X X X X X X X X		=					_	_	_	JAN-DEC
Common carp X X X X X X X X X X X X X X X X X X X							_	_	_	JAN-DEC
Gizzard shad X X X X X X X X X X X X X X X X X X X		=					_	_	_	JAN-DEC
Gobies X X X X X X X X X X X X X X X X X X X		=					_	_	JAN-DEC	JAN-DEC
Hickory shad X X X X X X X X X X X X X X X X X X X							APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
Hogchoker									-	FEB-JUN
Largemouth bass X X X X X X X X X X X X X X X X X X X					v v v v			MAY-SEP	JAN-DEC	JAN-DEC
Minnows X X X X X X X X X X X X X X X X X X X		=							-	JAN-DEC
Mummichog X X X X X X X X X X X X X X X X X X X							_	_	JAN-DEC	JAN-DEC
Northern pipefish X X X X X X X X X X X X X X X X X X X							_	_	JAN-DEC	JAN-DEC
Northern puffer X X X X X X X X X X X X X X MAR-JUN - - Pumpkinseed X X X X X X X X X X X X X X X X X X X		2					_		JAN-DEC	JAN-DEC
Pumpkinseed X X X X X X X X X X X X X X X X X X X							_		MAR-OCT	MAR-OCT
Shortnose sturgeon		=							JAN-DEC	JAN-DEC
Silver perch X X X X X X X X X X X X X X X X X X X		=						_	JAN-DEC	JAN-DEC
Silversides X X X X X X X X X X X X X X X X X X X		-					_	_	JAN-DEC	JAN-DEC
Spot X X X X X X X X X X X X X X X X X X X		<u> </u>					MAR - TITT	- APR-SEP	JAN-DEC	JAN-DEC
Spotted seatrout X X X X X X X X X X X X X X X X X X X								DEC-APR		
Striped bass X X X X X X X X X X X X X X X X X X X		=							MAR-NOV	JAN-DEC -
Striped killifish X X X X X X X X X X X X X X APR-SEP - - - Summer flounder X X X X X X X X X X X X X X X X X X X							_	_	APR-NOV	
Summer flounder X X X X X X X X X X X X X X X X X X X							_	_	MAY-OCT	FEB-JUN
Weakfish X X X X X X X X X X X X X X X X X X X		=					_	_	JAN-DEC	JAN-DEC -
White catfish X X X X X X X X X X X X X X X X X X X						_	_	_	JAN-DEC	
White perch XXXXXXXXXXX						_	-	_	APR-NOV	-
							-	_	JAN-DEC	-
Winter flounder VVVVVVVVVVV FFR-MAV MAD-M		White perch Winter flounder						- MAR-MAY	- MAR-NOV	JAN-DEC NOV-MAY
					^ ^ ^ ^	FED TANI	FED MAI	HAIN MAI	LIVIV MOA	NOA LIWI
INVERTEBRATE: RAR# Species S F Conc. J F M A M J J A S O N D Spawning Eggs Larva			S F Conc	демам.т.та	зоил	Spawning	Eggs	Larvae	Juveniles	Adults
		-								
35 Blue crab								MAY-NOV	JAN-DEC	JAN-DEC

BIOLOGICAL RESOURCES:

BIRD	:
------	---

BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
	<u>-</u>					·	-	
38	American black duck		X X X X X X X X X	-	-	-		
	American coot		X X X X X X X X	-	-	_		
	American wigeon Bufflehead	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Canada goose	HIGH	X X X X X X X X		_	_		
	Gadwall		X X X X X X X X		_	_		
	Mallard	MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	Mergansers	MODERATE	X X X X X X X X X	-	-	-		
	Bald eagle Bufflehead	T T HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
30	Canvasback	HIGH	XXXX XXX	_	_	_		
	Common goldeneye	111 011	X X X X X X X X		_	_		
	Mergansers	MODERATE	X X X X X X X X X	-	-	-		
	Mute swan		X X X X X X X X X X	_	-	_		
	Ruddy duck	MODERATE	X X X X X X X X X	-	-	_		
	Scaup Scoters	HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Tundra swan	HIGH	X X X X X X X X X	_	_	_		
58	American black duck	HIGH	$X X X X \qquad X X X$	-	-	-		
	American coot		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-		
	American wigeon	W0.DED.1.EE	X X X X X X X X X X X X X X X X X X X		-	-		
	Bufflehead Canada goose	MODERATE HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
	Gadwall	nign	X X X X X X X X		_	_		
	Mallard	HIGH	X X X X X X X X		-	_		
	Mergansers	MODERATE	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		
	Northern pintail		X X X X X X X X X X	_	-	_		
420	Tundra swan	HIGH	XXXX XXX	— MAN TITT	-	_		
439 514	Great blue heron Great blue heron	8 NESTS 52 NESTS	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_		
JII	dieae blue helon	JZ NEDIO		11111 0011				
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
51	Alewife American eel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	- -	_	- JAN-DEC	FEB-JUN
	American shad		XXXXX	_	_	_	JAN-DEC	- FEB-JUN
	Atlantic croaker		\times	_	_	_	JAN-DEC	MAY-NOV
	Atlantic menhaden		X X X X X X X	-	-	MAY-NOV	MAY-NOV	MAY-OCT
	Atlantic sturgeon	C	$\times \times $	-	-	-	JAN-DEC	APR-NOV
	Banded killifish		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Bay anchovy Blueback herring		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-SEP	_	_	JAN-DEC -	JAN-DEC FEB-JUN
	Bluefish		XXXXXXXX	_	_	_	JUL-NOV	APR-NOV
	Bluegill		\times		_	_	-	JAN-DEC
	Brown bullhead		$\times \times $	APR-JUN	-	_	_	JAN-DEC
	Chain pickerel		$\times \times $		-	_	-	JAN-DEC
	Common carp Gizzard shad		X X X X X X X X X X X X X	MAY-AUG -	_	_	- JAN-DEC	JAN-DEC
	Gobies		$\begin{array}{cccccccccccccccccccccccccccccccccccc$			APR-OCT	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Hickory shad		XXXXX	-	-	-	-	FEB-JUN
	Hogchoker		$\times \times $	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Largemouth bass		$\times \times $		-	_	-	JAN-DEC
	Minnows		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Mummichog Northern pipefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern puffer		XXXXXXXX	MAY-AUG	_		MAR-OCT	MAR-OCT
	Pumpkinseed		\times		-	-	JAN-DEC	JAN-DEC
	Shortnose sturgeon		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Silver perch		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Silversides Spot		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		MAR-JUL -		JAN-DEC MAR-NOV	JAN-DEC JAN-DEC
	Spotted seatrout		XXXXXXXXX	_			APR-NOV	-
	Striped bass		X X X X X X X X X X	-	-		MAY-OCT	FEB-JUN
	Striped killifish		$\times \times $			-	JAN-DEC	JAN-DEC
	Summer flounder		X X X X X X X X X X X X X		-	_	JAN-DEC	-
	Weakfish White catfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	APR-NOV JAN-DEC	_
	White perch		\times		_	_	-	JAN-DEC
	Winter flounder		$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$		FEB-MAY	MAR-MAY	MAR-NOV	NOV-MAY
59	Alewife		X X X X X X X X X X	-		FEB-JUN	FEB-OCT	FEB-JUN
	American eel American shad		X X X X X X X X X X X X X		- FEB-JUN	- TIM	JAN-DEC	- -
	Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$				FEB-OCT MAY-DEC	FEB-JUN -
	Atlantic menhaden		XXXXXXX				MAY-NOV	MAY-OCT
	Atlantic sturgeon	С	$\times \times $	-		-	JAN-DEC	APR-NOV
	Banded killifish		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Bay anchovy Black crappie		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Blueback herring		XXXXXXXXXX				FEB-OCT	FEB-JUN
	Bluefish			-	-		MAY-NOV	-
	Bluegill		X X X X X X X X X X X X		-	-	-	JAN-DEC
	Bluespotted sunfish		X X X X X X X X X X X X X X X X X X X		-	-	-	JAN-DEC
	Brown bullhead Chain pickerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	_	JAN-DEC JAN-DEC
	Channel catfish		\times		_	_	JAN-DEC	JAN-DEC
	Common carp		$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$		-	-	-	JAN-DEC
	Gizzard shad		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Gobies		X X X X X X X X X X X X X			APR-OCT	JAN-DEC	JAN-DEC
	Hickory shad Hogchoker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	FEB-JUN -	FEB-JUN -	FEB-OCT JAN-DEC	FEB-JUN JAN-DEC
	Largemouth bass		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC -	JAN-DEC JAN-DEC
	Minnows		\times		_	_	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Pumpkinseed		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish Shortnose sturgeon		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUN-JUL -		-	JAN-DEC	JAN-DEC
	Shorthose sturgeon Silver perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_	JAN-DEC JUL-OCT	JAN-DEC -
	Silver perch Silversides		X X X X X X X X X X X X X X X X X X X	MAR-JUIT	- MAR-JUL	- APR-SEP	JAN-DEC	JAN-DEC
	Spot		\times				APR-NOV	-
	Spotted seatrout		$\times \times $	-	-	-	APR-NOV	-
	Striped bass		$\times \times $	-			MAY-OCT	FEB-JUN
	Striped killifish Summer flounder		X X X X X X X X X X X X X X X X X X X	APR-SEP -	-	_	JAN-DEC	JAN-DEC -
	Tessellated darter		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_	_	JAN-DEC -	- JAN-DEC
	Threadfin shad		\times	-	-	-	JAN-DEC	-
	Weakfish		$\times \times \times \times \times \times \times \times$	-	-	-	APR-NOV	-
	White catfish		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	White perch		X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC

