

NPAFC

Doc. 768

Statistics on Non-Salmonid Species for the NPAFC Statistical Yearbook Series
– Suggestion for Changing Area Divisions for the United States

by

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Submitted to the

Committee for Scientific Research and Statistics

by the

United States Party

August 2004

This paper by cited in the following manner:

Low, Loh-Lee. 2004. Statistics on Non-Salmonid Species for the NPAFC Statistical Yearbook Series – Suggestion for Changing Area Divisions for the United States. 7p. (NPAFC Doc. 768). Alaska Fisheries Science Center, National Marine Fisheries Service, 7600 Sand Point Way NE Seattle Wa 98115

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Introduction – The Statistical Yearbook series of the North Pacific Anadromous Fish Commission is a continuation of the system developed under its predecessor organization, the International North Pacific Fisheries Commission. Over the years, changes have been made to the yearbook as fisheries situations and data reporting requirements changed over time. The table of statistics for non-salmonid species in the yearbook for the United States is in need of some changes. The main reasons for need of change are (1) changes in species importance in the groundfish category, (2) changes in statistical areas used by various organizations, (3) increasing importance of pelagic species catches, and (4) difficulty of data compilation by traditional INPFC statistical areas.

Present Statistical Table – An example of the present non-salmonid data table is Table 33 in the 2000 Statistical yearbook entitled “Total catch of principal groundfish, shrimp, and crab species by country and area, in tonnes (round weight), 2000. A copy of this table is shown as Table A. The format of this table are as follows: “rows” are catch by species and “columns” are catch by INPFC Statistical areas.

Need for Change

(1) Changes in species importance in the groundfish category

The species breakdown for the groundfish category needs to be expanded to include two more species – Alaska plaice and Flathead sole. These two species have high catches in the Bering Sea-Aleutians area.

(2) Changes in statistical areas used by various organizations

The present statistical-area system used in Table 33 is the INPFC system (Bering Sea high seas, Bering Sea Area 1, Bering Sea area 2, Bering Sea area 5, Shumagin, Chirikof, Kodiak, Yakutat, Southeast, Charlotte, Vancouver, Columbia, Oregon Coast, Eureka, Monterey, and Conception (Fig. 1). The INPFC system is not being used by any of the State and Federal government agencies and fisheries management entities in the United States. Therefore, the INPFC statistical reporting system has outlived its usefulness and has to be changed. The proposal here is to change the area breakdown as follows: Bering Sea-Aleutians, Gulf of Alaska, Canada, Washington, Oregon, and California. These are much logical geographical areas as fisheries statistics are compiled by the State and Federal agencies in this manner; and the geographical designation makes better intuitive sense.

(3) Increasing importance of pelagic species catches

Table 33 is intended to report on the non-salmonid species. Herring, a pelagic species, was somewhat included in Table 33; but not other pelagic species that contribute significantly to the catches. Therefore, the suggestion here is to create a “pelagic” category and report on catches of chub mackerel, jack mackerel, northern anchovy, herring, Pacific sardine, albacore, other tunas, sharks-skates-dogfish, squid-octopus, and other pelagics.

(4) Difficulty of data compilation by traditional INPFC statistical areas

The compilation of Table 33 has been unusually difficult and tardy because the responsible agencies that collect the statistics do not record their data by INPFC areas. Rough conversions have to be made each time to re-compile data by INPFC areas. This process leads to errors and Table 33 cannot be compiled in a timely manner. The proposal here is to change the geographical reporting system to match with how the states of Alaska, Washington, Oregon, and California report their data in their websites. The data for British Columbia (of Canada) can also be more easily compiled than by the INPFC Charlotte and Vancouver areas.

Summary – The United States Party intends to submit data on “Total catch of principal groundfish, pelagics, cephalopods, and shellfish species by country and area, in tonnes (round weight)” according to tables B and C for the years 2002 and 2003, respectively.

