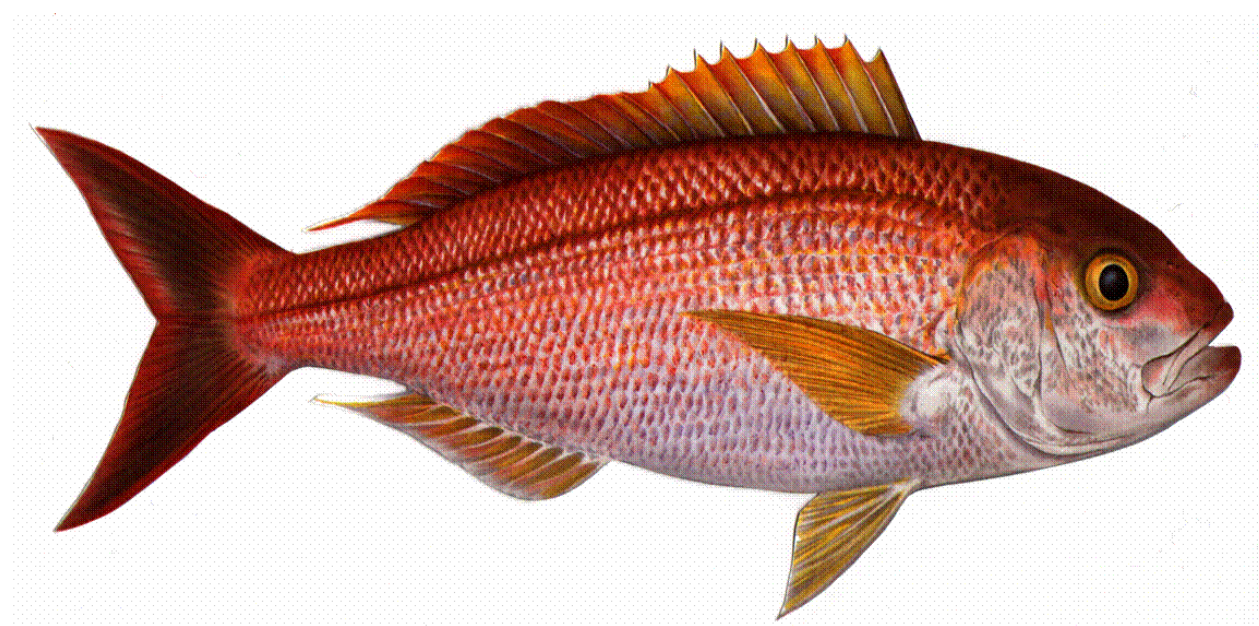


Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region



2004 Annual Report



June 2005
Western Pacific Regional Fishery Management Council
Honolulu, Hawaii

Cover photo: *Opakapaka* (*Pristipomoides filamentosus*) is commonly known as crimson snapper or Hawaiian pink snapper, although its skin is light brown. Opakapaka are usually caught at depths between 30 and 100 fathoms. Fish caught over hard bottoms have brighter skin colors than those caught over soft bottoms.

Although this species occurs throughout the tropical Pacific, nowhere does it grow as large as in the Hawaiian Islands. When a new opakapaka fishing area is discovered, the initial size of fish caught may be 12 to 18 pounds. Opakapaka of this size could be at least 10 years old.

Although opakapaka are caught year-round in the Hawaiian Islands, there is a distinct peak in landings during the winter season (October-February), particularly in the fishery around the main Hawaiian Islands. Most of the Opakapaka caught off the main Hawaiian Islands are from 1 to 5 pounds in round weight, whereas the waters around the Northwestern Hawaiian Islands yield fish mostly from 3 to 12 pounds in round weight or larger.

Opakapaka harvested from the main Hawaiian Islands, is sold at the fish auctions, through intermediary buyers on the major islands, and directly to retail fish markets and restaurants. The Northwestern Hawaiian Islands' catch is marketed primarily through the Honolulu fish auction.

Substitutions are possible among the deepwater snapper species available in Hawaii. However, no other snapper has gained the reputation of the opakapaka, and there is only weak substitutability for opakapaka in the up-scale restaurant market. Nevertheless, uku is sometimes substituted for opakapaka during the summer months when the former species is most available and the latter species is least available.

Opakapaka is caught principally by vertical hook-and-line gear. Small fish which migrate into relatively shallow depths are sometimes trapped.

