

**NORTHERN MARIANA ISLANDS
2008 FISHERY STATISTICS**

Compiled by
Division of Fish and Wildlife
and the
Western Pacific Fisheries Information Network

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COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS 2008 FISHERY STATISTICS

INTRODUCTION

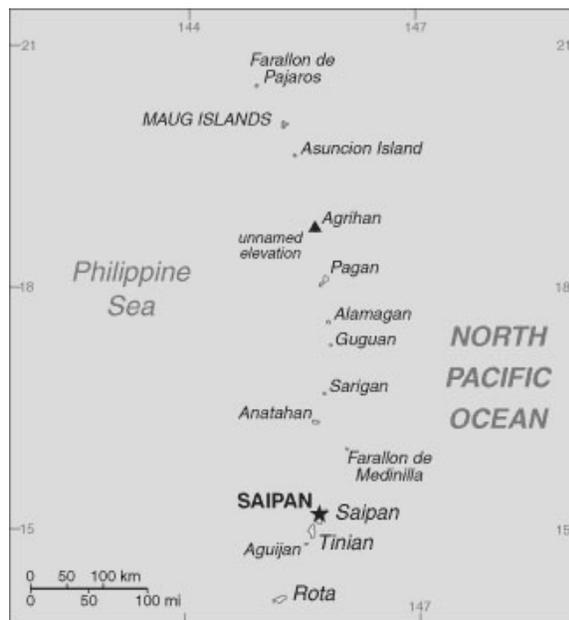
Location: 14° to 21°N latitude, 145°E longitude

Main Islands: Saipan, Rota, Tinian

Population: about 51,484 (*The World Factbook*, July 2009 est.)

Economy: tourism, agriculture, garment production

The chief domestic commercial fishery of the Commonwealth of the Northern Mariana Islands (CNMI) is a small boat, 1-day troll fishery, and most of the boats are 12- to 24-foot outboard-powered, runabout-type vessels. However, a few larger boats are used mainly for bottomfishing around the islands north of Saipan, and a small charter fleet also exists.



CNMI

Source: <https://www.cia.gov/library/publications/the-world-factbook/maps/cq-map.gif>;

The World Factbook

Trolling is the most common fishing method, but bottomfishing and reef fishing are also popular. Reef fishes make up a significant portion of the total commercial catch and are an important component of the local diet. In recent years, several larger boats started fishing more intensively for bottomfishes around the islands north of Saipan. While the vast majority of the domestic catch is consumed locally, there have been some intermittent exports to Guam, Hawaii, and Japan.

In 1982 WPacFIN significantly improved data collecting and processing systems by providing computer hardware, software, and training. Since then numerous system upgrades and replacements have been implemented to keep up with changing technologies and the increasing demands for improved fisheries statistics.

DATA COLLECTING

The Division of Fish and Wildlife (DFW) has been collecting fishery statistics about the commercial fishing fleet of Saipan since the mid-1970s. With the assistance of the NMFS WPacFIN program, DFW also expanded its fisheries monitoring programs to include Rota and Tinian, the other two major inhabited islands in the CNMI.

DFW's principal method of collecting domestic commercial fisheries data is a dealer invoicing system, sometimes referred to as a trip ticket system. The DFW provides numbered two-part invoices to all purchasers of fresh fishery products (including hotels, restaurants, stores, fish markets, and roadside vendors). Dealers then complete an invoice each time they purchase fish directly from fishers; one copy goes to DFW and one copy goes to their records.

Some advantages of this data collection method are that it is relatively inexpensive to implement and maintain and is fairly easy to completely cover the commercial fisheries. DFW can also provide feedback to dealers and fishers to ensure data accuracy and continued cooperation.

There are some disadvantages: (1) dependency on non-DFW personnel to identify the catch and record the data; (2) restrictions on the types of data that can be collected; (3) required education and cooperation of all fish purchasers; and (4) limited recordings of fish actually sold to dealers. Therefore, a potentially important portion of the total landings is unrecorded.

Since 1982 DFW has tried to minimize these disadvantages in several ways: (1) maintain a close working relationship with dealers; (2) add new dealers to their list and educate them; and (3) implement a creel survey to help estimate total catch, including recreational and subsistence catch.

The current system collects data from dealers in Saipan, where DFW estimates more than 90% of all CNMI commercial landings are made. The DFW also estimates that the proportion of total commercial landings that have been recorded in the Saipan database since 1983 is about 90%. Previous volumes of FSWP reported only recorded landings, but in recent volumes the data have been adjusted to represent 100% coverage and are referenced as "Estimated Commercial Landings" in the tables and charts.

Information collected from the fishers includes the following:

- Date
- Buyer's Name (dealer)
- Seller's Name (fisherman)
- Species
- Weight (pounds)
- Price per Pound
- Value
- Invoice Number

These data elements are collected for all purchases of fishery products; however, species identification is frequently made only to a group level, especially for reef fish.

DATA PROCESSING

At the beginning of each month, a DFW employee visits each of the dealers on Saipan to collect the previous month's invoices, to resolve problems, and to answer any questions the dealers may have. The invoices are then returned to the office for an initial visual edit during the coding process and entered into the Commercial Purchase System database. After the records are entered, reports are generated to help verify that all the data were entered correctly. On a quarterly basis, copies of the database are sent to the Pacific Islands Fisheries Science Center, where the data are transferred to the central computer for additional verification before generating summary reports. These reports and databases are then ready for use by qualified WPacFIN participants.

DATA REPORTING

After all editing, adjustment, and quality control activities have been completed, monthly and annual summary reports by species are generated. Each monthly report contains a subtotal for the sum of all species for that month. Annual reports contain the total landings for each species and the total recorded landings for all species for the calendar year.

Please note that commercial landings data have been adjusted to reflect total coverage and are referenced as "Estimated Commercial Landings" in the charts and tables. Also, some of the charts in this volume are new or modified from earlier volumes. To access the most up-to-date data and charts, please visit the WPacFIN website, <http://www.pifsc.noaa.gov/wpacfin>.

SPECIES CATEGORIES

The species and species groups that are used in the tables and graphs of CNMI's data 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)

Blue marlin	Sharks
Mahimahi	Spearfish
Sailfish	Wahoo

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II. Bottomfish Management Unit Species (BMUS)

Alfonso	Jobfish (uku)
Amberjack	Kalikali (yellowtail)
Black jack	Lyretail grouper
Blacktip grouper	Onaga (red snapper)
Blue lined snapper	Opakapaka (pink snapper)
Ehu (red snapper)	Redgill emperor
Giant trevally	Silvermouth (deep lehi)
Gindai (flower snapper)	Yelloweye opakapaka

III. Billfishes

Blue marlin	Spearfish
Sailfish	

IV. Tunas

Dogtooth tuna	Tunas (unknown)
Kawakawa (saba)	Yellowfin tuna
Skipjack tuna	

V. Other Tunas

Dogtooth tuna	Tunas (unknown)
Kawakawa (saba)	

VI. Fisheries Categories

A. *Pelagic Fishes*

Barracudas	Sailfish
Blue marlin	Sharks
Dogtooth tuna	Skipjack tuna
Kawakawa (saba)	Spearfish
Mahimahi	Tunas (unknown)
Pelagic fishes (unknown)	Wahoo
Rainbow runner	Yellowfin tuna

B. *Bottomfishes*

Alfonsin	Kalikali (yellowtail)
Amberjack	Longnose emperor
Bigeye emperor	Lyretail grouper
Bigeye trevally	Marbled grouper
Black jack	Onaga (red snapper)
Blackspot emperor	Onespot snapper
Blacktip grouper	Opakapaka (pink snapper)
Blue lined gindai	Orange spotted trevally
Blue lined snapper	Orangefin emperor
Bluefin trevally	Peacock grouper
Bottomfishes (unknown)	Pink grouper
Brassy trevally	Red snapper
Ehu (red snapper)	Redgill emperor
Eight banded grouper	Saddleback grouper
Emperors	Sickle pomfret
Flagtail grouper	Silvermouth (deep lehi)
Flametail emperor	Smalltooth jobfish
Giant coral trout	Stout emperor
Giant trevally	Tomato grouper
Gindai (flower snapper)	White lyretail grouper
Groupers	Yellow banded grouper
Highfin grouper	Yellow spotted trevally
Honeycomb grouper	Yelloweye opakapaka
Humpback snapper	Yellowlips emperor
Jacks	Yellowstripe emperor
Jobfish (uku)	

C. *Reef Fishes*

Bigeye/glasseye	Reef fishes (unknown)
Bluebanded surgeonfish	Shallow snappers
Bluespine unicornfish	Soldierfishes
Butterflyfish	Squirrelfishes
Convict tang	Surgeonfishes
Dash & dot goatfish	Sweetlips
Fusiliers	Triggerfishes
Goatfishes	Tripletail wrasse
Highfin rudderfish brown	Two-barred goatfish
Highfin rudderfish silver	Unicornfishes
Humphead wrasse	Wrasses
Orangespine unicornfish	Yellowfin surgeonfish
Parrotfishes	Yellowstripe goatfish
Rabbitfishes	

D. *Other Fishes*

Bigeye scad	Octopus
Clams/bivalves	Sea cucumbers
Coconut crab	Seaweeds
Crabs	Shrimp (freshwater)
Eels (freshwater)	Shrimp (saltwater)
Invertebrates	Slipper lobster
Kona crab	Spiny lobster
Lemu	Squid
Milkfish	Trochus
Miscellaneous	Turtle
Mullet	

Table B-1
CNMI Annual 2008 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad	38,461	93,842	2.44
Jacks	1,785	4,389	2.46
Black jack	171	408	2.38
Giant trevally	24	48	2.00
Bottomfishes (unknown)	7,946	20,165	2.54
Sickle pomfret	1,572	3,798	2.42
Ehu (red snapper)	1,911	6,962	3.64
Gindai (flower snapper)	2,461	8,943	3.63
Groupers	2,932	9,549	3.26
Kalikali (yellowtail)	1,832	4,704	2.57
Onaga (red snapper)	2,620	12,016	4.59
Opakapaka (pink snapper)	4,013	10,858	2.71
Jobfish (uku)	2,743	5,548	2.02
Silvermouth (deep lehi)	640	1,799	2.81
Amberjack	548	1,362	2.48
Blue lined snapper	1,424	3,608	2.53
Red snapper	99	273	2.75
Reef fishes (unknown)	46,939	121,082	2.58
Wrasses	1,018	2,584	2.54
Rabbitfishes	2,976	8,934	3.00
Emperors	10,289	25,547	2.48
Parrotfishes	30,738	97,560	3.17
Surgeonfishes	1,440	2,977	2.07
Orangespine unicornfish	323	808	2.50
Unicornfishes	526	1,350	2.57
Goatfishes	205	513	2.50
Longnose emperor	15	37	2.50
Bigeye emperor	617	1,322	2.14
Pelagic fishes (unknown)	14	35	2.50
Barracudas	61	91	1.50
Mahimahi	13,187	24,249	1.84
Blue marlin	2,027	2,521	1.24
Rainbow runner	4,573	9,022	1.97
Wahoo	1,669	3,386	2.03
Tunas (unknown)	42	62	1.50
Skipjack tuna	170,059	267,665	1.57
Dogtooth tuna	3,487	5,471	1.57
Yellowfin tuna	18,695	36,760	1.97
Kawakawa (saba)	3,802	6,368	1.67
Spiny lobster	2,260	11,876	5.26
Slipper lobster	372	1,521	4.09
Octopus	1,908	3,809	2.00
TOTAL	388,426	823,821	2.12

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Table B-2
CNMI January 2008 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad	2,205	5,406	2.45
Jacks	31	77	2.50
Bottomfishes (unknown)	105	346	3.31
Ehu (red snapper)	75	243	3.22
Gindai (flower snapper)	25	76	3.10
Groupers	788	2,560	3.25
Onaga (red snapper)	82	326	4.00
Opakapaka (pink snapper)	164	412	2.51
Jobfish (uku)	170	260	1.53
Silvermouth (deep lehi)	17	51	3.00
Reef fishes (unknown)	4,722	12,101	2.56
Wrasses	113	241	2.13
Rabbitfishes	407	1,251	3.08
Emperors	535	1,393	2.61
Parrotfishes	1,840	5,900	3.21
Surgeonfishes	82	163	2.00
Longnose emperor	15	37	2.50
Mahimahi	1,825	3,413	1.87
Rainbow runner	114	216	1.90
Wahoo	31	62	2.00
Skipjack tuna	15,373	23,142	1.51
Dogtooth tuna	302	452	1.50
Yellowfin tuna	2,077	3,734	1.80
Spiny lobster	97	545	5.60
Octopus	123	251	2.04
TOTAL	31,314	62,657	2.00

Table B-3
CNMI February 2008 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad	1,309	3,335	2.55
Jacks	100	257	2.57
Bottomfishes (unknown)	369	923	2.50
Sickle pomfret	32	57	1.75
Ehu (red snapper)	46	173	3.75
Gindai (flower snapper)	140	502	3.59
Groupers	370	1,191	3.22
Kalikali (yellowtail)	22	59	2.75
Onaga (red snapper)	142	681	4.78
Opakapaka (pink snapper)	200	548	2.74
Jobfish (uku)	885	1,772	2.00
Silvermouth (deep lehi)	20	60	3.00
Amberjack	31	85	2.75
Reef fishes (unknown)	5,804	14,910	2.57
Wrasses	244	569	2.34
Rabbitfishes	338	1,021	3.03
Emperors	1,561	3,992	2.56
Parrotfishes	2,374	7,553	3.18
Surgeonfishes	116	232	2.00
Mahimahi	2,262	4,037	1.79
Rainbow runner	218	397	1.82
Wahoo	105	209	2.00
Tunas (unknown)	42	62	1.50
Skipjack tuna	13,917	22,435	1.61
Dogtooth tuna	454	689	1.52
Yellowfin tuna	1,618	3,176	1.96
Kawakawa (saba)	62	125	2.00
Spiny lobster	44	228	5.17
Octopus	106	214	2.01
TOTAL	32,930	69,495	2.11

