

# Supporting information of the Fish and Fisheries paper June 2011 resubmission

June 27, 2011

## **1 Supplementary tables**

Management	Country	Stock	Scientific name	Taxonomic order	Trophic Level	Methodology	Timespan	Current year	B ratio	U ratio
AFMA	Australia	Bight redfish Southeast Australia	<i>Centroberyx gerrardi</i>	Beryciformes		Integrated Analysis	1958-2007			
AFMA	Australia	Patagonian toothfish	<i>Dissostichus eleginoides</i>	Perciformes	3.96	Integrated Analysis	1975-2010	2010	2.3	0.19
AFMA	Australia	Macquarie Island New Zealand ling Western half of Southeast Australia	<i>Genypterus blacodes</i>	Ophidiiformes		Integrated Analysis	1968-2007			
AFMA	Australia	New Zealand ling Eastern half of Southeast Australia	<i>Genypterus blacodes</i>	Ophidiiformes	4.34	Integrated Analysis	1968-2007	2007	0.59	2.2 *
AFMA	Australia	Orange roughy Cascade Plateau	<i>Hoplostethus atlanticus</i>	Beryciformes		Integrated Analysis	1987-2006			
AFMA	Australia	Orange roughy Southeast Australia	<i>Hoplostethus atlanticus</i>	Beryciformes	3.98	Integrated Analysis	1978-2007	2007	0.52	0.29 *
AFMA	Australia	Jackass morwong Southeast Australia	<i>Nemadactylus macropterus</i>	Perciformes	3.41	Integrated Analysis	1913-2007	2007	0.31	1.8 *
AFMA	Australia	Tiger flathead Southeast Australia	<i>Neoplatycephalus richardsoni</i>	Scorpaeniformes	3.87	Integrated Analysis	1913-2006	2006	1.99	1.03 *
AFMA	Australia	Northern Australia brown tiger shrimp	<i>Penaeus esculentus</i>	Decapoda		Biomass dynamics model	1970-2006			
AFMA	Australia	Northern Australia grooved Tiger Prawn	<i>Penaeus esculentus</i>	Decapoda		Biomass dynamics model	1970-2006			
AFMA	Australia	Deepwater flathead Southeast Australia	<i>Platycephalus conatus</i>	Scorpaeniformes	4.20	Integrated Analysis	1978-2007	2007	1.51	0.61 *
AFMA	Australia	Tasmanian giant crab Tasmania	<i>Pseudocarcinus gigas</i>	Decapoda		Unknown	1990-2007			
AFMA	Australia	common gemfish Southeast Australia	<i>Rezea solandri</i>	Perciformes	4.25	Integrated Analysis	1966-2007	2007	0.25	0.39 *
AFMA	Australia	Blue Warehou Eastern half of Southeast Australia	<i>Seriotelella brama</i>	Perciformes	3.30	Integrated Analysis	1984-2006	2006	0.49	0.84 *
AFMA	Australia	Blue Warehou Western half of Southeast Australia	<i>Seriotelella brama</i>	Perciformes	3.30	Integrated Analysis	1984-2006	2006	0.41	2.04 *
AFMA	Australia	Silverfish Southeast Australia	<i>Seriotelella punctata</i>	Perciformes	3.40	Integrated Analysis	1978-2006	2006	1.03	0.79 *
AFMA	Australia	School whiting Southeast Australia	<i>Sillago flindersi</i>	Perciformes	3.34	Integrated Analysis	1945-2007	2007	0.66	0.82 *
CCAMLR	Multinational	Antarctic toothfish Ross Sea	<i>Dissostichus mawsoni</i>	Perciformes		Integrated Analysis	1995-2007			
CCSBT	Multinational	Southern bluefin tuna Southern Oceans	<i>Thunnus maccoyii</i>	Perciformes		Integrated Analysis	1931-2009			
CFP	Argentina	Argentine anchoita Southern Argentina	<i>Engraulis anchoita</i>	Clupeiformes	2.51	Biomass dynamics model	1992-2007	2007	3.13	0.04
CFP	Argentina	Argentine anchoita Northern Argentina	<i>Engraulis anchoita</i>	Clupeiformes	2.51	VPA	1989-2007	2007	1.37	0.17
CFP	Argentina	Patagonian grenadier Southern Argentina	<i>Macruronus magellanicus</i>	Gadiformes	3.93	VPA	1983-2006	2006	1.82	0.6
CFP	Argentina	Argentine hake Southern Argentina	<i>Merluccius hubbsi</i>	Gadiformes	4.23	VPA	1985-2008	2008	0.34	1.49
CFP	Argentina	Argentine hake Northern Argentina	<i>Merluccius hubbsi</i>	Gadiformes	4.23	VPA	1985-2007	2007	0.16	1.26
CFP	Argentina	Southern blue whiting Southern Argentina	<i>Micromesistius australis</i>	Gadiformes		VPA	1985-2007			
DETMCM	South Africa	Patagonian toothfish South Africa Subantarctic Prince Edward Islands	<i>Dissostichus eleginoides</i>	Perciformes		Biomass dynamics model	1960-2008			

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DETMCM	South Africa	Anchovy South Africa	<i>Engraulis encrasicolus</i>	Clupeiformes	3.11	Statistical catch at age model	1984-2006	2006	0.97 *	0.36 *
DETMCM	South Africa	Kingklip South Africa	<i>Genypterus capensis</i>	Ophidiiformes	4.44	Biomass dynamics model	1932-2008	2008	1.2	0.55 *
DETMCM	South Africa	South African abalone South Africa	<i>Haliotis midae</i>	Archaeogastropoda		Statistical catch at age model	1951-2008			
DETMCM	South Africa	South African west coast rock lobster South Africa Areas 3-4	<i>Jasus lalandii</i>	Decapoda		Statistical catch at age model	1910-2008			
DETMCM	South Africa	South African west coast rock lobster South Africa Area 7	<i>Jasus lalandii</i>	Decapoda		Statistical catch at age model	1910-2008			
DETMCM	South Africa	South African west coast rock lobster South Africa Area 8	<i>Jasus lalandii</i>	Decapoda		Statistical catch at age model	1910-2008			
DETMCM	South Africa	South African west coast rock lobster South Africa Areas 5-6	<i>Jasus lalandii</i>	Decapoda		Statistical catch at age model	1910-2008			
DETMCM	South Africa	South African west coast rock lobster South Africa Areas 1-2	<i>Jasus lalandii</i>	Decapoda		Statistical catch at age model	1910-2008			
DETMCM	South Africa	Shallow-water cape hake South Africa	<i>Merluccius capensis</i>	Gadiformes	4.45	Biomass dynamics model	1917-2008	2008	2.3	0.4 *
DETMCM	South Africa	Deep-water cape hake South Africa	<i>Merluccius paradoxus</i>	Gadiformes		Biomass dynamics model	1917-2008			
DETMCM	South Africa	Southern spiny lobster South Africa South coast	<i>Palinurus gilchristi</i>	Decapoda	2.60	Statistical catch at age model	1973-2008	2008	0.51 *	1.5 *
DETMCM	South Africa	Sardine South Africa	<i>Sardinops sagax</i>	Clupeiformes	2.43	Statistical catch at age model	1984-2006	2006	0.75 *	0.55 *
DETMCM	South Africa	Cape horse mackerel South Africa South coast	<i>Trachurus capensis</i>	Perciformes	3.47	Biomass dynamics model	1950-2007	2007	1.47 *	0.76 *
DFO	Canada	Sablefish Pacific Coast of Canada	<i>Anoplopoma fimbria</i>	Scorpaeniformes	3.83	Integrated Analysis	1913-2004	2004	0.17	3.86
DFO	Canada	Cusk NAFO 4X	<i>Brosme brosme</i>	Gadiformes		Biomass dynamics model	1970-2007			
DFO	Canada	Herring NAFO 4T spring spawners	<i>Clupea harengus</i>	Clupeiformes		VPA	1974-2007			
DFO	Canada	Herring NAFO 4R spring spawners	<i>Clupea harengus</i>	Clupeiformes		VPA	1963-2004			
DFO	Canada	Herring NAFO 4T fall spawners	<i>Clupea harengus</i>	Clupeiformes		VPA	1974-2007			
DFO	Canada	Herring NAFO 4R fall spawners	<i>Clupea harengus</i>	Clupeiformes		VPA	1971-2003			
DFO	Canada	Herring Scotian Shelf and Bay of Fundy	<i>Clupea harengus</i>	Clupeiformes		VPA	1965-2006			
DFO	Canada	Pacific herring Prince Rupert District	<i>Clupea pallasii</i>	Clupeiformes	3.15	Statistical catch at age model	1951-2007	2007	0.16 *	0.32 *

