

GUAM 2007 FISHERY STATISTICS

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

June 2009

CONTENTS

	Page
Introduction	C.1
Data Collecting	C.1
Data Processing	C.2
Data Reporting	C.2
Species Categories	C.3
Tables	C.6
Figures	C.20

LIST OF GUAM 2007 SUMMARY TABLES

Tables	Page
C-1 Annual Estimated Commerical Landings	C.6
C-2 January Estimated Commerical Landings	C.8
C-3 February Estimated Commerical Landings	C.9
C-4 March Estimated Commerical Landings	C.10
C-5 April Estimated Commerical Landings	C.11
C-6 May Estimated Commerical Landings	C.12
C-7 June Estimated Commerical Landings	C.13
C-8 July Estimated Commerical Landings	C.14
C-9 August Estimated Commerical Landings	C.15
C-10 September Estimated Commerical Landings	C.16
C-11 October Estimated Commerical Landings	C.17
C-12 November Estimated Commerical Landings	C.18
C-13 December Estimated Commerical Landings	C.19

LIST OF GUAM FIGURES

Figures	Page
2007 Monthly Estimated Commercial Landings	
C-1-1 Pelagic Fishes, Bottomfishes, Reef Fishes, and Other Fishes	C.20
C-1-2 Tunas, PMUS, and BMUS	C.20
C-1-3 Skipjack, Yellowfin, and Other Tunas	C.21
C-1-4 Wahoo, Mahimahi, and Billfishes	C.21
C-1-5 Onaga and Bigeye Scad	C.22
1980-2007 Average Monthly Estimated Commercial Landings	
C-2-1 Tunas, PMUS, and BMUS	C.23
C-2-2 Skipjack, Yellowfin, and Other Tunas	C.23
C-2-3 Wahoo, Mahimahi, and Marlins	C.24
C-2-4 Reef Fishes (unknown) and Bottomfishes (unknown)	C.24
C-2-5 Onaga and Bigeye Scad	C.25
1980-2007 Annual Total Estimated Commercial Landings	
C-3-1 All Species (Pounds) and All Species (Dollars)	C.26
C-3-2 Pelagic Fishes, Bottomfishes, Reef Fishes, and Other Fishes	C.26
C-3-3 Tunas, PMUS, and BMUS	C.27
C-3-4 Skipjack, Yellowfin, and Other Tunas	C.27
C-3-5 Wahoo, Mahimahi, and Billfishes	C.28
C-3-6 Reef Fishes (unknown) and Bottomfishes (unknown)	C.28
C-3-7 Onaga and Bigeye Scad	C.29

LIST OF GUAM FIGURES (continued)

Figures	Page
1980-2007 Monthly Estimated Commercial Landings	
C-4-1 Skipjack Tuna	C.30
C-4-2 Yellowfin Tuna	C.30
C-4-3 Dogtooth Tuna	C.31
C-4-4 Wahoo	C.31
C-4-5 Mahimahi	C.32
C-4-6 Marlins	C.32
C-4-7 Bottomfishes (unknown)	C.33
C-4-8 Reef Fishes (unknown)	C.33
C-4-9 Onaga	C.34
C-4-10 Bigeye Scad	C.34

GUAM 2007 FISHERY STATISTICS

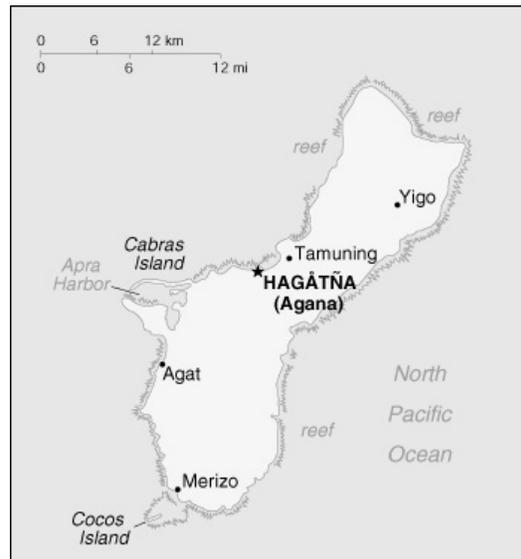
INTRODUCTION

The Territory of Guam is the southernmost, largest, and most populous island in the Mariana Archipelago.

Location: 13.4° N latitude, 144.7° E longitude

Population: about 176,000 (*The World Factbook*, 2009)

Economy: U.S. military and tourism



Guam:

Source: <https://www.cia.gov/library/publications/the-world-factbook/maps/gu-map.gif>; *The World Factbook*

Fishing activities on Guam are divided into two basic categories: offshore and inshore fishing. Offshore fishing typically involves small boats (12 to 48 feet) going on 1- to 2-day trolling and bottomfishing trips. They usually originate from one of the three principal harbors located on the west coast and southern tip of the island. Inshore fishing is usually conducted without the use of a boat and consists mostly of nearshore casting, netting, and spearfishing.

There are three sources of fish in Guam's commercial market: (1) full-time commercial fishers; (2) part-time commercial fishers; and (3) subsistence or recreational "expense" fishers who frequently sell portions of their catch to help defray costs. Licenses are not required to sell fish in Guam, nor are there any reporting requirements for those selling fish.

DATA COLLECTING

In 1982, WPacFIN began working with staff of the Guam Division of Aquatic and Wildlife Resources (DAWR) and with local fish dealers to obtain information on commercial landings through voluntary use of trip ticket invoices provided by WPacFIN. The tables and graphs in this section are based on data that are summarized from receipts submitted by all participating dealers on Guam and then adjusted to create the estimated total commercial landings based on an estimated annual percent coverage factor.

C.2

In July 1979, the Guam Fishermen's Cooperative was established in Agana through government funding. It subsequently became the central distribution center for fresh local fish. Prior to 1979 there was no central place to sell fish, and fishers had to develop their own markets and peddle fish after each trip.

In 1982, WPacFIN began working with the co-op to improve their invoicing system and to obtain data on all fish purchases. A system was established whereby the co-op would use forms and coding schemes designed by WPacFIN and supply copies of all invoices to WPacFIN for computer data entry. In return, WPacFIN would provide the co-op with document quality control and computer-generated summary statistics. All purchase data back to July 1979 were also coded and computerized. Over time, other fish markets began to operate, and DAWR and WPacFIN staff worked with them to obtain data through the voluntary receipt book program.

Data collected on commercial receipt forms include

- Date
- Number of Fishermen
- Area Fished
- Number of Pieces Caught
- Price per Pound
- Fisherman Code
- Hours Fished
- Species Caught
- Pounds Caught

Although a proposed law has been introduced several times that would require reporting by dealers and possibly commercial fishers, it has never made it very far through the legislative process, and the commercial landings data collection system remains voluntary.

DATA PROCESSING

At first, the data were processed at the central WPacFIN office in Honolulu. Beginning in 1994, however, DAWR staff took over this task using a computer and software provided by WPacFIN. The processing system for the commercial landings data collected from the fish dealers is fairly straightforward. Dealers complete a purchase form every time they purchase fish from a fisherman. On this form, catches are divided into categories for weighing by species or species group (where possible, number of pieces is also recorded).

DATA REPORTING

After completing all editing, adjusting, and quality control activities for the commercial landings data, monthly and annual summary reports by species are generated. Numerous standard reports are available, but only the monthly and annual landings by species are provided in this document.

Each table contains information on the pounds, value, and the average price per pound for each species or species group. Each monthly report contains a subtotal for the sum of all species combined for that month. Annual reports contain the estimated total landings for each species and the estimated total recorded landings for all species for the calendar year. Graphs

of some of the important statistics are included with the estimated commercial landings summary reports.

Please note that the 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 <http://www.pifsc.noaa.gov/wpacfin>.

SPECIES CATEGORIES

The species and species groups that are used in the tables and graphs of Guam’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)

Mahimahi	Spearfish
Marlins	Swordfish
Sailfish	Wahoo
Sharks	

II. Bottomfish Management Unit Species (BMUS)

Alfonsin	Kalikali (pink snapper)
Amberjack	Lehi (silverjaw)
Black jack	Mafute (emperor)
Ehu (red snapper)	Onaga (red snapper)
Gindai (flower snapper)	Opakapaka (pink snapper)
Groupers	Snappers
Jacks	Uku (gray snapper)

III. Billfishes

Marlins	Spearfish
Sailfish	Swordfish

IV. Tunas

Dogtooth tuna	Tunas (unknown)
Kawakawa	Yellowfin tuna
Skipjack tuna	

V. Other Tunas

Dogtooth tuna	Tunas (unknown)
Kawakawa	

VI. Fisheries Categories

A. *Pelagic Fishes*

Barracudas	Sailfish
Dogtooth tuna	Sharks
Kawakawa	Skipjack tuna
Mahimahi	Spearfish
Marlins	Swordfish
Monchong	Tunas (unknown)
Pelagic fishes (unknown)	Wahoo
Rainbow runner	Yellowfin tuna

B. *Bottomfishes*

Alfonsin	Jacks
Amberjack	Kalikali (pink snapper)
Black jack	Lehi (silverjaw)
Bottomfishes (unknown)	Mafute (emperor)
Deep bottomfishes	Onaga (red snapper)
Ehu (red snapper)	Opakapaka (pink snapper)
Gindai (flower snapper)	Tagafi (red snapper)
Groupers	Uku (gray snapper)

C. *Reef Fishes*

Goatfishes	Snappers
Humphead parrotfish	Squirrelfishes
Napoleon wrasse	Surgeonfishes
Parrotfishes	Sweetlips
Rabbitfishes	Unicornfishes
Reef fishes (unknown)	Wrasses
Rudderfish (guilli)	

D. *Other Fishes*

Bigeye scad (atulai)	Miscellaneous
Coconut crab	Mulletts
Crabs	Octopus
Eels (freshwater)	Seaweeds
Invertebrates	Shrimp (freshwater)
Kona crab	Shrimp (saltwater)
Lemu	Squid
Lobsters	Turtles
Milkfish	

(This page is intentionally left blank.)

Table C-1
Guam Annual 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Miscellaneous	555	1,484	2.67
Bigeye scad (atulai)	5,298	13,228	2.50
Black jack	102	229	2.24
Jacks	3,813	9,699	2.54
Napoleon wrasse	1,472	4,037	2.74
Humphead parrotfish	45	113	2.50
Bottomfishes (unknown)	710	1,776	2.50
Ehu (red snapper)	236	932	3.96
Gindai (flower snapper)	557	2,228	4.00
Groupers	964	2,730	2.83
Kalikali (pink snapper)	1,783	5,403	3.03
Lehi (silverjaw)	752	2,698	3.59
Onaga (red snapper)	956	4,751	4.97
Opakapaka (pink snapper)	735	2,878	3.92
Uku (gray snapper)	1,152	2,996	2.60
Tagafi (red snapper)	77	165	2.14
Amberjack	697	1,914	2.75
Reef fishes (unknown)	92,470	277,281	3.00
Rabbitfishes	2,443	7,284	2.98
Rudderfish (guilli)	884	2,543	2.88
Mafute (emperor)	3,095	7,898	2.55
Squirrelfishes	733	1,870	2.55
Parrotfishes	339	913	2.70
Snappers	1,233	3,182	2.58
Surgeonfishes	9,561	24,234	2.53
Unicornfishes	24,133	62,413	2.59
Goatfishes	118	352	2.97
Sweetlips	123	308	2.50
Pelagic fishes (unknown)	28	36	1.25
Barracudas	4,212	7,436	1.77
Mahimahi	106,218	175,813	1.66
Swordfish	18	46	2.50
Marlins	30,795	40,011	1.30
Spearfish	55	68	1.25
Sailfish	4,147	5,893	1.42
Rainbow runner	4,573	8,059	1.76
Monchong	1,441	3,267	2.27
Wahoo	35,987	71,286	1.98
Skipjack tuna	47,929	58,913	1.23
Dogtooth tuna	1,226	1,602	1.31
Yellowfin tuna	24,341	50,288	2.07
Invertebrates	7	26	3.75

Table C-1 (continued)
Guam Annual 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Crabs	124	345	2.79
Lobsters	4,725	16,878	3.57
Octopus	1,292	3,715	2.88
TOTAL	422,153	889,221	2.11

Table C-2
Guam January 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad (atulai)	58	175	3.00
Jacks	11	30	2.75
Napoleon wrasse	132	362	2.75
Groupers	145	378	2.61
Reef fishes (unknown)	9,230	27,621	2.99
Rabbitfishes	81	202	2.50
Rudderfish (guilli)	238	715	3.00
Mafute (emperor)	130	289	2.23
Squirrelfishes	162	427	2.64
Parrotfishes	202	504	2.50
Snappers	172	487	2.83
Surgeonfishes	220	598	2.72
Unicornfishes	379	976	2.57
Goatfishes	7	17	2.50
Barracudas	62	123	2.00
Mahimahi	8,306	14,481	1.74
Marlins	352	527	1.50
Sailfish	167	237	1.42
Rainbow runner	15	22	1.50
Monchong	19	43	2.25
Wahoo	1,164	2,366	2.03
Skipjack tuna	1,080	1,327	1.23
Dogtooth tuna	29	33	1.13
Yellowfin tuna	214	439	2.06
Invertebrates	7	26	3.75
Lobsters	36	130	3.57
Octopus	312	840	2.69
TOTAL	22,928	53,378	2.33