Table B-4
CNMI March 2008 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad	403	1,102	2.73
Jacks	20	50	2.50
Black jack	40	80	2.00
Bottomfishes (unknown)	1,723	4,342	2.52
Sickle pomfret	48	96	2.02
Ehu (red snapper)	162	609	3.75
Gindai (flower snapper)	265	974	3.67
Groupers	295	1,319	4.48
Kalikali (yellowtail)	281	702	2.50
Onaga (red snapper)	232	1,108	4.77
Opakapaka (pink snapper)	568	1,538	2.71
Jobfish (uku)	8	15	2.00
Silvermouth (deep lehi)	43	151	3.50
Blue lined snapper	46	115	2.50
Reef fishes (unknown)	5,941	15,299	2.58
Wrasses	31	85	2.75
Rabbitfishes	318	968	3.04
Emperors	805	2,055	2.55
Parrotfishes	1,792	5,723	3.19
Surgeonfishes	34	86	2.50
Unicornfishes	140	379	2.71
Mahimahi	3,476	6,958	2.00
Rainbow runner	239	463	1.94
Wahoo	35	71	2.00
Skipjack tuna	10,861	16,990	1.56
Dogtooth tuna	242	432	1.78
Yellowfin tuna	485	1,029	2.12
Spiny lobster	1	3	4.00
Slipper lobster	4	19	5.00
Octopus	172	343	2.00
TOTAL	28,712	63,104	2.20

Table B-5
CNMI April 2008 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad	271	741	2.73
Jacks	29	73	2.50
Bottomfishes (unknown)	459	1,178	2.56
Sickle pomfret	107	234	2.19
Ehu (red snapper)	294	1,068	3.64
Gindai (flower snapper)	245	907	3.70
Groupers	417	1,411	3.38
Kalikali (yellowtail)	47	117	2.50
Onaga (red snapper)	277	1,131	4.08
Opakapaka (pink snapper)	528	1,455	2.75
Jobfish (uku)	39	85	2.18
Silvermouth (deep lehi)	70	198	2.82
Amberjack	45	103	2.32
Reef fishes (unknown)	4,503	11,442	2.54
Wrasses	138	407	2.94
Rabbitfishes	473	1,314	2.78
Emperors	255	637	2.50
Parrotfishes	2,435	7,610	3.12
Surgeonfishes	184	437	2.37
Orangespine unicornfish	58	146	2.50
Unicornfishes	146	365	2.50
Goatfishes	29	73	2.50
Mahimahi	1,118	1,736	1.55
Rainbow runner	36	72	2.00
Wahoo	27	55	2.00
Skipjack tuna	16,161	18,845	1.17
Dogtooth tuna	530	736	1.39
Yellowfin tuna	745	1,454	1.95
Spiny lobster	93	467	5.05
Slipper lobster	14	69	5.00
Octopus	108	218	2.01
TOTAL	29,884	54,786	1.83

Table B-6
CNMI May 2008 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad	1,965	5,561	2.83
Jacks	275	629	2.29
Bottomfishes (unknown)	863	2,167	2.51
Sickle pomfret	415	1,024	2.47
Ehu (red snapper)	88	325	3.71
Gindai (flower snapper)	208	759	3.65
Groupers	117	316	2.69
Kalikali (yellowtail)	62	167	2.68
Onaga (red snapper)	308	1,397	4.53
Opakapaka (pink snapper)	205	555	2.71
Jobfish (uku)	486	978	2.01
Silvermouth (deep lehi)	118	307	2.59
Amberjack	75	188	2.50
Blue lined snapper	183	458	2.50
Reef fishes (unknown)	4,662	12,104	2.60
Wrasses	65	172	2.64
Rabbitfishes	392	1,155	2.95
Emperors	1,330	2,939	2.21
Parrotfishes	2,855	9,134	3.20
Surgeonfishes	26	52	2.00
Mahimahi	58	117	2.00
Blue marlin	231	231	1.00
Rainbow runner	442	829	1.88
Skipjack tuna	15,442	18,735	1.21
Dogtooth tuna	645	958	1.49
Yellowfin tuna	1,236	2,404	1.94
Spiny lobster	200	1,042	5.22
Octopus	90	180	2.00
TOTAL	33,043	64,882	1.96

Table B-7
CNMI June 2008 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad	5,299	14,339	2.71
Jacks	14	34	2.50
Black jack	9	23	2.50
Bottomfishes (unknown)	214	500	2.33
Sickle pomfret	163	408	2.50
Ehu (red snapper)	28	98	3.43
Gindai (flower snapper)	98	345	3.50
Groupers	152	571	3.76
Kalikali (yellowtail)	201	524	2.61
Onaga (red snapper)	38	192	5.00
Opakapaka (pink snapper)	26	65	2.50
Jobfish (uku)	173	347	2.00
Silvermouth (deep lehi)	8	23	3.00
Blue lined snapper	31	78	2.50
Red snapper	40	110	2.75
Reef fishes (unknown)	3,853	9,872	2.56
Wrasses	50	163	3.25
Rabbitfishes	240	745	3.10
Emperors	685	1,727	2.52
Parrotfishes	2,206	6,996	3.17
Surgeonfishes	226	452	2.00
Bigeye emperor	117	292	2.50
Mahimahi	235	353	1.50
Rainbow runner	518	1,034	2.00
Wahoo	97	194	2.00
Skipjack tuna	13,322	22,491	1.69
Dogtooth tuna	321	506	1.58
Yellowfin tuna	586	1,152	1.96
Spiny lobster	278	1,482	5.32
Slipper lobster	198	992	5.00
Octopus	92	185	2.00
TOTAL	29,523	66,293	2.25

Table B-8
CNMI July 2008 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad	5,244	12,638	2.41
Jacks	369	984	2.67
Bottomfishes (unknown)	1,032	2,618	2.54
Sickle pomfret	380	941	2.48
Ehu (red snapper)	130	467	3.59
Gindai (flower snapper)	422	1,555	3.69
Groupers	52	157	3.00
Kalikali (yellowtail)	202	509	2.52
Onaga (red snapper)	82	368	4.50
Opakapaka (pink snapper)	212	578	2.72
Jobfish (uku)	87	187	2.15
Silvermouth (deep lehi)	154	440	2.85
Amberjack	20	55	2.75
Blue lined snapper	144	360	2.50
Reef fishes (unknown)	3,302	8,458	2.56
Wrasses	235	620	2.64
Rabbitfishes	96	302	3.13
Emperors	893	2,233	2.50
Parrotfishes	2,226	6,988	3.14
Surgeonfishes	90	179	2.00
Bigeye emperor	59	148	2.50
Mahimahi	27	54	2.00
Blue marlin	342	512	1.50
Rainbow runner	141	282	2.00
Skipjack tuna	11,562	19,170	1.66
Dogtooth tuna	285	468	1.64
Yellowfin tuna	1,090	2,192	2.01
Spiny lobster	589	3,038	5.16
Octopus	314	628	2.00
TOTAL	29,780	67,127	2.25

Table B-9
CNMI August 2008 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad	5,952	14,647	2.46
Jacks	203	514	2.53
Black jack	99	247	2.50
Bottomfishes (unknown)	453	1,139	2.52
Sickle pomfret	162	365	2.25
Ehu (red snapper)	485	1,790	3.69
Gindai (flower snapper)	509	1,866	3.67
Groupers	577	1,558	2.70
Kalikali (yellowtail)	493	1,298	2.63
Onaga (red snapper)	372	1,662	4.47
Opakapaka (pink snapper)	500	1,371	2.74
Jobfish (uku)	246	500	2.03
Silvermouth (deep lehi)	118	324	2.75
Amberjack	177	428	2.42
Blue lined snapper	318	796	2.50
Red snapper	52	144	2.75
Reef fishes (unknown)	2,952	7,621	2.58
Wrasses	28	83	3.00
Rabbitfishes	165	494	2.99
Emperors	1,038	2,615	2.52
Parrotfishes	3,585	11,197	3.12
Surgeonfishes	78	160	2.05
Orangespine unicornfish	8	21	2.50
Unicornfishes	92	229	2.50
Goatfishes	20	50	2.50
Bigeye emperor	227	454	2.00
Barracudas	7	10	1.50
Mahimahi	697	1,085	1.56
Blue marlin	506	583	1.15
Rainbow runner	982	1,965	2.00
Wahoo	182	299	1.65
Skipjack tuna	20,551	34,369	1.67
Dogtooth tuna	528	903	1.71
Yellowfin tuna	3,972	7,786	1.96
Kawakawa (saba)	377	649	1.72
Spiny lobster	743	3,890	5.24
Octopus	175	349	2.00
TOTAL	47,627	103,462	2.17

Table B-10
CNMI September 2008 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad	6,965	15,508	2.23
Jacks	298	767	2.57
Black jack	6	15	2.50
Bottomfishes (unknown)	387	979	2.53
Sickle pomfret	104	250	2.41
Ehu (red snapper)	83	303	3.66
Gindai (flower snapper)	235	833	3.55
Groupers	115	306	2.66
Kalikali (yellowtail)	166	415	2.50
Onaga (red snapper)	95	456	4.82
Opakapaka (pink snapper)	539	1,451	2.69
Jobfish (uku)	228	518	2.28
Silvermouth (deep lehi)	36	98	2.72
Amberjack	52	131	2.50
Blue lined snapper	425	1,105	2.60
Reef fishes (unknown)	2,245	5,874	2.62
Wrasses	15	44	3.00
Rabbitfishes	130	403	3.10
Emperors	1,273	3,167	2.49
Parrotfishes	3,365	10,662	3.17
Surgeonfishes	33	66	2.00
Orangespine unicornfish	69	173	2.50
Unicornfishes	58	144	2.50
Bigeye emperor	203	406	2.00
Mahimahi	175	351	2.00
Blue marlin	369	369	1.00
Rainbow runner	479	958	2.00
Wahoo	166	353	2.13
Skipjack tuna	15,494	27,209	1.76
Dogtooth tuna	42	69	1.63
Yellowfin tuna	2,651	5,292	2.00
Kawakawa (saba)	412	661	1.60
Spiny lobster	119	648	5.44
Slipper lobster	8	38	5.00
Octopus	323	634	1.96
TOTAL	37,365	80,658	2.16

Table B-11
CNMI October 2008 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad	4,724	10,472	2.22
Jacks	315	670	2.12
Black jack	17	42	2.50
Bottomfishes (unknown)	920	2,351	2.55
Sickle pomfret	142	386	2.71
Ehu (red snapper)	192	700	3.65
Gindai (flower snapper)	98	351	3.59
Groupers	20	63	3.13
Kalikali (yellowtail)	274	697	2.54
Onaga (red snapper)	367	1,759	4.79
Opakapaka (pink snapper)	650	1,710	2.63
Jobfish (uku)	349	719	2.06
Silvermouth (deep lehi)	56	148	2.63
Amberjack	113	283	2.50
Blue lined snapper	252	629	2.50
Reef fishes (unknown)	3,265	8,702	2.67
Rabbitfishes	193	577	2.99
Emperors	380	950	2.50
Parrotfishes	3,348	10,602	3.17
Surgeonfishes	204	416	2.04
Orangespine unicornfish	11	27	2.50
Unicornfishes	69	173	2.50
Goatfishes	31	77	2.50
Bigeye emperor	11	22	2.00
Mahimahi	1,011	2,018	2.00
Blue marlin	342	512	1.50
Rainbow runner	827	1,655	2.00
Wahoo	137	291	2.13
Skipjack tuna	11,169	19,277	1.73
Dogtooth tuna	125	229	1.84
Yellowfin tuna	702	1,391	1.98
Kawakawa (saba)	1,532	2,921	1.91
Spiny lobster	73	400	5.49
Slipper lobster	44	219	5.00
Octopus	220	438	1.99
TOTAL	32,180	71,875	2.23

Table B-12
CNMI November 2008 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad	1,826	4,437	2.43
Jacks	36	96	2.64
Giant trevally	24	48	2.00
Bottomfishes (unknown)	1,014	2,551	2.51
Ehu (red snapper)	236	861	3.65
Gindai (flower snapper)	148	523	3.52
Groupers	3	9	3.25
Kalikali (yellowtail)	85	215	2.54
Onaga (red snapper)	216	1,008	4.66
Opakapaka (pink snapper)	141	389	2.77
Jobfish (uku)	27	62	2.26
Blue lined snapper	6	17	2.75
Reef fishes (unknown)	2,382	6,176	2.59
Rabbitfishes	155	490	3.15
Emperors	274	689	2.52
Parrotfishes	1,659	5,334	3.21
Surgeonfishes	223	446	2.00
Orangespine unicornfish	160	400	2.50
Goatfishes	15	38	2.50
Pelagic fishes (unknown)	14	35	2.50
Mahimahi	1,438	2,558	1.78
Blue marlin	238	313	1.31
Rainbow runner	563	1,126	2.00
Wahoo	637	1,305	2.05
Skipjack tuna	10,842	18,764	1.73
Dogtooth tuna	14	28	2.00
Yellowfin tuna	1,239	2,462	1.99
Kawakawa (saba)	336	617	1.84
Slipper lobster	96	144	1.50
Octopus	145	291	2.00
TOTAL	24,195	51,432	2.13

