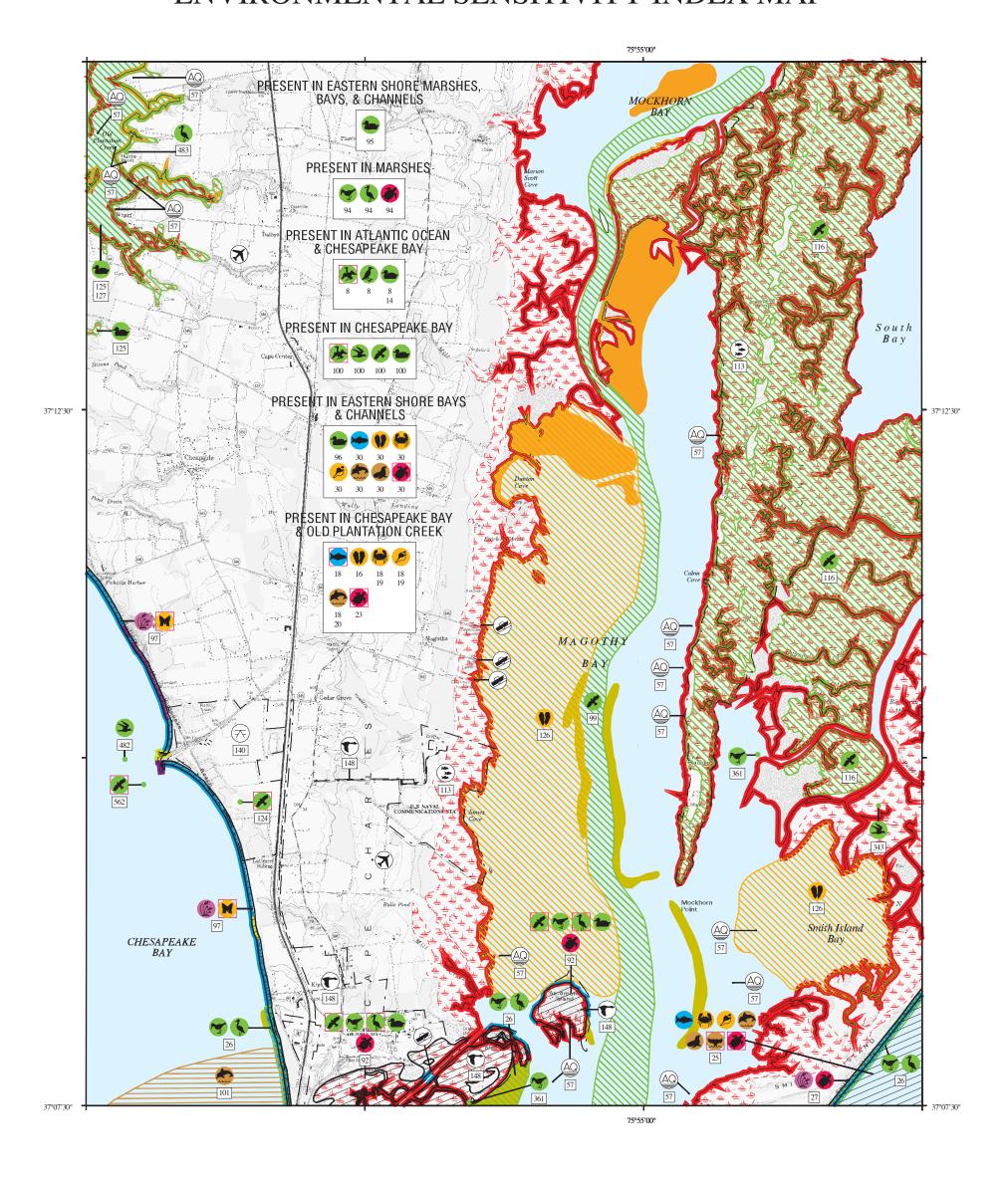
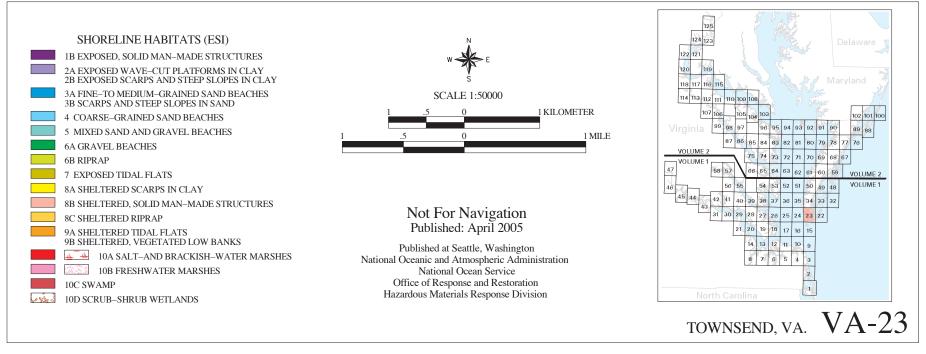
ENVIRONMENTAL SENSITIVITY INDEX MAP





Virginia: ESIMAP 23

BIOLOGICAL RESOURCES:

BIRD:

BIRD	:															
RAR#	Species	SF	Conc.	J	FI	M Z	A M	1 J	J	A	s	O N	I 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								Σ	X	-	-	-
	Red-necked grebe				X 2									-	-	_
1 /	Red-throated loon		III CII	X			. 7						X	-	-	_
14	Black scoter Surf scoter		HIGH	X									XX	-	_	_
	White-winged scoter			X									X	_	_	_
26	American woodcock			Х		Λ.	^-				v		X	_	_	_
20	Black-bellied plover			21		x :	x x	. x	· x			XX		_	_	_
	Dunlin			Х									X	_	_	_
	Greater yellowlegs											ХХ		_	_	_
	Killdeer				•				X				•	_	_	_
	Least sandpiper				2	X I	ХХ				Х	ХХ	ζ	_	_	_
	Lesser yellowlegs											ХХ		_	_	_
	Pectoral sandpiper							Х	X	Χ	Х	ХХ	ζ	-	_	_
	Red knot				2	X Z	ХХ	Χ	X	Χ				-	-	-
	Ruddy turnstone				2	X Z	ХХ	Χ	X	Х				-	-	-
	Sanderling			Х	X	X Z	ХХ	X	X	Х	Χ	ΧХ	X	-	-	-
	Semipalmated plover											ΧХ		-	-	-
	Semipalmated sandpiper				2	X I	XX	X	X	Χ	Χ	ΧХ	ζ	-	-	-
	Short-billed dowitcher			Χ	X Z	X I	XX						X	-	-	-
	Stilt sandpiper											XX		-	-	-
	Western sandpiper										Χ	XX		-	-	_
	Whimbrel								X	Х				-	-	-
	White-rumped sandpiper						XX							-	-	-
0.0	Willet American black duck		COMMON										X	- 7 DD TIM	-	_
92	American black duck American kestrel		ABUNDANT	Λ	X A	Χ	X X	\ Z	. A			XX		APR-JUN -	_	_
	American wigeon		COMMON	Х	v •	ν,	v v	,					XX	_	_	_
	Black-crowned night-heron		COMMON						· x					MAY-JUL	_	_
	Blue-winged teal		COMMON				XX					XX		-	_	_
