

**NORTHERN MARIANA ISLANDS
2006 FISHERY STATISTICS**

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

September 2008

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COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS 2006 FISHERY STATISTICS

INTRODUCTION

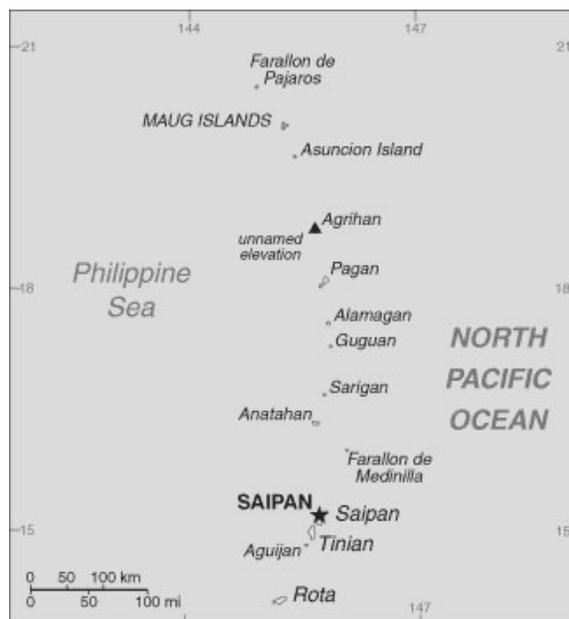
Location: 14° to 21°N latitude, 145°E longitude

Main Islands: Saipan, Rota, Tinian

Population: about 87,000 (*The World Factbook*, 2008)

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 fish 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 bottomfish 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 on 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.

B.2

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.

B.3

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 at <<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

B.4

II. Bottomfish Management Unit Species (BMUS)

Alfonsin	Kalikali (yellowtail)
Amberjack	Lyretail grouper
Blackjack	Maitai (blk-tipped grper)
Blueline snapper	Onaga (red snapper)
Ehu (red snapper)	Opakapaka (pink snp)
Giant trevally	Redgill emperor
Gindai (flower snap)	Silvermouth (deep lehi)
Jobfish (uku)	Yelloweye opakapaka

III. Billfish

Blue marlin	Spearfish
Sailfish	

IV. Tunas

Dogtooth tuna	Tunas (misc.)
Saba (kawakawa)	Yellowfin tuna
Skipjack tuna	

V. Other Tunas

Dogtooth tuna	Tunas (misc.)
Saba (kawakawa)	

VI. Fisheries Categories

A. Pelagics

Barracuda	Sharks
Blue marlin	Skipjack tuna
Dogtooth tuna	Spearfish
Mahimahi	Troll fish (misc.)
Rainbow runner	Tunas (misc.)
Saba (kawakawa)	Wahoo
Sailfish	Yellowfin tuna

B. Bottomfish

Alfonsin	Longnose emperor
Amberjack	Lyretail grouper
Bigeye emperor	Maitai (blk-tipped grper)
Bigeye trevally	Marbled grouper
Blackjack	Onaga (red snapper)
Blackspot emperor	Onespot snapper
Blue lined gindai	Opakapaka (pink snp)
Bluefin trevally	Orange spotted trevally
Blueline snapper	Orangefin emperor
Bottom fish	Peacock grouper
Brassy trevally	Pink grouper
Ehu (red snapper)	Red snapper
Eight banded grouper	Redgill emperor
Emperor (mafute/misc.)	Saddleback grouper
Flagtail grouper	Sickle pomfret (w/woman)
Flametail emperor	Silvermouth (deep lehi)
Giant coral trout	Smalltooth jobfish
Giant trevally	Stout emperor
Gindai (flower snap)	Tomato grouper
Grouper (misc.)	White lyretail grouper
Highfin grouper	Yellow banded grouper
Honeycomb grouper	Yellow spotted trevally
Humpback snapper	Yelloweye opakapaka
Jacks (misc.)	Yellowlips emperor
Jobfish (uku)	Yellowstripe emperor
Kalikali (yellowtail)	

C. Reef Fish

Angel/butterfly	Reef fish
Bigeye/glasseye	Snapper (misc. shallow)
Bluebanded surgeonfish	Soldierfish (misc.)
Bluespine unicornfish	Squirrelfish
Convict tang	Surgeonfish (misc.)
Dash & dot goatfish	Sweetlips
Fusilier (misc.)	Triggerfish (misc.)
Goatfish (misc.)	Tripletail wrasse
Highfin rudderfish brown	Two-barred goatfish
Highfin rudderfish silver	Unicornfish (misc.)
Humphead wrasse	Wrasse
Orangespine unicornfish	Yellowfin surgeonfish
Parrotfish (misc.)	Yellowstripe goatfish
Rabbitfish (hitting)	

D. Other

Bigeye scad
Clam/bivalve
Coconut crab
Crabs (misc)
Eel (freshwater)
Invertebrates
Kona crab
Lemu
Milkfish
Miscellaneous
Mullet

Octopus
Sea cucumber
Seaweeds
Shrimp (freshwater)
Shrimp (saltwater)
Slipper lobster
Spiny lobster
Squid
Trochus
Turtle

Table B-1
2006 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Bigeye scad	14,942	\$40,263	\$2.69
Jacks (misc)	1,978	\$4,694	\$2.37
Mullet	76	\$191	\$2.50
Blackjack	277	\$698	\$2.52
Bottom fish	7,299	\$19,844	\$2.72
Sickle pomfret	1,065	\$2,747	\$2.58
Alfonsin	25	\$51	\$2.00
Ehu (red snapper)	989	\$3,383	\$3.42
Gindai (flower snapper)	1,990	\$6,701	\$3.37
Grouper (misc)	1,317	\$4,513	\$3.43
Kalikali (yellowtail)	3,004	\$7,908	\$2.63
Onaga (red snapper)	2,025	\$8,761	\$4.33
Opakapaka (pink snapper)	1,482	\$4,027	\$2.72
Jobfish (uku)	230	\$613	\$2.66
Silvermouth (deep lehi)	324	\$1,035	\$3.20
Amberjack	170	\$534	\$3.14
Blueline snapper	1,747	\$4,468	\$2.56
Red snapper	35	\$89	\$2.50
Reef fish	88,904	\$225,600	\$2.54
Wrasse	143	\$417	\$2.92
Rabbitfish	8,452	\$26,920	\$3.19
Emperor (misc)	6,297	\$16,005	\$2.54
Squirrelfish	47	\$117	\$2.50
Parrotfish (misc)	21,000	\$64,869	\$3.09
Surgeonfish (misc)	7,598	\$15,341	\$2.02
Orangespine unicornfish	70	\$170	\$2.42
Unicornfish (misc)	131	\$321	\$2.45
Goatfish (misc)	552	\$1,522	\$2.76
Bigeye emperor	151	\$411	\$2.72
Troll fish (misc)	62	\$116	\$1.88
Barracuda	33	\$65	\$2.00
Mahimahi	17,360	\$36,249	\$2.09
Blue marlin	1,402	\$2,304	\$1.64
Sailfish	315	\$590	\$1.87
Rainbow runner	4,038	\$7,309	\$1.81
Wahoo	3,267	\$6,786	\$2.08
Tunas (misc)	15	\$15	\$1.00
Skipjack tuna	273,715	\$409,006	\$1.49
Dogtooth tuna	3,435	\$6,512	\$1.90
Yellowfin tuna	43,220	\$84,017	\$1.94
Saba (kawakawa)	8,779	\$13,157	\$1.50
Spiny lobster	4,392	\$21,503	\$4.90
Octopus	4,346	\$8,823	\$2.03
Shrimp (saltwater)	23	\$136	\$6.00
Squid	2	\$4	\$2.00
TOTAL	536,724	\$1,058,804	\$1.97

Table B-2
January 2006 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Bigeye scad	48	\$120	\$2.50
Jacks (misc)	287	\$738	\$2.57
Blackjack	11	\$20	\$1.75
Bottom fish	228	\$617	\$2.70
Sickle pomfret	631	\$1,735	\$2.75
Ehu (red snapper)	49	\$172	\$3.50
Gindai (flower snapper)	146	\$500	\$3.43
Grouper (misc)	11	\$39	\$3.50
Kalikali (yellowtail)	145	\$389	\$2.69
Onaga (red snapper)	491	\$2,034	\$4.14
Opakapaka (pink snapper)	8	\$21	\$2.75
Jobfish (uku)	35	\$60	\$1.75
Silvermouth (deep lehi)	33	\$106	\$3.25
Amberjack	27	\$82	\$3.00
Blueline snapper	65	\$164	\$2.50
Reef fish	7,895	\$19,830	\$2.51
Rabbitfish	857	\$2,769	\$3.23
Emperor (misc)	1,117	\$2,760	\$2.47
Parrotfish (misc)	154	\$503	\$3.27
Surgeonfish (misc)	767	\$1,535	\$2.00
Troll fish (misc)	62	\$116	\$1.88
Mahimahi	1,428	\$3,148	\$2.20
Sailfish	99	\$175	\$1.77
Rainbow runner	334	\$677	\$2.03
Wahoo	75	\$176	\$2.37
Skipjack tuna	16,269	\$33,197	\$2.04
Dogtooth tuna	738	\$1,557	\$2.11
Yellowfin tuna	2,335	\$4,746	\$2.03
Saba (kawakawa)	109	\$218	\$2.00
Spiny lobster	73	\$348	\$4.78
Octopus	222	\$451	\$2.03
TOTAL	34,749	\$79,003	\$2.27

Table B-3
February 2006 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Jacks (misc)	29	\$73	\$2.50
Bottom fish	210	\$525	\$2.50
Sickle pomfret	46	\$116	\$2.50
Ehu (red snapper)	38	\$132	\$3.50
Gindai (flower snapper)	55	\$177	\$3.25
Grouper (misc)	49	\$147	\$3.00
Kalikali (yellowtail)	15	\$39	\$2.50
Onaga (red snapper)	100	\$400	\$4.00
Jobfish (uku)	20	\$50	\$2.50
Silvermouth (deep lehi)	33	\$106	\$3.25
Reef fish	9,417	\$23,581	\$2.50
Rabbitfish	784	\$2,541	\$3.24
Emperor (misc)	691	\$1,772	\$2.57
Parrotfish (misc)	263	\$810	\$3.07
Surgeonfish (misc)	646	\$1,293	\$2.00
Mahimahi	3,177	\$6,635	\$2.09
Sailfish	180	\$360	\$2.00
Rainbow runner	280	\$522	\$1.87
Wahoo	101	\$278	\$2.75
Skipjack tuna	23,160	\$45,068	\$1.95
Dogtooth tuna	89	\$230	\$2.58
Yellowfin tuna	4,786	\$9,559	\$2.00
Saba (kawakawa)	238	\$476	\$2.00
Spiny lobster	68	\$338	\$5.00
Octopus	442	\$917	\$2.07
TOTAL	44,918	\$96,145	\$2.14

Table B-4
March 2006 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Jacks (misc)	73	\$124	\$1.70
Mullet	76	\$191	\$2.50
Blackjack	69	\$190	\$2.75
Bottom fish	1,245	\$3,415	\$2.74
Sickle pomfret	59	\$163	\$2.75
Ehu (red snapper)	54	\$161	\$3.00
Gindai (flower snapper)	35	\$109	\$3.14
Onaga (red snapper)	59	\$266	\$4.50
Silvermouth (deep lehi)	97	\$305	\$3.14
Amberjack	31	\$93	\$3.00
Blueline snapper	471	\$1,176	\$2.50
Red snapper	35	\$89	\$2.50
Reef fish	11,409	\$28,635	\$2.51
Rabbitfish	624	\$2,027	\$3.25
Emperor (misc)	485	\$1,214	\$2.50
Parrotfish (misc)	1,443	\$4,267	\$2.96
Surgeonfish (misc)	1,637	\$3,274	\$2.00
Orangespine unicornfish	31	\$77	\$2.50
Mahimahi	5,802	\$12,068	\$2.08
Rainbow runner	473	\$917	\$1.94
Wahoo	1,138	\$2,275	\$2.00
Skipjack tuna	21,087	\$38,643	\$1.83
Dogtooth tuna	82	\$150	\$1.83
Yellowfin tuna	4,892	\$9,493	\$1.94
Spiny lobster	456	\$2,020	\$4.43
Octopus	357	\$713	\$2.00
TOTAL	52,219	\$112,053	\$2.15