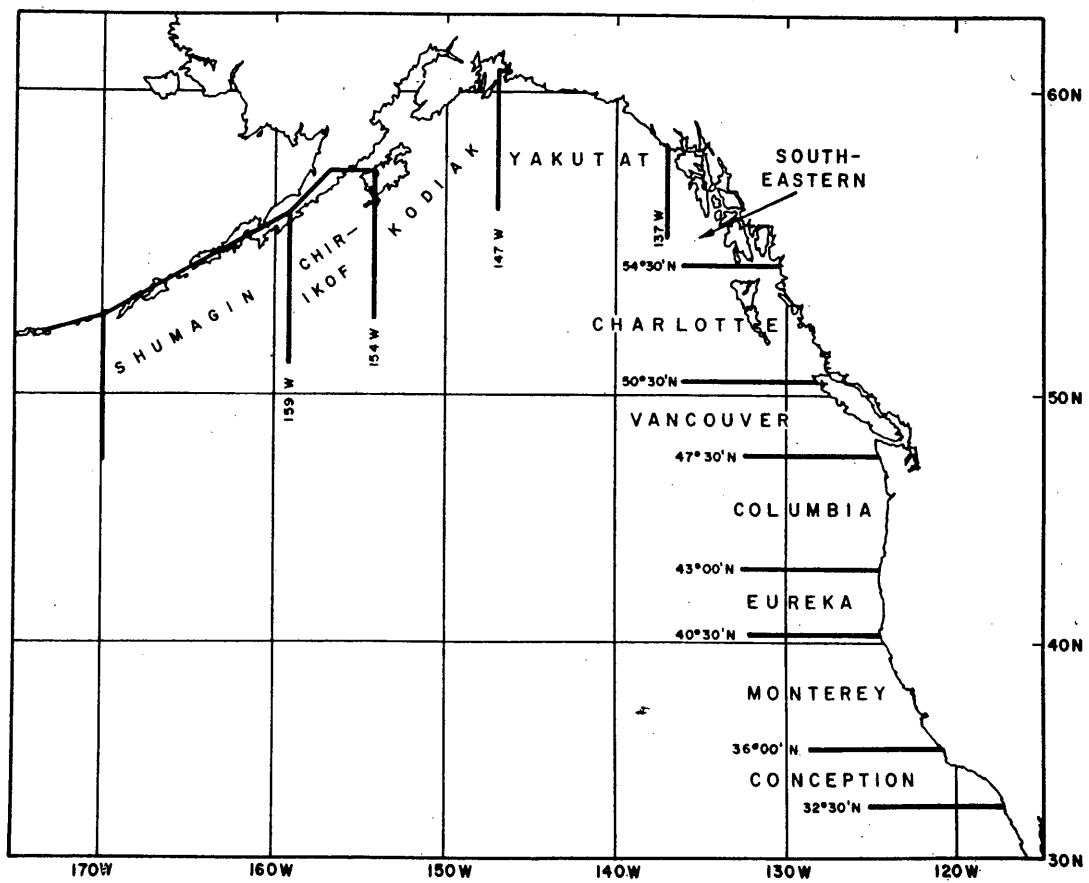
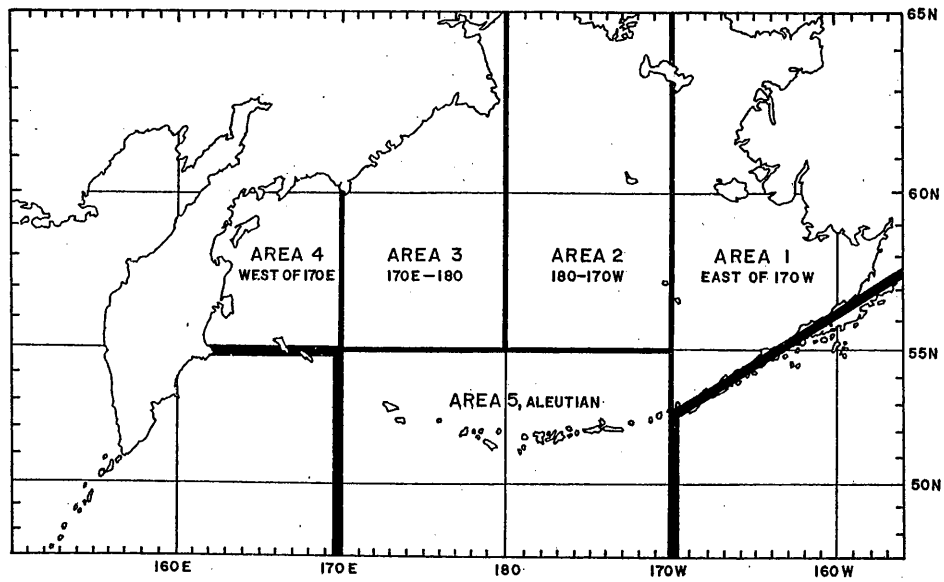


