# PACIFIC ISLANDS FISHERIES SCIENCE CENTER

# Fishery Statistics of the Western Pacific

## Volume 22

Territory of American Samoa (2005) Commonwealth of the Northern Mariana Islands (2005) Territory of Guam (2005) State of Hawaii (2005)

## Compiled by

David C. Hamm, Nathan T. S. Chan, and Craig J. Graham

July 2007



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Pacific Islands Fisheries Science Center Administrative Reports are issued to promptly disseminate scientific and technical information to marine resource managers, scientists, and the general public. Their contents cover a range of topics, including biological and economic research, stock assessment, trends in fisheries, and other subjects. Administrative Reports typically have not been reviewed outside the Center. As such, they are considered informal publications. The material presented in Administrative Reports may later be published in the formal scientific literature after more rigorous verification, editing, and peer review.

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## Pacific Islands Fisheries Science Center Administrative Report H-07-03

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### Volume 22

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## Compiled By

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### **PREFACE**

Over the years, the demand for data and information concerning marine fisheries has greatly increased. To help meet these increased needs in the central and western Pacific areas, the National Marine Fisheries Service's (NMFS) Southwest Fisheries Science Center (SWFSC) initiated the Western Pacific Fishery Information Network (WPacFIN) to assist Pacific island fisheries agencies in upgrading their data collecting, processing, and reporting capabilities.

In 1982, these agencies formed a Fisheries Data Coordinating Committee (FDCC) and a FDCC Technical Subcommittee to help guide, coordinate, and monitor all of their fisheries data-related activities. Significant progress has been made by all participating agencies, particularly in the areas of upgrading data collecting and processing systems.

In a major step to improve and coordinate the data reporting and distribution systems of the agencies, in May 1985 the FDCC agreed to produce a combined document reporting each island's major fisheries statistics. Production of the document would be the responsibility of the FDCC Technical Subcommittee and would be coordinated by the WPacFIN Program Manager. Each agency would supply the data required to produce the tables and graphs for its respective section, and central WPacFIN staff would produce and distribute the document as part of the Administrative Report Series.

In April 2003, NMFS created a new Pacific Islands Region composed of the Pacific Islands Fisheries Science Center (PIFSC, formerly SWFSC's Honolulu Laboratory) and the Pacific Islands Regional Office (PIRO, formerly Southwest Regional Office's Pacific Islands Area Office). As such, this report is now affiliated with PIFSC rather than SWFSC.

This is the 22nd volume in the series, "Fishery Statistics of the Western Pacific," and it contains year 2005 summaries of commercial landings for American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and Hawaii. As with previous volumes, it is divided into sections, one each for the major island areas.

#### INTRODUCTION

This report is compiled by fisheries agencies participating in the Western Pacific Fishery Information Network (WPacFIN, formerly referenced as WPACFIN), a collaboration among fisheries agencies in Hawaii, Guam, the Commonwealth of the Northern Mariana Islands (CNMI), and American Samoa. WPacFIN's goal is to improve the availability and dissemination of fisheries information. Participating groups include

	Department of Marine and Wildlife Resources (DMWR)
American Samoa	Pacific Islands Regional Office (PIRO) Fisheries Monitoring Field Office, American Samoa
Commonwealth of the Northern Mariana Islands (CNMI)	Division of Fish and Wildlife (DFW)
	Division of Aquatic and Wildlife Resources (DAWR)
Guam	Bureau of Statistics and Plans (BSAP; formerly Department of Commerce)
	Hawaii Division of Aquatic Resources (HDAR)
	Pacific Islands Fisheries Science Center (PIFSC)
Hawaii	Pacific Islands Regional Office (PIRO)
	Western Pacific Regional Fishery Management Council

WPacFIN and these groups collect, computerize, edit, and process data from the islands. WPacFIN staff at the Pacific Islands Fisheries Science Center then use these data to create the summaries and graphs found in this document.

Data from DMWR, DAWR, and DFW are supplied on portable computer media in established WPacFIN database formats. Data for Hawaii are provided by HDAR through an electronic telecommunications link. Once data from all agencies are put into the proper format on the central WPacFIN computer and appropriate edit, adjustment, and verification procedures are completed, summary tables and charts are produced using software developed by WPacFIN staff and commercially available software.

#### **PROGRESS**

In 1981 when WPacFIN began assisting agencies in improving their data collecting and processing systems, only the State of Hawaii had computerized processing. By mid-1982, fisheries offices in American Samoa, Guam, and the CNMI were using WPacFIN-supplied computers to process data. Since that time, these agencies have made significant improvements to their data collecting systems and have established sound, automated data processing systems. Most agencies can now provide preliminary fishery statistics to WPacFIN within 45 days of the date of collection.

In particular, the HDAR has significantly improved its procedures for editing, updating, and processing Hawaii's data; it has reduced the lag time in data processing from about 2.5 years to less than 3 months for most data. The biggest problems still facing HDAR in improving its data systems are reducing the delinquency of fisher reporting and implementing a validation system to ensure that what gets reported by fishers is accurate. A Dealer Reporting System has been implemented to augment the Fishermen's Reporting System and has helped address this issue, and efforts are continuing to develop and implement other improvements to the Hawaii fisheries monitoring programs.

#### **PRECAUTIONS**

Data collecting and processing systems vary greatly among Pacific island fisheries agencies. Although much standardization has taken place and is continuing, there remain unique aspects of each island's system based on local needs and capabilities.

When using summaries contained in this report, especially if making comparisons, keep in mind the nature of the systems used to produce the data. For example, Hawaii's commercial landings data are based on mandatory monthly reporting by fish dealers and licensed commercial fishers as well as NOAA Fisheries longline logbooks; CNMI and Guam's data are based on voluntary reporting of major fish buyers using government-provided "trip-ticket" invoices, adjusted to represent 100% coverage, and referenced as "Estimated Commercial Landings"; American Samoa data are based on a complex integration of data from a boat-based creel survey and data expansion system for a portion of the fisheries, mandatory logbooks and a size-frequency sampling program for the longline fishery, and a mandatory trip ticket invoice reporting system for local sales. Each system has advantages and disadvantages, and the user should be aware of them when comparing or interpreting data. In addition, WPacFIN staff and the island agencies are continually improving the data collecting and processing systems in each area. Because the improvements usually result in updates to the estimates of total and commercial landings, the data in this volume may not match exactly with data in previous volumes of this report series.

The user should also be aware that species assemblages vary among island groups, as do cultural preferences and principal fishing techniques and gear. Population size is of particular importance when interpreting the relative value and importance of the fisheries. Explanations of data collecting and processing systems are provided in each island's section.

#### **CONTENTS**

This document is divided into sections by island group. Each section contains reports on the monthly and annual landings by species and species groups for the commercial fleet.

#### **DEFINITIONS**

In addition to the description of the systems and the monthly and annual reports, each section contains graphs of some of the summary fishery statistics of particular interest or importance to participating WPacFIN agencies. Several categories have been defined for each island's fisheries. Because of differences in reporting systems and capabilities among the islands, species contained within each category may vary, but all categories are documented in each island's section. Overlap exists among some of the categories used for different graphs.

Note: 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 FSWP volume will maintain the original species categorizations from previous volumes for comparative purposes. As such, tunas are kept in a separate category.

### Categories used in the graphs include:

- 1. Fisheries Categories These are combinations of species of similar ecological types, specifically pelagic, bottomfish, reef fish, and "other." "Other" includes groups that generally traverse these categories, such as certain sharks and jacks, or are not typically included in these groups, such as mullet and milkfish.
- 2. Pelagic Management Unit Species (PMUS) The Magnuson Fishery Conservation and Management Act of 1976 was amended in 1992 to place tunas under U.S. jurisdiction for management. The Fishery Management Plan for Pacific Pelagic Species was amended to reflect this change. However, this report series will continue to treat tunas as a separate category, and the PMUS category in this document includes only billfishes, wahoo, mahimahi, and oceanic sharks.
- 3. Bottom Fish Management Unit Species (BMUS) Defined as the species of initial importance in the Fishery Management Plan for bottomfish and seamount fisheries, including the major deepwater snapper, grouper, emperor, and certain jacks.
- 4. Tunas All the tuna species excluding wahoo. Historically this had been predominantly skipjack and yellowfin tunas in all areas, but with the growth of longline fisheries in Hawaii and American Samoa, bigeye and albacore tunas have become much more important or even predominant.