	Brant		COMMON	Х									X	_	_	_
	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	Х	X	X Z	ХХ	Χ	X	Х	Χ	ΧХ	X	APR-JUN	_	_
	Gadwall		COMMON	Х	X	X Z	ХХ	X	X	Χ	Χ	ΧХ	X	APR-JUN	-	_
	Glossy ibis	C			2	X Z	ХХ	X	X	Χ	Χ	ХХ		MAY-JUL	-	-
	Great blue heron		COMMON	Χ	X Z	X Z	XX	X	X	Χ	Χ	ΧХ	X	-	-	-
	Great egret	С	COMMON							Χ	Χ	ХХ		MAY-JUL	-	-
	Green-winged teal			Χ									X	-	-	_
	King rail			Χ									X	-	-	-
	Little blue heron	С										ΧX		MAY-JUL	-	-
	Mallard		COMMON	Х	X Z	X I	ХХ	X	X	Х				MAY-JUL	-	-
	Merlin	_	COMMON									ХΧ		-	-	-
	Northern harrier	С	COMMON	X									X	-	-	-
	Northern pintail			X								XX		-	-	_
	Northern shoveler Red-tailed hawk		COMMON	X		X 2	X X						X	_	<u>-</u> -	-
	Sharp-shinned hawk		COMMON	Х	Λ							ли ХХ	X X	_	_	_
	Snow goose		ABUNDANT	v	X	· ·	v v	,					XX	_	_	_
	Snowy egret		COMMON	21					· v			XX		_	_	_
	Sora		COPITON				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				X	_	_	_
	Willet		COMMON											MAR-JUN	_	_
	Yellow-crowned night-heron	С										ХХ		MAY-JUL	_	_
94	Clapper rail		HIGH	Х	X	X Z	ХХ	Χ	X	Х	Χ	ΧХ	X	APR-AUG	_	_
	King rail			Χ	X	X I	ХХ	X	X	Х	Χ	ХХ	X	-	-	-
	Sora				2	X Z	ХХ	ζ.			Χ	ХХ		-	-	-
	Virginia rail			Х	X	X Z	ХХ	X	X	Χ	Χ	ΧХ	X	APR-JUN	-	-
	Whimbrel		HIGH		2	X Z	XX	ζ.		Χ	Χ	X		-	-	-
	Willet		HIGH											APR-SEP	-	-
95	American black duck		HIGH					X	X	Χ				MAR-JUL	-	-
	American wigeon		MODERATE	Χ									X	-	-	-
	Brant		HIGH		X 2								X		-	-
	Canada goose		HIGH											APR-JUN	_	-
	Gadwall		MODERATE					. X	. X	Х				APR-JUN	_	_
	Green-winged teal Mallard		MODERATE MODERATE	X				, ,		v			X	- MAY-JUL	_	_