Table C-3
Guam February 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Miscellaneous	8	19	2.50
Jacks	173	398	2.30
Napoleon wrasse	54	148	2.75
Bottomfishes (unknown)	4	15	4.00
Gindai (flower snapper)	7	28	4.00
Groupers	117	316	2.69
Kalikali (pink snapper)	5	14	3.00
Lehi (silverjaw)	35	123	3.57
Opakapaka (pink snapper)	53	212	4.00
Uku (gray snapper)	22	53	2.36
Amberjack	28	80	2.90
Reef fishes (unknown)	8,857	26,571	3.00
Rabbitfishes	248	743	3.00
Rudderfish (guilli)	135	345	2.55
Mafute (emperor)	78	231	2.97
Squirrelfishes	183	458	2.50
Parrotfishes	77	231	3.00
Snappers	153	383	2.50
Surgeonfishes	565	1,412	2.50
Unicornfishes	1,402	3,666	2.61
Barracudas	209	339	1.62
Mahimahi	23,834	38,934	1.63
Marlins	945	1,374	1.45
Spearfish	55	68	1.25
Sailfish	372	572	1.54
Rainbow runner	84	168	2.00
Wahoo	5,753	11,544	2.01
Skipjack tuna	1,975	2,627	1.33
Dogtooth tuna	140	168	1.20
Yellowfin tuna	1,489	2,997	2.01
Lobsters	615	1,767	2.87
Octopus	240	662	2.76
TOTAL	47,913	96,666	2.02

Table C-4
Guam March 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad (atulai)	76	228	3.00
Jacks	125	337	2.68
Napoleon wrasse	68	186	2.75
Lehi (silverjaw)	34	118	3.50
Reef fishes (unknown)	8,187	24,561	3.00
Mafute (emperor)	206	327	1.59
Squirrelfishes	74	185	2.50
Surgeonfishes	219	548	2.50
Unicornfishes	306	765	2.50
Barracudas	40	80	2.00
Mahimahi	28,272	48,427	1.71
Swordfish	18	46	2.50
Marlins	4,709	7,070	1.50
Sailfish	3,331	4,696	1.41
Rainbow runner	1,341	1,806	1.35
Wahoo	5,002	9,691	1.94
Skipjack tuna	2,519	3,082	1.22
Dogtooth tuna	85	138	1.63
Yellowfin tuna	885	1,626	1.84
Lobsters	97	365	3.75
Octopus	19	57	3.00
TOTAL	55,613	104,340	1.88

Table C-5
Guam April 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Miscellaneous	146	365	2.50
Bigeye scad (atulai)	118	353	3.00
Jacks	171	453	2.66
Napoleon wrasse	149	410	2.75
Groupers	18	55	3.00
Onaga (red snapper)	15	73	5.00
Opakapaka (pink snapper)	52	206	4.00
Uku (gray snapper)	98	255	2.61
Amberjack	22	60	2.71
Reef fishes (unknown)	6,118	18,306	2.99
Mafute (emperor)	208	567	2.72
Squirrelfishes	15	38	2.50
Snappers	32	81	2.50
Surgeonfishes	989	2,477	2.50
Unicornfishes	1,807	4,527	2.51
Sweetlips	17	42	2.50
Barracudas	1,732	2,831	1.63
Mahimahi	24,780	39,659	1.60
Marlins	1,728	2,574	1.49
Sailfish	75	119	1.60
Rainbow runner	197	387	1.97
Wahoo	4,729	9,329	1.97
Skipjack tuna	4,625	5,656	1.22
Dogtooth tuna	36	45	1.25
Yellowfin tuna	1,033	1,895	1.83
Lobsters	317	1,189	3.75
TOTAL	49,227	91,955	1.87

Table C-6
Guam May 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad (atulai)	35	88	2.50
Black jack	16	20	1.25
Jacks	844	2,095	2.48
Napoleon wrasse	215	592	2.75
Humphead parrotfish	45	113	2.50
Bottomfishes (unknown)	415	1,037	2.50
Gindai (flower snapper)	23	92	4.00
Groupers	44	121	2.75
Kalikali (pink snapper)	73	219	3.00
Lehi (silverjaw)	33	132	4.00
Onaga (red snapper)	15	73	5.00
Opakapaka (pink snapper)	94	375	4.00
Uku (gray snapper)	212	557	2.62
Tagafi (red snapper)	59	118	2.00
Amberjack	42	107	2.56
Reef fishes (unknown)	6,234	18,689	3.00
Rabbitfishes	707	2,121	3.00
Rudderfish (guilli)	192	575	3.00
Mafute (emperor)	301	752	2.50
Snappers	177	452	2.56
Surgeonfishes	775	1,938	2.50
Unicornfishes	2,402	6,083	2.53
Pelagic fishes (unknown)	28	36	1.25
Barracudas	842	1,435	1.70
Mahimahi	11,636	19,230	1.65
Marlins	3,912	5,598	1.43
Rainbow runner	576	1,172	2.04
Wahoo	1,928	3,853	2.00
Skipjack tuna	8,806	10,720	1.22
Dogtooth tuna	247	303	1.23
Yellowfin tuna	6,288	13,118	2.09
Lobsters	571	2,138	3.74
Octopus	102	291	2.87
TOTAL	47,890	94,247	1.97

Table C-7
Guam June 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Miscellaneous	7	22	3.00
Bigeye scad (atulai)	190	570	3.00
Black jack	27	67	2.50
Jacks	215	545	2.53
Napoleon wrasse	196	537	2.74
Bottomfishes (unknown)	271	677	2.50
Groupers	96	281	2.92
Kalikali (pink snapper)	16	48	3.00
Lehi (silverjaw)	79	288	3.64
Opakapaka (pink snapper)	163	592	3.63
Uku (gray snapper)	245	623	2.54
Amberjack	20	51	2.55
Reef fishes (unknown)	6,730	20,189	3.00
Rabbitfishes	34	102	3.00
Rudderfish (guilli)	53	159	3.00
Mafute (emperor)	306	795	2.60
Snappers	439	1,098	2.50
Surgeonfishes	1,042	2,650	2.54
Unicornfishes	3,501	8,752	2.50
Barracudas	140	263	1.88
Mahimahi	892	1,302	1.46
Marlins	7,855	9,586	1.22
Rainbow runner	598	1,197	2.00
Monchong	436	981	2.25
Wahoo	712	1,425	2.00
Skipjack tuna	11,092	13,416	1.21
Dogtooth tuna	40	44	1.11
Yellowfin tuna	5,878	12,715	2.16
Crabs	19	48	2.50
Lobsters	671	2,460	3.67
Octopus	15	46	3.00
TOTAL	41,981	81,528	1.94

Table C-8
Guam July 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Miscellaneous	102	284	2.77
Bigeye scad (atulai)	113	339	3.00
Black jack	20	50	2.50
Jacks	563	1,415	2.51
Bottomfishes (unknown)	21	47	2.25
Ehu (red snapper)	63	252	4.00
Gindai (flower snapper)	127	508	4.00
Groupers	320	946	2.96
Kalikali (pink snapper)	254	797	3.14
Lehi (silverjaw)	64	223	3.50
Onaga (red snapper)	39	196	5.00
Opakapaka (pink snapper)	33	132	4.00
Uku (gray snapper)	346	895	2.59
Tagafi (red snapper)	7	14	2.00
Amberjack	142	336	2.36
Reef fishes (unknown)	7,118	21,353	3.00
Rabbitfishes	329	988	3.00
Rudderfish (guilli)	22	65	3.00
Mafute (emperor)	1,226	3,237	2.64
Parrotfishes	45	134	3.00
Snappers	87	228	2.63
Surgeonfishes	816	1,993	2.44
Unicornfishes	1,402	3,790	2.70
Goatfishes	101	302	3.00
Barracudas	152	295	1.94
Mahimahi	670	534	0.80
Marlins	3,505	4,264	1.22
Rainbow runner	387	772	1.99
Monchong	333	749	2.25
Wahoo	878	1,757	2.00
Skipjack tuna	6,838	8,332	1.22
Dogtooth tuna	252	309	1.23
Yellowfin tuna	3,276	6,924	2.11
Crabs	27	81	3.00
Lobsters	455	1,699	3.73
Octopus	216	591	2.74
TOTAL	30,349	64,830	2.14

Table C-9
Guam August 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Miscellaneous	185	531	2.86
Bigeye scad (atulai)	1,820	5,090	2.80
Black jack	21	48	2.33
Jacks	463	1,198	2.59
Napoleon wrasse	85	235	2.75
Ehu (red snapper)	111	444	4.00
Gindai (flower snapper)	137	548	4.00
Groupers	82	247	3.00
Kalikali (pink snapper)	275	826	3.00
Lehi (silverjaw)	53	193	3.63
Onaga (red snapper)	62	312	5.00
Opakapaka (pink snapper)	103	412	4.00
Uku (gray snapper)	85	235	2.75
Reef fishes (unknown)	6,924	20,772	3.00
Rabbitfishes	622	1,865	3.00
Rudderfish (guilli)	12	36	3.00
Mafute (emperor)	285	780	2.73
Parrotfishes	15	45	2.91
Snappers	49	136	2.79
Surgeonfishes	1,428	3,756	2.63
Unicornfishes	4,032	10,747	2.67
Goatfishes	11	32	3.00
Sweetlips	18	44	2.50
Barracudas	262	523	2.00
Mahimahi	66	113	1.71
Marlins	5,413	6,139	1.13
Sailfish	83	104	1.25
Rainbow runner	162	323	2.00
Monchong	280	630	2.25
Wahoo	1,092	2,183	2.00
Skipjack tuna	4,375	5,401	1.23
Dogtooth tuna	102	123	1.21
Yellowfin tuna	1,834	3,626	1.98
Crabs	45	134	3.00
Lobsters	632	2,178	3.44
Octopus	109	277	2.54
TOTAL	31,332	70,282	2.24

Table C-10
Guam September 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Miscellaneous	4	10	2.50
Bigeye scad (atulai)	2,796	6,170	2.21
Jacks	718	1,884	2.62
Napoleon wrasse	336	917	2.73
Ehu (red snapper)	48	184	3.79
Gindai (flower snapper)	133	534	4.00
Groupers	58	154	2.63
Kalikali (pink snapper)	672	2,015	3.00
Lehi (silverjaw)	61	229	3.77
Onaga (red snapper)	187	905	4.84
Opakapaka (pink snapper)	122	486	4.00
Uku (gray snapper)	71	184	2.60
Amberjack	11	32	3.00
Reef fishes (unknown)	7,100	21,301	3.00
Rabbitfishes	166	497	3.00
Rudderfish (guilli)	98	244	2.50
Mafute (emperor)	117	297	2.54
Snappers	95	245	2.59
Surgeonfishes	1,408	3,520	2.50
Unicornfishes	2,784	7,087	2.55
Sweetlips	38	94	2.50
Barracudas	293	586	2.00
Mahimahi	33	58	1.75
Marlins	1,392	1,487	1.07
Sailfish	63	79	1.25
Rainbow runner	171	342	2.00
Monchong	175	393	2.25
Wahoo	2,918	5,809	1.99
Skipjack tuna	3,497	4,239	1.21
Dogtooth tuna	66	94	1.42
Yellowfin tuna	848	1,648	1.94
Lobsters	494	1,845	3.73
Octopus	110	280	2.55
TOTAL	27,081	63,847	2.36

Table C-11
Guam October 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Miscellaneous	6	12	2.00
Bigeye scad (atulai)	52	118	2.25
Black jack	8	19	2.50
Jacks	280	721	2.58
Napoleon wrasse	236	649	2.75
Ehu (red snapper)	6	25	4.00
Gindai (flower snapper)	50	199	4.00
Groupers	67	185	2.76
Kalikali (pink snapper)	243	729	3.00
Lehi (silverjaw)	105	375	3.55
Onaga (red snapper)	469	2,346	5.00
Opakapaka (pink snapper)	103	412	4.00
Uku (gray snapper)	57	154	2.71
Tagafi (red snapper)	11	32	3.00
Amberjack	60	154	2.56
Reef fishes (unknown)	8,998	26,993	3.00
Rabbitfishes	12	31	2.50
Mafute (emperor)	188	501	2.66
Squirrelfishes	9	28	3.00
Snappers	29	71	2.44
Surgeonfishes	965	2,436	2.53
Unicornfishes	2,898	7,280	2.51
Sweetlips	12	29	2.50
Barracudas	183	366	2.00
Mahimahi	718	1,257	1.75
Marlins	160	256	1.60
Rainbow runner	225	435	1.93
Monchong	118	292	2.46
Wahoo	2,507	4,956	1.98
Skipjack tuna	1,342	1,831	1.36
Dogtooth tuna	158	248	1.57
Yellowfin tuna	935	1,862	1.99
Crabs	22	56	2.50
Lobsters	288	1,079	3.75
Octopus	137	573	4.20
TOTAL	21,657	56,712	2.62

