

# Database contents for the Abstract, Results, Tables and Figures of the Fish and Fisheries paper 2011 resubmission

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## **Abstract**

A total of 326 assessments.

## **Results**

### *Summary*

Total number of proper stocks assessments: 326, from 289 marine fish populations and 37 invertebrate populations.

### *Global fisheries*

#### *Management bodies and geography*

Number of assessments from NMFS: 140.

Number of assessments from ICES: 63.

Number of assessments from MFish: 29.

Number of assessments from DFO: 22.

Number of assessments from AFMA: 16.

Number of assessments from DETMCM: 14.

Assessments were available for 32 LMEs, with the greatest number of assessed stocks coming from Northeast U.S. Continental Shelf (n=59), California Current (n=35), New Zealand Shelf (n=29), Celtic-Biscay Shelf (n=26), Gulf of Alaska (n=26), East Bering Sea (n=22) and Southeast U.S. Continental Shelf (n=20).

### *Taxonomy*

Number of species in FishBase: 12339

Number of species in SAUP: 649

Number of species in RAM Legacy: 160 (from 57 families and 20 orders)

Top 5 taxonomic orders: Gadiformes (n=67), Perciformes (n=62), Pleuronectiformes (n=53), Scorpaeniformes (n=40), Clupeiformes (n=37)

### *Timespan*

Number of assessments with catch timeseries: 309.

Number of assessments with recruitment timeseries: 272.

Number of assessments with spawning stock biomass timeseries: 275.

The median lengths of catch/landings, SSB, and recruitment timeseries were 38, 34, and 33 years, respectively (Figure 3). The time period covered by 90% of assessments is: catch/landings (1967-2007), SSB (1972-2007), recruitment (1971-2006), while that covered by 50% of assessments is: catch/landings (1983-2004), SSB (1985-2005), recruitment (1984-2003)

### *Assessment methodologies and reference points*

The three most common assessment methods were Statistical catch-at-age/length models (n=164), Virtual Population Analyses (n=91) and Biomass dynamics model (n=46). Regionally, Virtual Population Analysis (VPA) is still the most common assessment model for European stocks (71% of 63 assessments), Canada (59% of 22 assessments) and Argentina (83% of 6 assessments), whereas statistical catch-at-age and -length models are more common for the United States (66% of 140 assessments), Australia (81% of 16 assessments) and New Zealand (76% of 29 assessments).

Biomass- or exploitation-based reference points were available for 257 (80%) and 222 (69%) assessments, respectively.

### *Stock status*

Of the 240 stocks presented in Figure 4, 112 and 128 of the biomass reference points and 83 and 157 of the exploitation reference points come from assessments and from surplus production model fits, respectively.

Overall, 57% of stocks are estimated to be below their biomass-related MSY BRP, that is  $B_{curr} < B_{msy}$ , and 30% are estimated to be above their exploitation-related MSY BRP,  $U_{curr} > U_{msy}$  (n=240 stocks total; Figure 4). Of the stocks for which biomass is currently estimated to be below  $B_{msy}$ , 55% have had their exploitation rate reduced below  $U_{msy}$ , suggesting potential for recovery (Figure 4). The remaining 45% of these stocks however, still have excessive exploitation rates (Figure 4). On a positive note, 43% of all stocks are estimated to be above  $B_{msy}$ , and 91% of the stocks above  $B_{msy}$  also have  $U_{current}$  below  $U_{msy}$ .

### **References**

Worm, B., Hilborn, R., Baum, J.K. *et al.* (2009). Rebuilding global fisheries. *Science* 325, 578--585.

## Tables

Table 1: Number of assessments included in the RAM Legacy database

country	authority	mgmt	nassess
USA	National Marine Fisheries Service	NMFS	140
Multinational	International Council for the Exploration of the Sea	ICES	63
New Zealand	Ministry of Fisheries	MFish	29
Canada	Department of Fisheries and Oceans	DFO	22
Australia	Australian Fisheries Management Authority	AFMA	16
South Africa	South African national management	DETMCM	14
Multinational	International Commission for the Conservation of Atlantic Tunas	ICCAT	10
Multinational	Northwest Atlantic Fisheries Organization	NAFO	8
Argentina	Consejo Federal Pesquero	CFP	6
Multinational	Western and Central Pacific Fisheries Commission	WCPFC	4
USA	US state-level management	US State	3
Multinational	Inter-American Tropical Tuna Commission	IATTC	2
Russia	Russian Federal Fisheries Agency	RFFA	2
Multinational	Commission for the Conservation of Antarctic Marine Living Resources	CCAMLR	1
Peru	Instituto del Mar del Peru	IMARPE	1
Multinational	Indian Ocean Tuna Commission	IOTC	1
Multinational	International Pacific	IPHC	1

## Figures

### *Figure legends*

Figure 1. Global map of Large Marine Ecosystems (LMEs) and high seas areas (ovals) showing the number of stock assessments present in the database for each area. This map illustrates the limited coverage of available stock assessments.

Figure 2. Comparison of the taxonomic diversity of marine species as provided by FishBase (top panel), the coverage of catch data as provided by the Sea Around Us Project (SAUP) database (middle panel) and the new RAM Legacy database (bottom panel). To facilitate the identification of the taxonomic groups that are not presented in the catch and assessment data, the FishBase branching pattern of the spoked dendrogram is maintained to generate the other two dendrograms.

Figure 3. Orca plots showing the temporal coverage of (A) catch/landings, (B) spawning stock biomass and (C) recruitment. The temporal coverage for individual assessments is represented by thin alternating black and grey horizontal lines in the main panels. Orca plots are named because their distinctive shape is uncannily similar to the individually-identifiable nicked and notched dorsal fins of killer whales (orcas). Thick horizontal lines at the base of each main panel represent the time periods which are present in 90% (black) and 50% (grey) of all series for that data type. Subfigure histograms contain the frequency of occurrence of the various timespans without reference to time period. Solid and long-dash vertical lines within the subfigures represent the median, 2.5% and 97.5% quantiles, respectively.

Figure 4. Current exploitation rate versus current biomass for 241 individual stocks. Exploitation is scaled relative to that which should allow maximum sustainable yield ( $U_{msy}$ ); biomass is scaled relative to  $B_{msy}$ . Shades of grey indicate probability of occurrence as revealed by a kernel density smooth function. Solid circles indicate  $B_{msy}$

and  $U_{msy}$  that were obtained directly from assessments; open circles indicate that they were estimated from surplus production models. This figure is an updated version of Fig 3B from Worm *et al.* (2009).

Figure 5. Current exploitation rate versus biomass for individual stocks grouped by management unit. The panel labelled “Atlantic” comprises ICCAT and NAFO. Plot details as in Figure 6.