Figure 1. Statistical-area system used by the International North Pacific Fisheries Commission.

Table A is Table 33 from NPAFC Statistical Yearbook. Total catch of principal groundfish, herring, shrimp, and crab species by country and area, in tonnes (round weight), 2000.

	(Canada & U.S.) TOTAL CATCH	CANADA		Charlotte		Vancouver		Unknown					
		TOTAL	TOTAL	Domestic	JV	Foreign	Domestic	JV	Foreign	Domestic	JV	Foreign	
													Domestic
ALL SPECIES	2,186,624	226,720	118,344	106,190	11,176	978	104,793	77,314	27,464	15	3,583	3,583	-
SABLEFISH	25,382	2,817	1,679	1,679	-	-	1,136	1,136	-	-	2	2	-
HALIBUT	6,250	6,009	5,317	5,317	-	-	691	691	-	-	1	1	-
FLATFISH TOTAL	267,036	103,780	59,632	59,632	-	-	42,257	42,257	-	-	1,891	1,891	-
Arrowtooth flounder	11,577	4,288	2,515	2,515	-	-	1,744	1,744	-	-	29	29	-
Dover sole	12,634	3,040	1,706	1,706	-	-	1,330	1,330	-	-	4	4	-
English sole	1,865	710	571	571	-	-	131	131	-	-	8	8	-
Greenland turbot	6,236	-	-	-	-	-	-	-	-	-	-	-	-
Petrale sole	2,298	406	185	185	-	-	215	215	-	-	6	6	-
Rex sole	4,324	393	316	316	-	-	67	67	-	-	10	10	-
Rock sole	29,397	1,228	1,143	1,143	-	-	83	83	-	-	2	2	-
Starry flounder	452	39	31	31	-	-	5	5	-	-	3	3	-
Yellowfin sole	163,693	93,574	53,105	53,105	-	-	38,674	38,674	-	-	1,795	1,795	-
Other flatfish	34,560	102	60	60	-	-	8	8	-	-	34	34	-
ROCKFISH TOTAL	88,713	47,020	16,153	15,826	308	19	30,040	6,850	23,176	14	827	827	-
Pacific ocean perch	24,644	6,228	5,670	5,619	49	2	534	534	-	-	24	24	-
Thornyhead	4,891	1,501	595	595	-	-	871	871	-	-	35	35	-
Other rockfish	59,178	39,291	9,888	9,612	259	17	28,635	5,445	23,176	14	768	768	-
ATKA MACKEREL	44,595	-	-	-	-	-	-	-	-	-	-	-	-
PACIFIC COD	256,224	709	565	565	-	-	139	139	-	-	5	5	-
LINGCOD	2,723	2,393	1,432	1,432	-	-	959	959	-	-	2	2	-
POLLOCK	1,188,924	1,140	988	929	59	-	74	37	37	-	78	78	-
PACIFIC HAKE	229,789	23,335	15,739	3,971	10,809	969	7,193	2,941	4,251	1	403	403	-
OTHER GROUND FISH	10,059	3,251	1,318	1,318	-	-	1,639	1,639	-	-	294	294	-
GROUND FISH TOTAL	2,119,453	190,454	102,823	90,669	11,176	978	84,128	56,649	27,464	15	3,503	3,503	-
HERRING	33,011	29,289	13,424	13,424	-	-	15,865	15,865	-	-	-	-	-
SHRIMP	19,106	4,118	981	981	-	-	3,057	3,057	-	-	80	80	-
TOTAL OTHER THAN CRAB	2,171,570	223,961	117,228	105,074	11,176	978	103,050	75,571	27,464	15	3,583	3,583	-
CRAB TOTAL	15,054	2,859	1,116	1,116	-	-	1,743	1,743	-	-	-	-	-
King crab (unspecified) ⁴	3	2	2	2	-	-	-	-	-	-	-	-	-
Red king crab	-	-	-	-	-	-	-	-	-	-	-	-	-
Blue king crab	-	-	-	-	-	-	-	-	-	-	-	-	-
Brown king crab	-	-	-	-	-	-	-	-	-	-	-	-	-
Tanner crab (unspecified)	37	37	-	-	-	-	37	37	-	-	-	-	-
Tanner crab (beard)	18	18	-	-	-	-	-	-	-	-	-	-	-
Tanner crab (opilio)	-	-	-	-	-	-	-	-	-	-	-	-	-
Dungeness crab	2,818	2,818	1,114	1,114	-	-	1,704	1,704	-	-	-	-	-
Rock crab	11,647	11,647	-	-	-	-	-	-	-	-	-	-	-
Other crabs	498	2	-	-	-	-	2	2	-	-	-	-	-