- 5. Other Tunas The definition varies among the islands depending on the importance of each tuna species in the total landings. For Guam and the CNMI, it remains the same and includes all tunas as defined above except skipjack and yellowfin tunas. In Hawaii and Samoa, it also excludes bigeye and albacore tuna, and it includes only tuna with relatively minor landings.
- 6. Billfish Combination of all marlin, sailfish, spearfish, and swordfish species.

#### **GRAPHICS**

Four types of graphs are provided with each island's data. Type I graphs present summary charts of the major species and species groups for the year covered. Type II graphs are seasonality plots for the major species or species groups, showing the average weight landed during each month for all years combined. Type III graphs are time series plots of annual summary statistics to help visualize the variability among years. Type IV graphs are plots of monthly landings of some of the major commercially important species and document monthly fluctuations in landings of these species over the entire time series.

To access the most up-to-date data and charts, please visit the WPacFIN Website at <a href="http://www.pifsc.noaa.gov/wpacfin">http://www.pifsc.noaa.gov/wpacfin</a>.

## **AMERICAN SAMOA 2005 FISHERY STATISTICS**

## Compiled by

American Samoa

Department of Marine and Wildlife Resources

and the

Western Pacific Fishery Information Network

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#### AMERICAN SAMOA 2005 FISHERY STATISTICS

#### INTRODUCTION

Location: 14°S latitude, 170°W longitude

Islands: Tutuila, Aunu`u, the Manu`a Islands (Ofu,
Olesaga, Ta`u), Rose Atoll (uninhabited),
and Swain's Island (sparsely populated)

Population: about 57,700; 80% on Tutuila; (The World Factbook, 2007)

Economy: tuna industry

The American Samoa Department of Marine and Wildlife Resources (DMWR; formerly the Office of Marine Resources) is located near Pago Pago on Tutuila and has been collecting commercial fisheries data from the Tutuila fleet since the early 1970s. In 1983 it extended its coverage to the Manu`a Islands, and in 1985 DMWR modified its data collection programs to include recreational and subsistence fisheries data.



American Samoa Source: <a href="http://www.cia.gov/cia/publications/factbook/aq.html">http://www.cia.gov/cia/publications/factbook/aq.html</a>; The World Factbook

American Samoa's domestic fisheries have typically been small-boat, 1-day fisheries using primarily 28 to 32 foot long, outboard-engine-powered catamarans called *alias* (pronounced *ah-lee-ahs*). Traditionally, trolling and bottomfishing were the major methods of fishing, and spearfishing, netting, and vertical longlining were done occasionally. Beginning in about mid-1995 some of the traditional alias began converting to horizontal longlining. During 1996 horizontal longlining became the largest fishery in American Samoa based on total landed weight of the catch, even though only about one-third of the fleet had converted to this method. Over the next few years the fleet grew rapidly with the addition of new alias up to about 38 feet in length and, more significantly, with the addition of other larger mono-hull vessels that fished much longer trips. The primary target species is albacore tuna, but the fishery has also resulted in significant increases in landings of yellowfin tuna, bigeye tuna, wahoo, blue marlin, mahimahi, and some other incidentally caught species.

During 2005, the various fishery monitoring programs in American Samoa identified 54 active vessels: 51 home ported on Tutuila and 3 in the Manu'a islands. Many of these vessels participated in more than one fishery, and 41 of the Tutuila boats (including 27 vessels which were over 50 feet in length) did at least some longlining. Of the 54 total boats, 13 participated in the troll and bottomfish fisheries, and 4 were used in other forms of fishing activities. On average, the alia fleet on Tutuila consisted of 3-man crews, fished 11 hours, and caught about 173 pounds of fish; the Manu'a-based fleet typically had 2-man crews, fished

about 5 hours and landed 81 pounds of fish. Essentially all of the longlining was based out of Tutuila, where the majority of the catch was offloaded to the canneries.

#### SPECIAL NOTE ON DATA REVISIONS

Significant changes in the fisheries occurred in the mid-1990s with the development of the longline fishery and a nighttime, boat-based scuba spearfishing fishery. Because of the nature of these fisheries, biases began creeping into the effort-counting and interviewing processes of the DMWR surveys. By 1997 WPacFIN staff discovered the problems, and modifications to survey techniques were implemented by DMWR staff. It became clear by early 1998 that the algorithms used to expand the survey data and estimate for the total fishery also needed to be changed. The new data processing system that better handles the more complex nature of American Samoa's current fisheries as detailed below was completed and used to reprocess the historical time series. This volume includes the results of this new improved algorithm, but additional data quality control procedures and algorithm enhancements are still being made that may cause small changes in subsequent reports.

#### **DATA COLLECTING SYSTEM**

The data collecting systems used by DMWR to monitor the changing fisheries of American Samoa have evolved considerably over the past twenty years. One common factor of all systems has been that they have relied heavily on personal contacts with the fishers and on a significant amount of dockside monitoring and interviewing.

The major systems in place today include: (1) boat-based, access-point creel surveys on Tutuila and the Manu`a Islands (formerly referenced as Offshore Creel Survey System), which are the mainstay of the monitoring program; (2) a mandatory purchase receipt "trip ticket" system for fish businesses on Tutuila (Commercial Purchase System); (3) a vessel history and tracking system for all American Samoa vessels (Vessel Classification System); (4) a Daily Effort Census System for detailed tracking of the longline fishery; (5) a mandatory federal Longline Logbook System; (6) a Cannery Landings System to document all landings at the two canneries made by domestic and foreign vessels; and (7) a size frequency sampling program at the canneries. Data from all these major systems are used to develop the best available data for the complex and ever changing fisheries of American Samoa. More details of the first five data collection systems follow.

Commercial Catch Monitoring System. From 1982 to 1985, DMWR obtained catch statistics by interviewing commercial fishers at the end of their trips and kept records of as much commercial fishing activity as possible. This data collection method was accurate for trips where interviews were conducted. However, it was very labor intensive, did not cover all trips, and did not include the small but growing recreational and subsistence fisheries.

**Vessel Classification System**. Beginning in the early 1980s, a vessel classification system was established to collect information on all vessels participating in any domestic fisheries. This system provides the following information on American Samoa vessels:

- Boat Name
- Registration Number
- Propulsion
- Length
- Beam
- Number of Engines
- Type of Use
- Trailered
- Number of Crew

- Depth
- Engine Type
- Fuel Type
- Material
- Horsepower
- Port
- Methods of Fishing
- Federal Permit

**Boat-based Creel Survey System**. In October 1985, a new creel survey sampling system was implemented on Tutuila to provide better coverage and statistics on all boat-based fisheries. This replaced the Commercial Catch Monitoring System. Soon afterwards, similar monitoring programs were established in the Manu`a Islands, where the fishing fleets are centrally located and small enough for statistics to be collected for nearly every trip. The surveyors in the Manu`a Islands send their monitoring forms to DMWR in Tutuila for processing. The Manu`a statistics are entered and compiled on a monthly basis and are adjusted by an estimated percent coverage factor that is usually 100%.

The details of the Tutuila boat-based fishery sampling program have changed over the years to accommodate changes in the fisheries; but it is still a systematic, random sampling program that stratifies sampling by type of day (either weekday or weekend/holiday) and by fishing method. For logistical and cultural reasons, Sundays are no longer sampled, as effort is extremely low and not similar to other weekend/holiday-type days.

DMWR staff normally sample 2 weekdays and 1 weekend/holiday per week. During survey days, counts of total participation are collected, and as many returning vessels as possible are interviewed for catch, effort, and biological samples. Tutuila is divided into six sample areas, five of which are sampled. It is assumed that the non-sampled area is similar to the sampled areas in fishing activity and success rate. Furthermore, it is assumed that the fishers interviewed are representative of the entire fishing population and that they give accurate information.