Table C-12
Guam November 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Bigeye scad (atulai)	38	97	2.52
Black jack	11	24	2.25
Jacks	75	192	2.57
Gindai (flower snapper)	51	202	4.00
Groupers	5	16	3.00
Kalikali (pink snapper)	175	524	3.00
Lehi (silverjaw)	35	123	3.57
Onaga (red snapper)	18	92	5.00
Opakapaka (pink snapper)	12	49	4.00
Uku (gray snapper)	15	40	2.63
Amberjack	362	1,068	2.95
Reef fishes (unknown)	7,672	23,015	3.00
Rabbitfishes	245	736	3.00
Rudderfish (guilli)	135	404	3.00
Mafute (emperor)	36	94	2.60
Squirrelfishes	76	190	2.50
Surgeonfishes	762	1,933	2.54
Unicornfishes	1,515	4,017	2.65
Sweetlips	24	60	2.50
Barracudas	135	271	2.00
Mahimahi	1,838	2,918	1.59
Marlins	591	764	1.29
Rainbow runner	138	265	1.92
Wahoo	4,816	9,097	1.89
Skipjack tuna	1,506	1,883	1.25
Dogtooth tuna	35	44	1.25
Yellowfin tuna	311	599	1.93
Crabs	11	27	2.50
Lobsters	483	1,811	3.75
TOTAL	21,127	50,555	2.39

Table C-13
Guam December 2007 Estimated Commercial Landings

Species	Pounds	Value (\$)	Price/Lb (\$)
Miscellaneous	96	240	2.50
Jacks	175	432	2.47
Ehu (red snapper)	7	28	4.00
Gindai (flower snapper)	29	117	4.00
Groupers	11	32	3.00
Kalikali (pink snapper)	70	229	3.27
Lehi (silverjaw)	254	892	3.51
Onaga (red snapper)	151	754	5.00
Amberjack	9	25	2.75
Reef fishes (unknown)	9,304	27,912	3.00
Mafute (emperor)	12	28	2.25
Squirrelfishes	214	544	2.54
Surgeonfishes	372	974	2.62
Unicornfishes	1,705	4,725	2.77
Sweetlips	15	38	2.50
Barracudas	162	323	2.00
Mahimahi	5,172	8,898	1.72
Marlins	232	372	1.60
Sailfish	57	85	1.50
Rainbow runner	680	1,171	1.72
Monchong	79	178	2.25
Wahoo	4,488	9,276	2.07
Skipjack tuna	275	399	1.45
Dogtooth tuna	37	52	1.40
Yellowfin tuna	1,352	2,840	2.10
Lobsters	65	219	3.38
Octopus	32	97	3.00
TOTAL	25,055	60,880	2.43