Table 33. continued.

	U.S.		Bering Sea area			Shumagin	Chirikof	Kodiak	Yakutat	SEI	Vancouver	Columbia	Oregon Coast	Eureka	Monterey
	TOTAL	High Seas	Area 1	Area 2	Area 5										
ALL SPECIES	1,959,904										86,872	141,683	626	13,316	7,162
SABLEFISH	22,565	131	648	93	1,084	1,472	642	4,968	1,988	5,215	1,151	2,843	60	1,023	981
HALIBUT	241	NA	NA	NA	NA	NA	NA	NA	NA	NA	112	115	8	5	
FLATFISH TOTAL	163,256	77	110,550	10,739	1,601	4,436	3,174	15,493	387	2	4,720	5,445	4	2,812	2,918
Arrowtooth flounder	7,289	76	514	3	7	81	109	3,168	48	-	2,929	717	1	42	0
Dover sole	9,594	-	5	-	-	0	7	562	261	2	1,221	3,435	2	1,933	1,647
English sole	1,155	-	-	-	-	-	0	7	0	-	582	211	0	157	172
Greenland turbot	6,236	-	1,914	3,478	844	0	-	0	-	-	-	-	-	-	-
Petrale sole	1,892	-	0	-	-	-	-	-	-	-	420	684	0	499	229
Rex sole	3,931	-	7	0	0	857	1,090	1,424	8	-	41	231	0	131	108
Rock sole	28,169	-	22,053	532	196	34	379	4,908	45	-	15	0	-	0	7
Starry flounder	413	-	8	-	-	1	8	266	0	-	84	22	-	3	18
Yellowfin sole	70,119	-	68,286	1,829	-	0	-	5	-	-	-	-	-	-	-
Other flatfish	34,458	1	17,764	4,898	553	3,461	1,581	5,154	26	-	27	144	0	48	736
ROCKFISH TOTAL	41,693	25	510	205	9,838	2,112	275	14,759	1,389	881	1,963	5,345	5	1,925	1,672
Pacific ocean perch	18,416	0	205	162	8,589	910	138	7,733	587	1	32	54	-	4	0
Thornyhead	3,390	4	20	1	39	259	43	360	77	216	126	750	0	711	563
Other rockfish	19,887	21	286	42	1,210	943	94	6,665	724	664	1,805	4,540	5	1,210	1,109
ATKA MACKEREL	44,595	-	149	32	44,255	158	-	1	-	-	-	-	-	-	-