The popularity of opakapaka as a "catch of the day" is not entirely a recent development. Opakapaka was one of the most common fish served in Hawaii's restaurants prior to World War II. For nearly a century, opakapaka has been the most important bottomfish species in terms of total landed weight and value in Hawaii. (<http://www.state.hi.us/dbedt/seafood/opakapaka.html>)



A report of the Western Pacific Regional Fishery Management Council pursuant to National Oceanic and Atmospheric Administration Award No. **NA07FC0025**

**Bottomfish and Seamount Groundfish Fisheries
of the Western Pacific Region**

2003 Annual Report

June 30, 2005

Prepared by the Bottomfish Plan Team and Council Staff for the
Western Pacific Regional Fishery Management Council
1164 Bishop Street, Suite 1400, Honolulu, Hawaii 96813
Tel: (808) 522-8220, Fax: (808) 522-8226

Table of Contents

Table of Contents	ii
I. Introduction	1
A. Definition of Descriptors	1
B. Definition of Indicators	4
C. Plan Team Members	5
II. Summary	7
A. American Samoa	7
B. Guam	7
C. Hawaii	8
D. Northern Mariana Islands	8
III. Issues	9
IV. Region-Wide Recommendations 2004	9
V. Plan Administration	9
A. Administrative Activities	9
B. Use-it or Lose it Requirement for Permit Renewal (Calendar Yr 2003)	10
C. Northwestern Hawaiian Islands (NWHI) Bottomfish Fisheries	10
D. Protected Species Conservation	10
E. United States Coast Guard Fisheries Law Enforcement	11
F. NOAA Fisheries Office for Law Enforcement Pacific Islands Enforcement Division	14

Tables

Table 1: Regional Summary of 2004 Bottomfish Species	2
Table 2: Bottomfish Management Unit Species (BMUS)	3
Table 3: Hawaii Bottomfish Fishery Protected Species Interactions	11

Appendices

Appendix 1. American Samoa

This module was not available at the time of first publication of the 2004 Bottomfish Annual Report (June 30, 2005). It will be included in future publications when it is made available.

Appendix 2. Guam

Contents

1. Introduction.....	2-2
2. Summary	2-3
3. Historical Annual Statistics.....	2-4
4. Recommendations.....	2-5
5. List of Tables	2-6
6. List of Figures.....	2-6

Tables

	Page
1. Guam 2004 expanded creel survey composition of bottomfish management unit species (BMUS)	2-7
2. Guam 2004 commercial bottomfish average prices.....	2-7

Figures

	Page
1a. Harvest of all bottomfish species	2-8
1b. Harvest of BMUS species	2-8
2a. Total and Commercial BMUS harvest.....	2-11
2b. Commercial BMUS revenue.....	2-11
3a. Estimated bottomfish boat hours.....	2-13
3b. Estimated bottomfish trips	2-13
4. Bottomfish fishery participation	2-15
5. Average bottomfish prices	2-17
6a. Bottomfish CPUE: Overall, Charter, Non-Charter	2-19
6b. Deepwater CPUE: Overall, Charter, Non-Charter.....	2-19
6c. Shallow water CPUE: Overall, Charter, Non-Charter	2-19
7. Average Revenue per Trip.....	2-22
8a. Jacks/Trevallys: Harvest	2-24
8b. Jacks/Trevallys: CPUE	2-24
8c. Jacks/Trevallys: Average Size Harvested	2-25
9a. Snappers: Harvest.....	2-28
9b. Snappers: CPUE.....	2-28
9c. Snappers: Average Size Harvest	2-29
10a. Groupers: Harvest	2-32
10b. Groupers: CPUE	2-32
10c. Groupers: Average Size Harvested.....	2-33

11a. Emperors: Harvest.....	2-36
11b. Emperors: CPUE.....	2-36
11c. Emperors: CPUE.....	2-37
12a. Bottomfishery Bycatch: Non-charter and Charter	2-40
12b. Bottomfishery Bycatch: Summary.....	2-40

Appendix 3. Hawaii

This module was not available at the time of first publication of the 2004 Bottomfish Annual Report (June 30, 2005). It will be included in future publications when it is made available.

Appendix 4. Commonwealth of the Northern Mariana Islands

Contents	<u>page</u>
1. Summary	4-2
2. Historical Annual Statistics for CNMI Bottomfishes	4-3
3. List of Tables	4-4
4. List of Figures	4-4
5. Introduction.....	4-5
6. Recommendations.....	4-7
7. Figures, Interpretations, Calculations, and Tables.....	4-8