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

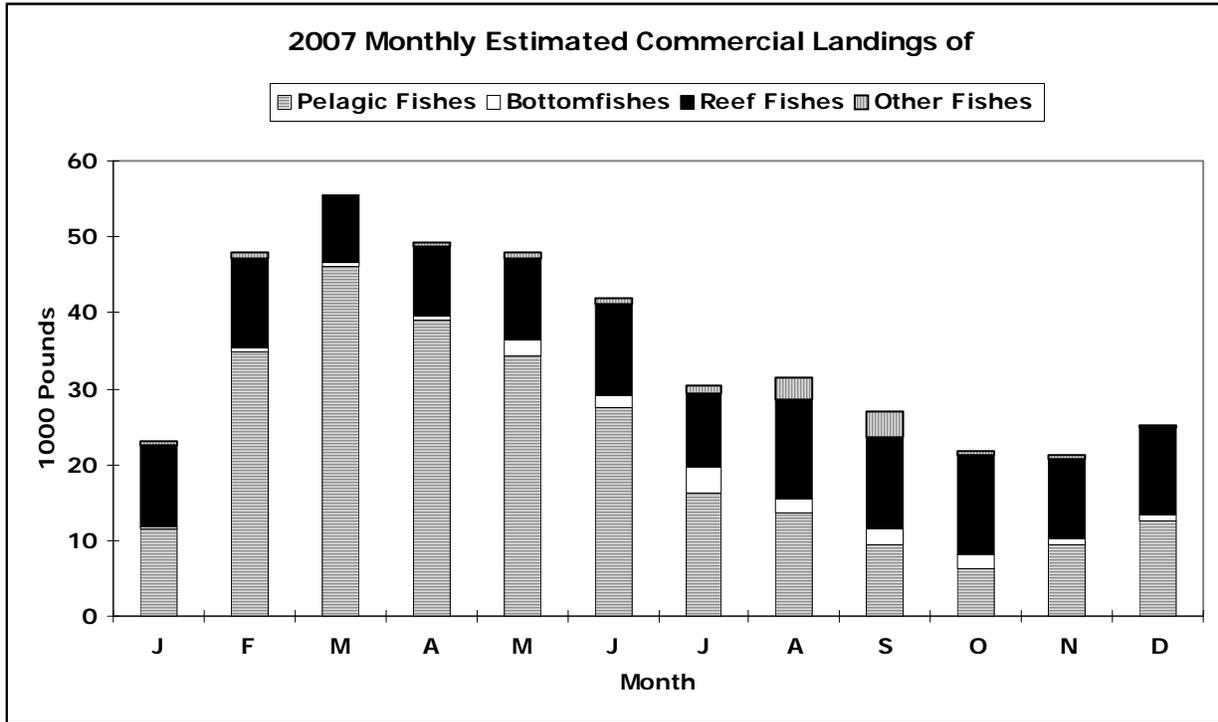


Figure C-1-1

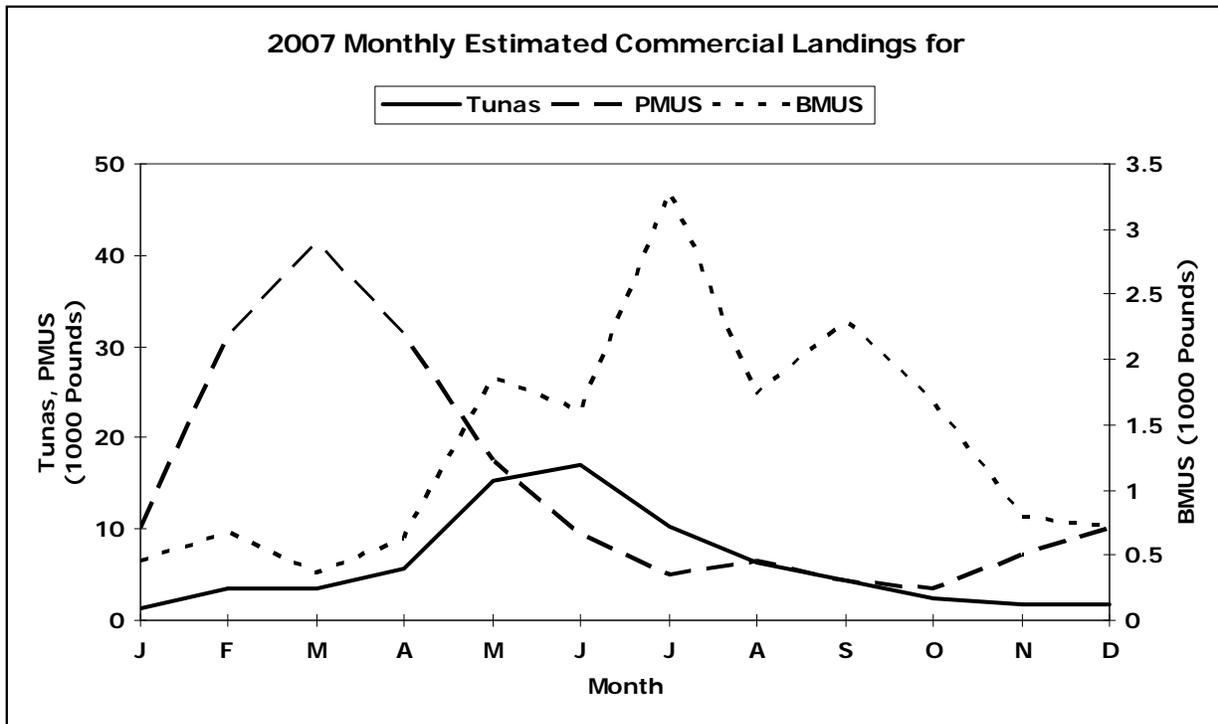


Figure C-1-2

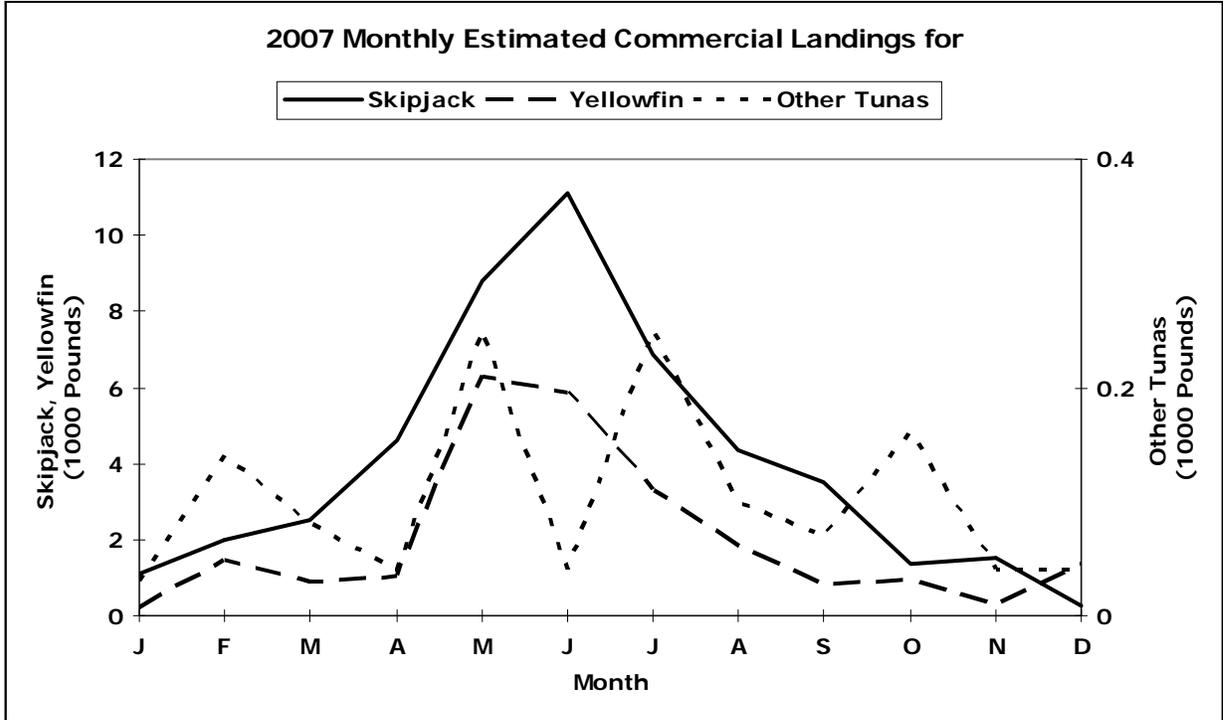


Figure C-1-3

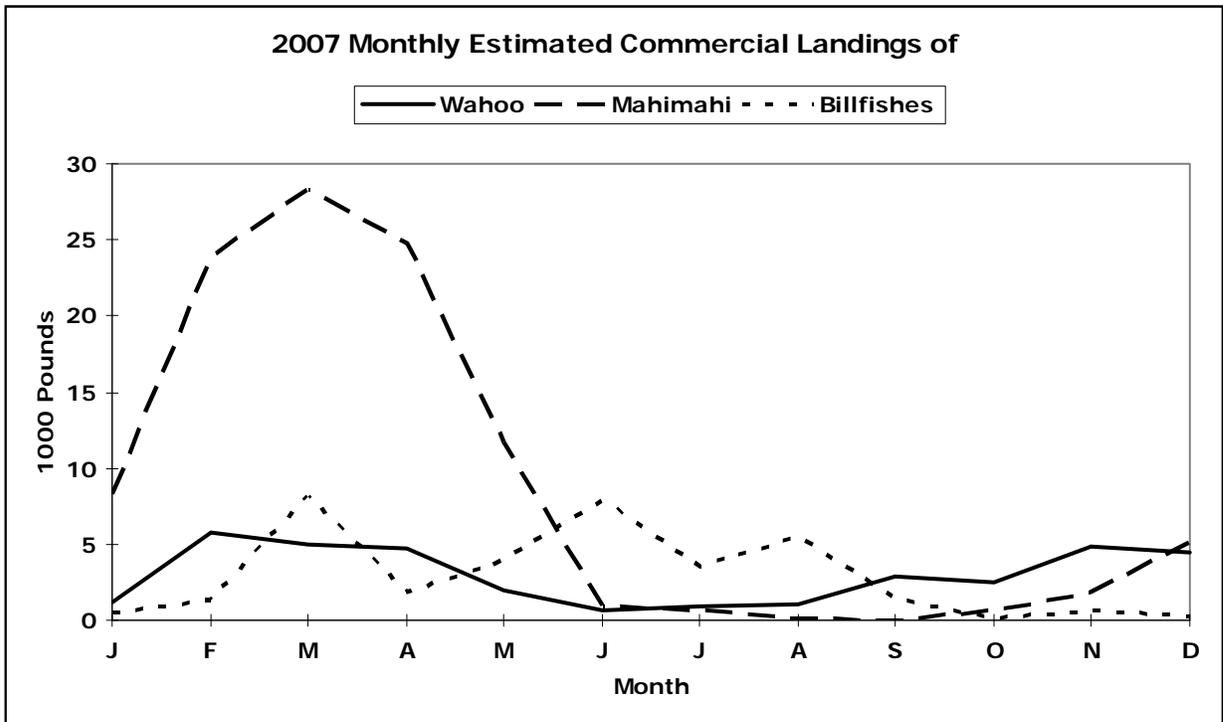


Figure C-1-4

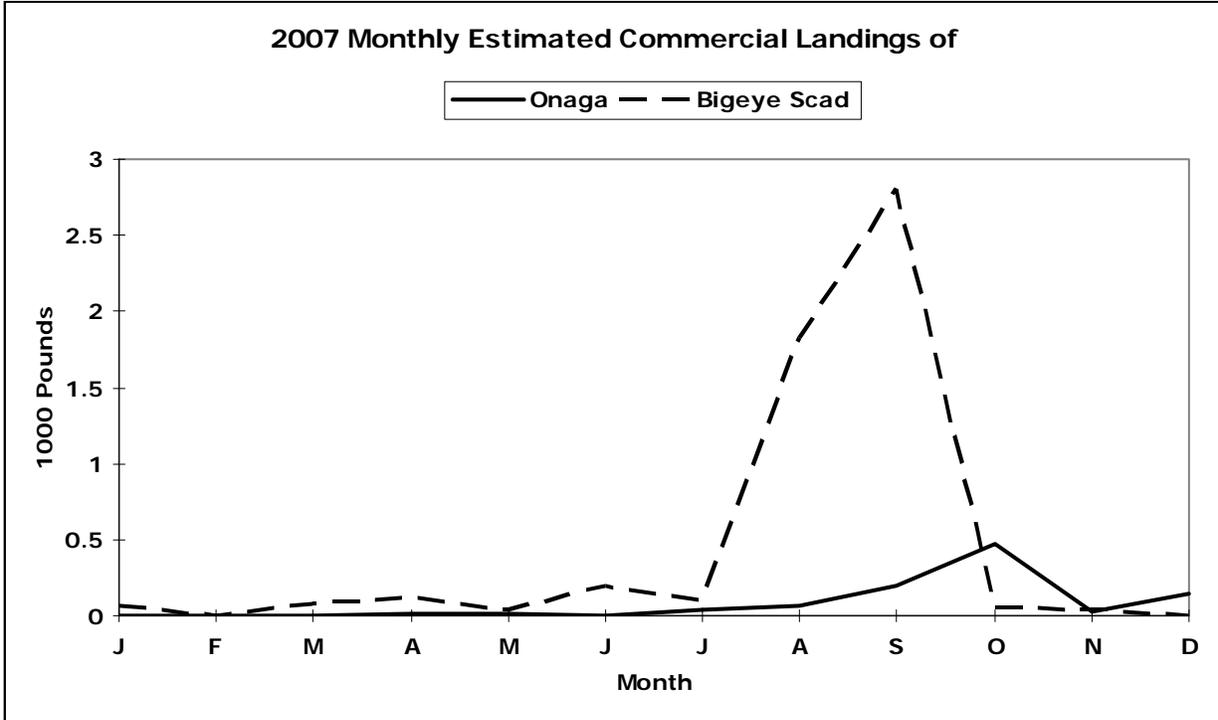


Figure C-1-5