Unless contrary information is available from dockside questioning of knowledgeable persons, a boat is assumed to be "out fishing" if its trailer is at a boat ramp or the boat is missing from its normal berthing area during the 18-hour survey day. The following participation information is recorded for all boats determined to be "out fishing." It is expanded to estimate the total number of fishing trips in Tutuila:

- Sample Date
- Boat Name
- 3 Observation Times

- Type of Day
- Fishing Method
- Sample Area

The remaining data items listed below are collected on each boat for which an interview is successfully completed.

- Interview Time \*
- Area Fished
- Home Island
- Total Hours Fished (trip length) \*
- Number of Fishermen
- Number of Gear Used
- Total Trip Weight in Pounds \*

- Species Caught \*
- Number of Pieces for Each Species
- Disposition of Species\*
- Weight in Pounds for Each Species \*
- Condition of Species if Not Whole
- Length of Fish (converted to weight)
- Price per Pound for Each Species

It is not always possible to obtain information on all the items listed. However, the ones marked with an asterisk (\*) are considered essential for data expansion purposes. Also, identification and weight of each species are often not obtainable; in this case a code for species groupings (e.g., miscellaneous bottom fish) is used. The interview data is later expanded to estimate the total catch per fishing trips and other CPUE measures in Tutuila. The catch per trip estimate is multiplied by the number of trips estimate for each strata to get an estimate of the total catch for Tutuila.

Commercial Purchase System. For several decades the two canneries provided monthly summary statistics about their purchases of fish from all vessels, foreign and domestic. Then in September 1990, a Commercial Purchase (receipt book) System was instituted in which all other businesses in Samoa that buy fish directly from fishers were required by local law to submit a copy of their purchase receipts to DMWR. Receipt books are issued by DMWR to all fish markets, stores, hotels, and restaurants that resell fish, either whole of prepared. The following information is collected via these receipts.

- Invoice Date
- Invoice Number
- Buyer's Name
- Boat Name, Owner
- Area Fished

- Fishing Method
- Species Bought
- Number of Pieces for Each Species
- Weight in Pounds for Each Species
- Price per Pound for Each Species

**Federal Longline Logbook System and Daily Effort Census**. In January 1996, in response to the developing longline fishery, a federal longline logbook system was implemented by NMFS. All longline fishers are required to obtain a federal permit and to submit logs

containing detailed data on each of their sets and the resulting catch. From 1996 to 1999, the logbooks submitted by the local longliners were edited by the NMFS fisheries monitoring agent in Samoa for any missing data and were then sent to PIFSC (formerly the Honolulu Laboratory) for further editing and data processing.

In July 1999, to improve monitoring of the fast-growing longline fishery, DMWR implemented a Daily Effort Census (DEC) for all federally permitted longline vessels. Six days a week, DMWR staffs make two visits a day to ports where longline vessels move. The staff document whether each vessel on the list is "in port" or "out fishing." The DEC data are used to track the activity of each vessel and to help ensure all fishing log sheets are submitted by the fishers.

To further improve the quality and timeliness of the data, beginning in January 2000 logbook data collecting, editing, and processing has been done by DMWR in Samoa and downloaded to NMFS periodically.

The following information is recorded for each set these longline fishers make:

- Set Date
- Vessel
- Date of Departure
- Port of Departure
- Date of Arrival
- Port of Arrival
- Observer on Board
- Target Species
- Bait Used
- Mainline Length
- No. of Hooks
- No. of Hooks/Float
- No. of Lightsticks Used
- Bird Catch Mitigation Measures
- Wind Detection
- Wave Height
- Sea Surface Temperature
- Wind Speed

- Begin Set Time
- Begin Set Latitude and Longitude
- End Set Time
- End Set Latitude and Longitude
- Haul Date
- Begin Haul Date
- Begin Haul Latitude and Longitude
- End Haul Time
- End Haul Latitude and Longitude
- No. of Pelagic Species Kept
- No. of Pelagic Species Released
- No. of Sharks Finned
- No. of Sharks Kept
- No. of Sharks Released
- No. of Protected Species Released Alive
- No. of Protected Species Released Injured
- No. of Protected Species Released Dead

Logbook data are also compared with cannery unloading data for Samoa-based boats on a monthly basis to identify boats that unload at the canneries but did not turn in any longline logs or turn in just a part of the logs that they are required to.

The longline logbooks provide no information on the pounds caught or the disposition of fish caught by large longliners, which are not covered by the Boat-Based Creel Survey.

Beginning in April 2001, length data from South Pacific Regional Longline Port Sampling Forms were collected for Samoa-based longliners and converted to pounds to provide better estimates of the pounds per fish of fish caught by the large longliners. Disposition data were also entered in the comments section of these forms to provide sampled disposition data on the fish caught.

### **DATA PROCESSING SYSTEM**

As the data collecting systems used by DMWR to monitor the fisheries in American Samoa have changed over the years, so have the data processing systems. Numerous versions of database and utility software and microcomputer systems have been used over the years to meet the growing demand for processing the collected data. Generally speaking, these changes, with their significant emphasis on improving data quality and their cross validation among systems, have made the data processing systems more robust, complex, and complete.

Several important principles have remained constant over time: (1) keep data processing close to the source of data collecting; (2) provide all of the needed software tools to ensure the quality of data; (3) make the systems user friendly and functional for the local staff; and (4) maintain as many standards as possible throughout the time series of data collected.

Typically, when upgrades (such as changes in expansion and reporting algorithms for the creel survey data and commercial landings data) have been made to data processing systems, the entire time series of data would be reprocessed using the same algorithms so that trends in the fisheries would remain as intact as possible. The annual and monthly estimated commercial landings data and the corresponding time series figures included in this report were produced with the versions of data processing systems in use in May 2001. To help the reader understand the origin of the data included in this report, a general description of these processes follows. Please note that it does not include the details on many minor changes that have occurred throughout the evolutionary history of these systems.

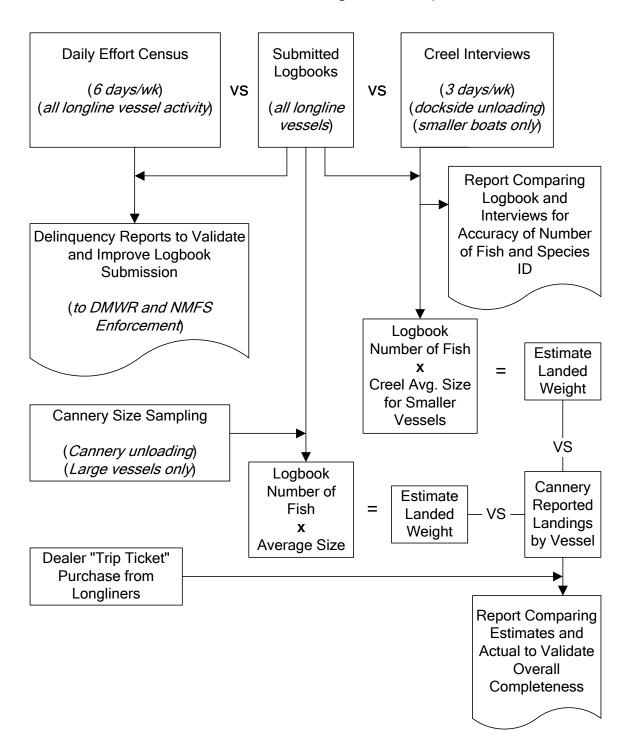
The data from 1982 to 1985 have been imported directly from the original Commercial Catch Monitoring System used before the implementation of the boat-based creel survey. Since 1986, the boat-based creel survey data expansion system has been the central system for estimating total commercial landings in American Samoa. In short, the survey data expansion process involves multiplying the average daily participation by the average catch per trip for each stratum. For the years 1986 to 1990, commercial sales portions of the expanded creel survey data from Tutuila and the Manu`a Islands were combined to produce estimated total commercial landings. Since 1990, with the implementation of the mandatory fish dealer receipt book system on Tutuila, further adjustments have been made to these combined creel data by using receipt book data. These adjustments made significant improvements in overall totals as they helped adjust for sales not monitored through the boat-based survey (e.g., shoreline and strictly nighttime commercial fishing). Species totals modified with these types of adjustments are flagged in reports with an asterisk. Finally, in the late 1990s when larger longline vessels began landing their catches directly at the canneries and thus out of the monitoring capabilities of the standard creel surveys, the longline logbook system and cannery size frequency

sampling data entered the algorithm to fill the gap for this portion of the fishery. This data added the landings of these vessels to create a more complete picture of the estimated total commercial landings for the Territory.