## *Figures*



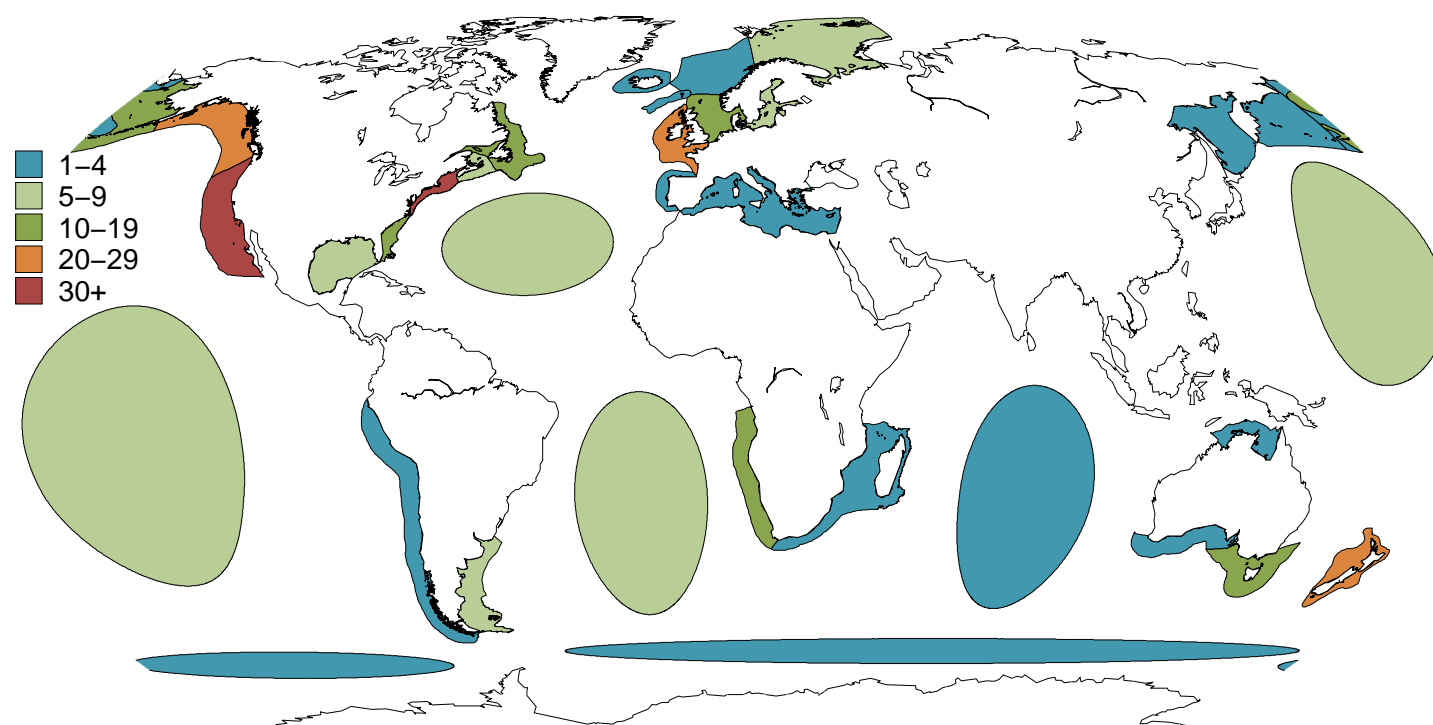
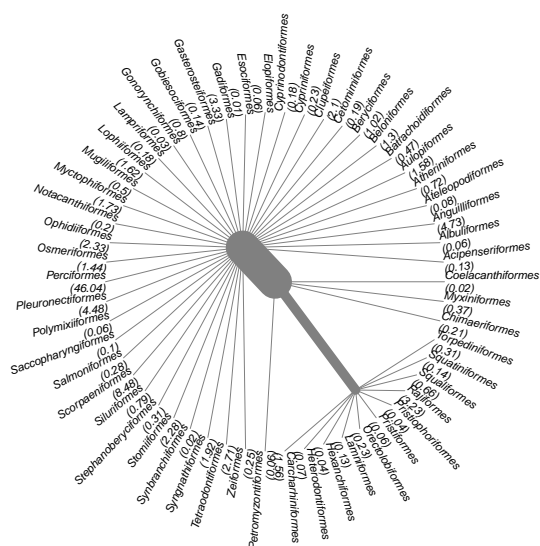
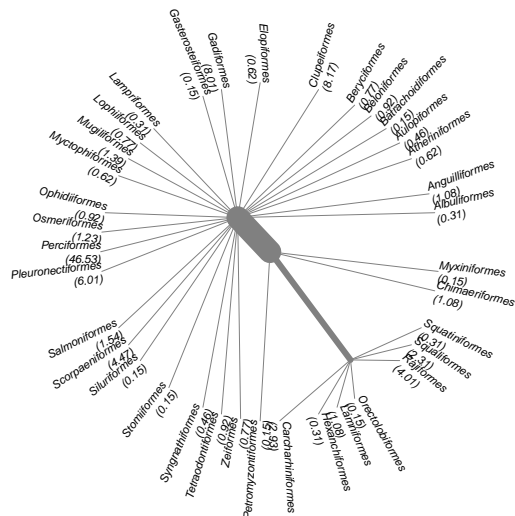


Figure 1:

FishBase



SAUP



## RAM Legacy

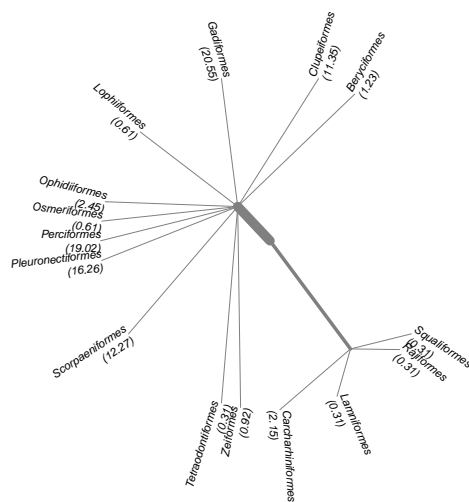


Figure 2:

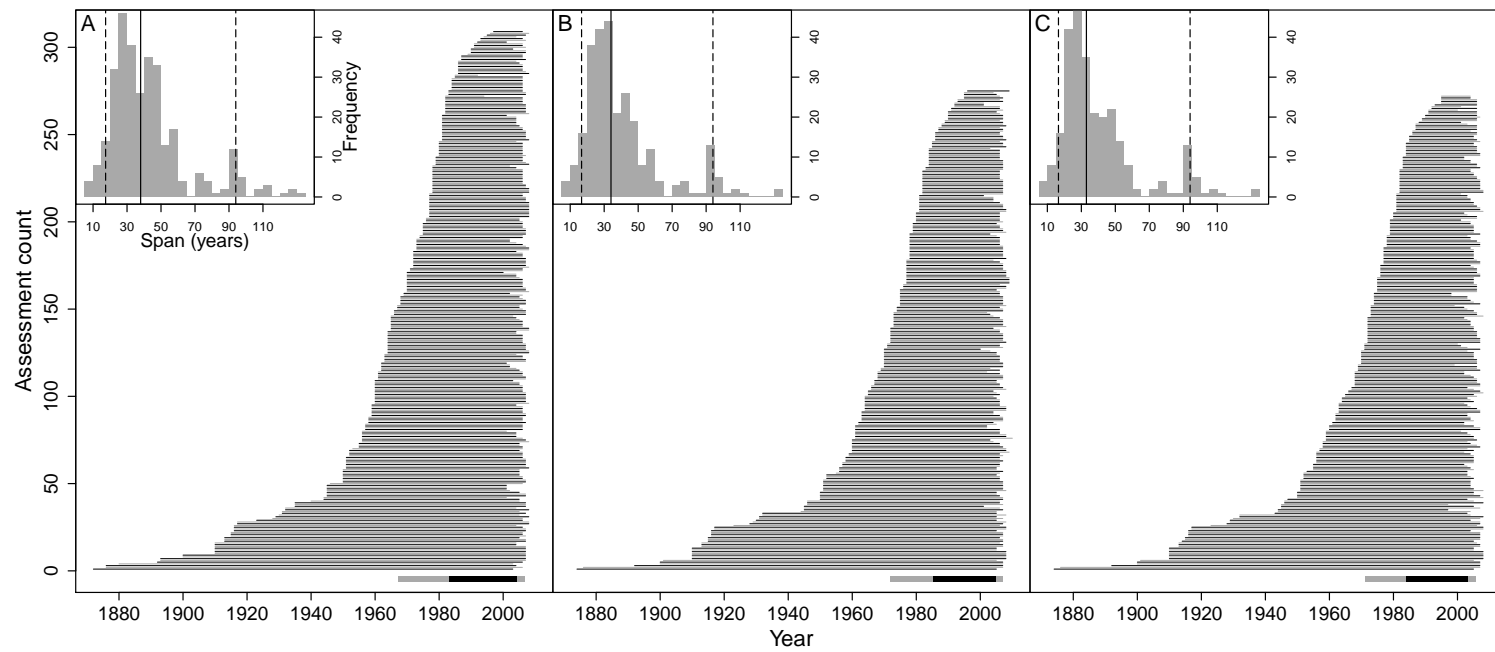


Figure 3:

all assessments (n=240)

