

STATE OF HAWAII 2008 FISHERY STATISTICS

Compiled by
Division of Aquatic Resources
and the
Western Pacific Fishery Information Network

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STATE OF HAWAII 2008 FISHERY STATISTICS

INTRODUCTION

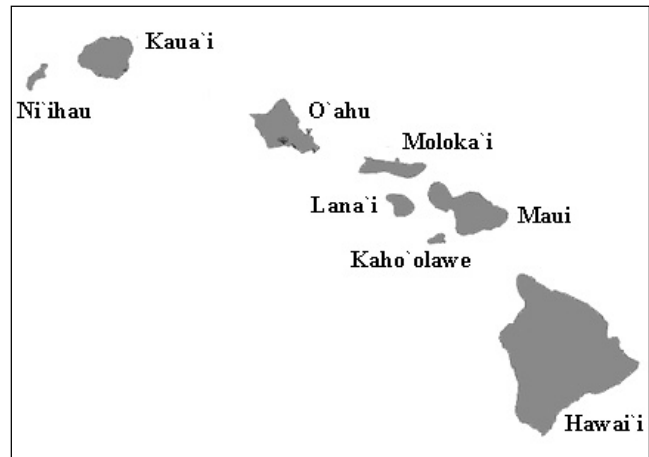
The Hawaiian Archipelago stretches northwestward over 1500 miles.

Location: 19° N latitude, 155° W longitude to about 28° N latitude and 178° W longitude

Islands: Hawaii, Maui, Lanai, Molokai, Oahu, Kauai, Kahoolawe, and Niihau (comprise over 99% of the total land area)

Population: 1,287,500 (*The State of Hawaii Data Book, 2008 Update*)

Commercial Catch Breakdown (lbs):
about 90% on Oahu, 5% on Hawaii (Big Island), 1% on Kona, and 4% unknown or on other islands



Hawaiian Islands: copied and modified from:
http://satftp.soest.hawaii.edu/space/hawaii/maps/All_Islands_map.710x509.gif
SOEST Satlab Server

The commercial fisheries of the State of Hawaii are quite diverse; they vary from shore-based algae (limu) harvesting by hand to large vessel-based fisheries such as the offshore pelagic longline fishery that operates on the high seas. There are several major fisheries in Hawaii. Tuna fishing using various methods, deepwater hook-and-line bottomfish fishing for groupers and snappers, various forms of net fishing that target nearshore pelagic and reef fish species, and trolling for such pelagic species as tuna, marlin, wahoo (ono), and mahimahi constitute the top producing fisheries.

Commercial fishing (i.e., selling catches or providing charter fishing services) in Hawaii requires purchasing an annually renewable commercial marine license (CML). In 2008 there were 4263 licensed commercial fishers. The summary catch data for 2008 were created from a combination of Hawaii Division of Aquatic Resources' (HDAR) fishers and dealer reports processed through the Dealer Reporting System (DRS) and Fisherman Reporting System (FRS), as well as additional fishery reports (including federal longline logbooks).

In 2008 the main Hawaiian Islands (MHI) deepwater bottomfish fishery was managed through the implementation of a total allowable catch (TAC) of 241,000 pounds. The implementation of the TAC was a federally mandated management measure to end overfishing of specific deepwater bottomfish species within the MHI. The managed species are known as the "deep 7" and are comprised of onaga, opakapaka, kalekale, hapuupuu, ehu, gindai, and lehi. The fishing season opened on November 15, 2008 and was closed July 6, 2009. For more information about this fishery, please visit <http://www.hawaiibottomfish.info>. None of the other MHI commercial fisheries are constrained by TAC management measures.

DATA COLLECTING

Previously, data processed in the Reported Landings tables and charts presented in this section were collected from various Fishermen's Reporting System (FRS) Forms. Beginning in October 2002, HDAR implemented several new FRS forms that no longer required sales information reporting as a trade-off for requiring improved catch, effort, and bycatch statistics. The FRS was modified to accommodate these new forms.

The Dealer Reporting System (DRS) was computerized in 2000 and is now a major source of sales data used to create the tables and charts. Data from the NOAA Fisheries Longline Logbook Program are integrated with DRS and FRS data to create the "best available" summaries presented in this report.

Dealers are required by state law to submit a Commercial Marine Dealer's Report for each month that they are in the business of purchasing marine life. Information collected includes

- Dealer Name
- Dealer Number
- Month and Year
- Date
- First and Last Name from Whom Fish was Bought
- Fisherman's Commercial Marine License Number
- Species Bought
- Pounds Bought
- Pieces Bought
- Amount Paid
- Condition

Likewise, all holders of a Commercial Marine License are required by state law to report on their fishing activity. The majority of commercial fishers use the Monthly Fishing Report, a replacement for the old General Fish Catch Report (C-3 Form). This form collects data on fishing catch and effort for each day, method, and area fished, and it is processed in the FRS. Information collected includes

- Fisherman's Name and Commercial License Number
- Boat's Name and Registration/USCG Number
- Month and Year Fished
- Day Fished
- Charter Trip (y/n)
- Buoy or Area Fished
- Fishing Method
- Hours Fished per Method/Area
- Number of Net Sets
- Number of Fishing Lines, Traps, or Net Length
- Port of Landing
- Species Name
- Number Landed
- Pounds Landed
- Number Lost
- Number Released

Other FRS data collection forms include the Net, Trap and Dive Activity Report, Tuna Handline Trip Report, Deep Sea Handline Trip Report, Aku Boat Report, NWHI Bottomfish Trip Sales Report, and NWHI Bottomfish Trip Daily Log. Commercial collectors of tropical marine fish are required to have an aquarium permit in addition to their commercial marine

D.3

license, and they are required to report monthly on the C-6 Aquarium Fish Catch Report. Aquarium fish catches, however, are not included in this report's statistics.

This report assumes that the data submitted by fishers are complete and accurate. The HDAR continually attempts to improve the quality of data and decrease the time delays in receiving and processing the data.

DATA PROCESSING

When HDAR receives various data reporting forms, staff code and edit the data before keypunching. Forms that fail initial editing are returned for correction and resubmission, or minor problems may be cleared up over the telephone. Delinquency notices are sent to those who fall more than a few months behind in their reporting. Once the data are keypunched, HDAR staff use computer-generated reports to verify and correct errors in the database. When the database is considered to be reasonably complete and error free, it is ready for use in producing various summary catch reports.

DATA REPORTING

More than 150 marine species and species groups are recorded in HDAR's monthly landings reports, many of which are insignificant in the total catch. To help reduce this document's size and improve the usability of the tables, WPacFIN staff combined some of the less important species, reorganized the order of presentation, created a new species coding system, and translated all records in the database. The new coding system has 100 species and species groups based on flexible ecological and phylogenetic criteria. All of the commercially important pelagic and bottomfish species or unique species groups have individual codes and are reported separately.

The monthly and annual reports included in this document contain the common name, pounds caught, pounds sold, value rounded to the nearest dollar, and the average price per pound for each species. Pounds caught data is from the Longline Logbooks, Dealer Reports, and Fisherman Catch Reports; the pounds sold, value and price/pound data is from Dealer Reports. Each monthly report contains a subtotal for the sum of all species for that month.

Several types of graphs are also included. Please note that some of the charts in this volume are new or modified from earlier volumes. More up-to-date tables and charts are available at the WPacFIN website <http://www.pifsc.noaa.gov/wpacfin>.

SPECIES CATEGORIES

The species and species groups used in the tables and graphs are defined in this section. Many of the species included in this report have been recategorized over the years. For example, the Magnuson Fishery Conservation and Management Act of 1976 was amended in 1992 to include tunas in the Pelagic Management Unit Species (PMUS) category. However, this report maintains the original species categorizations from previous FSWP reports for comparative purposes. As such, tunas are kept in a separate category.

I. Pelagic Management Unit Species (PMUS)

Billfishes (unknown)	Sharks
Black marlin	Shortnose spearfish
Blue marlin	Striped marlin
Mahimahi	Swordfish
Sailfish	Wahoo

II. Bottomfish Management Unit Species (BMUS)

Armorhead	Lehi (silverjaw)
Butaguchi (pig-lipped ulua)	Onaga (red snapper)
Ehu (red snapper)	Opakapaka (pink snapper)
Gindai (flower snapper)	Taape (blue lined snapper)
Gunkin (black) ulua	Uku (gray snapper)
Hapuupuu (hawaiian grouper)	White ulua
Kahala (amberjack)	Yellow-tail kali
Kalekale	

III. Billfishes

Billfishes (unknown)	Shortnose spearfish
Black marlin	Striped marlin
Blue marlin	Swordfish
Sailfish	

IV. Tunas

Albacore tuna	Skipjack tuna
Bigeye tuna	Tunas (unknown)
Kawakawa	Yellowfin tuna

V. Other Tunas

Kawakawa	Tunas (unknown)
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VI. Fisheries Categories

A. *Pelagic Fishes*

Albacore tuna	Pomfret
Barracudas	Rainbow runner
Bigeye tuna	Rays
Billfishes (unknown)	Sailfish
Black marlin	Sharks
Blue marlin	Shortnose spearfish
Japanese mackerel	Skipjack tuna
Kawakawa	Striped marlin
Mahimahi	Swordfish
Moonfish (opah)	Tunas (unknown)
Oilfish	Wahoo
Pelagic fishes (unknown)	Yellowfin tuna

B. *Bottomfishes*

Armorhead	Lehi (silverjaw)
Blue spot grouper	Onaga (red snapper)
Blue trevally	Opakapaka (pink snapper)
Butaguchi (pig-lipped ulua)	Papa ulua
Dobe ulua	Porgy
Ehu (red snapper)	Sasa ulua
Gindai (flower snapper)	Snake mackerel
Golden kalekale	Snappers
Gunkin (black) ulua	Taape (blue lined snapper)
Hapuupuu (hawaiian grouper)	Uku (gray snapper)
Jacks	White ulua
Kahala (amberjack)	Yellow-tail kali
Kalekale	

C. *Reef Fishes*

Bigeyes	Reef fishes (unknown)
Damselfishes	Reef jacks
Filefishes	Rudderfish
Flounders	Scorpionfishes
Goatfishes	Squirrelfishes
Gobies	Surgeonfishes/tangs
Hawkfish	Tilapia
Mountain bass	Trumpetfish
Parrotfishes	Wrasses
Pufferfishes	

D. *Other Fishes*

Algae	Miscellaneous
Bigeye scad (akule)	Mulletts
Bonefish	Needlefishes
Clams	Octopus
Crabs	Sea turtles
Eels	Shrimp (freshwater)
Flying fishes	Shrimp (saltwater)
Freshwater fishes	Silversides
Herrings/sardines	Slipper lobsters
Invertebrates	Spiny lobsters
Leatherjacket	Squid
Limpets (saltwater)	Ten pounder
Mackerel scad	Threadfin
Milkfish	

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Table D-1
Hawaii Annual 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Miscellaneous	1,767	1,725	2,638	1.53
Sharks	443,129	339,332	150,104	0.44
Rays	18	0	0	0.00
Eels	740	605	621	1.03
Armorhead	40	10	6	0.64
Bigeye scad (akule)	358,582	156,398	452,361	2.89
Mackerel scad	262,082	163,939	443,588	2.71
Leatherjacket	322	303	558	1.84
Ten pounder	581	432	425	0.98
Bonfish	11,341	10,649	11,203	1.05
Milkfish	2,696	2,609	3,014	1.16
Flying fishes	6	1	2	2.00
Needlefishes	672	294	520	1.77
Threadfin	660	422	2,673	6.34
Mulletts	9,847	9,155	34,146	3.73
Pomfret	685,382	671,636	1,664,622	2.48
Oilfish	491,248	491,248	917,004	1.87
Jacks	1,855	1,450	5,124	3.53
Kahala (amberjack)	12,696	868	1,105	1.27
Sasa ulua	744	460	1,250	2.72
Butaguchi (pig-lipped ulua)	10,662	8,307	16,831	2.03
Dobe ulua	283	109	221	2.03
Papa ulua	4,961	1,941	5,695	2.93
White ulua	19,276	12,991	30,600	2.36
Gunkin (black) ulua	1,176	496	893	1.80
Blue trevally	7,961	5,470	12,147	2.22
Hapuupuu (hawaiian grouper)	21,994	17,525	93,994	5.36
Blue spot grouper	2,728	1,874	5,218	2.78
Kalekale	8,025	5,159	18,580	3.60
Snappers	3,485	2,984	11,704	3.92
Yellow-tail kali	22	10	29	2.85
Taape (blue lined snapper)	41,681	37,587	60,461	1.61
Ehu (red snapper)	23,550	15,342	78,071	5.09
Gindai (flower snapper)	3,829	2,449	9,718	3.97
Golden kalekale	132	9	25	2.95
Lehi (silverjaw)	12,039	9,916	38,760	3.91
Onaga (red snapper)	98,167	71,590	458,322	6.40
Opakapaka (pink snapper)	121,523	95,879	545,558	5.69
Uku (gray snapper)	165,815	137,415	495,676	3.61
Snake mackerel	36	5	1	0.10
Porgy	3,436	3,138	11,155	3.56
Reef fishes (unknown)	811	5	5	1.01
Reef jacks	156	129	454	3.52
Squirrelfishes	62,279	57,616	262,597	4.56
Trumpetfish	51	17	17	1.00
Scorpionfishes	2,063	1,368	5,900	4.31

Table D-1 (continued)
Hawaii Annual 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Mountain bass	4,407	3,041	10,810	3.55
Bigeyes	3,985	3,271	10,512	3.21
Goatfishes	39,432	36,777	149,655	4.07
Rudderfish	38,198	37,658	48,795	1.30
Damselfishes	2,086	1,591	4,787	3.01
Hawkfish	931	845	2,228	2.64
Tilapia	10,535	657	2,059	3.14
Wrasses	6,008	3,627	15,848	4.37
Parrotfishes	46,904	44,596	167,595	3.76
Surgeonfishes/tangs	84,652	78,879	146,846	1.86
Flounders	46	31	61	1.96
Filefishes	609	583	642	1.10
Pelagic fishes (unknown)	6,424	79	8	0.10
Moonfish (opah)	1,333,015	1,313,319	2,197,381	1.67
Rainbow runner	4,598	2,799	5,558	1.99
Mahimahi	1,449,895	1,252,472	3,182,350	2.54
Barracudas	37,275	32,710	29,421	0.90
Wahoo	976,583	852,662	2,235,226	2.62
Tunas (unknown)	10,813	4,537	10,771	2.37
Skipjack tuna	1,297,977	910,564	1,187,888	1.30
Yellowfin tuna	3,467,141	3,206,876	8,658,554	2.70
Albacore tuna	853,488	803,249	1,343,759	1.67
Bigeye tuna	13,771,330	13,377,125	49,672,237	3.71
Kawakawa	8,397	2,444	4,616	1.89
Billfishes (unknown)	5,165	121	90	0.75
Swordfish	4,248,857	3,834,729	7,175,727	1.87
Blue marlin	1,167,763	922,288	1,019,047	1.10
Black marlin	8,254	6,217	4,673	0.75
Striped marlin	1,030,688	1,023,462	1,048,102	1.02
Shortnose spearfish	536,435	508,220	358,728	0.71
Sailfish	24,566	11,251	11,761	1.05
Spiny lobsters	11,868	9,912	120,317	12.1
Slipper lobsters	43	1	4	6.00
Crabs	45,643	13,228	56,942	4.30
Shrimp (saltwater)	10,175	160	659	4.11
Octopus	30,000	20,874	83,691	4.01
Squid	1,627	1,479	3,262	2.21
Limpets (saltwater)	11,186	6,526	56,144	8.60
Invertebrates	9,457	5,551	189,168	34.1
Algae	10,908	6,322	50,081	7.92
TOTAL	33,507,900	30,681,594	85,119,601	2.77

Table D-2
Hawaii January 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Miscellaneous	249	249	209	0.84
Sharks	32,510	25,505	18,541	0.73
Eels	102	102	102	1.00
Armorhead	40	10	6	0.64
Bigeye scad (akule)	21,608	7,821	21,059	2.69
Mackerel scad	23,057	15,375	36,887	2.40
Leatherjacket	13	13	25	1.93
Bonefish	491	491	769	1.57
Milkfish	1	0	0	0.00
Needlefishes	74	12	22	1.79
Threadfin	9	9	45	5.11
Mulletts	66	66	137	2.09
Pomfret	41,616	38,938	133,174	3.42
Oilfish	39,572	39,572	88,629	2.24
Jacks	43	16	33	2.10
Kahala (amberjack)	3,144	252	429	1.70
Sasa ulua	4	4	9	2.25
Butaguchi (pig-lipped ulua)	714	714	1,927	2.70
Dobe ulua	4	0	0	0.00
Papa ulua	544	142	394	2.77
White ulua	879	325	709	2.18
Gunkin (black) ulua	257	121	197	1.62
Blue trevally	431	409	901	2.21
Hapuupuu (hawaiian grouper)	1,851	1,401	9,057	6.46
Blue spot grouper	42	10	25	2.50
Kalekale	779	390	1,599	4.10
Snappers	71	69	262	3.82
Yellow-tail kali	8	2	7	3.50
Taape (blue lined snapper)	3,820	3,820	5,522	1.45
Ehu (red snapper)	4,004	2,690	14,963	5.56
Gindai (flower snapper)	507	278	1,201	4.31
Golden kalekale	19	6	19	3.10
Lehi (silverjaw)	1,762	1,633	7,271	4.45
Onaga (red snapper)	10,461	7,829	64,965	8.30
Opakapaka (pink snapper)	15,414	12,640	86,554	6.85
Uku (gray snapper)	10,847	9,051	38,764	4.28
Snake mackerel	15	5	1	0.10
Porgy	184	184	588	3.19
Reef fishes (unknown)	4	0	0	0.00
Squirrelfishes	2,170	2,170	9,062	4.18
Trumpetfish	1	1	1	1.00
Scorpionfishes	222	177	942	5.34
Mountain bass	326	150	911	6.07
Bigeyes	486	466	1,587	3.41
Goatfishes	2,500	2,383	8,654	3.63
Rudderfish	484	484	764	1.58

Table D-2 (continued)
Hawaii January 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Damselfishes	238	99	177	1.79
Hawkfish	14	14	23	1.63
Tilapia	346	36	162	4.50
Wrasses	205	85	504	5.90
Parrotfishes	1,688	1,688	5,683	3.37
Surgeonfishes/tangs	7,301	7,301	13,835	1.89
Flounders	2	2	2	1.00
Filefishes	4	4	7	1.75
Pelagic fishes (unknown)	8	8	1	0.10
Moonfish (opah)	53,183	50,230	140,596	2.80
Rainbow runner	60	36	58	1.61
Mahimahi	114,281	90,560	213,358	2.36
Barracudas	622	423	641	1.52
Wahoo	32,546	29,594	116,957	3.95
Tunas (unknown)	607	142	169	1.20
Skipjack tuna	80,770	24,004	17,573	0.73
Yellowfin tuna	282,159	274,533	749,357	2.73
Albacore tuna	110,740	105,554	172,129	1.63
Bigeye tuna	1,487,471	1,395,480	4,230,143	3.03
Kawakawa	766	138	252	1.82
Billfishes (unknown)	270	0	0	0.00
Swordfish	265,333	229,168	768,586	3.35
Blue marlin	24,495	19,319	36,518	1.89
Striped marlin	35,655	34,357	82,051	2.39
Shortnose spearfish	105,479	99,483	52,895	0.53
Sailfish	2,108	587	633	1.08
Spiny lobsters	661	655	8,314	12.7
Slipper lobsters	4	0	0	0.00
Crabs	4,654	1,806	7,979	4.42
Shrimp (saltwater)	425	0	0	0.00
Octopus	1,795	1,104	3,972	3.60
Limpets (saltwater)	596	596	6,731	11.3
Invertebrates	67	27	106	4.00
Algae	536	169	1,931	11.4
TOTAL	2,836,495	2,543,182	7,188,260	2.83

Table D-3
Hawaii February 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Miscellaneous	220	220	784	3.57
Sharks	25,541	21,546	18,999	0.88
Eels	8	8	12	1.49
Bigeye scad (akule)	16,297	12,944	33,663	2.60
Mackerel scad	18,909	8,638	21,807	2.52
Leatherjacket	20	20	28	1.38
Ten pounder	21	21	21	1.00
Bonefish	1,814	1,761	1,761	1.00
Milkfish	21	21	30	1.44
Needlefishes	49	17	34	2.00
Threadfin	194	194	1,164	5.99
Mulletts	35	35	76	2.15
Pomfret	51,225	51,225	152,307	2.97
Oilfish	46,573	46,573	106,191	2.28
Jacks	70	0	0	0.00
Kahala (amberjack)	3,480	39	67	1.73
Butaguchi (pig-lipped ulua)	572	404	1,408	3.49
Dobe ulua	3	0	0	0.00
Papa ulua	770	287	680	2.37
White ulua	2,016	1,965	5,307	2.70
Gunkin (black) ulua	86	59	174	2.95
Blue trevally	876	770	1,467	1.91
Hapuupuu (hawaiian grouper)	2,017	1,337	8,454	6.32
Blue spot grouper	180	104	257	2.47
Kalekale	1,373	804	3,187	3.96
Snappers	131	131	492	3.76
Yellow-tail kali	4	1	4	3.50
Taape (blue lined snapper)	3,378	2,710	4,085	1.51
Ehu (red snapper)	4,090	2,746	13,812	5.03
Gindai (flower snapper)	501	212	913	4.30
Golden kalekale	13	0	0	0.00
Lehi (silverjaw)	2,805	2,293	9,799	4.27
Onaga (red snapper)	13,513	10,209	69,592	6.82
Opakapaka (pink snapper)	26,013	21,023	124,104	5.90
Uku (gray snapper)	12,491	7,460	30,229	4.05
Porgy	276	87	258	2.98
Reef fishes (unknown)	27	0	0	0.00
Squirrelfishes	2,854	2,339	9,554	4.08
Trumpetfish	13	0	0	0.00
Scorpionfishes	236	117	597	5.11
Mountain bass	136	136	606	4.48
Bigeyes	547	479	1,438	3.00
Goatfishes	3,745	3,508	11,543	3.29
Rudderfish	1,343	1,343	1,886	1.40
Damselfishes	54	54	138	2.55
Hawkfish	71	9	25	2.68