One of the most significant recent improvements made in the data processing systems for DMWR has been in the area of cross-system data validation and quality control. By collecting similar data from several sources using different monitoring and reporting tools, the quality of reported data can be cross-referenced between systems to provide insight into the validity and completeness of each data set. The following schematic shows some cross-system data validation relationships and features that are used in the most current version of the integrated DMWR fisheries monitoring programs (see next page):

# **Data Quality and Cross Validation**

## American Samoa Longline Example



#### DATA REPORTING SYSTEM

After all editing, quality control, and data interpretation activities are completed, monthly and annual commercial landings data tables by species are generated. Each of the commercial landings data tables contains the common name, weight sold in pounds, value in dollars, the average price per pound of each species or species group, and whether the data was modified by Commercial Purchase System data (denoted by asterisks). The monthly data tables are based on monthly expansions of the Tutuila Boat-Based Creel Survey Data with enhancements by monthly Longline Logbook, Commercial Purchase System, and Manu`a data as explained previously. Annual data tables are based on combined annual expansions of the creel data for the entire calendar year with similar annual enhancements from Longline Logbook, Commercial Purchase System, and Manu`a data. Since the monthly and annual data tables are based on separate monthly and annual expansion of the creel data, the annual data tables are not the exact sum of the 12 monthly data tables, but they fall within the standard error. These data tables are listed as Tables A-1 to A-13 in this report.

The charts that make up the rest of the report are for groups of species as well as for some of the dominant individual species. Some of the charts in this volume are new or modified from earlier volumes. The top ten commercial species for the year are emphasized, and they can change from year to year. The species in the species groups used in the charts of this report are defined below.

To access the most up-to-date data and charts, please visit the WPacFIN Website at <a href="http://www.pifsc.noaa.gov/wpacfin">http://www.pifsc.noaa.gov/wpacfin</a>.

Note: 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 FSWP volume will maintain the original species categorizations from previous volumes for comparative purposes. As such, tunas are kept in a separate category.

### I. Pelagic Management Unit Species (PMUS)

Although the Magnuson Fishery Conservation and Management Act of 1976 was amended in 1992 to include tunas in the PMUS (PPMUS), this report series will continue to treat tunas as a separate category from the PPMUS. The PMUS category includes:

Black marlin Sharks (misc) Blacktip reef shark Striped marlin Blue shark Sailfish Shortfin mako shark Spearfish Nurse shark Swordfish Wahoo Thresher shark White tip oceanic shark **Pomfret** Mahimahi Moonfish

Blue marlin

### II. Bottomfish Management Unit Species (BMUS)

Black jack Pink snapper (opakapaka)
Amberjack Flower snapper (gindai)
Giant trevally Yellowtail snapper

Yelloweye opakapaka Smalltooth jobfish (lehi)
Blacktip grouper Longtail snapper (onaga)
Lunartail grouper Squirrel snapper (ehu)
Blue lined snapper Ambon emperor

Blue lined snapper Ambon emperor Gray jobfish Redgill emperor

### III. Billfish

Swordfish Striped marlin
Blue marlin
Sailfish

Blue marlin Sailfish
Black marlin Spearfish

### IV. Tunas

Tunas (misc)

Skipjack tuna

Dogtooth tuna

Albacore

Bluefin tuna

Yellowfin tuna

Bigeye tuna

Kawakawa

### V. Other Tuna

Tunas (misc) Bluefin tuna Dogtooth tuna Kawakawa

## VI. Fisheries Categories

### A. Pelagics

Albacore Oilfish

All sharks Pelagic fish (misc)
Barracudas (misc) Pelagic thresher shark

Bigeye barracuda Pomfret

Bigeye thresher shark Rainbow runner

Bigeye tuna Sailfish

Billfish (misc) Sharks (misc)

Black marlin Shortfin mako shark

Blacktip reef shark
Blue marlin
Blue shark
Blue shark
Bluefin tuna
Silky shark
Skipjack tuna
Small barracuda
Snake mackerel

Dogtooth tuna Spearfish
Great barracuda Striped marlin
Hammerhead shark Swordfish
Kawakawa Thresher shark
Longfin mako shark Tiger shark
Mackerel Tunas (misc)
Mahimahi Wahoo

Moonfish White tip oceanic shark

Nurse shark Yellowfin tuna

#### B. Bottom Fish

Amberjack
Ambon emperor
Bigeye emperor
Bigeye scad
Bigeye trevally
Black jack
Black snapper
Black triggerfish
Blacktip grouper
Blood snapper

Blue kingfish trevally
Blue lined gindai
Blue lined snapper
Blue triggerfish
Bluefin trevally
Blueline bream
Bottomfish (misc)
Bridled triggerfish
Brown jobfish

Deep water snappers Emperors (misc) Flagtail grouper

Flower snapper (gindai)

Giant trevally
Goldenline bream
Goldspot trevally
Gray jobfish
Groupers (misc)
Jacks (misc)
Kusakar's snapper
Longnose emperor

Longtail snapper (onaga)

Lunartail grouper
Mackerel scad (opelu)
Multidens snapper
Netfin grouper
Onespot snapper
Orangespot emperor
Orangestripe triggerfish
Paddletail snapper
Peacock grouper
Picassofish

Pink snapper (opakapaka) Pinktail triggerfish Pristipomoides/Etelis Redgill emperor Rufous snapper Smalltooth grouper Smalltooth jobfish (lehi)

Spotted grouper
Squirrel snapper (ehu)
Stone's snapper
Striped grouper
Tomato grouper
Twinspot/red snapper
Twospot bristletooth
Whitemouth trevally
Yellow margined snapper
Yellow-eyed bristletooth
Yelloweye opakapaka
Yelloweye snapper

Yellowspot grouper

Yellowtail snapper

### C. Reef Fish

Arenatus wrasse Porcupinefish
Bandcheck wrasse Rabbitfish
Barred flagtail Red snapper
Barred thicklip Reef fish (misc)
Bigeye squirrelfish Rockmover wrasse

Bigeyes Rudderfish

Bigscale soldierfish Rudderfish (biggibus)
Blackeye thicklip Rudderfish (cinerascens)

Blue-banded surgeonfish

Brown surgeonfish

Butterflyfishes (misc)

Cardinalfish

Saber squirrelfish

Sergeant major

Squirrelfish

Striped bristletootly

Cardinalfish Striped bristletooth Checkerboard wrasse Surgeonfishes/tangs

Christmas wrasse Sweepers
Cigar wrasse Sweetlips
Convict tang Terapon perch
Flagtails Tilefishes
Floral wrasse Triggerfish

Flounders Triple tail wrasse
Harlequin tuskfish Two spotted hawkfish
Inshore groupers Unicornfishes (misc)
Inshore snappers Weedy surge wrasse

Inshore snappers Weedy surge wrasse Mullets Whitepatch wrasse

Napoleon wrasse Whitespotted surgeonfish

Naso tang Wrasses (misc)
Orange goatfish Yellow goatfishes

Orangespine unicornfish Yellowfin surgeonfish Parrotfishes (misc)

#### D. Other

Anchovies Milkfish

Angler flatfish Monogram monocle bream

Banded sergeantMoray eelsBatfishesNeedlefishButterflyfish (auriga)Octopus

Butterflyfish (melanotic)
Catfish
Conger eels
Conger eels
Octopus (cyanea)
Pacific sailfin tang

Coral crouchers Prettyfins

Crabs Racoon butterflyfish Dottybacks Rays

Dragon eel Red algae
Eagle ray Remoras

Eels Saddleback butterflyfish

Emperor angelfish Salmon

False mullet Sand and coral rubble

Fish (misc) Sea shells

Flame hawkfish Sea urchins (misc)

Flashlightfishes Seahorses
Flyingfish Seaweeds
Forktail rabbitfish Shrimp

Fringelip mullet Slipper lobster
Frogfishes Spiny lobster
Giant clam Spotted moray eels

Giant moray eel Squid Green snails Sunfish

Halfbeaks Sweetlip emperor

Invertebrates (misc)ThreadfinKona crabTilapiaLeatherbackTurban snail

Longnose parrotfishUndulated moray eelLowfin drummerWestern drummerMangrove clamYellowmargin moray eel

Mangrove crab

#### A.15

### INTERPRETATION OF STATISTICS

The user is reminded to pay heed to the precautions and assumptions identified earlier in this document when making interpretations of or inferences from data reported in the tables and graphs. Remember also that the commercial landings summaries are not based on a census of all the fishing activities, but on samples of those activities and on integration of data from four separate data systems. One of the major factors in expanding the creel survey data into monthly and annual estimates is the use of proportionality constants to adjust for percent coverage of the surveys. The flexibility of the survey design allows for refinement of these constants as additional information is gained on the fishing activities. If the constants are improved upon, the basic survey data can be expanded again to create better overall estimates. However, the variability and species composition would not be expected to change since these statistics are based on the actual survey information collected from the fishers. The estimates of total landings are considered to be conservative because the catch from the subsistence inshore fisheries are currently not included in this document.