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Management	Country	Stock	Scientific name	Taxonomic order	Trophic Level	Methodology	Timespan	Current year	B ratio	U ratio
DFO	Canada	Pacific herring Queen Charlotte Islands	<i>Clupea pallasii</i>	Clupeiformes	3.15	Statistical catch at age model	1951-2007	2007	0.2 *	0 *
DFO	Canada	Pacific herring Central Coast	<i>Clupea pallasii</i>	Clupeiformes	3.15	Statistical catch at age model	1951-2007	2007	0.3 *	0.11 *
DFO	Canada	Pacific herring Straight of Georgia	<i>Clupea pallasii</i>	Clupeiformes	3.15	Statistical catch at age model	1951-2007	2007	0.91 *	0.4 *
DFO	Canada	Pacific herring West Coast of Vancouver Island	<i>Clupea pallasii</i>	Clupeiformes	3.15	Statistical catch at age model	1951-2007	2007	0.03 *	0 *
DFO	Canada	Pacific cod West Coast of Vancouver Island	<i>Gadus macrocephalus</i>	Gadiformes	4.01	Biomass dynamics model	1956-2002	2001	0.28 *	0.61 *
DFO	Canada	Pacific cod Hecate Strait	<i>Gadus macrocephalus</i>	Gadiformes	4.01	Biomass dynamics model	1956-2005	2004	0.37 *	0.25 *
DFO	Canada	Atlantic cod NAFO 4VsW	<i>Gadus morhua</i>	Gadiformes		Unknown	1958-2002			
DFO	Canada	Atlantic cod NAFO 4TVn	<i>Gadus morhua</i>	Gadiformes		VPA	1965-2009			
DFO	Canada	Atlantic cod NAFO 3Ps	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1959-2004	2004	0.49 *	0.41 *
DFO	Canada	Atlantic cod NAFO 5Zjm	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1978-2003	2002	0.34 *	0.45 *
DFO	Canada	Atlantic cod NAFO 2J3KL inshore	<i>Gadus morhua</i>	Gadiformes		VPA	1959-2006			
DFO	Canada	Atlantic cod NAFO 3Pn4RS	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1964-2007	2006	0.09 *	0.79 *
DFO	Canada	Atlantic cod NAFO 2J3KL	<i>Gadus morhua</i>	Gadiformes		VPA	1850-2005			
DFO	Canada	Rock sole Hecate Strait	<i>Lepidopsetta bilineata</i>	Pleuronectiformes	3.21	Statistical catch at age model	1945-2001	2001	1.03 *	0.45 *
DFO	Canada	Haddock NAFO-5Zejm	<i>Melanogrammus aeglefinus</i>	Gadiformes		VPA	1968-2003			
DFO	Canada	Haddock NAFO-4X5Y	<i>Melanogrammus aeglefinus</i>	Gadiformes		VPA	1960-2003			
DFO	Canada	English sole Hecate Strait	<i>Parophrys vetulus</i>	Pleuronectiformes	3.45	Statistical catch at age model	1944-2001	2001	1.24 *	0.37 *
DFO	Canada	Pollock NAFO-4VWX5Zc	<i>Pollachius virens</i>	Gadiformes	4.38	VPA	1974-2007	2006	0.56 *	0.3 *
IATTC	Multinational	Yellowfin tuna Eastern Pacific	<i>Thunnus albacares</i>	Perciformes		Statistical catch at age model	1975-2007			
IATTC	Multinational	Bigeye tuna Eastern Pacific	<i>Thunnus obesus</i>	Perciformes		Integrated Analysis	1975-2007			
ICCAT	Multinational	Skipjack tuna Western Atlantic	<i>Katsuwonus pelamis</i>	Perciformes	4.35	Biomass dynamics model	1952-2006	2006	1.72 *	0.32
ICCAT	Multinational	Skipjack tuna Eastern Atlantic	<i>Katsuwonus pelamis</i>	Perciformes	4.35	Biomass dynamics model	1950-2006	2006	1.71 *	0.27
ICCAT	Multinational	Albacore tuna North Atlantic	<i>Thunnus alalunga</i>	Perciformes	4.31	VPA	1929-2005	2005	0.81	1.49
ICCAT	Multinational	Yellowfin tuna Atlantic	<i>Thunnus albacares</i>	Perciformes	4.34	VPA	1970-2006	2006	1.07	0.81
ICCAT	Multinational	Bigeye tuna Atlantic	<i>Thunnus obesus</i>	Perciformes	4.50	Biomass dynamics model	1950-2005	2005	0.9 *	0.87
ICCAT	Multinational	Bluefin tuna Eastern Atlantic	<i>Thunnus thynnus</i>	Perciformes	4.43	VPA	1969-2007	2007	0.34	9.38
ICCAT	Multinational	Bluefin tuna Western Atlantic	<i>Thunnus thynnus</i>	Perciformes	4.43	VPA	1969-2007	2007	0.57	1.33

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ICCAT	Multinational	Swordfish South Atlantic	<i>Xiphias gladius</i>	Perciformes	4.49	Biomass dynamics model	1970-2005	2005	1.54	0.49
ICCAT	Multinational	Swordfish Mediterranean Sea	<i>Xiphias gladius</i>	Perciformes	4.49	Biomass dynamics model	1968-2006	2006	0.94	1.27
ICCAT	Multinational	Swordfish North Atlantic	<i>Xiphias gladius</i>	Perciformes	4.49	Biomass dynamics model	1978-2007	2005	0.99	0.88
ICES	Multinational	Sandeel North Sea	<i>Ammodytes marinus</i>	Perciformes		VPA	1983-2007	2007	0.92 *	0.24 *
ICES	Multinational	Herring Northern Irish Sea	<i>Clupea harengus</i>	Clupeiformes	3.23	Statistical catch at age model	1960-2006	2006	0.72 *	0.34 *
ICES	Multinational	Herring ICES 30	<i>Clupea harengus</i>	Clupeiformes	3.23	VPA	1972-2007	2006	1.19 *	1.1 *
ICES	Multinational	Herring ICES 25-32	<i>Clupea harengus</i>	Clupeiformes	3.23	VPA	1973-2006	2006	0.69 *	0.79 *
ICES	Multinational	Herring ICES 22-24-IIIa	<i>Clupea harengus</i>	Clupeiformes		Statistical catch at age model	1991-2006			
ICES	Multinational	Herring Iceland (Summer spawners)	<i>Clupea harengus</i>	Clupeiformes	3.23	VPA	1983-2007	2006	1 *	0.79 *
ICES	Multinational	Herring North Sea	<i>Clupea harengus</i>	Clupeiformes	3.23	Statistical catch at age model	1960-2007	2006	0.65 *	1.32 *
ICES	Multinational	Herring ICES VIa	<i>Clupea harengus</i>	Clupeiformes	3.23	Statistical catch at age model	1957-2006	2006	0.18 *	1.59 *
ICES	Multinational	Herring ICES 31	<i>Clupea harengus</i>	Clupeiformes	3.23	VPA	1979-2006	2006	0.29 *	1.6 *
ICES	Multinational	Herring ICES 28	<i>Clupea harengus</i>	Clupeiformes	3.23	VPA	1976-2007	2006	1.21 *	0.87 *
ICES	Multinational	Herring ICES VIa-VIIb-VIIc	<i>Clupea harengus</i>	Clupeiformes	3.23	VPA	1969-2000	2000	0.5 *	1.04 *
ICES	Multinational	Anchovy ICES VIII	<i>Engraulis encrasicolus</i>	Clupeiformes		Biomass dynamics model	1986-2007			
ICES	Multinational	Atlantic cod Baltic Areas 25-32	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1964-2007	2006	0.16 *	1.46 *
ICES	Multinational	Atlantic cod Northeast Arctic	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1943-2006	2006	0.56 *	1.42 *
ICES	Multinational	Atlantic cod Kattegat	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1970-2006	2006	0.19 *	0.31 *
ICES	Multinational	Atlantic cod coastal Norway	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1982-2006	2006	0.27 *	2.17 *
ICES	Multinational	Atlantic cod West of Scotland	<i>Gadus morhua</i>	Gadiformes	4.42	Statistical catch at age model	1977-2006	2006	0.12 *	0.42 *
ICES	Multinational	Atlantic cod North Sea	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1962-2007	2006	0.19 *	0.8 *
ICES	Multinational	Atlantic cod Irish Sea	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1968-2006	2006	0.15 *	0.56 *
ICES	Multinational	Atlantic cod Baltic Areas 22 and 24	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1969-2007	2006	0.36 *	1.43 *
ICES	Multinational	Atlantic cod Iceland	<i>Gadus morhua</i>	Gadiformes	4.42	Statistical catch at age model	1952-2006	2006	0.46 *	1.17 *
ICES	Multinational	Atlantic cod Faroe Plateau	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1959-2006	2006	0.26 *	1.52 *
ICES	Multinational	Fourspotted megrim ICES VIIIc-IXa	<i>Lepidorhombus boscii</i>	Pleuronectiformes		VPA	1986-2006	2006	0.7 *	1.01 *
ICES	Multinational	Megrim ICES VIIIc-IXa	<i>Lepidorhombus whiffiagonis</i>	Pleuronectiformes	4.24	VPA	1985-2007	2006	0.43 *	1.07 *
ICES	Multinational	Capelin Barents Sea	<i>Mallotus villosus</i>	Osmeriformes	3.15	Unknown	1965-2007	2006	0.17 *	0 *
ICES	Multinational	Capelin Iceland	<i>Mallotus villosus</i>	Osmeriformes	3.15	Survey index	1977-2007	2006	0.49 *	0.85 *