Table B-13
CNMI December 2008 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad	2,297	5,658	2.46
Jacks	95	238	2.50
Bottomfishes (unknown)	405	1,072	2.64
Sickle pomfret	18	37	2.00
Ehu (red snapper)	92	326	3.54
Gindai (flower snapper)	68	252	3.69
Groupers	27	88	3.25
Onaga (red snapper)	409	1,928	4.71
Opakapaka (pink snapper)	281	785	2.80
Jobfish (uku)	45	103	2.29
Amberjack	35	88	2.50
Blue lined snapper	18	51	2.75
Red snapper	7	19	2.75
Reef fishes (unknown)	3,309	8,523	2.58
Wrasses	100	200	2.00
Rabbitfishes	68	213	3.14
Emperors	1,261	3,152	2.50
Parrotfishes	3,051	9,862	3.23
Surgeonfishes	144	288	2.00
Orangespine unicornfish	16	40	2.50
Unicornfishes	22	59	2.75
Goatfishes	110	275	2.50
Barracudas	54	81	1.50
Mahimahi	864	1,568	1.82
Rainbow runner	12	25	2.00
Wahoo	252	547	2.17
Skipjack tuna	15,364	26,238	1.71
Yellowfin tuna	2,294	4,688	2.04
Kawakawa (saba)	1,083	1,395	1.29
Spiny lobster	23	133	5.75
Slipper lobster	8	38	5.00
Octopus	39	78	2.00
TOTAL	31,873	68,050	2.14