A.16

Table A-1 American Samoa Annual 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb	
Bigeye scad	363	\$619	\$1.70	*
Mackerel	55	\$107	\$1.92	*
Trevally (misc)	20	\$22	\$1.10	*
Black jack	174	\$484	\$2.78	
Bigeye trevally	44	\$90	\$2.02	
Whitemouth trevally	2	\$4	\$2.41	
Barracudas (misc)	746	\$1,408	\$1.89	
Bigeye barracuda	0	\$1	\$1.80	
Mullets	277	\$600	\$2.16	*
Sharks (misc)	14	\$7	\$0.50	
Milkfish	55	\$76	\$1.38	*
Groupers (misc)	218	\$441	\$2.02	
Peacock grouper	21	\$37	\$1.73	
Flagtail grouper	14	\$28	\$2.00	
Tomato grouper	111	\$299	\$2.68	
White-edged lyretail	22	\$40	\$1.86	
Blacktip grouper	20	\$60	\$2.99	
Spotted grouper	37	\$94	\$2.58	
Lunartail grouper	509	\$1,059	\$2.08	
Blue lined snapper	383	\$836	\$2.18	*
Rufous snapper	177	\$468	\$2.65	
Yellow margined snapper	34	\$68	\$2.00	
Onespot snapper	21	\$40	\$1.94	
Twinspot/red snapper	1	\$3	\$2.00	
Paddletail snapper	664	\$1,294	\$1.95	
Gray jobfish	451	\$929	\$2.06	
Pristipomoides/Etelis	0	\$1	\$3.00	
Yelloweye snapper	39	\$118	\$3.00	
Pink snapper (opakapaka)	1,004	\$2,450	\$2.44	*
Blue lined gindai	34	\$103	\$3.00	
Flower snapper (gindai)	40	\$121	\$3.00	
Yellowtail snapper	220	\$429	\$1.95	*
Smalltooth jobfish (lehi)	530	\$1,206	\$2.27	
Longtail snapper (onaga)	710	\$1,911	\$2.69	*
Squirrel snapper (ehu)	625	\$1,378	\$2.20	*
Black snapper	20	\$1,576 \$42	\$2.10	*
Stone's snapper	146	\$437	\$3.00	
Kusakar's snapper	9	\$19	\$2.13	
Bigeye emperor	39	\$ <del>7</del> 9	\$2.05	
Emperors (misc)	1	\$3	\$2.30	
Longnose emperor	111	\$209	\$1.87	
Ambon emperor	181	\$498	\$2.75	
Blueline bream	2	\$6	\$2.47	
Redgill emperor	586	\$1,469	\$2.51	
Oilfish	3	\$1, <del>4</del> 09 \$3	\$1.00	
Pomfret	168	\$337	\$2.00	
Flounders	64	\$159	\$2.48	*
Surgeonfishes/tangs	7,101	\$14,189	\$2.48	*
Unicornfishes (misc)		\$3,133		*
· · · · · · · · · · · · · · · · · · ·	1,518		\$2.06 \$2.06	*
Squirrelfish	784	\$1,616 \$214	\$2.06 \$2.61	
Saber squirrelfish	82	\$214	\$2.61	

Table A-1 (Cont.)
American Samoa Annual 2005 Estimated Commercial Landings

A.17

Species	Pounds	Value	\$/Lb
Bigscale soldierfish	7	\$18	\$2.60
Yellowstriped squirrelfish	7	\$14	\$2.00
Bigeye squirrelfish	10	\$23	\$2.26
Parrotfishes (misc)	7,144	\$15,655	\$2.19 *
Terapon perch	1	\$2	\$2.25
Sweetlips	2	\$71	\$43.4
Christmas wrasse	1	\$1	\$2.00
Sweepers	13	\$25	\$2.00
Inshore groupers	679	\$1,332	\$1.96 *
Triggerfish	10	\$19	\$2.00
Inshore snappers	12	\$30	\$2.46
Red snapper	257	\$513	\$2.00
Mahimahi	35,649	\$45,366	\$1.27
Swordfish	7,966	\$18,617	\$2.34 *
Blue marlin	2,972	\$3,097	\$1.04 *
Black marlin	955	\$955	\$1.00
Sailfish	1,237	\$1,125	\$0.91
Rainbow runner	81	\$154	\$1.91
Wahoo	458,678	\$423,337	\$0.92
Skipjack tuna	316,917	\$193,777	\$0.61
Bluefin tuna	390	\$975	\$2.50 *
Dogtooth tuna	103	\$204	\$1.98
Albacore	6,434,965	\$6,438,325	\$1.00
Yellowfin tuna	1,123,207	\$1,026,364	\$0.91
Bigeye tuna	285,454	\$314,930	\$1.10
Moonfish	776	\$663	\$0.85
Spiny lobster	3,335	\$14,313	\$4.29 *
Octopus	662	\$1,797	\$2.71 *
Shrimp	180	\$565	\$3.14 *
Tilapia	3,359	\$3,984	\$1.19 *
Salmon	32	\$64	\$2.00 *
Rudderfish	4	\$8	\$2.18
Angler flatfish	132	\$266	\$2.02 *
Stareye parrotfish	56	\$112	\$2.00
Yellowband parrotfish	3	\$6	\$2.00
Pa'a crab	56	\$356	\$6.36 *
TOTAL	8,703,761	\$8,546,301	\$0.98

<sup>\*</sup> Data replaced or modified by Actual Commercial Landings Data

Table A-2 American Samoa January 2005 Estimated Commercial Landings

A.18

Species	Pounds	Value	Price/Lb
Fish (misc)	25	\$47	\$1.85
Black jack	95	\$215	\$2.27
Blue kingfish trevally	27	\$51	\$1.85
Barracudas (misc)	172	\$333	\$1.93
Bigeye barracuda	1	\$1	\$1.80
Groupers (misc)	53	\$94	\$1.76
White-edged lyretail	37	\$69	\$1.85
Spotted grouper	69	\$136	\$1.96
Blue lined snapper	42	\$85	\$2.00
Rufous snapper	24	\$49	\$2.00
Paddletail snapper	126	\$244	\$1.94
Gray jobfish	207	\$341	\$1.65
Pristipomoides/Etelis	152	\$457	\$3.00
Yelloweye snapper	19	\$36	\$1.84
Yellowtail snapper	23	\$47	\$2.00
Smalltooth jobfish (lehi)	109	\$197	\$1.80
Longtail snapper (onaga)	333	\$832	\$2.50
Squirrel snapper (ehu)	94	\$306	\$3.25 *
Longnose emperor	91	\$171	\$1.87
Ambon emperor	77	\$145	\$1.88
Inshore snappers	2	\$5	\$2.00
Red snapper	5	\$9	\$1.70
Mahimahi	3,655	\$5,832	\$1.60
Swordfish	273	\$726	\$2.66 *
Sailfish	70	\$140	\$2.00 *
Wahoo	39,745	\$37,171	\$0.94
Skipjack tuna	16,855	\$10,408	\$0.62
Dogtooth tuna	58	\$102	\$1.75
Albacore	243,571	\$243,576	\$1.00
Yellowfin tuna	22,910	\$24,201	\$1.06
Bigeye tuna	7,986	\$8,785	\$1.10
TOTAL	336,910	\$334,810	\$0.99