Tables	<u>page</u>
1. Commercial landings (in pounds) of all bottomfishes, BMUS species identified to species on invoices, all shallow-water bottomfishes, all deep-water bottomfishes, and selected deep-water bottomfishes	4-11
2. Commercial landings (in pounds) of fishes only identified as assorted bottomfishes, and selected shallow-water bottomfishes.....	4-12
3. Commercial landings of bottomfishes, and their associated revenues and prices for 2004.....	4-13
4. Commercial landings, consumer price indices (CPIs), revenue, and prices for all bottomfishes	4-17
5. Number of fishermen (used as a proxy for number of boats), number of trips, catch rate, revenue per trip, and inflation-adjusted revenue per trip for bottomfish, and inflation-adjusted revenue per trip for all species when bottomfishing.....	4-21
6. Bycatch during bottomfishing (totals for 5 years)	4-22
7. Bycatch during bottomfishing (2004).....	4-22

Figures	<u>page</u>
1. Commercial bottomfish landings, allocated to sector of the fishery (or categorized as “assorted bottomfishes”).....	4-8
2. Commercial bottomfish landings of deep-water species	4-8
3. Commercial bottomfish landings of shallow-water species	4-9
4. Commercial bottomfish landings and inflation-adjusted revenue	4-15
5. Average price of bottomfish	4-15
6. Number of fishermen (boats) making bottomfish landings	4-18
7. Number of bottomfish trips.....	4-18
8. Bottomfish catch in average pounds per trip	4-18
9. Average inflation-adjusted revenue per trip landing bottomfish	4-19
5. Appendix 5-Status of Bottomfish Stocks	5-1
This module was not available at the time of first publication of the 2004 Bottomfish Annual Report (June 30, 2005). It will be included in future publications when it is made available.	
6. Appendix 6-Glossary	6-1

Bottomfish and Seamount Groundfish Fisheries of the Western Pacific 2004 Annual Report

I. Introduction

The 2004 annual report provides a set of descriptors and indicators of the bottomfish fisheries from American Samoa, Guam, Hawaii and the Northern Mariana Islands. The descriptors are designed to document recent trends in landings, effort, participation, revenue and prices. Should management action be recommended, descriptor information will aid in assessing potential impacts of the action on fishery participants. The indicators are quantifiable and measurable tools used to identify signs of stress in the stocks or the fishery. Based on changes over time in indicator levels, the Bottomfish Plan Team (BPT) may identify "yellow light" situations (i.e., where stress is first detected) and recommend that either management action or additional study be undertaken or "red light" situations where immediate management action is needed.

The annual report is organized as follows: The introduction section defines and briefly explains the descriptors and indicators. The next section briefly summarizes time trends in descriptor and indicator levels, through the current year, and recommends any areas of concern for each island area. Reports from each island area are appended. The introduction describes the history and present characteristics of the fishery. Results of the current year's descriptors and indicators are presented in detail, in relation to past temporal trends. Figures are supported with information on source of the data, methods of calculation, and data interpretation. Table 1 summarizes 2003 bottomfish statistics for the region. The appended report from each area includes a summary of the new area specific and region-wide recommendations. Finally, additional appendices contain information on NMFS 2003 administrative and enforcement activities, habitat conditions, protected species interactions, and 2003 BPT membership.

Table 2 lists scientific, common English and local/indigenous names for bottomfish management unit species (BMUS) for each area (American Samoa, Guam/Northern Marianas, and Hawaii).

A. Definition of Descriptors

The fishery descriptors are defined as follows:

Landings information

Time series information on aggregate catch for each island area shows recent trends in total bottomfish harvest. For American Samoa and Guam, estimates of both the commercial landings and the total landings (combined commercial, recreational and subsistence) are available. For Hawaii and the Northern Marianas, landings information represents only the commercial harvest.

Table 1: Regional Summary of 2004 Bottomfish Species

	<u>American Samoa</u>	<u>Guam</u>	<u>CNMI</u>	<u>Hawaii</u>			
				All	MHI	Mau	Hoomalu
BMUS Landings (lb)		36,282	12,849				
Revenue (\$)		73,466	142,260				
No. Of Boats		347	43				
No. Of Trips		3,763	287				
CPUE		4.0 lb/hr	104 lb/trip				
SPR		---	---				

Notes:

Hawaii module was not available at the time of first publication of the 2004 Bottomfish Annual Report (June 30, 2005), and therefore not included in the Table 1. It will be included in future publications when it is made available.