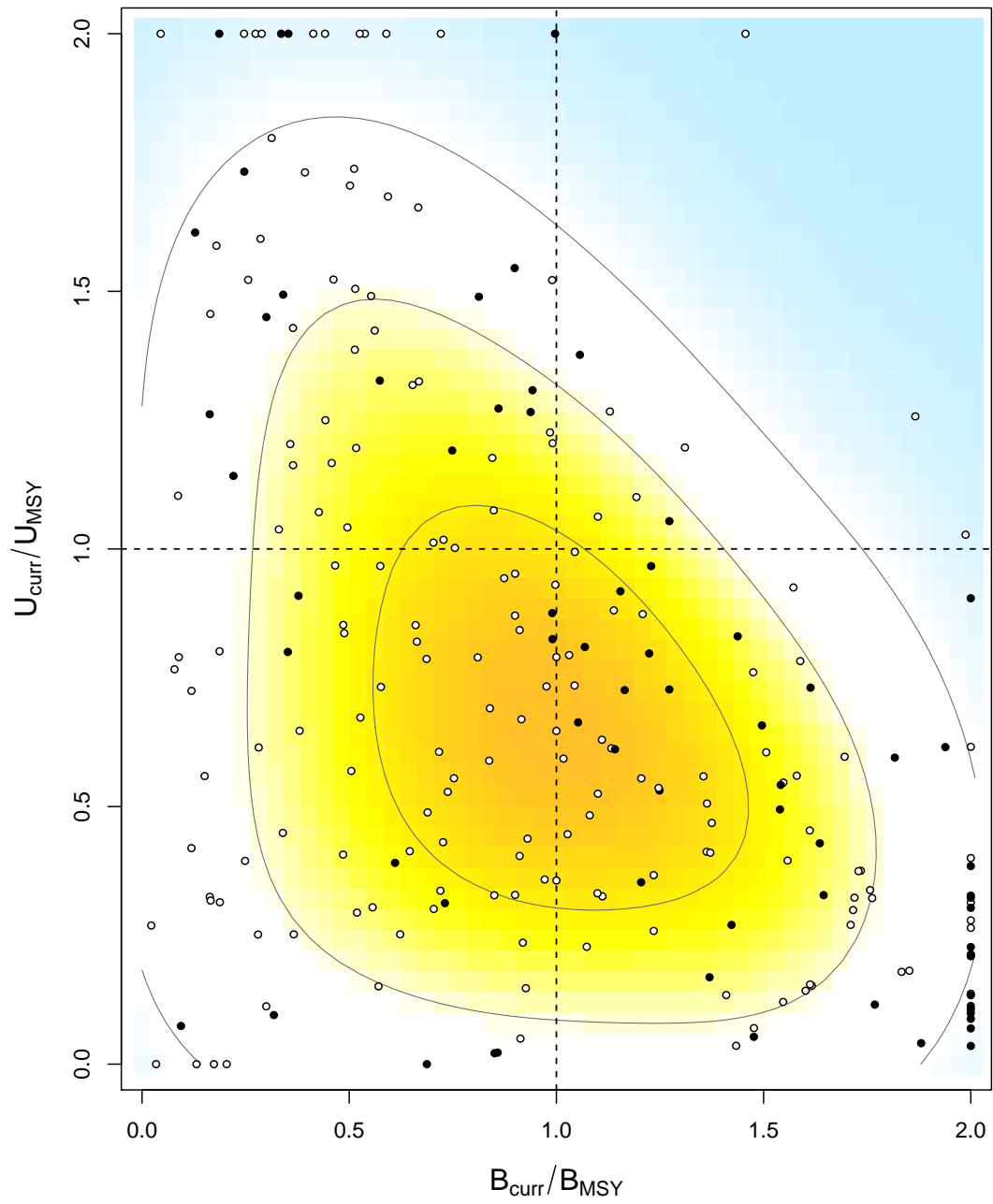


Figure 4:

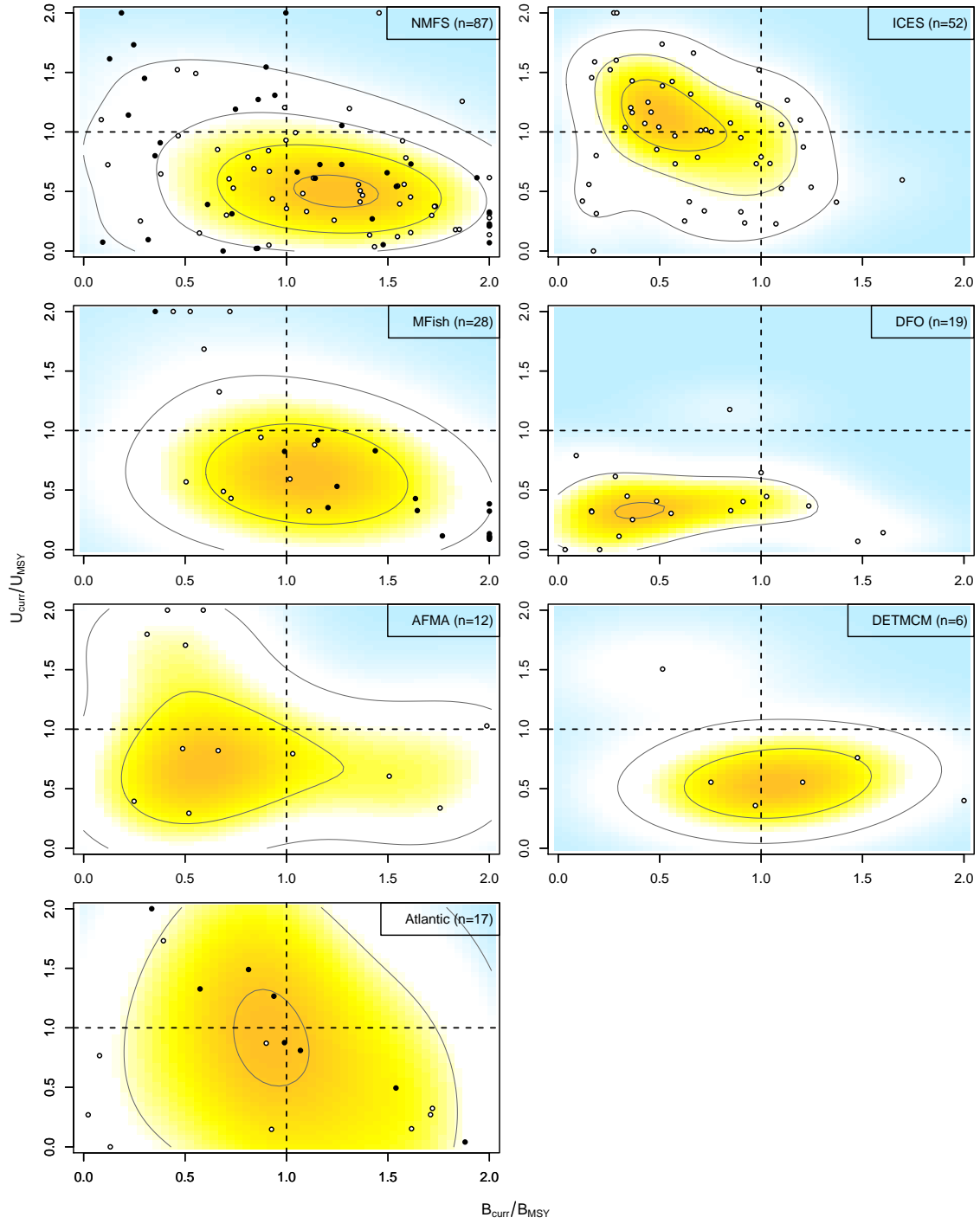


Figure 5:

mgmt	stock	scientificname	assessmethod	timespan	currentyear	E
AFMA	Bight redfish	<i>Centroberyx</i>	Integrated	1958-2007		
	Southeast Australia	<i>gerrardi</i>	Analysis			
AFMA	New Zealand ling	<i>Genypterus</i>	Integrated	1968-2007	2007	
	Eastern half of Southeast Australia	<i>blacodes</i>	Analysis			
AFMA	New Zealand ling	<i>Genypterus</i>	Integrated	1968-2007		
	Western half of Southeast Australia	<i>blacodes</i>	Analysis			
AFMA	Orange roughy	<i>Hoplostethus</i>	Integrated	1987-2006	2006	
	Cascade Plateau	<i>atlanticus</i>	Analysis			
AFMA	Orange roughy	<i>Hoplostethus</i>	Integrated	1978-2007	2007	
	Southeast Australia	<i>atlanticus</i>	Analysis			
AFMA	Jackass morwong	<i>Nemadactylus</i>	Integrated	1913-2007	2007	
	Southeast Australia	<i>macropterus</i>	Analysis			
AFMA	Tiger flathead	<i>Neoplatycephalus</i>	Integrated	1913-2006	2006	
	Southeast Australia	<i>richardsoni</i>	Analysis			
AFMA	Northern Australia	<i>Penaeus esculentus</i>	Biomass	1970-2006		
	brown tiger shrimp		dynamics model			
AFMA	Northern Australia	<i>Penaeus esculentus</i>	Biomass	1970-2006		
	grooved Tiger Prawn		dynamics model			
AFMA	Deepwater flathead	<i>Platycephalus</i>	Integrated	1978-2007	2007	
	Southeast Australia	<i>conatus</i>	Analysis			
AFMA	Tasmanian giant crab Tasmania	<i>Pseudocarcinus</i> <i>gigas</i>	Unknown	1990-2007	2007	
AFMA	common gemfish	<i>Rexea solandri</i>	Integrated	1966-2007	2007	
	Southeast Australia		Analysis			