<sup>\*</sup> Data replaced or modified by Actual Commercial Landings Data

Table A-3
American Samoa February 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Barracudas (misc)	186	\$360	\$1.94
Peacock grouper	1	\$2	\$1.74
White-edged lyretail	19	\$35	\$1.85
Blue lined snapper	5	\$9	\$2.00
Yellow margined snapper	3	\$6	\$2.00
Paddletail snapper	37	\$69	\$1.88
Gray jobfish	12	\$23	\$1.94
Pink snapper (opakapaka)	71	\$117	\$1.65 *
Smalltooth jobfish (lehi)	30	\$60	\$2.00
Longtail snapper (onaga)	203	\$570	\$2.81 *
Squirrel snapper (ehu)	23	\$50	\$2.20
Bigeye emperor	3	\$6	\$2.05
Longnose emperor	9	\$17	\$1.87
Redgill emperor	7	\$14	\$2.00
Pomfret	13	\$26	\$2.00
Surgeonfishes/tangs	38	\$63	\$1.65 *
Unicornfishes (misc)	28	\$46	\$1.65 *
Squirrelfish	8	\$13	\$1.65 *
Parrotfishes (misc)	62	\$102	\$1.65 *
Inshore groupers	37	\$61	\$1.65 *
Red snapper	21	\$41	\$2.00
Mahimahi	1,524	\$2,049	\$1.34
Swordfish	1,013	\$2,757	\$2.72 *
Blue marlin	1,018	\$916	\$0.90 *
Black marlin	85	\$85	\$1.00
Sailfish	283	\$255	\$0.90 *
Wahoo	17,014	\$16,279	\$0.96
Skipjack tuna	6,102	\$3,829	\$0.63
Albacore	87,415	\$88,337	\$1.01
Yellowfin tuna	9,515	\$11,528	\$1.21
Bigeye tuna	2,723	\$2,996	\$1.10
Moonfish	402	\$503	\$1.25
TOTAL	127,909	\$131,223	\$1.03

<sup>\*</sup> Data replaced or modified by Actual Commercial Landings Data

A.20

Table A-4 American Samoa March 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Black jack	4	\$12	\$3.00
Bigeye trevally	8	\$22	\$2.75
Barracudas (misc)	353	\$706	\$2.00
Groupers (misc)	9	\$20	\$2.25
Flagtail grouper	14	\$28	\$2.00
White-edged lyretail	33	\$61	\$1.85
Lunartail grouper	2	\$6	\$3.00
Blue lined snapper	125	\$250	\$2.00 *
Rufous snapper	3	\$9	\$3.00
Paddletail snapper	10	\$20	\$2.00 *
Gray jobfish	10	\$20	\$2.00 *
Yelloweye snapper	3	\$9	\$3.00
Pink snapper (opakapaka)	2	\$6	\$3.00
Flower snapper (gindai)	2	\$6	\$3.00
Smalltooth jobfish (lehi)	7	\$21	\$3.00
Longtail snapper (onaga)	6	\$18	\$3.00
Squirrelfish	27	\$60	\$2.24
Mahimahi	832	\$1,627	\$1.95 *
Swordfish	355	\$1,065	\$3.00 *
Rainbow runner	18	\$34	\$1.91
Wahoo	7,221	\$6,975	\$0.97
Skipjack tuna	1,927	\$1,680	\$0.87
Albacore	19,247	\$19,596	\$1.02
Yellowfin tuna	7,472	\$9,665	\$1.29
Bigeye tuna	2,387	\$2,625	\$1.10
Moonfish	218	\$109	\$0.50
TOTAL	40,294	\$44,651	\$1.11

<sup>\*</sup> Data replaced or modified by Actual Commercial Landings Data

Table A-5
American Samoa April 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Black jack	26	\$78	\$3.00
Barracudas (misc)	30	\$60	\$2.00
Peacock grouper	7	\$12	\$1.73
Tomato grouper	17	\$51	\$3.00
Blacktip grouper	6	\$19	\$3.00
Lunartail grouper	15	\$44	\$3.00
Blue lined snapper	35	\$70	\$2.00
Rufous snapper	15	\$46	\$3.00
Yellow margined snapper	21	\$41	\$2.00
Paddletail snapper	294	\$570	\$1.94
Gray jobfish	123	\$274	\$2.22
Yelloweye snapper	18	\$54	\$3.00
Pink snapper (opakapaka)	4	\$12	\$3.00
Blue lined gindai	13	\$38	\$3.00
Flower snapper (gindai)	14	\$41	\$3.00
Yellowtail snapper	10	\$29	\$3.00
Smalltooth jobfish (lehi)	286	\$633	\$2.21
Longtail snapper (onaga)	53	\$158	\$3.00
Squirrel snapper (ehu)	189	\$431	\$2.28
Stone's snapper	48	\$143	\$3.00
Bigeye emperor	23	\$48	\$2.05
Longnose emperor	68	\$127	\$1.87
Ambon emperor	7	\$20	\$3.00
Redgill emperor	54	\$107	\$2.00
Pomfret	97	\$194	\$2.00
Surgeonfishes/tangs	130	\$215	\$1.65 *
Squirrelfish	35	\$74	\$2.13
Parrotfishes (misc)	155	\$256	\$1.65 *
Red snapper	156	\$312	\$2.00
Mahimahi	539	\$603	\$1.12
Swordfish	405	\$1,030	\$2.54 *
Wahoo	4,391	\$4,069	\$0.93
Skipjack tuna	6,736	\$5,501	\$0.82
Dogtooth tuna	46	\$92	\$2.00
Albacore	152,991	\$152,991	\$1.00
Yellowfin tuna	15,950	\$15,482	\$0.97
Bigeye tuna	13,280	\$14,608	\$1.10
Spiny lobster	10	\$35	\$3.50 *
TOTAL	196,295	\$198,566	\$1.01

<sup>\*</sup> Data replaced or modified by Actual Commercial Landings Data

A.22

Table A-6 American Samoa May 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Black jack	51	\$153	\$3.00
Barracudas (misc)	258	\$482	\$1.87
Peacock grouper	2	\$3	\$1.73
Tomato grouper	24	\$72	\$3.00
Blacktip grouper	13	\$39	\$3.00
Lunartail grouper	25	\$75	\$3.00
Blue lined snapper	9	\$18	\$2.00
Rufous snapper	4	\$12	\$3.00
Yellow margined snapper	5	\$11	\$2.00
Paddletail snapper	82	\$166	\$2.02
Gray jobfish	38	\$88	\$2.34
Yelloweye snapper	19	\$57	\$3.00
Pink snapper (opakapaka)	6	\$18	\$3.00
Blue lined gindai	22	\$66	\$3.00
Flower snapper (gindai)	25	\$75	\$3.00
Yellowtail snapper	19	\$57	\$3.00
Smalltooth jobfish (lehi)	121	\$304	\$2.51
Longtail snapper (onaga)	135	\$405	\$3.00
Squirrel snapper (ehu)	233	\$664	\$2.85
Stone's snapper	99	\$297	\$3.00
Kusakar's snapper	9	\$19	\$2.13
Bigeye emperor	6	\$13	\$2.05
Longnose emperor	18	\$33	\$1.87
Ambon emperor	12	\$36	\$3.00
Redgill emperor	14	\$28	\$2.00
Pomfret	25	\$50	\$2.00
Surgeonfishes/tangs	86	\$173	\$2.00 *
Unicornfishes (misc)	49	\$98	\$2.00 *
Squirrelfish	31	\$62	\$2.00 *
Parrotfishes (misc)	214	\$503	\$2.36 *
Inshore groupers	32	\$64	\$2.00 *
Red snapper	41	\$81	\$2.00
Mahimahi	4,549	\$6,509	\$1.43
Swordfish	566	\$1,532	\$2.71 *
Blue marlin	132	\$132	\$1.00 *
Black marlin	1,195	\$1,195	\$1.00
Sailfish	393	\$393	\$1.00 *
Wahoo	13,947	\$13,484	\$0.97
Skipjack tuna	54,638	\$33,466	\$0.61
Dogtooth tuna	38	\$57	\$1.50 *
Albacore	692,951	\$692,951	\$1.00
Yellowfin tuna	113,144	\$105,913	\$0.94
Bigeye tuna	28,387	\$31,487	\$1.11
Spiny lobster	178	\$791	\$4.44 *
Tilapia	198	\$226	\$1.14 *
TOTAL	912,042	\$892,356	\$0.98