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

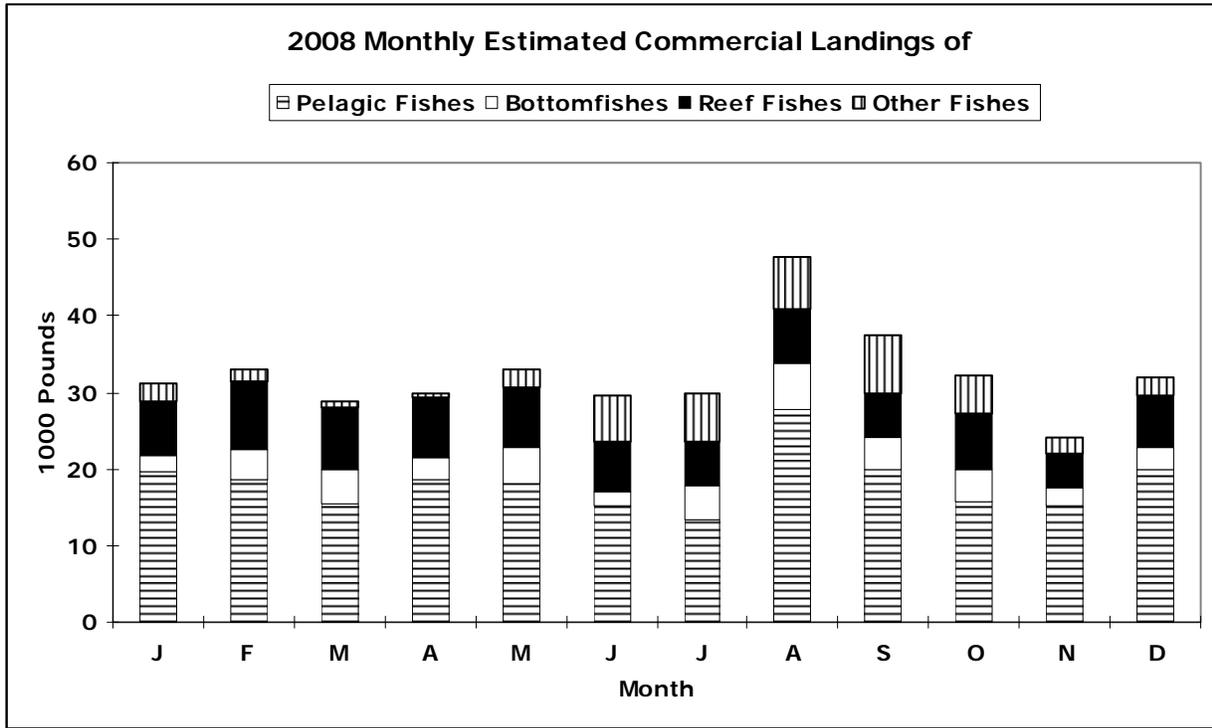


Figure B-1-1

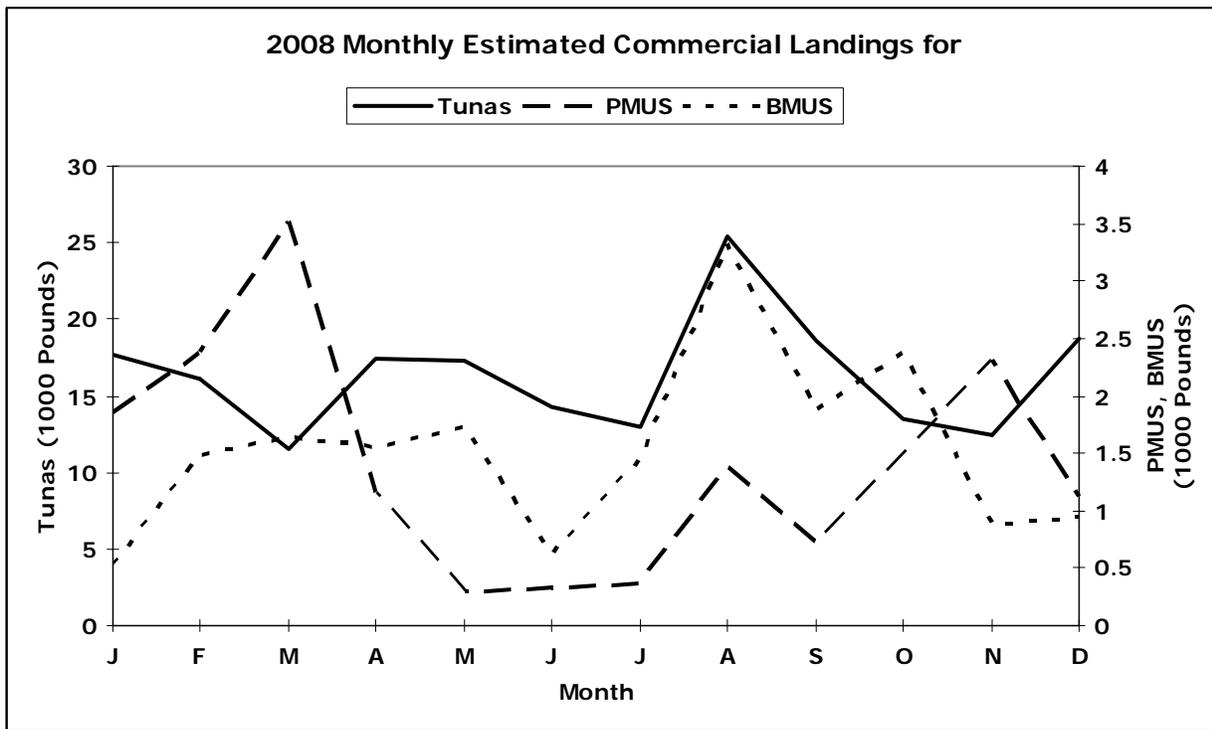


Figure B-1-2

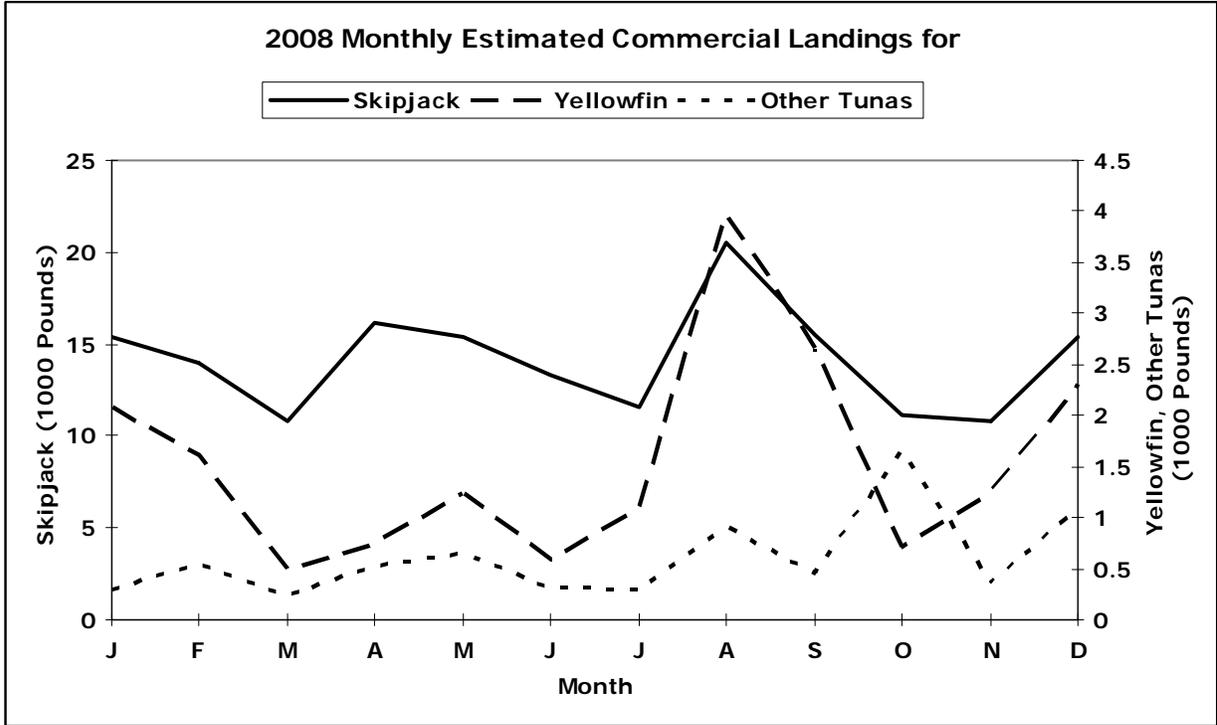


Figure B-1-3

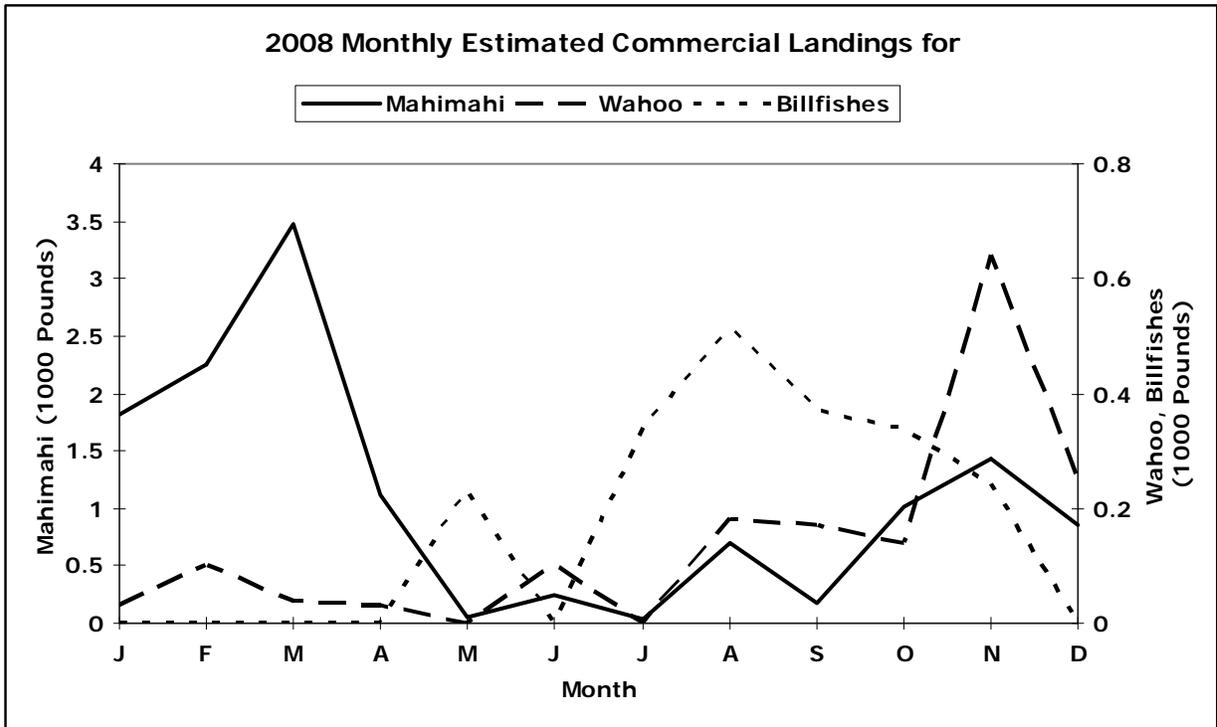


Figure B-1-4

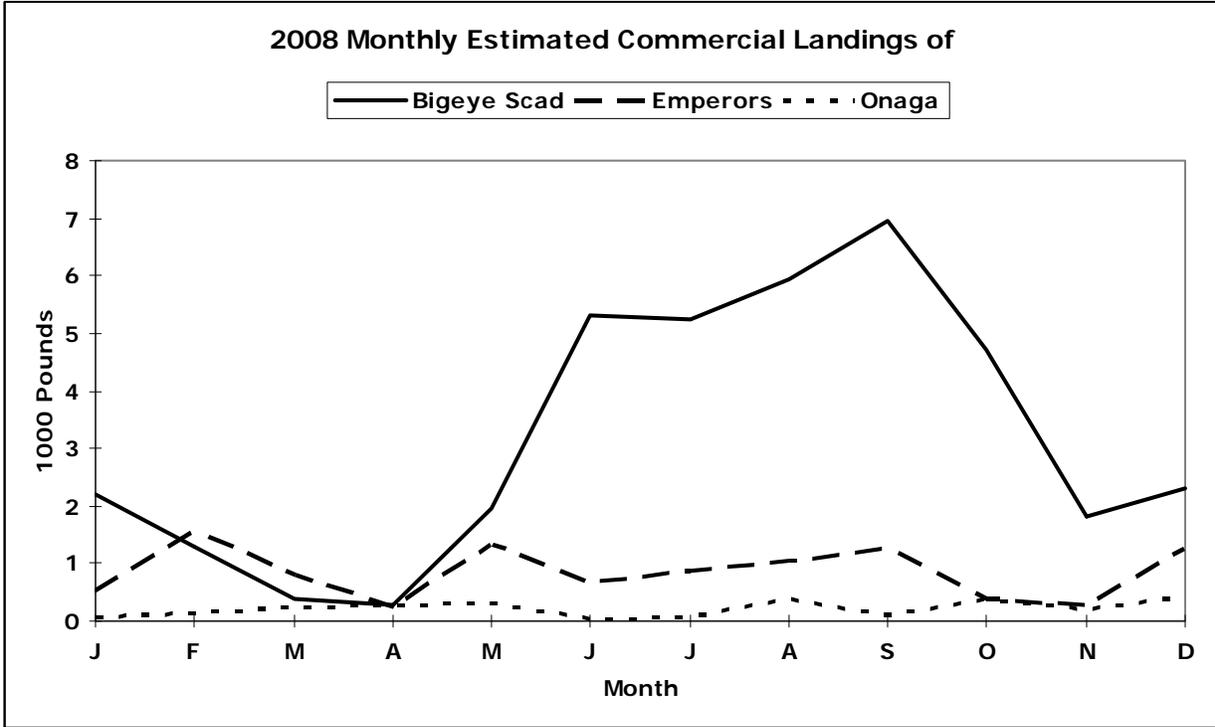


Figure B-1-5

B.23