	Northern pintail		MODERATE	Х				∆ Z:	. 1	21			XX	- IAN	_	_
	Northern shoveler		LOW	Х									X	_	_	_
	Snow goose		HIGH	Х									X	_	_	_
96	Bufflehead		HIGH	Χ									X	_	_	_
	Long-tailed duck		MODERATE	Х									X	_	_	_
	Mergansers		HIGH	Х	X	X Z	Χ					ΧХ	X	-	-	_
	Scoters		HIGH	Χ	X	X Z	Χ					ХХ	X	-	-	-
	Tundra swan		MODERATE	Χ	X	X I	Χ					ΧХ	X	-	-	-
99	Osprey				2	X Z	XX	X	X	Χ	Χ	ΧХ	ζ	-	-	-
100	Brown pelican	С			2	X Z	XX	X	X	Χ	Χ	X		-	-	-
	Gulls							X	X	Χ			X	-	-	-
	Loons			Χ									X	-	-	-
	Mergansers			Χ									X	-	-	-
	Osprey							X	. X	Х		ΧХ		-	-	-
	Scoters		HIGH	Χ				, .					X	_	-	-
116	Terns American kestrel		אווע ע רוווום ע		2	Λ.	ΛX	. X	X				,	_	_	-
110			ABUNDANT									XX		_	_	_
	Broad-winged hawk		COMMON									X X X X		_	_	_
	Merlin Red-tailed hawk		COMMON ARIINDANT	Х	У								X	_	_	_
	Sharp-shinned hawk		ABUNDANT ABUNDANT	Λ	Δ							x x X X		_	_	_
124	Bald eagle	тт	- 1T- ^ 14 T- 171 T	Х	X	х '	χy	(- FEB-MAY	_	_
125		_ 1	HIGH						×					MAR-JUL	_	_
120	American wigeon				X				. 21	23			X	-	_	_
	Canada goose		HIGH					<u> </u>	X	Х				APR-JUN	_	_
	Gadwall		-		X			4	-1				X	-	_	_
	Green-winged teal				X								X	-	_	_
	Mallard		MODERATE					X	X	Х				MAY-JUL	-	-
	Snow goose				X								X	-	-	-
127	Bufflehead		HIGH	Х	X	X Z	X					ХХ	X	-	-	-
	Long-tailed duck			Χ	X Z	X Z	Χ						X	-	-	-
	Mergansers			Х									X	-	-	-
	Ring-necked duck				X Z								X	-	-	-
	Scaup				X								X	-	_	-
	Scoters		HIGH	Χ	X	X Z	Χ					XX	X	-	-	-

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 23 (cont.)

BIOLOGICAL RESOURCES: (cont.)

BIRD:	(cont.)