AFMA	Blue Eastern Warehouse half of Southeast Australia	<i>Seriolella brama</i>	Integrated Analysis	1984-2006	2006
AFMA	Blue Western Warehouse half of Southeast Australia	<i>Seriolella brama</i>	Integrated Analysis	1984-2006	2006
AFMA	Silverfish Southeast Australia	<i>Seriolella punctata</i>	Integrated Analysis	1978-2006	2006
AFMA	School whiting Southeast Australia	<i>Sillago flindersi</i>	Integrated Analysis	1945-2007	2007
CCAMLR	Antarctic toothfish Ross Sea	<i>Dissostichus mawsoni</i>	Integrated Analysis	1995-2007	2007
CFP	Argentine anchoita Northern Argentina	<i>Engraulis anchoita</i>	VPA	1989-2007	2007
CFP	Argentine anchoita Southern Argentina	<i>Engraulis anchoita</i>	Biomass dynamics model	1992-2007	2007
CFP	Patagonian grenadier Southern Argentina	<i>Macruronus magellanicus</i>	VPA	1983-2006	2006
CFP	Argentine hake Northern Argentina	<i>Merluccius hubbsi</i>	VPA	1985-2007	2007
CFP	Argentine hake Southern Argentina	<i>Merluccius hubbsi</i>	VPA	1985-2008	2008
CFP	Southern blue whiting Southern Argentina	<i>Micromesistius australis</i>	VPA	1985-2007	

DETMCM	Patagonian toothfish	South Africa	<i>Dissostichus eleginoides</i>	Biomass dynamics model	1960-2008	
	Prince Islands	Edward				
DETMCM	Anchovy	South Africa	<i>Engraulis encrasicolus</i>	Statistical catch at age model	1984-2006	2006
DETMCM	Kingklip	South Africa	<i>Genypterus capensis</i>	Biomass dynamics model	1932-2008	2008
DETMCM	South abalone	African South Africa	<i>Haliotis midae</i>	Statistical catch at age model	1951-2008	
DETMCM	South African west coast	rock lobster	<i>Jasus lalandii</i>	Statistical catch at age model	1910-2008	
	South Africa Areas 1-2					
DETMCM	South African west coast	rock lobster	<i>Jasus lalandii</i>	Statistical catch at age model	1910-2008	
	South Africa Areas 3-4					
DETMCM	South African west coast	rock lobster	<i>Jasus lalandii</i>	Statistical catch at age model	1910-2008	
	South Africa Areas 5-6					
DETMCM	South African west coast	rock lobster	<i>Jasus lalandii</i>	Statistical catch at age model	1910-2008	
	South Africa Area 7					



DETMCM	South African west coast rock lobster	<i>Jasus lalandii</i>	Statistical catch at age model	1910-2008	
	South Africa Area 8				
DETMCM	Shallow-water cape hake South Africa	<i>Merluccius capensis</i>	Biomass dynamics model	1917-2008	2008
DETMCM	Deep-water cape hake South Africa	<i>Merluccius paradoxus</i>	Biomass dynamics model	1917-2008	
DETMCM	Southern spiny lobster South Africa South coast	<i>Palinurus gilchristi</i>	Statistical catch at age model	1973-2008	2008
DETMCM	Sardine South Africa	<i>Sardinops sagax</i>	Statistical catch at age model	1984-2006	2006
DETMCM	Cape horse mackerel South Africa South coast	<i>Trachurus capensis</i>	Biomass dynamics model	1950-2007	2007
DFO	Herring Scotian Shelf and Bay of Fundy	<i>Clupea harengus</i>	VPA	1965-2006	
DFO	Herring NAFO 4R fall spawners	<i>Clupea harengus</i>	VPA	1971-2003	
DFO	Herring NAFO 4R spring spawners	<i>Clupea harengus</i>	VPA	1963-2004	
DFO	Herring NAFO 4T fall spawners	<i>Clupea harengus</i>	VPA	1974-2007	
DFO	Herring NAFO 4T spring spawners	<i>Clupea harengus</i>	VPA	1974-2007	
DFO	Pacific herring Central Coast	<i>Clupea pallasii</i>	Statistical catch at age model	1951-2007	2007

DFO	Pacific Prince District	herring Rupert	<i>Clupea pallasii</i>	Statistical catch at age model	1951-2007	2007
DFO	Pacific Queen Islands	herring Charlotte	<i>Clupea pallasii</i>	Statistical catch at age model	1951-2007	2007
DFO	Pacific Straight of Georgia	herring	<i>Clupea pallasii</i>	Statistical catch at age model	1951-2007	2007
DFO	Pacific West Coast of Vancouver Island	herring	<i>Clupea pallasii</i>	Statistical catch at age model	1951-2007	2007
DFO	Pacific cod Hecate Strait		<i>Gadus</i> <i>macrocephalus</i>	Biomass dynamics model	1956-2005	2004
DFO	Pacific cod West Coast of Vancouver Island		<i>Gadus</i> <i>macrocephalus</i>	Biomass dynamics model	1956-2002	2001
DFO	Atlantic cod NAFO 5Zjm		<i>Gadus morhua</i>	VPA	1978-2003	2002
DFO	Atlantic cod NAFO 2J3KL inshore		<i>Gadus morhua</i>	VPA	1959-2006	2005
DFO	Atlantic cod NAFO 3Ps		<i>Gadus morhua</i>	VPA	1959-2004	2004
DFO	Atlantic cod NAFO 3Pn4RS		<i>Gadus morhua</i>	VPA	1964-2007	2006
DFO	Atlantic cod NAFO 4TVn		<i>Gadus morhua</i>	VPA	1965-2007	2006
DFO	Rock sole Hecate Strait		<i>Lepidopsetta</i> <i>bilineata</i>	Statistical catch at age model	1945-2001	2001

DFO	Haddock		<i>Melanogrammus</i>	VPA	1960-2003	2003
	NAFO-4X5Y		<i>aeglefinus</i>			
DFO	Haddock		<i>Melanogrammus</i>	VPA	1968-2003	2002
	NAFO-5Zejm		<i>aeglefinus</i>			
DFO	English sole	Hecate Strait	<i>Parophrys vetulus</i>	Statistical catch at age model	1944-2001	2001
DFO	Pollock		<i>Pollachius virens</i>	VPA	1974-2007	2006
	NAFO-4VWX5Zc					
IATTC	Yellowfin	tuna	<i>Thunnus albacares</i>	Statistical catch at age model	1975-2007	
	Eastern Pacific					
IATTC	Bigeye	tuna	<i>Thunnus obesus</i>	Integrated Analysis	1975-2007	
	Eastern Pacific					
ICCAT	Skipjack	tuna	<i>Katsuwonus</i>	Biomass	1950-2006	2006
	Eastern Atlantic		<i>pelamis</i>	dynamics model		
ICCAT	Skipjack	tuna	<i>Katsuwonus</i>	Biomass	1952-2006	2006
	Western Atlantic		<i>pelamis</i>	dynamics model		
ICCAT	Albacore	tuna	<i>Thunnus alalunga</i>	VPA	1929-2005	2005
	North Atlantic					
ICCAT	Yellowfin	tuna	<i>Thunnus albacares</i>	VPA	1970-2006	2006
	Atlantic					
ICCAT	Bigeye	tuna	<i>Thunnus obesus</i>	Biomass	1950-2005	2005
	Atlantic			dynamics model		
ICCAT	Bluefin	tuna	<i>Thunnus thynnus</i>	VPA	1969-2007	2007
	Eastern Atlantic					
ICCAT	Bluefin	tuna	<i>Thunnus thynnus</i>	VPA	1969-2007	2007
	Western Atlantic					

ICCAT	Swordfish		<i>Xiphias gladius</i>	Biomass	1968-2006	2006
	Mediterranean			dynamics model		
	Sea					
ICCAT	Swordfish	North	<i>Xiphias gladius</i>	Biomass	1978-2007	2005
	Atlantic			dynamics model		
ICCAT	Swordfish	South	<i>Xiphias gladius</i>	Biomass	1970-2005	2005
	Atlantic			dynamics model		
ICES	Sandeel	North Sea	<i>Ammodytes</i>	VPA	1983-2007	2007
			<i>marinus</i>			
ICES	Herring	ICES	<i>Clupea harengus</i>	Statistical catch	1991-2006	2006
	22-24-IIIa			at age model		
ICES	Herring	Northern	<i>Clupea harengus</i>	Statistical catch	1960-2006	2006
	Irish Sea			at age model		
ICES	Herring	North Sea	<i>Clupea harengus</i>	Statistical catch	1960-2007	2006
				at age model		
ICES	Herring	ICES VIa	<i>Clupea harengus</i>	Statistical catch	1957-2006	2006
				at age model		
ICES	Herring	ICES	<i>Clupea harengus</i>	VPA	1969-2000	2000
	VIa-VIIb-VIIc					
ICES	Herring	ICES 25-32	<i>Clupea harengus</i>	VPA	1973-2006	2006
ICES	Herring	ICES 30	<i>Clupea harengus</i>	VPA	1972-2007	2006
ICES	Herring	ICES 31	<i>Clupea harengus</i>	VPA	1979-2006	2006
ICES	Herring	Iceland	<i>Clupea harengus</i>	VPA	1983-2007	2006
	(Summer spawners)					
ICES	Herring	ICES 28	<i>Clupea harengus</i>	VPA	1976-2007	2006
ICES	Anchovy	ICES VIII	<i>Engraulis</i>	Biomass	1986-2007	
			<i>encrasicolus</i>	dynamics model		