Table D-3 (continued)
Hawaii February 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Tilapia	551	39	176	4.50
Wrasses	341	141	860	6.09
Parrotfishes	3,066	2,513	8,030	3.20
Surgeonfishes/tangs	7,586	6,143	11,992	1.95
Flounders	4	0	0	0.00
Filefishes	19	19	35	1.81
Pelagic fishes (unknown)	71	71	7	0.10
Moonfish (opah)	55,891	55,314	160,129	2.89
Rainbow runner	151	108	239	2.22
Mahimahi	112,756	99,031	223,199	2.25
Barracudas	3,130	2,768	3,610	1.30
Wahoo	32,937	28,090	124,234	4.42
Tunas (unknown)	236	129	181	1.41
Skipjack tuna	78,636	28,373	27,994	0.99
Yellowfin tuna	396,354	395,333	897,815	2.27
Albacore tuna	167,437	159,387	226,961	1.42
Bigeye tuna	1,306,632	1,306,632	4,407,937	3.37
Kawakawa	419	131	228	1.75
Billfishes (unknown)	90	0	0	0.00
Swordfish	658,960	547,354	1,305,447	2.39
Blue marlin	33,653	27,200	48,177	1.77
Black marlin	325	325	603	1.86
Striped marlin	51,662	51,662	93,812	1.82
Shortnose spearfish	78,331	78,331	54,713	0.70
Sailfish	1,985	237	203	0.86
Spiny lobsters	1,648	1,344	16,577	12.3
Slipper lobsters	5	0	0	0.00
Crabs	3,811	1,542	6,846	4.44
Shrimp (saltwater)	2,560	36	36	1.00
Octopus	1,840	1,071	4,223	3.94
Squid	43	29	55	1.90
Limpets (saltwater)	1,062	647	4,789	7.40
Invertebrates	710	0	0	0.00
Algae	601	601	7,069	11.8
TOTAL	3,248,112	2,998,445	8,273,128	2.76

**Table D-4
Hawaii March 2008 Reported Commercial Landings**

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Miscellaneous	191	191	185	0.97
Sharks	37,717	37,591	17,496	0.47
Eels	61	61	63	1.04
Bigeye scad (akule)	60,363	12,535	29,645	2.37
Mackerel scad	14,046	9,947	24,014	2.41
Leatherjacket	8	8	13	1.65
Ten pounder	93	93	116	1.24
Bonfish	49	16	19	1.23
Milkfish	118	118	139	1.18
Flying fishes	1	1	2	2.00
Needlefishes	193	73	115	1.59
Threadfin	106	46	309	6.76
Mulletts	8	8	21	2.50
Pomfret	56,178	55,568	146,719	2.64
Oilfish	50,919	50,919	101,837	2.00
Jacks	120	35	87	2.49
Kahala (amberjack)	1,661	60	63	1.06
Sasa ulua	21	11	31	2.78
Butaguchi (pig-lipped ulua)	682	682	1,821	2.67
Dobe ulua	100	96	193	2.00
Papa ulua	921	108	283	2.62
White ulua	4,361	1,895	4,766	2.52
Gunkin (black) ulua	30	30	82	2.76
Blue trevally	1,224	879	1,952	2.22
Hapuupuu (hawaiian grouper)	1,258	509	3,291	6.46
Blue spot grouper	186	39	98	2.50
Kalekale	924	433	1,600	3.69
Snappers	393	363	1,427	3.93
Taape (blue lined snapper)	2,964	2,964	4,286	1.45
Ehu (red snapper)	2,789	1,730	9,255	5.35
Gindai (flower snapper)	442	208	976	4.69
Golden kalekale	9	0	0	0.00
Lehi (silverjaw)	1,727	1,320	5,103	3.87
Onaga (red snapper)	12,298	5,652	38,392	6.79
Opakapaka (pink snapper)	14,857	11,078	60,730	5.48
Uku (gray snapper)	12,771	8,801	29,084	3.30
Snake mackerel	5	0	0	0.00
Porgy	172	105	342	3.25
Reef fishes (unknown)	58	0	0	0.00
Squirrelfishes	2,767	2,450	10,922	4.46
Trumpetfish	6	0	0	0.00
Scorpionfishes	211	124	526	4.26
Mountain bass	1,178	504	1,449	2.88
Bigeyes	282	123	384	3.11
Goatfishes	3,937	3,826	13,836	3.62
Rudderfish	5,389	4,849	5,423	1.12

Table D-4 (continued)
Hawaii March 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Damselfishes	254	37	102	2.79
Hawkfish	31	31	81	2.61
Tilapia	1,001	61	275	4.50
Wrasses	408	176	696	3.95
Parrotfishes	4,869	4,454	16,961	3.81
Surgeonfishes/tangs	6,383	5,326	10,669	2.00
Filefishes	87	87	144	1.66
Pelagic fishes (unknown)	144	0	0	0.00
Moonfish (opah)	63,161	62,625	149,913	2.39
Rainbow runner	697	168	371	2.21
Mahimahi	207,306	177,667	361,821	2.04
Barracudas	5,416	5,416	4,837	0.89
Wahoo	64,157	57,582	183,333	3.18
Tunas (unknown)	137	0	0	0.00
Skipjack tuna	55,225	30,551	38,522	1.26
Yellowfin tuna	296,482	291,235	881,966	3.03
Albacore tuna	106,833	91,292	190,735	2.09
Bigeye tuna	787,395	787,395	3,368,791	4.28
Kawakawa	801	95	199	2.09
Billfishes (unknown)	1,440	0	0	0.00
Swordfish	821,737	771,264	1,211,121	1.57
Blue marlin	58,369	47,638	71,067	1.49
Black marlin	290	140	128	0.91
Striped marlin	51,865	51,739	96,284	1.86
Shortnose spearfish	68,392	68,392	54,764	0.80
Sailfish	1,357	259	471	1.82
Spiny lobsters	1,928	1,453	18,682	12.9
Slipper lobsters	16	0	0	0.00
Crabs	2,705	1,590	6,882	4.33
Shrimp (saltwater)	1,210	74	546	7.34
Octopus	2,119	1,917	9,596	5.01
Limpets (saltwater)	1,088	332	2,827	8.51
Invertebrates	1,605	57	220	3.86
Algae	755	531	5,387	10.2
TOTAL	2,909,453	2,675,625	7,204,480	2.69

Table D-5
Hawaii April 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Miscellaneous	59	59	29	0.50
Sharks	43,278	30,764	11,734	0.38
Rays	9	0	0	0.00
Eels	36	36	40	1.12
Bigeye scad (akule)	53,273	15,678	38,749	2.47
Mackerel scad	10,079	4,083	11,360	2.78
Leatherjacket	53	53	105	2.00
Ten pounder	64	64	64	1.00
Bonfish	475	424	449	1.06
Milkfish	555	555	682	1.23
Needlefishes	49	3	6	2.50
Threadfin	86	53	366	6.92
Mulletts	3,197	3,197	11,779	3.68
Pomfret	74,413	73,057	154,978	2.12
Oilfish	46,899	46,899	95,454	2.04
Jacks	62	27	68	2.53
Kahala (amberjack)	384	124	141	1.13
Sasa ulua	10	0	0	0.00
Butaguchi (pig-lipped ulua)	1,035	221	277	1.25
Dobe ulua	2	2	4	1.95
Papa ulua	262	124	387	3.11
White ulua	1,576	1,046	2,104	2.01
Gunkin (black) ulua	115	9	5	0.50
Blue trevally	832	563	1,311	2.33
Hapuupuu (hawaiian grouper)	1,116	179	1,274	7.14
Blue spot grouper	85	10	30	3.07
Kalekale	249	67	242	3.64
Snappers	256	256	1,089	4.25
Taape (blue lined snapper)	1,531	1,148	1,929	1.68
Ehu (red snapper)	881	654	3,843	5.88
Gindai (flower snapper)	68	21	95	4.61
Golden kalekale	8	0	0	0.00
Lehi (silverjaw)	308	287	1,430	4.99
Onaga (red snapper)	4,291	4,291	26,279	6.12
Opakapaka (pink snapper)	3,277	2,373	16,600	7.00
Uku (gray snapper)	17,774	17,774	56,283	3.17
Porgy	348	348	1,296	3.73
Reef fishes (unknown)	4	0	0	0.00
Reef jacks	33	29	102	3.50
Squirrelfishes	1,926	865	3,675	4.25
Scorpionfishes	38	38	174	4.60
Mountain bass	96	78	289	3.71
Bigeyes	152	70	218	3.12
Goatfishes	3,107	2,582	9,723	3.77
Rudderfish	564	564	871	1.54
Damselfishes	29	29	69	2.37

Table D-5 (continued)
Hawaii April 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Hawkfish	90	90	267	2.96
Tilapia	887	34	153	4.50
Wrasses	438	161	1,099	6.82
Parrotfishes	5,260	5,225	20,286	3.88
Surgeonfishes/tangs	6,030	5,446	9,954	1.83
Flounders	4	4	10	2.50
Filefishes	20	20	38	1.91
Moonfish (opah)	50,729	47,429	117,390	2.48
Rainbow runner	82	20	20	1.00
Mahimahi	189,216	163,019	413,450	2.54
Barracudas	7,180	7,180	5,681	0.79
Wahoo	184,626	168,147	311,757	1.85
Tunas (unknown)	3,097	3,097	6,980	2.25
Skipjack tuna	107,920	74,495	80,708	1.08
Yellowfin tuna	282,471	245,614	617,375	2.51
Albacore tuna	152,934	152,934	216,036	1.41
Bigeye tuna	827,051	795,372	2,976,278	3.74
Kawakawa	732	364	276	0.76
Swordfish	813,895	813,895	1,086,720	1.34
Blue marlin	101,232	79,314	73,152	0.92
Striped marlin	71,469	67,757	85,258	1.26
Shortnose spearfish	64,683	58,133	30,440	0.52
Sailfish	1,504	231	266	1.15
Spiny lobsters	1,382	1,047	13,212	12.6
Crabs	4,244	2,326	9,619	4.14
Shrimp (saltwater)	1,085	0	0	0.00
Octopus	1,376	1,011	3,842	3.80
Squid	40	40	79	2.00
Limpets (saltwater)	1,866	222	1,922	8.68
Invertebrates	850	0	0	0.00
Algae	1,098	279	2,997	10.8
TOTAL	3,156,430	2,901,605	6,540,861	2.25

Table D-6
Hawaii May 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Miscellaneous	124	124	31	0.25
Sharks	40,744	33,401	10,248	0.31
Eels	74	74	74	1.00
Bigeye scad (akule)	39,001	21,242	56,377	2.65
Mackerel scad	13,279	7,062	19,214	2.72
Leatherjacket	18	14	23	1.65
Ten pounder	106	106	76	0.72
Bonefish	3,121	2,793	2,933	1.05
Milkfish	333	333	416	1.25
Needlefishes	25	22	46	2.13
Threadfin	138	47	223	4.74
Mulletts	961	935	3,329	3.56
Pomfret	78,007	78,007	136,661	1.75
Oilfish	58,439	58,439	73,969	1.27
Jacks	122	74	195	2.64
Kahala (amberjack)	167	7	4	0.54
Sasa ulua	17	4	9	2.51
Butaguchi (pig-lipped ulua)	1,797	1,797	2,784	1.55
Dobe ulua	2	0	0	0.00
Papa ulua	348	144	556	3.85
White ulua	3,239	2,267	4,586	2.02
Gunkin (black) ulua	20	17	29	1.70
Blue trevally	418	264	579	2.19
Hapuupuu (hawaiian grouper)	2,907	2,663	11,954	4.49
Blue spot grouper	224	224	716	3.20
Kalekale	191	191	593	3.10
Snappers	473	420	1,647	3.92
Taape (blue lined snapper)	5,668	4,976	7,953	1.60
Ehu (red snapper)	1,517	1,114	2,168	1.95
Gindai (flower snapper)	251	251	499	1.99
Onaga (red snapper)	4,276	3,794	16,948	4.47
Opakapaka (pink snapper)	3,060	3,060	12,609	4.12
Uku (gray snapper)	19,204	16,202	48,623	3.00
Porgy	867	867	2,999	3.46
Reef fishes (unknown)	261	0	0	0.00
Reef jacks	93	93	325	3.52
Squirrelfishes	7,131	6,261	36,913	5.90
Trumpetfish	3	3	3	1.00
Scorpionfishes	149	149	497	3.33
Mountain bass	317	317	1,142	3.60
Bigeyes	276	185	627	3.39
Goatfishes	6,381	6,381	23,739	3.72
Rudderfish	1,663	1,663	2,320	1.39
Damselfishes	150	150	419	2.79
Hawkfish	74	74	186	2.52
Tilapia	1,041	221	342	1.55

Table D-6 (continued)
Hawaii May 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Wrasses	721	283	976	3.44
Parrotfishes	7,363	7,363	28,894	3.92
Surgeonfishes/tangs	8,804	8,804	16,384	1.86
Flounders	11	11	17	1.56
Filefishes	163	163	185	1.13
Moonfish (opah)	106,348	106,348	159,375	1.50
Rainbow runner	334	267	472	1.77
Mahimahi	172,636	149,218	352,070	2.36
Barracudas	6,084	6,084	2,649	0.44
Wahoo	185,263	155,246	288,833	1.86
Tunas (unknown)	544	472	1,590	3.37
Skipjack tuna	89,118	54,715	62,496	1.14
Yellowfin tuna	339,263	322,814	934,950	2.90
Albacore tuna	84,965	84,965	146,890	1.73
Bigeye tuna	1,282,715	1,248,284	4,747,975	3.80
Kawakawa	908	95	145	1.54
Billfishes (unknown)	90	0	0	0.00
Swordfish	642,957	606,744	970,962	1.60
Blue marlin	138,482	78,599	68,493	0.87
Black marlin	1,712	1,712	1,207	0.71
Striped marlin	223,903	223,903	123,415	0.55
Shortnose spearfish	51,300	51,300	15,438	0.30
Sailfish	1,419	306	157	0.51
Crabs	1,682	189	1,173	6.21
Shrimp (saltwater)	615	0	0	0.00
Octopus	2,004	1,625	6,101	3.76
Squid	433	433	898	2.08
Limpets (saltwater)	764	680	9,191	13.5
Invertebrates	5,388	5,388	188,580	35.0
Algae	2,192	1,644	13,569	8.26
TOTAL	3,654,856	3,374,082	8,628,668	2.56

Table D-7
Hawaii June 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Miscellaneous	208	208	664	3.20
Sharks	35,633	29,452	18,347	0.62
Eels	110	60	60	1.00
Bigeye scad (akule)	17,961	17,230	48,774	2.83
Mackerel scad	15,717	8,148	22,629	2.78
Leatherjacket	4	4	7	1.72
Ten pounder	3	0	0	0.00
Bonfish	770	764	779	1.02
Milkfish	503	503	402	0.80
Needlefishes	25	25	52	2.05
Threadfin	2	2	9	6.16
Mulletts	90	72	269	3.75
Pomfret	59,120	53,982	153,309	2.84
Oilfish	36,241	36,241	86,067	2.37
Jacks	1,055	1,055	4,092	3.88
Kahala (amberjack)	147	147	184	1.25
Sasa ulua	75	59	175	2.97
Butaguchi (pig-lipped ulua)	947	752	1,483	1.97
Papa ulua	508	73	227	3.11
White ulua	1,324	841	1,722	2.05
Gunkin (black) ulua	14	14	34	2.45
Blue trevally	1,024	537	1,202	2.24
Hapuupuu (hawaiian grouper)	2,124	2,124	11,521	5.42
Blue spot grouper	129	32	89	2.78
Kalekale	191	191	777	4.08
Snappers	406	204	817	4.00
Taape (blue lined snapper)	3,715	3,715	5,728	1.54
Ehu (red snapper)	901	575	2,522	4.39
Gindai (flower snapper)	251	251	1,067	4.25
Lehi (silverjaw)	50	50	205	4.10
Onaga (red snapper)	8,243	3,056	18,479	6.05
Opakapaka (pink snapper)	1,977	1,937	11,638	6.01
Uku (gray snapper)	19,392	13,181	47,542	3.61
Porgy	180	174	612	3.51
Reef fishes (unknown)	20	5	5	1.01
Squirrelfishes	2,976	2,090	9,746	4.66
Scorpionfishes	89	78	255	3.29
Mountain bass	567	322	1,259	3.91
Bigeyes	353	88	299	3.41
Goatfishes	2,048	1,661	7,600	4.58
Rudderfish	4,211	4,211	6,012	1.43
Damselfishes	107	85	251	2.96
Hawkfish	64	63	190	3.00
Tilapia	987	52	260	5.00
Wrasses	213	111	435	3.92
Parrotfishes	3,882	3,882	14,310	3.69

Table D-7 (continued)
Hawaii June 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Surgeonfishes/tangs	6,455	6,455	11,406	1.77
Flounders	3	3	7	2.50
Filefishes	33	23	27	1.17
Moonfish (opah)	137,361	131,407	215,972	1.64
Rainbow runner	244	208	352	1.70
Mahimahi	94,041	77,945	239,329	3.07
Barracudas	3,270	738	1,136	1.54
Wahoo	140,104	113,005	275,020	2.43
Tunas (unknown)	382	382	963	2.52
Skipjack tuna	50,965	16,581	30,271	1.83
Yellowfin tuna	400,556	324,914	872,985	2.69
Albacore tuna	29,290	28,902	56,856	1.97
Bigeye tuna	1,288,150	1,156,272	4,175,825	3.61
Kawakawa	1,178	200	461	2.31
Billfishes (unknown)	121	121	90	0.75
Swordfish	383,611	380,446	848,802	2.23
Blue marlin	142,898	72,689	75,273	1.04
Black marlin	1,805	854	114	0.13
Striped marlin	210,649	210,649	123,897	0.59
Shortnose spearfish	27,383	25,392	19,798	0.78
Sailfish	1,707	275	265	0.96
Crabs	1,359	39	275	7.01
Shrimp (saltwater)	1,455	0	0	0.00
Octopus	2,331	1,610	6,170	3.83
Squid	29	29	58	2.00
Limpets (saltwater)	222	170	2,194	12.9
Invertebrates	250	0	0	0.00
Algae	2,048	527	2,964	5.62
TOTAL	3,152,455	2,738,140	7,442,617	2.72

Table D-8
Hawaii July 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Miscellaneous	153	153	188	1.23
Sharks	31,195	28,430	13,303	0.47
Eels	138	135	135	1.00
Bigeye scad (akule)	12,694	11,860	34,961	2.95
Mackerel scad	18,584	12,373	34,169	2.76
Leatherjacket	7	3	5	1.99
Ten pounder	61	61	61	1.00
Bonfish	472	443	460	1.04
Milkfish	279	279	348	1.25
Needlefishes	20	17	26	1.50
Mulletts	663	573	2,228	3.89
Pomfret	57,322	55,880	157,486	2.82
Oilfish	25,436	25,436	61,320	2.41
Jacks	58	40	141	3.55
Kahala (amberjack)	253	123	93	0.76
Sasa ulua	231	231	616	2.67
Butaguchi (pig-lipped ulua)	237	237	557	2.35
Papa ulua	427	298	509	1.71
White ulua	1,115	1,014	2,417	2.38
Gunkin (black) ulua	26	0	0	0.00
Blue trevally	753	753	1,576	2.09
Hapuupuu (hawaiian grouper)	1,284	1,284	6,133	4.78
Blue spot grouper	364	115	283	2.46
Kalekale	40	22	79	3.60
Snappers	421	421	1,637	3.89
Taape (blue lined snapper)	3,389	2,967	4,744	1.60
Ehu (red snapper)	304	304	1,081	3.56
Gindai (flower snapper)	70	70	242	3.45
Onaga (red snapper)	8,304	8,304	39,989	4.82
Opakapaka (pink snapper)	461	461	2,406	5.22
Uku (gray snapper)	13,021	13,021	49,177	3.78
Porgy	371	361	1,340	3.71
Reef fishes (unknown)	11	0	0	0.00
Squirrelfishes	6,410	5,980	29,048	4.86
Scorpionfishes	151	99	323	3.25
Mountain bass	364	364	1,590	4.37
Bigeyes	211	211	514	2.44
Goatfishes	3,952	3,952	16,704	4.23
Rudderfish	2,569	2,569	3,394	1.32
Damselfishes	287	287	1,152	4.01
Hawkfish	78	78	232	2.99
Tilapia	22	22	110	5.00
Wrasses	352	145	298	2.05
Parrotfishes	3,843	3,843	15,366	4.00
Surgeonfishes/tangs	7,354	6,269	12,270	1.96
Flounders	9	9	14	1.46