BIRD	: (cont.)							
RAR#	Species	S F Conc.	J F M A M J J A S O N D				g 	
127	Tundra swan		$X \ X \ X \ X \qquad \qquad X \ X \ X$		-	-		
	Forster's tern American oystercatcher	13 ADULTS HIGH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL -	-	-		
	Common tern	80 NESTS	XXXXXXXX	MAY-JUL	-	_		
	Great blue heron	19 NESTS T	$\begin{smallmatrix} X & X & X & X & X & X & X & X & X & X $	MAY-JUL MAR-AUG	-	-		
	Peregrine falcon	1	A A A A A A	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
18	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 Atlantic menhaden		$\begin{array}{c} 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		-	-	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 \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 Butterfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Clearnose skate		XXXXXXX	-	-	-	-	MAY-NOV
	Gobies Harvestfish		$\begin{smallmatrix} 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		XXXXXXXXXXX	-	-	-	NOV-MAR	JAN-JUN
	Hogchoker Inland silverside		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		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		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG -	-	-	JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	- JAN-DEC	APR-OCT JAN-DEC
	Northern puffer Northern searobin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	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		$X \ X \ X \ X \qquad \qquad X \ X \ X$	-	-	-	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		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- APR-MAY	_	-	- JAN-DEC	OCT-MAY JAN-DEC
	Spot		$\times \times $	-	-	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 Striped killifish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- APR-SEP	_	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Summer flounder		$\times \times $	-	-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog Threadfin shad		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	<u>-</u>	OCT-APR FEB-MAY
								SEP-NOV
25	Weakfish Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	APR-AUG -	-	MAY-AUG -	APR-NOV AUG-DEC	APR-NOV MAY-NOV
	Atlantic mackerel		X X	-	-	-	_	MAR-APR
	Atlantic menhaden Black drum		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	_	_	JAN-DEC -	MAY-OCT APR-OCT
	Black sea bass		XXXXXXX	JUN-OCT	-	-	APR-OCT	APR-OCT
	Bluefish Butterfish		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Crevalle jack		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	JAN-DEC	-
	Northern kingfish Northern searobin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-AUG -	-	-	-	APR-OCT MAR-OCT
	Pollock		XXXXX	-	-	-	_	DEC-APR
	Red drum Red hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JUL-NOV -	_	_	- FEB-MAY	MAY-NOV FEB-MAY
	nea nane						1 11 1111	SEP-NOV
	Sandbar shark Scup (porgy)		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_	MAY-OCT JUN-OCT	MAY-OCT MAR-OCT
	Silver hake		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	-	-	-	-	OCT-MAY
	Southern kingfish (whiting) Spanish mackerel		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-	_	_	APR-OCT APR-MAY
	Spiny dogfish		$X \ X \ X \ X$	-	-	-	_	NOV-APR
	Spot Spotted hake		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	DEC-APR -	MAR-NOV MAR-JUN	MAR-NOV MAR-JUN
	-							SEP-NOV
	Spotted seatrout Summer flounder		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MAY-JUL -	-	- OCT-MAY	APR-NOV	APR-NOV APR-OCT
	Tautog		X X X X X X X X X X X X X X X X X X X	APR-AUG	-	-	-	JAN-DEC
30	Weakfish Alewife		$\begin{smallmatrix} & & \times $	APR-AUG	-	MAY-AUG -	APR-NOV	APR-NOV FEB-JUN
30	American eel		$\times \times $	-	-	-	JAN-DEC	-
	American shad Atlantic croaker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	_	- MAY-DEC	FEB-JUN -
	Atlantic herring		XXXXX	-	-	-	-	FEB-JUN
	Atlantic mackerel Atlantic menhaden		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	-	- MAY-NOV	MAR-APR MAY-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-SEP	APR-OCT APR-SEP
	Blueback herring		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	FEB-JUN	FEB-OCT	FEB-JUN
	Bluefish Crevalle jack		$\begin{smallmatrix}&&&X&X&X&X&X\\X&X&X&X&X&X&X&X&X&X&X&X&X&$	-	-	_	MAY-OCT JAN-DEC	MAY-OCT
	Gobies		X X X X X X X X	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Hickory shad Hogchoker		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	- MAY-SEP	- MAY-SEP	- JAN-DEC	FEB-JUN JAN-DEC
	Killifish		$\times \times $	MAR-SEP	- -	-	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 DEC-APR
	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 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
			11 11 11					

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 23 (cont.)