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

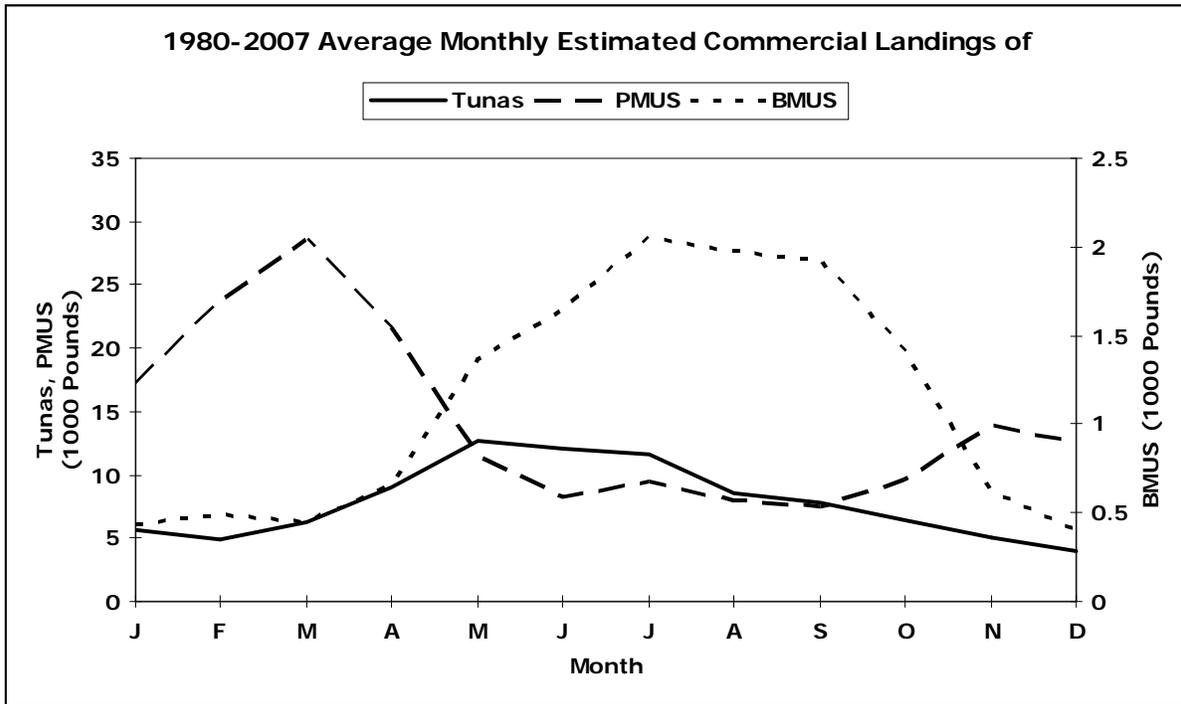


Figure C-2-1

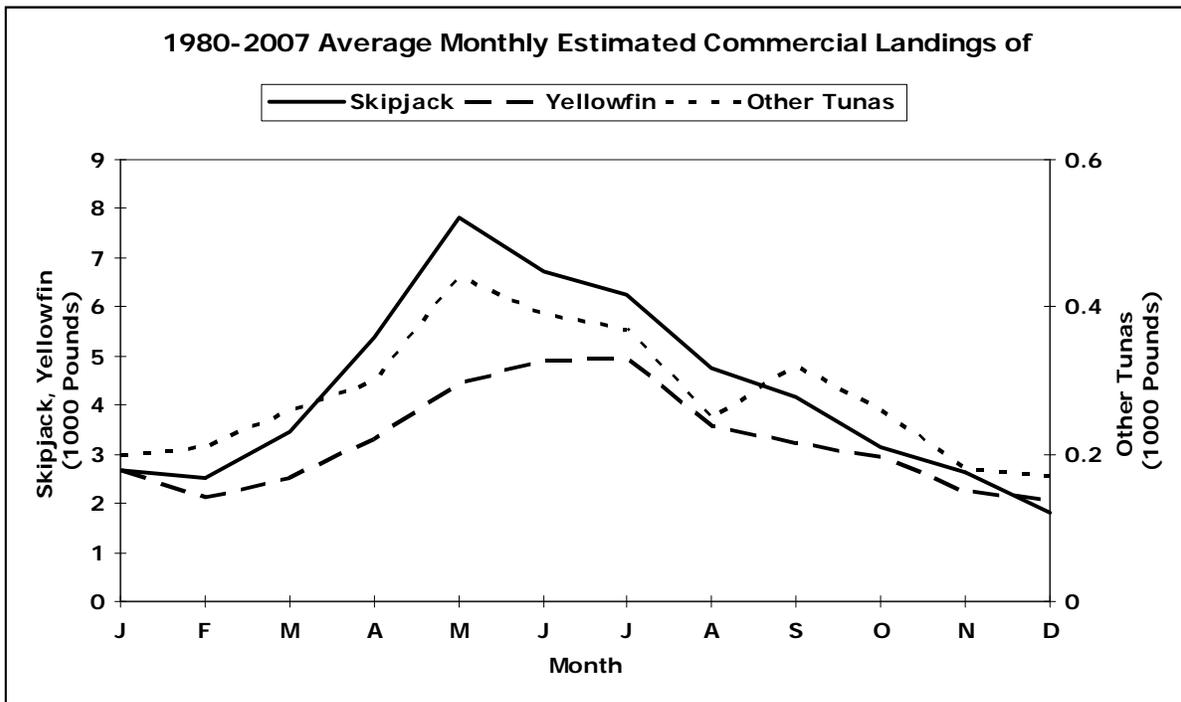


Figure C-2-2

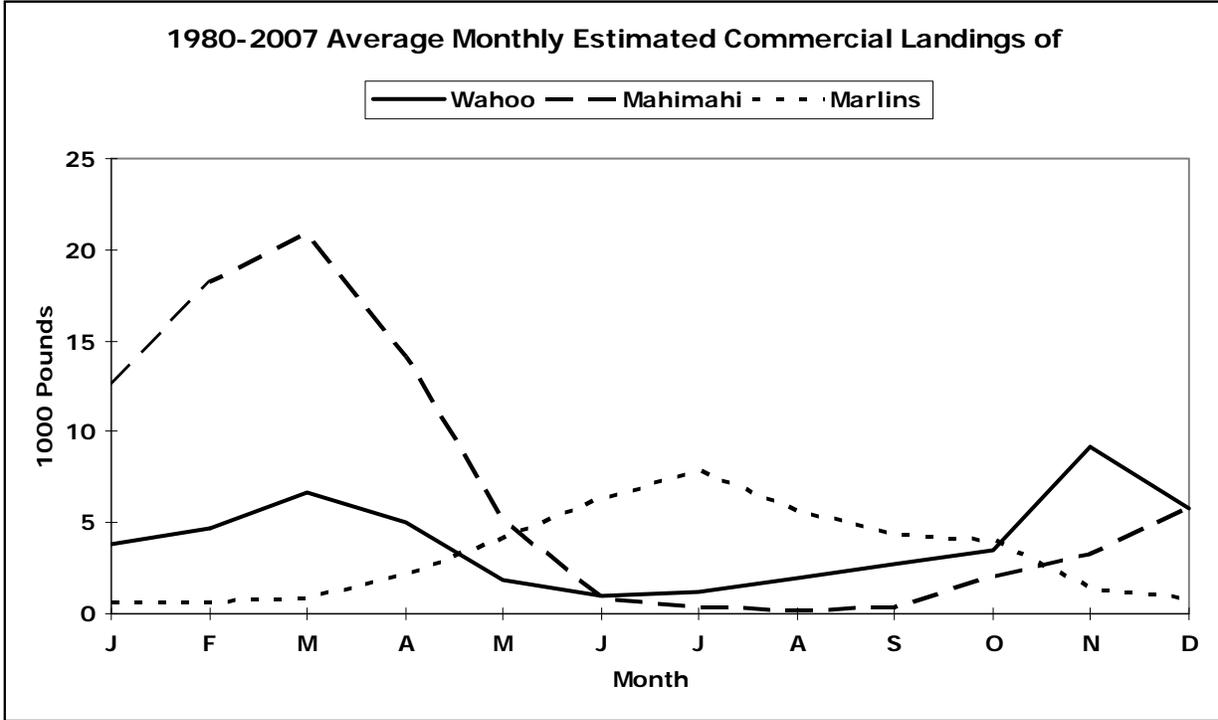


Figure C-2-3

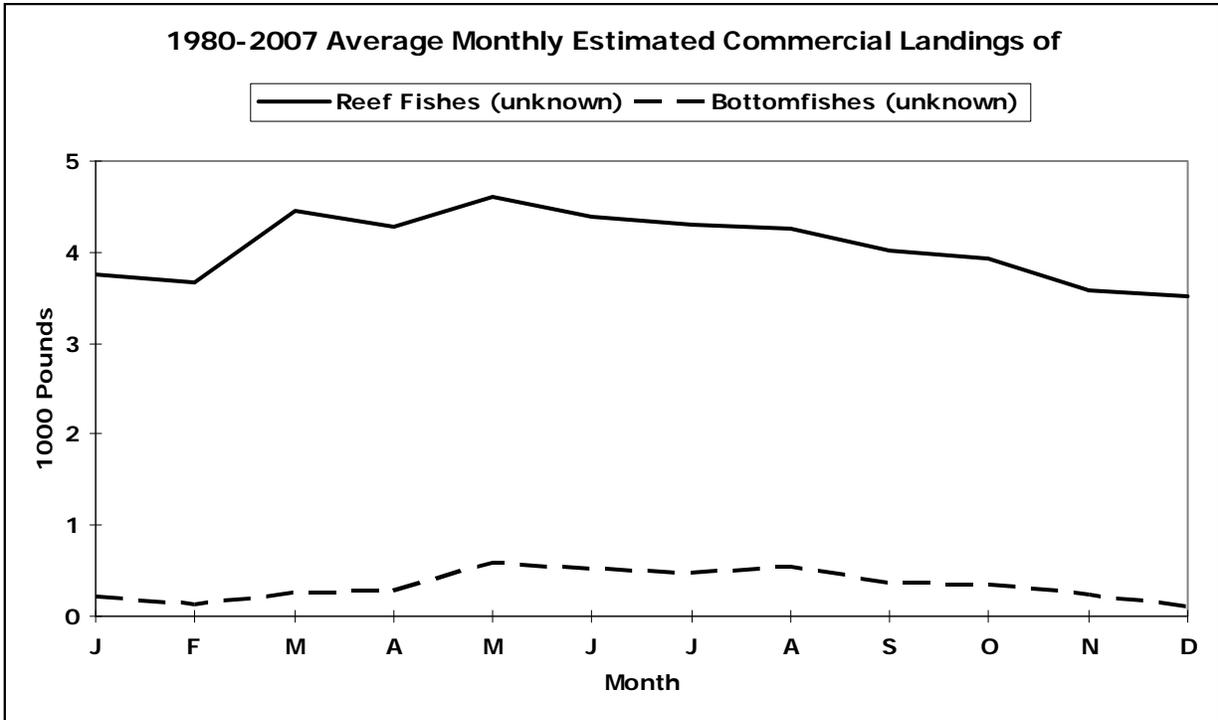


Figure C-2-4

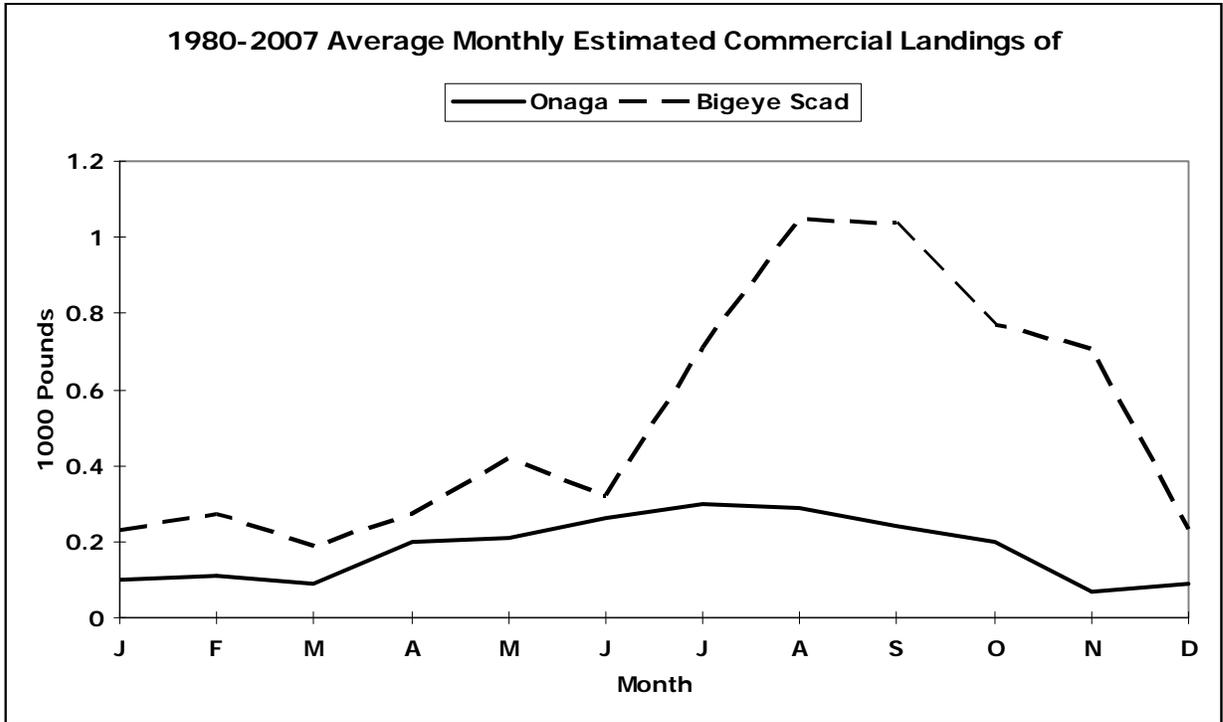


Figure C-2-5