Table B-5
April 2006 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Jacks (misc)	113	\$259	\$2.30
Blackjack	42	\$104	\$2.50
Bottom fish	1,785	\$5,096	\$2.86
Sickle pomfret	20	\$50	\$2.50
Ehu (red snapper)	71	\$236	\$3.33
Gindai (flower snapper)	390	\$1,278	\$3.27
Grouper (misc)	342	\$1,196	\$3.50
Kalikali (yellowtail)	66	\$181	\$2.75
Onaga (red snapper)	64	\$198	\$3.11
Opakapaka (pink snapper)	169	\$465	\$2.75
Jobfish (uku)	40	\$140	\$3.50
Silvermouth (deep lehi)	32	\$111	\$3.50
Amberjack	26	\$92	\$3.50
Blueline snapper	57	\$143	\$2.50
Reef fish	6,838	\$19,258	\$2.82
Rabbitfish	385	\$1,242	\$3.23
Emperor (misc)	1,165	\$3,014	\$2.59
Parrotfish (misc)	1,601	\$4,800	\$3.00
Surgeonfish (misc)	489	\$978	\$2.00
Unicornfish (misc)	22	\$55	\$2.50
Goatfish (misc)	38	\$95	\$2.50
Mahimahi	1,714	\$3,724	\$2.17
Rainbow runner	888	\$1,134	\$1.28
Wahoo	422	\$842	\$2.00
Skipjack tuna	25,230	\$37,136	\$1.47
Dogtooth tuna	474	\$957	\$2.02
Yellowfin tuna	3,699	\$7,148	\$1.93
Spiny lobster	892	\$4,511	\$5.06
Octopus	244	\$488	\$2.00
Squid	2	\$4	\$2.00
TOTAL	47,318	\$94,935	\$2.01

Table B-6
May 2006 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Jacks (misc)	245	\$618	\$2.53
Bottom fish	897	\$2,268	\$2.53
Sickle pomfret	20	\$40	\$2.00
Ehu (red snapper)	10	\$33	\$3.25
Gindai (flower snapper)	231	\$757	\$3.28
Grouper (misc)	18	\$64	\$3.50
Kalikali (yellowtail)	467	\$1,109	\$2.37
Onaga (red snapper)	265	\$1,269	\$4.80
Opakapaka (pink snapper)	163	\$442	\$2.72
Silvermouth (deep lehi)	12	\$38	\$3.25
Amberjack	30	\$105	\$3.50
Blueline snapper	78	\$194	\$2.50
Reef fish	6,639	\$16,598	\$2.50
Rabbitfish	594	\$1,922	\$3.23
Emperor (misc)	446	\$1,116	\$2.50
Parrotfish (misc)	2,533	\$7,720	\$3.05
Surgeonfish (misc)	995	\$2,041	\$2.05
Goatfish (misc)	181	\$533	\$2.94
Mahimahi	1,828	\$3,547	\$1.94
Blue marlin	178	\$356	\$2.00
Rainbow runner	153	\$304	\$1.99
Wahoo	42	\$78	\$1.86
Skipjack tuna	35,417	\$34,413	\$0.97
Dogtooth tuna	758	\$1,003	\$1.32
Yellowfin tuna	4,354	\$7,900	\$1.81
Saba (kawakawa)	61	\$114	\$1.87
Spiny lobster	1,111	\$5,553	\$5.00
Octopus	239	\$477	\$2.00
Shrimp (saltwater)	23	\$136	\$6.00
TOTAL	57,988	\$90,750	\$1.56

Table B-7
June 2006 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Jacks (misc)	7	\$20	\$2.75
Bottom fish	356	\$1,052	\$2.95
Ehu (red snapper)	76	\$253	\$3.31
Gindai (flower snapper)	247	\$844	\$3.42
Grouper (misc)	289	\$947	\$3.28
Kalikali (yellowtail)	365	\$943	\$2.59
Onaga (red snapper)	91	\$438	\$4.82
Opakapaka (pink snapper)	259	\$713	\$2.75
Jobfish (uku)	16	\$27	\$1.75
Silvermouth (deep lehi)	74	\$242	\$3.29
Reef fish	6,696	\$16,729	\$2.50
Wrasse	33	\$106	\$3.25
Rabbitfish	589	\$1,913	\$3.25
Emperor (misc)	98	\$245	\$2.50
Parrotfish (misc)	2,407	\$7,395	\$3.07
Surgeonfish (misc)	644	\$1,287	\$2.00
Orangespine unicornfish	22	\$49	\$2.25
Unicornfish (misc)	26	\$53	\$2.00
Goatfish (misc)	71	\$204	\$2.87
Mahimahi	113	\$252	\$2.23
Rainbow runner	448	\$881	\$1.97
Wahoo	52	\$67	\$1.30
Skipjack tuna	34,744	\$37,031	\$1.07
Yellowfin tuna	4,781	\$8,529	\$1.78
Spiny lobster	368	\$1,836	\$4.99
Octopus	331	\$666	\$2.01
TOTAL	53,202	\$82,722	\$1.55

Table B-8
July 2006 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Bigeye scad	79	\$202	\$2.56
Jacks (misc)	323	\$819	\$2.53
Blackjack	14	\$32	\$2.33
Bottom fish	310	\$791	\$2.55
Sickle pomfret	51	\$102	\$2.00
Ehu (red snapper)	55	\$194	\$3.50
Gindai (flower snapper)	114	\$398	\$3.50
Grouper (misc)	64	\$191	\$3.00
Kalikali (yellowtail)	156	\$428	\$2.74
Onaga (red snapper)	165	\$608	\$3.68
Opakapaka (pink snapper)	23	\$68	\$3.00
Amberjack	5	\$9	\$2.00
Blueline snapper	61	\$147	\$2.40
Reef fish	8,633	\$21,696	\$2.51
Wrasse	20	\$65	\$3.25
Rabbitfish	458	\$1,487	\$3.25
Emperor (misc)	39	\$96	\$2.47
Parrotfish (misc)	1,982	\$6,323	\$3.19
Surgeonfish (misc)	302	\$604	\$2.00
Goatfish (misc)	41	\$127	\$3.12
Blue marlin	182	\$182	\$1.00
Sailfish	36	\$55	\$1.50
Rainbow runner	24	\$47	\$2.00
Skipjack tuna	27,320	\$38,035	\$1.39
Dogtooth tuna	189	\$473	\$2.50
Yellowfin tuna	1,703	\$2,858	\$1.68
Saba (kawakawa)	251	\$399	\$1.59
Spiny lobster	185	\$749	\$4.04
Octopus	557	\$1,126	\$2.02
TOTAL	43,340	\$78,310	\$1.81

Table B-9
August 2006 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Bigeye scad	4,268	\$12,753	\$2.99
Jacks (misc)	487	\$1,197	\$2.46
Bottom fish	728	\$1,919	\$2.64
Sickle pomfret	113	\$239	\$2.12
Ehu (red snapper)	104	\$348	\$3.36
Gindai (flower snapper)	332	\$1,070	\$3.22
Grouper (misc)	79	\$214	\$2.71
Kalikali (yellowtail)	579	\$1,464	\$2.53
Opakapaka (pink snapper)	299	\$820	\$2.74
Jobfish (uku)	73	\$208	\$2.86
Silvermouth (deep lehi)	18	\$49	\$2.70
Blueline snapper	477	\$1,274	\$2.67
Reef fish	8,764	\$22,204	\$2.53
Wrasse	25	\$80	\$3.25
Rabbitfish	493	\$1,600	\$3.25
Emperor (misc)	720	\$1,834	\$2.55
Squirrelfish	37	\$93	\$2.50
Parrotfish (misc)	3,361	\$10,482	\$3.12
Surgeonfish (misc)	564	\$1,187	\$2.10
Unicornfish (misc)	46	\$128	\$2.75
Goatfish (misc)	12	\$30	\$2.50
Mahimahi	189	\$395	\$2.09
Blue marlin	369	\$738	\$2.00
Rainbow runner	271	\$547	\$2.02
Skipjack tuna	29,396	\$42,939	\$1.46
Dogtooth tuna	601	\$1,124	\$1.87
Yellowfin tuna	2,135	\$4,396	\$2.06
Saba (kawakawa)	9	\$14	\$1.50
Spiny lobster	502	\$2,414	\$4.81
Octopus	336	\$673	\$2.00
TOTAL	55,388	\$112,433	\$2.03

Table B-10**September 2006 Estimated Commercial Landings**

Species	Pounds	Value	Price/Lb
Bigeye scad	3,532	\$9,756	\$2.76
Jacks (misc)	98	\$258	\$2.64
Blackjack	36	\$91	\$2.50
Bottom fish	1,070	\$2,776	\$2.59
Ehu (red snapper)	217	\$757	\$3.49
Gindai (flower snapper)	222	\$775	\$3.49
Grouper (misc)	98	\$336	\$3.44
Kalikali (yellowtail)	957	\$2,621	\$2.74
Onaga (red snapper)	312	\$1,393	\$4.47
Opakapaka (pink snapper)	284	\$780	\$2.75
Jobfish (uku)	13	\$32	\$2.50
Silvermouth (deep lehi)	25	\$76	\$3.00
Amberjack	51	\$153	\$3.00
Blueline snapper	429	\$1,073	\$2.50
Reef fish	5,253	\$13,542	\$2.58
Rabbitfish	523	\$1,660	\$3.17
Emperor (misc)	624	\$1,630	\$2.61
Parrotfish (misc)	3,445	\$10,569	\$3.07
Surgeonfish (misc)	284	\$567	\$2.00
Unicornfish (misc)	9	\$18	\$2.00
Goatfish (misc)	155	\$385	\$2.49
Bigeye emperor	116	\$325	\$2.79
Barracuda	33	\$65	\$2.00
Mahimahi	37	\$85	\$2.27
Rainbow runner	537	\$1,048	\$1.95
Wahoo	228	\$459	\$2.01
Skipjack tuna	22,474	\$34,331	\$1.53
Yellowfin tuna	1,259	\$2,803	\$2.23
Saba (kawakawa)	2,458	\$3,541	\$1.44
Spiny lobster	580	\$2,905	\$5.01
Octopus	337	\$738	\$2.19
TOTAL	45,695	\$95,548	\$2.09

Table B-11
October 2006 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Bigeye scad	5,099	\$12,570	\$2.47
Jacks (misc)	64	\$161	\$2.50
Bottom fish	193	\$552	\$2.86
Sickle pomfret	125	\$303	\$2.41
Ehu (red snapper)	5	\$17	\$3.50
Grouper (misc)	106	\$383	\$3.60
Kalikali (yellowtail)	38	\$95	\$2.50
Onaga (red snapper)	162	\$728	\$4.50
Opakapaka (pink snapper)	92	\$253	\$2.75
Reef fish	6,271	\$15,751	\$2.51
Wrasse	65	\$165	\$2.53
Rabbitfish	1,480	\$4,536	\$3.07
Emperor (misc)	66	\$177	\$2.67
Squirrelfish	10	\$24	\$2.50
Parrotfish (misc)	1,934	\$6,065	\$3.14
Surgeonfish (misc)	777	\$1,572	\$2.02
Orangespine unicornfish	17	\$43	\$2.50
Unicornfish (misc)	27	\$68	\$2.50
Goatfish (misc)	55	\$149	\$2.73
Mahimahi	611	\$1,272	\$2.08
Blue marlin	636	\$955	\$1.50
Rainbow runner	85	\$162	\$1.91
Wahoo	335	\$767	\$2.29
Skipjack tuna	7,549	\$14,313	\$1.90
Dogtooth tuna	120	\$240	\$2.00
Yellowfin tuna	2,183	\$5,362	\$2.46
Saba (kawakawa)	2,307	\$3,431	\$1.49
Spiny lobster	158	\$829	\$5.26
Octopus	510	\$1,020	\$2.00
TOTAL	31,079	\$71,962	\$2.32

Table B-12
November 2006 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Bigeye scad	1,326	\$3,245	\$2.45
Jacks (misc)	243	\$411	\$1.69
Blackjack	105	\$261	\$2.50
Bottom fish	33	\$82	\$2.50
Ehu (red snapper)	267	\$935	\$3.50
Gindai (flower snapper)	117	\$410	\$3.50
Grouper (misc)	54	\$174	\$3.25
Kalikali (yellowtail)	178	\$535	\$3.00
Onaga (red snapper)	60	\$231	\$3.85
Opakapaka (pink snapper)	186	\$466	\$2.50
Blueline snapper	92	\$253	\$2.75
Reef fish	5,961	\$14,877	\$2.50
Rabbitfish	839	\$2,554	\$3.05
Emperor (misc)	133	\$332	\$2.50
Parrotfish (misc)	1,336	\$4,236	\$3.17
Surgeonfish (misc)	380	\$777	\$2.04
Bigeye emperor	35	\$86	\$2.50
Mahimahi	993	\$2,186	\$2.20
Blue marlin	36	\$73	\$2.00
Rainbow runner	391	\$751	\$1.92
Wahoo	572	\$1,292	\$2.26
Tunas (misc)	15	\$15	\$1.00
Skipjack tuna	7,955	\$14,306	\$1.80
Dogtooth tuna	385	\$779	\$2.02
Yellowfin tuna	3,018	\$6,180	\$2.05
Saba (kawakawa)	2,752	\$4,023	\$1.46
Octopus	420	\$844	\$2.01
TOTAL	27,880	\$60,314	\$2.16