Table 2: Bottomfish Management Unit Species (BMUS)

(Absence of an indigenous name implies no local name established or area is not within the species' geographic range.)				
Scientific	English Common	American Samoa	Guam/CNMI	Hawaii
<i>Bottomfish:</i>				
<i>Aphareus rutilans</i>	red snapper/silvermouth	palu-gutusaliva	maraap tatoong	lehi
<i>Aprion virescens</i>	gray snapper/jobfish	asoama	tosan	uku
<i>Caranx ignobilis</i>	giant trevally/jack	sapoanae	tarakito	white ulua/pau'u
<i>C. lugubris</i>	black trevally/jack	tafauli	trankiton attilong	black ulua
<i>Epinephelus fasciatus</i>	blacktip grouper	fausi	gadao matai	
<i>E. quernus</i>	sea bass			hapu'upuu
<i>Etelis</i>				
<i>carbunculus</i>	red snapper	palu-malau	guihan boninas	ehu
<i>E. coruscans</i>	red snapper	palu-loa	onaga	onaga
<i>Lethrinus amboinensis</i>	ambon emperor	filoa-gutumumu	mafuti/lililok	
<i>L. rubrioperculatus</i>	redgill emperor	filoa-pa'o'omumu	mafuti tatdong	
<i>Lutjanus kasmira</i>	blueline snapper	savane	sas/funai	ta'ape
<i>Pristipomoides auricilla</i>	yellowtail snapper	palu-i'usama	guihan boninas	yellowtail kalekale
<i>P. filamentosus</i>	pink snapper	palu-'ena'ena	guihan boninas	opakapaka
<i>P. flavipinnis</i>	yelloweye snapper	palu-sina	guihan boninas	yelloweye opakapaka
<i>P. seiboldi</i>	pink snapper		guihan boninas	kalekale
<i>P. zonatus</i>	snapper	palu-sega	guihan boninas/gindai	gindai
<i>Pseudocaranx dentex</i>	thicklip trevally		terakito	butaguchi/pig ulua
<i>Seriola dumerili</i>	amberjack		guihan tatdong	kahala
<i>Variola louti</i>	lunartail grouper	papa	bueli	
<i>Seamount Groundfish:</i>				
<i>Beryx splendens</i>	alfonsin			kinmedai (Japanese)
<i>Hyperoglyphe japonica</i>	ratfish/butterfish			medai (Jap.)
<i>Pseudopentaceros richardsoni</i>	armorhead			kusakari tsubodai (Jap.)

In Hawaii, changes in species catch composition are provided for the Main Hawaiian Islands (MHI) and the Northwestern Hawaiian Islands (NWHI). Statistical tests for consistency in catch composition over time and between areas are included. Where possible, descriptor information has been presented for each NWHI management zone: Hoomalu and Mau. For 2004, pounds landed by species are presented in tabular form for each area except Hawaii. For Hawaii, NWHI BMUS landings by species are provided for 1986 through 2004.

Effort information

Effort is measured in number of trips for Hawaii and the Northern Marianas, and in both hours fished and trips taken for American Samoa and Guam.

Participation information

Estimates of the number of vessels making bottomfish landings are provided for all areas.

Economic information

Time trends in economic performance are characterized by plots of total ex-vessel revenue, aggregate average price levels, and for Hawaii, price trends over time for major species. In time-series of prices and revenues, it is appropriate to adjust value for the rate of inflation so that values throughout the time period are comparable (based on a consistent purchasing power for the dollar). Both the unadjusted and adjusted aggregate average price and aggregate revenues are plotted to clarify the relative change over time.

B. Definition of Indicators

Indicators were developed as tools for identifying signs of stress in the stocks or the fishery which deserve further investigation and/or a management response. Analyses consider how the indicators change over time. Indicators for Hawaii include 95% confidence intervals. To the degree possible, similar variance estimates are expected from the other areas in future annual reports. The indicators are defined as follows:

Aggregate Catch-Per-Unit-Effort

If the current year's aggregate catch-per-unit-effort (CPUE) is less than 50% of the average aggregate CPUE for the first three years of available data, there may be cause for concern. CPUE information is available for all areas; research CPUE is available for SE Hancock Seamount for all years since 1985, except in 1992 and 1994-2004.

Mean Fish Size

If there has been a significant reduction in mean fish size for a species over time, the stock may be stressed by the fishery. Mean size information is provided for nine species in Hawaii. No mean size information was available at this time for American Samoa, Guam or the Northern Marianas.

Percent Immature

If over 50% of the catch for a species is below the size of first maturity, the stock may be stressed by the fishery. Information for this indicator by species is available only from Hawaii.

Spawning Potential Ratio

The spawning potential ratio (SPR) is the ratio of the spawning stock biomass per recruit, at the current level of fishing, to the spawning stock biomass per recruit that would occur in the absence of fishing. According to the overfishing definition contained in the Bottomfish FMP (Amendment 3, 1990), if SPR is less than or equal to 0.20, recruitment overfishing has occurred (i.e., spawners have been reduced to 20%, or less, of their unexploited stock level). Data to calculate SPR were not available from Guam or the Northern Marianas. An estimate of the "worst case" SPR was calculated for American Samoa's bottomfish complex using Dory Project data to estimate the virgin population CPUE and information on percent of immature fish from Hawaii. In Hawaii, SPR was calculated for five major species in the Hoomalu and Mau Zones, of the NWHI, and the MHI; some SPR values changed slightly from previous year's reports due to improvement in the calculations. SPR for armorhead was calculated annually since 1985, except for 1992 and 1994-2004.