BIOLOGICAL RESOURCES: (cont.)

###	Species Silver perch Silversides Spanish mackerel Spot Spotted hake Spotted seatrout Striped anchovy Summer flounder Tautog Weakfish White hake White perch Winter flounder TAT: 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 Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster Northern quahog (hard clam)			X X X X X X X X X X X 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	Eggs APR-MAY MAR-JUL	Larvae APR-JUN APR-SEP APR-JUN	Juveniles JAN-DEC JAN-DEC - APR-OCT OCT-APR APR-NOV APR-NOV - MAR-OCT - JAN-DEC DEC-JUL	Adult JAN-I JAN-I APR-N APR-N APR-N APR-N APR-C MAR-N SEP-N JAN-I DEC-N	DEC DEC MAY SEP NOV NOV NOV APR OCT MAY NOV DEC
######################################	Silver perch Silversides Spanish mackerel Spot Spotted hake Spotted seatrout Striped anchovy Summer flounder Tautog Weakfish White hake White perch Winter flounder TAT: 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	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	APR-MAY MAR-JUL MAY-JUL APR-SEP APR-AUG - APR-JUN	APR-MAY MAR-JUL APR-JUN	APR-JUN APR-SEP APR-JUN	JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR APR-NOV APR-NOV APR-NOV APR-NOV JAN-DEC	JAN-I JAN-I JAN-I APR-N JUL-S APR-N APR-N APR-N OCT-I APR-C MAR-N SEP-N JAN-I	DEC DEC MAY SEP NOV NOV NOV APR OCT MAY NOV DEC
HABI' RAR#	Silversides Spanish mackerel Spot Spotted hake Spotted seatrout Striped anchovy Summer flounder Tautog Weakfish White hake White perch Winter flounder TAT: 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			X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X 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	MAR-JUL APR-JUN	APR-SEP APR-JUN	JAN-DEC JAN-DEC - APR-OCT OCT-APR APR-NOV APR-NOV APR-NOV - MAR-OCT - JAN-DEC	JAN-I JAN-I APR-N JUL-S - APR-N APR-N OCT-F APR-N ORT-S APR-C MAR-N SEP-N JAN-I	DEC DEC MAY SEP NOV NOV NOV APR OCT MAY NOV DEC
HABI' RAR#	Silversides Spanish mackerel Spot Spotted hake Spotted seatrout Striped anchovy Summer flounder Tautog Weakfish White hake White perch Winter flounder TAT: 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			X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X 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	MAR-JUL APR-JUN	APR-SEP APR-JUN	JAN-DEC APR-OCT OCT-APR APR-NOV APR-NOV APR-NOV - MAR-OCT - JAN-DEC	JAN-I APR-N JUL-S APR-N APR-N APR-N APR-N OCT-A APR-C MAR-N SEP-N JAN-I	DEC MAY SEP NOV NOV NOV APR OCT MAY NOV DEC
PAR#	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			X X X X X X X X X X X X X X X X X X X	M A 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 X X X X X X X X X 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	- - - - - - - -	- - - - - - - - APR-JUN	APR-OCT OCT-APR APR-NOV APR-NOV APR-NOV - MAR-OCT - JAN-DEC	JUL-S APR-N APR-N APR-N OCT-N APR-C MAR-N SEP-N JAN-I	SEP NOV NOV APR OCT MAY NOV DEC
PAR#	Spotted hake Spotted seatrout Striped anchovy Summer flounder Tautog Weakfish White hake White perch Winter flounder PAT: 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 X X X X X X X X 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		- - - - - - - APR-JUN	OCT-APR APR-NOV APR-NOV APR-NOV - MAR-OCT - JAN-DEC	APR-N APR-N APR-N OCT-A APR-C MAR-N SEP-N JAN-I	NOV NOV NOV APR OCT MAY NOV DEC
97 INVE: RAR# 16 18 19 25 30 97 126 MARII RAR# 18 20	Striped anchovy Summer flounder Tautog Weakfish White hake White perch Winter flounder TAT: 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	M J G	X X X X X X X X X X X X X X 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		- - - - - APR-JUN	APR-NOV APR-NOV - MAR-OCT - JAN-DEC	APR-N APR-N OCT-A APR-O MAR-N SEP-N JAN-I	NOV NOV APR OCT MAY NOV DEC