Table B-13
December 2006 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Bigeye scad	591	\$1,615	\$2.73
Jacks (misc)	9	\$18	\$2.00
Bottom fish	244	\$750	\$3.07
Alfonsin	25	\$51	\$2.00
Ehu (red snapper)	43	\$145	\$3.40
Gindai (flower snapper)	102	\$382	\$3.75
Grouper (misc)	207	\$821	\$3.96
Kalikali (yellowtail)	38	\$105	\$2.75
Onaga (red snapper)	256	\$1,196	\$4.67
Jobfish (uku)	35	\$95	\$2.75
Blueline snapper	16	\$45	\$2.75
Reef fish	5,127	\$12,900	\$2.52
Rabbitfish	827	\$2,669	\$3.23
Emperor (misc)	711	\$1,815	\$2.55
Parrotfish (misc)	540	\$1,698	\$3.14
Surgeonfish (misc)	113	\$226	\$2.00
Mahimahi	1,468	\$2,938	\$2.00
Rainbow runner	155	\$318	\$2.06
Wahoo	305	\$552	\$1.81
Skipjack tuna	23,116	\$39,594	\$1.71
Yellowfin tuna	8,075	\$15,043	\$1.86
Saba (kawakawa)	593	\$941	\$1.59
Octopus	352	\$710	\$2.02
TOTAL	42,947	\$84,629	\$1.97