Economic Indicators

Revenue per trip plots is presented for all areas except the MHI. A more valuable indicator for the commercial fisheries, which may be available in the future, would be net revenue (ex-vessel revenue minus costs per trip). Net revenue is available only from the Hoomalu Zone and Mau Zone in Hawaii.

C. Plan Team Members

The FMP requires the Council's Bottomfish Plan Team (BPT) to prepare an annual report on the status of the pelagic fisheries taking place in each of the island areas served by the Council (American Samoa, Guam, Hawaii and Northern Mariana Islands), to evaluate the effectiveness of the FMP in meeting its goals and objectives, and make recommendations for future management and administrative action.

2004 Bottomfish Plan Team Members

American Samoa

Sabrina Mariner

Dept. Of Marine and Wildlife Resources
P.O. Box 3730
Pago Pago, AS 96977
Tel:(684) 633-4456
Fax:(684) 633-5944

Lewis Van Fossen

National Marine Fisheries Service
Pacific Islands Regional Office
1601 Kapiolani Blvd Suite 1110
Honolulu HI 96814
Tel: (808) 973-2937
Fax: (808) 973-2941

Guam

Thomas Flores, Jr.

DAWR, Dept. Of Agriculture, Guam
192 Dairy Road
Mangilao, Guam 96923
Tel: (671) 735-3986
Fax: (671) 734-6570

Commonwealth of the Northern Marianas Islands

Manuel Ramon

Division of Fish and Wildlife
Department of Land & Natural Resources
P.O. Box 10007
Saipan, MP 96950
Tel: (670) 322-9627
Fax: (670) 322-9629

Hawaii

Robert Moffitt (Chair)

Kurt Kawamoto

David Hamm

Minling Pan

National Marine Fisheries Service
Pacific Islands Fisheries Science Center
2570 Dole Street
Honolulu, HI 96822-2396
Tel: (808) 948-9706
Fax: (808) 943-1290

Council Staff

Mark Mitsuyasu

1164 Bishop St. Suite 1400
Honolulu, HI 96813
Tel: (808)522-8220
Fax: (808)522-8226

Andrew Burnell

Reginald Kokubun

Hawaii Division of Aquatic Resources
1151 Punchbowl Street, #330
Honolulu, HI 96813
Tel: (808) 587-0096
Fax: (808) 587-0115

II. Summary

A. American Samoa

This module was not available at the time of first publication of the 2004 Bottomfish Annual Report (June 30, 2005). It will be included in future publications when it is made available.

B. Guam

Descriptors

The fairly large fluctuations over time in bottomfish landings in Guam appear to be due more to entry and exit patterns of fishermen, rather than changes in fish stocks. The number of highliners fishing in the area doubled from 1993 to 1994, increasing the total commercial BMUS harvest and revenue by nearly 300% during that year. In 2004, a decrease in bottomfish landings was due to decreases in landings from the offshore, charter and non-charter sectors. 2004 landings decreased by 9.9% from 2003, not as large a decrease as in 2002, and is above the long term average.

The adjusted average price for bottomfish has not shown consistent marketing trends. This is believed to have resulted from the seasonal supply of pelagic fish and difficulties in developing a consistent market for locally caught fish. In addition, imported fish from other islands around the region have contributed to the continued marketing problem for local fishermen. The 2004 inflation-adjusted average bottomfish price of \$2.93 decreased from last year by 12.8% and remains below the long term average.

Indicators

Total and BMUS bottomfish harvest decreased in 2004. Total bottomfish landings decreased nearly 8%, with charter decreasing 10.3% and Non-charter catch decreased nearly 10%. Total BMUS landings decreased 12%, with the non-charter and charter components also decreasing 10.5% and 76.7% respectively. Offshore landings made up the overwhelming majority of both the total bottomfish catch and BMUS catch. The CPUE for all bottomfish decreased almost 15%, while the non-charter decreased 14% and charter CPUE decreased 61.5%.

The 2004 inflation-adjusted average revenue per trip for bottomfish increased 8%, while increasing slightly for all species. Decreases in revenue in previous years were due to a combination of occurrences: fishermen selling their catch to vendors not participating in the commercial receipt book program, an increase in the amount of imports from Micronesia and the Philippines, and significant numbers of bad weather days and storms.