97 INVE: RAR# 16 18 19 25 30 97 126 MARII RAR# 18 20	Summer flounder Tautog Weakfish White hake White perch Winter flounder PAT: 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	M J G	X X X X X X X X X X X X X X 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		- - - - APR-JUN	APR-NOV - MAR-OCT - JAN-DEC	APR-N OCT-A APR-O MAR-N SEP-N JAN-I	NOV APR OCT MAY NOV DEC
97 INVE: RAR# 16 18 19 25 30 97 126 MARII RAR# 18 20	Tautog Weakfish White hake White perch Winter flounder TAT: 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 Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster			X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X 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		APR-JUN	- MAR-OCT - JAN-DEC	OCT-A APR-O MAR-N SEP-N JAN-I	APR OCT MAY NOV DEC
97 INVE: RAR# 16 18 19 25 30 97 126 MARII RAR# 18 20	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 Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster			X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X 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		APR-JUN	- JAN-DEC	MAR-N SEP-N JAN-I	MAY NOV DEC
97 INVE RAR# 16 18 19 25 30 97 126 MARII RAR# 18 20	White perch Winter flounder PAT: 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	M J & X X X X X X X X X X X X X X X X X X	X X X X J 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 X X	APR-JUN		APR-JUN	JAN-DEC	SEP-1 JAN-1	NOV DEC
97 INVE RAR# 16 18 19 25 30 97 126 MARII RAR# 18 20	Winter flounder PAT: Species			J F: X X X X X X X X X X X X X X X X X X X	M A I A X X X X X X X X X X X X X X X X X	M 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 X X X X X X X X X						
97 INVE: RAR#	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 Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster			J F : X X X X X X X X X X X X X X X X X X	M A 1 A 2 A 3 A 3 A 3 A 3 A 3 A 3 A 3 A 3 A 3	M J &	J A S X	O N D X	-	-	-	DEC-JUL	DEC-I	мау
97 INVE: RAR#	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)			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	 X	 X X X X X X X X X X X X						
97 INVE: RAR#	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 Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster			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	 X	 X X X X X X X X X X X X						
97 INVE: RAR# 16 18 19 25 30 97 126 MARII RAR# 18 20	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 thelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster	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 X X X X X X X X X X X X						
INVE: RAR# 16 18 19 25 30 97 126 MARII RAR# 18 20	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	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 J A S	X X X X X X X X X						
INVE: RAR# 16 18 19 25 30 97 126 MARII RAR# 18 20	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	S F Conc.		X X X X X X X X X X X X X X X X X X X	M A N X X X X	X X X X X X м J 3	X	X X X X X X						
INVE: RAR# 16 18 19 25 30 97 126 MARII RAR# 18 20	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	S F Conc.		J F :	M A 1 X X X X X X	м ј :	J A S							
**************************************	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	S F Conc.		 X X X X X X	 X X X X X X			OND						
16 18 19 25 30 97 126 MARII RAR# 18 20	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	S F Conc.		 X X X X X X	 X X X X X X			OND						
18 19 25 30 97 126 MARII RAR# 18 20	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			$\begin{array}{ccc} X & X \\ X & X \end{array}$	ХХХ	 x x x			Spawning	Eggs	Larvae	Juveniles	Adult	ts