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

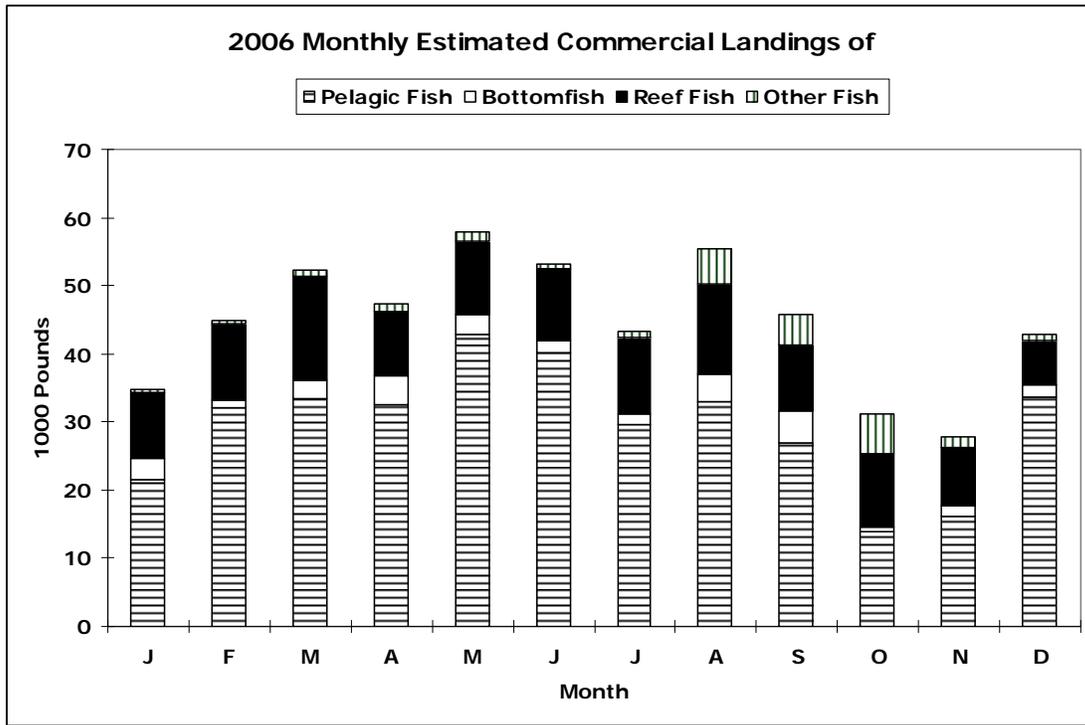


Figure B-1-1

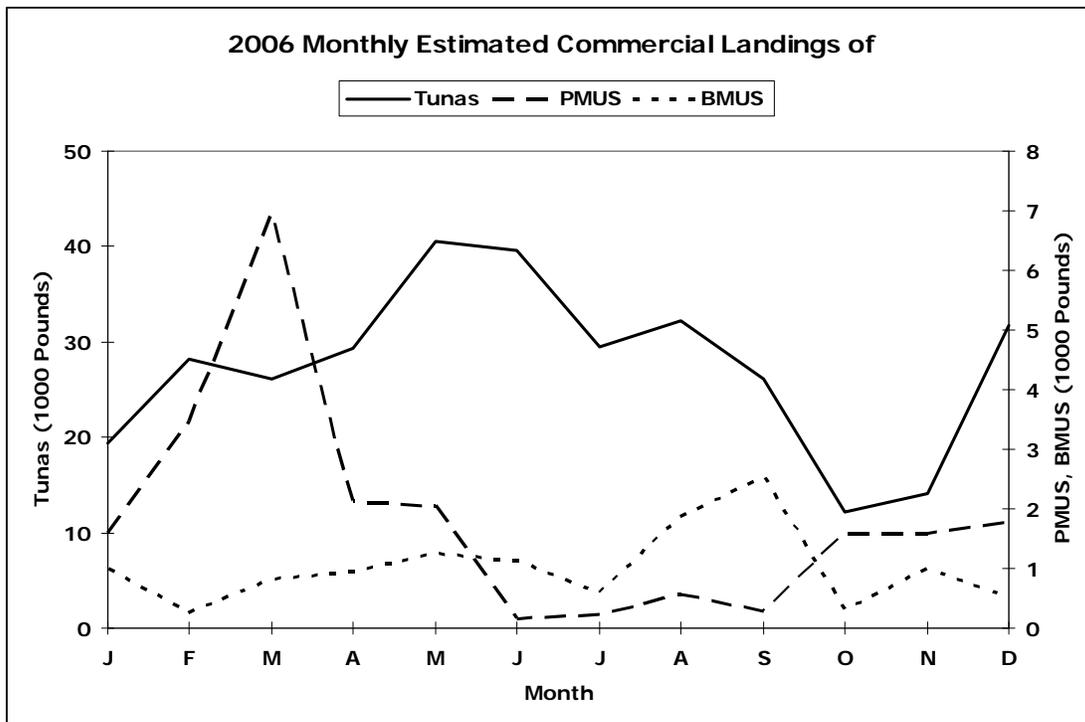


Figure B-1-2

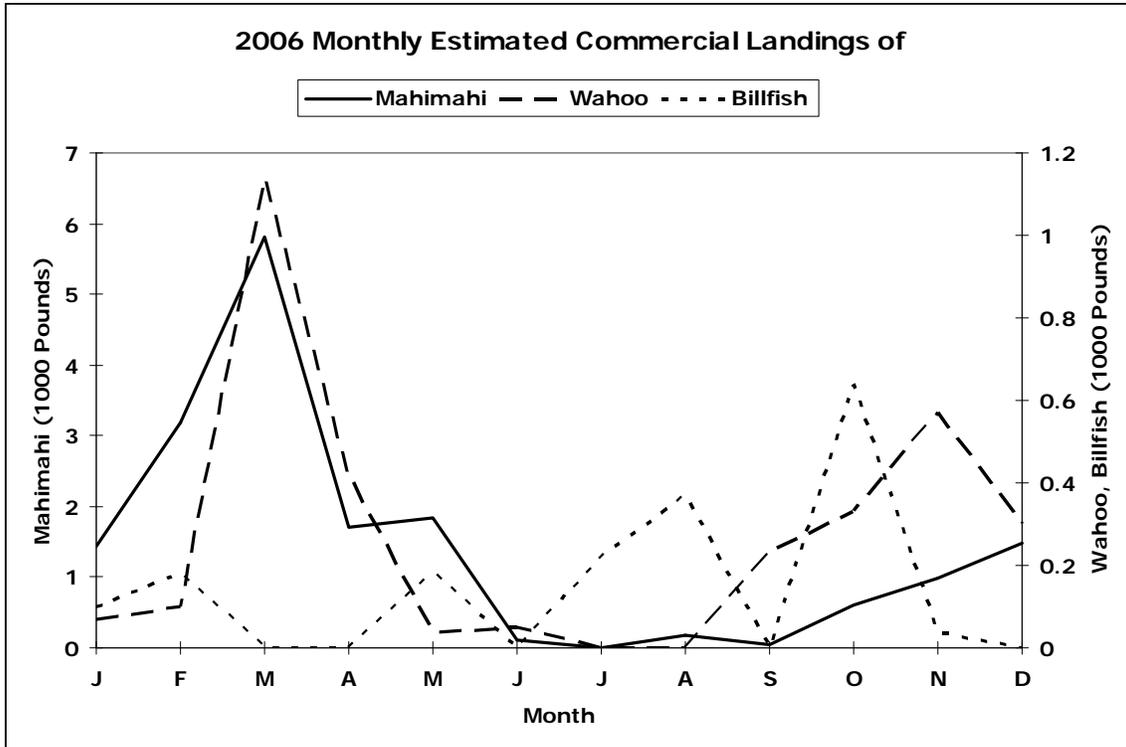


Figure B-1-3

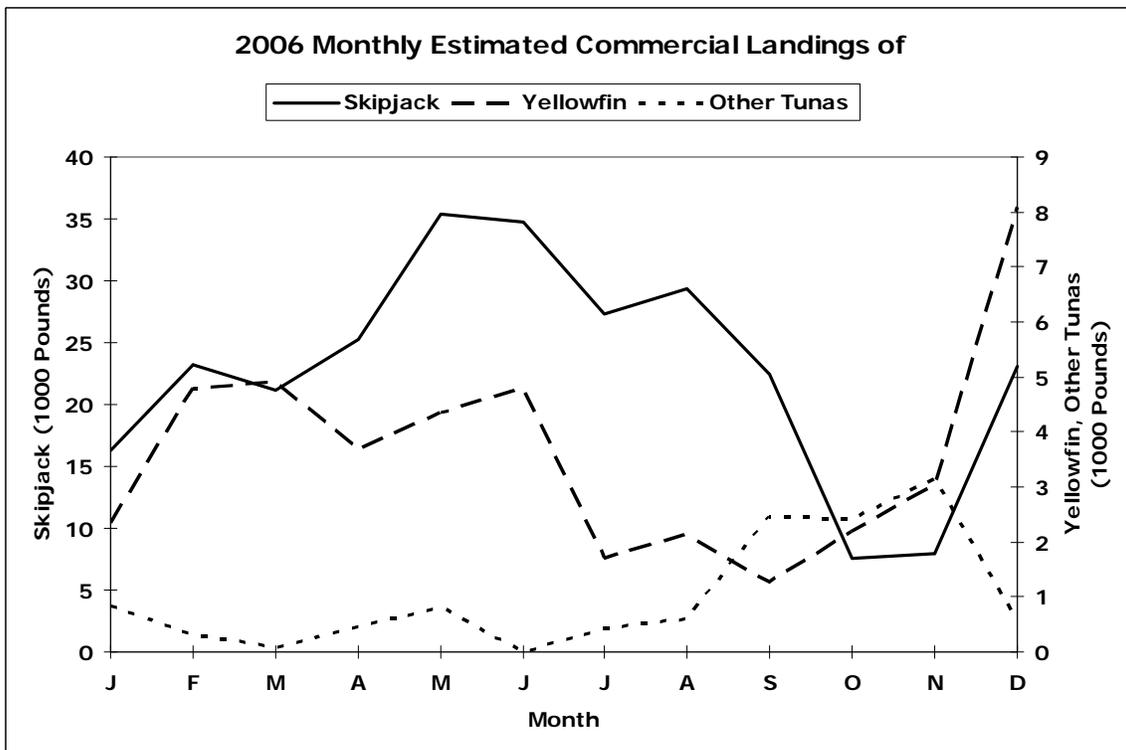


Figure B-1-4

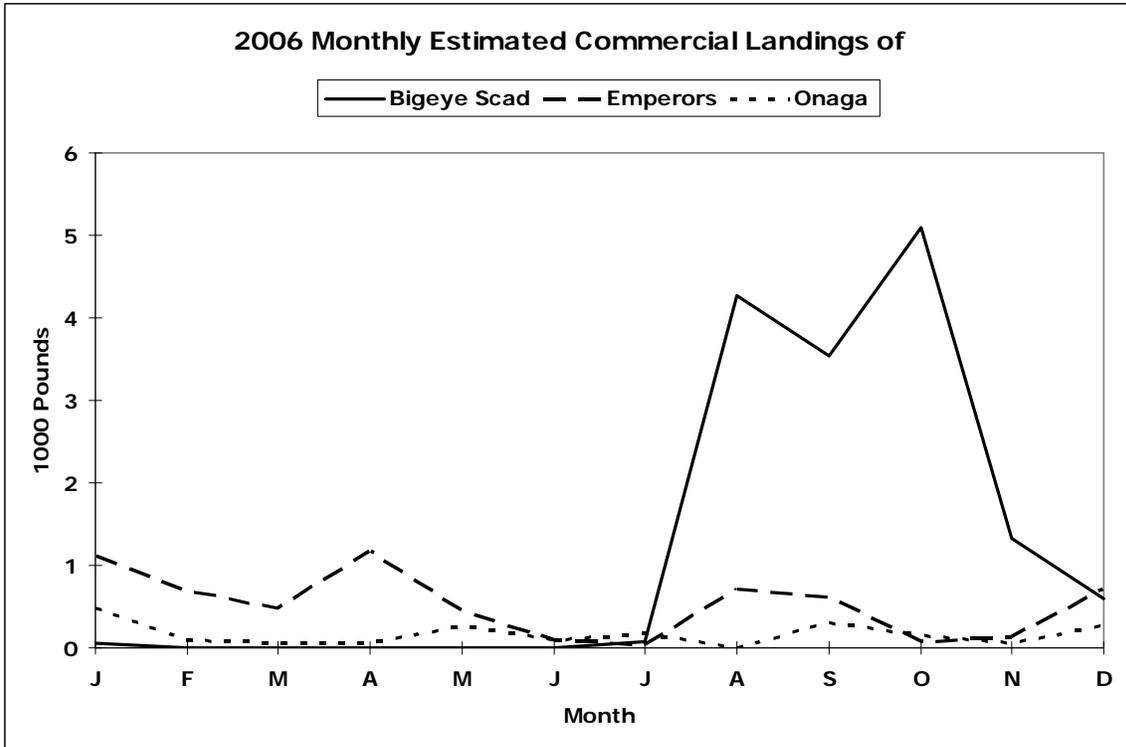


Figure B-1-5

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:

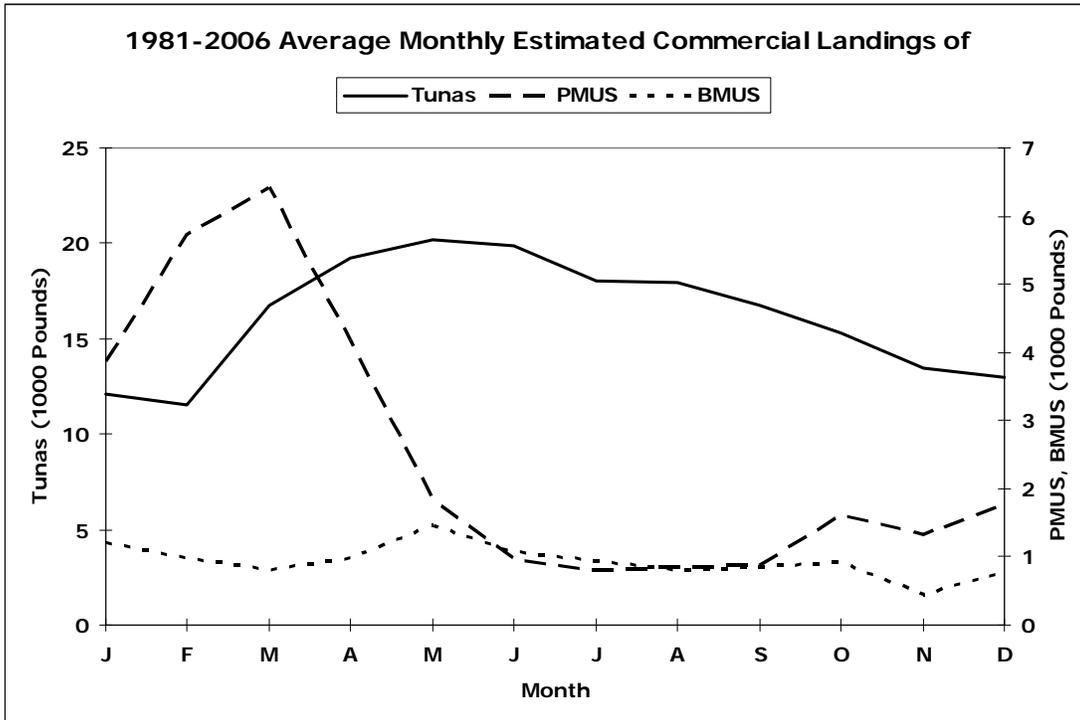


Figure B-2-1

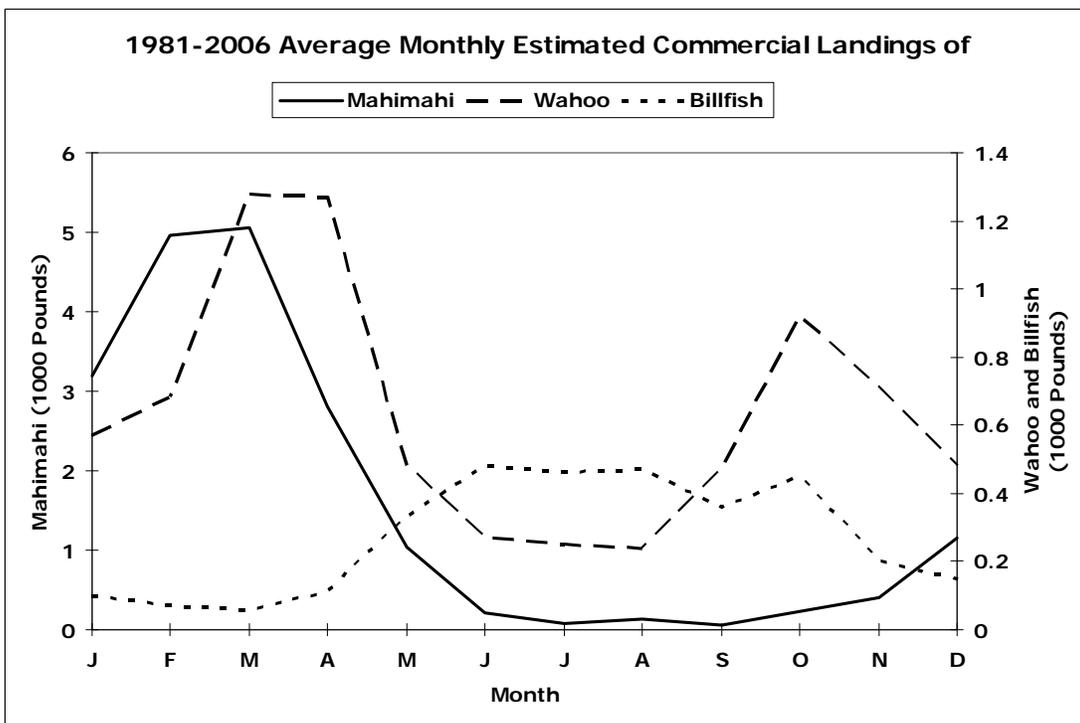


Figure B-2-2

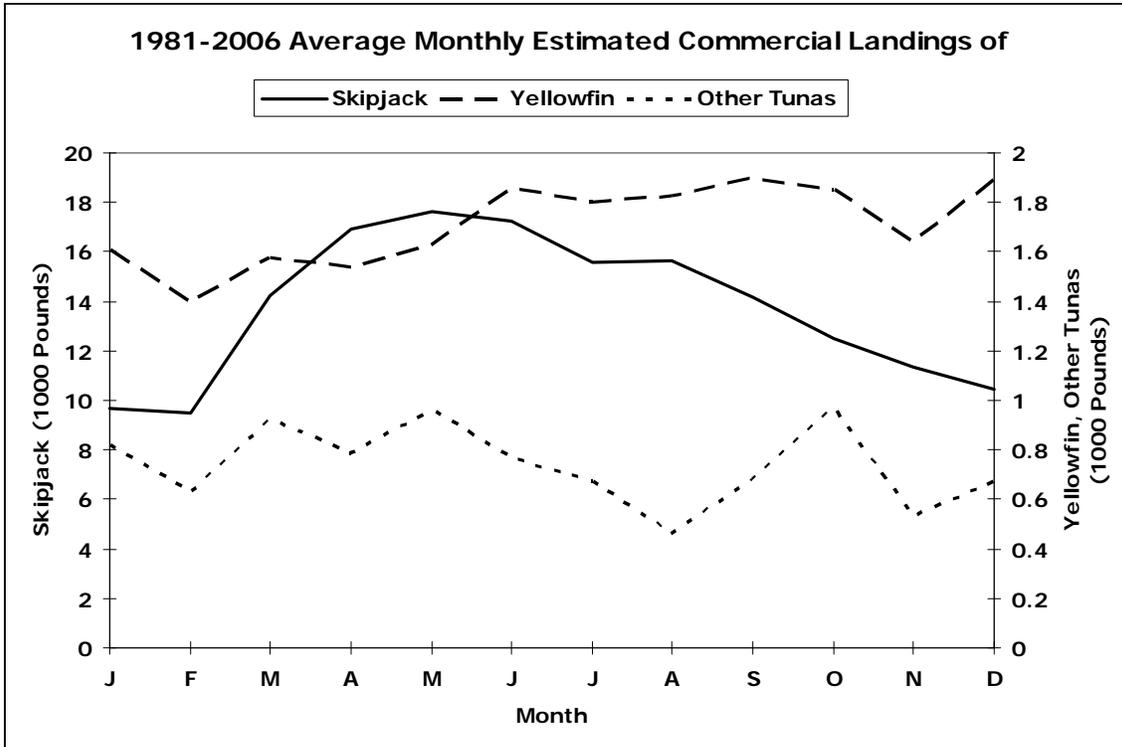


Figure B-2-3

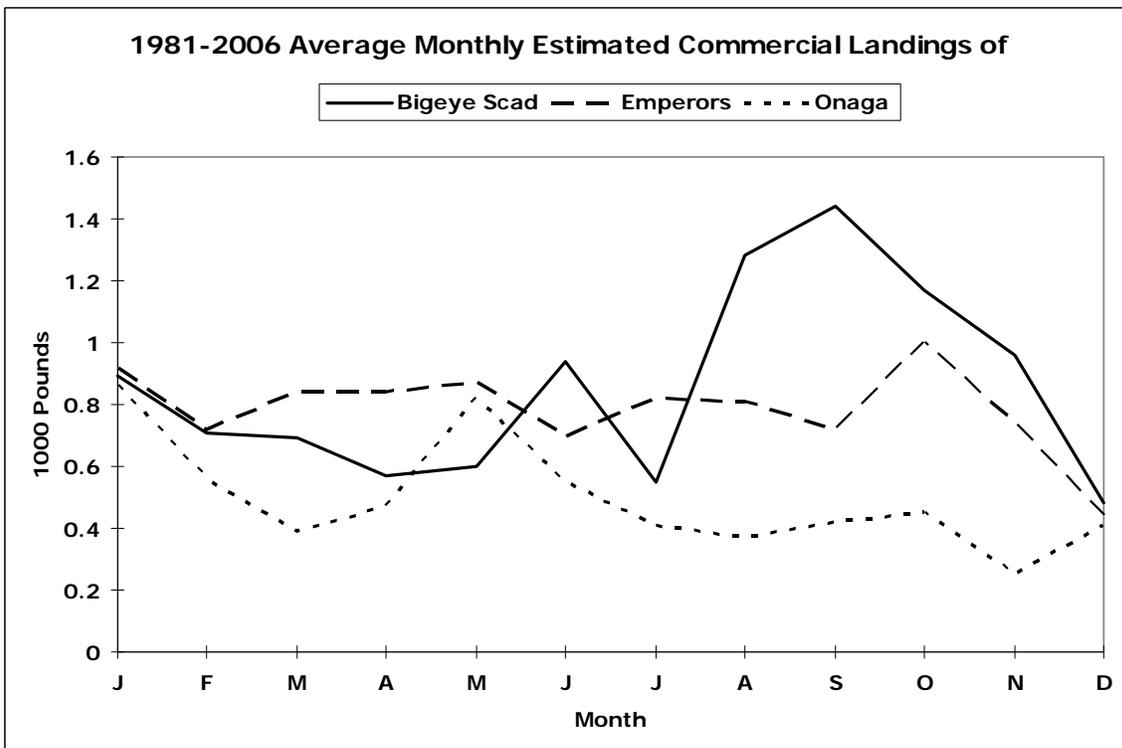


Figure B-2-4

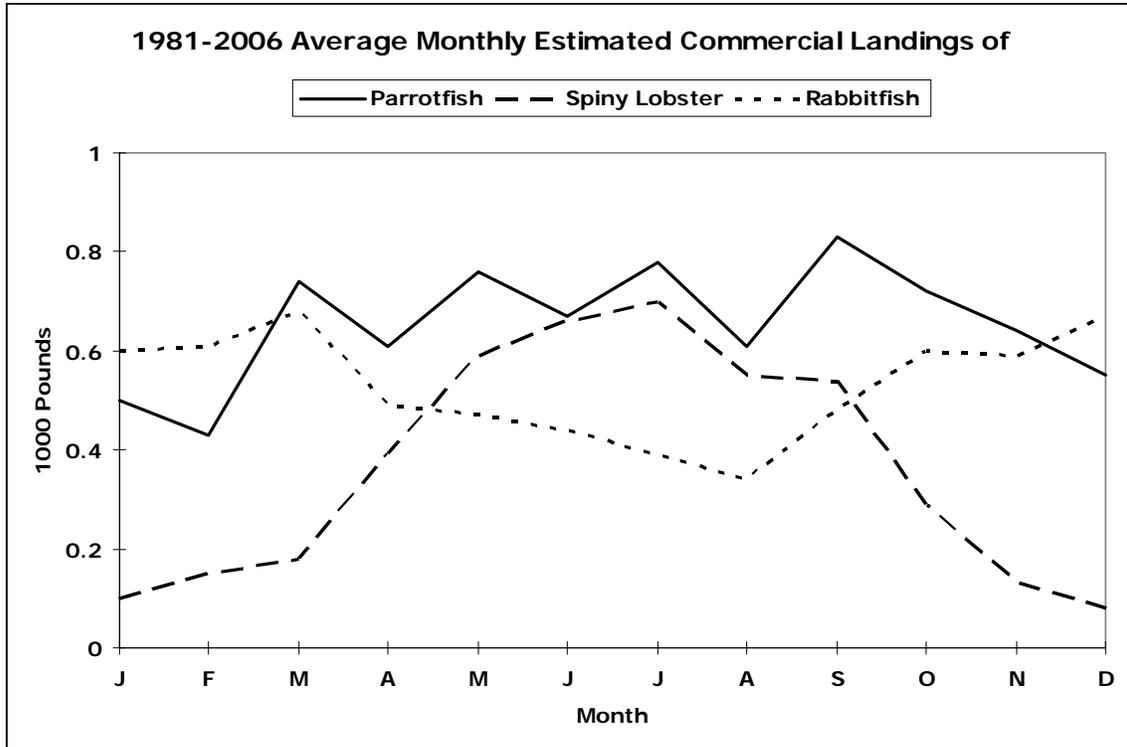


Figure B-2-5

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

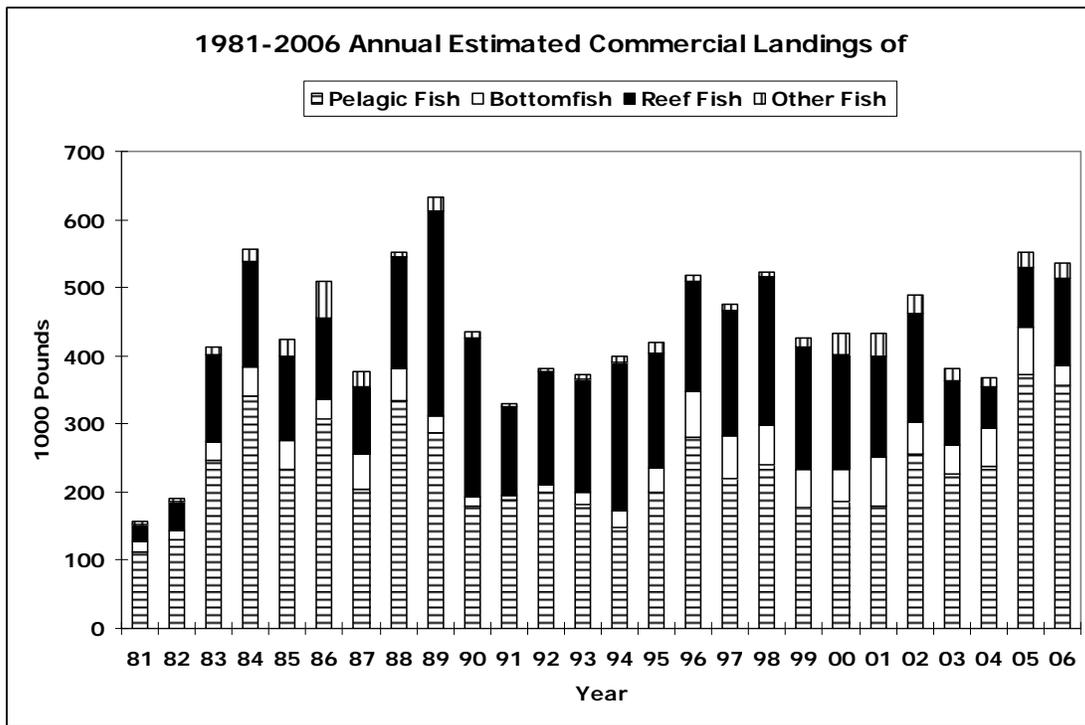


Figure B-3-1