<sup>\*</sup> Data replaced or modified by Actual Commercial Landings Data

A.23

Table A-7 American Samoa June 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb	
Black jack	46	\$119	\$2.60	
Spotted grouper	17	\$45	\$2.60	
Lunartail grouper	59	\$117	\$2.00	
Blue lined snapper	88	\$168	\$1.90	
Rufous snapper	76	\$198	\$2.60	
Paddletail snapper	181	\$357	\$1.97	*
Gray jobfish	118	\$231	\$1.95	
Pink snapper (opakapaka)	140	\$273	\$1.95	*
Yellowtail snapper	29	\$56	\$1.95	
Smalltooth jobfish (lehi)	15	\$39	\$2.60	
Squirrel snapper (ehu)	20	\$50	\$2.50	*
Redgill emperor	230	\$597	\$2.60	
Surgeonfishes/tangs	222	\$436	\$1.96	*
Unicornfishes (misc)	266	\$521	\$1.96	*
Squirrelfish	138	\$274	\$1.99	*
Parrotfishes (misc)	904	\$1,871	\$2.07	*
Inshore groupers	120	\$234	\$1.95	*
Mahimahi	3,389	\$3,814	\$1.13	
Swordfish	582	\$1,212	\$2.08	*
Blue marlin	238	\$287	\$1.20	*
Rainbow runner	3	\$6	\$1.91	
Wahoo	36,729	\$33,646	\$0.92	
Skipjack tuna	58,969	\$35,443	\$0.60	
Dogtooth tuna	35	\$61	\$1.75	*
Albacore	935,580	\$935,580	\$1.00	
Yellowfin tuna	176,744	\$160,369	\$0.91	
Bigeye tuna	25,493	\$28,308	\$1.11	
Spiny lobster	218	\$924	\$4.24	*
Pa'a crab	21	\$146	\$6.95	*
TOTAL	1,240,670	\$1,205,380	\$0.97	

<sup>\*</sup> Data replaced or modified by Actual Commercial Landings Data

Table A-8 American Samoa July 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Bigeye scad	121	\$241	\$2.00 *
Black jack	34	\$87	\$2.60
Barracudas (misc)	19	\$33	\$1.75
Mullets	22	\$38	\$1.72 *
Spotted grouper	13	\$33	\$2.60
Lunartail grouper	43	\$86	\$2.00
Blue lined snapper	65	\$123	\$1.90
Rufous snapper	56	\$145	\$2.60
Paddletail snapper	63	\$125	\$1.97
Gray jobfish	87	\$169	\$1.95
Pink snapper (opakapaka)	51	\$153	\$3.00 *
Yellowtail snapper	21	\$41	\$1.95
Smalltooth jobfish (lehi)	11	\$29	\$2.60
Longtail snapper (onaga)	45	\$90	\$2.00 *
Squirrel snapper (ehu)	41	\$82	\$2.00 *
Redgill emperor	169	\$438	\$2.60
Surgeonfishes/tangs	494	\$1,054	\$2.13 *
Unicornfishes (misc)	98	\$196	\$2.00 *
Squirrelfish	160	\$320	\$2.00 *
Parrotfishes (misc)	766	\$1,806	\$2.36 *
Inshore groupers	19	\$38	\$2.00 *
Mahimahi	5,784	\$7,526	\$1.30
Swordfish	907	\$2,048	\$2.26 *
Sailfish	636	\$579	\$0.91
Rainbow runner	9	\$17	\$1.91
Wahoo	59,811	\$56,433	\$0.94
Skipjack tuna	36,126	\$21,876	\$0.61
Bluefin tuna	390	\$975	\$2.50 *
Albacore	390,351	\$390,351	\$1.00
Yellowfin tuna	286,718	\$258,364	\$0.90
Bigeye tuna	56,819	\$62,634	\$1.10
Spiny lobster	431	\$1,882	\$4.37 *
Octopus	10	\$20	\$2.00 *
Tilapia	400	\$500	\$1.25 *
TOTAL	840,787	\$808,532	\$0.96

<sup>\*</sup> Data replaced or modified by Actual Commercial Landings Data

A.25

Table A-9 American Samoa August 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb	
Bigeye scad	95	\$231	\$2.43	*
Mackerel	30	\$60	\$2.00	*
Trevally (misc)	20	\$22	\$1.10	*
Black jack	7	\$19	\$2.60	
Whitemouth trevally	0	\$1	\$2.42	
Barracudas (misc)	38	\$69	\$1.83	
Mullets	142	\$320	\$2.25	*
Groupers (misc)	15	\$29	\$2.00	
Peacock grouper	2	\$4	\$1.73	
Tomato grouper	6	\$14	\$2.50	
White-edged lyretail	2	\$3	\$1.85	
Blacktip grouper	0	\$0	\$2.79	
Spotted grouper	3	\$7	\$2.61	
Lunartail grouper	38	\$76	\$2.00	
Blue lined snapper	88	\$213	\$2.42	*
Rufous snapper	12	\$31	\$2.60	
Yellow margined snapper	3	\$5	\$2.00	
Onespot snapper	2	\$3	\$1.94	
Twinspot/red snapper	0	\$0	\$2.00	
Paddletail snapper	49	\$93	\$1.91	
Gray jobfish	30	\$59	\$1.95	
Yellowtail snapper	5	\$9	\$1.95	
Smalltooth jobfish (lehi)	31	\$63	\$2.05	
Squirrel snapper (ehu)	240	\$480	\$2.00	*
Black snapper	20	\$42	\$2.10	*
Bigeye emperor	3	\$6	\$2.05	
Longnose emperor	9	\$16	\$1.87	
Ambon emperor	13	\$35	\$2.75	
Blueline bream	0	\$1	\$2.44	
Redgill emperor	47	\$117	\$2.51	
Pomfret	12	\$25	\$2.00	
Flounders	44	\$100	\$2.26	*
Surgeonfishes/tangs	1,730	\$3,468	\$2.00	*
Unicornfishes (misc)	529	\$1,122	\$2.12	*
Squirrelfish	77	\$153	\$2.00	*
Parrotfishes (misc)	1,504	\$3,104	\$2.06	*
Inshore groupers	1,504	\$234	\$2.00 \$1.97	*
č i	119	\$3	\$1.97 \$1.99	
Triggerfish		\$3 \$2	\$1.99 \$2.46	
Inshore snappers Red snapper	1 20	\$40	\$2.40	
11				
Mahimahi Swordfish	6,966	\$8,809 \$2,012	\$1.26 \$2.03	*
	992 645	\$2,012 \$645	\$2.03	•
Blue marlin	645	\$645 \$226	\$1.00	
Sailfish	249 52.082	\$226 \$47.820	\$0.91 \$0.02	
Wahoo	52,082	\$47,820 \$12,050	\$0.92	
Skipjack tuna	21,247	\$13,059	\$0.61	
Albacore	757,901	\$758,081	\$1.00	
Yellowfin tuna	133,891	\$119,795	\$0.89	
Bigeye tuna	31,743	\$34,858	\$1.10	
Spiny lobster	336	\$1,412	\$4.20	*
Octopus	42	\$120	\$2.85	*

Table A-9 (Cont)
American Samoa August 2005 Estimated Commercial Landings

Species	Pounds	Value	\$/Lb
Shrimp	36	\$135	\$3.74 *
Tilapia	702	\$749	\$1.07 *
Angler flatfish	92	\$163	\$1.77 *
Pa'a crab	35	\$210	\$6.00 *
TOTAL	1,011,942	\$998,368	\$0.99