Table D-8 (continued)
Hawaii July 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Filefishes	50	50	80	1.61
Moonfish (opah)	170,897	170,897	239,412	1.40
Rainbow runner	143	122	230	1.89
Mahimahi	80,705	70,555	191,896	2.72
Barracudas	5,991	5,991	4,819	0.80
Wahoo	93,130	83,259	228,868	2.75
Tunas (unknown)	1,355	147	588	4.00
Skipjack tuna	137,800	96,730	101,034	1.04
Yellowfin tuna	388,390	345,387	916,437	2.65
Albacore tuna	47,672	40,793	69,318	1.70
Bigeye tuna	1,039,031	1,036,439	4,016,063	3.87
Kawakawa	1,085	355	753	2.12
Swordfish	156,154	156,154	343,243	2.20
Blue marlin	118,450	103,147	123,411	1.20
Black marlin	755	316	304	0.96
Striped marlin	34,560	34,560	62,830	1.82
Shortnose spearfish	17,102	16,805	24,091	1.43
Sailfish	1,288	898	1,056	1.18
Crabs	1,611	177	1,107	6.24
Shrimp (saltwater)	685	0	0	0.00
Octopus	4,039	3,301	13,326	4.04
Squid	2	2	3	2.00
Limpets (saltwater)	433	270	1,570	5.81
Invertebrates	11	11	41	3.75
Algae	539	539	2,850	5.28
TOTAL	2,505,640	2,356,401	6,842,053	2.90

Table D-9
Hawaii August 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Miscellaneous	95	95	106	1.11
Sharks	51,974	37,516	11,412	0.30
Eels	93	44	44	1.00
Bigeye scad (akule)	43,717	5,559	17,760	3.20
Mackerel scad	18,440	9,742	27,567	2.83
Leatherjacket	47	47	68	1.47
Ten pounder	66	11	11	1.00
Bonfish	974	974	999	1.03
Milkfish	292	235	347	1.48
Flying fishes	0	0	0	0.00
Needlefishes	21	16	31	1.94
Mulletts	1,576	1,408	5,538	3.93
Pomfret	53,074	51,970	170,833	3.29
Oilfish	38,072	38,072	106,460	2.80
Jacks	17	12	33	2.85
Kahala (amberjack)	176	24	19	0.82
Sasa ulua	90	44	153	3.52
Butaguchi (pig-lipped ulua)	643	247	740	3.00
Papa ulua	295	280	990	3.54
White ulua	800	800	2,451	3.06
Gunkin (black) ulua	75	39	34	0.87
Blue trevally	556	291	846	2.91
Hapuupuu (hawaiian grouper)	1,213	441	3,145	7.13
Blue spot grouper	333	333	1,220	3.66
Kalekale	109	44	172	3.92
Snappers	248	152	632	4.16
Taape (blue lined snapper)	3,388	3,388	5,834	1.72
Ehu (red snapper)	327	282	1,308	4.64
Gindai (flower snapper)	70	34	146	4.29
Golden kalekale	12	0	0	0.00
Onaga (red snapper)	7,895	7,895	47,821	6.06
Opakapaka (pink snapper)	1,681	1,151	7,319	6.36
Uku (gray snapper)	15,703	13,479	59,607	4.42
Porgy	624	624	2,381	3.81
Reef fishes (unknown)	95	0	0	0.00
Reef jacks	28	5	19	3.75
Squirrelfishes	3,753	3,753	16,707	4.45
Trumpetfish	3	0	0	0.00
Scorpionfishes	122	92	322	3.50
Mountain bass	131	71	245	3.47
Bigeyes	248	248	801	3.23
Goatfishes	3,025	2,843	12,110	4.26
Rudderfish	5,447	5,447	7,237	1.33
Damselfishes	486	391	1,167	2.99
Hawkfish	195	195	495	2.54
Tilapia	1,184	192	582	3.04

Table D-9 (continued)
Hawaii August 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Wrasses	424	282	1,026	3.63
Parrotfishes	3,840	3,840	14,319	3.73
Surgeonfishes/tangs	8,697	8,697	14,483	1.67
Flounders	2	0	0	0.00
Filefishes	25	25	13	0.50
Moonfish (opah)	190,238	186,823	307,544	1.65
Rainbow runner	506	383	919	2.40
Mahimahi	104,893	90,500	279,669	3.09
Barracudas	2,282	1,425	2,286	1.60
Wahoo	65,430	55,199	210,726	3.82
Tunas (unknown)	2,631	10	23	2.26
Skipjack tuna	190,023	157,138	248,720	1.58
Yellowfin tuna	258,240	222,243	745,185	3.35
Albacore tuna	64,701	64,701	118,130	1.83
Bigeye tuna	929,129	875,839	4,274,657	4.88
Kawakawa	828	119	311	2.61
Billfishes (unknown)	1,406	0	0	0.00
Swordfish	153,396	153,396	325,351	2.12
Blue marlin	130,746	110,560	153,257	1.39
Black marlin	194	194	354	1.83
Striped marlin	44,684	43,846	78,169	1.78
Shortnose spearfish	14,127	12,244	26,237	2.14
Sailfish	2,025	1,163	1,773	1.52
Crabs	3,889	458	2,347	5.12
Shrimp (saltwater)	455	0	0	0.00
Octopus	3,801	2,839	11,308	3.98
Squid	281	281	563	2.00
Limpets (saltwater)	685	542	2,892	5.34
Invertebrates	9	9	34	3.75
Algae	248	248	1,853	7.48
TOTAL	2,435,243	2,181,485	7,337,862	3.36

Table D-10
Hawaii September 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Miscellaneous	127	127	159	1.25
Sharks	31,626	27,660	11,562	0.42
Eels	25	25	25	1.00
Bigeye scad (akule)	6,254	4,847	44,991	9.28
Mackerel scad	25,046	18,134	51,984	2.87
Leatherjacket	19	19	38	2.00
Ten pounder	112	21	21	1.00
Bonfish	552	470	470	1.00
Milkfish	427	427	533	1.25
Needlefishes	17	17	34	2.00
Threadfin	28	11	88	8.00
Mulletts	1,138	1,010	3,622	3.59
Pomfret	58,449	57,774	116,466	2.02
Oilfish	29,179	29,179	51,618	1.77
Jacks	78	78	198	2.56
Kahala (amberjack)	156	22	22	1.00
Sasa ulua	84	35	82	2.32
Butaguchi (pig-lipped ulua)	1,129	552	1,023	1.85
Papa ulua	409	185	792	4.28
White ulua	1,162	656	1,660	2.53
Gunkin (black) ulua	379	103	192	1.86
Blue trevally	451	172	434	2.52
Hapuupuu (hawaiian grouper)	1,562	1,562	8,975	5.75
Blue spot grouper	265	265	759	2.86
Kalekale	250	148	590	4.00
Snappers	557	538	2,088	3.88
Yellow-tail kali	3	0	0	0.00
Taape (blue lined snapper)	5,658	5,197	8,827	1.70
Ehu (red snapper)	355	175	786	4.49
Gindai (flower snapper)	56	37	159	4.30
Onaga (red snapper)	4,038	1,865	12,333	6.61
Opakapaka (pink snapper)	3,238	1,736	11,003	6.34
Uku (gray snapper)	11,387	6,669	29,770	4.46
Porgy	129	111	424	3.83
Reef fishes (unknown)	74	0	0	0.00
Squirrelfishes	12,001	11,487	50,120	4.36
Trumpetfish	7	7	7	1.00
Scorpionfishes	111	111	419	3.78
Mountain bass	257	257	731	2.84
Bigeyes	402	395	1,270	3.21
Goatfishes	3,473	3,473	15,125	4.36
Rudderfish	5,381	5,381	6,927	1.29
Damselfishes	113	112	311	2.78
Hawkfish	144	144	338	2.34
Tilapia	1,285	0	0	0.00
Wrasses	919	701	2,815	4.02

Table D-10 (continued)
Hawaii September 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Parrotfishes	3,360	3,360	12,455	3.71
Surgeonfishes/tangs	8,443	8,363	15,815	1.89
Flounders	12	2	12	5.00
Filefishes	110	110	55	0.50
Moonfish (opah)	191,021	191,021	200,434	1.05
Rainbow runner	674	428	833	1.95
Mahimahi	95,528	84,585	243,237	2.88
Barracudas	1,352	1,352	2,249	1.66
Wahoo	53,151	48,661	146,266	3.01
Tunas (unknown)	513	36	54	1.50
Skipjack tuna	204,548	175,544	235,908	1.34
Yellowfin tuna	174,143	159,310	412,189	2.59
Albacore tuna	19,725	19,725	37,161	1.88
Bigeye tuna	1,190,623	1,177,939	4,099,838	3.48
Kawakawa	501	143	259	1.82
Billfishes (unknown)	1,118	0	0	0.00
Swordfish	9,709	9,709	32,727	3.37
Blue marlin	117,203	117,203	109,844	0.94
Black marlin	829	829	741	0.89
Striped marlin	29,842	28,588	45,555	1.59
Shortnose spearfish	18,680	18,649	24,621	1.32
Sailfish	2,178	1,688	2,010	1.19
Spiny lobsters	2,817	2,291	27,987	12.2
Slipper lobsters	10	0	0	0.00
Crabs	5,154	843	3,590	4.26
Shrimp (saltwater)	495	0	0	0.00
Octopus	2,862	1,748	6,805	3.89
Squid	410	382	845	2.21
Limpets (saltwater)	926	926	7,512	8.11
Invertebrates	2	2	7	3.50
Algae	1,235	423	2,900	6.85
TOTAL	2,345,682	2,235,751	6,111,699	2.73

Table D-11
Hawaii October 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Miscellaneous	179	179	227	1.27
Sharks	26,619	21,429	7,300	0.34
Eels	27	27	31	1.13
Bigeye scad (akule)	5,893	3,170	10,292	3.25
Mackerel scad	36,859	27,918	79,285	2.84
Leatherjacket	35	31	60	1.96
Ten pounder	53	53	53	1.00
Bonfish	76	62	109	1.77
Milkfish	73	73	101	1.38
Flying fishes	5	0	0	0.00
Needlefishes	49	19	38	2.03
Threadfin	36	14	99	6.90
Mulletts	1,676	1,645	6,368	3.87
Pomfret	68,506	68,506	144,243	2.11
Oilfish	30,824	30,824	69,669	2.26
Jacks	69	69	157	2.29
Kahala (amberjack)	105	8	8	1.00
Sasa ulua	158	56	133	2.40
Butaguchi (pig-lipped ulua)	2,457	2,457	4,062	1.65
Dobe ulua	1	1	1	0.50
Papa ulua	161	128	315	2.46
White ulua	1,054	1,034	2,225	2.15
Gunkin (black) ulua	68	68	102	1.50
Blue trevally	475	221	563	2.55
Hapuupuu (hawaiian grouper)	2,355	2,355	11,651	4.95
Blue spot grouper	230	120	348	2.91
Kalekale	357	357	1,207	3.38
Snappers	371	306	1,200	3.92
Taape (blue lined snapper)	2,585	2,136	3,610	1.69
Ehu (red snapper)	237	237	915	3.86
Gindai (flower snapper)	177	177	724	4.10
Onaga (red snapper)	2,250	2,250	12,963	5.76
Opakapaka (pink snapper)	2,938	2,938	16,642	5.66
Uku (gray snapper)	11,398	11,398	42,022	3.69
Porgy	172	172	627	3.64
Reef fishes (unknown)	24	0	0	0.00
Squirrelfishes	9,775	9,705	41,288	4.25
Trumpetfish	6	4	4	1.00
Scorpionfishes	27	21	69	3.27
Mountain bass	453	453	1,510	3.34
Bigeyes	309	309	1,058	3.43
Goatfishes	2,778	2,652	12,900	4.86
Rudderfish	3,879	3,879	5,066	1.31
Damselfishes	183	163	466	2.86
Hawkfish	54	54	111	2.04
Tilapia	898	0	0	0.00

Table D-11 (continued)
Hawaii October 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Wrasses	745	745	3,949	5.30
Parrotfishes	4,766	4,198	16,351	3.90
Surgeonfishes/tangs	7,367	7,367	13,872	1.88
Filefishes	26	26	25	0.96
Pelagic fishes (unknown)	6,201	0	0	0.00
Moonfish (opah)	137,529	136,447	196,418	1.44
Rainbow runner	828	429	841	1.96
Mahimahi	136,918	119,354	331,075	2.77
Barracudas	659	253	398	1.58
Wahoo	42,258	36,399	124,989	3.43
Tunas (unknown)	122	5	20	4.00
Skipjack tuna	201,039	179,824	253,102	1.41
Yellowfin tuna	179,626	167,869	488,162	2.91
Albacore tuna	5,867	3,658	11,769	3.22
Bigeye tuna	1,360,738	1,332,164	5,123,689	3.85
Kawakawa	487	232	394	1.70
Billfishes (unknown)	270	0	0	0.00
Swordfish	13,676	12,542	38,691	3.08
Blue marlin	118,992	110,222	115,093	1.04
Black marlin	769	769	661	0.86
Striped marlin	55,038	55,038	72,155	1.31
Shortnose spearfish	20,203	19,452	26,160	1.34
Sailfish	4,654	4,654	4,556	0.98
Spiny lobsters	819	819	8,424	10.3
Slipper lobsters	1	0	0	0.00
Crabs	4,671	721	3,318	4.60
Shrimp (saltwater)	420	0	0	0.00
Octopus	3,276	2,299	8,750	3.81
Squid	339	240	644	2.69
Limpets (saltwater)	1,285	1,033	8,506	8.24
Invertebrates	205	55	180	3.27
Algae	605	567	2,944	5.19
TOTAL	2,527,308	2,395,053	7,334,953	3.06

Table D-12
Hawaii November 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Miscellaneous	72	72	13	0.19
Sharks	42,136	22,267	5,505	0.25
Eels	23	17	17	1.00
Bigeye scad (akule)	37,994	25,489	67,557	2.65
Mackerel scad	37,098	21,903	58,897	2.69
Leatherjacket	91	91	180	1.99
Ten pounder	4	4	4	1.00
Bonefish	2,508	2,449	2,449	1.00
Milkfish	87	67	16	0.24
Needlefishes	97	21	39	1.85
Threadfin	60	46	370	7.97
Mulletts	431	199	758	3.80
Pomfret	45,890	45,148	96,089	2.13
Oilfish	33,575	33,575	36,174	1.08
Jacks	88	17	34	2.00
Kahala (amberjack)	902	15	23	1.50
Sasa ulua	27	3	8	2.50
Butaguchi (pig-lipped ulua)	80	80	167	2.10
Dobe ulua	46	5	12	2.50
Papa ulua	201	124	429	3.46
White ulua	791	586	1,514	2.58
Blue trevally	644	409	860	2.10
Hapuupuu (hawaiian grouper)	2,371	2,175	10,435	4.80
Blue spot grouper	414	346	697	2.01
Kalekale	1,042	587	1,707	2.91
Snappers	75	57	203	3.57
Yellow-tail kali	1	1	4	3.00
Taape (blue lined snapper)	2,196	1,907	3,239	1.70
Ehu (red snapper)	2,478	1,501	7,335	4.89
Gindai (flower snapper)	562	390	1,501	3.85
Golden kalekale	9	0	0	0.00
Lehi (silverjaw)	1,335	863	3,004	3.48
Onaga (red snapper)	7,508	4,934	28,879	5.85
Opakapaka (pink snapper)	15,878	11,226	57,498	5.12
Uku (gray snapper)	11,087	9,640	35,456	3.68
Porgy	51	43	162	3.78
Reef fishes (unknown)	149	0	0	0.00
Reef jacks	2	2	8	3.53
Squirrelfishes	5,940	5,940	25,593	4.31
Trumpetfish	6	3	3	1.00
Scorpionfishes	231	125	489	3.91
Mountain bass	315	315	699	2.22
Bigeyes	375	375	1,331	3.55
Goatfishes	1,467	1,096	5,533	5.05
Rudderfish	2,184	2,184	2,960	1.36
Damselfishes	41	41	123	2.99

Table D-12 (continued)
Hawaii November 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Hawkfish	72	48	150	3.12
Tilapia	1,123	0	0	0.00
Wrasses	686	452	2,103	4.66
Parrotfishes	1,694	1,506	5,351	3.55
Surgeonfishes/tangs	4,109	3,649	7,094	1.94
Filefishes	44	28	18	0.63
Moonfish (opah)	97,257	95,378	142,895	1.50
Rainbow runner	628	483	934	1.94
Mahimahi	98,611	90,940	214,675	2.36
Barracudas	673	673	644	0.96
Wahoo	36,924	31,424	98,288	3.13
Tunas (unknown)	698	79	113	1.43
Skipjack tuna	53,742	41,906	47,399	1.13
Yellowfin tuna	242,501	239,570	468,371	1.96
Albacore tuna	12,818	10,787	26,044	2.41
Bigeye tuna	1,105,579	1,098,494	3,380,122	3.08
Kawakawa	415	323	778	2.41
Billfishes (unknown)	180	0	0	0.00
Swordfish	43,252	15,576	36,693	2.36
Blue marlin	103,931	88,586	77,069	0.87
Black marlin	1,078	1,078	560	0.52
Striped marlin	85,042	85,042	70,350	0.83
Shortnose spearfish	28,641	22,566	12,077	0.54
Sailfish	2,528	812	327	0.40
Spiny lobsters	870	648	7,612	11.8
Slipper lobsters	3	0	0	0.00
Crabs	5,968	2,186	8,344	3.82
Shrimp (saltwater)	420	51	77	1.53
Octopus	2,598	1,367	5,532	4.05
Squid	44	37	99	2.64
Limpets (saltwater)	525	525	4,835	9.20
Invertebrates	270	0	0	0.00
Algae	685	428	2,047	4.78
TOTAL	2,192,168	2,030,975	5,078,570	2.50

Table D-13
Hawaii December 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Miscellaneous	91	49	43	0.87
Sharks	44,158	23,772	5,658	0.24
Rays	9	0	0	0.00
Eels	43	17	19	1.13
Bigeye scad (akule)	43,528	18,024	48,533	2.69
Mackerel scad	30,969	20,614	55,774	2.71
Leatherjacket	9	4	7	2.02
Bonfish	38	3	5	1.58
Milkfish	8	0	0	0.00
Needlefishes	54	53	77	1.46
Mulletts	7	7	22	3.00
Pomfret	41,581	41,581	102,355	2.46
Oilfish	55,520	55,520	39,616	0.71
Jacks	75	31	88	2.89
Kahala (amberjack)	2,121	48	53	1.09
Sasa ulua	26	14	34	2.50
Butaguchi (pig-lipped ulua)	371	164	582	3.54
Dobe ulua	125	5	13	2.50
Papa ulua	116	47	135	2.85
White ulua	958	562	1,138	2.03
Gunkin (black) ulua	107	36	45	1.25
Blue trevally	277	204	454	2.23
Hapuupuu (hawaiian grouper)	1,936	1,496	8,105	5.42
Blue spot grouper	276	276	699	2.53
Kalekale	2,521	1,926	6,828	3.54
Snappers	84	68	210	3.10
Yellow-tail kali	6	6	16	2.52
Taape (blue lined snapper)	3,389	2,658	4,705	1.77
Ehu (red snapper)	5,669	3,334	20,083	6.02
Gindai (flower snapper)	874	521	2,196	4.21
Golden kalekale	62	3	7	2.60
Lehi (silverjaw)	4,052	3,471	11,948	3.44
Onaga (red snapper)	15,091	11,513	81,683	7.09
Opakapaka (pink snapper)	32,728	26,257	138,454	5.27
Uku (gray snapper)	10,739	10,739	29,119	2.71
Snake mackerel	16	0	0	0.00
Porgy	62	62	128	2.08
Reef fishes (unknown)	84	0	0	0.00
Squirrelfishes	4,575	4,575	19,969	4.36
Trumpetfish	6	0	0	0.00
Scorpionfishes	476	239	1,288	5.39
Mountain bass	268	75	379	5.02
Bigeyes	345	322	984	3.05
Goatfishes	3,019	2,420	12,188	5.04
Rudderfish	5,083	5,083	5,937	1.17
Damselfishes	143	143	411	2.88

Table D-13 (continued)
Hawaii December 2008 Reported Commercial Landings

Species	Caught	Sold	Value (\$)	Price/Lb (\$)
Hawkfish	45	45	132	2.96
Tilapia	1,210	0	0	0.00
Wrasses	557	344	1,086	3.16
Parrotfishes	3,272	2,724	9,591	3.52
Surgeonfishes/tangs	6,124	5,060	9,072	1.79
Filefishes	29	29	17	0.57
Moonfish (opah)	79,400	79,400	167,303	2.11
Rainbow runner	252	149	289	1.94
Mahimahi	43,004	39,100	118,572	3.03
Barracudas	616	408	469	1.15
Wahoo	46,057	46,057	125,954	2.73
Tunas (unknown)	491	39	92	2.36
Skipjack tuna	48,192	30,702	44,161	1.44
Yellowfin tuna	226,958	218,056	673,764	3.09
Albacore tuna	50,507	40,553	71,730	1.77
Bigeye tuna	1,166,816	1,166,816	4,870,918	4.17
Kawakawa	278	250	560	2.24
Billfishes (unknown)	180	0	0	0.00
Swordfish	286,178	138,482	207,385	1.50
Blue marlin	79,310	67,814	67,695	1.00
Black marlin	497	0	0	0.00
Striped marlin	136,320	136,320	114,327	0.84
Shortnose spearfish	42,113	37,474	17,495	0.47
Sailfish	1,814	142	45	0.31
Spiny lobsters	1,742	1,657	19,509	11.8
Slipper lobsters	5	1	4	6.00
Crabs	5,895	1,350	5,462	4.05
Shrimp (saltwater)	350	0	0	0.00
Octopus	1,960	982	4,067	4.14
Squid	8	8	18	2.35
Limpets (saltwater)	1,734	583	3,175	5.45
Invertebrates	90	2	0	0.00
Algae	366	366	3,570	9.75
TOTAL	2,544,060	2,250,850	7,136,449	3.17