ICES	Atlantic cod coastal Norway	<i>Gadus morhua</i>	VPA	1982-2006	2006
ICES	Atlantic cod Northeast Arctic	<i>Gadus morhua</i>	VPA	1943-2006	2006
ICES	Atlantic cod Faroe Plateau	<i>Gadus morhua</i>	VPA	1959-2006	2006
ICES	Atlantic cod Iceland	<i>Gadus morhua</i>	Statistical catch at age model	1952-2006	2006
ICES	Atlantic cod Baltic Areas 22 and 24	<i>Gadus morhua</i>	VPA	1969-2007	2006
ICES	Atlantic cod Baltic Areas 25-32	<i>Gadus morhua</i>	VPA	1964-2007	2006
ICES	Atlantic cod Kattegat	<i>Gadus morhua</i>	VPA	1970-2006	2006
ICES	Atlantic cod Irish Sea	<i>Gadus morhua</i>	VPA	1968-2006	2006
ICES	Atlantic cod West of Scotland	<i>Gadus morhua</i>	Statistical catch at age model	1977-2006	2006
ICES	Atlantic cod North Sea	<i>Gadus morhua</i>	VPA	1962-2007	2006
ICES	Fourspotted megrin ICES VIIIc-IXa	<i>Lepidorhombus boscii</i>	VPA	1986-2006	2006
ICES	Megrin ICES VIIIc-IXa	<i>Lepidorhombus whiffiagonis</i>	VPA	1985-2007	2006
ICES	Capelin Barents Sea	<i>Mallotus villosus</i>	Unknown	1965-2007	2006
ICES	Capelin Iceland	<i>Mallotus villosus</i>	Survey index	1977-2007	2006

ICES	Haddock Northeast Arctic	<i>Melanogrammus aeglefinus</i>	VPA	1947-2006	2006
ICES	Haddock Faroe Plateau	<i>Melanogrammus aeglefinus</i>	VPA	1955-2006	2006
ICES	Haddock Iceland	<i>Melanogrammus aeglefinus</i>	VPA	1977-2007	2007
ICES	Haddock Irish Sea	<i>Melanogrammus aeglefinus</i>	Survey index	1972-2006	
ICES	Haddock West of Scotland	<i>Melanogrammus aeglefinus</i>	Statistical catch at age model	1977-2006	2006
ICES	Haddock ICES IIIa and North Sea	<i>Melanogrammus aeglefinus</i>	VPA	1963-2006	2006
ICES	Haddock Rockall Bank	<i>Melanogrammus aeglefinus</i>	VPA	1990-2007	2006
ICES	Haddock ICES VIIb-k	<i>Melanogrammus aeglefinus</i>	VPA	1993-2006	2006
ICES	Whiting ICES VIa	<i>Merlangius merlangus</i>	Survey index	1984-2007	
ICES	Whiting ICES IIIa, VIId and North Sea	<i>Merlangius merlangus</i>	VPA	1979-2006	2006
ICES	Whiting ICES VIIe-k	<i>Merlangius merlangus</i>	VPA	1982-2007	2006
ICES	Hake Northeast Atlantic North	<i>Merluccius merluccius</i>	VPA	1977-2007	2006
ICES	Hake Northeast Atlantic South	<i>Merluccius merluccius</i>	VPA	1982-2007	
ICES	Whiting Northeast Atlantic	<i>Micromesistius poutassou</i>	Integrated Analysis	1980-2007	2006

ICES	European Irish Sea	Plaice	<i>Pleuronectes platessa</i>	Statistical catch at age model	1962-2006	2006
ICES	European ICES VIIId	Plaice	<i>Pleuronectes platessa</i>	VPA	1979-2006	
ICES	European ICES IIIa	Plaice	<i>Pleuronectes platessa</i>	VPA	1976-2006	
ICES	European North Sea	Plaice	<i>Pleuronectes platessa</i>	VPA	1956-2006	
ICES	European ICES VIIIf-g	Plaice	<i>Pleuronectes platessa</i>	VPA	1976-2006	2006
ICES	European ICES VIIe	Plaice	<i>Pleuronectes platessa</i>	VPA	1975-2006	2006
ICES	Pollock Arctic	Northeast	<i>Pollachius virens</i>	VPA	1957-2006	2006
ICES	Pollock Plateau	Faroe	<i>Pollachius virens</i>	VPA	1958-2006	2006
ICES	Pollock VI and North Sea	ICES IIIa,	<i>Pollachius virens</i>	VPA	1964-2006	2006
ICES	Greenland Northeast Arctic	halibut	<i>Reinhardtius hippoglossoides</i>	VPA	1959-2007	2006
ICES	European ICES VIIIc-IXa	pilchard	<i>Sardina pilchardus</i>	Statistical catch at age model	1978-2007	
ICES	Mackerel Northeast Atlantic	ICES	<i>Scomber scombrus</i>	Statistical catch at age model	1972-2007	2006
ICES	Golden Northeast Arctic	Redfish	<i>Sebastes norvegicus</i>	Statistical catch at age model	1986-2006	2006

ICES	common European sole ICES Kattegat and Skagerrak	<i>Solea vulgaris</i>	VPA	1982-2007	2006
ICES	common European sole Bay of Biscay	<i>Solea vulgaris</i>	VPA	1982-2006	2006
ICES	common European sole Irish Sea	<i>Solea vulgaris</i>	VPA	1968-2006	2006
ICES	common European sole North Sea	<i>Solea vulgaris</i>	VPA	1956-2006	
ICES	common European sole ICES VIId	<i>Solea vulgaris</i>	VPA	1981-2006	
ICES	common European sole Celtic Sea	<i>Solea vulgaris</i>	VPA	1970-2006	2006
ICES	common European sole Western English Channel	<i>Solea vulgaris</i>	VPA	1968-2006	2006
ICES	Sprat North Sea	<i>Sprattus sprattus</i>	Statistical catch at age model	1995-2007	
ICES	Sprat ICES Baltic Areas 22-32	<i>Sprattus sprattus</i>	VPA	1973-2007	2006
ICES	Norway pout North Sea	<i>Trisopterus esmarkii</i>	VPA	1983-2007	2006
IMARPE	Peruvian anchoveta North-Central Peru	<i>Engraulis ringens</i>	VPA	1963-2004	
IOTC	Bigeye tuna Indian Ocean	<i>Thunnus obesus</i>	Biomass dynamics model	1957-2006	2004
IPHC	Pacific halibut North Pacific	<i>Hippoglossus stenolepis</i>	Statistical catch at age model	1988-2009	2008



Iran	0	<i>Clupeonella</i> <i>engrauliformis</i>	Biomass dynamics model	1991-2007	2004
MFish	Black oreo West end of Chatham Rise	<i>Allocyttus niger</i>	Integrated Analysis	1973-2007	2007
MFish	Australian salmon New Zealand	<i>Arripis trutta</i>	Integrated Analysis	1975-2006	2006
MFish	New Zealand snapper New Zealand Area 8	<i>Chrysophrys</i> <i>auratus</i>	Integrated Analysis	1931-2005	2005
MFish	New Zealand ling New Zealand Areas LIN 3 and 4	<i>Genypterus</i> <i>blacodes</i>	Integrated Analysis	1972-2007	2007
MFish	New Zealand ling New Zealand Areas LIN 5 and 6	<i>Genypterus</i> <i>blacodes</i>	Integrated Analysis	1972-2007	2007
MFish	New Zealand ling New Zealand Area LIN 6b	<i>Genypterus</i> <i>blacodes</i>	Integrated Analysis	1980-2006	2006
MFish	New Zealand ling New Zealand Area LIN 72	<i>Genypterus</i> <i>blacodes</i>	Integrated Analysis	1972-2007	2007
MFish	New Zealand ling New Zealand Area LIN 7WC - WCSI	<i>Genypterus</i> <i>blacodes</i>	Integrated Analysis	1972-2008	2008