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ICES	Multinational	Haddock ICES VIIIb-k	<i>Melanogrammus aeglefinus</i>	Gadiformes		VPA	1993-2006			
ICES	Multinational	Haddock Faroe Plateau	<i>Melanogrammus aeglefinus</i>	Gadiformes	4.09	VPA	1955-2006	2006	0.85 *	1.07 *
ICES	Multinational	Haddock Irish Sea	<i>Melanogrammus aeglefinus</i>	Gadiformes		Survey index	1972-2006			
ICES	Multinational	Haddock Northeast Arctic	<i>Melanogrammus aeglefinus</i>	Gadiformes	4.09	VPA	1947-2006	2006	1.1 *	1.06 *
ICES	Multinational	Haddock ICES IIIa and North Sea	<i>Melanogrammus aeglefinus</i>	Gadiformes	4.09	VPA	1963-2006	2006	0.62 *	0.25 *
ICES	Multinational	Haddock Iceland	<i>Melanogrammus aeglefinus</i>	Gadiformes	4.09	VPA	1977-2007	2007	0.98 *	1.23 *
ICES	Multinational	Haddock Rockall Bank	<i>Melanogrammus aeglefinus</i>	Gadiformes		VPA	1990-2007			
ICES	Multinational	Haddock West of Scotland	<i>Melanogrammus aeglefinus</i>	Gadiformes	4.09	Statistical catch at age model	1977-2006	2006	0.58 *	0.73 *
ICES	Multinational	Whiting ICES VIa	<i>Merlangius merlangus</i>	Gadiformes		Survey index	1984-2007			
ICES	Multinational	Whiting ICES IIIa, VIId and North Sea	<i>Merlangius merlangus</i>	Gadiformes	4.29	VPA	1979-2006	2006	0.33 *	1.04 *
ICES	Multinational	Whiting ICES VIIe-k	<i>Merlangius merlangus</i>	Gadiformes	4.29	VPA	1982-2007	2006	0.44 *	1.25 *
ICES	Multinational	Hake Northeast Atlantic North	<i>Merluccius merluccius</i>	Gadiformes	4.42	VPA	1977-2007	2006	1.04 *	0.74 *
ICES	Multinational	Hake Northeast Atlantic South	<i>Merluccius merluccius</i>	Gadiformes		VPA	1982-2007			
ICES	Multinational	Whiting Northeast Atlantic	<i>Micromesistius poutassou</i>	Gadiformes	4.01	Integrated Analysis	1980-2007	2006	0.67 *	1.66 *
ICES	Multinational	European Plaice North Sea	<i>Pleuronectes platessa</i>	Pleuronectiformes		VPA	1956-2006			
ICES	Multinational	European Plaice ICES VIId	<i>Pleuronectes platessa</i>	Pleuronectiformes		VPA	1979-2006			
ICES	Multinational	European Plaice ICES IIIa	<i>Pleuronectes platessa</i>	Pleuronectiformes		VPA	1976-2006			
ICES	Multinational	European Plaice Irish Sea	<i>Pleuronectes platessa</i>	Pleuronectiformes	3.26	Statistical catch at age model	1962-2006	2006	1.07 *	0.23 *
ICES	Multinational	European Plaice ICES VIIf-g	<i>Pleuronectes platessa</i>	Pleuronectiformes	3.26	VPA	1976-2006	2006	0.65 *	0.41 *
ICES	Multinational	European Plaice ICES VIIe	<i>Pleuronectes platessa</i>	Pleuronectiformes	3.26	VPA	1975-2006	2006	0.51 *	1.39 *
ICES	Multinational	Pollock ICES IIIa, VI and North Sea	<i>Pollachius virens</i>	Gadiformes	4.38	VPA	1964-2006	2006	0.57 *	0.97 *
ICES	Multinational	Pollock Northeast Arctic	<i>Pollachius virens</i>	Gadiformes	4.38	VPA	1957-2006	2006	1.7 *	0.6 *
ICES	Multinational	Pollock Faroe Plateau	<i>Pollachius virens</i>	Gadiformes	4.38	VPA	1958-2006	2006	0.99 *	1.52 *
ICES	Multinational	Greenland halibut	<i>Reinhardtius hippoglossoides</i>	Pleuronectiformes	4.48	VPA	1959-2007	2006	0.36 *	1.2 *
ICES	Multinational	European pilchard ICES VIIIc-IXa	<i>Sardina pilchardus</i>	Clupeiformes		Statistical catch at age model	1978-2007			
ICES	Multinational	Mackerel ICES Northeast Atlantic	<i>Scomber scombrus</i>	Perciformes	3.18	Statistical catch at age model	1972-2007	2006	0.98 *	0.73 *
ICES	Multinational	Golden Redfish Northeast Arctic	<i>Sebastes norvegicus</i>	Scorpaeniformes		Statistical catch at age model	1986-2006			
ICES	Multinational	common European sole Irish Sea	<i>Solea vulgaris</i>	Pleuronectiformes	3.17	VPA	1968-2006	2006	0.36 *	1.16 *
ICES	Multinational	common European sole ICES Kattegat and Skagerrak	<i>Solea vulgaris</i>	Pleuronectiformes	3.17	VPA	1982-2007	2006	1.25 *	0.54 *
ICES	Multinational	common European sole ICES VIId	<i>Solea vulgaris</i>	Pleuronectiformes		VPA	1981-2006			
ICES	Multinational	common European sole Western English Channel	<i>Solea vulgaris</i>	Pleuronectiformes	3.17	VPA	1968-2006	2006	0.51 *	1.74 *

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ICES	Multinational	common European sole Bay of Biscay	<i>Solea vulgaris</i>	Pleuronectiformes	3.17	VPA	1982-2006	2006	0.76 *	1 *
ICES	Multinational	common European sole Celtic Sea	<i>Solea vulgaris</i>	Pleuronectiformes	3.17	VPA	1970-2006	2006	0.9 *	0.95 *
ICES	Multinational	common European sole North Sea	<i>Solea vulgaris</i>	Pleuronectiformes		VPA	1956-2006			
ICES	Multinational	Sprat ICES Baltic Areas 22-32	<i>Sprattus sprattus</i>	Clupeiformes	3.00	VPA	1973-2007	2006	1.13 *	1.27 *
ICES	Multinational	Sprat North Sea	<i>Sprattus sprattus</i>	Clupeiformes		Statistical catch at age model	1995-2007			
ICES	Multinational	Norway pout North Sea	<i>Trisopterus esmarkii</i>	Gadiformes	3.24	VPA	1983-2007	2006	0.9 *	0.33 *
IMARPE	Peru	Peruvian anchoveta North-Central Peru	<i>Engraulis ringens</i>	Clupeiformes		VPA	1963-2004			
IOTC	Multinational	Bigeye tuna Indian Ocean	<i>Thunnus obesus</i>	Perciformes	4.50	Biomass dynamics model	1957-2006	2004	1.23	0.97
IPHC	Multinational	Pacific halibut North Pacific	<i>Hippoglossus stenolepis</i>	Pleuronectiformes		Statistical catch at age model	1988-2009			
Iran	Iran	Anchovy kilka Caspian Sea	<i>Clupeonella engrauliformis</i>	Clupeiformes		Biomass dynamics model	1991-2007			
MFish	New Zealand	Black oreo West end of Chatham Rise	<i>Allocyttus niger</i>	Zeiformes	3.38	Integrated Analysis	1973-2007	2007	0.99	0.82
MFish	New Zealand	Australian salmon New Zealand	<i>Arripis trutta</i>	Perciformes	4.07	Integrated Analysis	1975-2006	2006	1.64	0.33
MFish	New Zealand	New Zealand snapper New Zealand Area 8	<i>Chrysophrys auratus</i>	Perciformes	3.32	Integrated Analysis	1931-2005	2005	0.35	2.5
MFish	New Zealand	New Zealand ling New Zealand Area LIN 7WC - WCSI	<i>Genypterus blacodes</i>	Ophidiiformes	4.34	Integrated Analysis	1972-2008	2008	2.21	0.13
MFish	New Zealand	New Zealand ling New Zealand Areas LIN 5 and 6	<i>Genypterus blacodes</i>	Ophidiiformes	4.34	Integrated Analysis	1972-2007	2007	3.96	0.1
MFish	New Zealand	New Zealand ling New Zealand Areas LIN 3 and 4	<i>Genypterus blacodes</i>	Ophidiiformes	4.34	Integrated Analysis	1972-2007	2007	3.07	0.09
MFish	New Zealand	New Zealand ling New Zealand Area LIN 6b	<i>Genypterus blacodes</i>	Ophidiiformes	4.34	Integrated Analysis	1980-2006	2006	2.19	0.11
MFish	New Zealand	New Zealand ling New Zealand Area LIN 72	<i>Genypterus blacodes</i>	Ophidiiformes	4.34	Integrated Analysis	1972-2007	2007	2.49	0.32
MFish	New Zealand	New Zealand abalone species New Zealand Area PAU 5D	<i>Haliotis iris</i>	Archaeogastropoda	2.00	Integrated Analysis	1964-2006	2006	0.44 *	2.1 *
MFish	New Zealand	New Zealand abalone species New Zealand Area PAU 5A	<i>Haliotis iris</i>	Archaeogastropoda	2.00	Integrated Analysis	1964-2006	2006	0.72 *	2.83 *
MFish	New Zealand	New Zealand abalone species New Zealand Area PAU 7	<i>Haliotis iris</i>	Archaeogastropoda	2.00	Integrated Analysis	1964-2008	2008	0.87 *	0.94 *
MFish	New Zealand	New Zealand abalone species New Zealand Area PAU 5B	<i>Haliotis iris</i>	Archaeogastropoda	2.00	Integrated Analysis	1963-2007	2007	1.02 *	0.59 *
MFish	New Zealand	Orange roughy New Zealand Mid East Coast	<i>Hoplostethus atlanticus</i>	Beryciformes	3.98	Integrated Analysis	1981-2004	2004	1.2	0.35
MFish	New Zealand	Red rock lobster New Zealand area CRA7	<i>Jasus edwardsii</i>	Decapoda	2.60	Unknown	1976-2005	2005	0.73 *	0.43 *