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

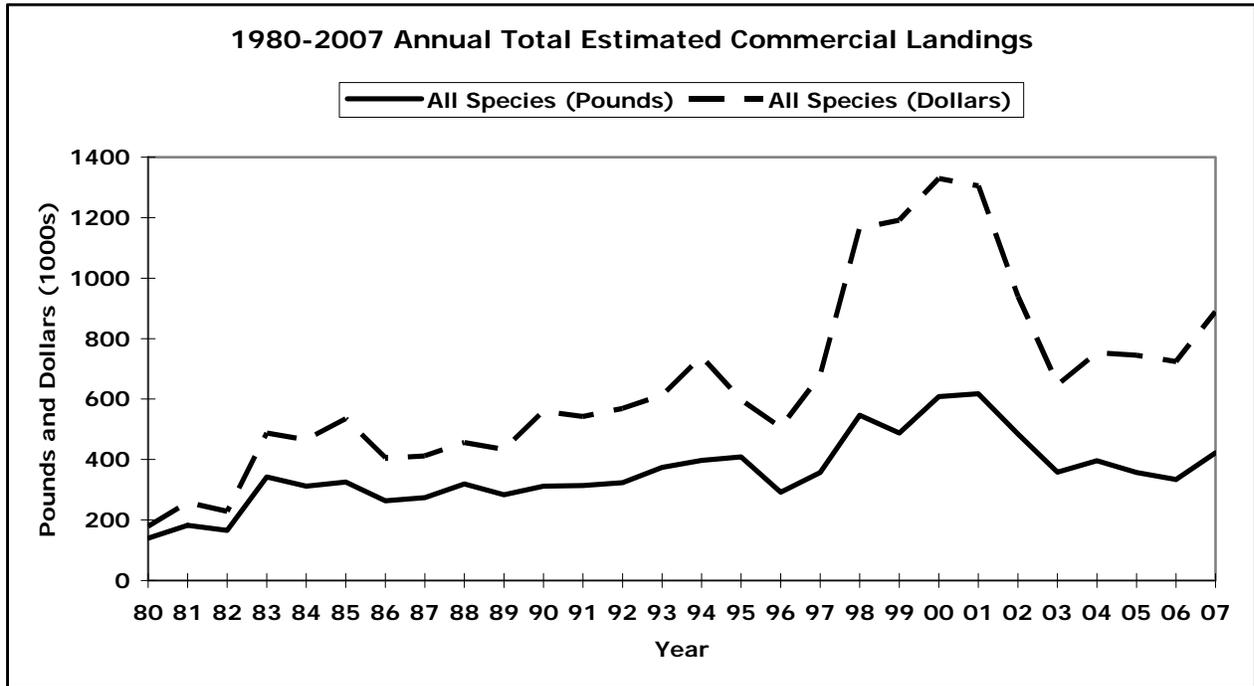


Figure C-3-1

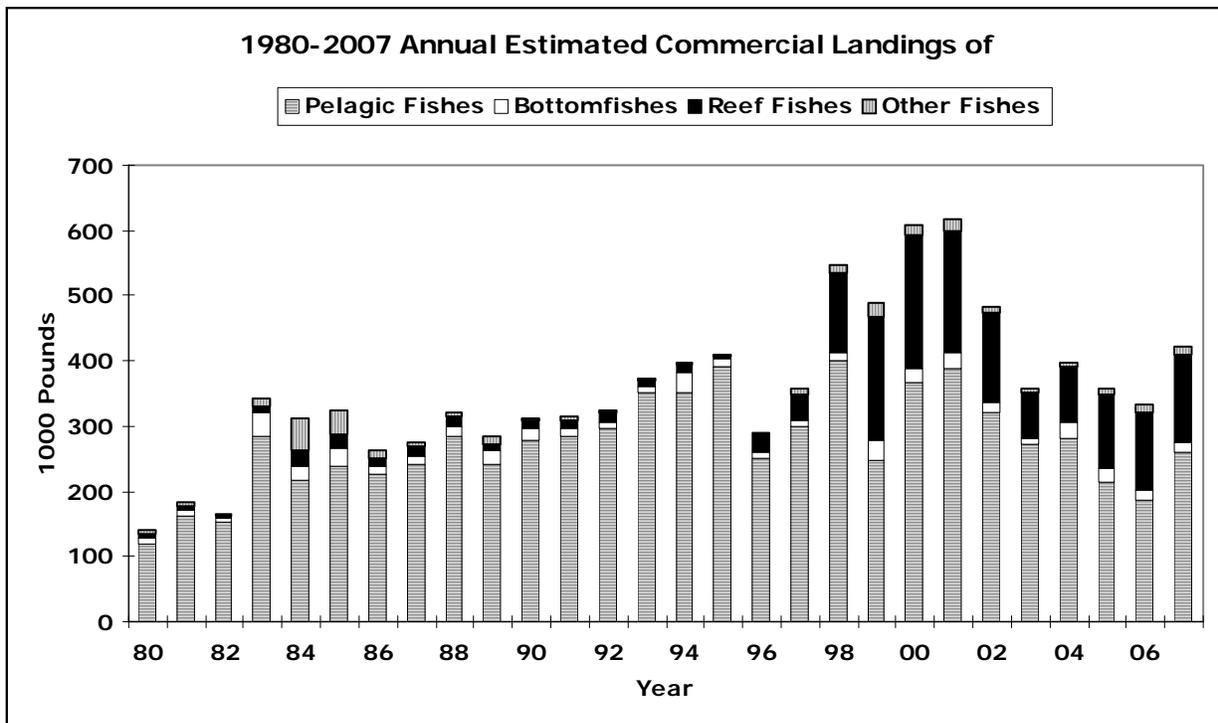


Figure C-3-2

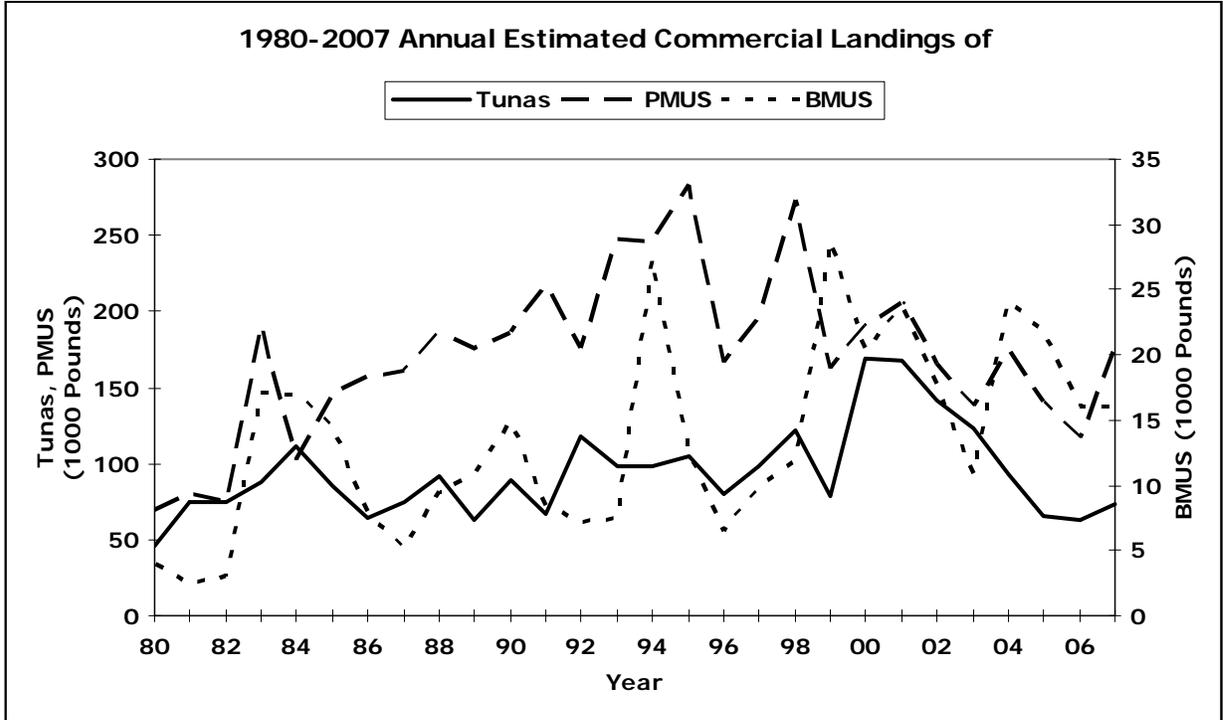


Figure C-3-3

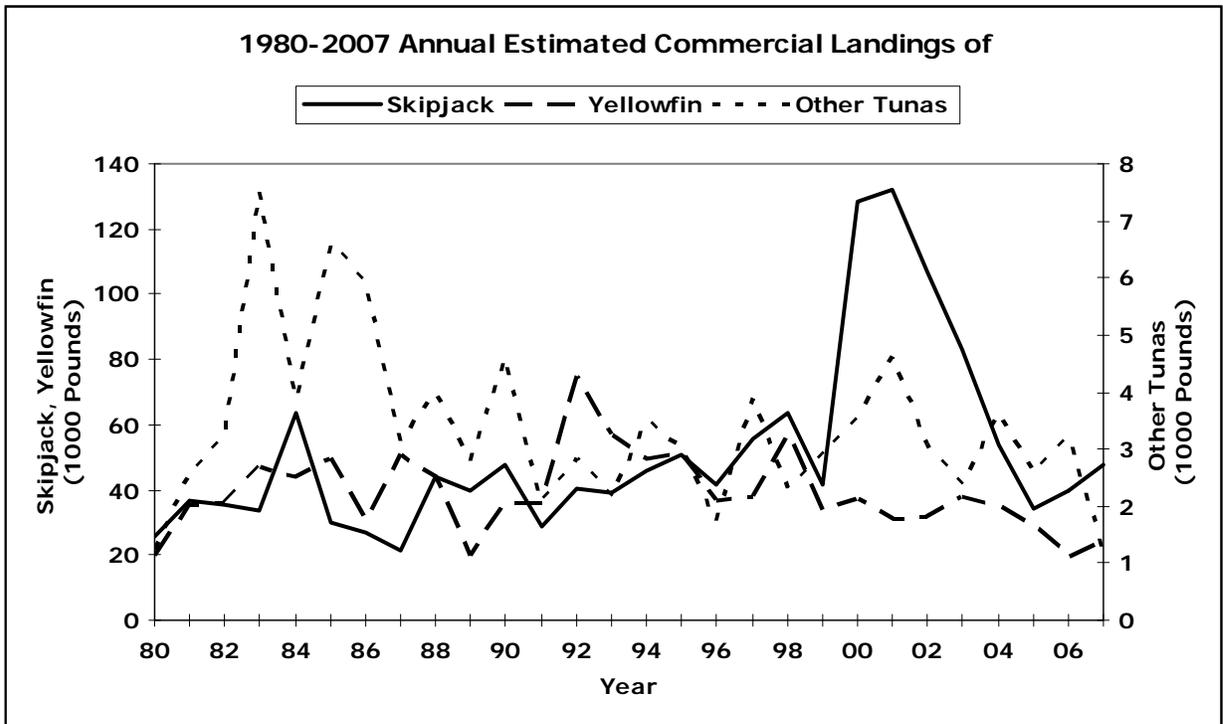


Figure C-3-4

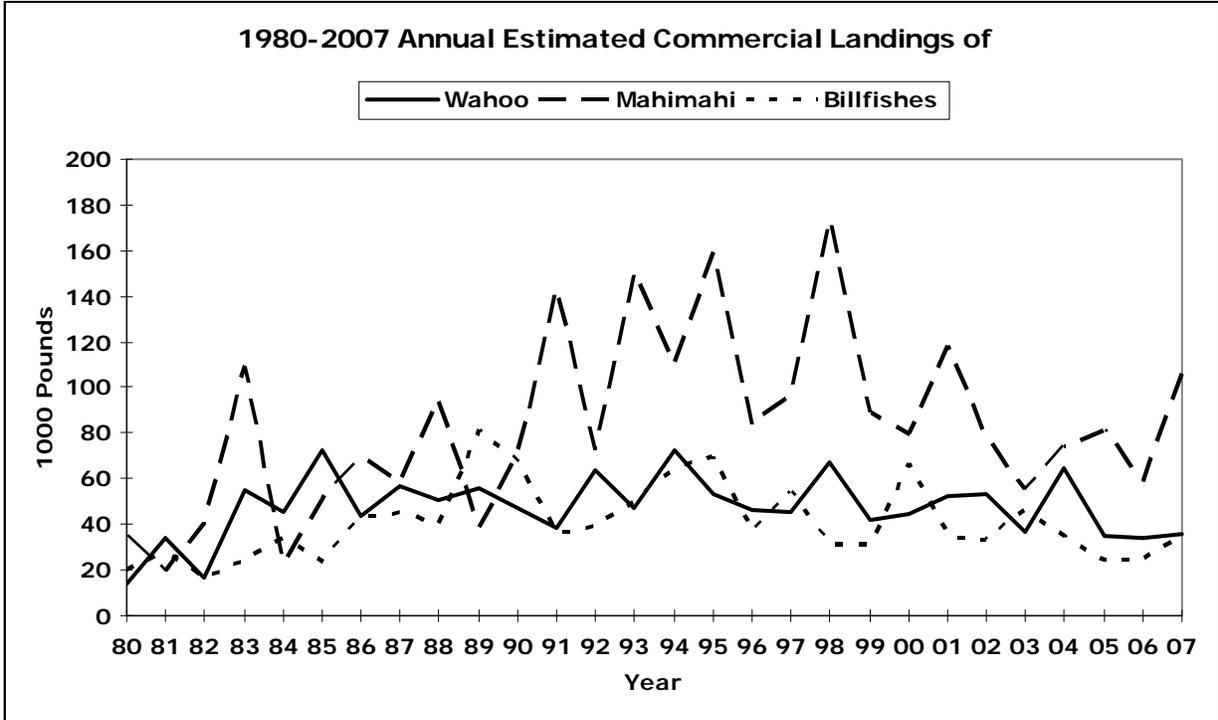


Figure C-3-5

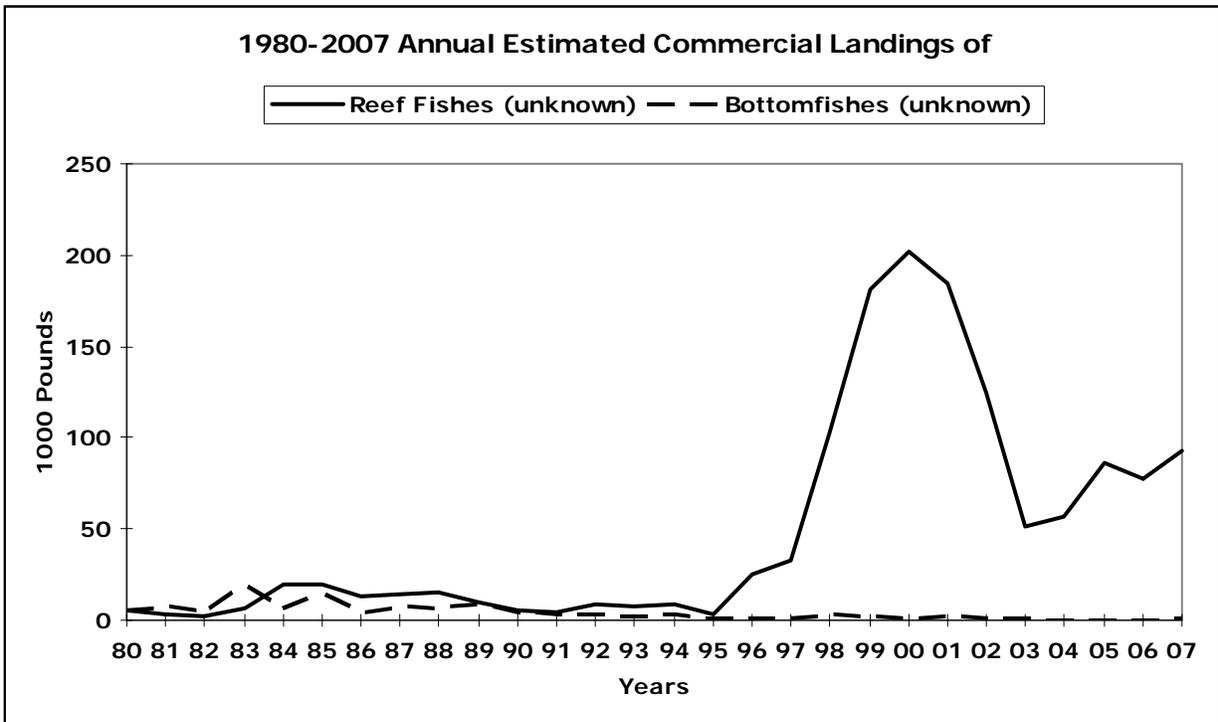