MFish	New Zealand abalone species New Zealand Area PAU 5A	<i>Haliotis iris</i>	Integrated Analysis	1964-2006	2006
MFish	New Zealand abalone species New Zealand Area PAU 5B	<i>Haliotis iris</i>	Integrated Analysis	1963-2007	2007
MFish	New Zealand abalone species New Zealand Area PAU 5D	<i>Haliotis iris</i>	Integrated Analysis	1964-2006	2006
MFish	New Zealand abalone species New Zealand Area PAU 7	<i>Haliotis iris</i>	Integrated Analysis	1964-2008	2008
MFish	Orange roughy New Zealand Mid East Coast	<i>Hoplostethus</i> <i>atlanticus</i>	Integrated Analysis	1981-2004	2004
MFish	Red rock lobster New Zealand area CRA1	<i>Jasus edwardsii</i>	Unknown	1945-2001	2001
MFish	Red rock lobster New Zealand area CRA2	<i>Jasus edwardsii</i>	Unknown	1945-2001	2001
MFish	Red rock lobster New Zealand area CRA3	<i>Jasus edwardsii</i>	Unknown	1945-2007	

MFish	Red rock lobster New Zealand area CRA4	<i>Jasus edwardsii</i>	Unknown	1945-2005	2005
MFish	Red rock lobster New Zealand area CRA5	<i>Jasus edwardsii</i>	Unknown	1945-2002	2002
MFish	Red rock lobster New Zealand area CRA7	<i>Jasus edwardsii</i>	Unknown	1976-2005	2005
MFish	Red rock lobster New Zealand area CRA8	<i>Jasus edwardsii</i>	Unknown	1976-2005	2005
MFish	Hoki Eastern New Zealand	<i>Macruronus novaezelandiae</i>	Integrated Analysis	1972-2007	2007
MFish	Hoki Western New Zealand	<i>Macruronus novaezelandiae</i>	Integrated Analysis	1972-2007	2007
MFish	Southern hake Chatham Rise	<i>Merluccius australis</i>	Integrated Analysis	1975-2006	2006
MFish	Southern hake Sub-Antarctic	<i>Merluccius australis</i>	Integrated Analysis	1975-2007	2007
MFish	Southern blue whiting Campbell Island Rise	<i>Micromesistius australis</i>	Integrated Analysis	1979-2006	2006
MFish	Trevally New Zealand Areas TRE 7	<i>Pseudocaranx dentex</i>	Integrated Analysis	1944-2005	2005
MFish	Smooth oreo Chatham Rise	<i>Pseudocyttus maculatus</i>	Integrated Analysis	1979-2006	2006

MFish	Smooth oreo West end of Chatham Rise	<i>Pseudocyttus maculatus</i>	Integrated Analysis	1973-2004	2004
MFish	common gemfish New Zealand	<i>Rexea solandri</i>	Integrated Analysis	1952-2007	2006
NAFO	Atlantic cod NAFO 3M	<i>Gadus morhua</i>	VPA	1959-2008	
NAFO	Atlantic cod NAFO 3NO	<i>Gadus morhua</i>	VPA	1953-2007	2006
NAFO	American Plaice NAFO-3LNO	<i>Hippoglossoides platessoides</i>	VPA	1955-2007	2006
NAFO	American Plaice NAFO-3M	<i>Hippoglossoides platessoides</i>	VPA	1960-2007	2007
NAFO	Yellowtail Flounder NAFO 3LNO	<i>Limanda ferruginea</i>	Biomass dynamics model	1960-2009	2007
NAFO	Redfish species NAFO 3LN	<i>Redfish species</i>	Biomass dynamics model	1959-2008	2008
NAFO	Redfish species NAFO 3M	<i>Redfish species</i>	VPA	1989-2006	2006
NAFO	Greenland halibut NAFO 23KLMNO	<i>Reinhardtius hippoglossoides</i>	VPA	1960-2006	2006
NMFS	Sablefish Eastern Bering Sea / Aleutian Islands / Gulf of Alaska	<i>Anoplopoma fimbria</i>	Statistical catch at age model	1956-2008	2008
NMFS	Sablefish Pacific Coast	<i>Anoplopoma fimbria</i>	Integrated Analysis	1900-2007	2007

NMFS	Ocean	quahog	<i>Arctica islandica</i>	Biomass	1978-2008	
	Atlantic Coast			dynamics model		
NMFS	Gray	triggerfish	<i>Balistes capriscus</i>	Biomass	1981-2004	
	Gulf of Mexico			dynamics model		
NMFS	Gulf	menhaden	<i>Brevoortia</i>	Statistical catch	1964-2004	2004
	Gulf of Mexico		<i>patronus</i>	at age model		
NMFS	Atlantic	menhaden	<i>Brevoortia</i>	Statistical catch	1940-2005	2005
	Atlantic		<i>tyrannus</i>	at age model		
NMFS	Blacknose	shark	<i>Carcharhinus</i>	Biomass	1950-2005	
	Atlantic		<i>acronotus</i>	dynamics model		
NMFS	Finetooth	shark	<i>Carcharhinus</i>	Biomass	1976-2005	
	Atlantic		<i>isodon</i>	dynamics model		
NMFS	Blacktip	shark	<i>Carcharhinus</i>	Biomass	1981-2004	
	Atlantic		<i>limbatus</i>	dynamics model		
NMFS	Blacktip shark Gulf		<i>Carcharhinus</i>	Biomass	1981-2004	
	of Mexico		<i>limbatus</i>	dynamics model		
NMFS	Sandbar	shark	<i>Carcharhinus</i>	Biomass	1975-2004	
	Atlantic		<i>plumbeus</i>	dynamics model		
NMFS	Black sea bass		<i>Centropristis</i>	Statistical catch	1968-2007	2007
	Mid-Atlantic Coast		<i>striata</i>	at age model		
NMFS	Snow crab Bering		<i>Chionoecetes opilio</i>	Biomass	1979-2008	2008
	Sea			dynamics model		
NMFS	Atlantic	herring	<i>Clupea harengus</i>	Statistical catch	1960-2005	
	Northwestern			at age model		
	Atlantic Coast					
NMFS	Pacific	herring	<i>Clupea pallasii</i>	Statistical catch	1980-2006	
	Prince William			at age model		
	Sound					

NMFS	Pacific Sitka	herring	<i>Clupea pallasii</i>	Statistical catch at age model	1978-2007	
NMFS	Weakfish Coast	Atlantic	<i>Cynoscion regalis</i>	VPA	1981-2008	
NMFS	Petrale Northern Coast	sole Pacific	<i>Eopsetta jordani</i>	Integrated Analysis	1910-2005	2005
NMFS	Petrale Southern Coast	sole Pacific	<i>Eopsetta jordani</i>	Integrated Analysis	1874-2005	2005
NMFS	Red grouper Mexico	Gulf of	<i>Epinephelus morio</i>	Statistical catch at age model	1986-2005	2005
NMFS	Snowy Southern coast	grouper Atlantic	<i>Epinephelus niveatus</i>	Statistical catch at age model	1961-2002	2002
NMFS	Pacific Sea and Islands	cod Bering Aleutian	<i>Gadus macrocephalus</i>	Integrated Analysis	1964-2008	2008
NMFS	Pacific Alaska	cod Gulf of	<i>Gadus macrocephalus</i>	Integrated Analysis	1964-2008	2008
NMFS	Atlantic Georges Bank	cod	<i>Gadus morhua</i>	VPA	1960-2008	2007
NMFS	Atlantic Maine	cod Gulf of	<i>Gadus morhua</i>	VPA	1893-2008	2007
NMFS	Witch NAFO-5Y	Flounder	<i>Glyptocephalus cynoglossus</i>	VPA	1982-2008	2007
NMFS	Rex sole Alaska	Gulf of	<i>Glyptocephalus zachirus</i>	Statistical catch at age model	1979-2008	

NMFS	Kelp greenling	<i>Hexagrammos</i>	Integrated	1979-2005	
	Oregon Coast	<i>decagrammus</i>	Analysis		
NMFS	Flathead sole	<i>Hippoglossoides</i>	Statistical catch	1977-2008	2008
	Bering Sea and Aleutian Islands	<i>elassodon</i>	at age model		
NMFS	Flathead sole Gulf of Alaska	<i>Hippoglossoides</i>	Statistical catch	1978-2008	
		<i>elassodon</i>	at age model		
NMFS	American Plaice	<i>Hippoglossoides</i>	VPA	1960-2008	2007
	NAFO-5YZ	<i>platessoides</i>			
NMFS	Atlantic Halibut	<i>Hippoglossus</i>	Unknown	1800-2007	
	NAFO-5YZ	<i>hippoglossus</i>			
NMFS	American lobster	<i>Homarus</i>	Biomass	1981-2007	
	Georges Bank	<i>americanus</i>	dynamics model		
NMFS	American lobster	<i>Homarus</i>	Biomass	1981-2007	
	Gulf of Maine	<i>americanus</i>	dynamics model		
NMFS	American lobster	<i>Homarus</i>	Biomass	1981-2007	
	Southern New England	<i>americanus</i>	dynamics model		
NMFS	Northern shortfin squid Northwestern Atlantic Coast	<i>Illex illecebrosus</i>	Biomass	1967-2005	
			dynamics model		
NMFS	Northern rock sole	<i>Lepidopsetta</i>	Statistical catch	1971-2008	2007
	Eastern Bering Sea and Aleutian Islands	<i>polyxystra</i>	at age model		
NMFS	Yellowfin sole	<i>Limanda aspera</i>	Statistical catch	1959-2008	2008
	Bering Sea and Aleutian Islands		at age model		