PACIFIC COD	255,515	117	111,947	39,147	38,812	26,677	7,985	30,686	94	262	372	9	0	0	0
LINGCOD	330	4	-	-	-	0	1	23	10	123	22	48	1	42	25
POLLOCK	1,187,784	5,304	828,535	291,634	457	15,626	6,053	38,247	1,924	2	2	1	-	-	-
PACIFIC HAKE	206,454	-	-	-	-	-	-	-	-	-	73,966	126,782	-	5,460	1
OTHER GROUND FISH	6,808	2	1,114	1,931	182	13	60	516	56	10	885	876	0	607	370
GROUND FISH TOTAL	1,928,999	5,661	1,053,453	343,780	96,229	50,496	17,588	104,694	5,848	6,495	83,102	141,347	70	11,870	5,967
HERRING	3,722	NA	NA	NA	NA	NA	NA	NA	NA	NA	241	0	-	0	274
SHRIMP11	14,988	NA	NA	NA	NA	NA	NA	NA	NA	NA	478	60	244	970	595
TOTAL OTHER THAN CRAB	1,947,709	5,661	1,053,453	343,780	96,229	50,496	17,588	104,694	5,848	6,495	83,821	141,407	314	12,840	6,836
CRAB TOTAL	12,195	-	NA	NA	NA	-	-	-	-	-	3,051	276	312	476	329
King crab (unspecified)	1	-	NA	NA	NA	-	-	-	-	-	-	-	-	-	-
Red king crab	-	-	NA	NA	NA	-	-	-	-	-	-	-	-	-	-
Blue king crab	-	-	NA	NA	NA	-	-	-	-	-	-	-	-	-	-
Brown king crab	-	-	NA	NA	NA	-	-	-	-	-	-	-	-	-	-
Scarlet king crab	0	-	NA	NA	NA	-	-	-	-	-	-	-	-	-	-
Tanner crab (unspecified)	18	-	NA	NA	NA	-	-	-	-	-	-	-	-	-	-
Tanner crab (bairdi)	0	-	NA	NA	NA	-	-	-	-	-	-	-	-	-	-
Tanner crab (opilio)	-	-	NA	NA	NA	-	-	-	-	-	-	-	-	-	-
Dungeness crab	11,647	-	NA	NA	NA	-	-	-	-	-	3,051	276	312	472	303
Rock crab	496	-	NA	NA	NA	-	-	-	-	-	-	-	-	4	23
Other crabs	34	-	NA	NA	NA	-	-	-	-	-	-	-	-	0	0

Annual Statistics 2002

Table B

Table 33. Total catch of principal groundfish, pelagic, cephalopod, and shellfish species by country and area, in tonnes (round weight), 2002.