Virginia: ESIMAP 116 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH: (cont.)

HUMAN USE RESOURCES:

PARK:

 HUN#
 Name
 Contact
 Phone

 134
 CALEDON NATURAL AREA STATE PARK
 VA DCR
 540/663-3861

BIOLOGICAL RESOURCES:

В	I	R	D	:

RAR#	Species	S F Conc.	J F M A M J J A S O	N D	Nesting	Migrating	Molting	_	
42	Bald eagle	T T HIGH	X X X X X X X	Х	_	_	_		
	American black duck	HIGH		ХХ	_	_	_		
	American wigeon		X X X X X X X	ХХ	_	-	_		
	Canada goose	VERY HIGH	X X X X X X	ХХ	-	-	_		
	Gadwall		X X X X X	ХХ	-	-	-		
	Green-winged teal	HIGH		ХХ	-	-	_		
	Mallard	HIGH		ХХ	-	-	-		
	Northern pintail			ХХ	-	-	-		
F 0	Tundra swan	HIGH		ХХ	-	-	_		
58	American black duck	HIGH		ХХ	_	_	_		
	American coot			X X X X	_	_	_		
	American wigeon Bufflehead	MODERATE		XX	_	_	_		
	Canada goose	HIGH		XX	_	_	_		
	Gadwall	IIIGII		XX	_	_	_		
	Mallard	HIGH		XX	_	_	_		
	Mergansers	MODERATE		XX	_	_	_		
	Northern pintail			ХХ	_	_	_		
	Tundra swan	HIGH		ХХ	-	-	-		
FISH	l:								
RAR#	Species	S F Conc.	J F M A M J J A S O	N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Blueback herring		X		_	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		\times \times \times \times \times \times \times \times \times		APR-SEP	_	-	-	JAN-DEC
	Channel catfish		\times \times \times \times \times \times \times \times \times			-	-	JAN-DEC	JAN-DEC
	Hickory shad		X X X X X X X X X		FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		$X\;X\;X\;X\;X\;X\;X\;X\;$	ХХ	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $	ХХ	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Largemouth bass		imes $ imes$	ХХ	MAR-MAY	-	-	-	JAN-DEC
	Longnose gar		X X X X X X X X X X X	ХХ	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Pumpkinseed		X X X X X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish		X X X X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Striped bass Tessellated darter		XXXXXX		-	-	_	MAY-OCT	- TAN DEG
	White catfish		X X X X X X X X X X X			_	_	- JAN-DEC	JAN-DEC JAN-DEC
	White perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$			- APR-JUN	- APR-JUN	JAN-DEC	JAN-DEC JAN-DEC
	Yellow perch		X X X X X X X X X X X			AFK-50N -	AFK-00N -	JAN-DEC	JAN-DEC
	Alewife		XXXXXXXXXX		- AIN OON	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American shad		X X X X X X X X X X		FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden		XXXXXX		-	-	-	MAY-NOV	-
	Banded killifish		\times \times \times \times \times \times \times \times \times		APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black crappie		\times \times \times \times \times \times \times \times \times	ХХ	MAR-JUL	-	-	JAN-DEC	JAN-DEC
59	Alewife		X X X X X X X X X X		-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American eel		$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} $	ХХ	-	-	-	JAN-DEC	-
	American shad		X X X X X X X X X X		-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic croaker		X X X X X X	ХХ	-	-	-	MAY-DEC	-
	Atlantic menhaden		X X X X X X		-	-	MAY-NOV	MAY-NOV	MAY-OCT
	Atlantic sturgeon	C	X X X X X X X X X X X		-	-	-	JAN-DEC	APR-NOV
	Banded killifish		X X X X X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Bay anchovy		X X X X X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Black crappie		X X X X X X X X X X X			-	-	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X		-	FEB-JUN	FEB-JUN -	FEB-OCT	FEB-JUN
	Bluefish		XXXXXX		- ADD CED	-	_	MAY-NOV	- TAN DEC
	Bluegill		X X X X X X X X X X X X X X X X X X X			_	_	-	JAN-DEC
	Bluespotted sunfish Brown bullhead		$\begin{array}{cccccccccccccccccccccccccccccccccccc$			_	_	_	JAN-DEC JAN-DEC
	Chain pickerel		X X X X X X X X X X X			_	_	_	JAN-DEC
	Channel catfish		X X X X X X X X X X X			_	_	JAN-DEC	JAN-DEC
	Common carp		X X X X X X X X X X X X X X X X X X X			_	_	- DEC	JAN-DEC
	Gizzard shad		X X X X X X X X X X X X		-	_	_	JAN-DEC	JAN-DEC

INVERTEBRATE:

Gobies

Hickory shad

Largemouth bass

Redbreast sunfish

Spotted seatrout

Striped killifish

Tessellated darter

Summer flounder

Threadfin shad

White catfish

White perch

Yellow perch

Weakfish

Shortnose sturgeon

Hogchoker

Minnows

Mummichog

Pumpkinseed

Silver perch

Striped bass

Silversides

Spot

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
35	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC
54	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC

X X X X X X X X X

X X X X X X X X X

X X X X X X X X X X X X X

X X X X X X X X

 $\hbox{X } \hbox{X } \hbox{MAR-MAY }$

X X X X X X X X X X X APR-AUG

X X X X X X X X X X X APR-AUG

X X X X X X X X X X X X MAR-JUN

 $\hbox{\tt X} \hbox{\tt JUN-JUL}$

X X X X

X X X X X X X X X X X X MAR-JUL

X X X X X X X X X X X X APR-SEP

X X X X X X X X X X X X MAY-JUN

X X X X X X X X X X X X APR-JUN

JAN-DEC

FEB-OCT

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JUL-OCT

JAN-DEC

APR-NOV

APR-NOV

MAY-OCT

JAN-DEC

JAN-DEC

JAN-DEC APR-NOV

JAN-DEC

JAN-DEC

JAN-DEC

FEB-JUN FEB-JUN

MAR-JUL

FEB-JUN

APR-SEP

DEC-APR

FEB-JUN

JAN-DEC

FEB-JUN

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

FEB-JUN

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

HUMAN USE RESOURCES:

PARK:

HUN#	Name	Contact	Phone
134	CALEDON NATURAL AREA STATE PARK	VA DCR	540/663-3861

BIOLOGICAL RESOURCES:

Tessellated darter

Threadfin shad Weakfish

White catfish

White perch

Yellow perch

BIRD	:
------	---

BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting	ī	
45	Bald eagle	тт	x x x x				· -	
45	Common moorhen	T T C	x	_	_	_		
	Great blue heron	C	XXXX	_	_	_		
	Greater yellowlegs		XXXX	-	_	_		
	Green heron		XXXX	-	-	-		
	King rail		X X X X	-	-	-		
	Least bittern		X X X X	-	-	-		
	Marsh wren		XXXX	-	-	_		
	Osprey Sora		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-AUG	_	_		
	Swamp sparrow		XXXX	_	_	_		
	Virginia rail		XXXX	_	_	_		
	Wood duck		$\times \times $	APR-JUN	-	-		
49	Canada goose	VERY HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Tundra swan	HIGH	X X X X X X X X	-	-	_		
56	American black duck	HIGH	X X X X X X X X	-	-	_		
	American wigeon Canada goose	VERY HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Gadwall	VERT HIGH	X X X X X X X X	_	_	_		
	Green-winged teal	HIGH	X X X X X X X X	_	_	_		
	Mallard	HIGH	$X X X X \qquad X X X$	-	_	_		
	Northern pintail		$X \ X \ X \ X $	-	-	_		
	Tundra swan	HIGH	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_		
62	Bufflehead		X X X X X X X X X X	-	-	-		
	Canvasback	HIGH	X X X X X X X X	-	-	_		
	Mergansers	MODERATE	X X X X X X X X X	-	-	_		
	Ring-necked duck Ruddy duck	HIGH MODERATE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Scaup	MODERATE	X X X X X X X X	_	_	_		
	Tundra swan	HIGH	X X X X X X X X	_	_	_		
63	American black duck	HIGH	$X X X X \qquad X X X$	-	-	_		
	American coot		$X \ X \ X \ X $	-	-	_		
	American wigeon		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Bufflehead		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Canada goose	HIGH	XXXX	-	-	_		
	Mallard	HIGH	X X X X X X X X	-	-	_		
	Mergansers	MODERATE	X X X X X X X X X	-	-	_		
	Northern pintail Wood duck		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_ Δ PR = .TIIN	_	_		
65	Rails		X X X X X X X X X X X X X	-	_	_		
00	Sora		X X X X X X X X X X X X X	_	-	_		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
5.1	Alewife		X X X X X X X X X		FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
34	American shad		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden		XXXXXXX		-		MAY-NOV	-
	Banded killifish		X X X X X X X X X X	APR-SEP	-	_	JAN-DEC	JAN-DEC
	Black crappie		$\times \times $	MAR-JUL	-	_	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$		-	-	-	JAN-DEC
	Channel catfish		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Hickory shad		X X X X X X X X X	FEB-JUN		FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker Inland silverside		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		MAY-SEP -	MAY-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Largemouth bass		X X X X X X X X X X X X X		_	_	-	JAN-DEC
	Longnose gar		$X \times X \times X \times X \times X \times X \times X \times X$		_	_	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Pumpkinseed		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	MAR-JUN	-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Striped bass		XXXXX	-	_	_	MAY-OCT -	-
	Tessellated darter White catfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	JAN-DEC	JAN-DEC JAN-DEC
	White perch		X X X X X X X X X X X X X X X X X X X			- APR-JUN	JAN-DEC	JAN-DEC
	Yellow perch		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
55	Alewife		X X X X X	FEB-JUN	FEB-JUN	-	-	FEB-JUN
	Blueback herring		X X X X X	FEB-JUN	FEB-JUN	_	_	FEB-JUN
64	Alewife		$X\;X\;X\;X\;X\;X\;X\;X\;$	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American eel		X X X X X X X X X X X X X	-	-	-	JAN-DEC	-
	American shad Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	FEB-JUN -	FEB-JUN -	FEB-OCT MAY-DEC	FEB-JUN -
	Atlantic menhaden		X X X X X X X X	_		- MAY-NOV	MAY-NOV	- MAY-OCT
	Atlantic sturgeon	С	X X X X X X X X X X X X X		_	-	JAN-DEC	APR-NOV
	Banded killifish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Bay anchovy		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Black crappie		$\times \times $	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluefish		XXXXXX	- ADD GED	-	-	MAY-NOV -	- -
	Bluegill Bluespotted sunfish		X X X X X X X X X X X X X X X X X X X		_	_	_	JAN-DEC JAN-DEC
	Brown bullhead		X X X X X X X X X X X X X		_	_	_	JAN-DEC
	Chain pickerel		X X X X X X X X X X X X X		-	_	_	JAN-DEC
	Channel catfish		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Common carp		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	MAY-AUG	-	-	-	JAN-DEC
	Gizzard shad		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Gobies		$\times \times $			APR-OCT	JAN-DEC	JAN-DEC
	Hickory shad		X X X X X X X X X X	-		FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		X X X X X X X X X X X X X X X X X X X	- MAD MAY	-	-	JAN-DEC	JAN-DEC
	Largemouth bass		X X X X X X X X X X X X X X X X X X X		_	-	- TAN-DEC	JAN-DEC
	Longnose gar Minnows		X X X X X X X X X X X X X X X X X X X		<u>-</u>	_	JAN-DEC	JAN-DEC
	Minnows Mummichog		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummicnog Pumpkinseed		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Redbreast sunfish		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Shortnose sturgeon		X X X X X X X X X X X X X	-	_	_	JAN-DEC	JAN-DEC
	Silver perch		XXXX	_	-	-	JUL-OCT	-
	Silversides		$\times \times $			APR-SEP	JAN-DEC	JAN-DEC
	Spot		$\times \times $	-	-	DEC-APR	APR-NOV	-
	Spotted seatrout		X X X X X X X X	-	-	-	APR-NOV	-
	Striped bass		X X X X X X X X X	FEB-JUN		FEB-JUN	FEB-OCT	FEB-JUN
	Striped killifish		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Summer flounder		$X\ X\ X$	-	-	-	JAN-DEC	-

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

X X X X X X X X

X X X X X X X X X X X X MAY-JUN

 $\hbox{X X X X X X X X X X X X X APR-JUN}$

 $\hbox{X X X X X X X X X X X X X APR-JUN}$

APR-JUN

APR-JUN

APR-JUN

JAN-DEC

APR-NOV

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

-

JAN-DEC

JAN-DEC

JAN-DEC

Virginia: ESIMAP 118 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
35	Blue crab		$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$	-	-	MAY-NOV	JAN-DEC	JAN-DEC
54	Blue crab		$\times \times $	-	-	MAY-NOV	JAN-DEC	JAN-DEC

BIOLOGICAL RESOURCES:

В	I	R	D	:

BIRD	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
62	Bufflehead		X X X X X X X X X	-			_	
	Canvasback	HIGH	X X X X X X X X X	-	-	_		
	Mergansers	MODERATE	X X X X X X X X X X	-	-	-		
	Ring-necked duck	HIGH	$X X X X \qquad X X X$	-	-	-		
	Ruddy duck	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Scaup	MODERATE	X X X X X X X X X	-	-	-		
	Tundra swan	HIGH	X X X X X X X X X	-	-	-		
63	American black duck	HIGH	X X X X X X X X X	-	-	-		
	American coot		X X X X X X X X X X	-	-	-		
	American wigeon		X X X X X X X X X X	-	-	-		
	Bufflehead		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Canada goose	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Mallard	HIGH	X X X X X X X X X	-	-	-		
	Mergansers	MODERATE	X X X X X X X X	-	-	_		
	Northern pintail		X X X X X X X X X X	-	-	_		
7.0	Wood duck		X X X X X X X X X X X X X		-	_		
	Osprey	E E CO 70 DIDDO	XXXXX	MAR-AUG	-	_		
	Bald eagle	T T 60-70 BIRDS	X X X X X X X X X		-	_		
FISH								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
64	Alewife		$\mathbf{x} \ \mathbf{x} \ \mathbf{x}$	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American eel		$X\;X\;X\;X\;X\;X\;X\;X\;$	-	-	-	JAN-DEC	-
	American shad		X X X X X X X X X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic croaker		$X \ X \ X \ X \ X \ X \ X \ X$	-	-	-	MAY-DEC	-
	Atlantic menhaden		X X X X X X X	-	-	MAY-NOV	MAY-NOV	MAY-OCT
	Atlantic sturgeon	С	$\times \times $	-	-	_	JAN-DEC	APR-NOV
	Banded killifish				-	-	JAN-DEC	JAN-DEC
	Bay anchovy		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Black crappie		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluefish		X X X X X X X	-	-	-	MAY-NOV	
	Bluegill		X X X X X X X X X X X X X		-	-	-	JAN-DEC
	Bluespotted sunfish		X X X X X X X X X X X X X X		-	-	-	JAN-DEC
	Brown bullhead		X X X X X X X X X X X X X		-	-	-	JAN-DEC
	Chain pickerel		X X X X X X X X X X X X X X X X X X X		-	_	- TAN DEG	JAN-DEC
	Channel catfish		X X X X X X X X X X X X X X X X X X X		-	_	JAN-DEC -	JAN-DEC
	Common carp Gizzard shad		X X X X X X X X X X X X X X X X X X X	MAY-AUG	_	_	JAN-DEC	JAN-DEC JAN-DEC
	Gobies		X X X X X X X X X X X X X X X X X X X	700-050	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Hickory shad		XXXXXXXXX	- -	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		X X X X X X X X X X X X X X X X X X X	_	- TED OON	-	JAN-DEC	JAN-DEC
	Largemouth bass		X X X X X X X X X X X X X	MAR-MAY	_	_	-	JAN-DEC
	Longnose gar		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Pumpkinseed		imes ime		_	_	JAN-DEC	JAN-DEC
	Redbreast sunfish		imes ime		-	_	JAN-DEC	JAN-DEC
	Shortnose sturgeon		X X X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Silver perch		X X X X	-	-	-	JUL-OCT	-
	Silversides		X X X X X X X X X X X X X X	MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
	Spot		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	-	-	DEC-APR	APR-NOV	-
	Spotted seatrout		X X X X X X X X	-	-	-	APR-NOV	-
	Striped bass		X X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Striped killifish		$X\ X\ X$	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder		$X\ X\ X$	-	-	-	JAN-DEC	-
	Tessellated darter		$X\ X\ X$		-	-	-	JAN-DEC
	Threadfin shad		$X\ X\ X$	-	-	-	JAN-DEC	-
	Weakfish		X X X X X X X X	-	-	_	APR-NOV	-
	White catfish		$X\ X\ X$		-	-	JAN-DEC	JAN-DEC
	White perch Yellow perch		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		APR-JUN -	APR-JUN -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	-			111 IV O O IV			21114 DIO	01114 DEC
	RTEBRATE:	S. F. Co	TEMAM T T 2 0 0 2 2	Cmar	Ease	T 0	Tours of 1 and	7 d 1 + -
RAR#	Species	S F Conc.	J F M A M J J A S O N D	spawning	rggs	Larvae	Juveniles	Adults
	Blue crab			-	-	MAY-NOV	JAN-DEC	JAN-DEC

S F Conc.

BIOLOGICAL RESOURCES:

BIRD	:
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RAR# Species

	species	5 F Colic.	OIMAMOUASOND	Restring	Migracing	MOTCING		
70	Osprey		X X X X X X	MAR-AUG			-	
72	1 2	тт		DEC-AUG	_	_		
	American black duck	HIGH	XXXX XXX		_	_		
7.5	American coot	IIIGII	X X X X X X X X		_	_		
	American wigeon		X X X X X X X X		_	_		
	Bald eagle	тт	XXX		_	_		
	Bufflehead	1 1	X X X X X X X X		_	_		
	Canada goose	HIGH	X X X X X X X X X X X X X		_	_		
	Canvasback	HIGH	X X X X X X X X X X		_	_		
	Gadwall	111011	X X X X X X X X		_	_		
	Mallard	HIGH	X X X X X X X X X X X X X		_	_		
	Mergansers	MODERATE	X X X X X X X X X		_	_		
	Northern pintail	1102214112	X X X X X X X X		_	_		
	Ring-necked duck	HIGH	X X X X X X X X		_	_		
	Ruddy duck	5000	X X X X X X X X		_	_		
	Scaup	HIGH	X X X X X X X X		_	_		
	Tundra swan	HIGH	X X X X X X X X		_	_		
75	American black duck	HIGH	X X X X X X X X		_	_		
	American coot		X X X X X X X X		_	_		
	American wigeon		X X X X X X X X		_	_		
	Bufflehead		X X X X X X X X		_	_		
	Canada goose	HIGH	X X X X X X X X		_	_		
	Canvasback	HIGH	X X X X X X X X		_	_		
	Gadwall		X X X X X X X X		_	_		
	Mallard	HIGH	X X X X X X X X		_	_		
	Mergansers	MODERATE	X X X X X X X X	_	_	_		
	Northern pintail		$X X X X \qquad X X X$	-	-	_		
	Ring-necked duck	HIGH	X X X X X X X X	_	_	_		
	Ruddy duck	MODERATE	$X X X X \qquad X X X$	-	-	_		
	Scaup	HIGH	$X X X X \qquad X X X$	-	-	-		
	Tundra swan	HIGH	$X X X X \qquad X X X$	_	_	_		
77	Sora		$\times \times $	-	-	-		
	Virginia rail		$\times \times $	-	-	-		
508	Great blue heron	1450 NESTS	$\times \times $	MAY-JUL	-	-		
	Great egret	C 20 NESTS	X X X X X X X X X	MAY-JUL	-	-		
509	Great blue heron	80 NESTS	X X X X X X X X X X X X X X	MAY-JUL	-	-		
FISH								
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
76	Alewife			FEB-JUN	FEB-JUN	FEB-JUN	EED OCT	
70	American eel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		- -	- -	FEB-OCT JAN-DEC	FEB-JUN -
	American shad		X X X X X X X X X X	FEB-JUN		FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic croaker		X X X X X X X X		- LED-JON	- -	MAY-DEC	- HD-00N
	Atlantic menhaden		XXXXXXX	_	_	MAY-NOV	MAY-NOV	MAY-OCT
	Atlantic sturgeon	С	X X X X X X X X X X X X X		_	MAI-NOV	JAN-DEC	APR-NOV
	Banded killifish	C	X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Bay anchovy		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Black crappie		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Blueback herring		XXXXXXXXX	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		X X X X X X X X X X X X X		- LDD 00N	-	-	JAN-DEC
	Bluespotted sunfish		X X X X X X X X X X X X X		_	_	_	JAN-DEC
	Brown bullhead		X X X X X X X X X X X X X		_	_	_	JAN-DEC
	Chain pickerel		X X X X X X X X X X X X X X X X X X X		_	_	_	JAN-DEC
	Channel catfish		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Common carp		X X X X X X X X X X X X X		_	_	-	JAN-DEC
	Gizzard shad		X X X X X X X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Hickory shad		XXXXXXXXX	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		X X X X X X X X X X X X X		-	-	JAN-DEC	-
	2							