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Management	Country	Stock	Scientific name	Taxonomic order	Trophic Level	Methodology	Timespan	Current year	B ratio	U ratio
MFish	New Zealand	Red rock lobster Zealand area CRA3	New <i>Jasus edwardsii</i>	Decapoda		Unknown	1945-2007			
MFish	New Zealand	Red rock lobster Zealand area CRA2	New <i>Jasus edwardsii</i>	Decapoda	2.60	Unknown	1945-2001	2001	0.53 *	2.12 *
MFish	New Zealand	Red rock lobster Zealand area CRA8	New <i>Jasus edwardsii</i>	Decapoda	2.60	Unknown	1976-2005	2005	0.69 *	0.49 *
MFish	New Zealand	Red rock lobster Zealand area CRA5	New <i>Jasus edwardsii</i>	Decapoda	2.60	Unknown	1945-2002	2002	0.59 *	1.68 *
MFish	New Zealand	Red rock lobster Zealand area CRA1	New <i>Jasus edwardsii</i>	Decapoda	2.60	Unknown	1945-2001	2001	1.14 *	0.88 *
MFish	New Zealand	Red rock lobster Zealand area CRA4	New <i>Jasus edwardsii</i>	Decapoda	2.60	Unknown	1945-2005	2005	0.67 *	1.33 *
MFish	New Zealand	Hoki Western Zealand	New <i>Macruronus novaezelandiae</i>	Gadiformes	4.47	Integrated Analysis	1972-2007	2007	0.51 *	0.57 *
MFish	New Zealand	Hoki Eastern New Zealand	<i>Macruronus novaezelandiae</i>	Gadiformes	4.47	Integrated Analysis	1972-2007	2007	1.11 *	0.33 *
MFish	New Zealand	Southern hake Chatham Rise	<i>Merluccius australis</i>	Gadiformes	4.45	Integrated Analysis	1975-2006	2006	1.77	0.12
MFish	New Zealand	Southern hake	<i>Merluccius australis</i>	Gadiformes	4.45	Integrated Analysis	1975-2007	2007	2.91	0.11
MFish	New Zealand	Sub-Antarctic Southern blue whiting Campbell Island Rise	<i>Micromesistius australis</i>	Gadiformes	3.79	Integrated Analysis	1979-2006	2006	1.15	0.92
MFish	New Zealand	Trevally New Zealand Areas TRE 7	<i>Pseudocaranx dentex</i>	Perciformes	3.24	Integrated Analysis	1944-2005	2005	1.44	0.83
MFish	New Zealand	Smooth oreo Chatham Rise	<i>Pseudocyttus maculatus</i>	Zeiformes	3.61	Integrated Analysis	1979-2006	2006	2.25	0.38
MFish	New Zealand	Smooth oreo West end of Chatham Rise	<i>Pseudocyttus maculatus</i>	Zeiformes	3.61	Integrated Analysis	1973-2004	2004	1.25	0.53
MFish	New Zealand	common gemfish New Zealand	<i>Rezea solandri</i>	Perciformes	4.25	Integrated Analysis	1952-2007	2006	1.64	0.43
NAFO	Multinational	Atlantic cod NAFO 3NO	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1953-2007	2006	0.02 *	0.27 *
NAFO	Multinational	Atlantic cod NAFO 3M	<i>Gadus morhua</i>	Gadiformes		VPA	1959-2008			
NAFO	Multinational	American Plaice NAFO-3LNO	<i>Hippoglossoides platessoides</i>	Pleuronectiformes	3.65	VPA	1955-2007	2006	0.08 *	0.77 *
NAFO	Multinational	American Plaice NAFO-3M	<i>Hippoglossoides platessoides</i>	Pleuronectiformes		VPA	1960-2007			
NAFO	Multinational	Yellowtail Flounder NAFO 3LNO	<i>Limanda ferruginea</i>	Pleuronectiformes	3.22	Biomass dynamics model	1960-2009	2007	1.62 *	0.15 *
NAFO	Multinational	Redfish species NAFO 3LN	<i>Redfish species</i>	Scorpaeniformes		Biomass dynamics model	1959-2008	2008	1.88	0.04
NAFO	Multinational	Redfish species NAFO 3M	<i>Redfish species</i>	Scorpaeniformes		VPA	1989-2006			
NAFO	Multinational	Greenland halibut NAFO 23KLMNO	<i>Reinhardtius hippoglossoides</i>	Pleuronectiformes	4.48	VPA	1960-2006	2006	0.39 *	1.73 *
NMFS	USA	Sablefish Pacific Coast	<i>Anoplopoma fimbria</i>	Scorpaeniformes		Integrated Analysis	1900-2007			
NMFS	USA	Sablefish Eastern Bering Sea / Aleutian Islands / Gulf of Alaska	<i>Anoplopoma fimbria</i>	Scorpaeniformes	3.83	Statistical catch at age model	1956-2008	2008	1.05	0.66
NMFS	USA	Ocean quahog Atlantic Coast	<i>Arctica islandica</i>	Veneroida		Biomass dynamics model	1978-2008			
NMFS	USA	Gray triggerfish Gulf of Mexico	<i>Balistes capriscus</i>	Tetraodontiformes		Biomass dynamics model	1981-2004			
NMFS	USA	Gulf menhaden Gulf of Mexico	<i>Brevoortia patronus</i>	Clupeiformes	2.19	Statistical catch at age model	1964-2004	2004	1.08 *	0.48 *

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Management	Country	Stock	Scientific name	Taxonomic order	Trophic Level	Methodology	Timespan	Current year	B ratio	U ratio
NMFS	USA	Atlantic menhaden	<i>Brevoortia tyrannus</i>	Clupeiformes	2.25	Statistical catch at age model	1940-2005	2005	0.47 *	0.97 *
NMFS	USA	Blacknose shark Atlantic	<i>Carcharhinus acronotus</i>	Carcharhiniformes		Biomass dynamics model	1950-2005			
NMFS	USA	Finetooth shark Atlantic	<i>Carcharhinus isodon</i>	Carcharhiniformes		Biomass dynamics model	1976-2005			
NMFS	USA	Blacktip shark Gulf of Mexico	<i>Carcharhinus limbatus</i>	Carcharhiniformes		Biomass dynamics model	1981-2004			
NMFS	USA	Blacktip shark Atlantic	<i>Carcharhinus limbatus</i>	Carcharhiniformes		Biomass dynamics model	1981-2004			
NMFS	USA	Sandbar shark Atlantic	<i>Carcharhinus plumbeus</i>	Carcharhiniformes		Biomass dynamics model	1975-2004			
NMFS	USA	Black sea bass Mid-Atlantic Coast	<i>Centropristis striata</i>	Perciformes	3.98	Statistical catch at age model	1968-2007	2007	0.92	0.67 *
NMFS	USA	Snow crab Bering Sea	<i>Chionoecetes opilio</i>	Decapoda	2.30	Biomass dynamics model	1979-2008	2008	0.55	1.49 *
NMFS	USA	Atlantic herring Northwest Atlantic Coast	<i>Clupea harengus</i>	Clupeiformes	3.23	Statistical catch at age model	1960-2005	2005	1.66	0.34
NMFS	USA	Pacific herring Prince William Sound	<i>Clupea pallasii</i>	Clupeiformes		Statistical catch at age model	1980-2006			
NMFS	USA	Pacific herring Sitka	<i>Clupea pallasii</i>	Clupeiformes		Statistical catch at age model	1978-2007			
NMFS	USA	Weakfish Atlantic Coast	<i>Cynoscion regalis</i>	Perciformes		VPA	1981-2008			
NMFS	USA	Petrale sole Southern Pacific Coast	<i>Eopsetta jordani</i>	Pleuronectiformes	4.05	Integrated Analysis	1874-2005	2005	1.13	0.61 *
NMFS	USA	Petrale sole Northern Pacific Coast	<i>Eopsetta jordani</i>	Pleuronectiformes	4.05	Integrated Analysis	1910-2005	2005	1.87	1.26 *
NMFS	USA	Red grouper Gulf of Mexico	<i>Epinephelus morio</i>	Perciformes	3.49	Statistical catch at age model	1986-2005	2005	1.27	0.73
NMFS	USA	Snowy grouper Southern Atlantic coast	<i>Epinephelus niveatus</i>	Perciformes	4.04	Statistical catch at age model	1961-2002	2002	0.19	3.08
NMFS	USA	Pacific cod Bering Sea and Aleutian Islands	<i>Gadus macrocephalus</i>	Gadiformes	4.01	Integrated Analysis	1964-2008	2008	1	0.93 *
NMFS	USA	Pacific cod Gulf of Alaska	<i>Gadus macrocephalus</i>	Gadiformes	4.01	Integrated Analysis	1964-2008	2008	0.91	0.84 *
NMFS	USA	Atlantic cod Georges Bank	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1960-2008	2007	0.12	0.72 *
NMFS	USA	Atlantic cod Gulf of Maine	<i>Gadus morhua</i>	Gadiformes	4.42	VPA	1893-2008	2007	1.46 *	2.4
NMFS	USA	Witch Flounder NAFO-5Y	<i>Glyptocephalus cynoglossus</i>	Pleuronectiformes		VPA	1982-2008	2007	0.3	1.45
NMFS	USA	Rex sole Gulf of Alaska	<i>Glyptocephalus zachirus</i>	Pleuronectiformes		Statistical catch at age model	1979-2008			
NMFS	USA	Kelp greenling Oregon Coast	<i>Hexagrammos decagrammus</i>	Scorpaeniformes		Integrated Analysis	1979-2005			
NMFS	USA	Flathead sole Gulf of Alaska	<i>Hippoglossoides classodon</i>	Pleuronectiformes		Statistical catch at age model	1978-2010			