	(Canada & US) TOTAL CATCH	CANADA Total	UNITED STATES Total	Bering Sea/ Aleutians	Gulf of Alaska	Washington	Oregon	California	Unknown U.S.
ALL SPECIES	2,315,180		2,315,180	1,781,860	207,111	60,323	89,687	172,074	4,125
SABLEFISH	17,089		17,089	1,997	12,484	1,163	1,445	0	0
HALIBUT	38,653		38,653	7,677	29,589	1,147	240	0	0
FLATFISH TOTAL	207,567		207,567	159,250	34,135	3,752	5,087	5,343	0
Arrowtooth flounder	35,265		35,265	11,540	21,231	1,960	505	29	0
Dover sole	6,370		6,370	0	0	525	2,722	3,123	0
English sole	1,493		1,493	0	0	684	436	373	0
Greenland turbot	3,526		3,526	3,526	0	0	0	0	0
Petrale sole	1,827		1,827	0	0	454	893	480	0
Rex sole	3,619		3,619	0	3,016	45	270	288	0
Rock sole	41,367		41,367	41,331	0	16	7	13	0
Starry flounder	62		62	0	0	15	18	29	0
Yellowfin sole	72,999		72,999	72,999	0	0	0	0	0
Alaska plaice	12,176		12,176	12,176	0	0	0	0	0
Flathead sole	17,253		17,253	15,108	2,145	0	0	0	0
Other flatfish	11,610		11,610	2,570	7,743	53	236	1,008	0
ROCKFISH TOTAL	43,397		43,397	15,725	21,443	1,202	2,110	2,917	0
Pacific ocean perch	22,263		22,263	10,529	11,734	-	-	-	0
Thornyhead	1,138		1,138	0	1,138	-	-	-	0
Other rockfish	13,767		13,767	5,196	8,571	-	-	-	0
ATKA MACKEREL	42,127		42,127	42,042	0	-	-	-	85
PACIFIC COD	226,520		226,520	183,200	42,345	948	27	81	0
LINGCOD	259		259	0	2	94	82	0	0
POLLOCK	1,385,178		1,385,178	1,332,572	48,892	3,714	0	0	0
PACIFIC HAKE	45,766		45,766	0	0	10,688	32,305	2,773	0
OTHER SPECIES	14,933		14,933	0	0	1,981	562	8,350	4,040
GROUNDFISH TOTAL	2,015,260		2,015,260	1,742,463	188,890	23,487	39,748	16,547	4,125
SHRIMP	28,136		28,136	0	1,452	5,103	18,919	2,662	0
King crab (unspecified)	1		1	0	0	0	0	1	0
Red king crab	5,189		5,189	5,189	0	0	0	0	0
Blue king crab	-		0	0	0	0	0	0	0
Brown king crab	-		0	0	0	0	0	0	0
Scarlet king crab	-		0	0	0	0	0	0	0
Tanner crab (unspecified)	-		0	0	0	0	0	0	0
Tanner crab (bairdi)	599		599	0	599	0	0	0	0
Tanner crab (opilio)	14,669		14,669	14,669	0	0	0	0	0
Dungeness crab	22,150		22,150	0	3,488	9,708	5,644	3,310	0
Rock crab	36		36	0	0	0	0	36	0
Other crabs	45		45	0	0	0	0	45	0
CRAB TOTAL	42,689		42,689	19,858	4,087	9,708	5,644	3,392	-
Chub Mackerel	3,741		3,741	0	0	248	126	3,367	0
Jack Mackerel	1,027		1,027	0	0	12	9	1,006	0
Northern Anchovy	4,653		4,653	0	0	0	3	4,650	0
Herring	36,106		36,106	19,539	12,682	549	12	3,324	0
Pacific Sardine	96,896		96,896	0	0	15,832	22,711	58,353	0
Albacore	10,029		10,029	0	0	5,357	1,979	2,693	0
Other Tunas	2,590		2,590	0	0	0	0	2,590	0
Sharks, Skates, and Dogfish	1,124		1,124	0	0	1	510	613	0
Squid & Octopus	72,929		72,929	0	0	26	26	72,877	0
Others	-		0	0	0	0	0	0	0
PELAGIC TOTAL	229,095		229,095	19,539	12,682	22,025	25,376	149,473	-

Annual Statistics 2003

Table C

Table 33. Total catch of principal groundfish, pelagic, cephalopod, and shellfish species by country and area, in tonnes (round weight), 2003.