NMFS	Yellowtail flounder Cape Cod / Gulf of Maine	<i>Limanda ferruginea</i>	VPA	1935-2008	2007
NMFS	Yellowtail flounder Georges Bank	<i>Limanda ferruginea</i>	VPA	1935-2008	2007
NMFS	Yellowtail Flounder Southern New England-Mid Atlantic	<i>Limanda ferruginea</i>	VPA	1935-2008	2007
NMFS	Golden king crab Aleutian Islands Eastern segment	<i>Lithodes</i> <i>aequispinus</i>	Statistical catch at length model	1990-2007	
NMFS	Golden king crab Aleutian Islands Western segment	<i>Lithodes</i> <i>aequispinus</i>	Statistical catch at length model	1989-2007	
NMFS	Monkfish Gulf of Maine / Northern Georges Bank	<i>Lophius</i> <i>americanus</i>	Unknown	1964-2006	2006
NMFS	Monkfish Southern Georges Bank / Mid-Atlantic	<i>Lophius</i> <i>americanus</i>	Unknown	1964-2006	2006
NMFS	Tilefish Mid-Atlantic Coast	<i>Lopholatilus</i> <i>chamaeleonticeps</i>	Biomass dynamics model	1973-2008	2005
NMFS	Tilefish Southern Atlantic coast	<i>Lopholatilus</i> <i>chamaeleonticeps</i>	Statistical catch at age model	1961-2002	2002



NMFS	Mutton Southern coast and Mexico	snapper Atlantic Gulf of	<i>Lutjanus analis</i>	Statistical catch at age model	1981-2006	
NMFS	Red Eastern Mexico	snapper Gulf of	<i>Lutjanus</i> <i>campechanus</i>	Statistical catch at age model	1872-2003	
NMFS	Red Southern coast	snapper Atlantic	<i>Lutjanus</i> <i>campechanus</i>	Statistical catch at age model	1945-2006	
NMFS	Red Western Mexico	snapper Gulf of	<i>Lutjanus</i> <i>campechanus</i>	Statistical catch at age model	1880-2003	
NMFS	Haddock	NAFO-5Y	<i>Melanogrammus</i> <i>aeglefinus</i>	VPA	1956-2008	2007
NMFS	Haddock Bank	Georges	<i>Melanogrammus</i> <i>aeglefinus</i>	VPA	1930-2008	
NMFS	Silver hake Maine / Georges Bank	Gulf of Northern	<i>Merluccius</i> <i>bilinearis</i>	Survey index	1955-2005	
NMFS	Silver Southern Georges / Mid-Atlantic	hake Bank	<i>Merluccius</i> <i>bilinearis</i>	Survey index	1955-2005	
NMFS	Pacific hake Coast	Pacific	<i>Merluccius</i> <i>productus</i>	Integrated Analysis	1966-2008	2008
NMFS	Atlantic Mid-Atlantic Coast	croaker	<i>Micropogonias</i> <i>undulatus</i>	Biomass dynamics model	1973-2002	2002

NMFS	Dover sole Gulf of Alaska	<i>Microstomus pacificus</i>	Statistical catch at age model	1978-2010	
NMFS	Dover sole Pacific Coast	<i>Microstomus pacificus</i>	Integrated Analysis	1910-2005	2005
NMFS	Striped bass Gulf of Maine / Cape Hatteras	<i>Morone saxatilis</i>	Statistical catch at age model	1982-2006	
NMFS	Gag Gulf of Mexico	<i>Mycteroperca microlepis</i>	Unknown	1963-2004	2004
NMFS	Gag Southern Atlantic coast	<i>Mycteroperca microlepis</i>	Statistical catch at age model	1962-2005	2005
NMFS	Yellowtail snapper Southern Atlantic Coast and Gulf of Mexico	<i>Ocyurus chrysurus</i>	Statistical catch at age model	1962-2001	2001
NMFS	Lingcod Northern Pacific Coast	<i>Ophiodon elongatus</i>	Integrated Analysis	1956-2005	
NMFS	Lingcod Southern Pacific Coast	<i>Ophiodon elongatus</i>	Integrated Analysis	1956-2005	
NMFS	Red porgy Southern Atlantic coast	<i>Pagrus pagrus</i>	Statistical catch at age model	1972-2004	2004
NMFS	Northern shrimp Gulf of Maine	<i>Pandalus borealis</i>	Statistical catch at age model	1960-2009	2008
NMFS	Summer flounder Mid-Atlantic Coast	<i>Paralichthys dentatus</i>	Statistical catch at age model	1940-2007	
NMFS	Red king crab Bristol Bay	<i>Paralithodes camtschaticus</i>	Statistical catch at length model	1960-2008	2008

NMFS	Red king crab	<i>Paralithodes</i>	Statistical catch	1976-2008	
	Norton Sound	<i>camtschaticus</i>	at length model		
NMFS	English sole Pacific Coast	<i>Parophrys vetulus</i>	Integrated Analysis	1876-2007	2007
NMFS	Atlantic butterflyfish Gulf of Maine / Cape Hatteras	<i>Peprilus triacanthus</i>	Unknown	1965-2005	
NMFS	Sea scallop Georges Bank	<i>Placopecten magellanicus</i>	Statistical catch at length model	1964-2006	2006
NMFS	Sea scallop Mid-Atlantic Coast	<i>Placopecten magellanicus</i>	Statistical catch at length model	1964-2006	2006
NMFS	Starry flounder Northern Pacific Coast	<i>Platichthys stellatus</i>	Integrated Analysis	1970-2005	2005
NMFS	Starry flounder Southern Pacific Coast	<i>Platichthys stellatus</i>	Integrated Analysis	1970-2005	2005
NMFS	Atka mackerel Bering Sea and Aleutian Islands	<i>Pleurogrammus monopterygius</i>	Statistical catch at age model	1976-2009	2009
NMFS	Alaska plaice Bering Sea and Aleutian Islands	<i>Pleuronectes quadrituberculatus</i>	Statistical catch at age model	1972-2008	2008
NMFS	Pollock NAFO-5YZ	<i>Pollachius virens</i>	Survey index	1963-2007	
NMFS	Bluefish Atlantic Coast	<i>Pomatomus saltatrix</i>	Statistical catch at age model	1981-2007	2007

NMFS	Winter NAFO-5Z	Flounder	<i>Pseudopleuronectes americanus</i>	VPA	1982-2007	2006
NMFS	Winter NAFO-5Y	Flounder	<i>Pseudopleuronectes americanus</i>	Unknown	1982-2008	
NMFS	Winter Southern England-Mid Atlantic	Flounder New	<i>Pseudopleuronectes americanus</i>	VPA	1940-2007	2007
NMFS	Longnose Pacific Coast	skate	<i>Raja rhina</i>	Integrated Analysis	1915-2007	2007
NMFS	Greenland Bering Sea and Aleutian Islands	turbot	<i>Reinhardtius hippoglossoides</i>	Statistical catch at age model	1960-2009	2009
NMFS	Arrowtooth flounder Sea and Aleutian Islands	Bering	<i>Reinhardtius stomias</i>	Statistical catch at age model	1970-2008	2008
NMFS	Arrowtooth flounder of Alaska	Gulf	<i>Reinhardtius stomias</i>	Statistical catch at age model	1958-2010	2010
NMFS	Arrowtooth flounder Coast	Pacific	<i>Reinhardtius stomias</i>	Integrated Analysis	1916-2007	2007
NMFS	Atlantic sharpnose shark Atlantic		<i>Rhizoprionodon terraenovae</i>	Biomass dynamics model	1950-2005	
NMFS	Vermilion Gulf of Mexico	snapper	<i>Rhomboplites aurorubens</i>	Biomass dynamics model	1981-2004	

NMFS	Vermilion snapper	<i>Rhomboplites</i>	Statistical catch	1946-2008	2007
	Southern Atlantic coast	<i>aurorubens</i>	at age model		
NMFS	Pacific sardine	<i>Sardinops sagax</i>	Statistical catch	1981-2008	2006
	North Pacific		at age model		
NMFS	Pacific sardine	<i>Sardinops sagax</i>	Integrated	1981-2007	2006
	Pacific Coast		Analysis		
NMFS	Pacific chub mackerel	<i>Scomber japonicus</i>	Statistical catch	1929-2008	
	Pacific Coast		at age model		
NMFS	King mackerel Gulf of Mexico	<i>Scomberomorus cavalla</i>	VPA	1992-2001	2001
NMFS	King mackerel Southern Atlantic Coast	<i>Scomberomorus cavalla</i>	VPA	1981-2001	2001
NMFS	Spanish mackerel Southern Atlantic Coast	<i>Scomberomorus maculatus</i>	Statistical catch	1950-2008	2007
			at age model		
NMFS	Atlantic mackerel Gulf of Maine / Cape Hatteras	<i>Scomber scombrus</i>	VPA	1960-2005	
NMFS	Windowpane flounder - Gulf of Maine / Georges Bank	<i>Scophthalmus aquosus</i>	Survey index	1975-2007	