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Management	Country	Stock	Scientific name	Taxonomic order	Trophic Level	Methodology	Timespan	Current year	B ratio	U ratio
NMFS	USA	Flathead sole Bering Sea and Aleutian Islands	<i>Hippoglossoides classodon</i>	Pleuronectiformes	3.64	Statistical catch at age model	1977-2008	2008	1.83	0.18 *
NMFS	USA	American NAFO-5YZ Plaice	<i>Hippoglossoides platessoides</i>	Pleuronectiformes	3.65	VPA	1960-2008	2007	0.7	0.3 *
NMFS	USA	Atlantic NAFO-5YZ Halibut	<i>Hippoglossus hippoglossus</i>	Pleuronectiformes		Unknown	1800-2007			
NMFS	USA	American lobster Georges Bank	<i>Homarus americanus</i>	Decapoda		Biomass dynamics model	1981-2007			
NMFS	USA	American lobster Gulf of Maine	<i>Homarus americanus</i>	Decapoda		Biomass dynamics model	1981-2007			
NMFS	USA	American lobster Southern New England	<i>Homarus americanus</i>	Decapoda		Biomass dynamics model	1981-2007			
NMFS	USA	Northern shortfin squid Northwest Atlantic Coast	<i>Illex illecebrosus</i>	Teuthida		Biomass dynamics model	1967-2005			
NMFS	USA	Northern rock sole Eastern Bering Sea and Aleutian Islands	<i>Lepidopsetta polyxystra</i>	Pleuronectiformes	3.21	Statistical catch at age model	1971-2008	2007	3.02	0.21
NMFS	USA	Yellowfin sole Bering Sea and Aleutian Islands	<i>Limanda aspera</i>	Pleuronectiformes	3.24	Statistical catch at age model	1959-2008	2008	1.94	0.62
NMFS	USA	Yellowtail Flounder Southern New England-Mid Atlantic	<i>Limanda ferruginea</i>	Pleuronectiformes	3.22	VPA	1935-2008	2007	0.13	1.61
NMFS	USA	Yellowtail flounder Georges Bank	<i>Limanda ferruginea</i>	Pleuronectiformes	3.22	VPA	1935-2008	2007	0.22	1.14
NMFS	USA	Yellowtail flounder Cape Cod / Gulf of Maine	<i>Limanda ferruginea</i>	Pleuronectiformes	3.22	VPA	1935-2008	2007	0.25	1.73
NMFS	USA	Golden king crab Aleutian Islands Eastern segment	<i>Lithodes aequispinus</i>	Decapoda		Statistical catch at length model	1990-2007			
NMFS	USA	Golden king crab Aleutian Islands Western segment	<i>Lithodes aequispinus</i>	Decapoda		Statistical catch at length model	1989-2007			
NMFS	USA	Monkfish Southern Georges Bank / Mid-Atlantic	<i>Lophius americanus</i>	Lophiiformes	4.49	Unknown	1964-2006	2006	1.72 *	0.3 *
NMFS	USA	Monkfish Gulf of Maine / Northern Georges Bank	<i>Lophius americanus</i>	Lophiiformes	4.49	Unknown	1964-2006	2006	1.73 *	0.38 *
NMFS	USA	Tilefish Southern Atlantic coast	<i>Lopholatilus chamaeleonticeps</i>	Perciformes	3.45	Statistical catch at age model	1961-2002	2002	0.9	1.55
NMFS	USA	Tilefish Mid-Atlantic Coast	<i>Lopholatilus chamaeleonticeps</i>	Perciformes	3.45	Biomass dynamics model	1973-2008	2005	0.72 *	0.61 *
NMFS	USA	Mutton snapper Southern Atlantic coast and Gulf of Mexico	<i>Lutjanus analis</i>	Perciformes		Statistical catch at age model	1981-2006			
NMFS	USA	Red snapper Southern Atlantic coast	<i>Lutjanus campechanus</i>	Perciformes		Statistical catch at age model	1945-2006			

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Management	Country	Stock	Scientific name	Taxonomic order	Trophic Level	Methodology	Timespan	Current year	B ratio	U ratio
NMFS	USA	Red snapper Eastern Gulf of Mexico	<i>Lutjanus campechanus</i>	Perciformes		Statistical catch at age model	1872-2003			
NMFS	USA	Red snapper Western Gulf of Mexico	<i>Lutjanus campechanus</i>	Perciformes		Statistical catch at age model	1880-2003			
NMFS	USA	Haddock NAFO-5Y	<i>Melanogrammus aeglefinus</i>	Gadiformes	4.09	VPA	1956-2008	2007	0.99	1.21 *
NMFS	USA	Haddock Georges Bank	<i>Melanogrammus aeglefinus</i>	Gadiformes		VPA	1930-2008			
NMFS	USA	Silver hake Gulf of Maine / Northern Georges Bank	<i>Merluccius bilinearis</i>	Gadiformes		Survey index	1955-2005			
NMFS	USA	Silver hake Southern Georges Bank / Mid-Atlantic	<i>Merluccius bilinearis</i>	Gadiformes		Survey index	1955-2005			
NMFS	USA	Pacific hake Pacific Coast	<i>Merluccius productus</i>	Gadiformes	4.35	Integrated Analysis	1966-2008	2008	1.61	0.73
NMFS	USA	Atlantic croaker Mid-Atlantic Coast	<i>Micropogonias undulatus</i>	Perciformes	3.31	Biomass dynamics model	1973-2002	2002	1.42	0.27
NMFS	USA	Dover sole Pacific Coast	<i>Microstomus pacificus</i>	Pleuronectiformes	3.27	Integrated Analysis	1910-2005	2005	1.61	0.45 *
NMFS	USA	Dover sole Gulf of Alaska	<i>Microstomus pacificus</i>	Pleuronectiformes		Statistical catch at age model	1978-2010			
NMFS	USA	Striped bass Gulf of Maine / Cape Hatteras	<i>Morone saxatilis</i>	Perciformes		Statistical catch at age model	1982-2006			
NMFS	USA	Gag Gulf of Mexico	<i>Mycteroperca microlepis</i>	Perciformes	3.65	Unknown	1963-2004	2004	1	2.44
NMFS	USA	Gag Southern Atlantic coast	<i>Mycteroperca microlepis</i>	Perciformes	3.65	Statistical catch at age model	1962-2005	2005	0.94	1.31
NMFS	USA	Yellowtail snapper Southern Atlantic Coast and Gulf of Mexico	<i>Ocyurus chrysurus</i>	Perciformes	3.99	Statistical catch at age model	1962-2001	2001	1.14	0.61
NMFS	USA	Lingcod Southern Pacific Coast	<i>Ophiodon elongatus</i>	Scorpaeniformes		Integrated Analysis	1956-2005			
NMFS	USA	Lingcod Northern Pacific Coast	<i>Ophiodon elongatus</i>	Scorpaeniformes		Integrated Analysis	1956-2005			
NMFS	USA	Red porgy Southern Atlantic coast	<i>Pagrus pagrus</i>	Perciformes	3.65	Statistical catch at age model	1972-2004	2004	0.61	0.39
NMFS	USA	Northern shrimp Gulf of Maine	<i>Pandalus borealis</i>	Decapoda		Statistical catch at age model	1960-2009	2008	1.58 *	0.56 *
NMFS	USA	Summer flounder Mid-Atlantic Coast	<i>Paralichthys dentatus</i>	Pleuronectiformes		Statistical catch at age model	1940-2007			
NMFS	USA	Red king crab Bristol Bay	<i>Paralithodes camtschaticus</i>	Decapoda	2.82	Statistical catch at length model	1960-2008	2008	1.27	1.05
NMFS	USA	Red king crab Norton Sound	<i>Paralithodes camtschaticus</i>	Decapoda		Statistical catch at length model	1976-2008			
NMFS	USA	English sole Pacific Coast	<i>Parophrys vetulus</i>	Pleuronectiformes	3.45	Integrated Analysis	1876-2007	2007	6.42	0.14 *
NMFS	USA	Atlantic butterfish Gulf of Maine / Cape Hatteras	<i>Peprilus triacanthus</i>	Perciformes		Unknown	1965-2005			