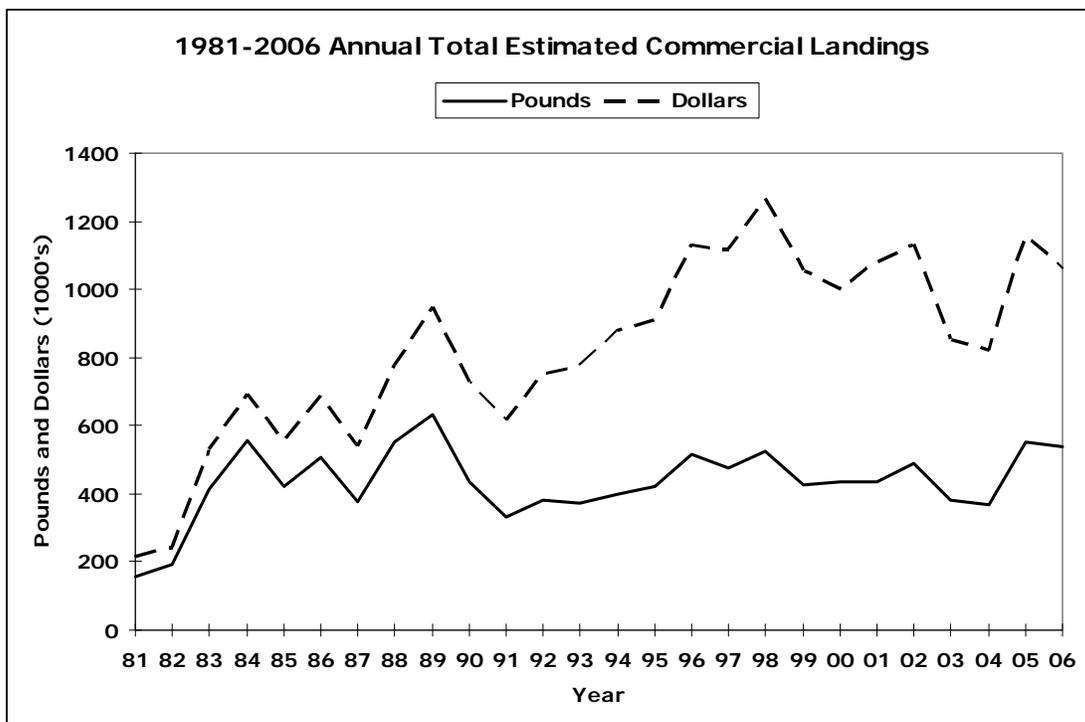


Figure B-3-2

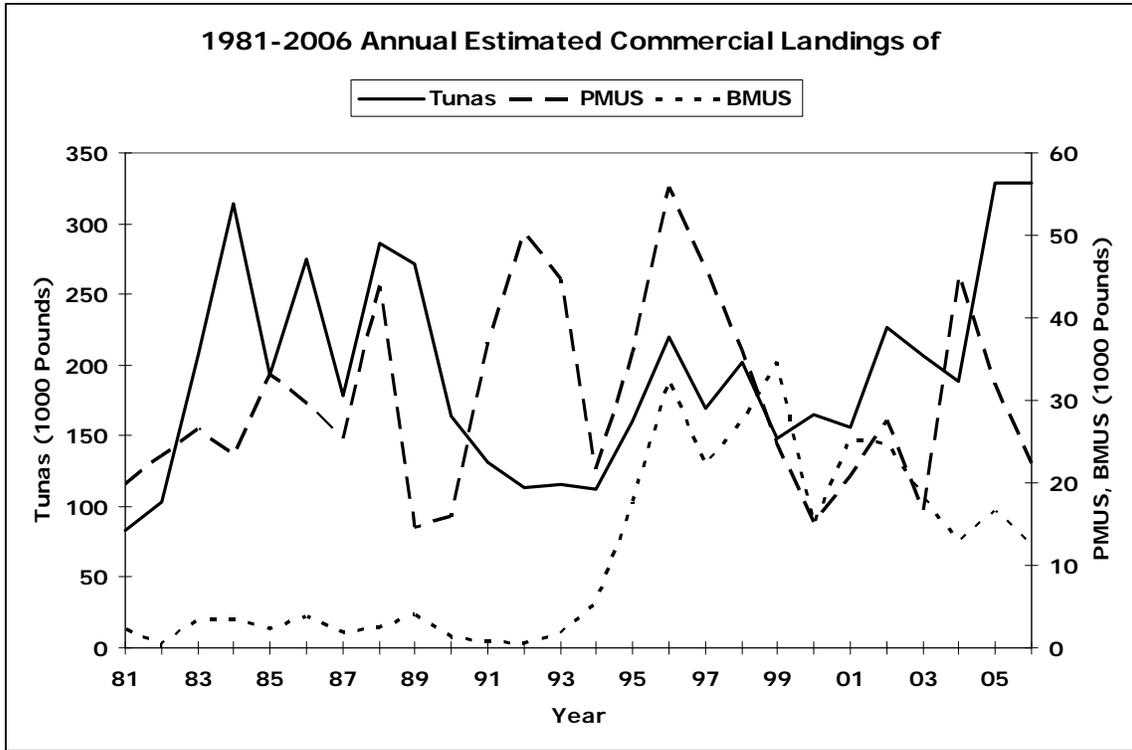


Figure B-3-3

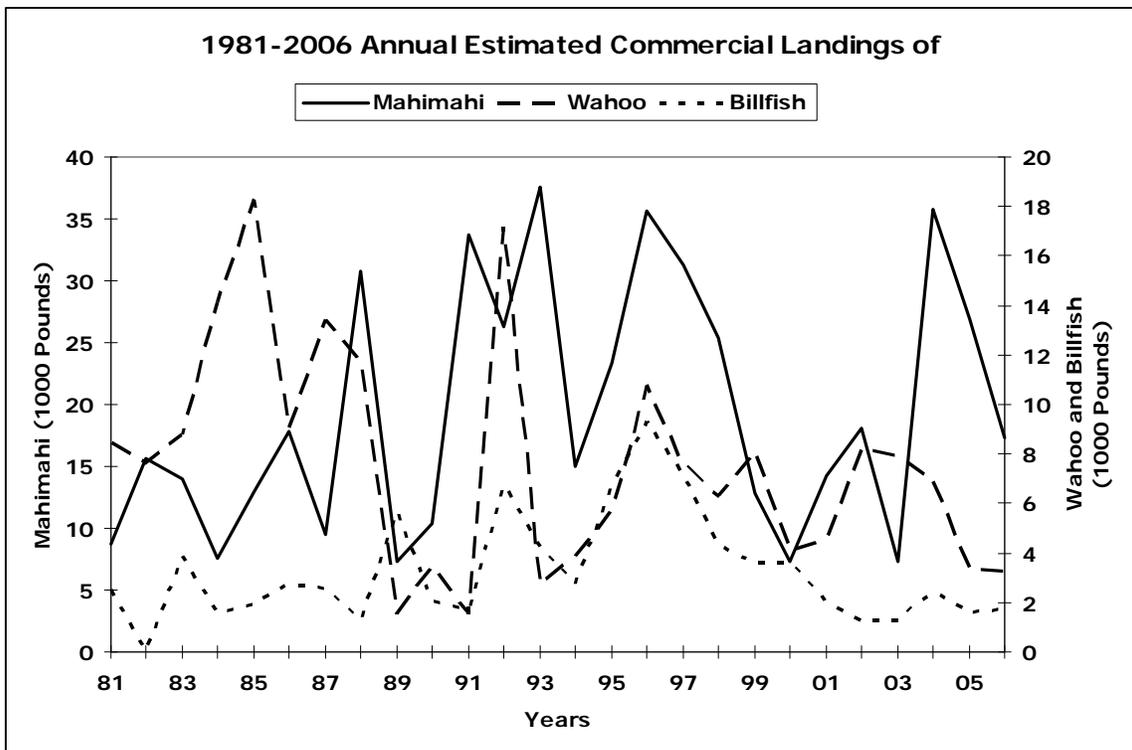


Figure B-3-4

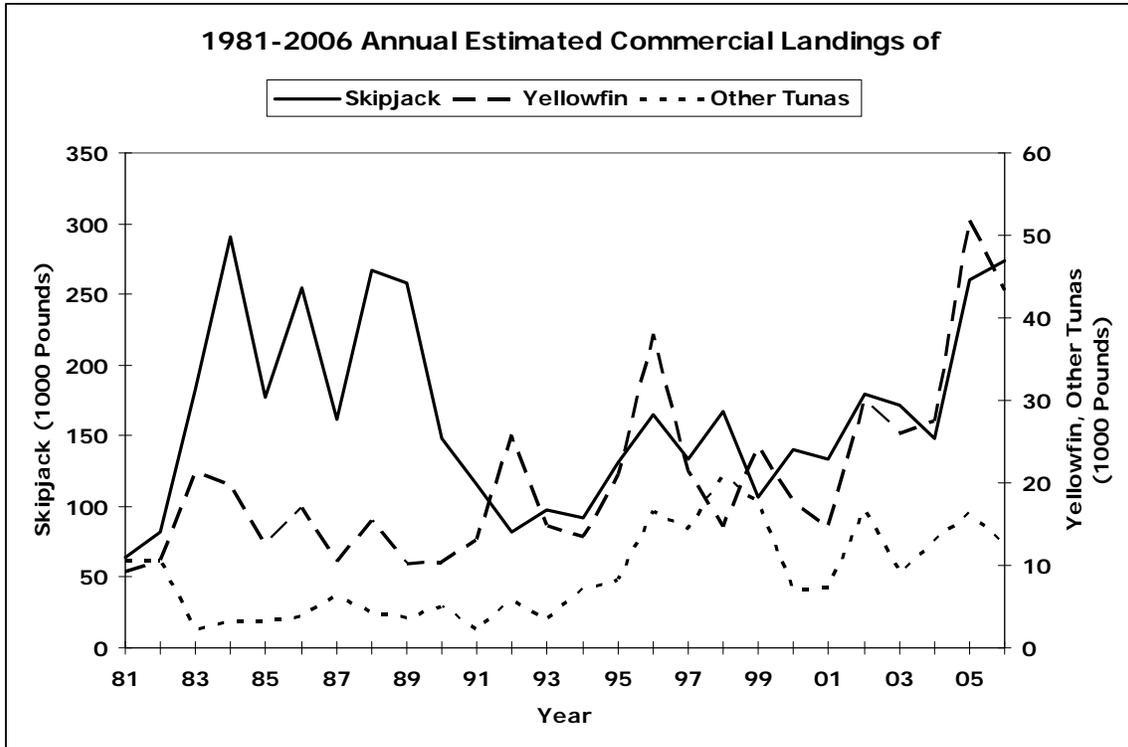


Figure B-3-5

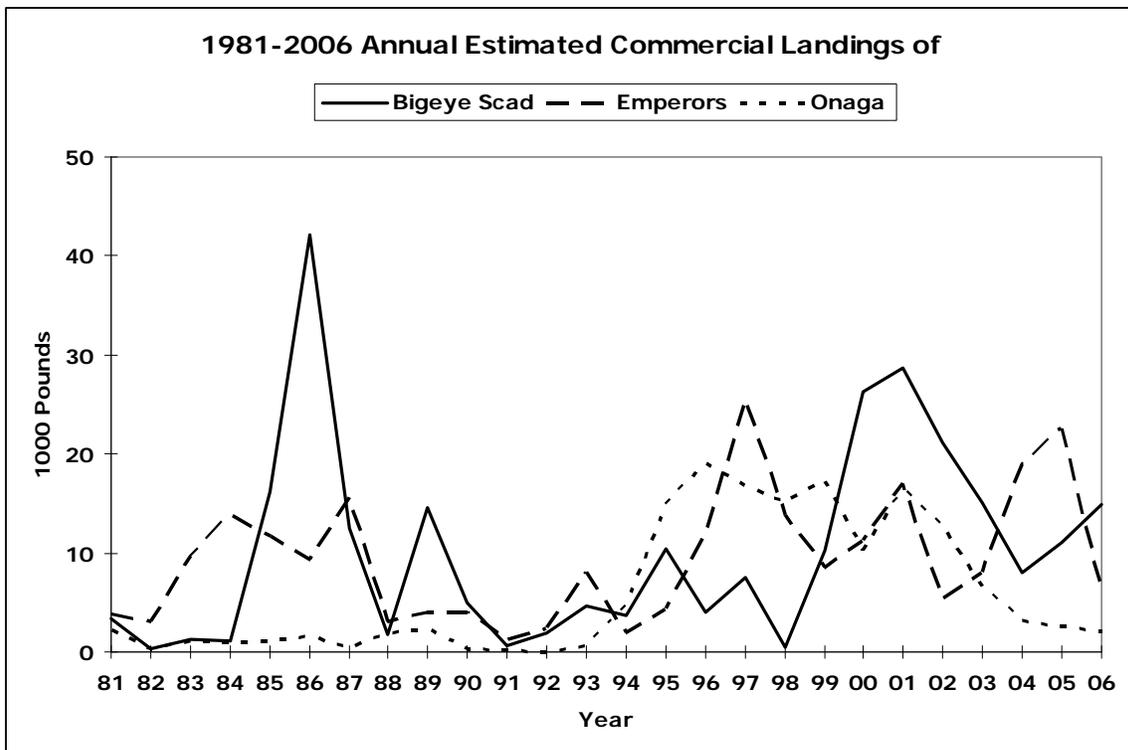


Figure B-3-6

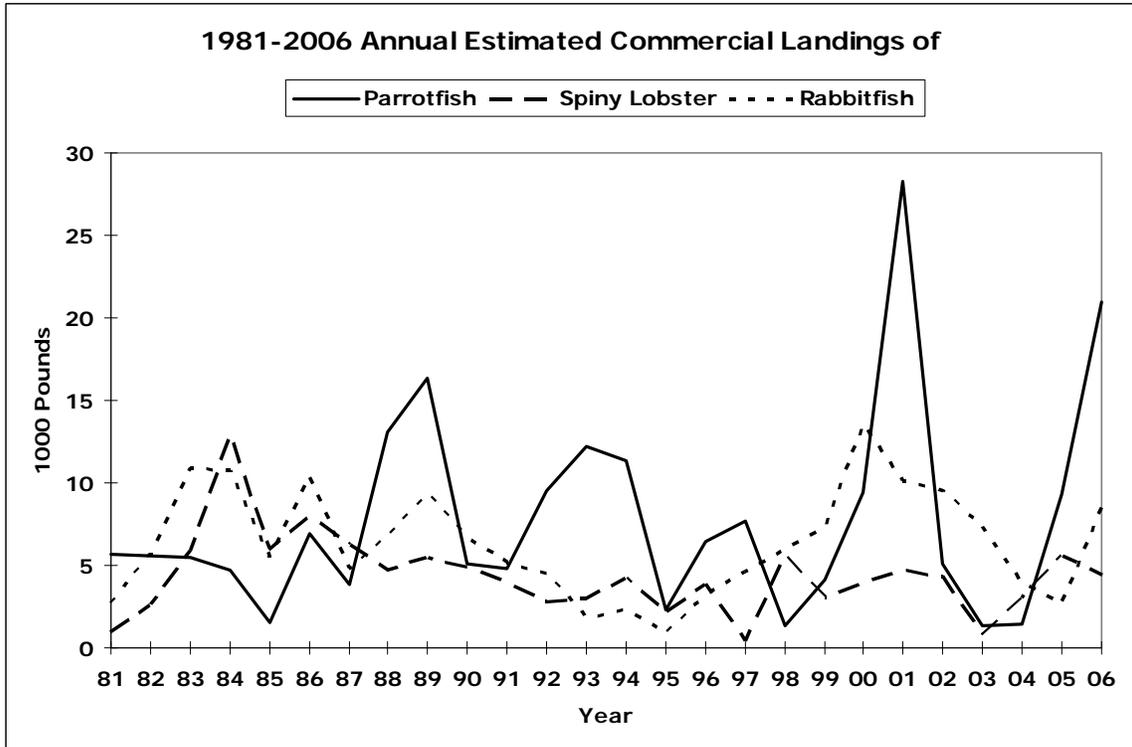


Figure B-3-7

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:

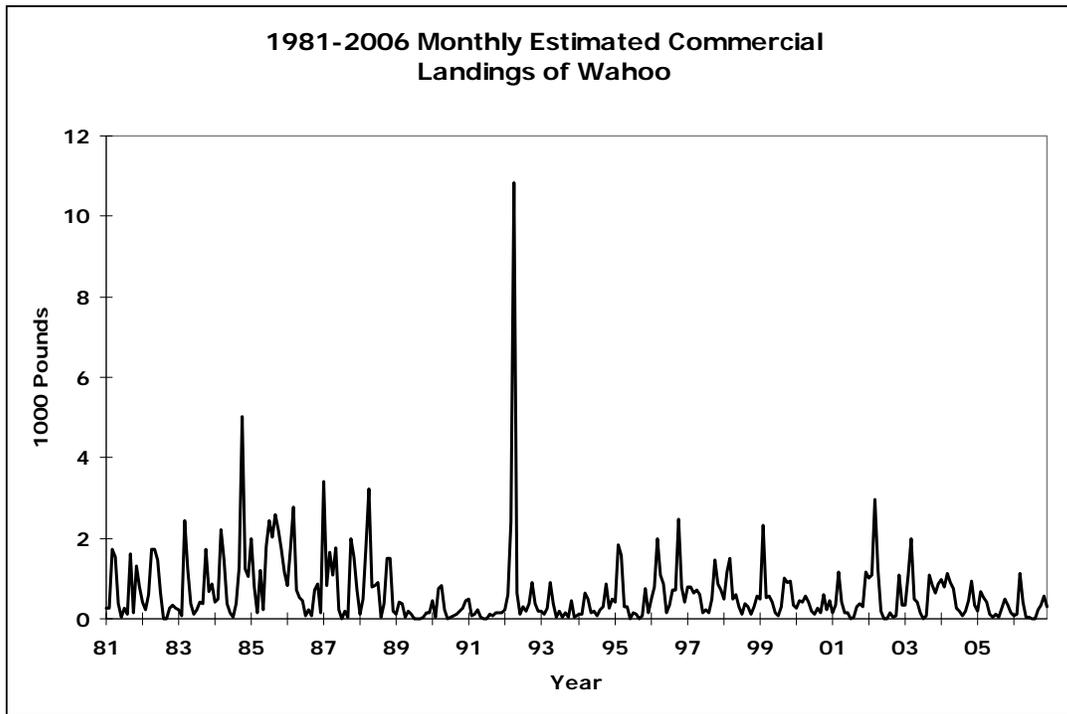


Figure B-4-1

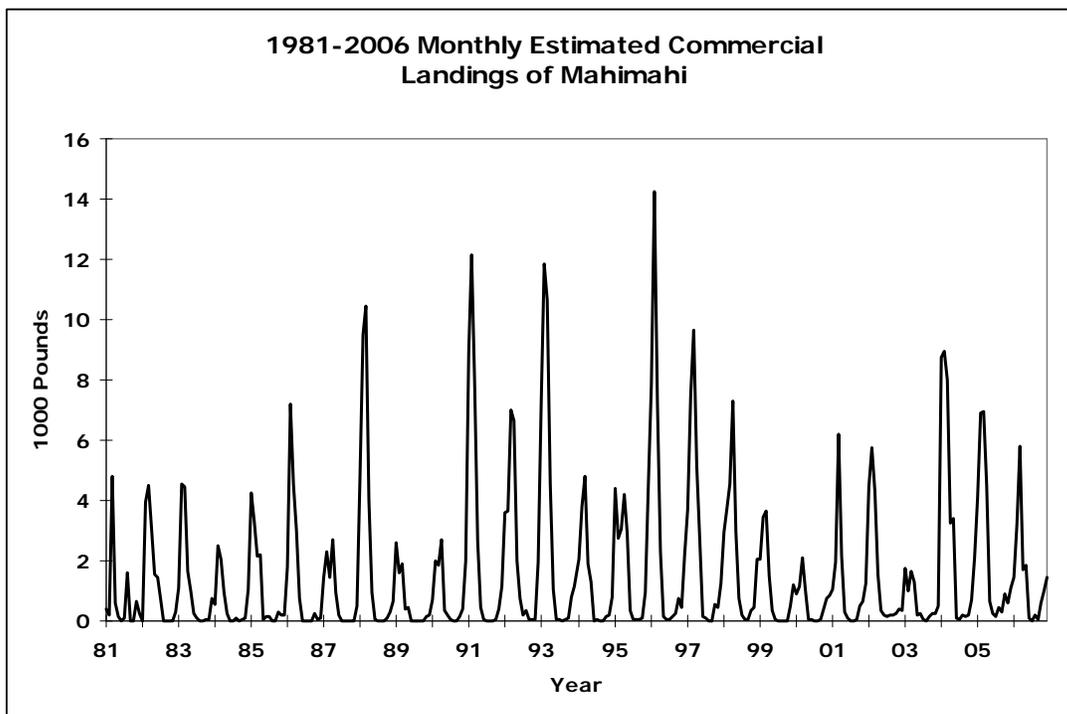


Figure B-4-2

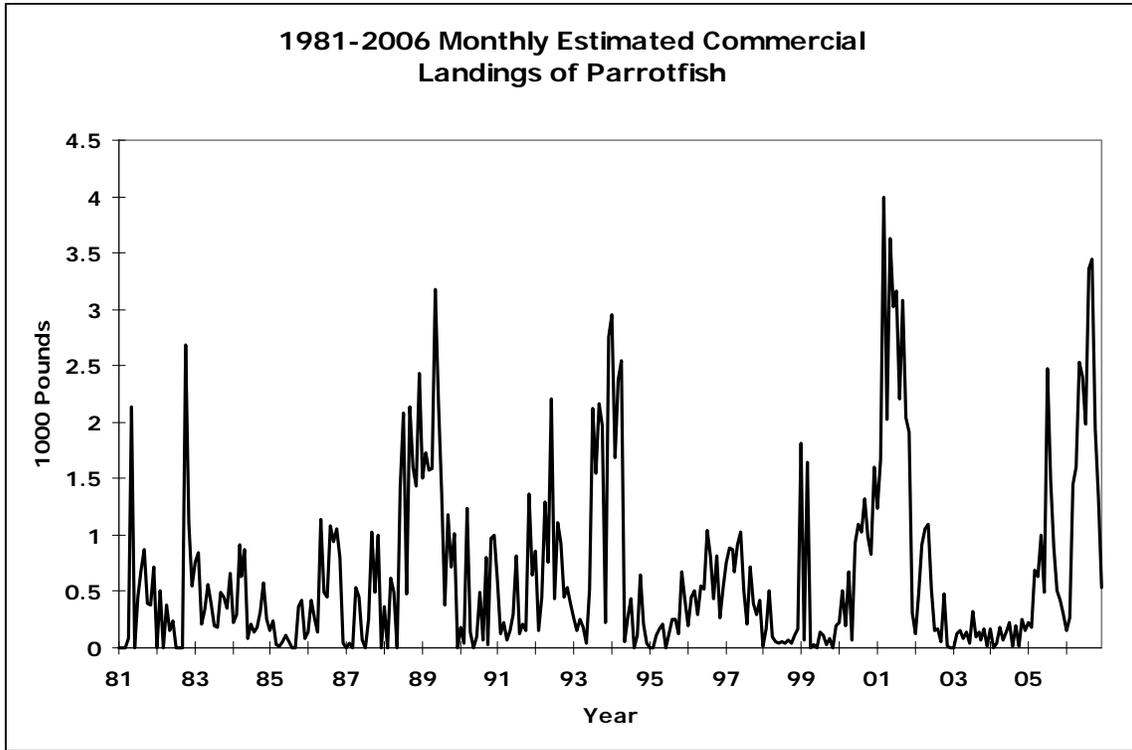


Figure B-4-3

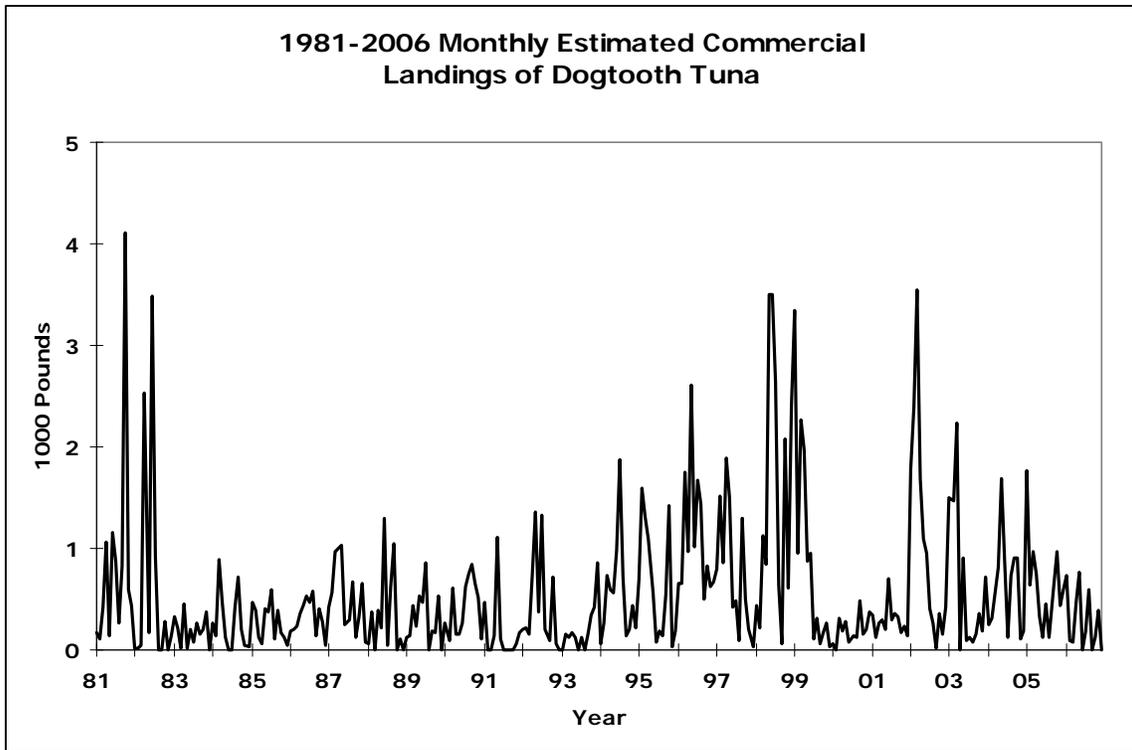


Figure B-4-4

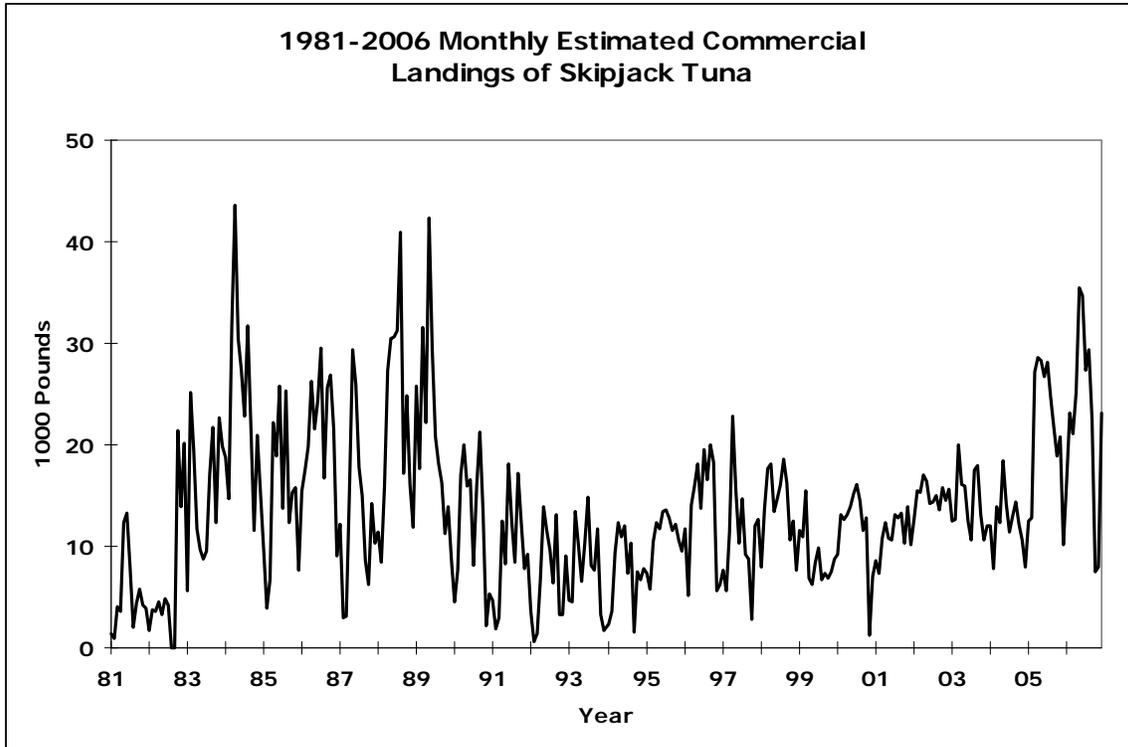


Figure B-4-5

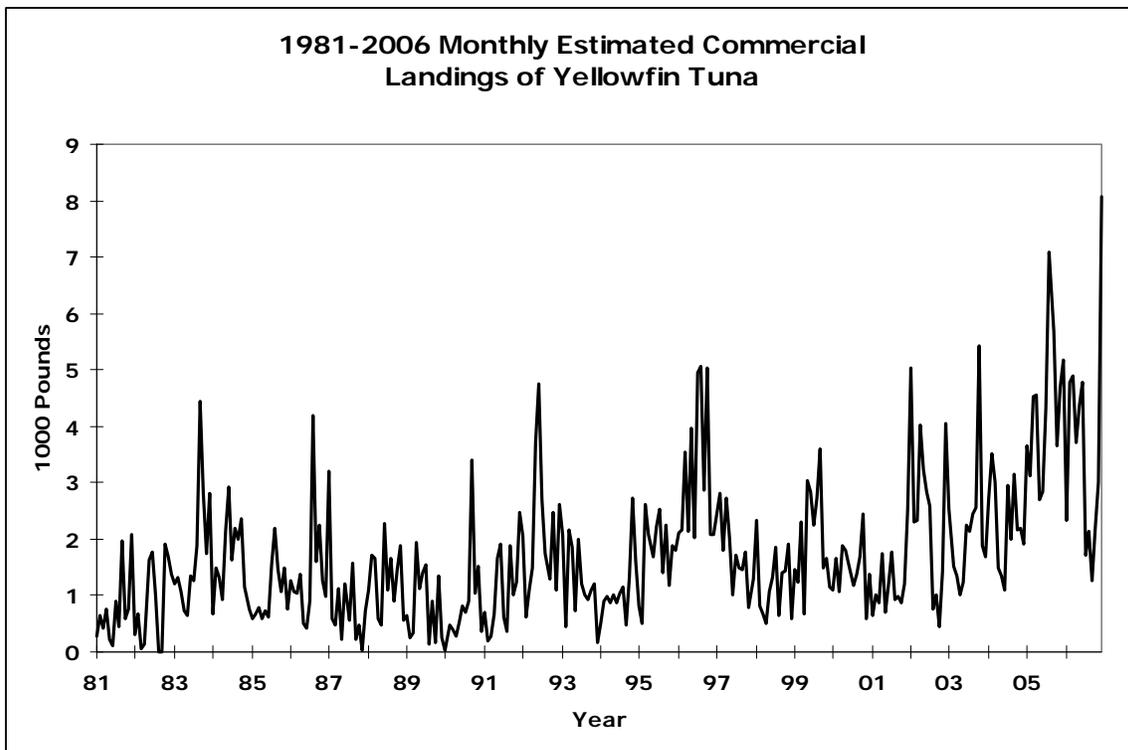