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

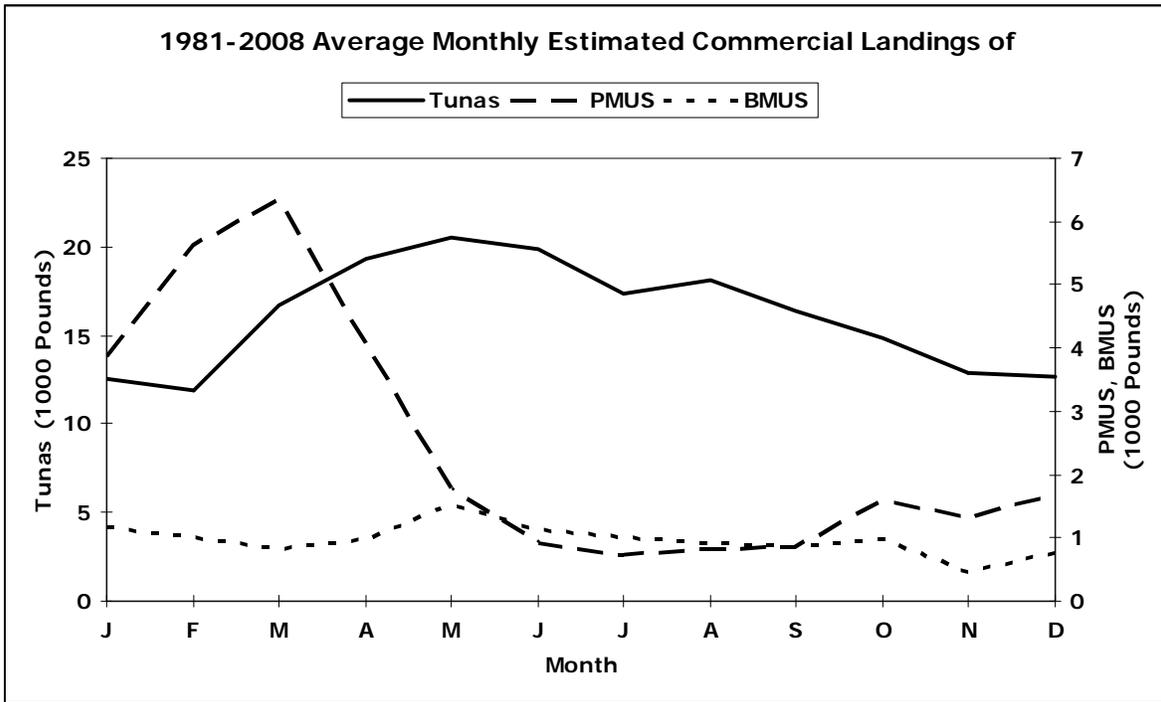


Figure B-2-1

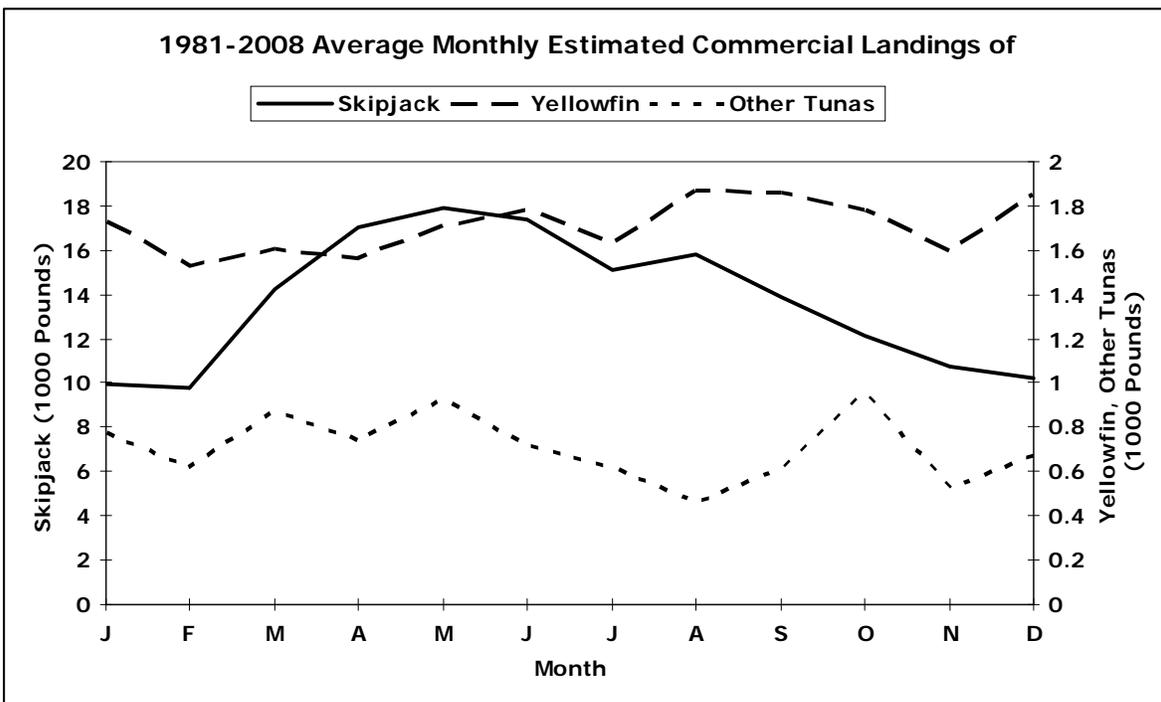


Figure B-2-2

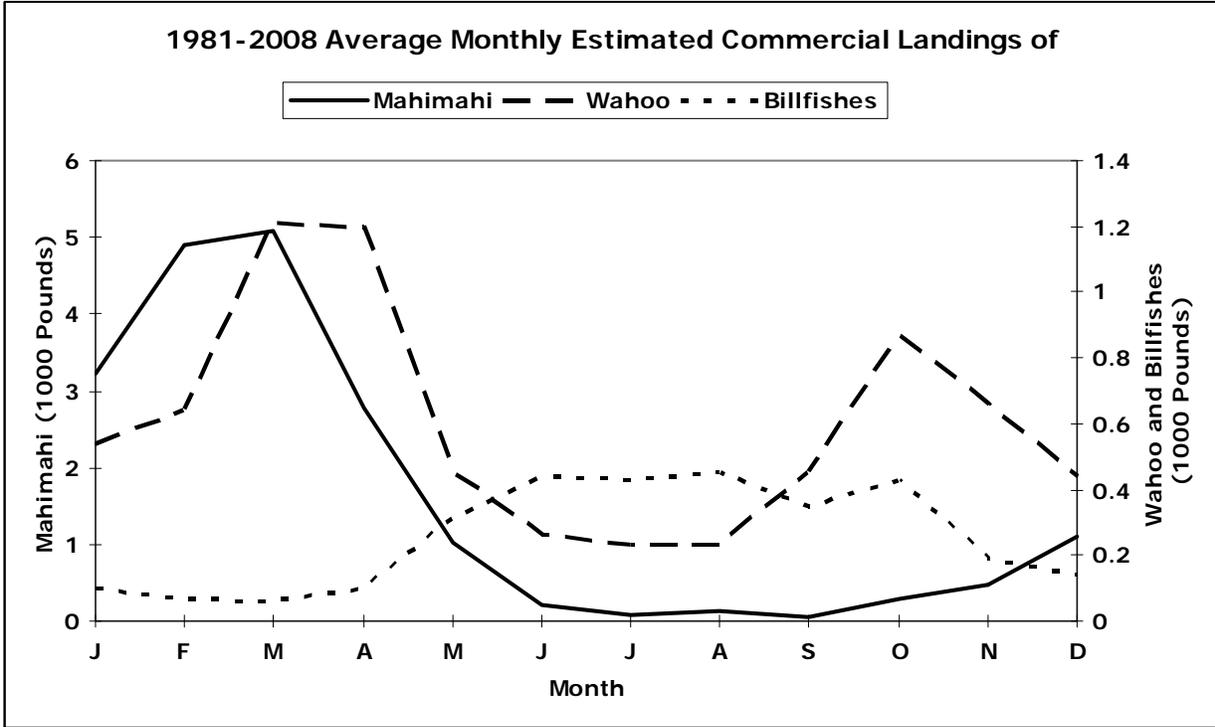


Figure B-2-3

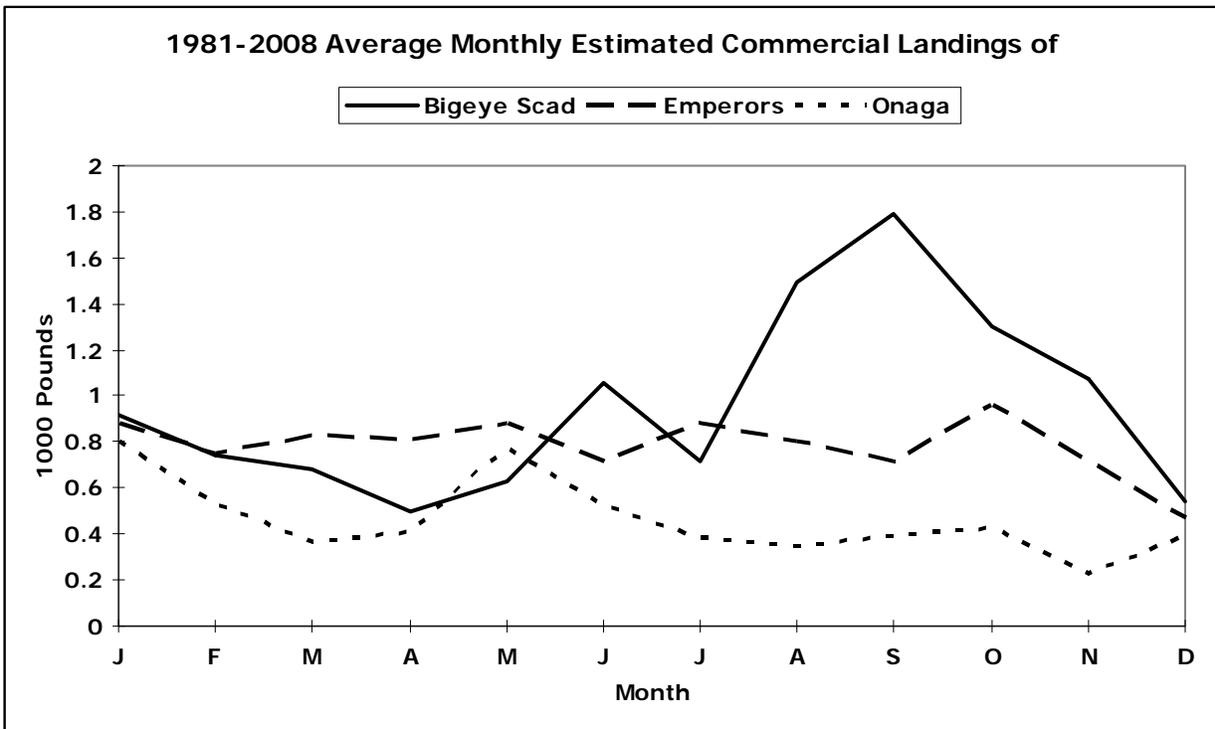


Figure B-2-4

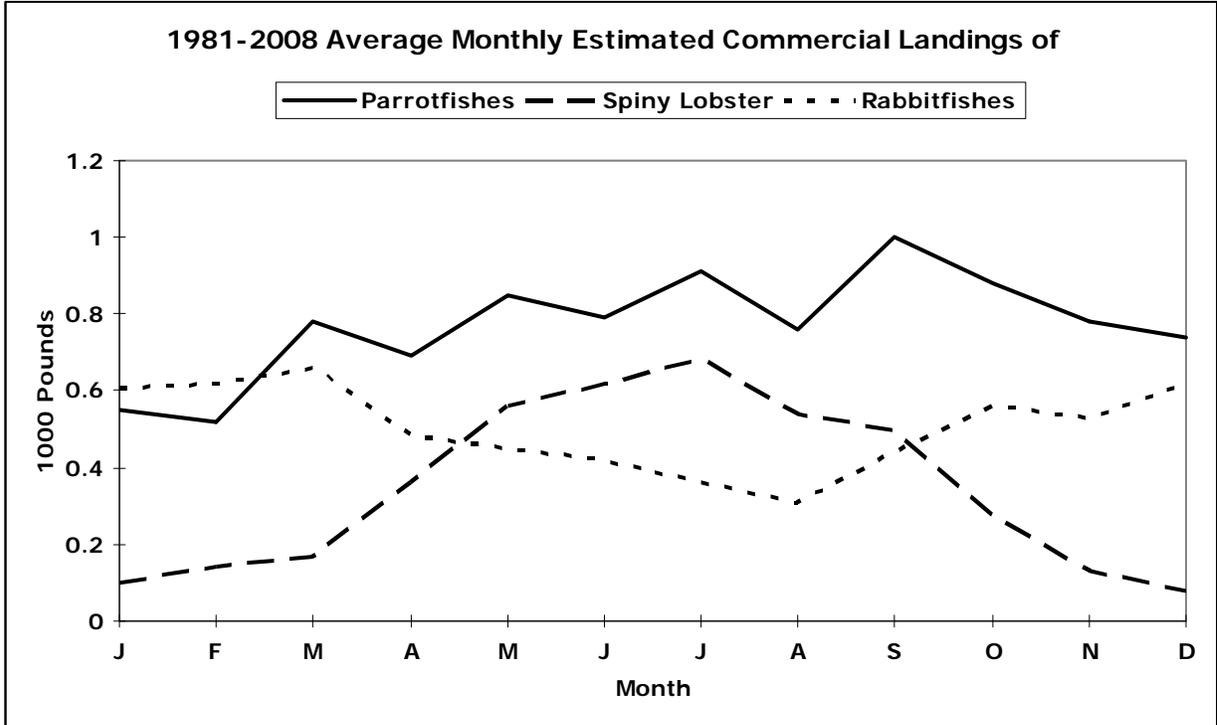


Figure B-2-5

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