Figure C-3-6

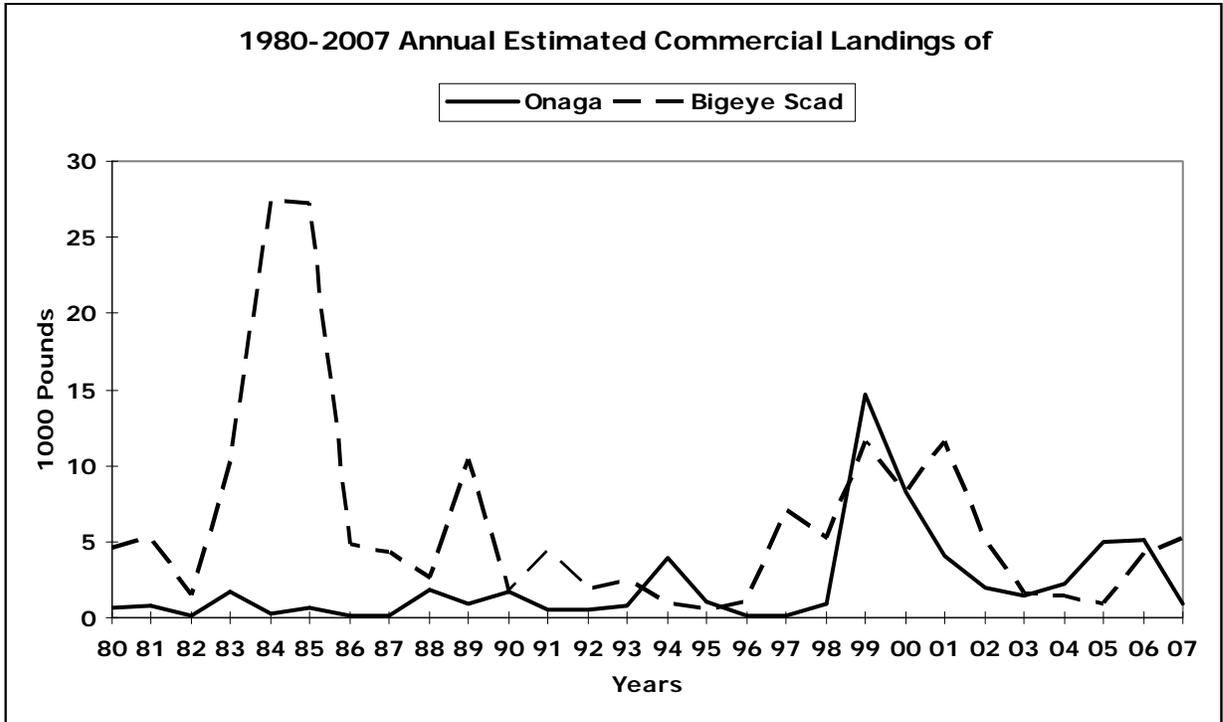


Figure C-3-7

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

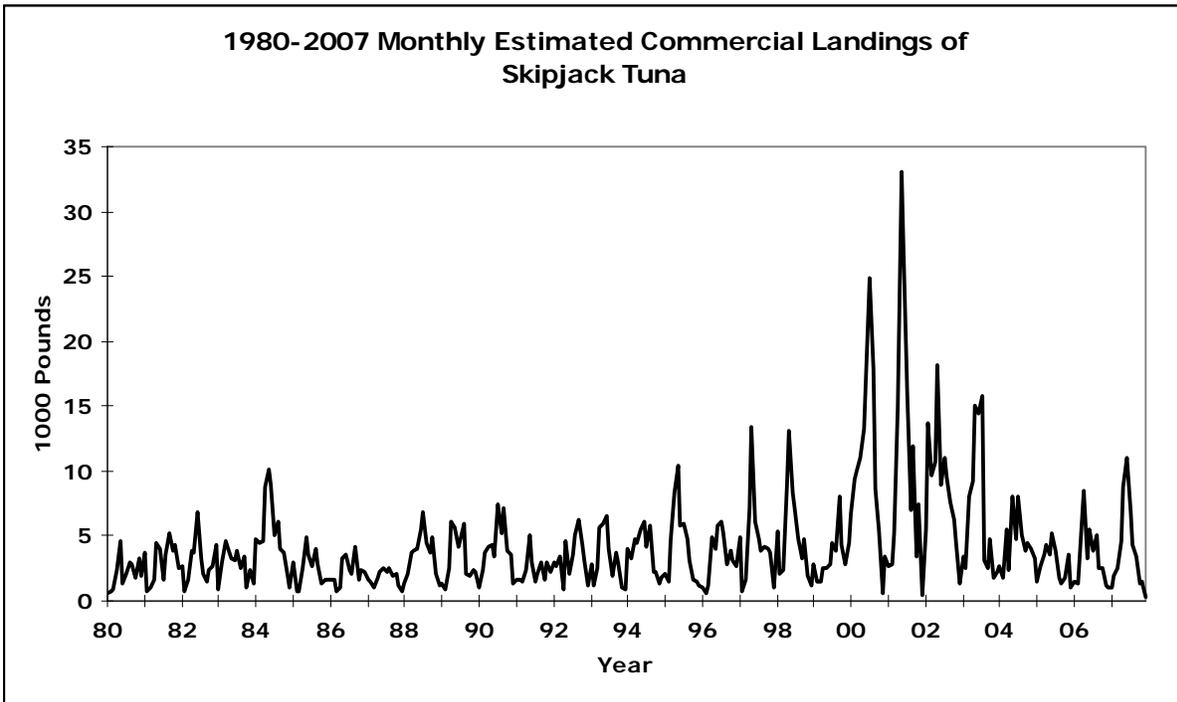


Figure C-4-1

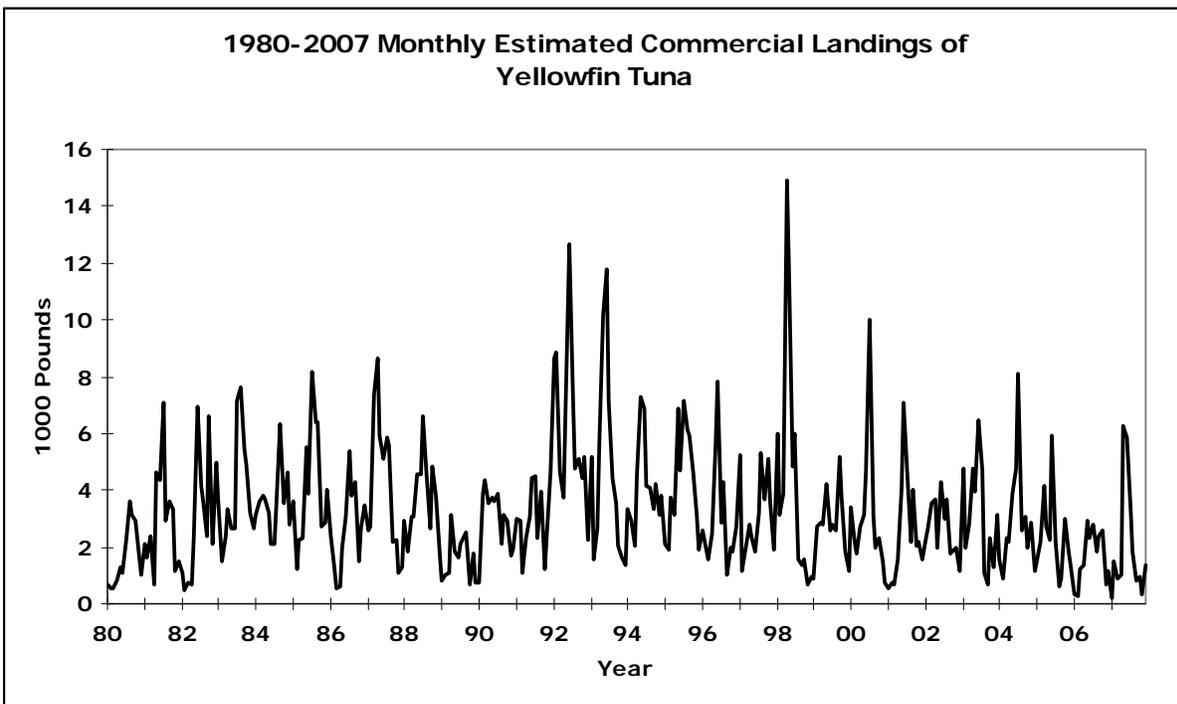


Figure C-4-2

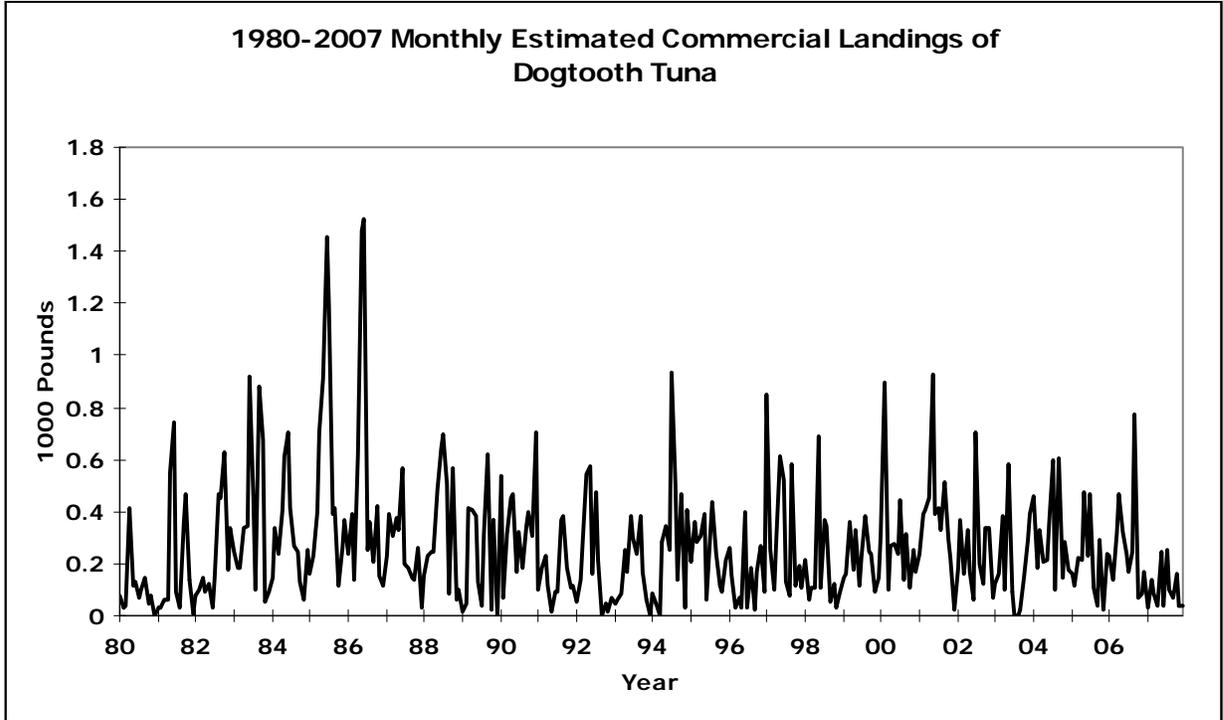


Figure C-4-3

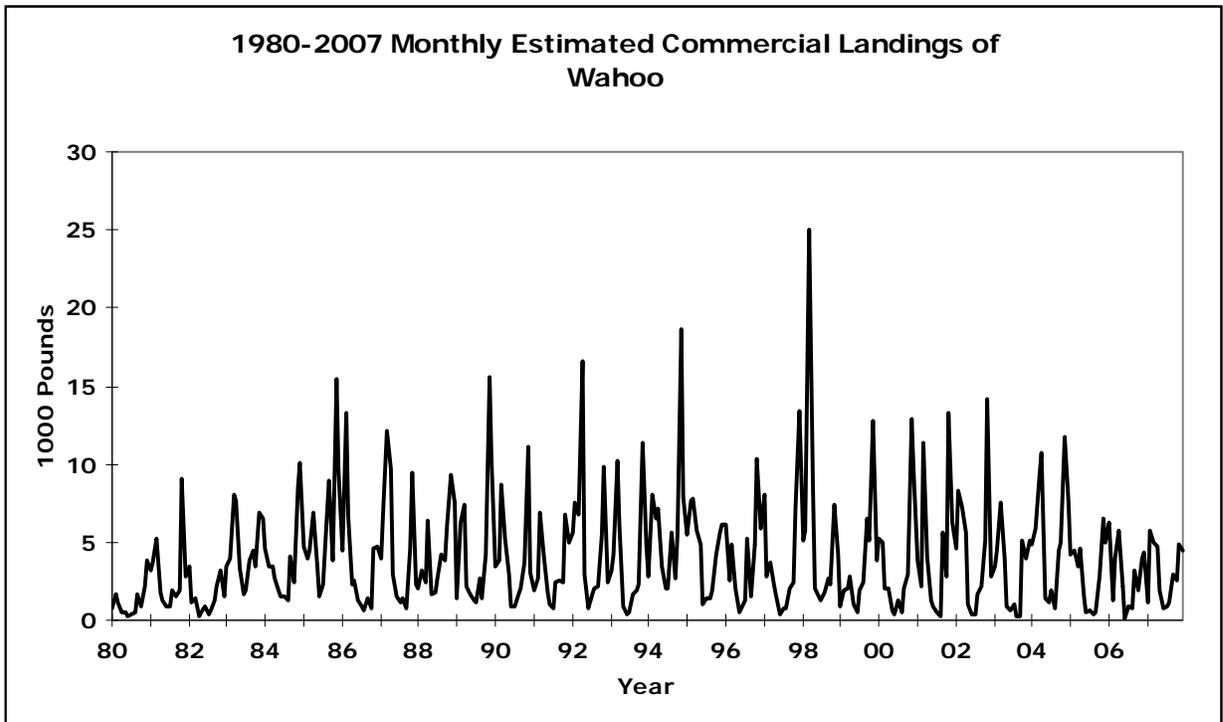