Figure B-4-6

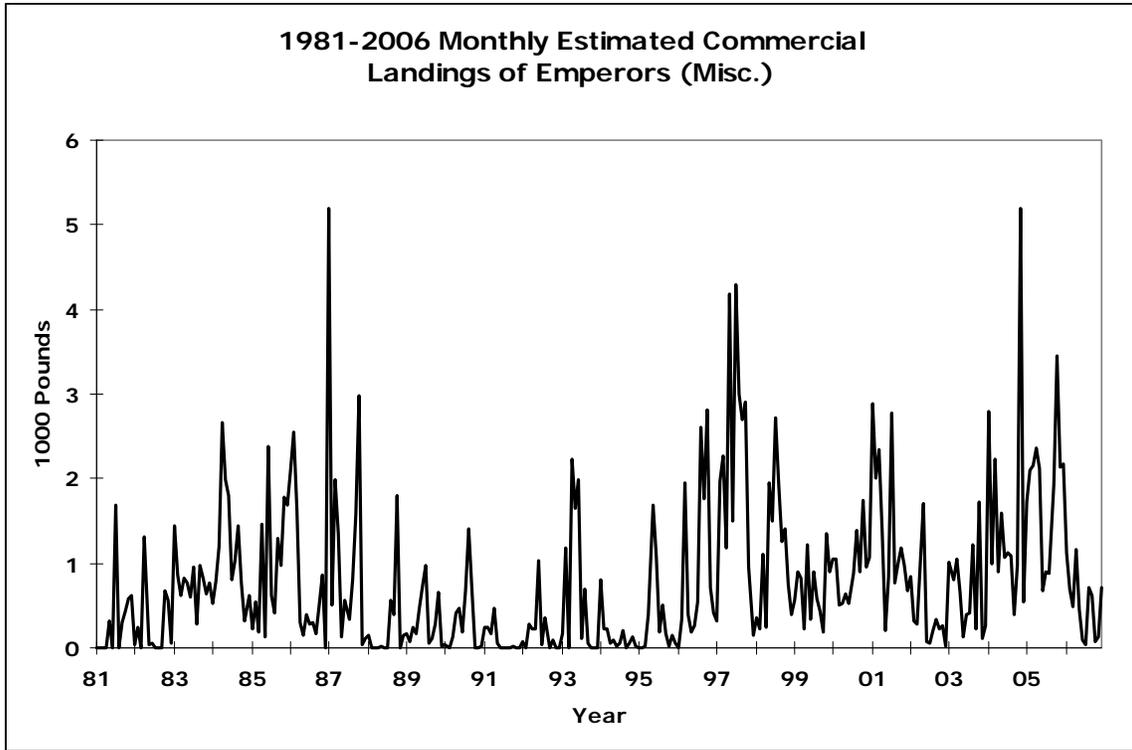


Figure B-4-7

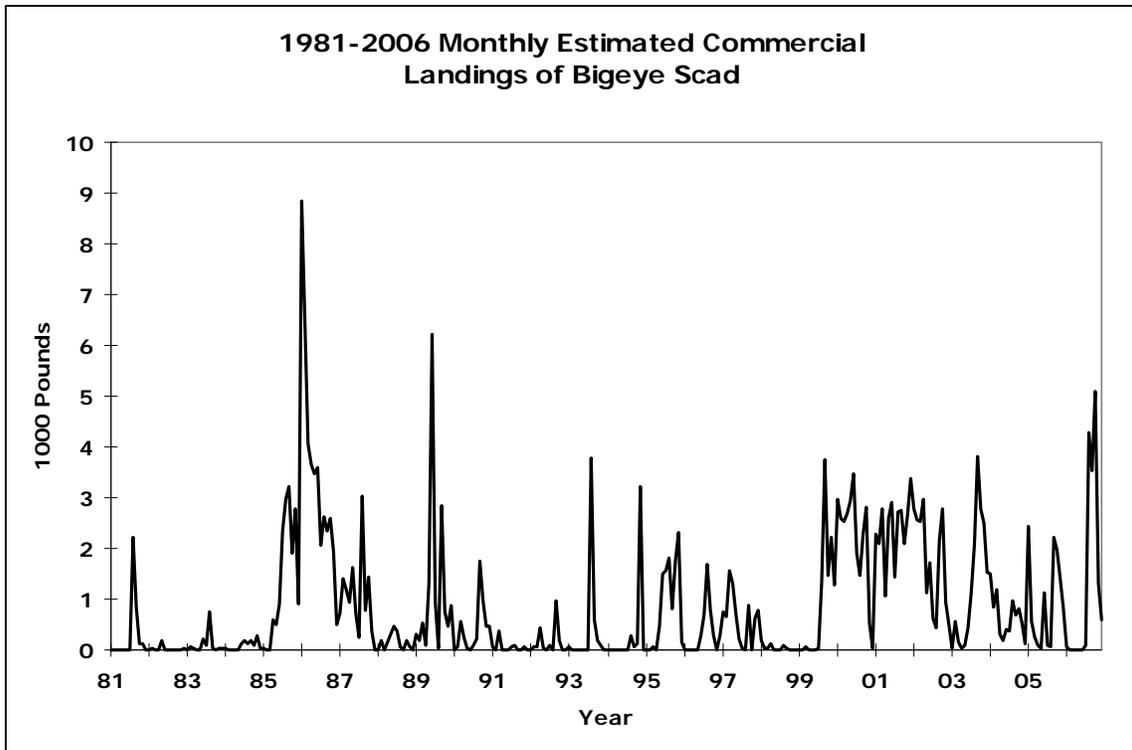


Figure B-4-8

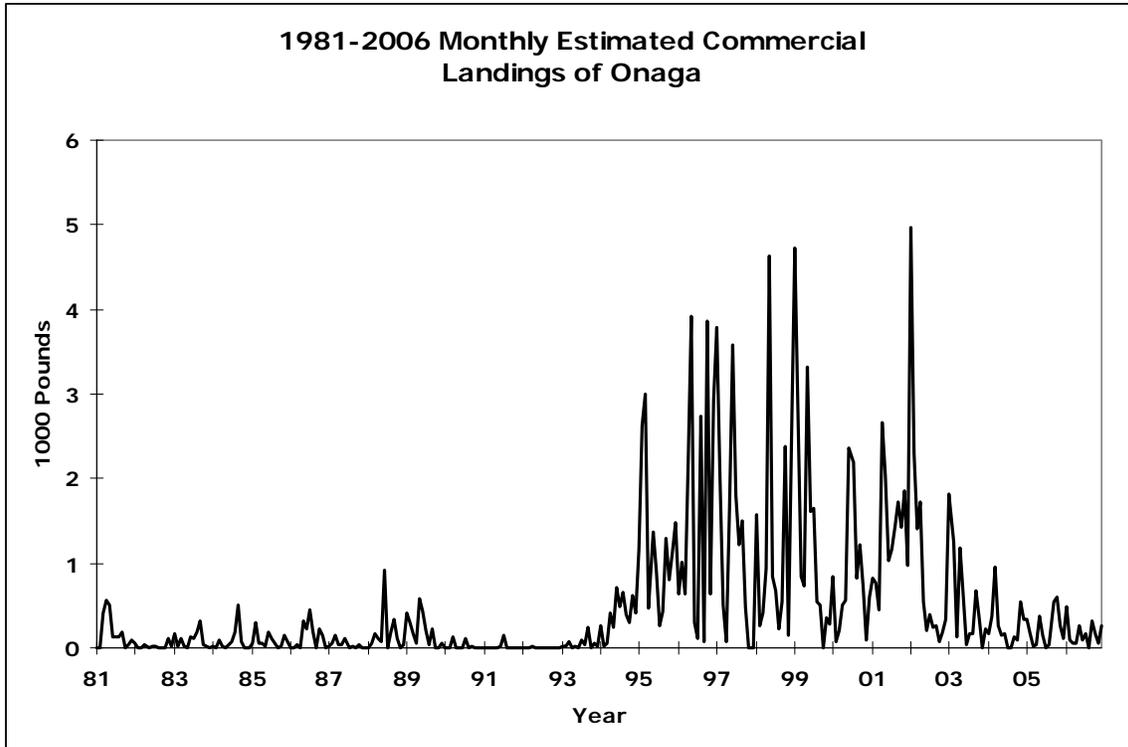


Figure B-4-9

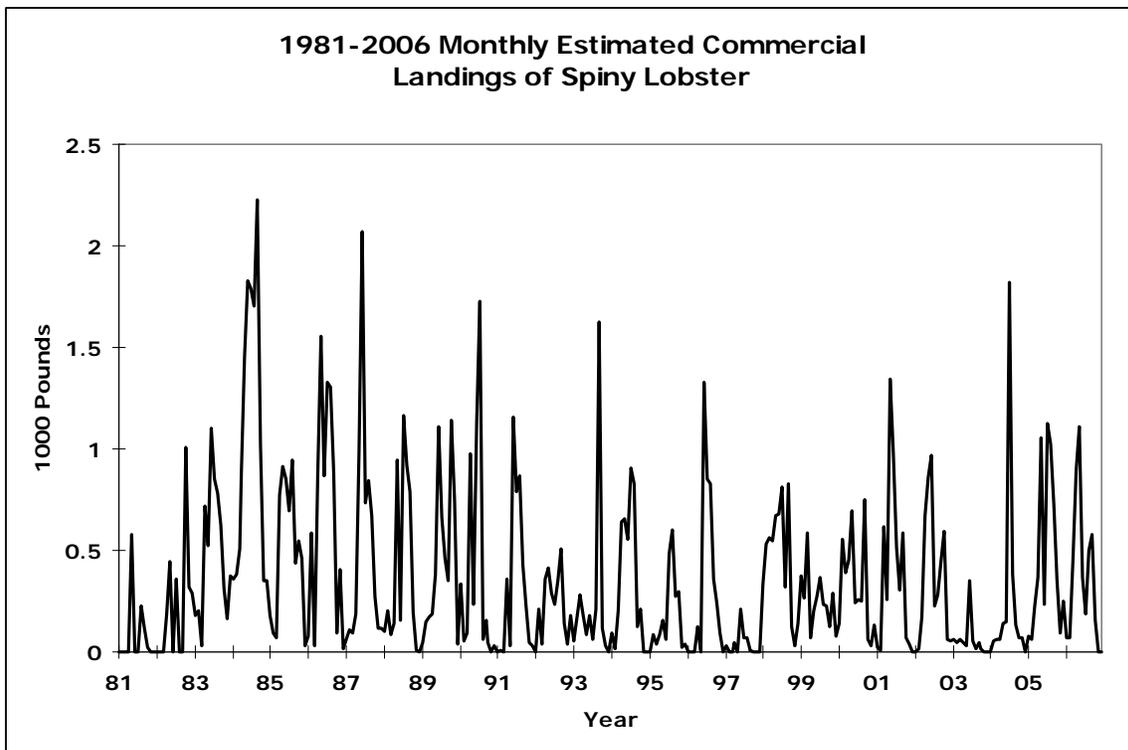


Figure B-4-10

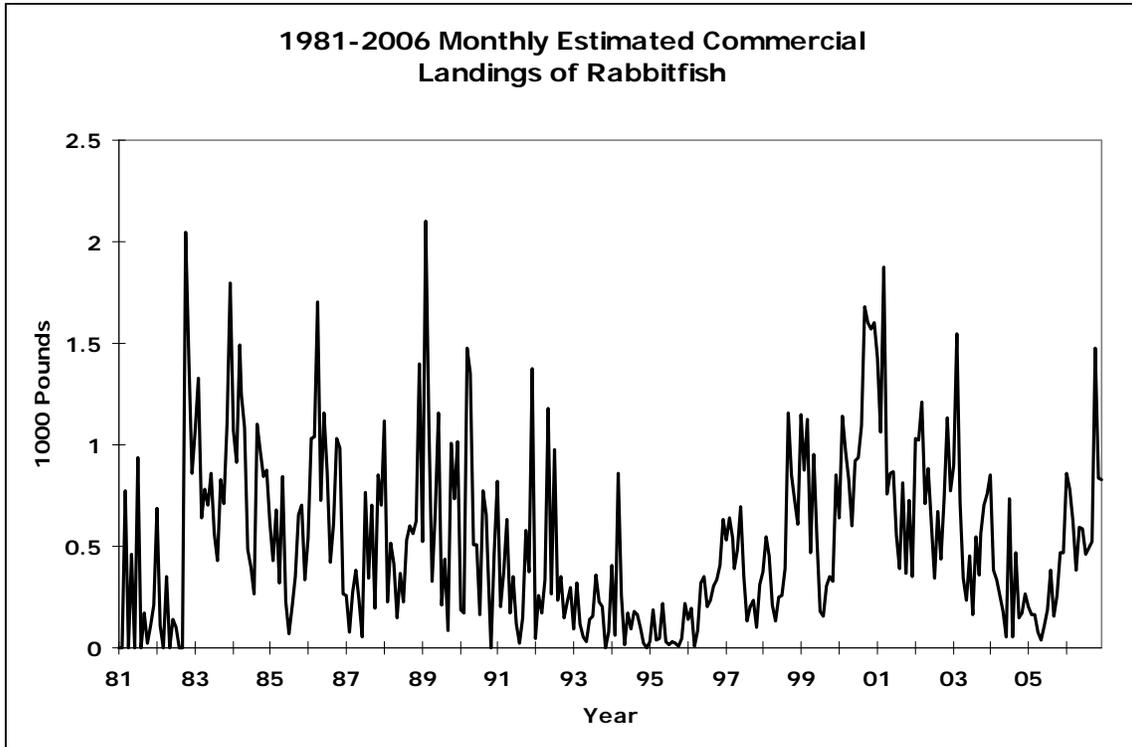


Figure B-4-11