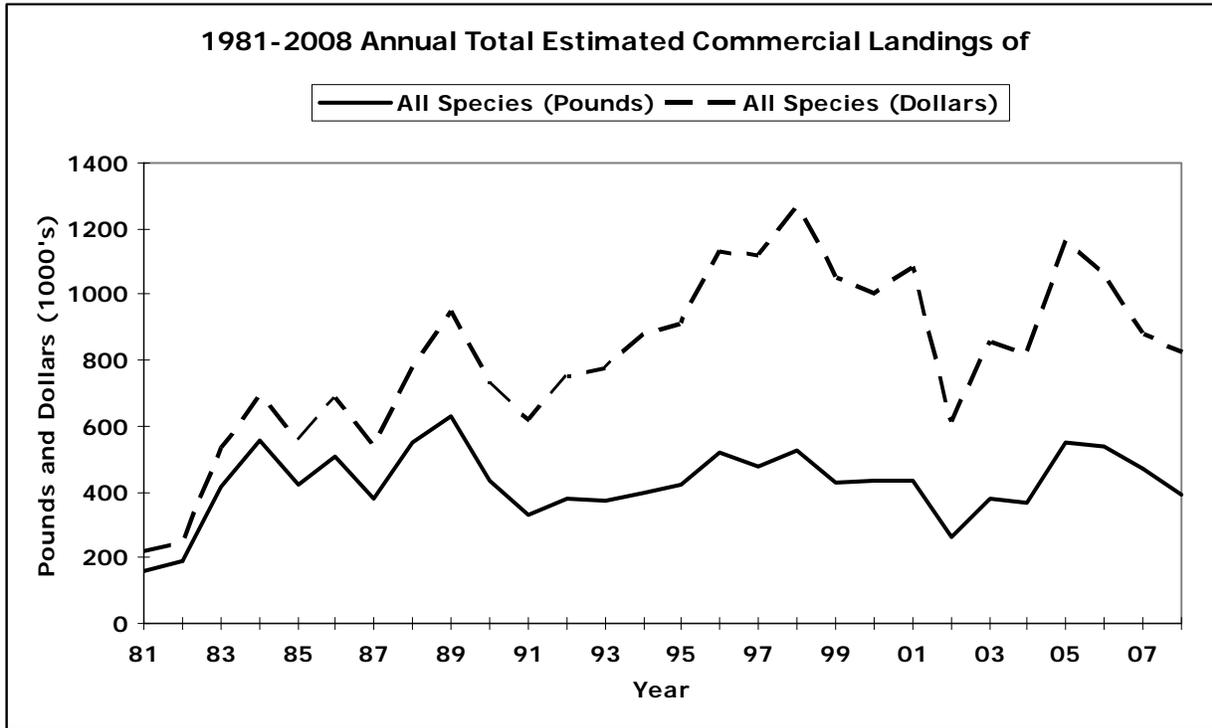


Figure B-3-1

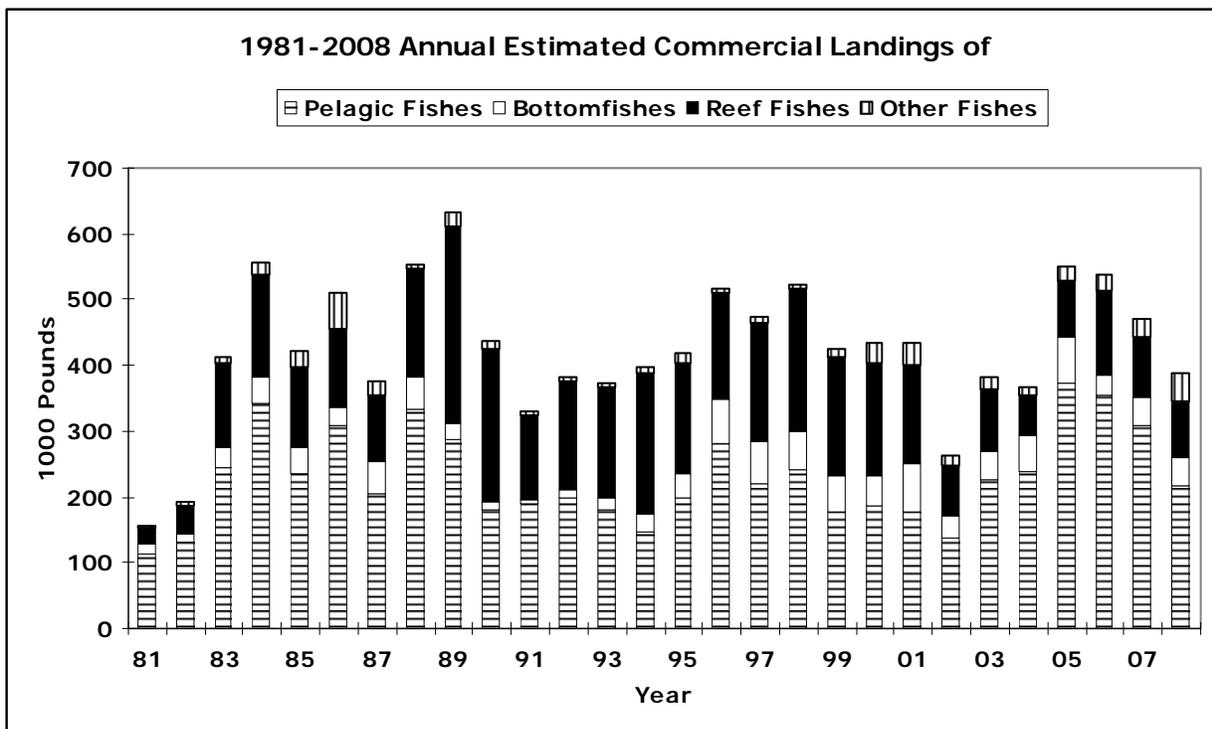


Figure B-3-2

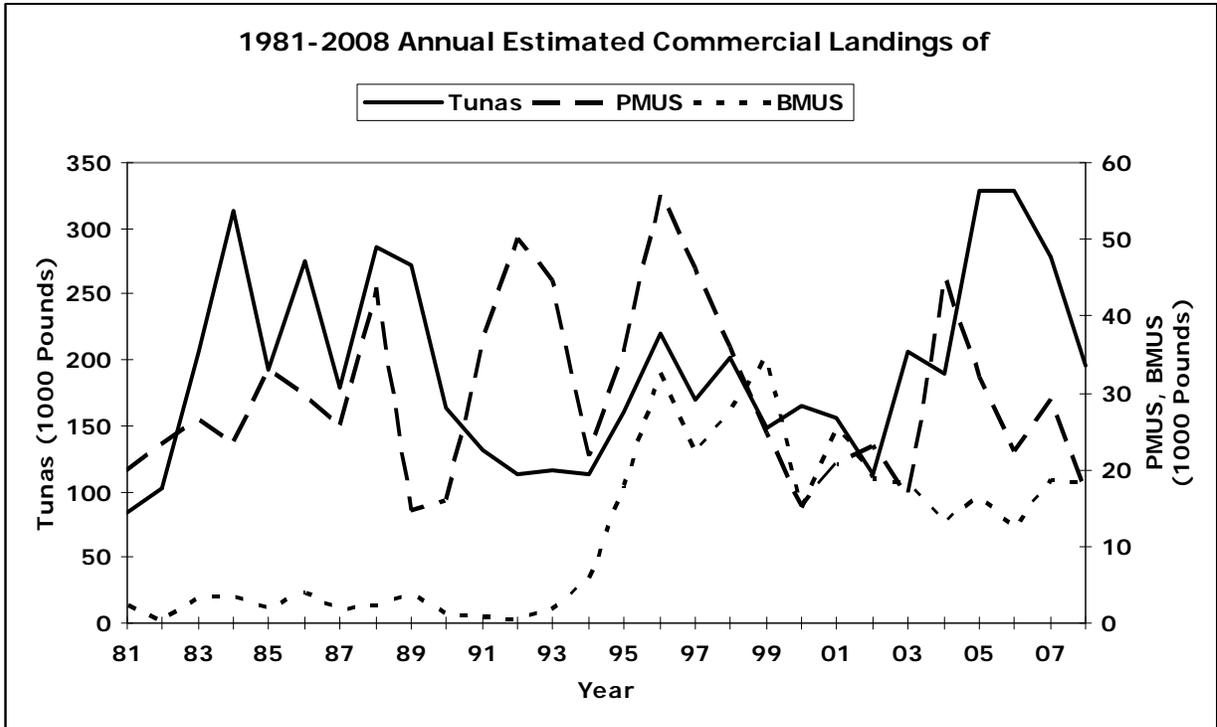


Figure B-3-3

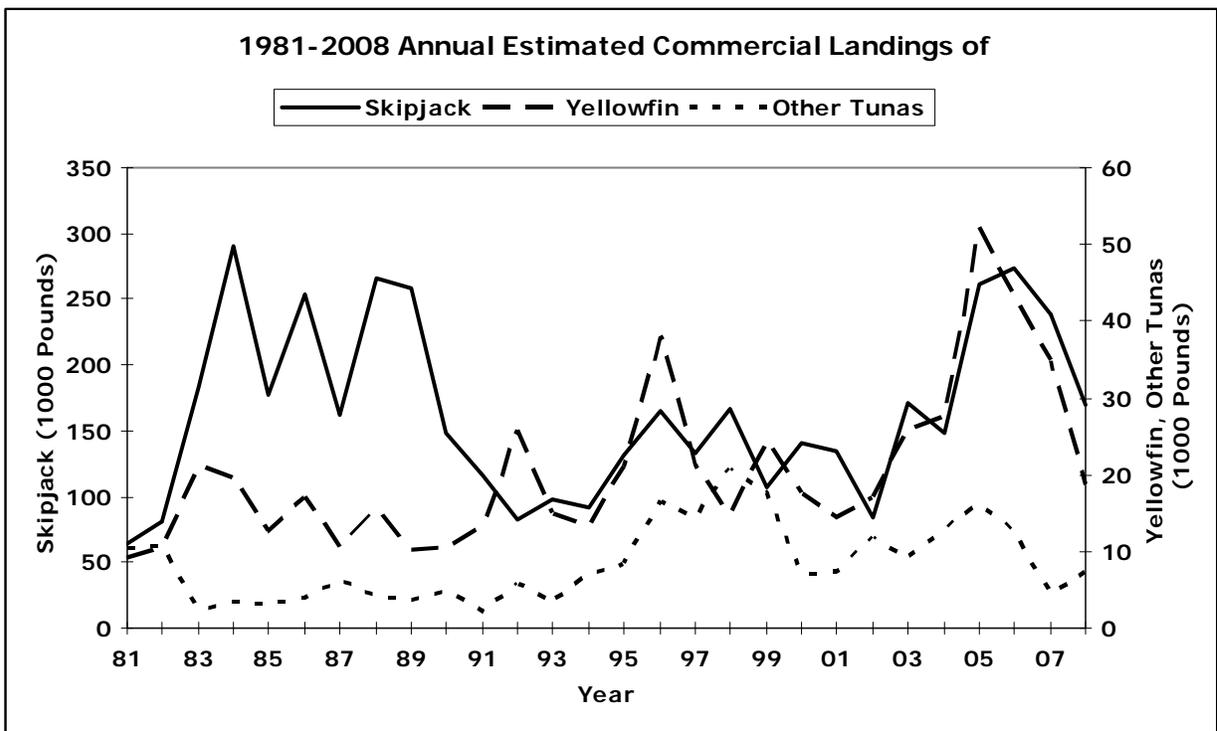


Figure B-3-4

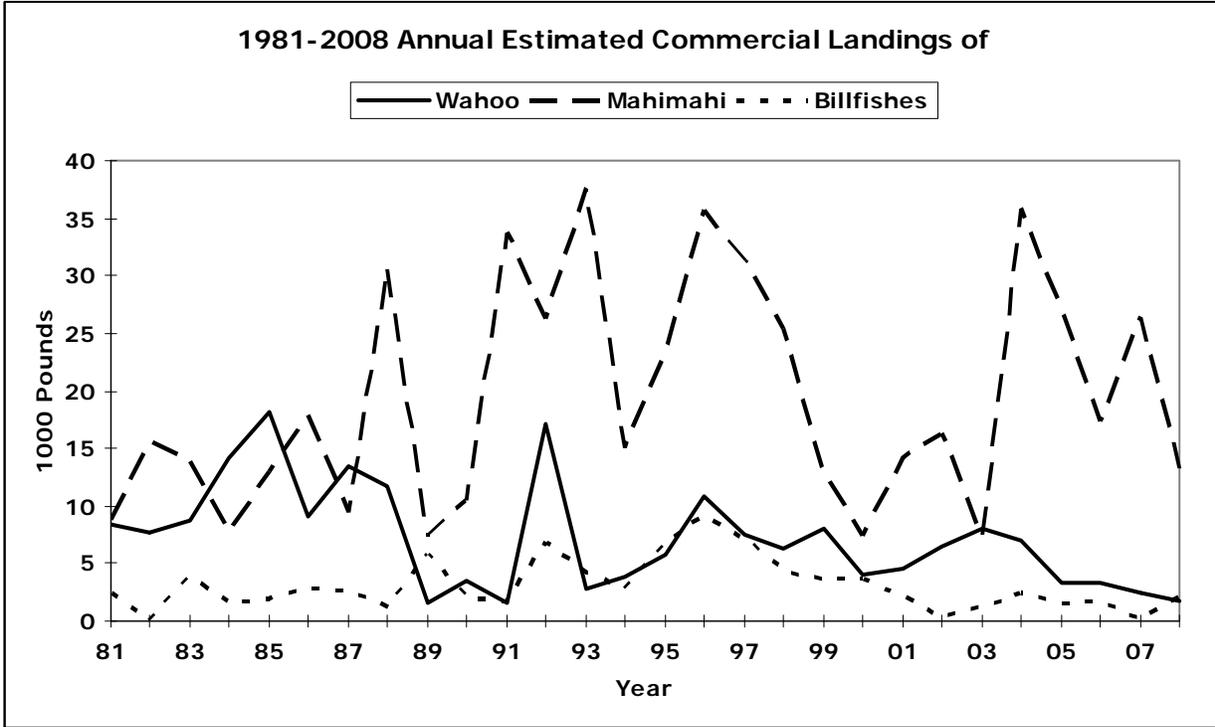


Figure B-3-5

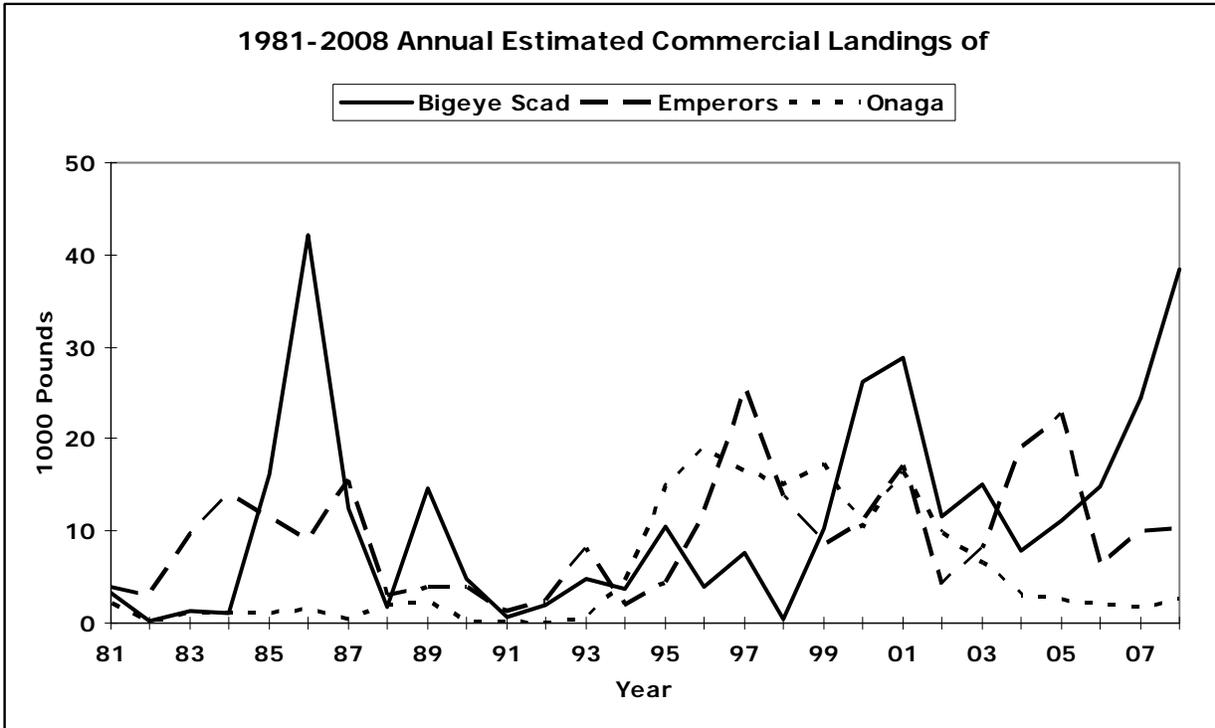


Figure B-3-6