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Management	Country	Stock	Scientific name	Taxonomic order	Trophic Level	Methodology	Timespan	Current year	B ratio	U ratio
NMFS	USA	Sea scallop Georges Bank	<i>Placopecten magellanicus</i>	Ostreoida	2.00	Statistical catch at length model	1964-2006	2006	1.59 *	0.78 *
NMFS	USA	Sea scallop Mid-Atlantic Coast	<i>Placopecten magellanicus</i>	Ostreoida	2.00	Statistical catch at length model	1964-2006	2006	1 *	0.36 *
NMFS	USA	Starry flounder Southern Pacific Coast	<i>Platichthys stellatus</i>	Pleuronectiformes	3.32	Integrated Analysis	1970-2005	2005	1.55	0.12 *
NMFS	USA	Starry flounder Northern Pacific Coast	<i>Platichthys stellatus</i>	Pleuronectiformes	3.32	Integrated Analysis	1970-2005	2005	1.1	0.33 *
NMFS	USA	Atka mackerel Bering Sea and Aleutian Islands	<i>Pleurogrammus monopterygius</i>	Scorpaeniformes	3.33	Statistical catch at age model	1976-2009	2009	1.55	0.55 *
NMFS	USA	Alaska plaice Bering Sea and Aleutian Islands	<i>Pleuronectes quadrituberculatus</i>	Pleuronectiformes	3.10	Statistical catch at age model	1972-2008	2008	2.46	0.07
NMFS	USA	Pollock NAFO-5YZ	<i>Pollachius virens</i>	Gadiformes		Survey index	1963-2007			
NMFS	USA	Bluefish Atlantic Coast	<i>Pomatomus saltatrix</i>	Perciformes	4.50	Statistical catch at age model	1981-2007	2007	0.81 *	0.79
NMFS	USA	Winter Flounder Southern New England-Mid Atlantic	<i>Pseudopleuronectes americanus</i>	Pleuronectiformes	2.83	VPA	1940-2007	2007	0.09	1.1 *
NMFS	USA	Winter NAFO-5Y Flounder	<i>Pseudopleuronectes americanus</i>	Pleuronectiformes		Unknown	1982-2008			
NMFS	USA	Winter NAFO-5Z Flounder	<i>Pseudopleuronectes americanus</i>	Pleuronectiformes	2.83	VPA	1982-2007	2006	0.28	0.25 *
NMFS	USA	Longnose skate Pacific Coast	<i>Raja rhina</i>	Rajiformes	3.76	Integrated Analysis	1915-2007	2007	1.56 *	0.4 *
NMFS	USA	Greenland turbot Bering Sea and Aleutian Islands	<i>Reinhardtius hippoglossoides</i>	Pleuronectiformes	4.48	Statistical catch at age model	1960-2009	2009	1.48	0.05
NMFS	USA	Arrowtooth flounder Pacific Coast	<i>Reinhardtius stomias</i>	Pleuronectiformes	4.26	Integrated Analysis	1916-2007	2007	3.81	0.21
NMFS	USA	Arrowtooth flounder Bering Sea and Aleutian Islands	<i>Reinhardtius stomias</i>	Pleuronectiformes	4.26	Statistical catch at age model	1970-2008	2008	2.7	0.31 *
NMFS	USA	Arrowtooth flounder Gulf of Alaska	<i>Reinhardtius stomias</i>	Pleuronectiformes	4.26	Statistical catch at age model	1958-2010	2010	3.02	0.28 *
NMFS	USA	Atlantic sharpnose shark Atlantic	<i>Rhizoprionodon terraenovae</i>	Carcharhiniformes		Biomass dynamics model	1950-2005			
NMFS	USA	Vermilion snapper Southern Atlantic coast	<i>Rhomboplites aurorubens</i>	Perciformes	4.33	Statistical catch at age model	1946-2008	2007	0.86	1.27
NMFS	USA	Vermilion snapper Gulf of Mexico	<i>Rhomboplites aurorubens</i>	Perciformes		Biomass dynamics model	1981-2004			
NMFS	USA	Pacific sardine Pacific Coast	<i>Sardinops sagax</i>	Clupeiformes	2.43	Integrated Analysis	1981-2007	2006	1.36 *	0.41 *
NMFS	USA	Pacific chub mackerel Pacific Coast	<i>Scomber japonicus</i>	Perciformes		Statistical catch at age model	1929-2008			
NMFS	USA	King mackerel Gulf of Mexico	<i>Scomberomorus cavalla</i>	Perciformes		VPA	1992-2001			

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Management	Country	Stock	Scientific name	Taxonomic order	Trophic Level	Methodology	Timespan	Current year	B ratio	U ratio
NMFS	USA	King mackerel Southern Atlantic Coast	<i>Scomberomorus cavalla</i>	Perciformes		VPA	1981-2001			
NMFS	USA	Spanish mackerel Southern Atlantic Coast	<i>Scomberomorus maculatus</i>	Perciformes	4.50	Statistical catch at age model	1950-2008	2007	0.38	0.91
NMFS	USA	Atlantic mackerel Gulf of Maine / Cape Hatteras	<i>Scomber scombrus</i>	Perciformes		VPA	1960-2005			
NMFS	USA	Windowpane Southern New England-Mid Atlantic	<i>Scophthalmus aquosus</i>	Pleuronectiformes		Survey index	1975-2007			
NMFS	USA	Windowpane flounder - Gulf of Maine / Georges Bank	<i>Scophthalmus aquosus</i>	Pleuronectiformes		Survey index	1975-2007			
NMFS	USA	California scorpionfish Southern California	<i>Scorpaena guttata</i>	Scorpaeniformes		Statistical catch at age model	1990-2005			
NMFS	USA	Cabazon California Northern	<i>Scorpaenichthys marmoratus</i>	Scorpaeniformes	3.51	Integrated Analysis	1916-2005	2005	1.04	0.99 *
NMFS	USA	Cabazon California Southern	<i>Scorpaenichthys marmoratus</i>	Scorpaeniformes	3.51	Integrated Analysis	1932-2005	2005	0.74	0.53 *
NMFS	USA	Rougheye rockfish Bering Sea and Aleutian Islands	<i>Sebastes aleutianus</i>	Scorpaeniformes		Statistical catch at age model	1974-2009			
NMFS	USA	Rougheye rockfish Gulf of Alaska	<i>Sebastes aleutianus</i>	Scorpaeniformes		Statistical catch at age model	1974-2007			
NMFS	USA	Pacific Ocean perch Eastern Bering Sea and Aleutian Islands	<i>Sebastes alutus</i>	Scorpaeniformes	3.50	Statistical catch at age model	1974-2009	2009	1.23	0.26 *
NMFS	USA	Pacific ocean perch Pacific Coast	<i>Sebastes alutus</i>	Scorpaeniformes	3.50	Statistical catch at age model	1953-2007	2007	0.69	0
NMFS	USA	Pacific ocean perch Gulf of Alaska	<i>Sebastes alutus</i>	Scorpaeniformes		Statistical catch at age model	1959-2010			
NMFS	USA	Shortraker rockfish Bering Sea and Aleutian Islands	<i>Sebastes borealis</i>	Scorpaeniformes		Statistical catch at age model	1977-2008			
NMFS	USA	Gopher rockfish Southern Pacific Coast	<i>Sebastes carnatus</i>	Scorpaeniformes		Integrated Analysis	1965-2005			
NMFS	USA	Darkblotched rockfish Pacific Coast	<i>Sebastes crameri</i>	Scorpaeniformes	3.69	Integrated Analysis	1928-2007	2007	0.73	0.31
NMFS	USA	Widow rockfish Pacific Coast	<i>Sebastes entomelas</i>	Scorpaeniformes	3.68	Statistical catch at age model	1955-2006	2006	0.91 *	0.06
NMFS	USA	Acadian redfish Gulf of Maine / Georges Bank	<i>Sebastes fasciatus</i>	Scorpaeniformes		Statistical catch at age model	1913-2007			
NMFS	USA	Yellowtail rockfish Northern Pacific Coast	<i>Sebastes flavidus</i>	Scorpaeniformes	4.11	Integrated Analysis	1967-2005	2005	1.36	0.51 *
NMFS	USA	Chilipepper Southern Pacific Coast	<i>Sebastes goodei</i>	Scorpaeniformes	3.58	Integrated Analysis	1892-2007	2006	1.43 *	0.04
NMFS	USA	Shortbelly rockfish Pacific Coast	<i>Sebastes jordani</i>	Scorpaeniformes		Integrated Analysis	1950-2005			
NMFS	USA	Cowcod Southern California	<i>Sebastes levis</i>	Scorpaeniformes	3.69	Integrated Analysis	1900-2007	2007	0.09	0.07
NMFS	USA	Black rockfish Southern Pacific Coast	<i>Sebastes melanops</i>	Scorpaeniformes	4.20	Integrated Analysis	1915-2007	2007	2.23	0.33