X X X X X X X X X X X X MAY-JUN

X X X X X X X X X X X APR-AUG

X X X X X X X X X X X APR-AUG

X X X X X X X X X X X X MAR-JUN

X X X X X X X X X X X X JUN-JUL

X X X X X X X X X X X X MAR-JUL

X X X X X X X X X X X X APR-SEP

X X X X X X X X X X X APR-JUN

X X X X X X X X X X X X MAY-JUN

X X X X X X X X X X X X APR-JUN

X X X X X X X X X X X X APR-JUN

X X X X X X

JAN-DEC

APR-NOV

MAY-OCT

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

JAN-DEC

MAR-JUL APR-SEP

APR-JUN APR-JUN

DEC-APR

J F M A M J J A S O N D Nesting Migrating Molting

Yellow perch HUMAN USE RESOURCES:

Largemouth bass

Redbreast sunfish

Striped killifish

Tessellated darter Threadfin shad

Shortnose sturgeon

Longnose gar

Minnows

Spot

Mummichog

Pumpkinseed

Silversides

Striped bass

White catfish

White perch

PARK:

HUN#	Name	Contact	Phone
141	LEESYLVANIA STATE PARK	VA DCR	703/670-0372

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
149	FEATHERSTONE NATIONAL WILDLIFE REFUGE	U.S. FISH AND WILDLIFE SERVICE	703/490-4979
155	MASON NECK NATIONAL WILDLIFE REFUGE	U.S. FISH AND WILDLIFE SERVICE	703/490-4979

BIOLOGICAL RESOURCES:

BIRD	:
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BIRD	:											
RAR#	Species	SF	Conc.	JFM	AM	JJAS	SOND	Nesting	Migrating	Molting	г	
63	American black duck		HIGH	 X X X			 X X X				-	
03	American coot		пібп	XXX			XXX	_	_	_		
	American wigeon			ххх			X X X	-	-	-		
	Bufflehead			XXX			XXX		-	-		
	Canada goose Mallard		HIGH HIGH	X X X X X X			X X X X X X X X X X X X X X X X X X X		_	_		
	Mergansers		MODERATE	XXX			XXX		_	-		
	Northern pintail			XXX	X		X X X	-	-	-		
= 0	Wood duck						XXXX	APR-JUN	-	-		
	Osprey Bald eagle	тт				X X X X X X X X X X X X X X X X X X X	Y	MAR-AUG DEC-AUG	_	_		
	American black duck		HIGH	XXX		21 21 21	XXX	-	_	_		
	American coot			XXX	X		X X X	-	-	_		
	American wigeon			XXX			XXX	-	-	-		
	Bald eagle Bufflehead	ТТ		X X X X X X			X X X X	-	_	_		
	Canada goose		HIGH			XXXX	XXXX	_	_	_		
	Canvasback		HIGH	XXX	X		X X X	-	-	-		
	Gadwall			XXX			XXX	-	-	-		
	Mallard Mergansers		HIGH MODERATE	XXX		XXXX	X X X X X X X X X X X X X X X X X X X	_	_	_		
	Northern pintail		MODERATE	XXX			XXX		_	_		
	Ring-necked duck		HIGH	ххх			X X X		-	-		
	Ruddy duck		5000	XXX			XXX		-	-		
	Scaup Tundra swan		HIGH HIGH	X X X X X X			X X X X X X X X X X X X X X X X X X X		-	_		
75	American black duck		HIGH	XXX			XXX		_	_		
	American coot			ХХХ	X		X X X	-	-	-		
	American wigeon			XXX			X X X		-	-		
	Bufflehead		HIGH	X X X X X X			X X X X X X X X X X X X X X X X X X X		-	_		
	Canada goose Canvasback		HIGH	XXX			XXX		_	_		
	Gadwall			XXX			XXX		-	_		
	Mallard		HIGH	XXX	X		X X X		-	-		
	Mergansers		MODERATE	XXX			XXX		-	-		
	Northern pintail Ring-necked duck		HIGH	X X X X X X			X X X X X X X X X X X X X X X X X X X		_	_		
	Ruddy duck		MODERATE	XXX			XXX		_	_		
	Scaup		HIGH	XXX			X X X		-	_		
	Tundra swan		HIGH	XXX			X X X	-	-	-		
77	Sora Virginia rail						XXXX	-	-	_		
78	Bald eagle	тт	HIGH			XXXX	X X X X X	_	_	_		
418	Great blue heron		320 NESTS					MAY-JUL	-	-		
562	Peregrine falcon	T		Х	XX	X X X		MAR-AUG	-	-		
FISH	:											
RAR#		9 6	Conc.	т в м	тъм	.т.т ъ	я ом в	Spawning	Faas	Larvae	Juveniles	Adults
64	Alewife			ХХ	XX	XXXX	X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American eel						XXXX		-	-	JAN-DEC	-
	American shad Atlantic croaker			ХХ		XXXX		-	FEB-JUN -	FEB-JUN -	FEB-OCT	FEB-JUN -
	Atlantic croaker Atlantic menhaden					X	X X X X	_	-	- MAY-NOV	MAY-DEC MAY-NOV	- MAY-OCT
	Atlantic sturgeon	С		ххх			XXXX		_	-	JAN-DEC	APR-NOV
	Banded killifish			XXX	XX	XXXX	X X X	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Bay anchovy							APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black crappie Blueback herring							MAR-JUL FEB-JUN	- FEB-JUN	- FEB-JUN	JAN-DEC FEB-OCT	JAN-DEC FEB-JUN
	Bluefish			Λ Λ		X X X X X X X X X X X X X X X X X X X		- -	- -	- -	MAY-NOV	
	Bluegill			XXX				APR-SEP	_	_	-	JAN-DEC
	Bluespotted sunfish			XXX	XX	XXXX	X X X	MAY-JUN	-	-	-	JAN-DEC
	Brown bullhead							APR-JUN	-	_	-	JAN-DEC
	Chain pickerel Channel catfish							FEB-APR MAR-MAY	_	_	- JAN-DEC	JAN-DEC JAN-DEC
	Common carp							MAY-AUG	_	_	-	JAN-DEC
	Gizzard shad						X X X		-	-	JAN-DEC	JAN-DEC
	Gobies							APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Hickory shad Hogchoker					XXXX	x x x x	-	FEB-JUN -	FEB-JUN -	FEB-OCT JAN-DEC	FEB-JUN JAN-DEC
	Largemouth bass							MAR-MAY	_	_	-	JAN-DEC
	Longnose gar			XXX	XX	XXXX	X X X	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Minnows							APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog Pumpkinseed							APR-AUG MAR-JUN	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Redbreast sunfish							JUN-JUL	-	_	JAN-DEC	JAN-DEC
	Shortnose sturgeon			XXX	XX	XXXX	X X X	-	-	-	JAN-DEC	JAN-DEC
	Silver perch			17 17 17	, .,	XXX		-	-	-	JUL-OCT	- -
	Silversides Spot						X	MAR-JUL -	MAR-JUL -	APR-SEP DEC-APR	JAN-DEC APR-NOV	JAN-DEC -
	Spotted seatrout			AAA		XXXX		_	_	-	APR-NOV	_
	Striped bass			ХХ		XXXX		FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Striped killifish							APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder Tessellated darter						X X X	- APR-JUN	_	_	JAN-DEC -	- JAN-DEC
	Threadfin shad						XXXX	AFK-00N -	_	_	JAN-DEC	JAN-DEC
	Weakfish					XXXX		-	-	-	APR-NOV	-
	White catfish			X X X	XX	XXXX	X X X X	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	White perch							APR-JUN	APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
76	Yellow perch Black crappie							APR-JUN MAR-JUL	-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
, 0	Blueback herring					XXXX		FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill			XXX	XX	XXXX	X X X	APR-SEP	-	-	-	JAN-DEC
	Bluespotted sunfish							MAY-JUN	-	-	-	JAN-DEC
	Brown bullhead							APR-JUN	-	_	_	JAN-DEC
	Chain pickerel Channel catfish							FEB-APR MAR-MAY	_	_	- JAN-DEC	JAN-DEC JAN-DEC
	Common carp							MAY-AUG	-	-	-	JAN-DEC
	Gizzard shad			XXX	XX	XXXX	XXXX	APR-JUN	-	-	JAN-DEC	JAN-DEC
	Hickory shad					XXXX		FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker Largemouth bass						X	- MAR-MAY	_	_	JAN-DEC -	- JAN-DEC
	Largemouth bass Longnose gar							MAK-MAY MAY-JUN	_	_	- JAN-DEC	JAN-DEC JAN-DEC
	Minnows							APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog			XXX	XX	XXXX	X X X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Pumpkinseed Pedbreast sunfieh							MAR-JUN	-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish Shortnose sturgeon						X	JUN-JUL -	-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Silversides							- MAR-JUL	- MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC JAN-DEC