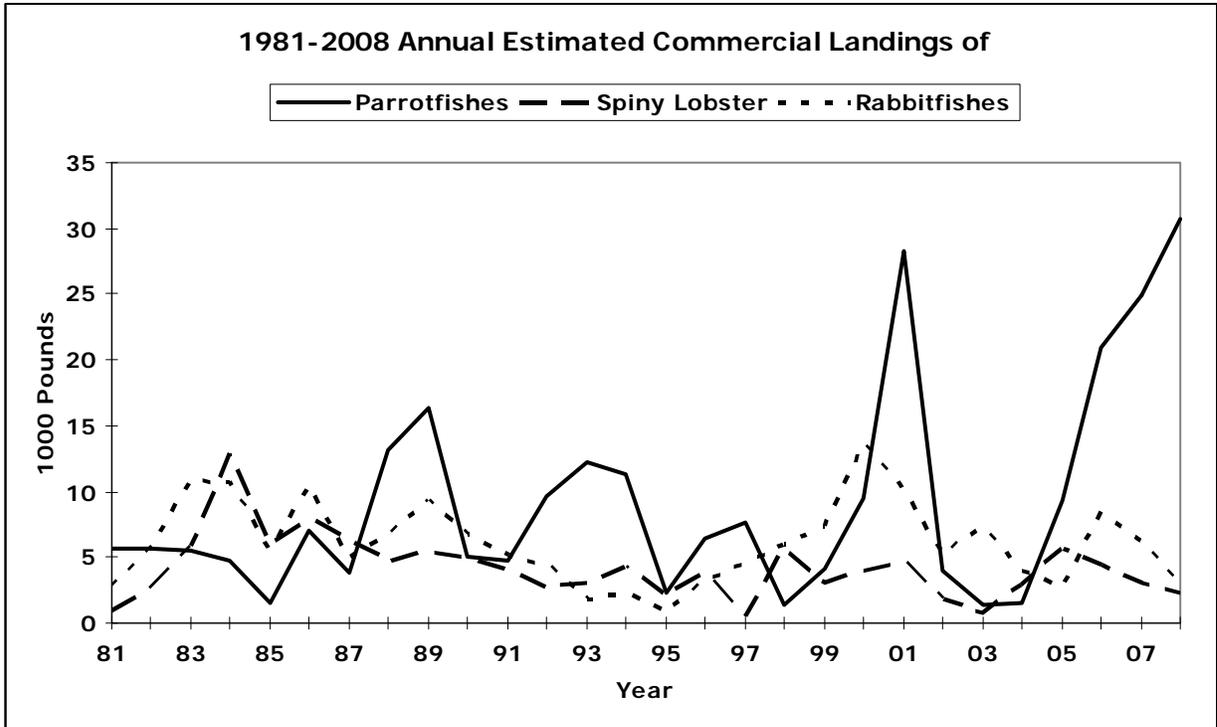


Figure B-3-7

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

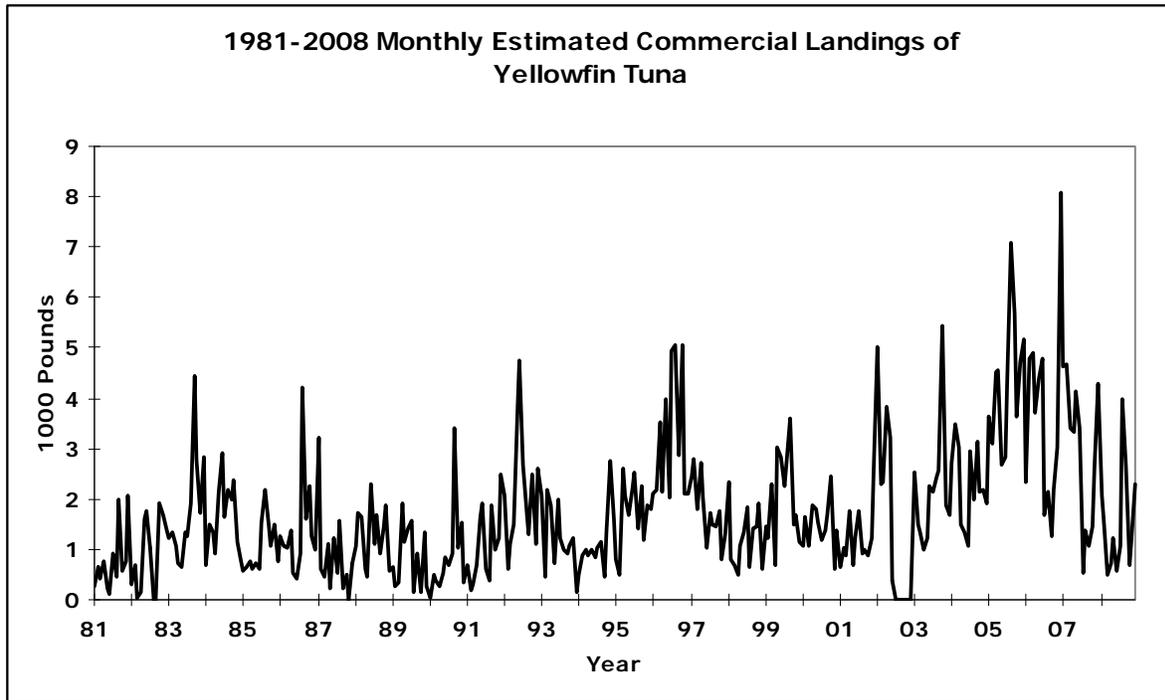


Figure B-4-1

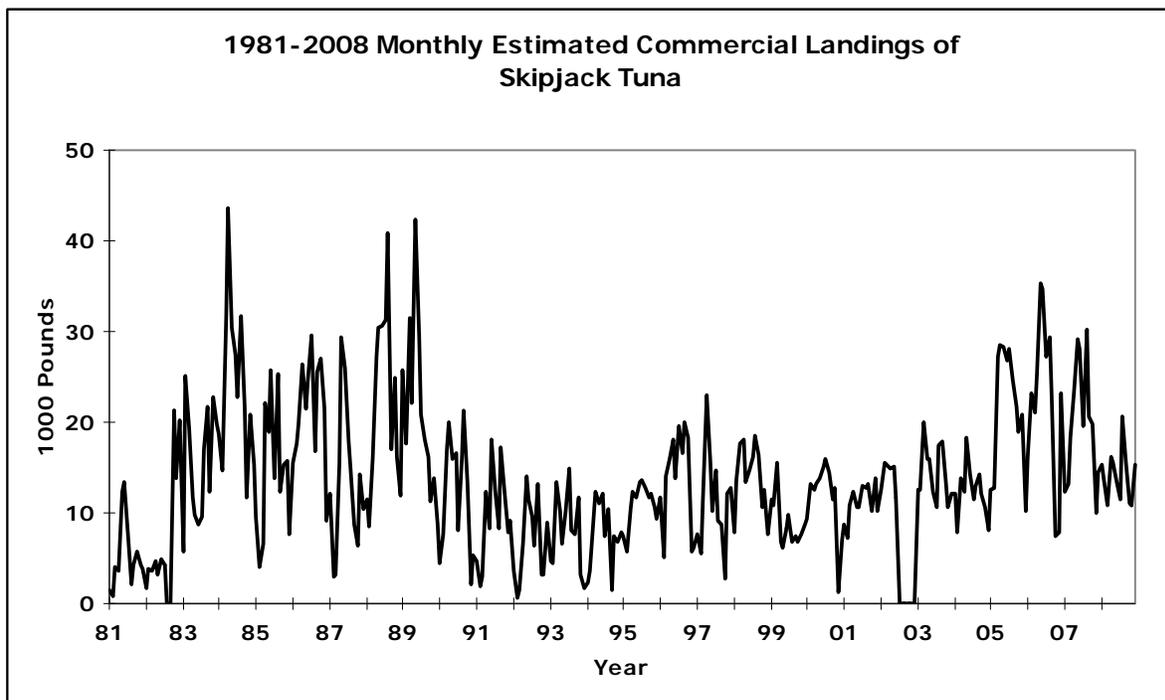


Figure B-4-2

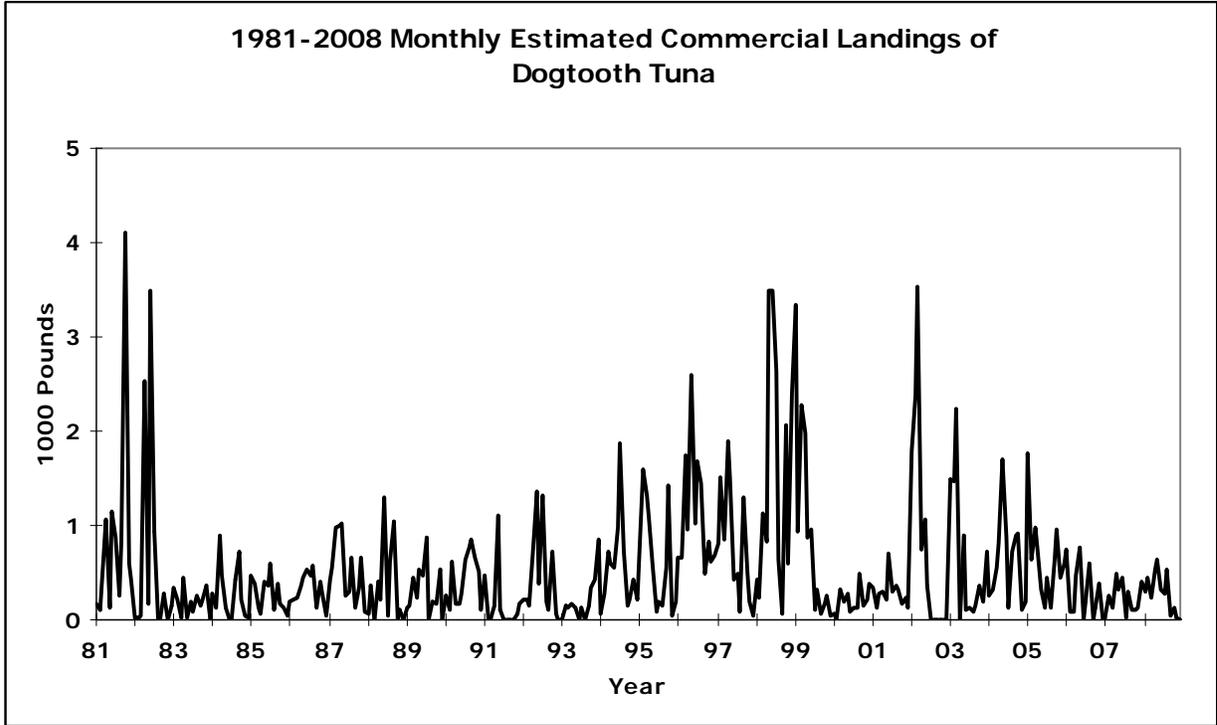


Figure B-4-3

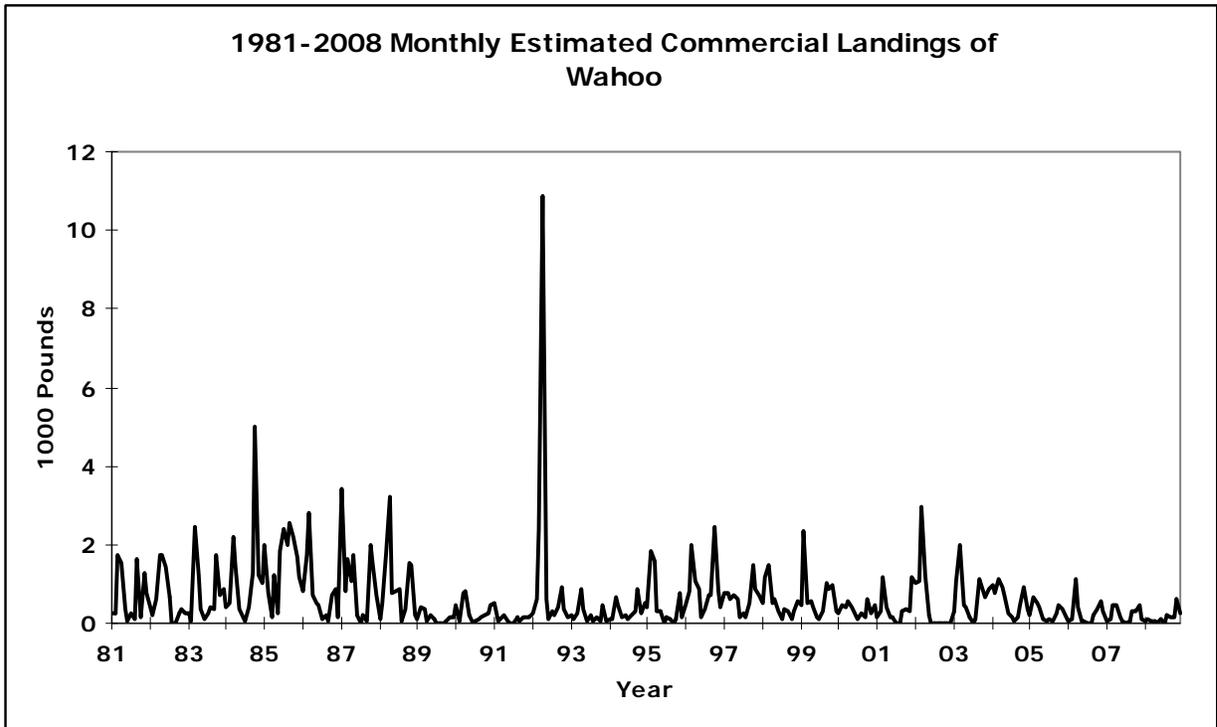


Figure B-4-4

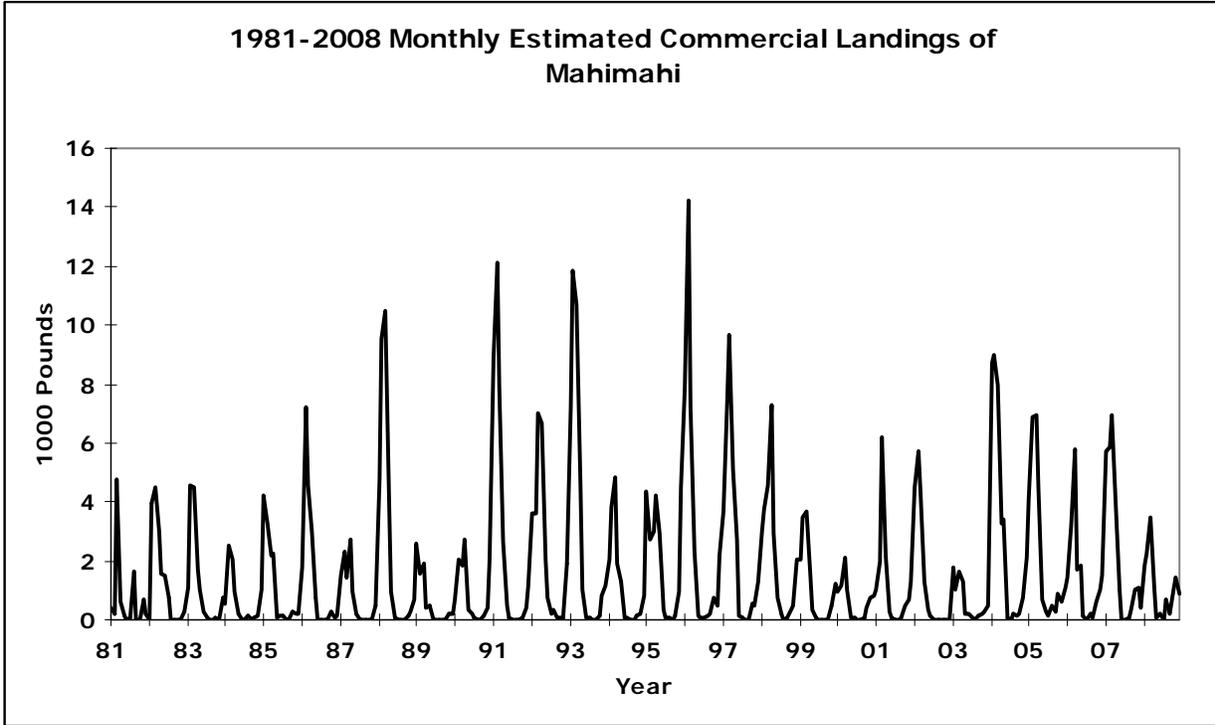