The following are summary charts of the major species and species groups by month:

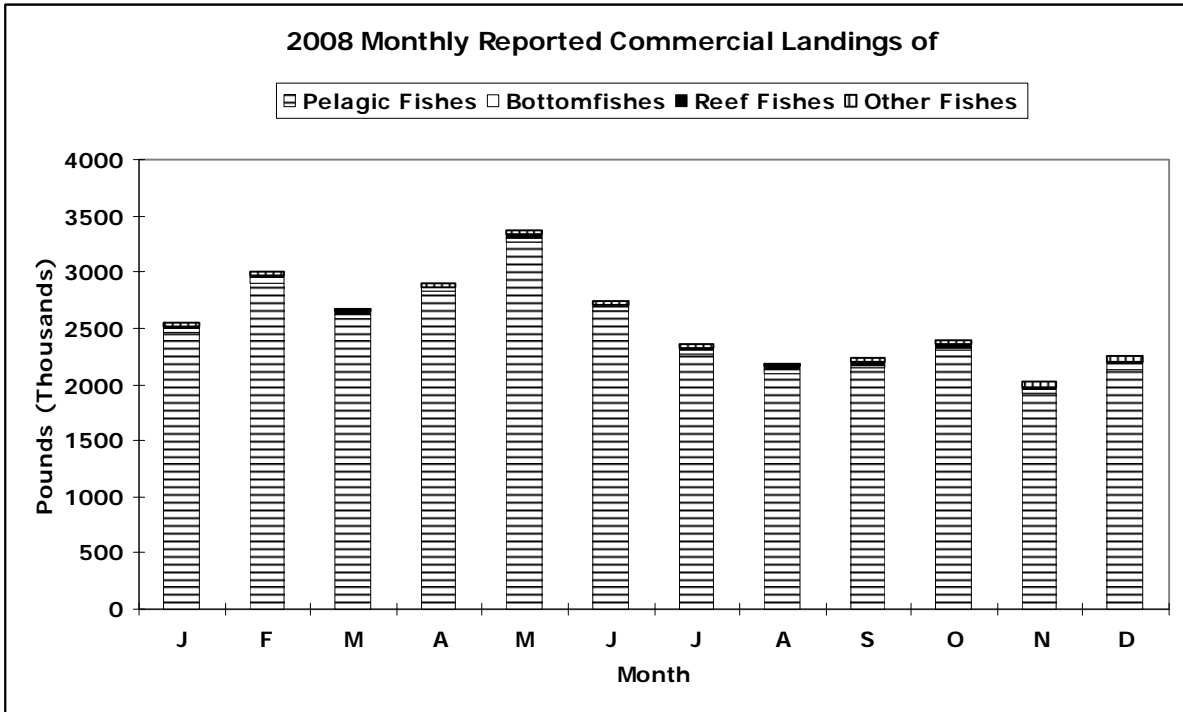


Figure D-1-1

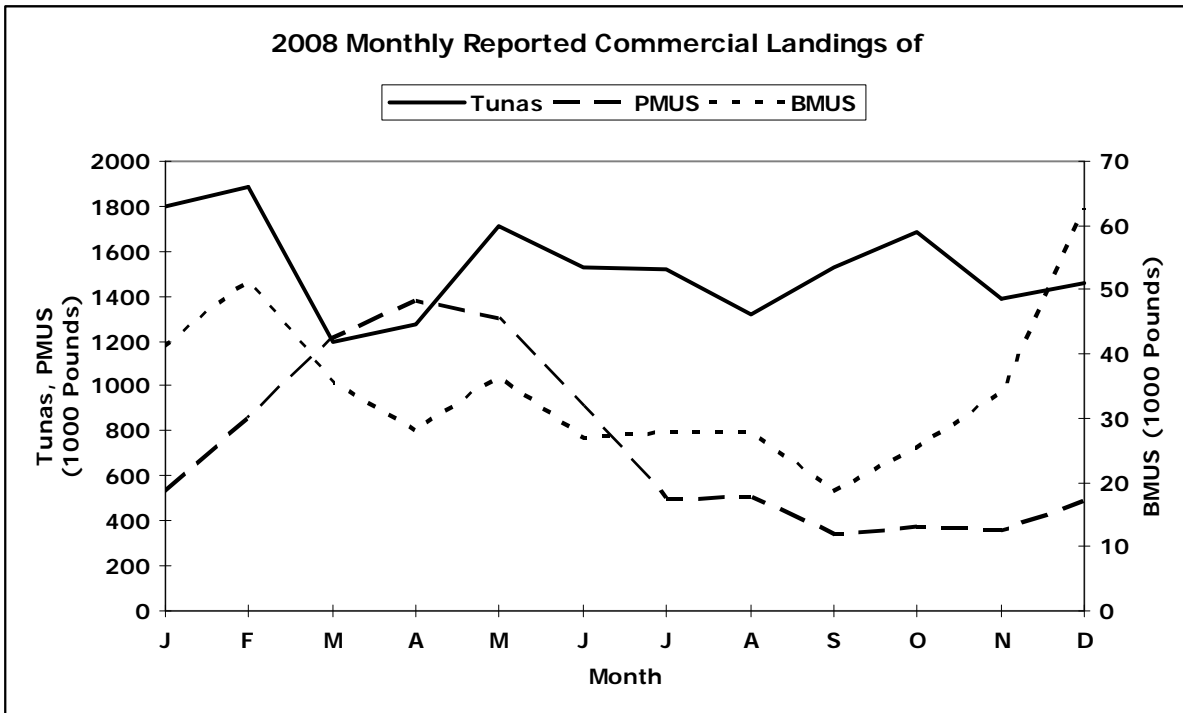


Figure D-1-2

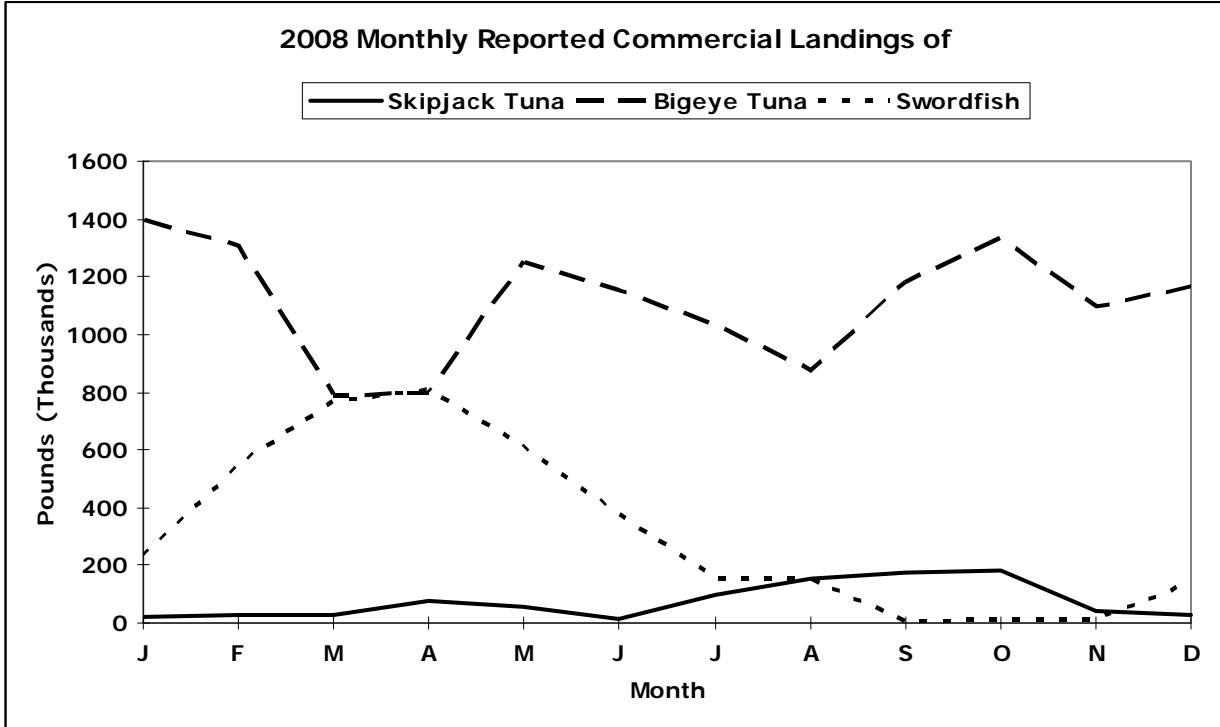


Figure D-1-3

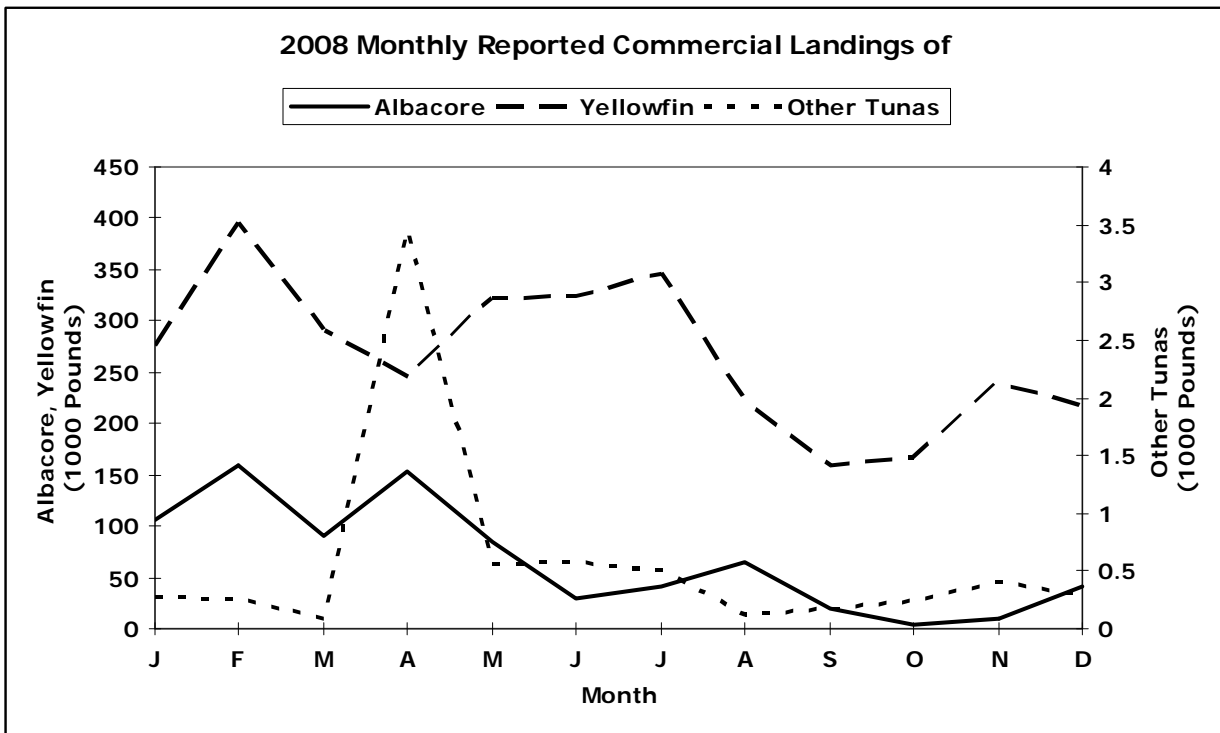


Figure D-1-4

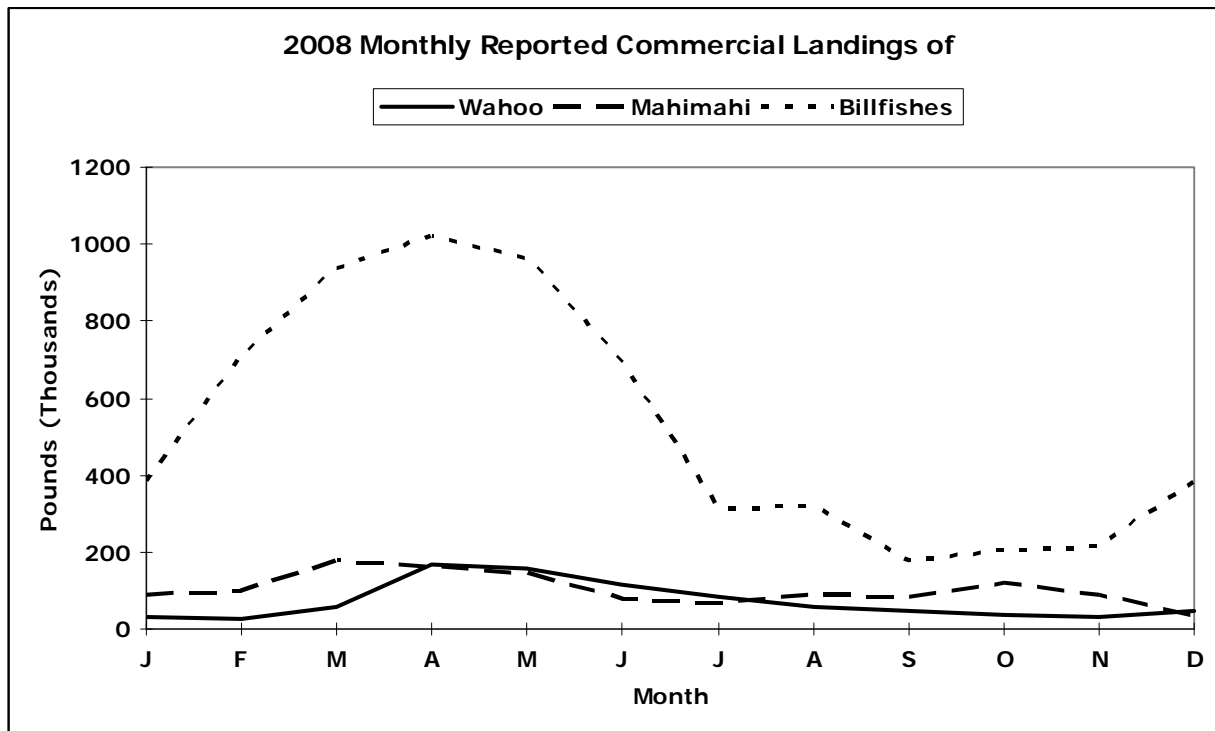


Figure D-1-5

The following are seasonality plots for the major species or species groups, showing the average weight landed during each month for all years combined:

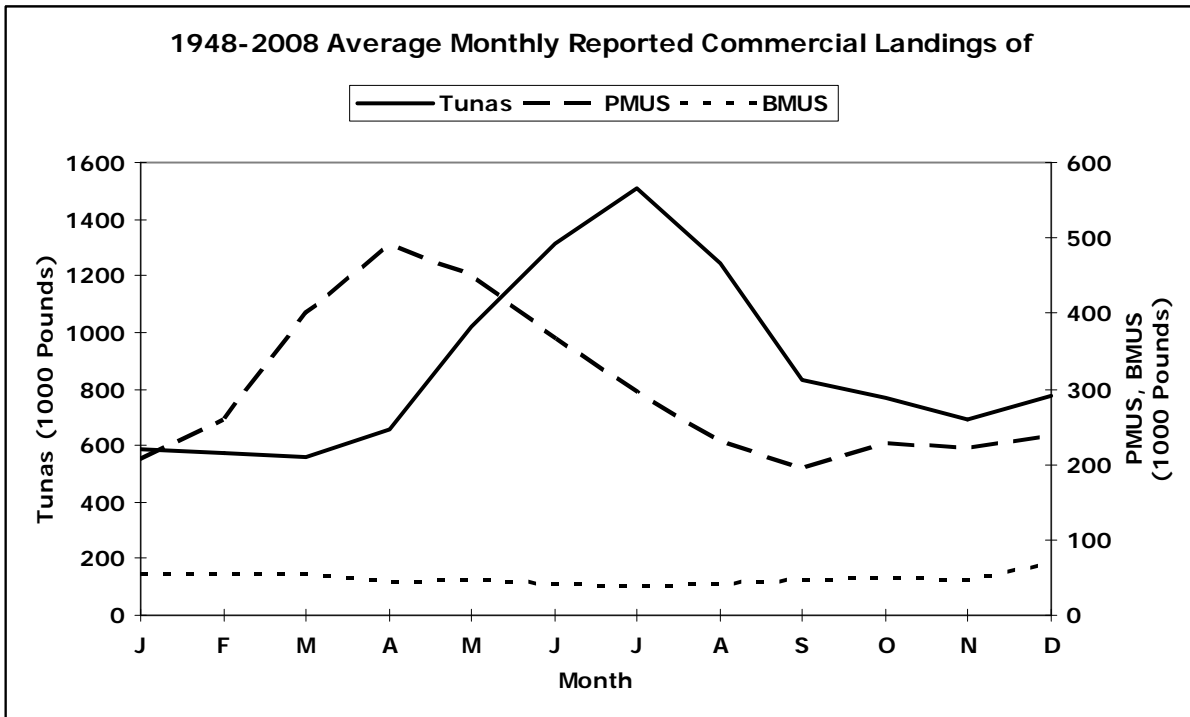


Figure D-2-1

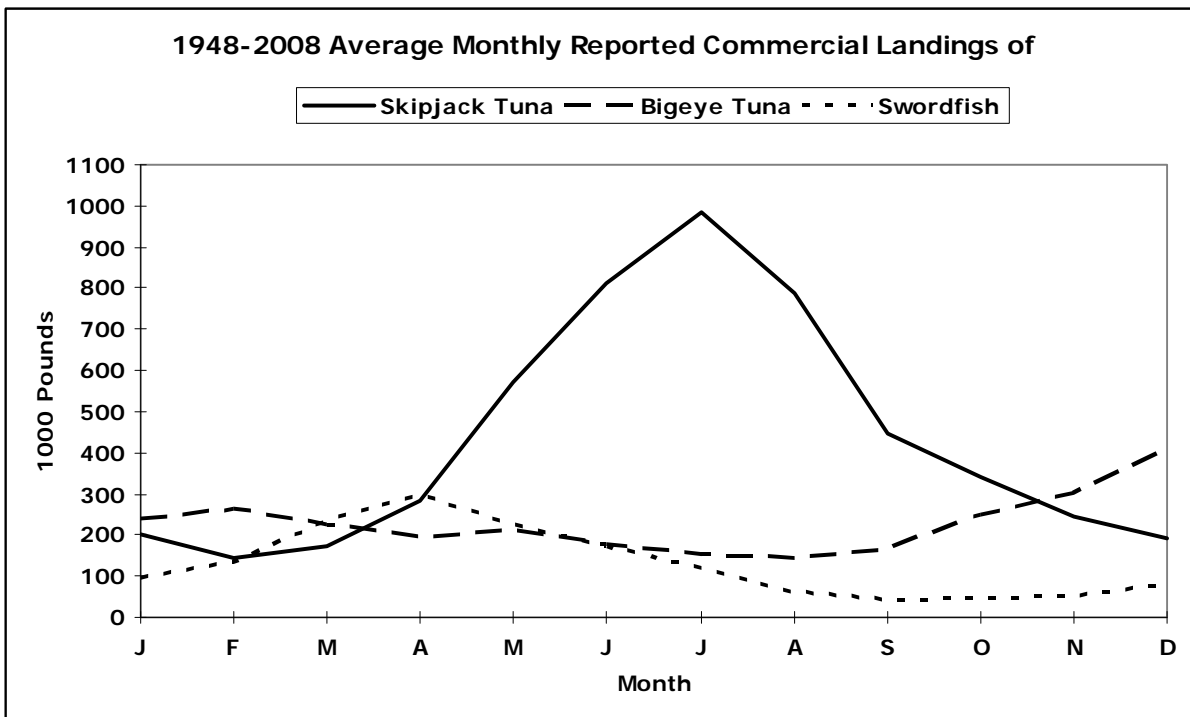


Figure D-2-2

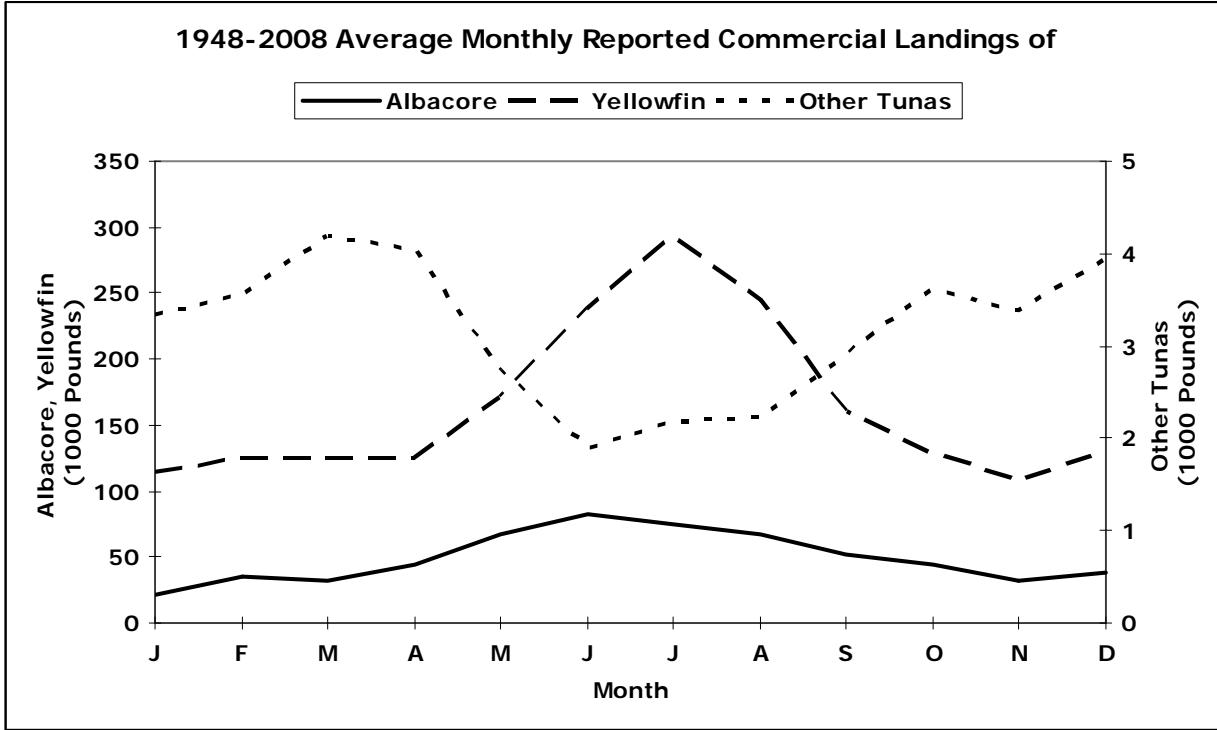


Figure D-2-3

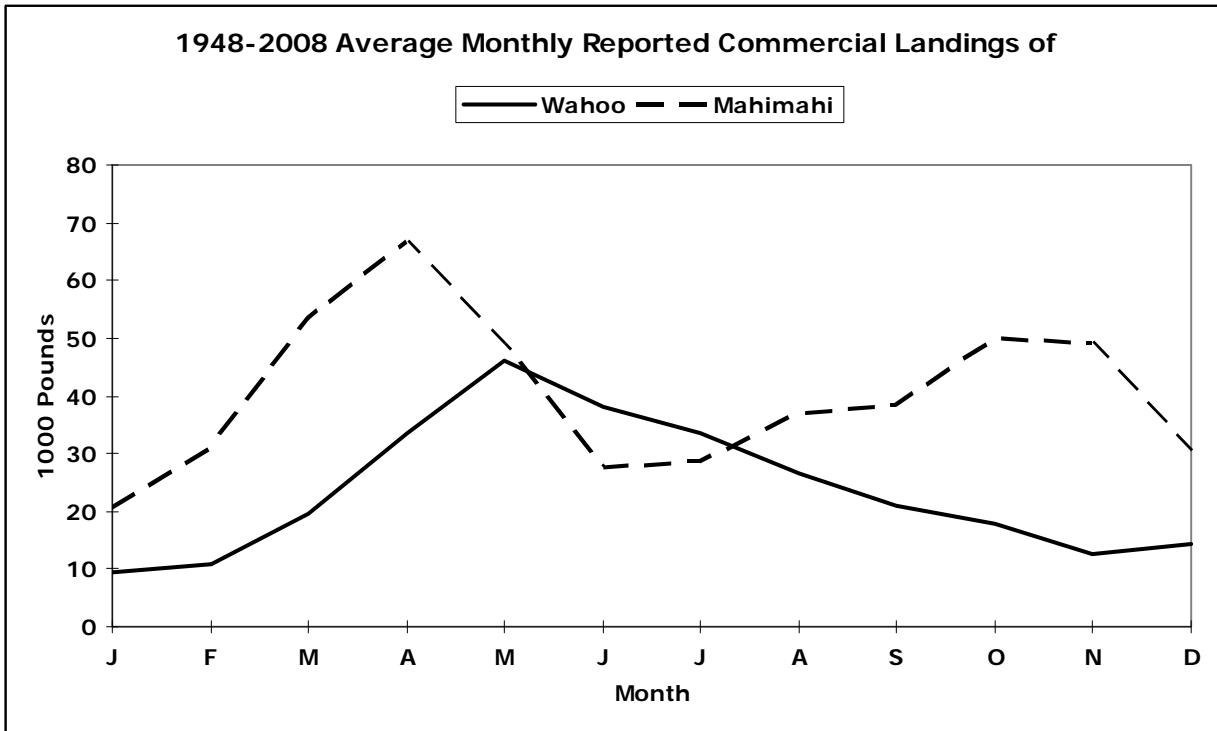


Figure D-2-4

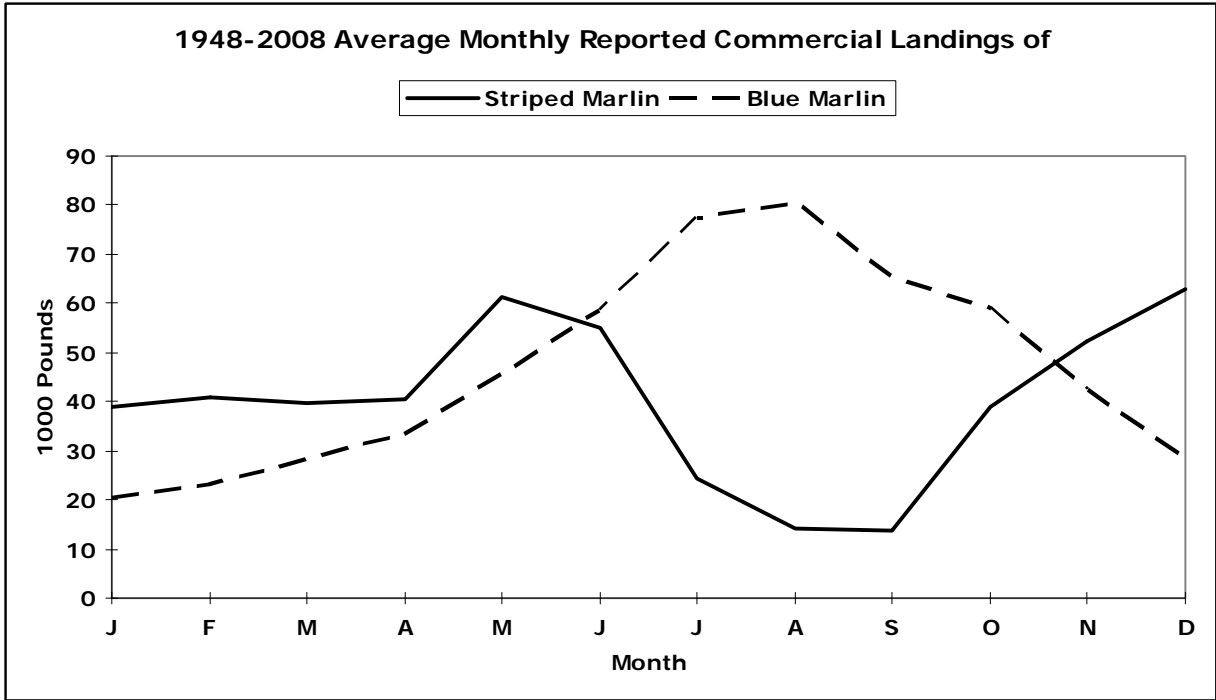


Figure D-2-5

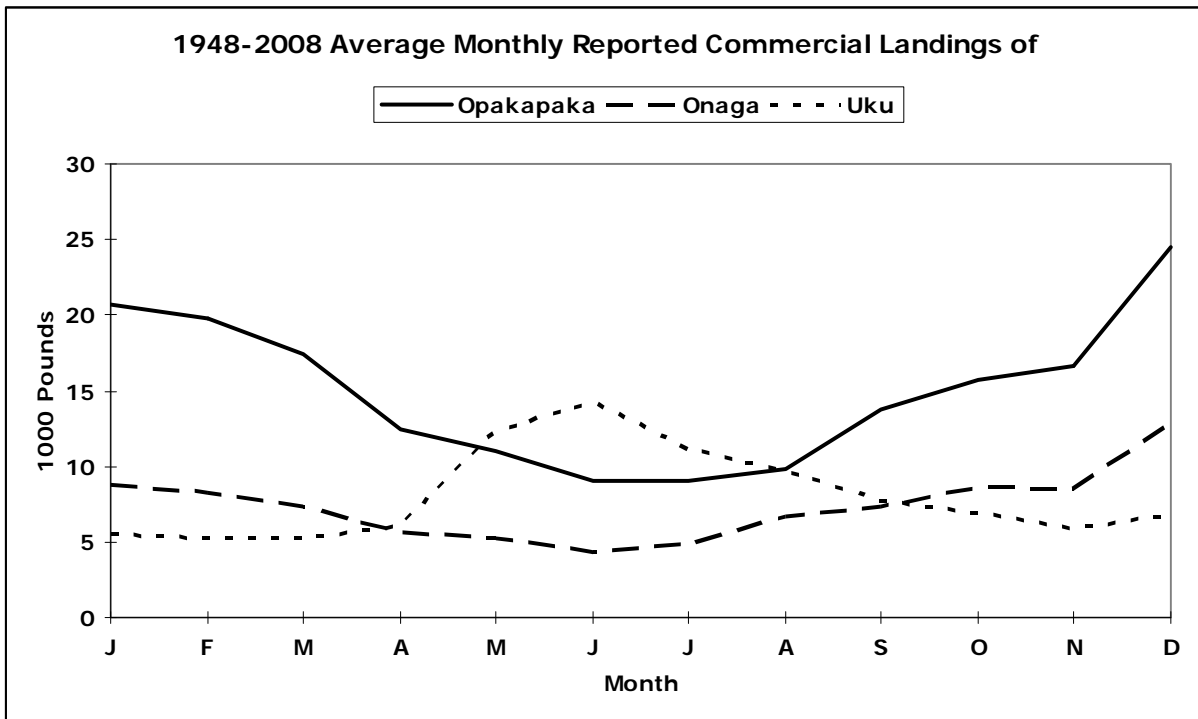


Figure D-2-6

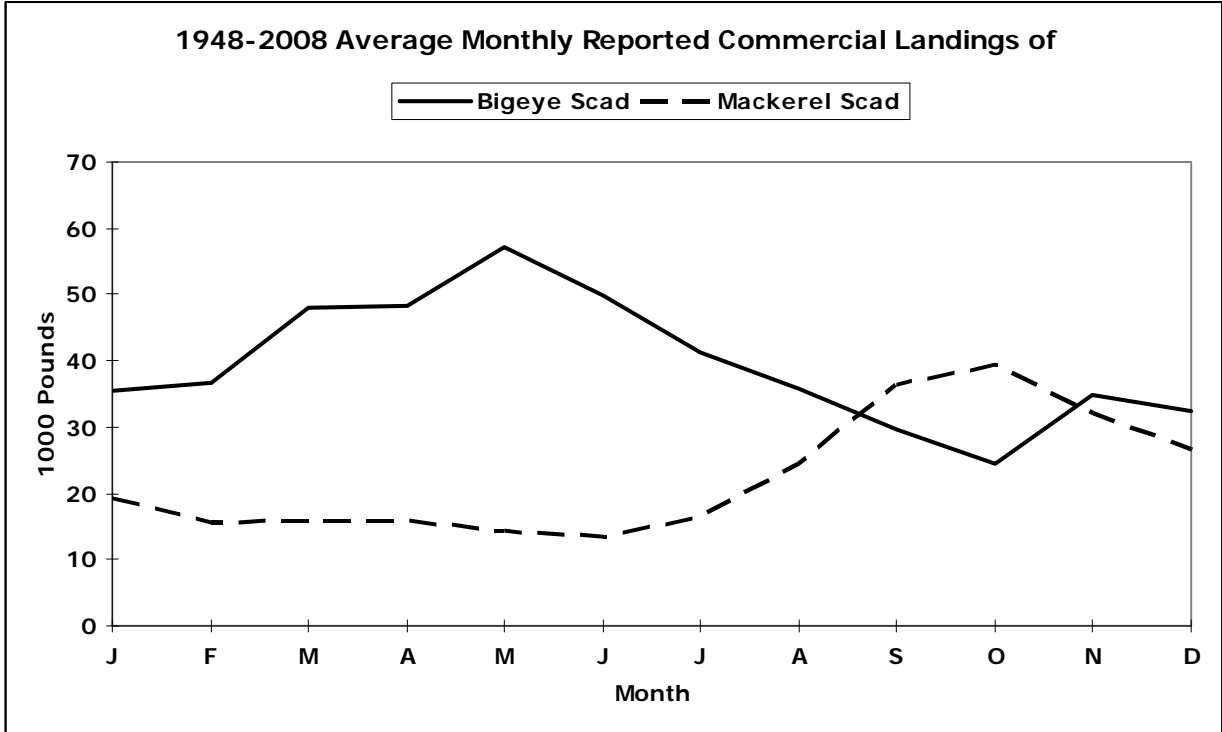


Figure D-2-7

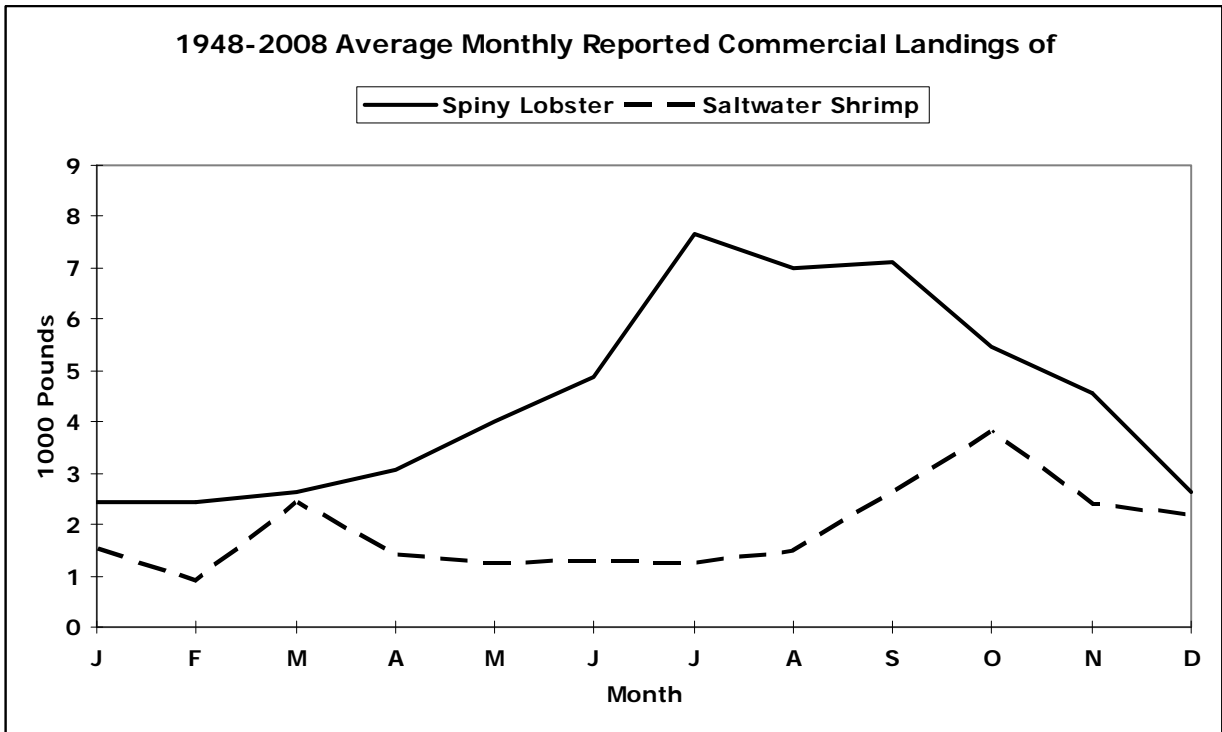


Figure D-2-8

The following graphs plot annual summary statistics to illustrate the variability among years:

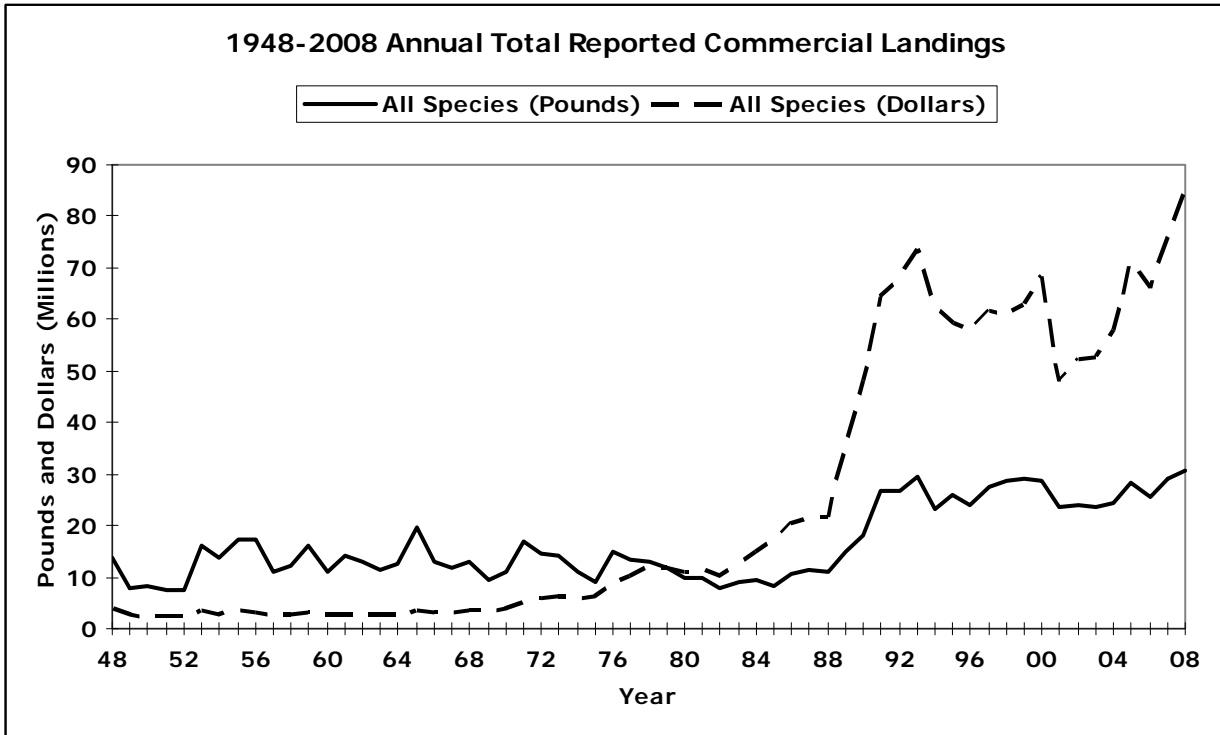


Figure D-3-1

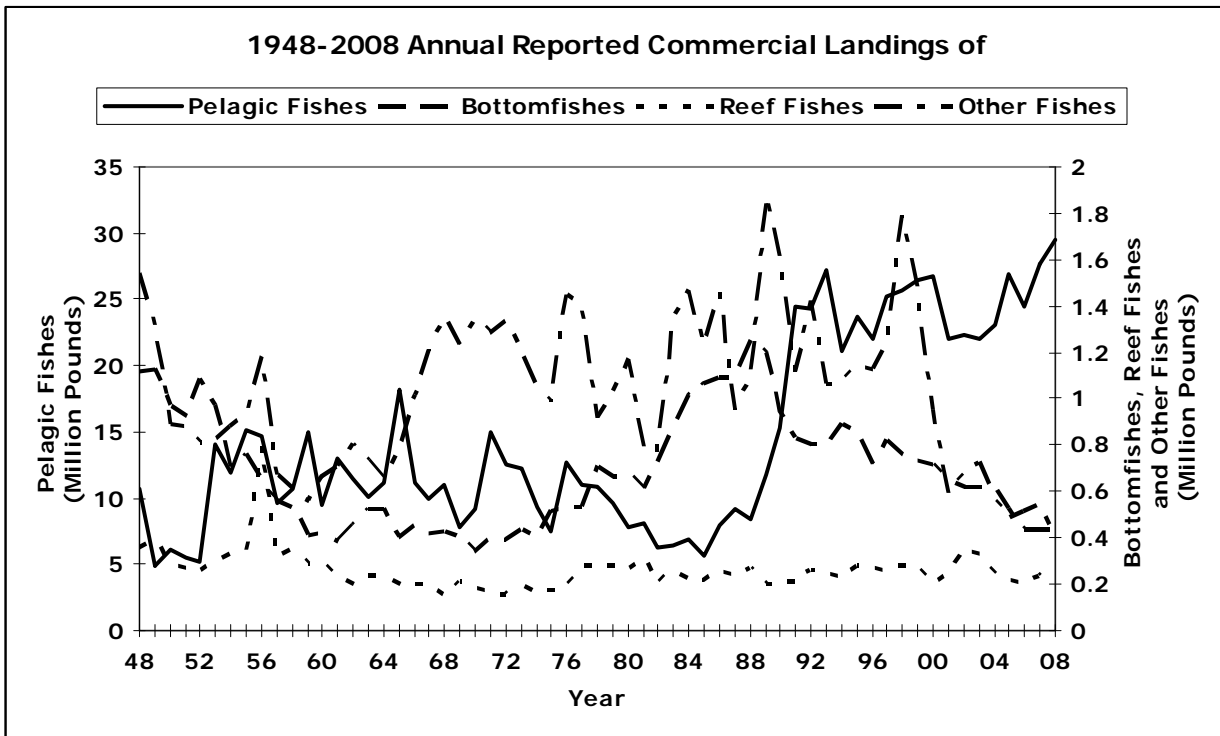


Figure D-3-2

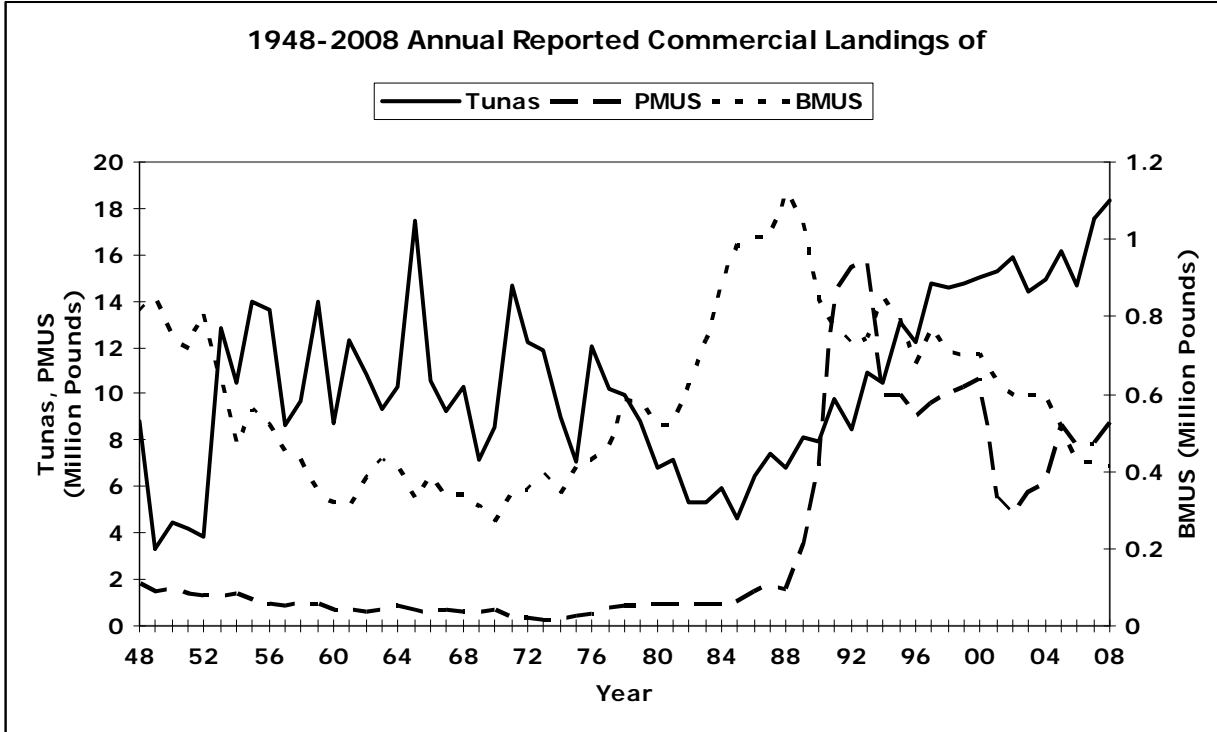


Figure D-3-3

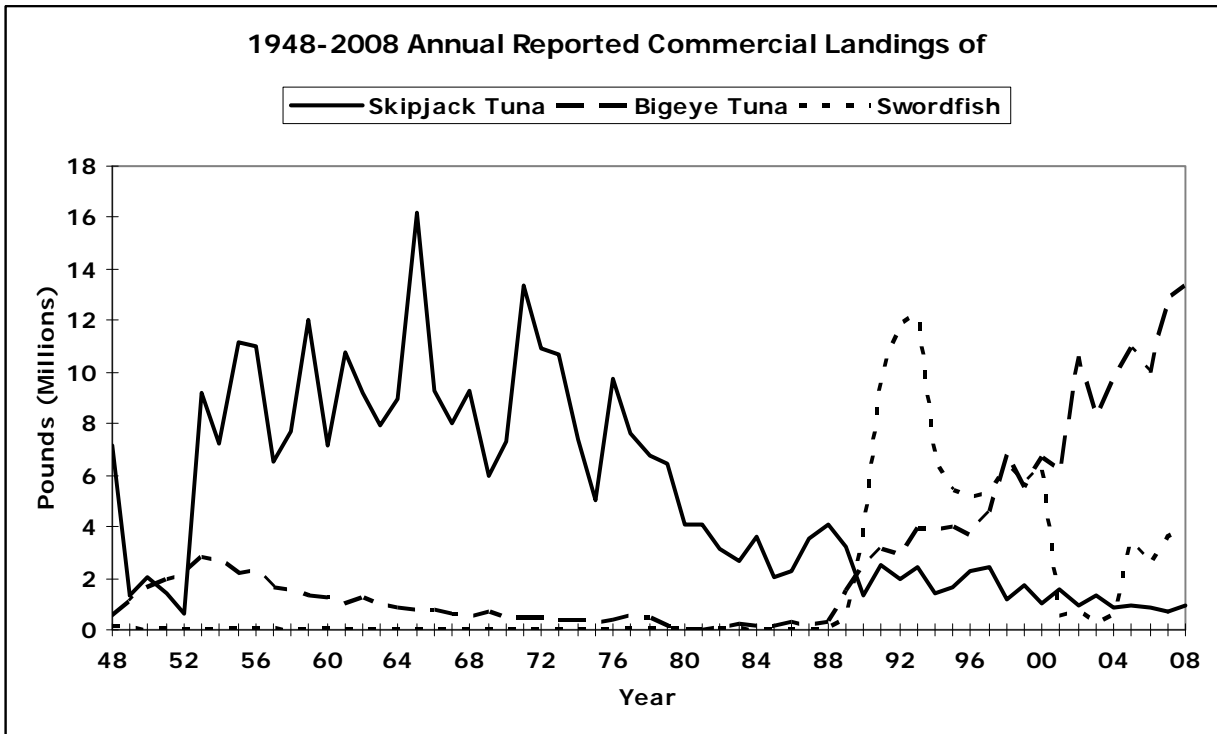


Figure D-3-4

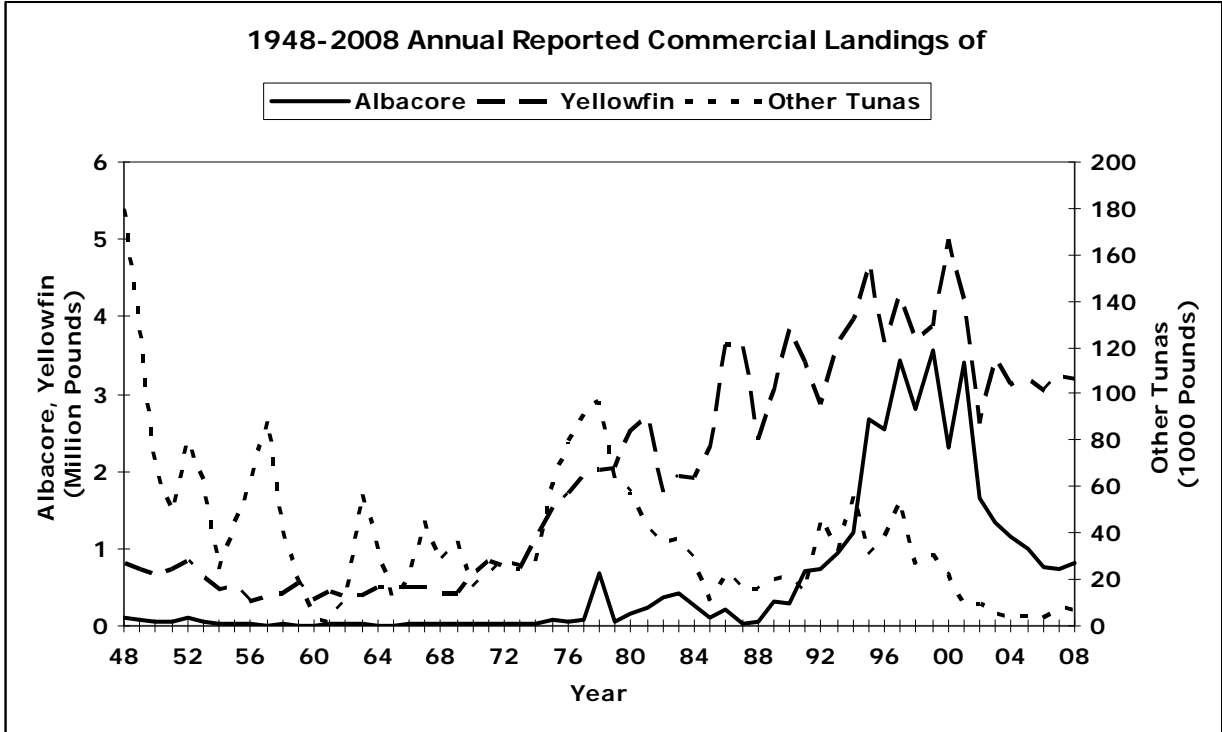


Figure D-3-5

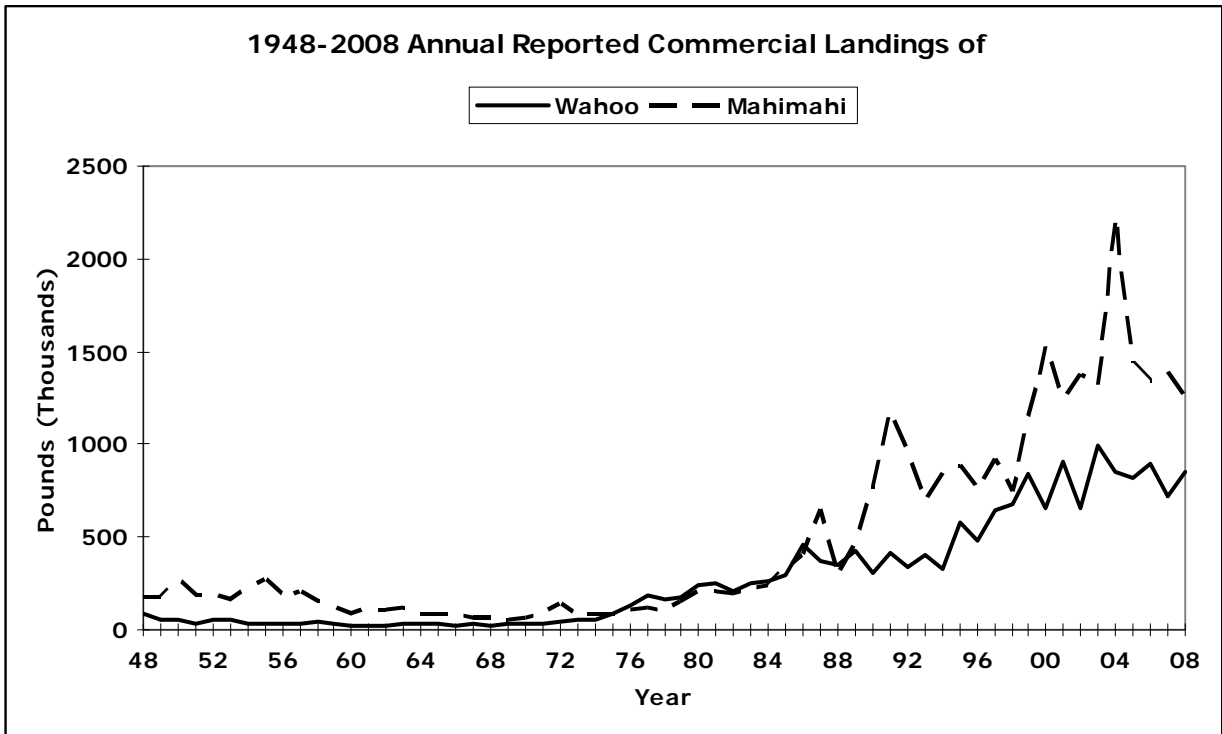


Figure D-3-6

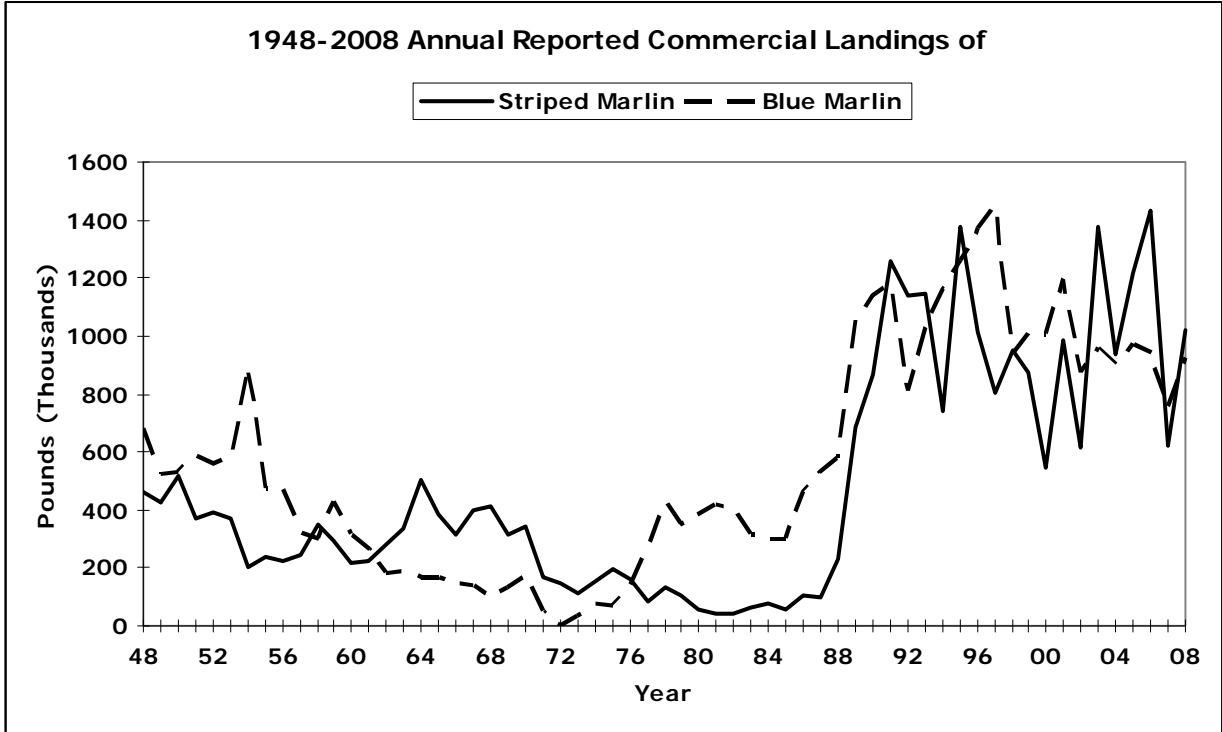


Figure D-3-7

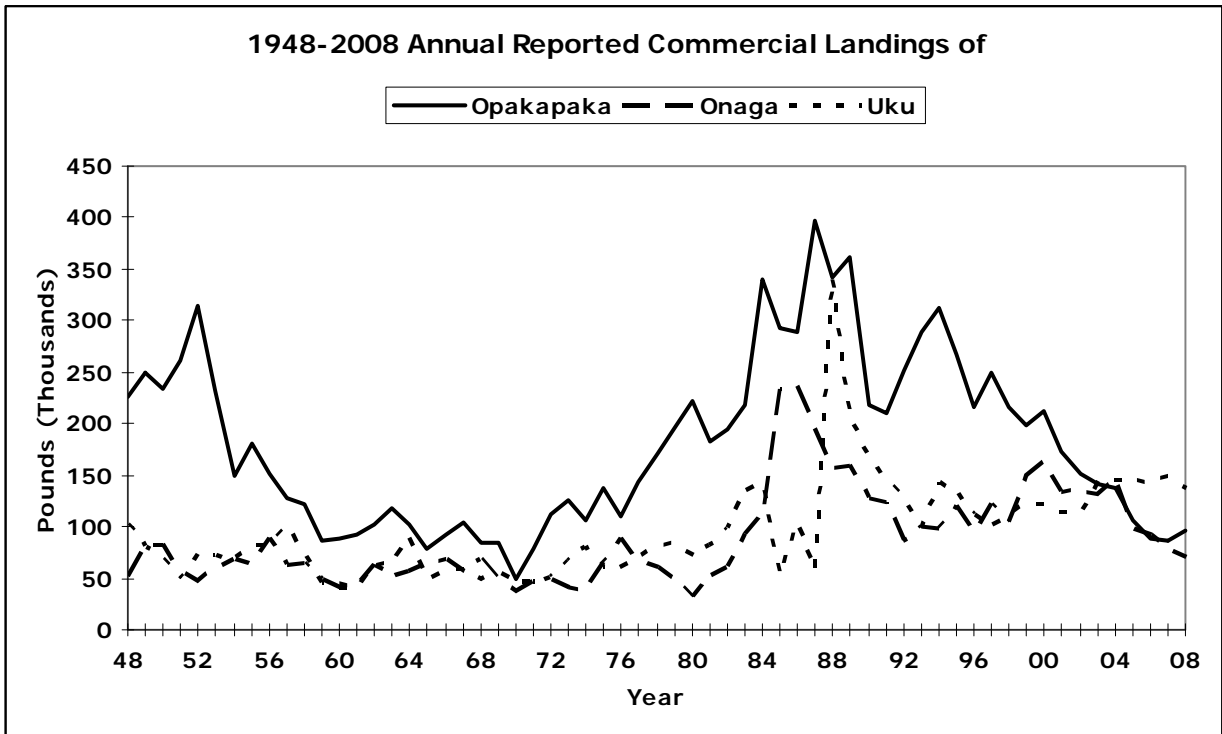


Figure D-3-8

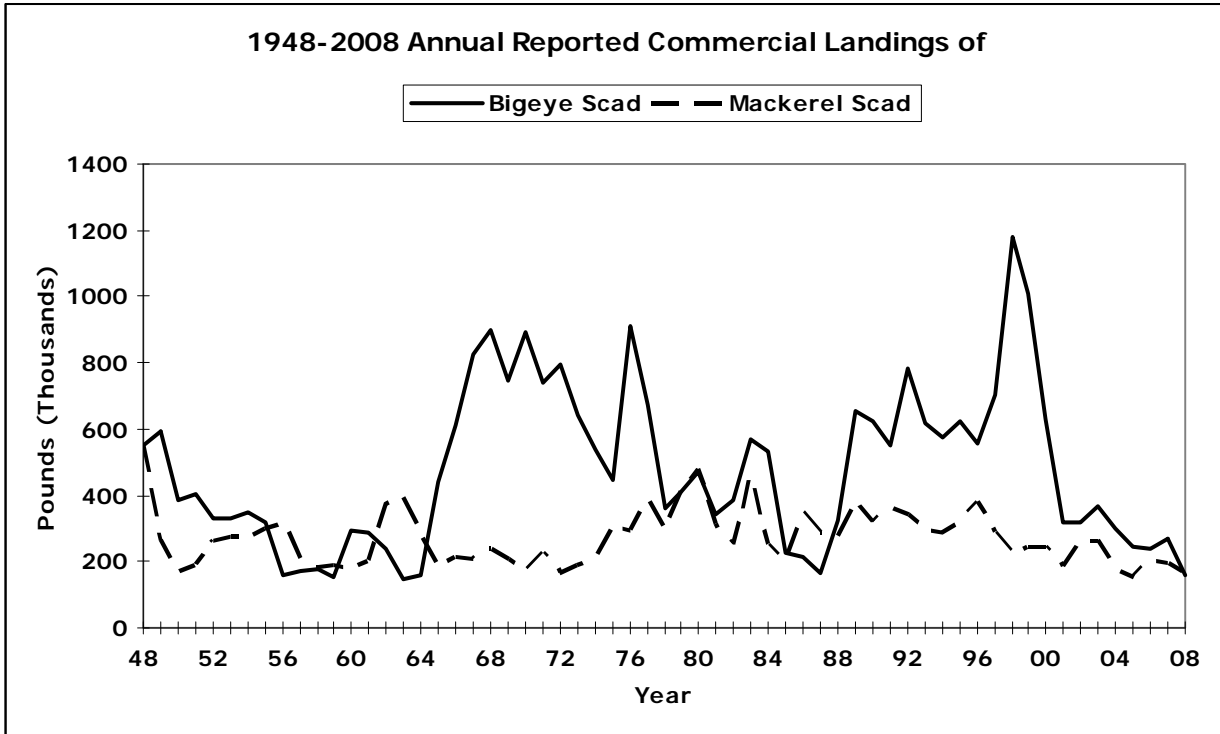


Figure D-3-9

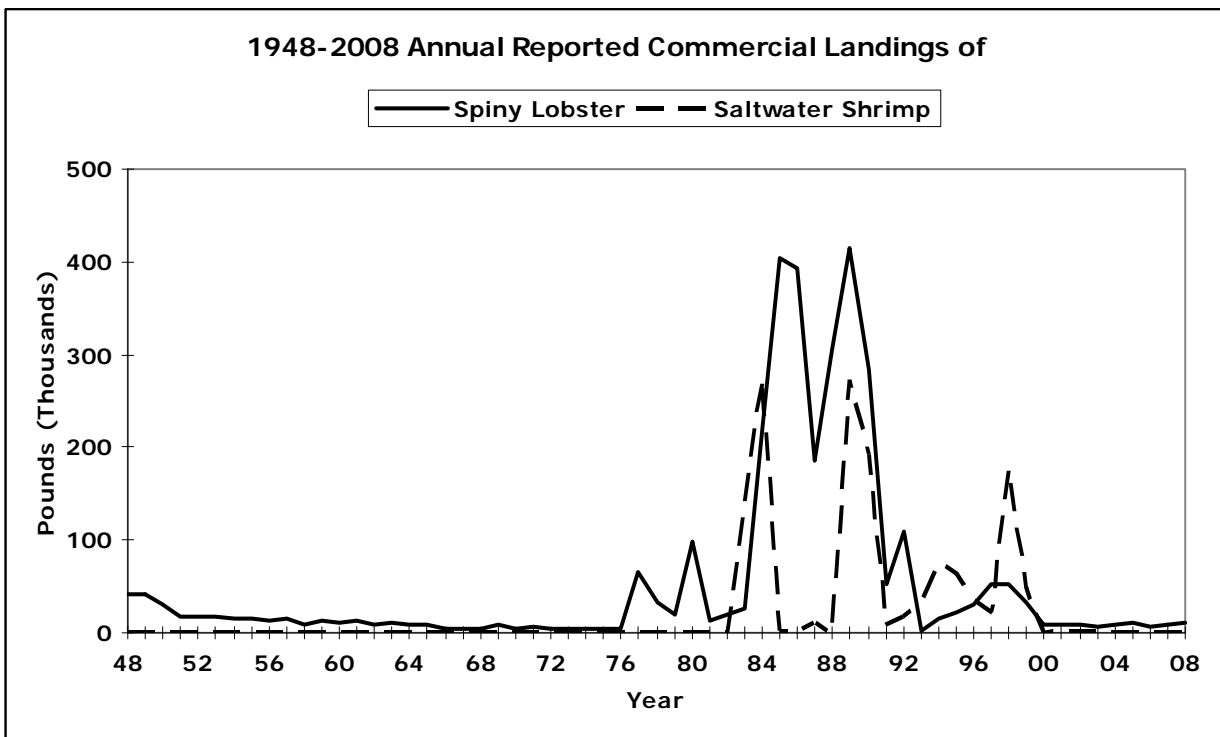


Figure D-3-10

The following graphs plot monthly landings of some commercially important species and document monthly fluctuations over the time series:

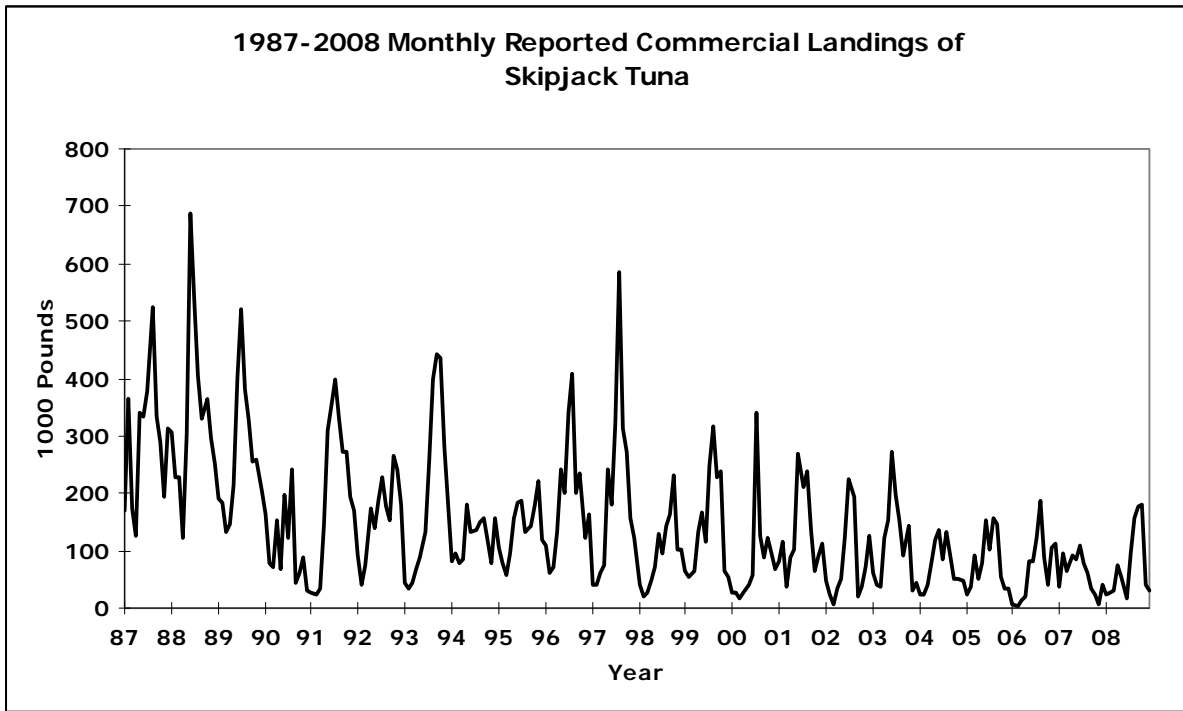


Figure D-4-1

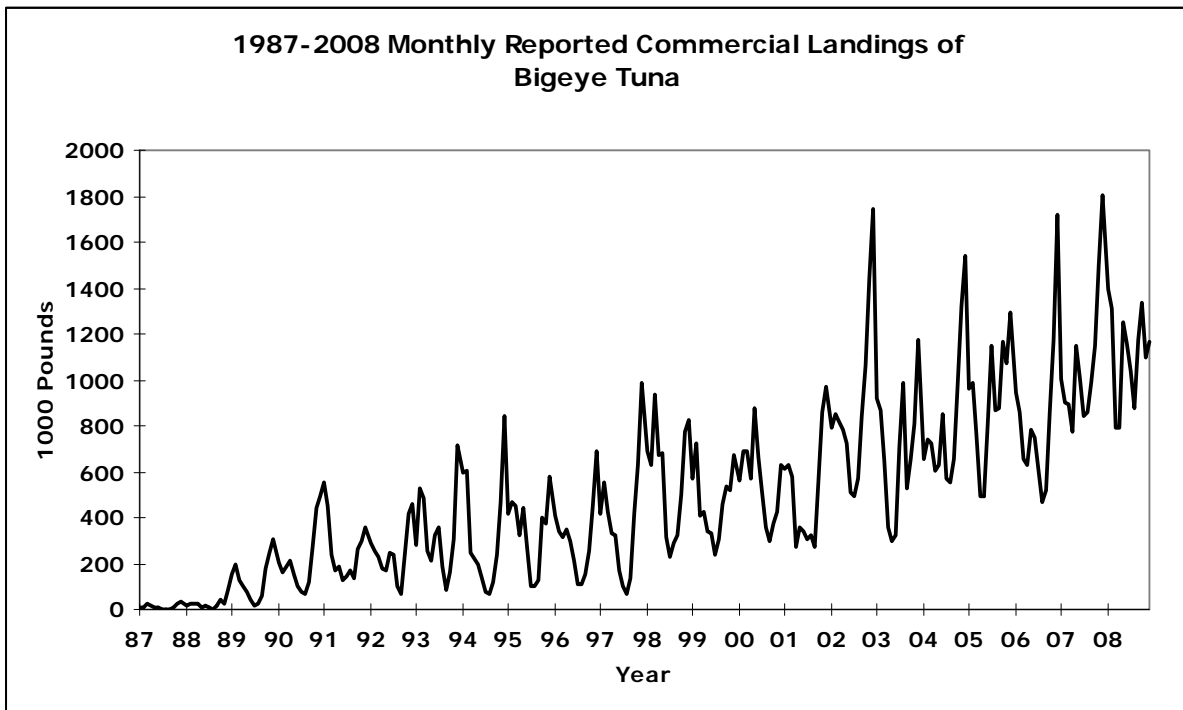


Figure D-4-2

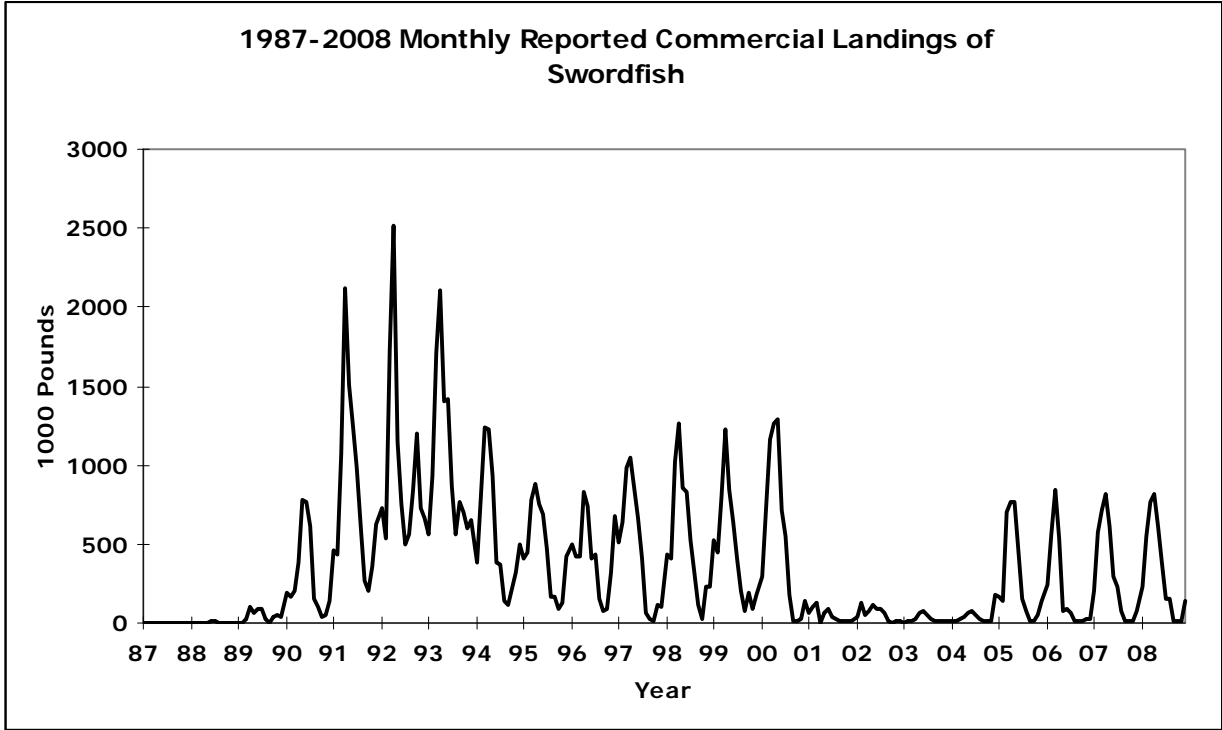


Figure D-4-3

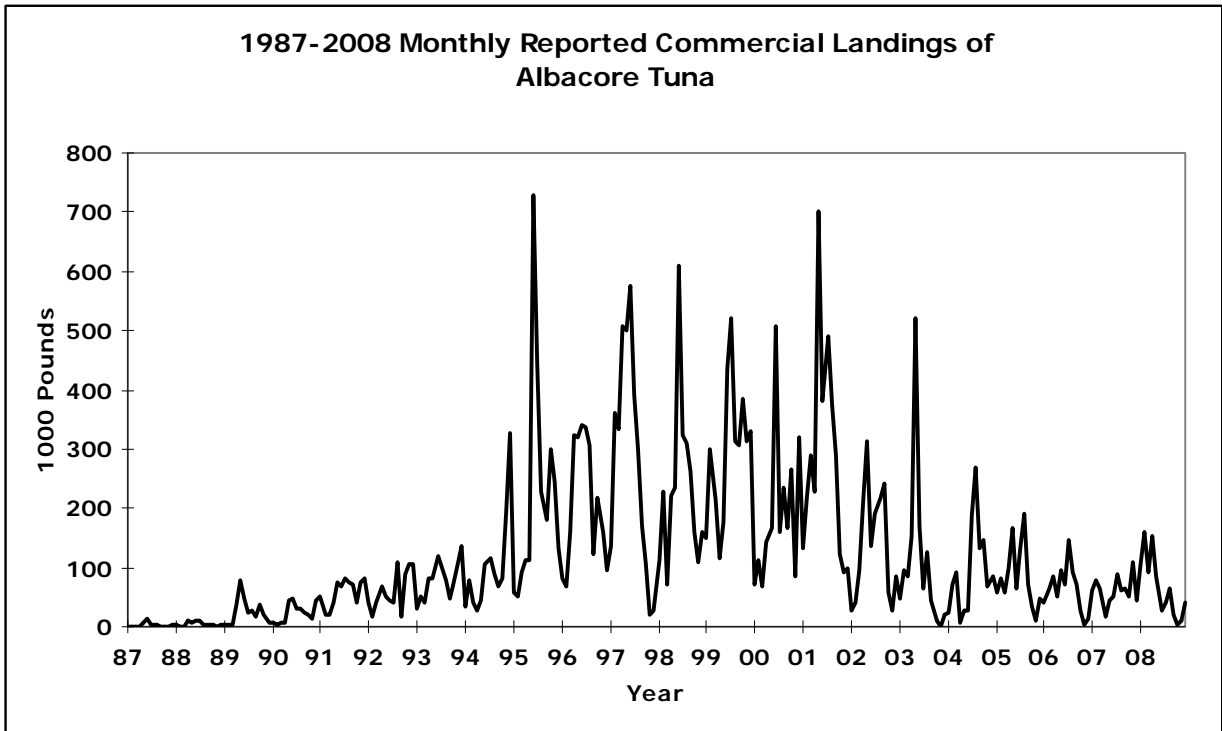


Figure D-4-4

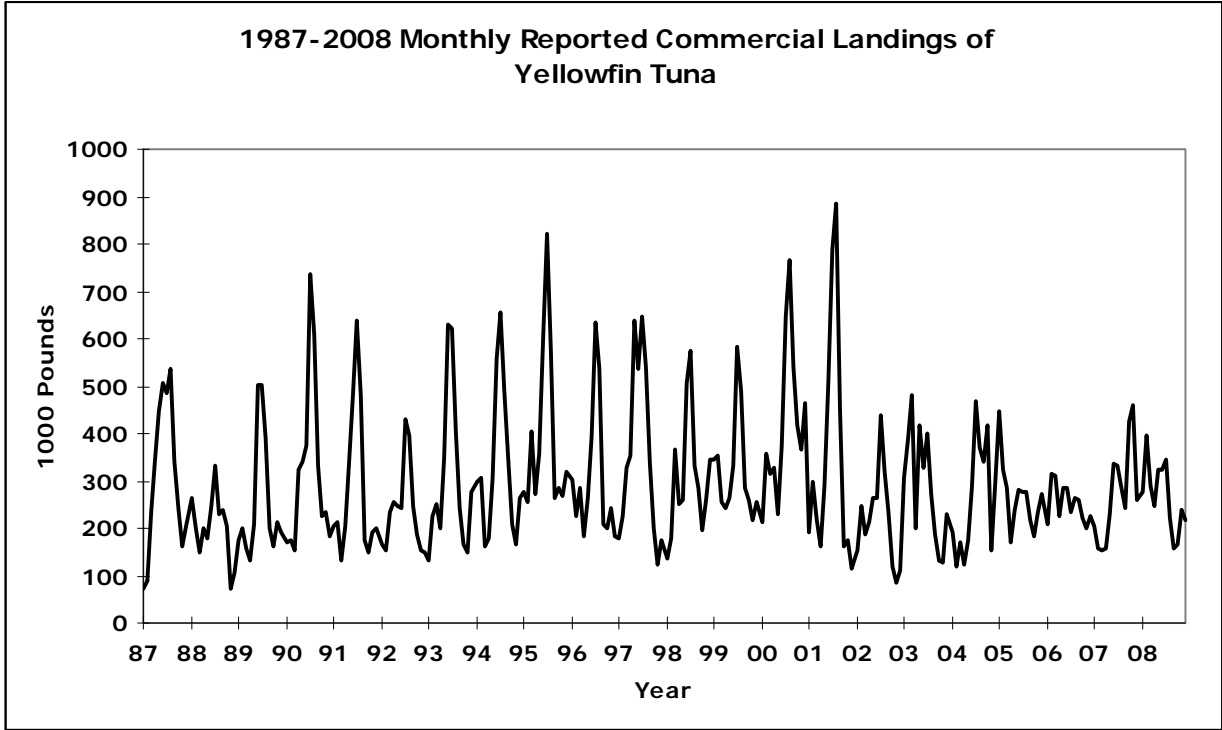


Figure D-4-5

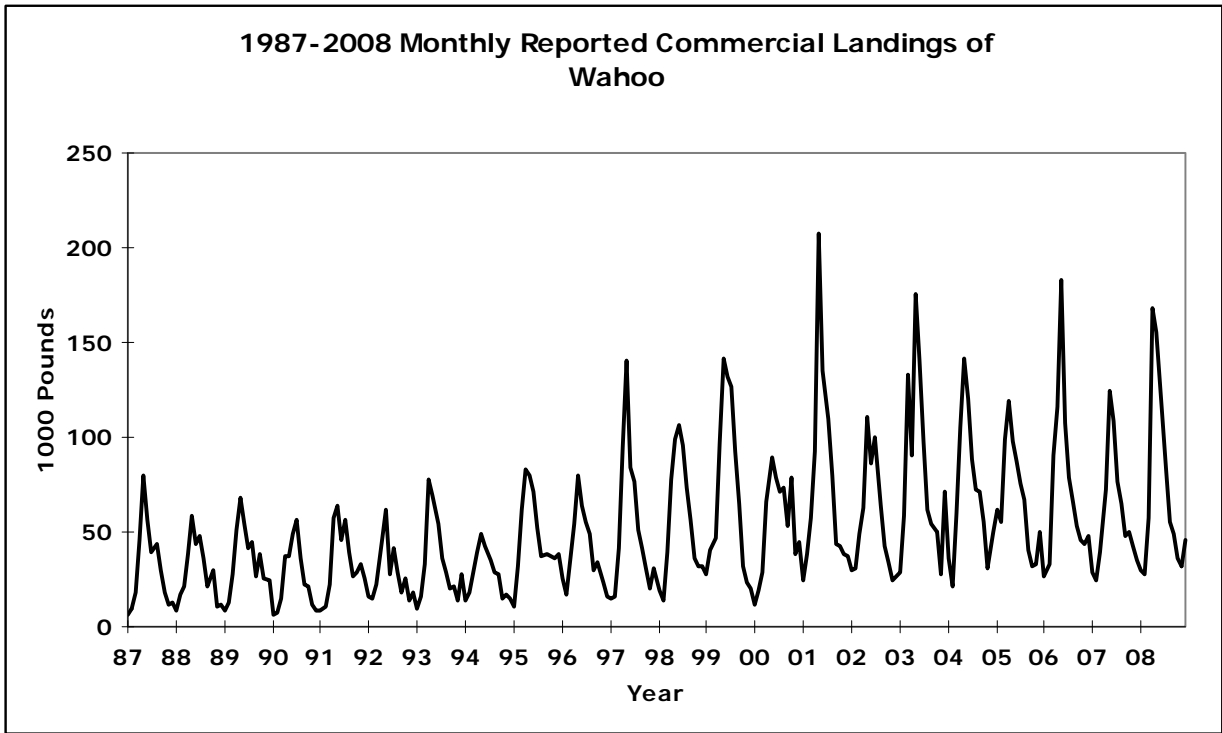


Figure D-4-6

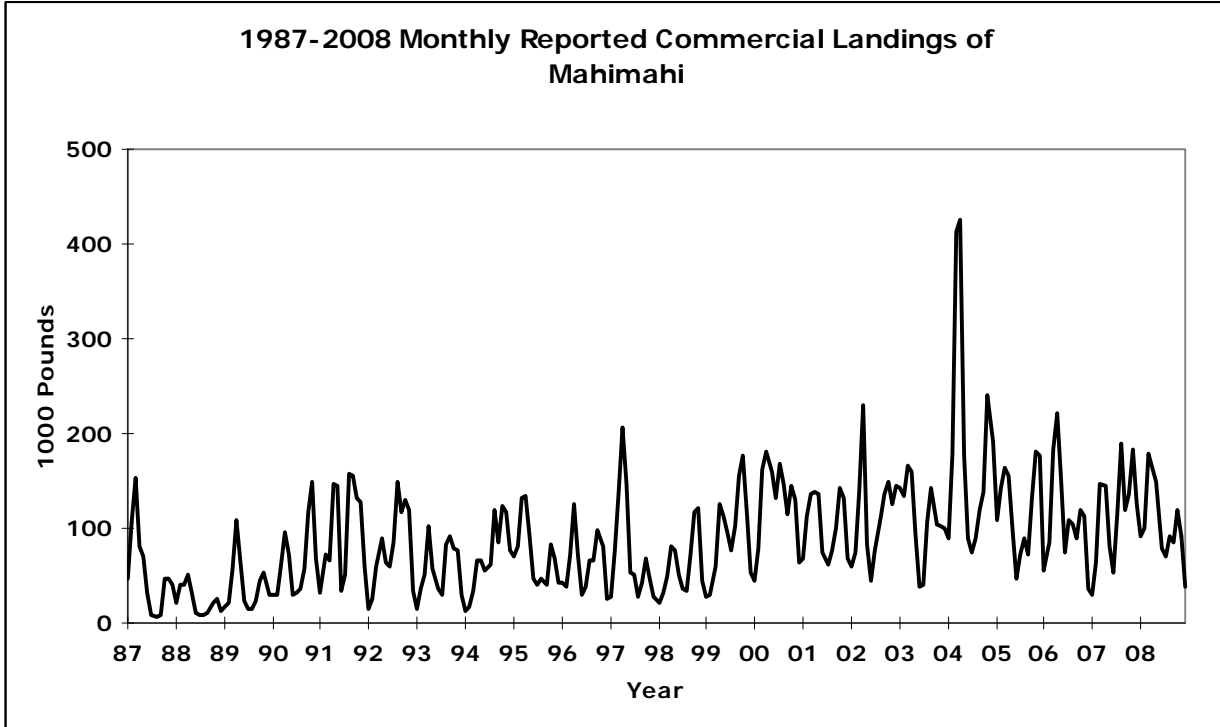


Figure D-4-7