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

Virginia: ESIMAP 122 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
76	Spot		X X X X X X X X X X X X X	-	-	DEC-APR	APR-NOV	-
	Striped bass		X X X X X X	-	-	-	MAY-OCT	-
	Striped killifish		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Tessellated darter		X X X X X X X X X X X X X	APR-JUN	-	-	-	JAN-DEC
	Threadfin shad		$\times \times $	-	-	-	JAN-DEC	-
	White catfish		$\times \times $	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	White perch		$\times \times $	APR-JUN	APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Yellow perch		$\times \times $	APR-JUN	-	-	JAN-DEC	JAN-DEC
	Alewife		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American eel		$\times \times $	-	-	-	JAN-DEC	-
	American shad		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic croaker		X X X X X X X X	-	-	-	MAY-DEC	-
	Atlantic menhaden		X X X X X X X	-	-	MAY-NOV	MAY-NOV	MAY-OCT
	Atlantic sturgeon	C	$\times \times $	-	-	-	JAN-DEC	APR-NOV
	Banded killifish		X X X X X X X X X X X X X X	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Bay anchovy		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

NATIONAL PARK:

HUN#	Name	Contact	Phone	
131	PRINCE WILLIAM FOREST NATIONAL PARK	NATIONAL PARK SERVICE	703/221-4706	

PARK: HUN# Name Cor

141 LEESYLVANIA STATE PARK

Contact ------VA DCR **Phone**-----703/670-0372

WILDLIFE REFUGE:

HUN#NameContactPhone149FEATHERSTONE NATIONAL WILDLIFE REFUGEU.S. FISH AND WILDLIFE SERVICE703/490-4979

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	JFMAMJJ	A S O N D	Nesting	Migrating	Molting
62	Bufflehead		X X X X	X X X		-	
	Canvasback	HIGH	X X X X	X X X	_	-	_
	Mergansers	MODERATE	X X X X	X X X	_	_	_
	Ring-necked duck	HIGH	X X X X	X X X	_	_	_
	Ruddy duck	MODERATE	X X X X	X X X	_	_	_
	Scaup	MODERATE	X X X X	X X X	_	_	_
	Tundra swan	HIGH	X X X X	X X X	_	_	_
63	American black duck	HIGH	X X X X	X X X	_	_	_
	American coot		X X X X	X X X	_	_	_
	American wigeon		$\times \times \times \times$	X X X	_	_	_
	Bufflehead		XXXX	XXX	_	_	_
	Canada goose	HIGH	X X X X	X X X	_	_	_
	Mallard	HIGH	XXXX	XXX	_	_	_
	Mergansers	MODERATE	XXXX	XXX	_	_	_
	Northern pintail		XXXX	XXX	_	_	_
	Wood duck		XXXXXXX		APR-IIIN	_	_
70	Osprey		XXXXX		MAR-AUG	_	_
79	1 1	HIGH	XXXX	XXX	-	_	_
, ,	American coot		XXXX	XXX	_	_	_
	American wigeon		XXXX	XXX	_	_	_
	Bufflehead		XXXX	XXX		_	_
	Canada goose	HIGH	XXXX	XXX	_	_	_
	Canvasback	HIGH	XXXX	XXX	_	_	_
	Mallard	HIGH	XXXX	XXX	_	_	_
	Mergansers	MODERATE	XXXX	XXX	_	_	_
	Northern pintail	MODERATE	XXXX	XXX	_	_	_
	Ring-necked duck	HIGH	XXXX	XXX	_	_	
	Ruddy duck	MODERATE	XXXX	XXX	_	_	_
	=	MODERATE		XXX	_	_	_
	Scaup Tundra swan	MODERATE HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	XXX	_	-	_
	Wood duck	пІСП	X			_	_
ISH							
_	Species	S F Conc	т в м а м т т	ASOND	Snawning	Faaa	.arwae

FISH	•							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
76	Alewife		X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
, 0	American eel		\times	-	-	-	JAN-DEC	-
	American shad		XXXXXXXXX	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic croaker		X X X X X X X	_	_	_	MAY-DEC	-
	Atlantic menhaden		X X X X X X X	_	_	MAY-NOV	MAY-NOV	MAY-OCT
	Atlantic sturgeon	С	\times	_	_	-	JAN-DEC	APR-NOV
	Banded killifish		$\times \times $	APR-SEP	_	_	JAN-DEC	JAN-DEC
	Bay anchovy		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Black crappie		X X X X X X X X X X X X X	MAR-JUL	_	_	JAN-DEC	JAN-DEC
	Blueback herring		$\times \times $	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		$\times \times $	APR-SEP	-	_	_	JAN-DEC
	Bluespotted sunfish		$\times \times $	MAY-JUN	-	-	-	JAN-DEC
	Brown bullhead		$\times \times $	APR-JUN	-	-	-	JAN-DEC
	Chain pickerel		$\times \times $	FEB-APR	-	-	-	JAN-DEC
	Channel catfish		$\times \times $	MAR-MAY	_	_	JAN-DEC	JAN-DEC
	Common carp		$\times \times $	MAY-AUG	-	-	-	JAN-DEC
	Gizzard shad		$\times \times $	APR-JUN	-	-	JAN-DEC	JAN-DEC
	Hickory shad		$\times \times $	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		$X\;X\;X\;X\;X\;X\;X\;X\;$	-	-	-	JAN-DEC	-
	Largemouth bass		$X\;X\;X\;X\;X\;X\;X\;X\;$	MAR-MAY	-	-	-	JAN-DEC
	Longnose gar		$X\;X\;X\;X\;X\;X\;X\;X\;$	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Minnows		$X\;X\;X\;X\;X\;X\;X\;X\;$		-	-	JAN-DEC	JAN-DEC
	Mummichog		$X\ X\ X$	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Pumpkinseed		$X\;X\;X\;X\;X\;X\;X\;X\;$		-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish		$X\ X\ X$	JUN-JUL	-	-	JAN-DEC	JAN-DEC
	Shortnose sturgeon		$X\ X\ X$	-	-	-	JAN-DEC	JAN-DEC
	Silversides		$X\ X\ X$	MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
	Spot		$X\ X\ X$	-	-	DEC-APR	APR-NOV	-
	Striped bass		X X X X X	-	-	-	MAY-OCT	-
	Striped killifish		$X\ X\ X$		-	-	JAN-DEC	JAN-DEC
	Tessellated darter		$X\ X\ X$	APR-JUN	-	-	-	JAN-DEC
	Threadfin shad		$X \; X \; $	-	-	-	JAN-DEC	-
	White catfish		$X \; X \; $		_	_	JAN-DEC	JAN-DEC
	White perch		$X \; X \; $		APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Yellow perch		$X\;X\;X\;X\;X\;X\;X\;X\;$	APR-JUN	-	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