NMFS	Windowpane Southern New England-Mid Atlantic	<i>Scophthalmus aquosus</i>	Survey index	1975-2007	
NMFS	California scorpionfish Southern California	<i>Scorpaena guttata</i>	Statistical catch at age model	1990-2005	
NMFS	Cabazon Northern California	<i>Scorpaenichthys marmoratus</i>	Integrated Analysis	1916-2005	2005
NMFS	Cabazon Southern California	<i>Scorpaenichthys marmoratus</i>	Integrated Analysis	1932-2005	2005
NMFS	Rougheye rockfish Bering Sea and Aleutian Islands	<i>Sebastes aleutianus</i>	Statistical catch at age model	1974-2009	
NMFS	Rougheye rockfish Gulf of Alaska	<i>Sebastes aleutianus</i>	Statistical catch at age model	1974-2007	
NMFS	Pacific Ocean perch Eastern Bering Sea and Aleutian Islands	<i>Sebastes alutus</i>	Statistical catch at age model	1974-2009	2009
NMFS	Pacific ocean perch Gulf of Alaska	<i>Sebastes alutus</i>	Statistical catch at age model	1959-2008	2008
NMFS	Pacific ocean perch Pacific Coast	<i>Sebastes alutus</i>	Statistical catch at age model	1953-2007	2007
NMFS	Shortraker rockfish Bering Sea and Aleutian Islands	<i>Sebastes borealis</i>	Statistical catch at age model	1977-2008	

NMFS	Gopher rockfish Southern Pacific Coast	<i>Sebastes carnatus</i>	Integrated Analysis	1965-2005	2005
NMFS	Darkblotched rockfish Pacific Coast	<i>Sebastes crameri</i>	Integrated Analysis	1928-2007	2007
NMFS	Widow rockfish Pacific Coast	<i>Sebastes entomelas</i>	Statistical catch at age model	1955-2006	2006
NMFS	Acadian redfish Gulf of Maine / Georges Bank	<i>Sebastes fasciatus</i>	Statistical catch at age model	1913-2007	
NMFS	Yellowtail rockfish Northern Pacific Coast	<i>Sebastes flavidus</i>	Integrated Analysis	1967-2005	2005
NMFS	Chilipepper Southern Pacific Coast	<i>Sebastes goodei</i>	Integrated Analysis	1892-2007	2006
NMFS	Shortbelly rockfish Pacific Coast	<i>Sebastes jordani</i>	Integrated Analysis	1950-2005	
NMFS	Cowcod Southern California	<i>Sebastes levis</i>	Integrated Analysis	1900-2007	2007
NMFS	Black rockfish Northern Pacific Coast	<i>Sebastes melanops</i>	Integrated Analysis	1914-2006	2006
NMFS	Black rockfish Southern Pacific Coast	<i>Sebastes melanops</i>	Integrated Analysis	1915-2007	2007

NMFS	Blackgill rockfish	<i>Sebastes</i>	Integrated	1950-2005	2005
	Pacific Coast	<i>melanostomus</i>	Analysis		
NMFS	Blue rockfish	<i>Sebastes mystinus</i>	Integrated	1916-2007	2007
	California		Analysis		
NMFS	Bocaccio Southern	<i>Sebastes</i>	Integrated	1951-2006	2006
	Pacific Coast	<i>paucispinis</i>	Analysis		
NMFS	Canary rockfish	<i>Sebastes pinniger</i>	Integrated	1916-2007	2007
	Pacific Coast		Analysis		
NMFS	Northern rockfish	<i>Sebastes polyspinis</i>	Statistical catch	1974-2009	2009
	Bering Sea and Aleutian Islands		at age model		
NMFS	Northern rockfish	<i>Sebastes polyspinis</i>	Statistical catch	1959-2008	2008
	Gulf of Alaska		at age model		
NMFS	Yelloweye rockfish	<i>Sebastes</i>	Integrated	1923-2006	2006
	Pacific Coast	<i>ruberrimus</i>	Analysis		
NMFS	Dusky rockfish Gulf of Alaska	<i>Sebastes variabilis</i>	Statistical catch	1973-2008	2007
			at age model		
NMFS	Shortspine thornyhead Pacific Coast	<i>Sebastolobus alascanus</i>	Integrated	1901-2005	2005
			Analysis		
NMFS	Longspine thornyhead Pacific Coast	<i>Sebastolobus altivelis</i>	Integrated	1962-2005	2005
			Analysis		
NMFS	Greater amberjack Gulf of Mexico	<i>Seriola dumerili</i>	Biomass	1986-2004	2004
			dynamics model		
NMFS	Greater amberjack Southern Atlantic coast	<i>Seriola dumerili</i>	Statistical catch	1946-2006	
			at age model		



NMFS	Bonnethead shark	<i>Sphyrna tiburo</i>	Biomass	1950-2005	
	Atlantic		dynamics model		
NMFS	Atlantic surfclam	<i>Spisula solidissima</i>	Biomass	1965-2008	1994
	Mid-Atlantic Coast		dynamics model		
NMFS	Atlantic surfclam	<i>Spisula solidissima</i>	Biomass	1965-2008	
	Northwest Atlantic (northeastern USA)		dynamics model		
NMFS	Spiny dogfish	<i>Squalus acanthias</i>	Unknown	1962-2006	2005
	Atlantic Coast				
NMFS	Scup Atlantic	<i>Stenotomus</i>	Statistical catch	1960-2007	
	Coast	<i>chrysops</i>	at age model		
NMFS	Walleye pollock	<i>Theragra</i>	Statistical catch	1976-2008	2008
	Aleutian Islands	<i>chalcogramma</i>	at age model		
NMFS	Walleye pollock	<i>Theragra</i>	Statistical catch	1963-2008	2008
	Eastern Bering Sea	<i>chalcogramma</i>	at age model		
NMFS	Walleye pollock	<i>Theragra</i>	Statistical catch	1964-2008	
	Gulf of Alaska	<i>chalcogramma</i>	at age model		
NMFS	White hake Georges	<i>Urophycis tenuis</i>	Biomass	1963-2007	2007
	Bank / Gulf of Maine		dynamics model		
RFFA	Walleye pollock	<i>Theragra</i>	Biomass	1985-1994	1992
	Northern Sea of Okhotsk	<i>chalcogramma</i>	dynamics model		
RFFA	Walleye pollock	<i>Theragra</i>	VPA	1994-2004	2004
	Western Bering Sea	<i>chalcogramma</i>			
SPRFMO	Chilean jack	<i>Trachurus murphyi</i>	Unknown	1975-2007	2006
	mackerel Chilean EEZ and offshore				

UNKNOWN	Shortfin Northwest Ocean	mako Pacific	<i>Isurus oxyrinchus</i>	VPA	1990-2003	
US State	American Rhode Island	lobster	<i>Homarus americanus</i>	Biomass dynamics model	1959-2007	2006
US State	Winter Rhode Island	flounder	<i>Pseudopleuronectes americanus</i>	Biomass dynamics model	1959-2007	2006
US State	Tautog Island	Rhode	<i>Tautoga onitis</i>	Biomass dynamics model	1959-2007	2006
WCPFC	Skipjack Central Pacific	tuna Western	<i>Katsuwonus pelamis</i>	Statistical catch at age model	1972-2006	2006
WCPFC	Albacore South Ocean	tuna Pacific	<i>Thunnus alalunga</i>	Statistical catch at age model	1959-2006	2006
WCPFC	Yellowfin Central Pacific	tuna Western	<i>Thunnus albacares</i>	Statistical catch at age model	1952-2005	2005
WCPFC	Bigeye Western Ocean	tuna Pacific	<i>Thunnus obesus</i>	Statistical catch at age model	1952-2006	2006

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Table 2: Summary of population-dynamics model based assessments in the RAM Legacy database, including the management body (acronyms from Table 1), assessment method, timespan of their longest time series data, estimated ratios of current biomass to the biomass at MSY and current harvest rate to the harvest rate that results in MSY. Estimated ratios were preferentially obtained directly from the assessment document or derived from surplus production models. When both SSB<sub>msy</sub> and B<sub>msy</sub> reference points were available, SSB was chosen preferentially.