The CPUE for all bottomfish decreased 15%, with the CPUE for shallow and deep bottomfishing increasing 7% and 11% respectively. The CPUE for non-charter boats decreased 14% for all bottomfishing, 15.4% for deep bottomfishing, and 2% for shallow bottomfishing.

Bottomfishing effort did decrease in 2004. Total hours and trips decreased 14.5% and 14.7% respectively. Charter hours and trips decreased 28.3% and 14.6% respectively. Non-charter

hours and trips decreased 13% and 15% respectively. These decreases may have been due, in part, to bad weather days in 2004. The number of unique boats bottomfishing has leveled off in recent years, but generally increases during years with ideal weather conditions, available marketing opportunities, and a thriving economy. In 2004, the number of unique boats in the fishery decreased 28% to 347 boats.

C. Hawaii

This module was not available at the time of first publication of the 2004 Bottomfish Annual Report (June 30, 2005). It will be included in future publications when it is made available.

D. Northern Mariana Islands

Descriptors

Data are available only on the commercial fishery. Landings of bottomfish increased in 2004 (30% more pounds in 2004 than in 2003), to slightly higher than the 22-year mean. This fishery continues to show a high turnover with changes in the high liners participating in the fishery. Fishermen sometimes conduct multi-purpose trips that focus primarily on shallow-water bottomfishes and catch pelagic species while in transit. In doing so, the shallow-water bottomfish complex continues to be exploited, but as part of the exploitation of reefs near the populated islands.

In 2004, the number of vessels fishing decreased to 43 following 58 in 2003 and 53 in 2002. The number of trips in 2004 decreased 24% from 2003 (and was below the long term average with 287 trips), and is still down 65% from the highest number of trips recorded in 2001 (833).

The inflation adjusted price slightly decreased in 2004 (-9.1% from 2003) and was lower than the 22-year mean. The total 2004 ex-vessel revenue increased to \$142,260 (up 18.2% from 2003), and above the long-term average.

Indicators

The average bottomfish catch per trip increased from 89 lb/trip in 2003 to 104 lb/trip in 2004. Although the average catch per trip is not a very good measure of CPUE, because it is subject to significant biases (e.g., changes in trip length and relative amounts of bottom fishing compared to trolling or reef fishing); it is the only measure readily obtained from the commercial landings system. However, the smaller vessels commonly make mixed trips and the relative proportions of bottomfishes to pelagic and reef fishes seem to be changing. The number of fishermen (used as a proxy for the number of boats) making commercial sales of any bottomfish species has varied widely over the last 20 years. This year there were less fishermen selling bottomfish than last (43 vs. 58), but the number remains near the 22-year mean. Most of these fishermen are using small vessels and when catching bottomfish, are more likely to target the shallow-water species.

Revenues and prices for bottomfishes were higher in 2004 than in 2003, with the inflation-adjusted revenue increasing by 18% and the inflation-adjusted average price per pound decreasing less than the 22-yr mean. This is a result of the combined effect of lower pounds landed and a lower price per pound for almost all bottomfish species. Almost all fishes caught in the CNMI are considered food fishes, including many that show a high incidence of ciguatera locally, including lyretail grouper (*Variola louti*) and red snapper (*Lutjanus bohar*). Redgill emperor (mafute') is the most frequently harvested and easily identified species in this complex, although a variety of snappers and groupers are also harvested.

II. Issues

This module was not available at the time of first publication of the 2004 Bottomfish Annual Report (June 30, 2005). It will be included in future publications when it is made available.

IV. Region-Wide Recommendations 2004

1. Recommends that the Council conduct a sensitivity analysis on the effects of MPAs on fishery based estimates of fishing mortality and CPUE for potential impacts in relation to overfishing/overfished thresholds.
2. Requests PIFSC to use the Stock Assessment (SAIP) funding to establish an ongoing program to collect bottomfish size frequency information in each island area; age at maturity; in support of addressing the Bottomfish Stock Assessment Workshop recommendations.
3. Recommends the Council, NMFS and State fund a contractor to conduct stock assessments on the bottomfish resources in the WPR.
4. Requests that the Council find resources to immediately support the high and medium recommendations from the Bottomfish Stock Assessment Workshop.
5. Recommends that the Council support a "SEDAR-type" stock assessment that includes the Council and public in the stock assessment review process. However, the peer review process should be less onerous and less costly than full blown SEDAR.

V. Plan Administration

A. Administrative Activities

This module was not available at the time of first publication of the 2004 Bottomfish Annual Report (June 30, 2005). It will be included in future publications when it is made available.

In August 2004, NMFS implemented a regulatory amendment to extend the moratorium on the harvest of seamount groundfish resources at Hancock Seamounts in the Northwestern Hawaiian Islands. The measure is intended to help rebuild pelagic armorhead (*Pseudopentaceros wheeleri*) stocks that were depleted in the 1970s and 1980s.