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Management	Country	Stock	Scientific name	Taxonomic order	Trophic Level	Methodology	Timespan	Current year	B ratio	U ratio
NMFS	USA	Black rockfish Northern Pacific Coast	<i>Sebastes melanops</i>	Scorpaeniformes	4.20	Integrated Analysis	1914-2006	2006	1.37 *	0.47
NMFS	USA	Blackgill rockfish Pacific Coast	<i>Sebastes melanostomus</i>	Scorpaeniformes		Integrated Analysis	1950-2005			
NMFS	USA	Blue rockfish California	<i>Sebastes mystinus</i>	Scorpaeniformes	2.81	Integrated Analysis	1916-2007	2007	0.75	1.19
NMFS	USA	Bocaccio Southern Pacific Coast	<i>Sebastes paucispinis</i>	Scorpaeniformes	3.51	Integrated Analysis	1951-2006	2006	0.32	0.1
NMFS	USA	Canary rockfish Pacific Coast	<i>Sebastes pinniger</i>	Scorpaeniformes	3.80	Integrated Analysis	1916-2009	2009	0.62	0.03
NMFS	USA	Northern rockfish Bering Sea and Aleutian Islands	<i>Sebastes polyspinis</i>	Scorpaeniformes	3.57	Statistical catch at age model	1974-2009	2009	1.41	0.13 *
NMFS	USA	Northern rockfish Gulf of Alaska	<i>Sebastes polyspinis</i>	Scorpaeniformes	3.57	Statistical catch at age model	1959-2008	2008	1.5	0.66
NMFS	USA	Yelloweye rockfish Pacific Coast	<i>Sebastes ruberrimus</i>	Scorpaeniformes	4.43	Integrated Analysis	1923-2006	2006	0.38 *	0.65
NMFS	USA	Dusky rockfish Gulf of Alaska	<i>Sebastes variabilis</i>	Scorpaeniformes	3.69	Statistical catch at age model	1973-2008	2007	1.54	0.54
NMFS	USA	Shortspine thornyhead Pacific Coast	<i>Sebastolobus alascanus</i>	Scorpaeniformes		Integrated Analysis	1901-2005			
NMFS	USA	Longspine thornyhead Pacific Coast	<i>Sebastolobus altivelis</i>	Scorpaeniformes	3.61	Integrated Analysis	1962-2005	2005	2.65	0.23
NMFS	USA	Greater amberjack Southern Atlantic coast	<i>Seriola dumerili</i>	Perciformes		Statistical catch at age model	1946-2006			
NMFS	USA	Greater amberjack Gulf of Mexico	<i>Seriola dumerili</i>	Perciformes		Biomass dynamics model	1986-2004			
NMFS	USA	Bonnethead shark Atlantic	<i>Sphyrna tiburo</i>	Carcharhiniformes		Biomass dynamics model	1950-2005			
NMFS	USA	Atlantic surfclam Mid-Atlantic Coast	<i>Spisula solidissima</i>	Veneroida		Biomass dynamics model	1965-2008			
NMFS	USA	Spiny dogfish Atlantic Coast	<i>Squalus acanthias</i>	Squaliformes		Unknown	1962-2006			
NMFS	USA	Scup Atlantic Coast	<i>Stenotomus chrysops</i>	Perciformes		Statistical catch at age model	1960-2007			
NMFS	USA	Walleye pollock Gulf of Alaska	<i>Theragra chalcogramma</i>	Gadiformes		Statistical catch at age model	1964-2008			
NMFS	USA	Walleye pollock Eastern Bering Sea	<i>Theragra chalcogramma</i>	Gadiformes	3.45	Statistical catch at age model	1963-2008	2008	0.66	0.85 *
NMFS	USA	Walleye pollock Aleutian Islands	<i>Theragra chalcogramma</i>	Gadiformes	3.45	Statistical catch at age model	1976-2008	2008	0.86	0.02
NMFS	USA	White hake Georges Bank / Gulf of Maine	<i>Urophycis tenuis</i>	Gadiformes	4.20	Biomass dynamics model	1963-2007	2007	0.35	0.8
RFFA	Russia	Walleye pollock Northern Sea of Okhotsk	<i>Theragra chalcogramma</i>	Gadiformes		Biomass dynamics model	1985-1994			
RFFA	Russia	Walleye pollock Western Bering Sea	<i>Theragra chalcogramma</i>	Gadiformes		VPA	1994-2004			

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Management	Country	Stock	Scientific name	Taxonomic order	Trophic Level	Methodology	Timespan	Current year	B ratio	U ratio
SPRFMO	Multinational	Chilean jack mackerel	<i>Trachurus murphyi</i>	Perciformes	3.49	Integrated Analysis VPA	1950-2010	2010	0.09 *	3.66 *
UNKNOWN	Multinational	Chilean EEZ and offshore Shortfin mako Northwest Pacific Ocean	<i>Isurus oxyrinchus</i>	Lamniformes			1990-2003			
US State	USA	American lobster Rhode Island	<i>Homarus americanus</i>	Decapoda	3.70	Biomass dynamics model	1959-2007	2006	0.53 *	0.67 *
US State	USA	Winter flounder Rhode Island	<i>Pseudopleuronectes americanus</i>	Pleuronectiformes	2.83	Biomass dynamics model	1959-2007	2006	0.25 *	2.02
US State	USA	Tautog Rhode Island	<i>Tautoga onitis</i>	Perciformes	3.33	Biomass dynamics model	1959-2007	2006	0.84 *	0.59 *
WCPFC	Multinational	Striped Southwestern marlin Pacific Ocean	<i>Kajikia audax</i>	Perciformes	4.58	Statistical catch at age model	1950-2004	2004	0.88	0.27
WCPFC	Multinational	Skipjack tuna Central Western Pacific	<i>Katsuwonus pelamis</i>	Perciformes	4.35	Statistical catch at age model	1972-2006	2006	4.38	0.3
WCPFC	Multinational	Albacore tuna South Pacific Ocean	<i>Thunnus alalunga</i>	Perciformes	4.31	Statistical catch at age model	1959-2006	2006	2.46	0.9
WCPFC	Multinational	Yellowfin tuna Central Western Pacific	<i>Thunnus albacares</i>	Perciformes	4.34	Statistical catch at age model	1952-2005	2005	1.22	0.8
WCPFC	Multinational	Bigeye tuna Western Pacific Ocean	<i>Thunnus obesus</i>	Perciformes	4.50	Statistical catch at age model	1952-2006	2006	1.06	1.38

Table S 1: 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 SSBmsy and Bmsy reference points were available, SSB was chosen preferentially.

	SP U/U <sub>msy</sub> < 1	SP U/U <sub>msy</sub> > 1
U/U <sub>msy</sub> < 1	20	14
U/U <sub>msy</sub> > 1	2	8
B/B <sub>msy</sub> < 1	28	6
B/B <sub>msy</sub> > 1	12	30

Table S 2: Contingency tables of stock status classification for biomass and exploitation reference points obtained from assessments and those derived from surplus production models.



## 2 Supplementary figures

Figure S1. Entity-relationship diagram

Figure S2. Contingency table

Figure S3. Taxonomic coverage of assessed marine species present in the RAM Legacy database. The circle located near the middle of the circular dendrogram represents kingdom Animalia and each subsequent branching represents a different taxonomic group (Kingdom to Phylum to Class to Order to Family to Genus to Species). The width of each line is proportional to the square root of the number of assessments in the database. The outermost lines represent species and the number of lines is the number of assessments for each species. The names of multi-assessment species are not repeated on the outermost portion of the dendrogram but continue counter-clockwise from the first entry. Note that branch lengths are chosen for graphical purposes and do not convey phylogenetic distance.

Figure S4. ICES Blim

Figure S5. Functional groups.

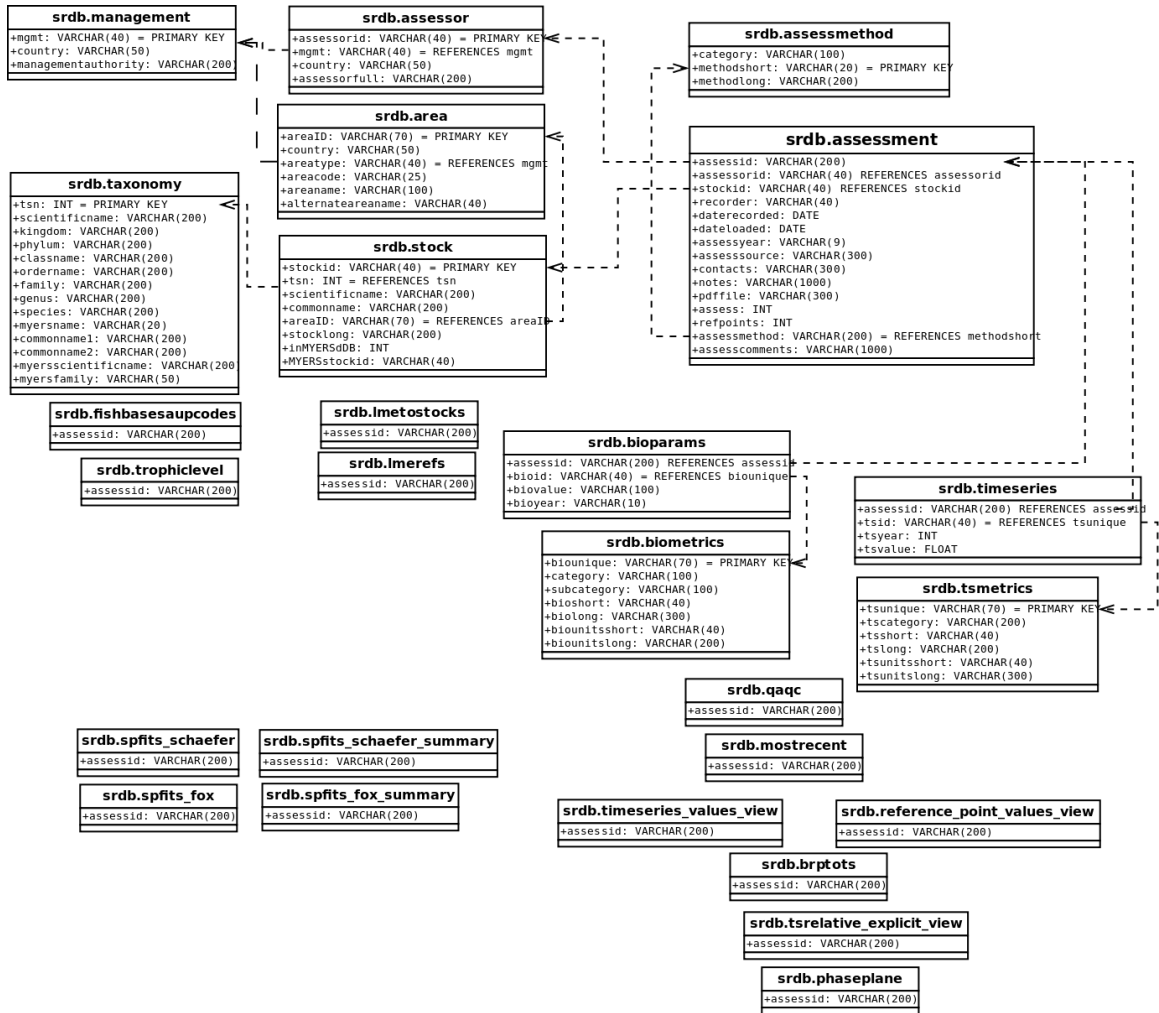


Fig. S 1:

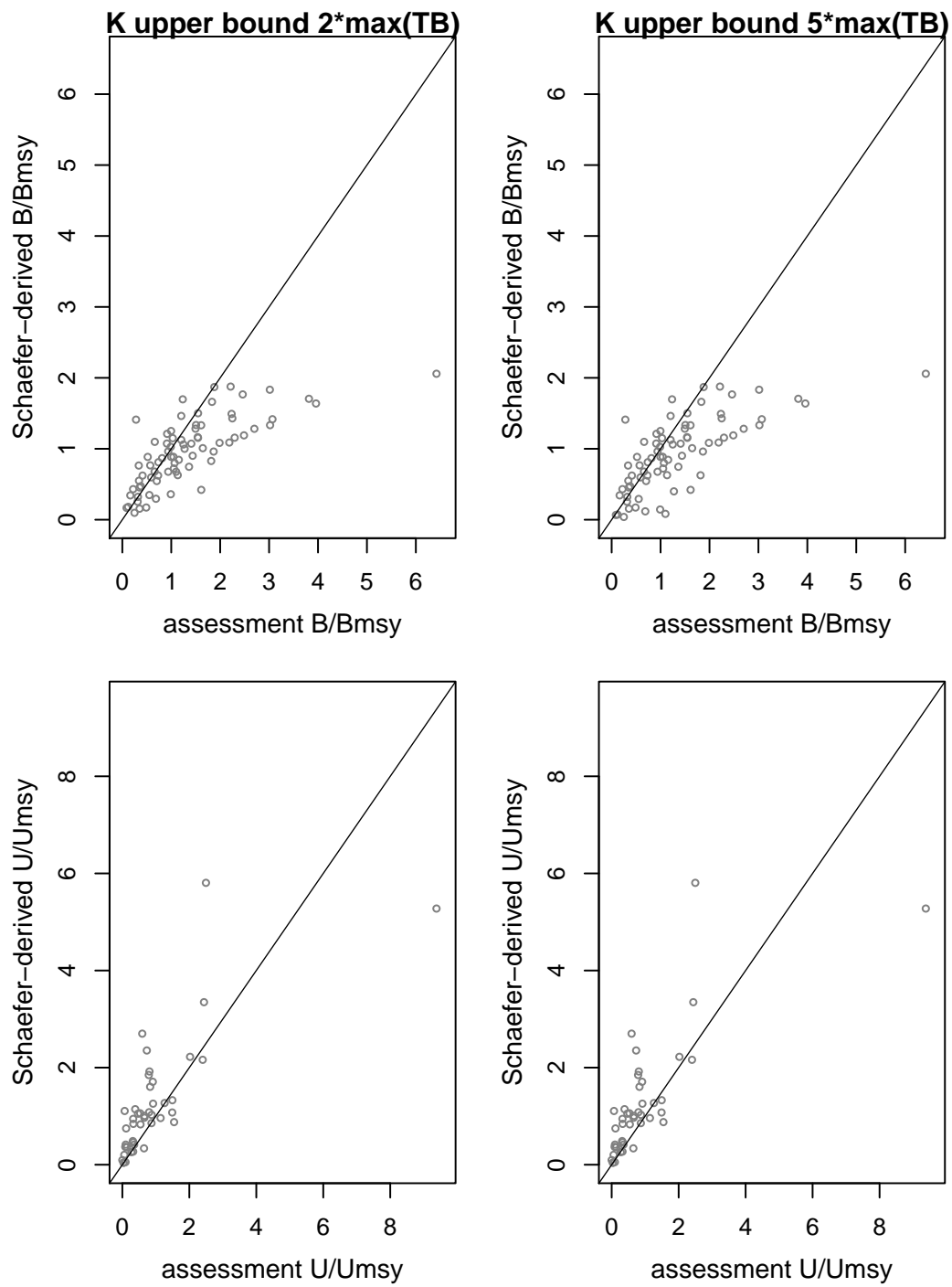


Fig. S 2:



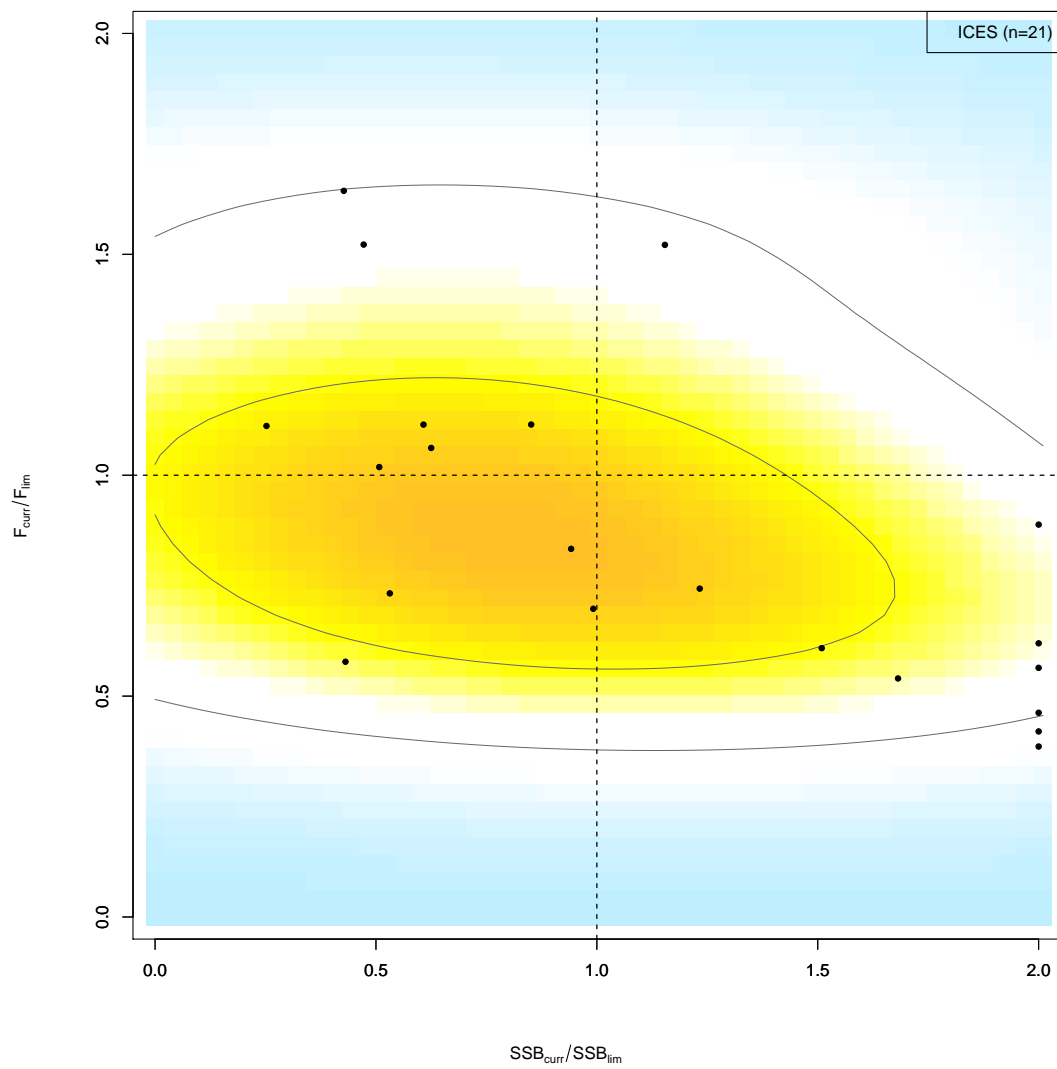


Fig. S 4: ICES SSBlim.

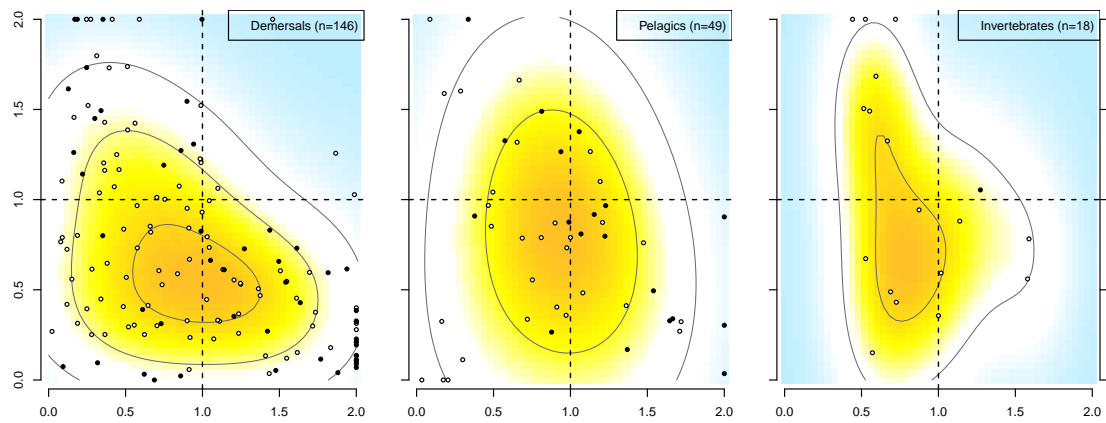


Fig. S 5: Invertebrates, demersal fish and pelagic fish.