18 19 25 30 97 126 MARII RAR# 18 20	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			$\begin{array}{ccc} X & X \\ X & X \end{array}$	ХХХ	$\sim \Delta$	V V V	 v v v	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	 JAN-I	DEC
25 30 97 126 MARII RAR# 18 20	Blue crab Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster				v v v	XXX		XXX	- TAI-UCT	MAY-OCT	MAY-OCT	JAN-DEC JAN-DEC	JAN-I JAN-I	
25 30 97 126 MARII RAR# 18 20	Channeled whelk Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster			X X		XXX	ххх	X X X	- MAN OCE	-	-	JAN-DEC	JAN-I	DEC
30 97 126 MARII RAR# 18 20	Blue crab Channeled whelk Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster							X X X X X X X X X X X X X X X X X X X	MAY-OCT -	MAY-SEP -	MAY-NOV -	JAN-DEC JAN-DEC	JAN-I JAN-I	
97 126 MARII RAR# 18 20	Blue crab Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster			ХХ	ХХХ	ххх	X X X	X X X	-	-	MAY-NOV	JAN-DEC	JAN-I	DEC
97 126 MARII RAR# 18 20	Channeled whelk Northern quahog (hard clam) Northeastern beach tiger beetle Eastern oyster							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-I JAN-I	
126 MARII RAR# 18 20	Northeastern beach tiger beetle Eastern oyster							XXX	-	MAI-SEP	MAI-NOV	JAN-DEC	JAN-I	
126 MARII RAR# 18 20	Eastern oyster								MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-I	
MARII RAR# 18 20	_	ТТ							JUN-SEP JUN-SEP	JUN-SEP JUN-SEP	- JUN-SEP	JAN-DEC JAN-DEC	JUN-(JAN-I	
RAR# 18 20									MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-I	
18 20	NE MAMMAL:													
20	Species	S F Conc.		JF	MAN	мј	JAS	OND	Mating	Calving	Pupping	Molting		
20	Harbor porpoise			 v v	 X X X	 v		 v						
2 E	Bottlenose dolphin			ΛΛ			ххх	X	-	-	-	_		
25	Bottlenose dolphin						XXX		-	-	-	-		
	Common dolphin Harbor porpoise			хх	XXX		XXX	X X	_	_	_	_		
	Harbor seal			ХХ				X X X	-	-	-	-		
3.0	Humpback whale Bottlenose dolphin	ΕE		ХХ			$X \ X \ X \ X$	XXX	_	JAN-DEC -	-	_		
30	Harbor porpoise			ХХ	XXX		1 11 11	X	-	-	-	-		
1.01	Harbor seal Bottlenose dolphin	HIGH		ХХ	V 1	v v 1	XXX	XXX	_	_	_	_		
	-	111 011			21. 2		1 11 11	21						
REPT:		G T C						0 N D	Mastine	**********	T		1	7 d 1 t
	Species	S F Conc.							Nesting			ting Juveni 	es .	Adults
23	Green sea turtle	TT					XXX		-	-	-	MAY-NO		- MAY NOT
	Kemp's ridley sea turtle Leatherback sea turtle	E E E E						X X X X	-	-	-	MAY-NO		MAY-NOV MAY-NOV
	Loggerhead sea turtle	ТТ						ХХ	-	-	-	MAY-NO		MAY-NOV
25	Green sea turtle Kemp's ridley sea turtle	T T E E						X X X X	_	_	-	MAY-NO MAY-NO		- MAY-NOV
	Leatherback sea turtle	E E						XX	-	-	-	-		MAY-NOV
27	Loggerhead sea turtle Diamondback terrapin	ТТ						XX	- MAY-JUL	-	-	MAY-NO MAR-NO		MAY-NOV
	Green sea turtle	ТТ						X X X X	MAI-JUL -	-	-	MAY-NO		MAR-NOV
	Kemp's ridley sea turtle	E E						ХХ	-	-	-	MAY-NO		MAY-NOV
	Leatherback sea turtle Loggerhead sea turtle	E E T T						X X X X	_	_	_	- MAY-NO		MAY-NOV MAY-NOV
	Diamondback terrapin				X X X	ХХХ	ХХХ	ХХ	-	-	-	MAR-NO	N V	MAR-NOV
	Diamondback terrapin				XXX	X X X	X X X	ХХ	- 	- =====	- 	MAR-NO	V N	MAR-NOV
	······································		=	=	=		=	=	=		=			
-	CULTURE:		Ge-4 : :								h a a -			
HUN#	Name		Contact								hone 			
57	AQUACULTURE: HARD CLAMS													
MANA	GEMENT AREA:													
HUN#	Name		Contact							Pl	hone			
113	MOCKHORN WILDLIFE MANAGEMENT AREA		VDGIF								04/367-100			
			ANGTE							81	04/30/-100	v		
PARK														
HUN#	Name		Contact							P)	hone			
140	KIPTOPEKE STATE PARK		VA DCR							7.	57/331-226	7		
	TITE TOTAL OTTILE TIME.													
MII'D.														
WILD:	LIFE REFUGE:		Contact							וֹס	hone			
	LIFE REFUGE:		Contact 								hone 57/331-276			

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.