NATIONAL PARK:

HUN#	Name	Contact	Phone	
128	GEO. WASHINGTON MEMORIAL NAT. PARKWAY	NATIONAL PARK SERVICE	703/289-2500	

BIOLOGICAL RESOURCES:

BIRD	:
------	---

BYB# BIKD	: Species	S F Conc.	J F M A M J J A S O N D	Nestina	Migrating	Molting	•	
							· -	
70	Osprey		X X X X X X	MAR-AUG		-		
	Bald eagle	T T		DEC-AUG	-	_		
/3	American black duck American coot	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_		
	American wigeon		X X X X X X X X	_	_	_		
	Bald eagle	ТТ	XXX	-	-	-		
	Bufflehead		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Canada goose	HIGH	X X X X X X X X X X X X X	-	-	-		
	Canvasback Gadwall	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_		
	Mallard	HIGH	X X X X X X X X X X X X	_	_	_		
	Mergansers	MODERATE	XXXX XXX	_	_	_		
	Northern pintail		$X \ X \ X \ X$	-	-	-		
	Ring-necked duck	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	_		
	Ruddy duck	5000	X X X X X X X X	-	-	_		
	Scaup Tundra swan	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
75	American black duck	HIGH	X X X X X X X X X	_	_	_		
	American coot		X X X X X X X X X X X X X X X X X X X	_	-	_		
	American wigeon		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Bufflehead		X X X X X X X X X	-	-	-		
	Canada goose Canvasback	HIGH HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	_	_		
	Gadwall	nign	X X X X X X X X	_	_	_		
	Mallard	HIGH	XXXX	_	_	_		
	Mergansers	MODERATE		-	-	_		
	Northern pintail		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	_		
	Ring-necked duck	HIGH	X X X X X X X X	_	-	_		
	Ruddy duck Scaup	MODERATE HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Tundra swan	HIGH	X X X X X X X X	_	_	_		
77	Sora		\times	-	_	-		
	Virginia rail		X X X X X X X X	-	-	-		
79	American black duck	HIGH	X X X X X X X X	-	-	-		
	American coot American wigeon		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Bufflehead		X X X X X X X X	_	_	_		
	Canada goose	HIGH	X X X X X X X X	_	_	_		
	Canvasback	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-		
	Mallard	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	_		
	Mergansers	MODERATE	X X X X X X X X X	_	_	_		
	Northern pintail Ring-necked duck	HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_		
	Ruddy duck	MODERATE	X X X X X X X X	_	_	_		
	Scaup	MODERATE	$X \ X \ X \ X$	-	-	_		
	Tundra swan	HIGH	$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-			
0.0	Wood duck		X X X X X X X X X X X X	APR-JUN	-	-		
80	Bald eagle Osprey	ТТ	$f X \ X \ X \ X \ X$	_	_	_		
81	Bald eagle	т т	XXX	_	_	_		
	American black duck	60-80 NESTS	X X X X X X X X X X X X X	APR-MAY	-	_		
	American woodcock		$X X \qquad \qquad X X X X$	-	-	-		
	Black rail		X X X X X X X X X	APR-JUN	-	-		
	Great blue heron		X X X X X X X X X X X X X X X X X X X		_	_		
83	King rail Wood duck		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-MAY -	_	_		
	Bald eagle	ТТ	X X X X X X X X X	_	_	_		
	Mute swan		X X X X X X X X X	-	-			
	Tundra swan	HIGH	X X	-	-			
	Bald eagle	T T >100	X X X X X X X X X	-	-	-		
8 /	Osprey	7 NESTS	X X X X X X	MAR-AUG	-	-		
FISH	:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
76	Alewife		X X X X X X X X X	FEB-JUN		FEB-JUN	FEB-OCT	FEB-JUN
	American eel		X X X X X X X X X X X X X X X X X X X	- FEB-JUN	- FEB-JUN	- FEB-JUN	JAN-DEC	- FEB-JUN
	American shad Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- UOU-00N	- FFD-10N	- HD-JUN	FEB-OCT MAY-DEC	- EB-JUN
	Atlantic menhaden		XXXXXXX	_		MAY-NOV	MAY-NOV	MAY-OCT
	Atlantic sturgeon	C	$\mathbf{X} \ \mathbf{X} \ \mathbf{X}$	-	-	-	JAN-DEC	APR-NOV
	Banded killifish				-	_	JAN-DEC	JAN-DEC
	Bay anchovy		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Black crappie Blueback herring		X X X X X X X X X X X X X X X X X X X	MAK-JUL FEB-JUN		- FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		$\times \times $			-	-	JAN-DEC
	Bluespotted sunfish		$X\;X\;X\;X\;X\;X\;X\;X\;$		-	-	-	JAN-DEC
	Brown bullhead		X X X X X X X X X X X X X		-	_	-	JAN-DEC
	Chain pickerel Channel catfish		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		- -	_	- JAN-DEC	JAN-DEC JAN-DEC
	Common carp		X X X X X X X X X X X X X		_	_	-	JAN-DEC
	Gizzard shad		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Hickory shad		$\times \times $	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		X X X X X X X X X X X X X	-	_	-	JAN-DEC	-
	Largemouth bass		X X X X X X X X X X X X X X X X X X X		_	_	- TAN DEC	JAN-DEC
	Longnose gar		$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $		_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	= = =			1100		_	JAN-DEC	JAN-DEC
	Minnows Mummichog		$\times \times $	APR-AUG	-	_		JAN-DEC
	Minnows				-	-	JAN-DEC	
	Minnows Mummichog Pumpkinseed Redbreast sunfish		$\begin{array}{c} & \times & $	MAR-JUN JUN-JUL	- - -	- -	JAN-DEC	JAN-DEC
	Minnows Mummichog Pumpkinseed Redbreast sunfish Shortnose sturgeon		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUN JUN-JUL -	- - - - MAD- TIII	- - -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows Mummichog Pumpkinseed Redbreast sunfish Shortnose sturgeon Silversides		X X X X X X X X X X X X X X X X X X X	MAR-JUN JUN-JUL - MAR-JUL	MAR-JUL	- - - APR-SEP	JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC
	Minnows Mummichog Pumpkinseed Redbreast sunfish Shortnose sturgeon		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAR-JUN JUN-JUL -	MAR-JUL	- - -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Minnows Mummichog Pumpkinseed Redbreast sunfish Shortnose sturgeon Silversides Spot		X X X X X X X X X X X X X X X X X X X	MAR-JUN JUN-JUL - MAR-JUL - -	MAR-JUL	- - - APR-SEP DEC-APR	JAN-DEC JAN-DEC JAN-DEC APR-NOV	JAN-DEC JAN-DEC JAN-DEC -
	Minnows Mummichog Pumpkinseed Redbreast sunfish Shortnose sturgeon Silversides Spot Striped bass Striped killifish Tessellated darter		X X X X X X X X X X X X X X X X X X X	MAR-JUN JUN-JUL - MAR-JUL APR-SEP APR-JUN	MAR-JUL - - - -	- - - APR-SEP DEC-APR - -	JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
	Minnows Mummichog Pumpkinseed Redbreast sunfish Shortnose sturgeon Silversides Spot Striped bass Striped killifish Tessellated darter Threadfin shad		X X X X X X X X X X X X X X X X X X X	MAR-JUN JUN-JUL - MAR-JUL APR-SEP APR-JUN -	MAR-JUL - - - - -	- - - APR-SEP DEC-APR - - -	JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC - JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
	Minnows Mummichog Pumpkinseed Redbreast sunfish Shortnose sturgeon Silversides Spot Striped bass Striped killifish Tessellated darter Threadfin shad White catfish		X X X X X X X X X X X X X X X X X X X	MAR-JUN JUN-JUL - MAR-JUL APR-SEP APR-JUN - MAY-JUN	MAR-JUL - - - - - -	- - - APR-SEP DEC-APR - - -	JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC - JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC - JAN-DEC JAN-DEC JAN-DEC JAN-DEC
	Minnows Mummichog Pumpkinseed Redbreast sunfish Shortnose sturgeon Silversides Spot Striped bass Striped killifish Tessellated darter Threadfin shad White catfish White perch		X X X X X X X X X X X X X X X X X X X	MAR-JUN JUN-JUL - MAR-JUL APR-SEP APR-JUN - MAY-JUN APR-JUN	MAR-JUL - - - - - -	APR-SEP DEC-APR APR-JUN	JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC - JAN-DEC	JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
	Minnows Mummichog Pumpkinseed Redbreast sunfish Shortnose sturgeon Silversides Spot Striped bass Striped killifish Tessellated darter Threadfin shad White catfish White perch Yellow perch		X X X X X X X X X X X X X X X X X X X	MAR-JUN JUN-JUL - MAR-JUL APR-SEP APR-JUN - MAY-JUN APR-JUN	MAR-JUL APR-JUN	APR-SEP DEC-APR APR-JUN	JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC - JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC - JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
	Minnows Mummichog Pumpkinseed Redbreast sunfish Shortnose sturgeon Silversides Spot Striped bass Striped killifish Tessellated darter Threadfin shad White catfish White perch Yellow perch ESTRIAL MAMMAL:		X X X X X X X X X X X X X X X X X X X	MAR-JUN JUN-JUL - MAR-JUL APR-SEP APR-JUN - MAY-JUN APR-JUN	MAR-JUL APR-JUN	APR-SEP DEC-APR APR-JUN	JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC - JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC - JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
RAR#	Minnows Mummichog Pumpkinseed Redbreast sunfish Shortnose sturgeon Silversides Spot Striped bass Striped killifish Tessellated darter Threadfin shad White catfish White perch Yellow perch ESTRIAL MAMMAL: Species	S F Conc.	X X X X X X X X X X X X X X X X X X X	MAR-JUN JUN-JUL - MAR-JUL APR-SEP APR-JUN - MAY-JUN APR-JUN	MAR-JUL APR-JUN	APR-SEP DEC-APR APR-JUN	JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC - JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC - JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC
RAR#	Minnows Mummichog Pumpkinseed Redbreast sunfish Shortnose sturgeon Silversides Spot Striped bass Striped killifish Tessellated darter Threadfin shad White catfish White perch Yellow perch ESTRIAL MAMMAL: Species	S F Conc.	X X X X X X X X X X X X X X X X X X X	MAR-JUN JUN-JUL - MAR-JUL APR-SEP APR-JUN - MAY-JUN APR-JUN	MAR-JUL APR-JUN	APR-SEP DEC-APR APR-JUN	JAN-DEC JAN-DEC JAN-DEC APR-NOV MAY-OCT JAN-DEC - JAN-DEC JAN-DEC JAN-DEC JAN-DEC	JAN-DEC JAN-DEC JAN-DEC - JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC

Virginia: ESIMAP 124 (cont.)

HUMAN USE RESOURCES:

PARK:

HUN#	Name	Contact	Phone
139	GEORGE WASHINGTON GRIST MILL STATE PARK	VA DCR	703/780-2000
142	MASON NECK STATE PARK	VA DCR	703/339-2385

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
149	FEATHERSTONE NATIONAL WILDLIFE REFUGE	U.S. FISH AND WILDLIFE SERVICE	703/490-4979
155	MASON NECK NATIONAL WILDLIFE REFUGE	U.S. FISH AND WILDLIFE SERVICE	703/490-4979
157	OCCOQUAN BAY NATIONAL WILDLIFE REFUGE	U.S. FISH AND WILDLIFE SERVICE	703/490-4979

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	JFMAMJJ	ASOND	Nesting	Migrating	Molting
79	American black duck	HIGH	X X X X	XXX	-	-	-
	American coot		X X X X	XXX	-	-	-
	American wigeon		X X X X	X X X	-	-	-
	Bufflehead		$X \times X \times X$	X X X	-	-	-
	Canada goose	HIGH	X X X X	X X X	-	-	-
	Canvasback	HIGH	X X X X	X X X	-	-	-
	Mallard	HIGH	X X X X	X X X	-	-	-
	Mergansers	MODERATE	$X \ X \ X \ X$	X X X	-	-	-
	Northern pintail		$X \ X \ X \ X$	X X X	-	-	-
	Ring-necked duck	HIGH	$X \ X \ X \ X$	X X X	-	-	-
	Ruddy duck	MODERATE	$X \ X \ X \ X$	X X X	-	-	-
	Scaup	MODERATE	$X \ X \ X \ X$	X X X	-	-	-
	Tundra swan	HIGH	X X X X	X X X	-	-	-
	Wood duck		X X X X X X X	X X X X X	APR-JUN	-	-

FISH:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
76	Alewife		X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American eel			-	-	-	JAN-DEC	-
	American shad		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic croaker		X X X X X X X X	-	-	-	MAY-DEC	-
	Atlantic menhaden		X X X X X X X	-	-	MAY-NOV	MAY-NOV	MAY-OCT
	Atlantic sturgeon	C	$\times \times $	-	-	-	JAN-DEC	APR-NOV
	Banded killifish		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Bay anchovy		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black crappie			MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Blueback herring		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		$\times \times $	APR-SEP	-	-	-	JAN-DEC
	Bluespotted sunfish		$\times \times $	MAY-JUN	-	-	-	JAN-DEC
	Brown bullhead		$\times \times $	APR-JUN	-	-	-	JAN-DEC
	Chain pickerel			FEB-APR	-	-	-	JAN-DEC
	Channel catfish		$\times \times $	MAR-MAY	-	-	JAN-DEC	JAN-DEC
	Common carp		$\times \times $	MAY-AUG	-	-	-	JAN-DEC
	Gizzard shad		$\times \times $	APR-JUN	-	-	JAN-DEC	JAN-DEC
	Hickory shad		X X X X X X X X X	FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		$\times \times $	-	-	-	JAN-DEC	-
	Largemouth bass		$\times \times $	MAR-MAY	-	-	-	JAN-DEC
	Longnose gar		$\times \times $	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Minnows		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog		$\times \times $	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Pumpkinseed		$\times \times $	MAR-JUN	-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish		$ \begin{smallmatrix} X & X & X & X & X & X & X & X & X & X$	JUN-JUL	-	-	JAN-DEC	JAN-DEC
	Shortnose sturgeon		$\times \times $	-	-	-	JAN-DEC	JAN-DEC
	Silversides		$\times \times $	MAR-JUL	MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
	Spot		$\times \times $	-	-	DEC-APR	APR-NOV	-
	Striped bass		X X X X X X	-	-	-	MAY-OCT	-
	Striped killifish		$\times \times $	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Tessellated darter		$\times \times $	APR-JUN	-	-	-	JAN-DEC
	Threadfin shad		$\times \times $	-	-	-	JAN-DEC	-
	White catfish		$\times \times $	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	White perch		$\times \times $	APR-JUN	APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Yellow perch		$\times \times $	APR-JUN	-	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

NATIONAL PARK:

HUN# Name		Contact	Phone
128	GEO. WASHINGTON MEMORIAL NAT. PARKWAY	NATIONAL PARK SERVICE	703/289-2500