	(Canada & US) TOTAL CATCH	CANADA Total	UNITED STATES Total	Bering Sea/ Aleutians	Gulf of Alaska	Washington	Oregon	California	Unknown U.S.
ALL SPECIES	2,142,588		2,142,588	1,835,059	197,314	80,626	97,356	114,724	
SABLEFISH	21,763		21,763	1,904	14,345	1,704	2,171	1,639	0
HALIBUT	40,353		40,353	1,163	37,789	863	157	381	0
FLATFISH TOTAL	197,608		197,608	152,393	29,996	3,996	6,473	4,750	0
Arrowtooth flounder	15,732		15,732	12,834	0	2,052	802	44	0
Dover sole	7,448		7,448	0	0	566	3,621	3,261	0
English sole	1,151		1,151	0	0	668	351	132	0
Greenland turbot	3,427		3,427	3,427	0	0	0	0	0
Petrale sole	2,029		2,029	0	0	549	1,100	380	0
Rex sole	4,113		4,113	0	3,485	48	321	259	0
Rock sole	35,456		35,456	35,395	0	43	3	15	0
Starry flounder	-		-	0	0	0	0	0	0
Yellowfin sole	74,418		74,418	74,418	0	0	0	0	0
Alaska plaice	9,778		9,778	9,778	0	0	0	0	0
Flathead sole	16,217		16,217	13,792	2,425	0	0	0	0
Other flatfish	9,340		9,340	2,749	5,587	70	275	659	0
ROCKFISH TOTAL	44,836		44,836	16,940	23,143	1,149	1,556	2,048	0
Pacific ocean perch	22,102		22,102	11,241	10,861	-	-	0	0
Thornyhead	1,159		1,159	0	1,159	-	-	0	0
Other rockfish	16,822		16,822	5,699	11,123	-	-	0	0
ATKA MACKEREL	54,865		54,865	54,287	578	0	0	0	0
PACIFIC COD	237,118		237,118	194,695	41,020	1,114	288	1	0
LINGCOD	229		229	0	0	107	69	53	0
POLLOCK	1,392,389		1,392,389	1,342,626	49,516	247	0	0	0
PACIFIC HAKE	55,394		55,394	0	0	17,072	36,581	1,741	0
OTHER SPECIES	46,930		46,930	28,043	6,339	11,683	865	0	0
GROUNDFISH TOTAL	2,068,233		2,068,233	1,792,051	184,227	36,786	46,604	8,565	0
SHRIMP	15,507		15,507	0	694	3,866	9,359	1,588	0
King crab (unspecified)	-		0	0	0	0	0	0	0
Red king crab	7,131		7,131	7,044	86	0	0	0	0
Blue king crab	-		0	0	0	0	0	0	0
Brown king crab	254		254	0	254	0	0	0	0
Scarlet king crab	-		0	0	0	0	0	0	0
Tanner crab (unspecified)	-		0	0	0	0	0	0	0
Tanner crab (bairdi)	594		594	0	594	0	0	0	0
Tanner crab (opilio)	12,909		12,909	12,909	0	0	0	0	0
Dungeness crab	37,906		37,906	0	1,878	15,313	10,651	10,064	0
Rock crab	-		0	0	0	0	0	0	0
Other crabs	-		0	0	0	0	0	0	0
CRAB TOTAL	58,794		58,794	19,954	2,812	15,313	10,651	10,064	0
Chub Mackerel	4,159		4,159	0	0	0	160	3,999	0
Jack Mackerel	231		231	0	0	2	74	155	0
Northern Anchovy	1,800		1,800	0	0	214	39	1,547	0
Herring	33,893		33,893	21,820	9,581	485	98	1,909	0
Pacific Sardine	71,478		71,478	0	0	11,920	25,258	34,300	0
Albacore	16,643		16,643	0	0	10,793	4,139	1,711	0
Other Tunas	3,038		3,038	0	0	0	0	3,038	0
Sharks, Skates, and Dogfish	8,870		8,870	0	0	1,155	949	6,766	0
Squid & Octopus	42,379		42,379	1,234	0	38	25	41,082	0
Others	54		54	23,054	9,581	54	30,742	94,507	-
PELAGIC TOTAL	182,491		182,491	23,054	9,581	24,661	30,742	94,507	-