B. Use-it or Lose it Requirement for Permit Renewal (Calendar Yr 2003)

This module was not available at the time of first publication of the 2004 Bottomfish Annual Report (June 30, 2005). It will be included in future publications when it is made available.

C. Northwestern Hawaiian Islands (NWHI) Bottomfish Fisheries

Regarding Northwestern Hawaiian Islands (NWHI) bottomfish fisheries during the Calendar year 2004, PIRO issued a total of 9 nine permits for the NWHI bottomfish fishery. Four vessels fished in the Mau Zone and four vessels fished in the Ho'omalau Zone. Five vessels were registered to fish in the Mau Zone and four vessels were registered to fish in the Ho'omalau Zone.

Mau Zone Vessels

1. Kai Pali
2. Constance Andrea
3. Wahine Kapaloa
4. Jamie Elizabeth
5. Iwa Lani

Ho'omalau Zone Vessels

1. Ka Imi Kai
2. Fortuna
3. Laysan
4. Kealailani

D. Protected Species Conservation

The Hawaii-based bottomfish fishery has been monitored under a mandatory observer program since October 2003. Beginning October 2003, branch personnel have conducted daily shoreside dock rounds in Honolulu to determine which fishing vessels are in port. These dock rounds are used to obtain an estimate of fishing effort on a real-time basis by assuming that a vessel is fishing when it is absent from the harbor. This report is used to ensure prompt dissemination of Hawaii Bottomfish Observer Data and may be revised after final data editing has been completed. The following table summarizes percent observer coverage for vessel departures, vessels arriving with observers, and protected species interactions for vessels arriving with observers during 2004.

Table 3: Hawaii Bottomfish Fishery Protected Species Interactions

Vessel Departures - 2004 (January 1, 2004 - December 31, 2004)	
Departures -----	71
Departures with observers -----	13
Observer coverage 2004 -----	18.3%
Vessels Arriving with Observers - 2004	
Departures with observers in 2004 -----	13
Observers departing in 2003 arriving in 2004 -----	1
Observers departing in 2004 arriving in 2005 -----	0
Total vessels arriving with observers - 2004 -----	14
Protected Species Interactions - 2004	
Vessels arriving with observers - 2004 -----	14
Trips with turtle interactions -----	0
Trips without turtle interactions -----	14
Trips with marine mammal interactions -----	0
Trips without marine mammal interactions -----	14
Trips with seabird interactions -----	4
Trips without seabird interactions -----	10
Total Sea Turtle Interactions -----	0
Total Marine Mammal Interactions -----	0
Total Seabird Interactions -----	5
Unidentified Boobies -----	2 *
Brown Booby -----	1 *
Black-footed Albatross -----	1 **
Laysan Albatross -----	1 *

Note: The percent of observer coverage is based on vessel departures.
 Protected species interactions are based on vessel arrivals. For the purpose of this report, an animal that becomes hooked or entangled is an interaction.

* Protected species interactions occurred during trolling operations.

** Protected species interactions occurred during bottomfishing operations.

E. United States Coast Guard Fisheries Law Enforcement

The following is a summary of U. S. Coast Guard fisheries law enforcement activity in the western and central Pacific Region and covers the period from January 1, 2004, to December 31, 2004.

The Coast Guard conducted aerial patrols of the Exclusive Economic Zone (EEZ) surrounding the Main Hawaiian Islands, Kingman Reef, Palmyra Atoll, Jarvis Island, Howland Island, Baker

Island, American Samoa, Guam, and the Northern Mariana Islands. We had 15 suspected foreign fishing vessel encroachments during the course of the year, but were unable to respond, due to nonavailability of resources.

The USCG capitalized on patrol support available from out-of-area assets to the greatest extent possible. During this period, they had tasked one of the Coast Guard's polar icebreakers transiting to and from Antarctica to patrol the Howland and Baker EEZ along her route.

In January, using the Vessel Monitoring System, the USCG detected two domestic longliners possibly setting gear in the Kiribati EEZ. NOAA Fisheries Enforcement contacted both vessels and directed them to stop fishing, and they complied. One vessel was boarded, and one was met at the pier upon their return to Honolulu. NOAA Fisheries Enforcement is investigating both incidents for possible violations of the Magnuson Stevens Fisheries Conservation Management Act and Lacey Act.

In March, USCGC WALNUT deployed to the southern portion of the Fourteenth Coast Guard District's area of responsibility. USCGC WALNUT patrolled the Kingman Reef, Palmyra Atoll, Jarvis Island, Howland Island, Baker Island, and American Samoa EEZs, with no sign of illegal activity. USCGC WALNUT also patrolled the American Samoa large vessel closed area, with no violations detected.