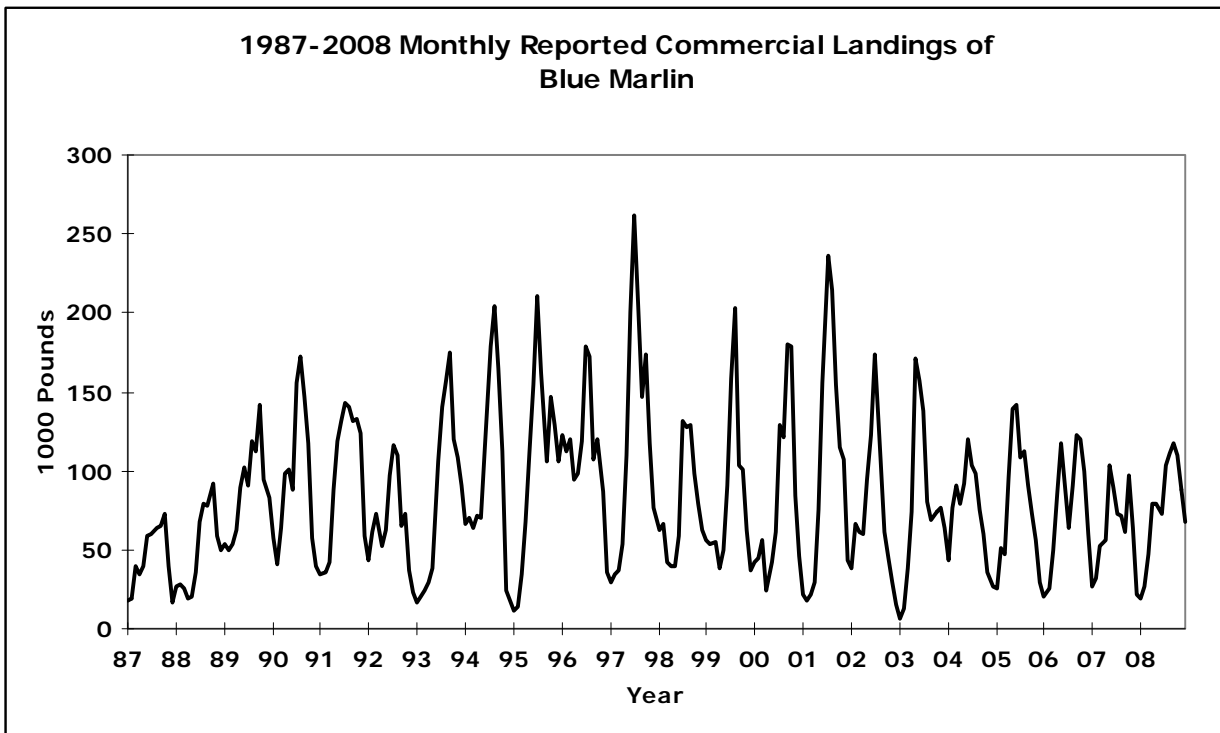


Figure D-4-8

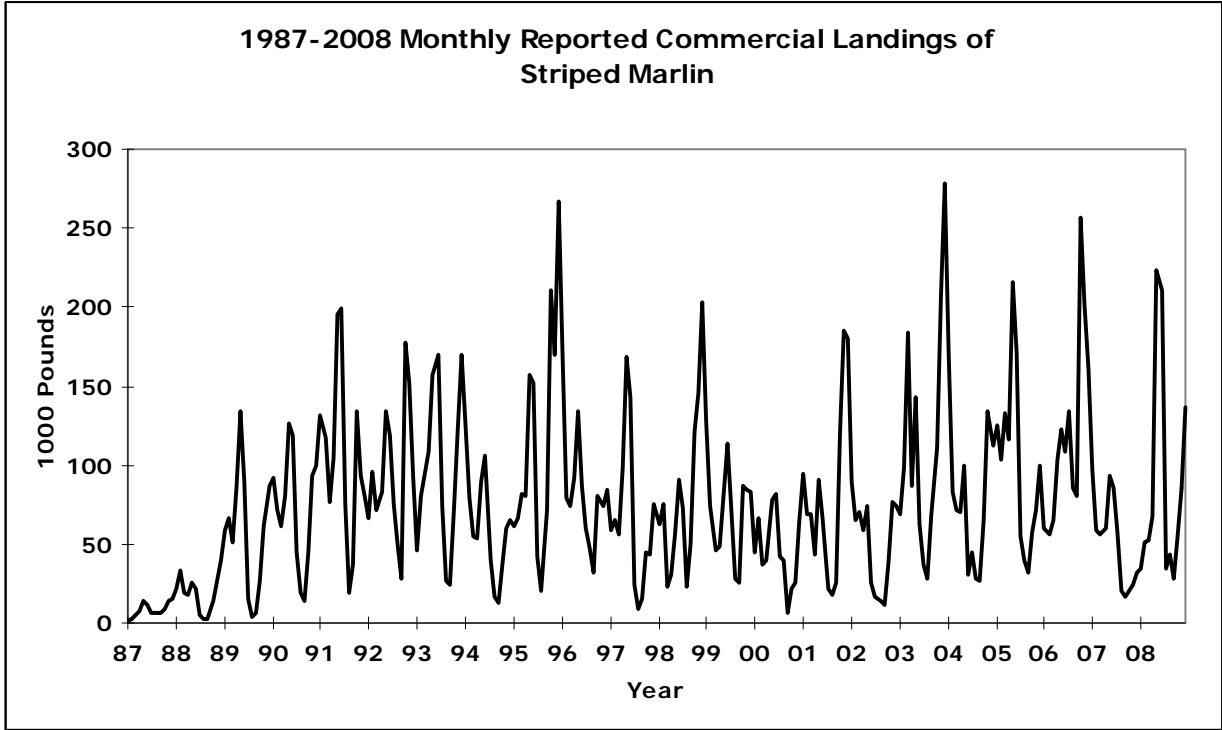


Figure D-4-9

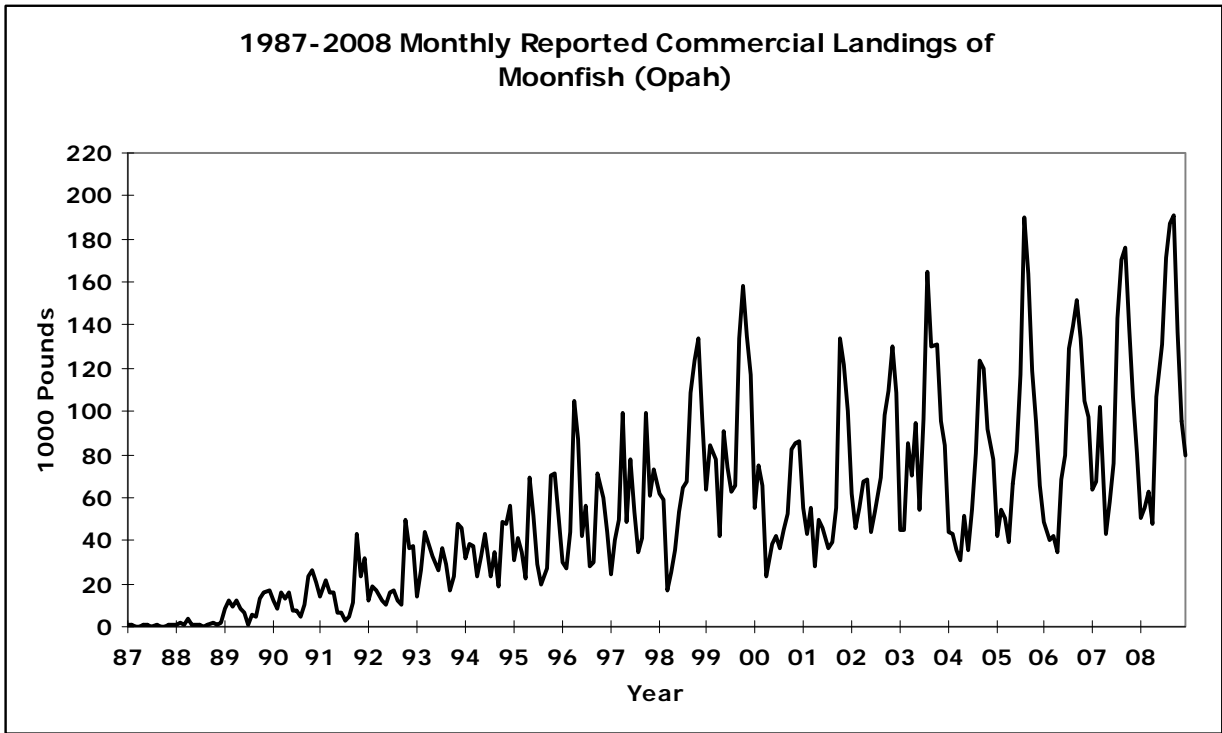


Figure D-4-10

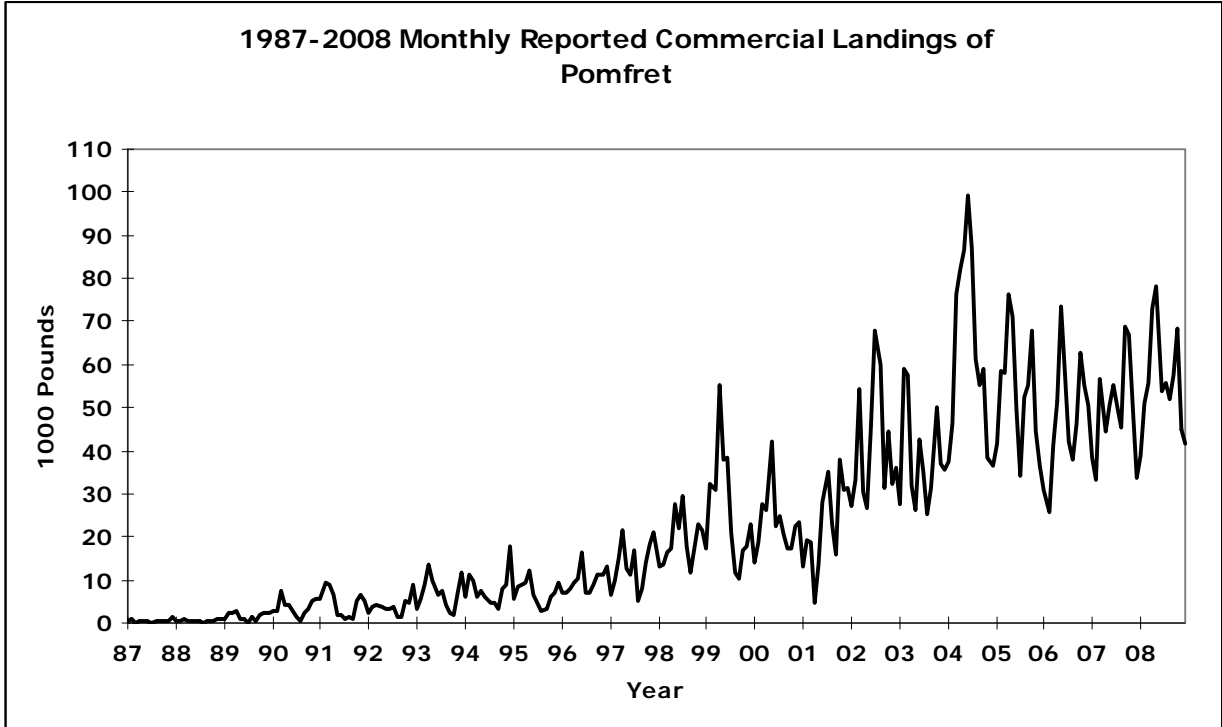


Figure D-4-11

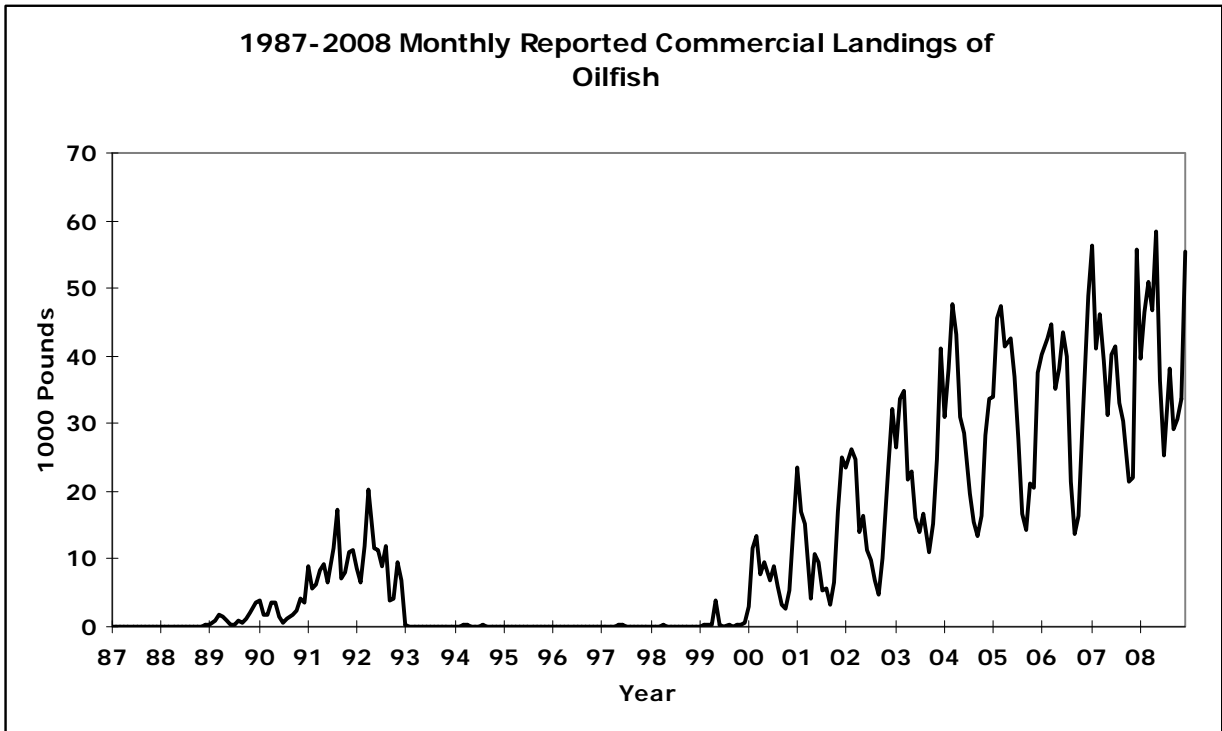


Figure D-4-12

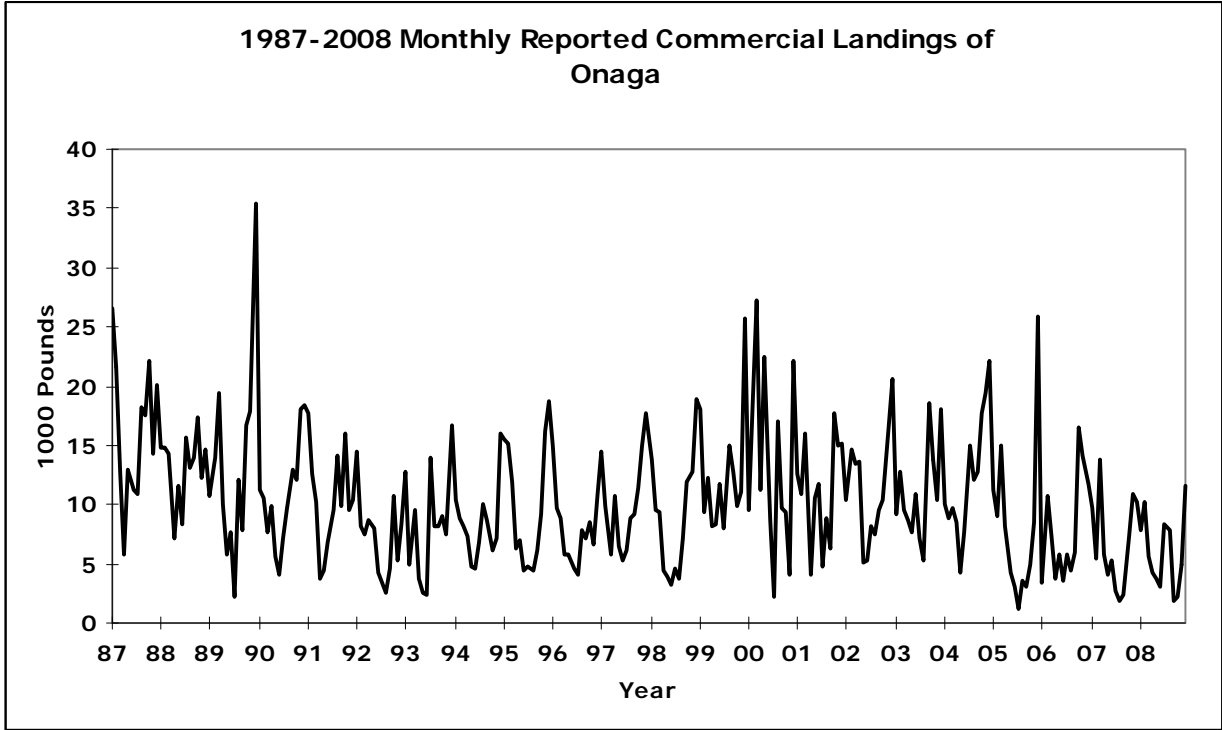


Figure D-4-13

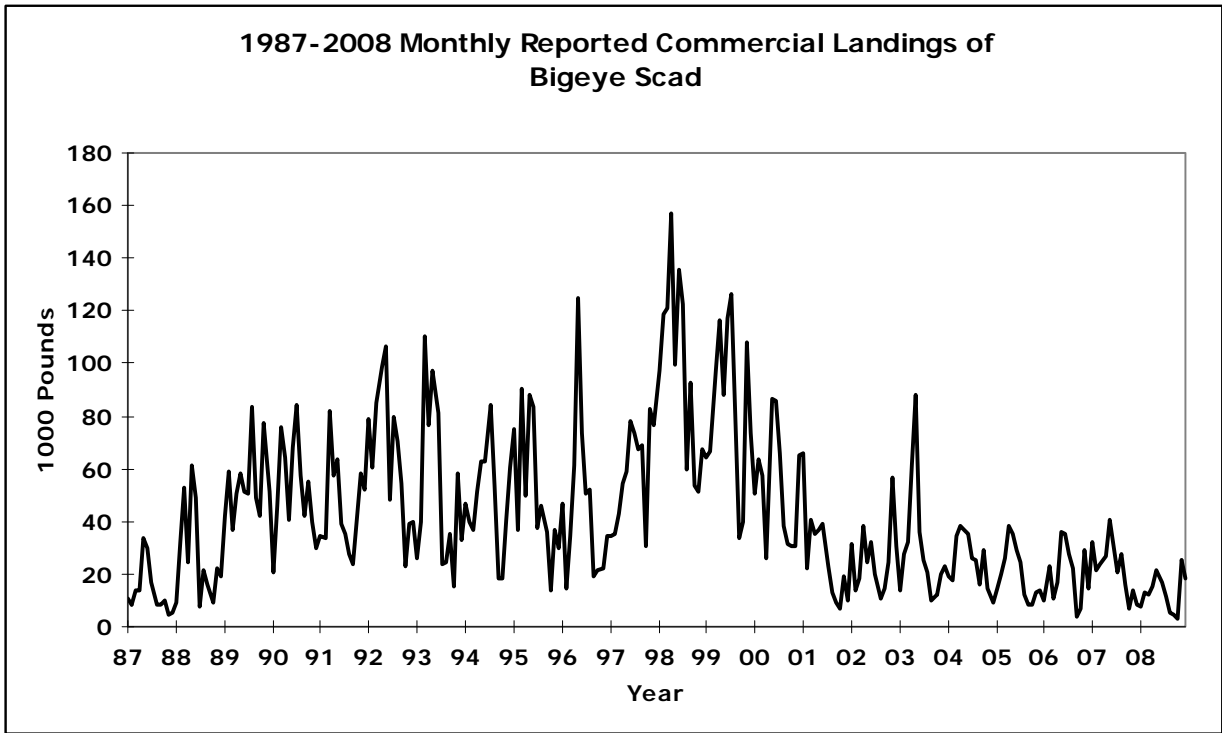


Figure D-4-14