Figure C-4-4

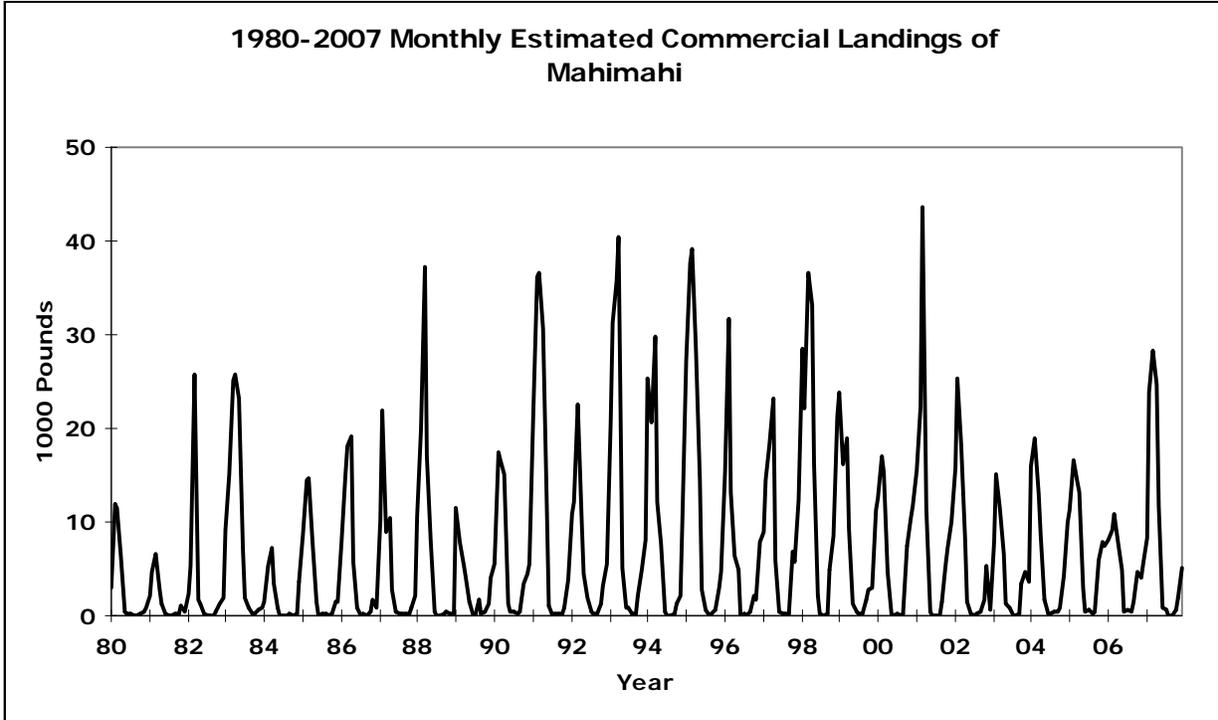


Figure C-4-5

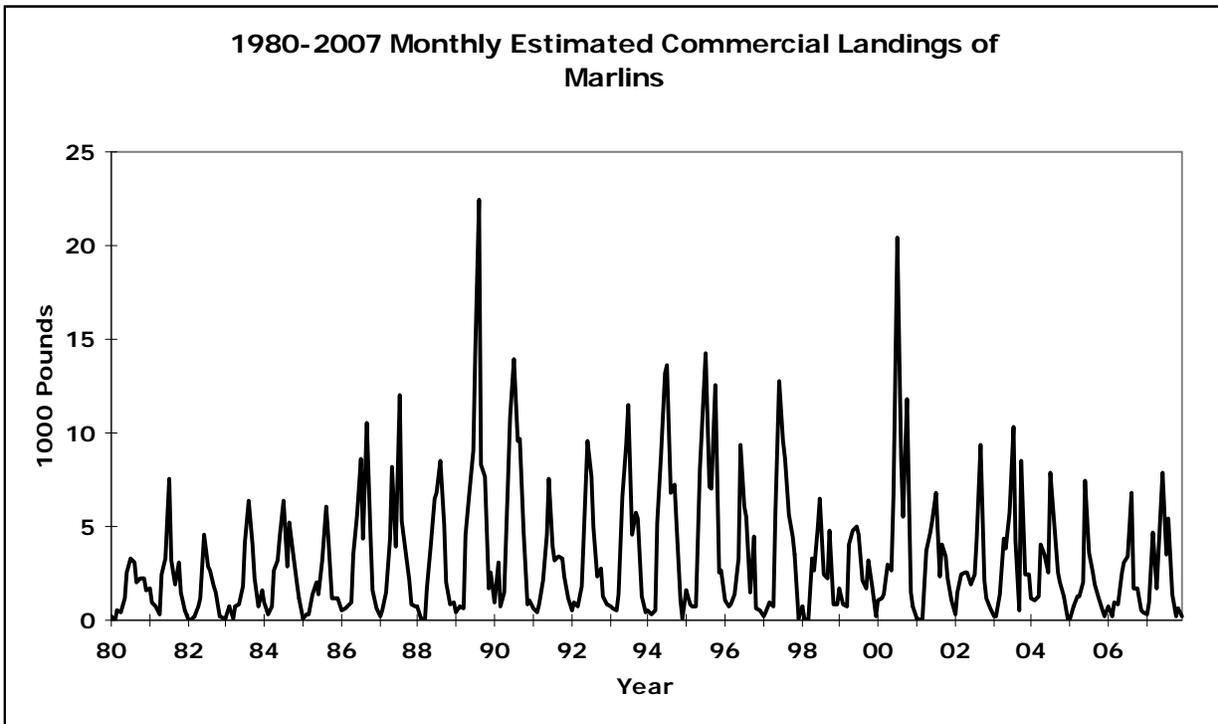


Figure C-4-6

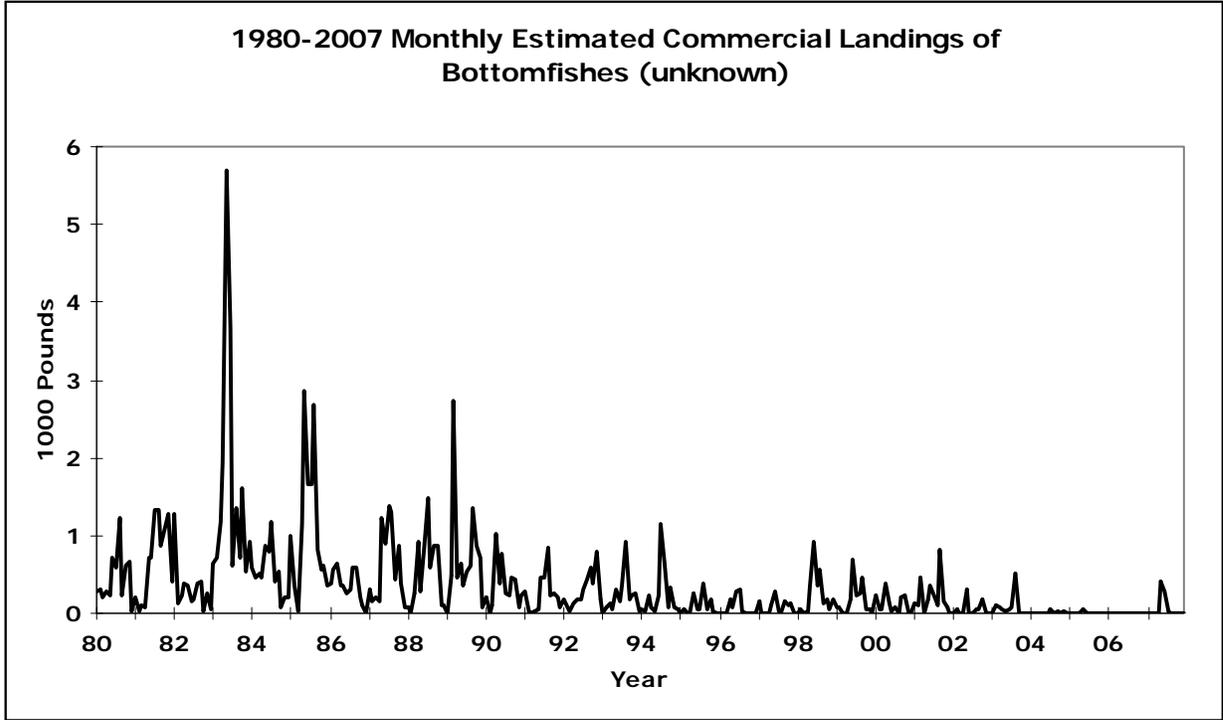


Figure C-4-7

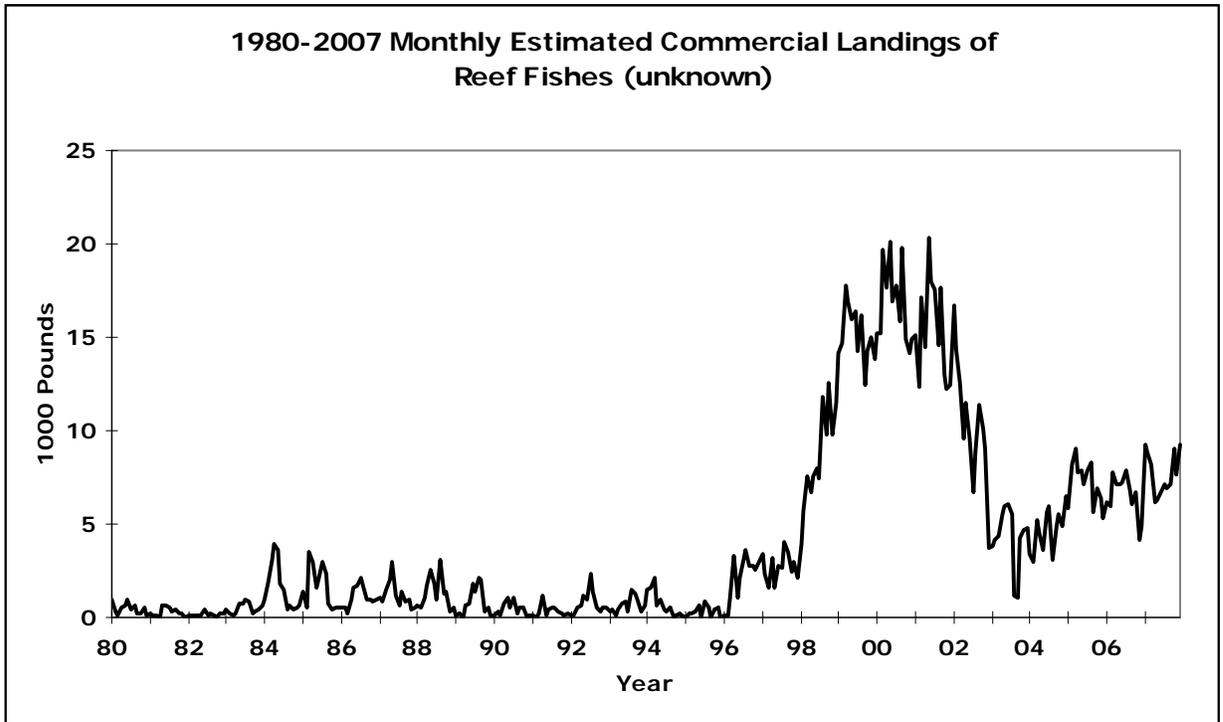


Figure C-4-8

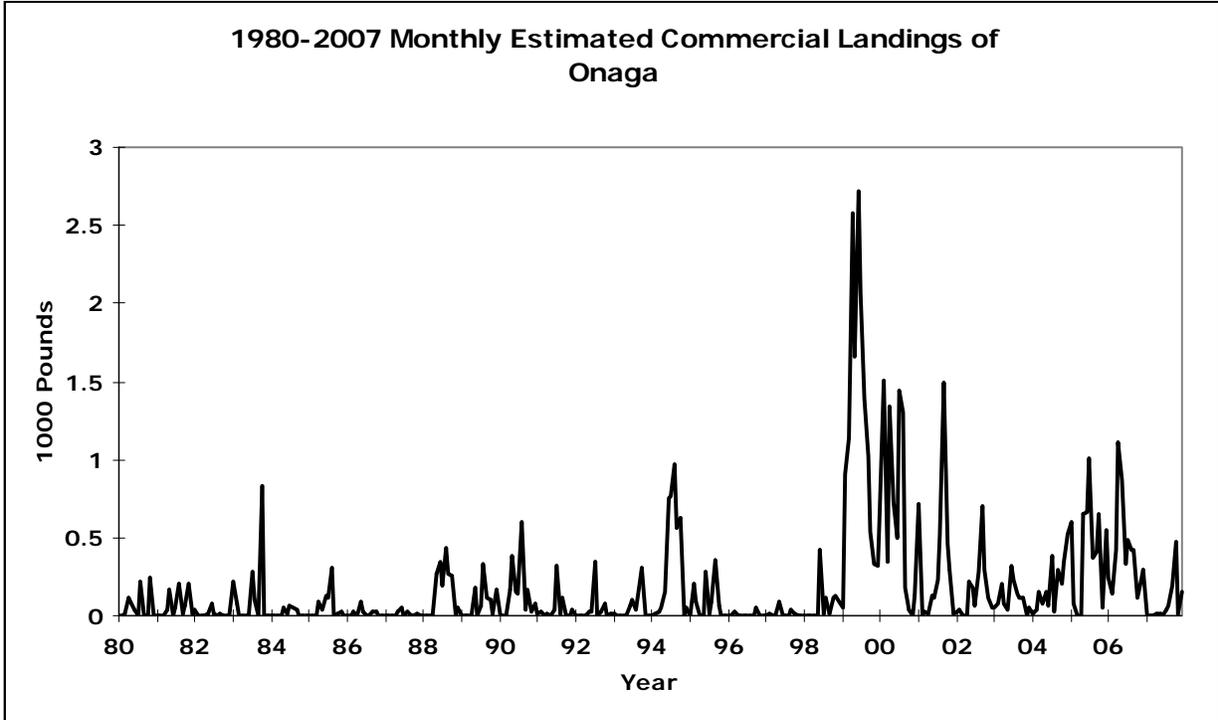


Figure C-4-9

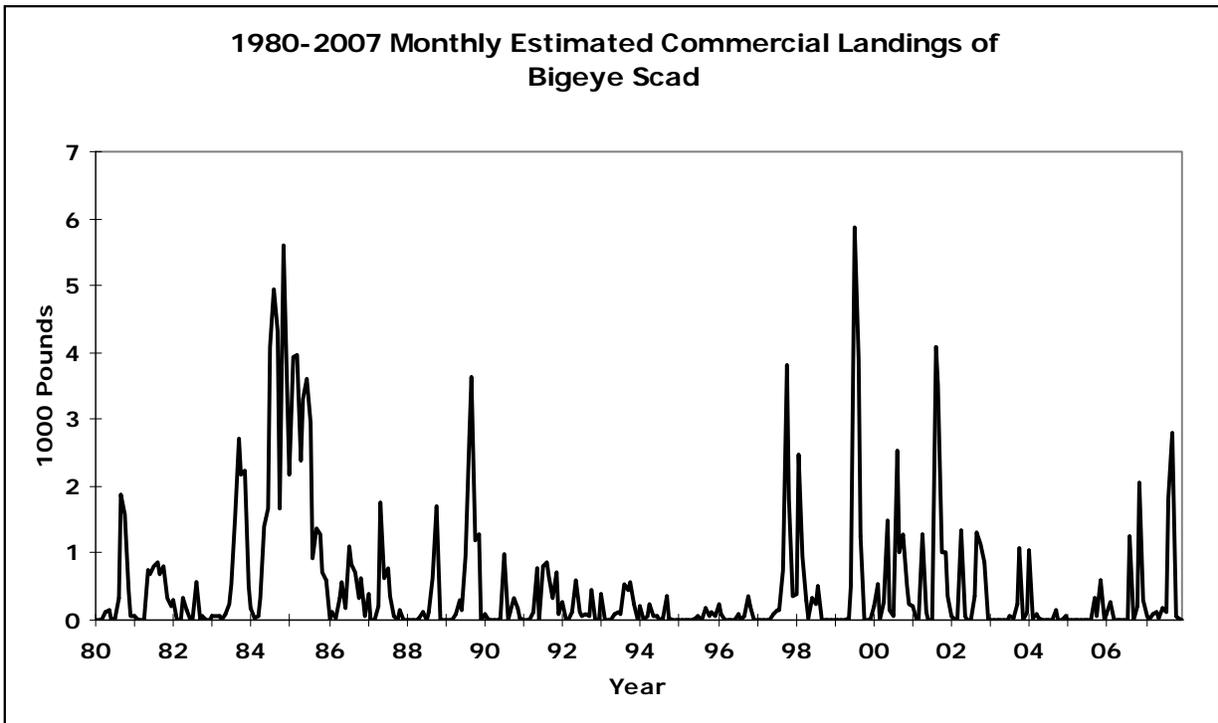


Figure C-4-10