During the month of May, USCGC KUKUI and USCGC WASHINGTON conducted a multiunit law enforcement patrol. These two units conducted a joint patrol of the Kingman Reef, Palmyra Atoll, and Jarvis Island EEZs, in addition to boarding some of the domestic longliners working south of the Main Hawaiian Islands, during their two-week patrol. No significant violations were noted.

Guam-based cutters continued to patrol the Guam and Northern Mariana Islands EEZs and board foreign fishing vessels inbound to Apra Harbor.

In January, the USCG assisted the Western Pacific Regional Fishery Management Council by providing C-130 support to conduct a privately owned fish aggregating device (PFAD) mapping flight east of the island of Hawaii.

USCG surface assets patrolled the vicinity of the Main and Northwest Hawaiian Islands, conducting boardings and monitoring the activity of the domestic longline fleet, and patrolling the Northwestern Hawaiian Island Coral Ecosystem Reserve. No significant violations were noted.

The Coast Guard conducted dedicated surface and aerial patrols of the Hawaiian Island Humpback Whale National Marine Sanctuary in concert with NOAA enforcement officers from December 2003 through the end of May 2004, with no significant violations noted during the season.

During the month of January, a U. S. Navy patrol boat found a small pleasure craft adrift in Apra Harbor, with a live green sea turtle onboard. The Navy turned the pleasure craft and sea turtle over to USCGC GALVESTON ISLAND, who cited the owner for a violation of the Endangered Species Act.

In April, the USCG provided C-130 transportation for four NOAA personnel to the island of Lanai to aid in the recovery of a beached, female orca. In May, the USCG transported NOAA personnel to the island of Molokai to aid in the disentanglement of two Hawaiian monk seals. During April - May period, the USCG also had two requests to assist with the removal of dead whales. The first incident involved a humpback whale that had washed up on Waimanalo Beach, and the second involved a sperm whale that had washed up on the outer reef at Kaneohe Bay. However, the USCG was unable to safely get surface units in close enough to provide assistance in either case.

In June, the USCG used a C-130 to transport three NOAA/NMFS personnel to the island of Kauai to assist a 500 lb. monk seal with a hook embedded in its digestive tract. The monk seal was then transported back to Oahu for surgery. In July, after the monk seal had recovered, a C-130 was used to transport the monk seal back to Kauai. On the return flight to Oahu, a deceased young whale was transported back to Air Station Barbers Point for further non-Coast Guard transport back to NOAA facilities in San Francisco for an autopsy.

During the month of May, the USCG responded to a report from a U. S. fisherman in the North Pacific that he had sighted a vessel actively engaged in large-scale driftnet operations. As a result, a C-130 from Barbers Point successfully located and documented three foreign vessels outfitted for driftnet operations. Due to on scene conditions, the USCG was unable to obtain the documentation necessary to prosecute any of the vessels. The USCG credits these sightings to U. S. fishermen working in the North Pacific, who reported the activity as it occurred to the Coast Guard.

The USCG directed the USCGC HEALY to patrol the high seas driftnet high threat area during its transit from Japan to the Arctic Ocean. Although numerous foreign fishing boats were sighted outfitted for squid jigging, no vessels were sighted that were rigged for driftnetting. Air Station Kodiak conducted numerous high seas driftnet surveillance flights on the northern edge of the Fourteenth District area of responsibility, and passed sighting information to the People's Republic of China law enforcement vessel ZHONG GUO YU ZHENG No. 201. No vessels were found to be engaged in illegal activity, though low visibility in the area often hampered search efforts.

In May, June, and December, USCGC WALNUT conducted three law enforcement patrols south of the Main Hawaiian Islands that focused on the domestic longline fleet. Most of the violations USCGC WALNUT detected were minor, such as floats not properly marked or the official number not properly displayed, although one vessel was cited for short float lines. USCGC KUKUI conducted a law enforcement patrol of the Northwestern Hawaiian Islands in August,

boarding the bottom fishing vessels she encountered along the way and reporting on the surface activity in the area. Surface activity was very light and no fisheries violations were detected.

In May, USCGC WASHINGTON, along with a NOAA (ole) SIA, responded to a reported assault of an observer on one of the domestic longliners. USCGC WASHINGTON boarded the vessel at-sea and removed the person who allegedly assaulted the observer.

F. NOAA Fisheries Office for Law Enforcement Pacific Islands Enforcement Division

This module was not available at the time of first publication of the 2004 Bottomfish Annual Report (June 30, 2005). It will be included in future publications when it is made available.