Figure B-4-5

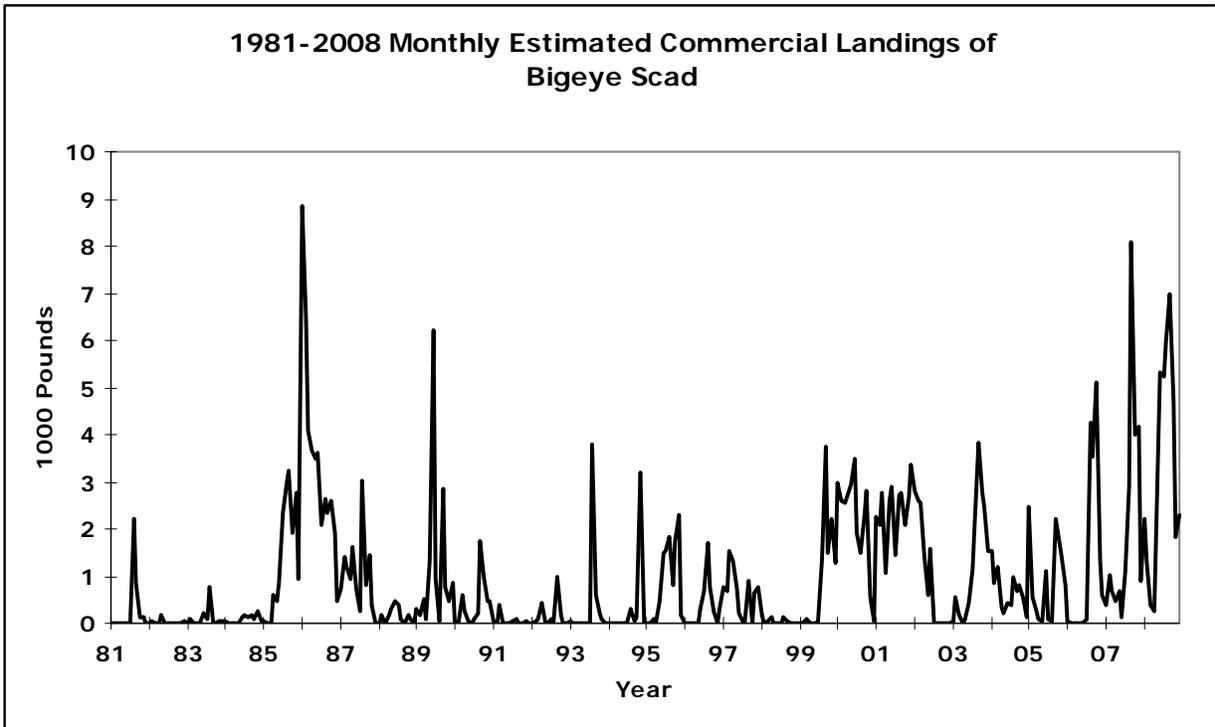


Figure B-4-6

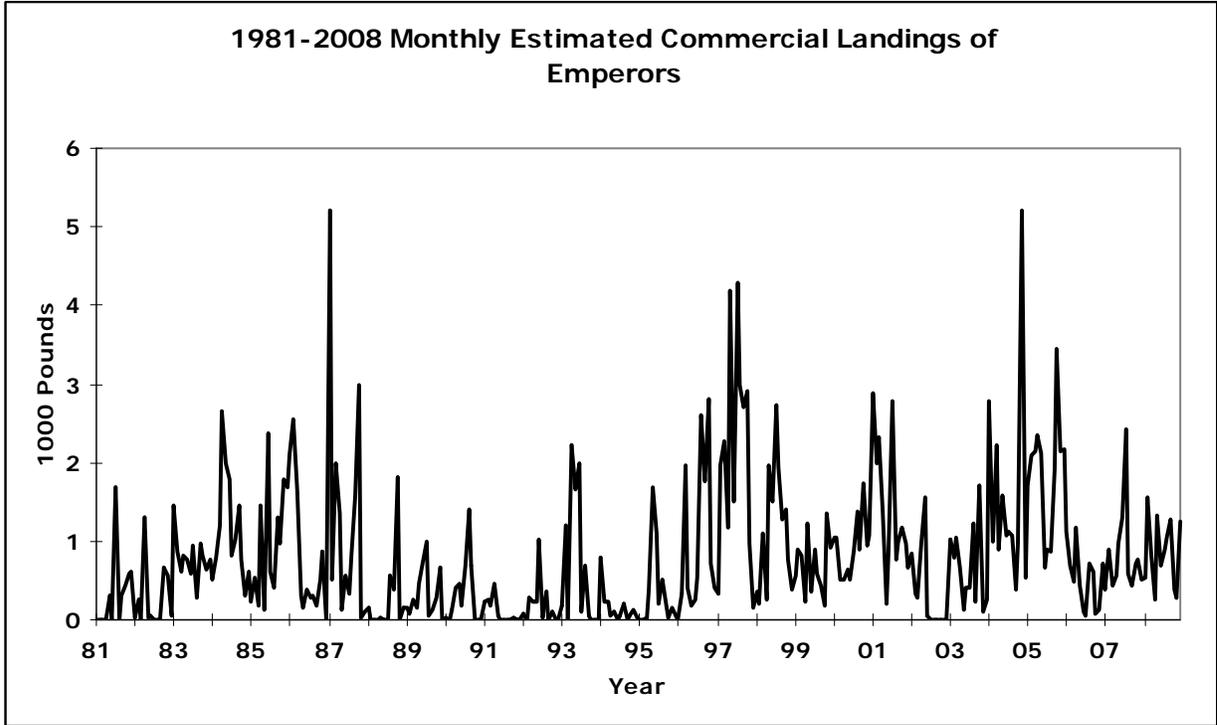


Figure B-4-7

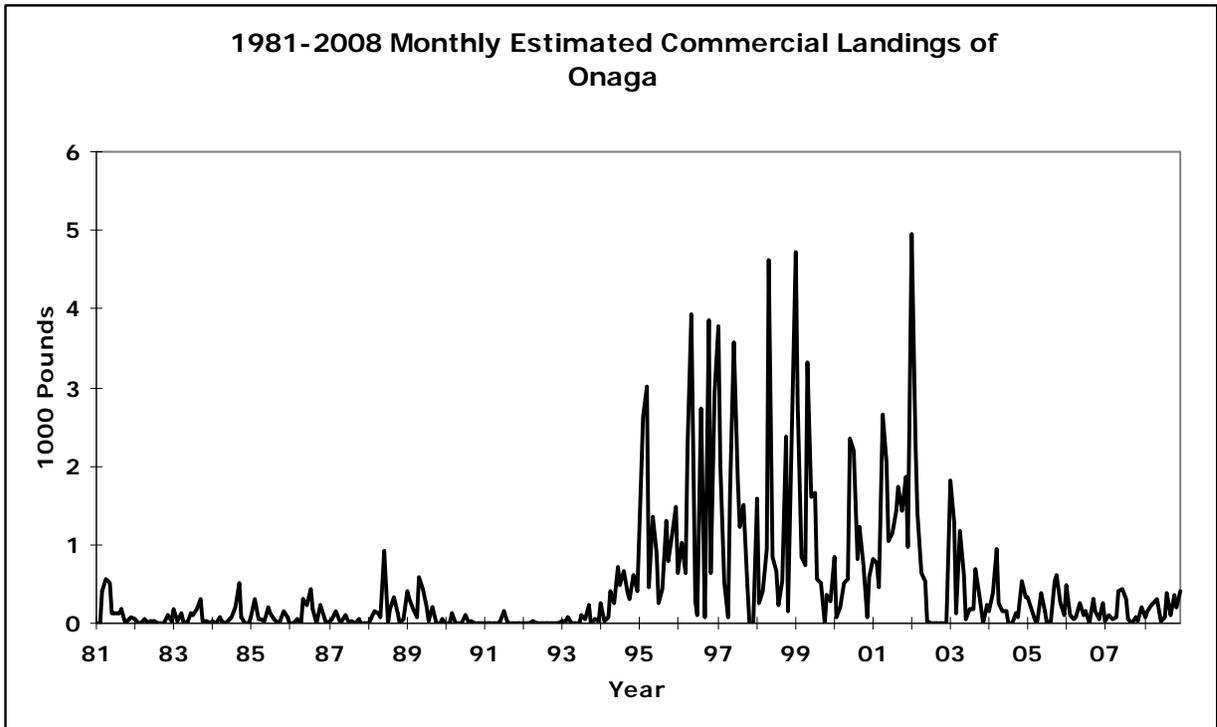


Figure B-4-8

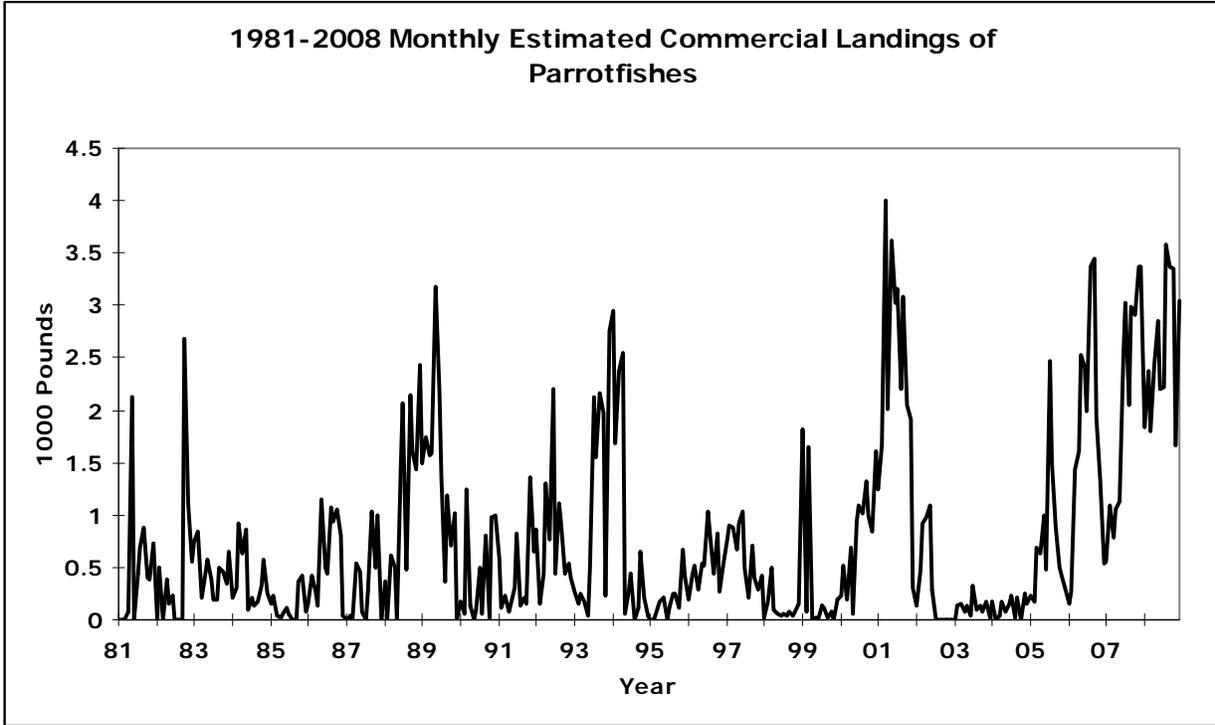


Figure B-4-9

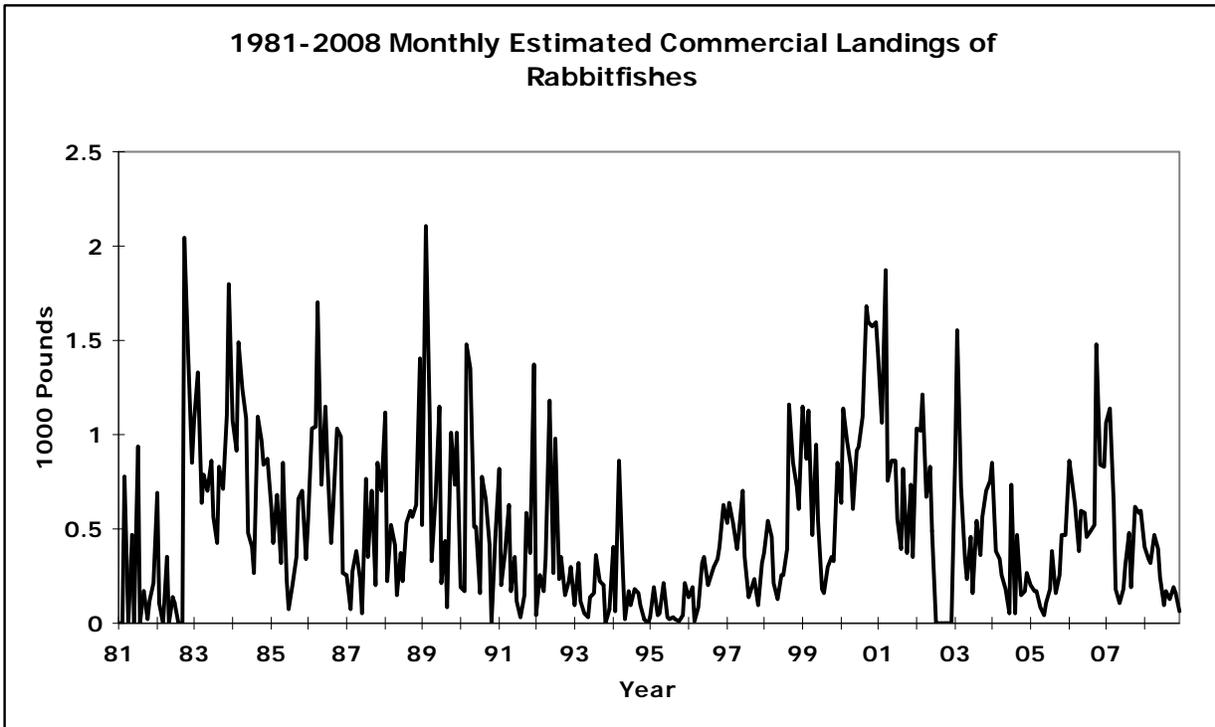


Figure B-4-10

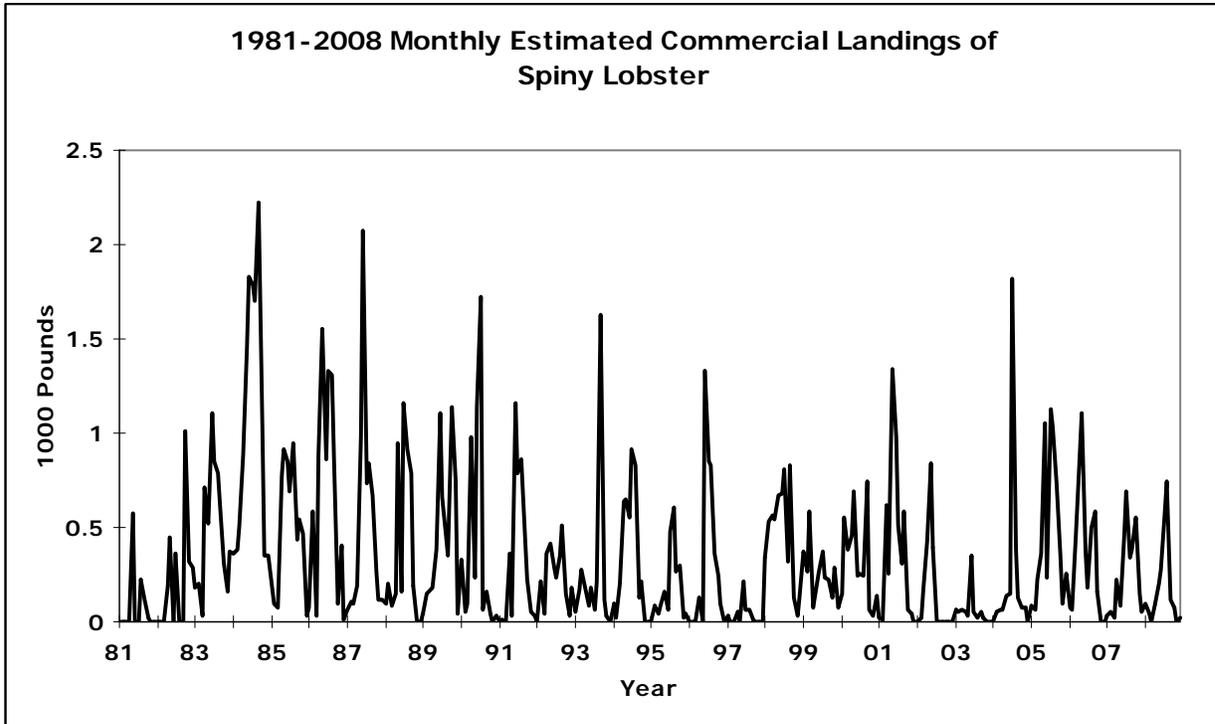


Figure B-4-11