<sup>\*</sup> Data replaced or modified by Actual Commercial Landings Data

A.27

Table A-10 American Samoa September 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb	
Bigeye scad	148	\$147	\$0.99	*
Mackerel	5	\$11	\$2.00	*
Black jack	3	\$8	\$2.60	
Whitemouth trevally	1	\$2	\$2.40	
Barracudas (misc)	24	\$43	\$1.81	
Mullets	113	\$242	\$2.14	*
Groupers (misc)	7	\$13	\$2.00	
Peacock grouper	5	\$9	\$1.73	
Tomato grouper	3	\$8	\$2.50	
White-edged lyretail	1	\$1	\$1.86	
Blacktip grouper	1	\$2	\$2.74	
Spotted grouper	1	\$3	\$2.60	
Lunartail grouper	35	\$70	\$2.00	
Blue lined snapper	54	\$123	\$2.28	*
Rufous snapper	5	\$14	\$2.60	
Yellow margined snapper	1	\$2	\$2.00	
Onespot snapper	2	\$4	\$1.93	
Twinspot/red snapper	1	\$2	\$2.01	
Paddletail snapper	186	\$403	\$2.16	*
Gray jobfish	13	\$26	\$1.95	
Pink snapper (opakapaka)	290	\$595	\$2.05	*
Yellowtail snapper	110	\$180	\$1.63	*
Smalltooth jobfish (lehi)	14	\$28	\$2.05	
Longtail snapper (onaga)	30	\$90	\$3.00	*
Squirrel snapper (ehu)	30	\$60	\$2.00	*
Bigeye emperor	1	\$3	\$2.05	
Longnose emperor	4	\$7	\$1.87	
Ambon emperor	10	\$27	\$2.75	
Blueline bream	1	\$3	\$2.46	
Redgill emperor	33	\$83	\$2.54	
Oilfish	3	\$3	\$1.00	
Pomfret	6	\$11	\$2.00	
Flounders	20	\$59	\$2.95	*
Surgeonfishes/tangs	1,260	\$2,521	\$2.00	*
Unicornfishes (misc)	172	\$343	\$2.00	*
Squirrelfish	59	\$118	\$2.00	*
Parrotfishes (misc)	1,199	\$2,708	\$2.26	*
Inshore groupers	138	\$274	\$1.98	*
Triggerfish	5	\$10	\$2.00	
Inshore snappers	0	\$1	\$2.45	
Red snapper	9	\$18	\$2.00	
Mahimahi	6,715	\$7,920	\$1.18	
Swordfish	470	\$896	\$1.91	*
Blue marlin	327	\$341	\$1.04	
Wahoo	43,769	\$40,070	\$0.92	
Skipjack tuna	10,352	\$6,266	\$0.61	
Albacore	649,849	\$650,203	\$1.00	
Yellowfin tuna	87,090	\$78,899	\$0.91	
Bigeye tuna	22,776	\$25,144	\$1.10	
Spiny lobster	229	\$1,031	\$4.50	*
Octopus	120	\$456	\$3.82	*
Octopus	120	ψτου	Ψ3.02	

Table A-10 (Cont)
American Samoa September 2005 Estimated Commercial Landings

Species	Pounds	Value	\$/ <b>L</b> b
Shrimp	144	\$431	\$2.99 *
Tilapia	812	\$941	\$1.16 *
Salmon	32	\$64	\$2.00 *
Angler flatfish	10	\$36	\$3.60 *
TOTAL	826.696	\$820,969	\$0.99

<sup>\*</sup> Data replaced or modified by Actual Commercial Landings Data

A.29

Table A-11 American Samoa October 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Black jack	3	\$8	\$2.60
Barracudas (misc)	96	\$169	\$1.76
Groupers (misc)	6	\$12	\$2.00
Peacock grouper	0	\$1	\$1.74
Tomato grouper	2	\$5	\$2.50
White-edged lyretail	1	\$1	\$1.86
Spotted grouper	1	\$3	\$2.60
Lunartail grouper	13	\$26	\$2.00
Blue lined snapper	46	\$113	\$2.47 *
Rufous snapper	5	\$13	\$2.60
Yellow margined snapper	1	\$2	\$1.99
Onespot snapper	1	\$1	\$1.95
Paddletail snapper	90	\$180	\$2.00 *
Gray jobfish	12	\$24	\$1.95
Pink snapper (opakapaka)	149	\$418	\$2.80 *
Yellowtail snapper	110	\$250	\$2.27 *
Smalltooth jobfish (lehi)	13	\$26	\$2.05
Squirrel snapper (ehu)	130	\$260	\$2.00 *
Bigeye emperor	1	\$2	\$2.05
Longnose emperor	3	\$6	\$1.87
Ambon emperor	5	\$13	\$2.75
Redgill emperor	17	\$43	\$2.51
Pomfret	5	\$10	\$2.00
Surgeonfishes/tangs	623	\$1,239	\$1.99 *
Unicornfishes (misc)	87	\$229	\$2.63 *
Squirrelfish	40	\$80	\$2.00 *
Parrotfishes (misc)	480	\$1,096	\$2.29 *
Inshore groupers	75	\$150	\$2.00 *
Inshore snappers	0	\$1	\$2.45
Red snapper	8	\$16	\$2.00
Mahimahi	1,703	\$2,443	\$1.43 *
Swordfish	1,286	\$2,310	\$1.80 *
Blue marlin	773	\$911	\$1.18 *
Sailfish	96	\$87	\$0.91
Wahoo	61,250	\$55,839	\$0.91
Skipjack tuna	29,675	\$17,967	\$0.61
Albacore	911,870	\$911,870	\$1.00
Yellowfin tuna	98,845	\$88,589	\$0.90
Bigeye tuna	32,625	\$36,074	\$1.11
Spiny lobster	222	\$938	\$4.23 *
Octopus	265	\$645	\$2.43 *
Tilapia	491	\$585	\$1.19 *
TOTAL	1,141,124	\$1,122,651	\$0.98

<sup>\*</sup> Data replaced or modified by Actual Commercial Landings Data

A.30

Table A-12 American Samoa November 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb	
Mackerel	20	\$36	\$1.79	*
Black jack	6	\$14	\$2.60	
Whitemouth trevally	0	\$1	\$2.42	
Barracudas (misc)	9	\$18	\$2.00	
Milkfish	55	\$76	\$1.38	*
Groupers (misc)	11	\$22	\$2.00	
Peacock grouper	3	\$4	\$1.73	
Tomato grouper	4	\$11	\$2.50	
White-edged lyretail	1	\$2	\$1.85	
Blacktip grouper	0	\$1	\$2.76	
Spotted grouper	2	\$5	\$2.59	
Lunartail grouper	33	\$67	\$2.00	
Blue lined snapper	16	\$32	\$1.99	
Rufous snapper	9	\$24	\$2.60	
Yellow margined snapper	2	\$4	\$2.01	
Onespot snapper	$\overset{2}{2}$	\$3	\$1.93	
Twinspot/red snapper	$\overset{2}{0}$	\$3 \$1	\$2.00	
Paddletail snapper	88	\$175	\$2.00	*
Gray jobfish	23	\$173 \$45	\$1.95	
Pink snapper (opakapaka)	85	\$249	\$2.95	*
Flower snapper (gindai)	30	\$51	\$1.69	*
Yellowtail snapper	4	\$31 \$7	\$1.95	-
Smalltooth jobfish (lehi)	24	\$49	\$2.05	
Longtail snapper (onaga)	14	\$81	\$2.03 \$5.79	*
	70			*
Squirrel snapper (ehu)		\$140	\$2.00	•••
Bigeye emperor	2 7	\$5	\$2.05	
Longnose emperor		\$12	\$1.87	
Ambon emperor	11	\$29	\$2.75	
Blueline bream	1	\$1	\$2.49	
Redgill emperor	38	\$97	\$2.52	
Pomfret	23	\$46	\$2.00	
Surgeonfishes/tangs	1,790	\$3,571	\$1.99	*
Unicornfishes (misc)	224	\$448	\$2.00	*
Squirrelfish	95	\$190	\$2.00	*
Parrotfishes (misc)	1,315	\$2,933	\$2.23	*
Inshore groupers	100	\$201	\$2.00	*
Triggerfish	2	\$4	\$2.01	
Inshore snappers	1	\$2	\$2.47	
Red snapper	15	\$30	\$2.00	
Mahimahi	568	\$636	\$1.12	
Swordfish	421	\$1,263	\$3.00	*
Rainbow runner	3	\$5	\$1.91	
Wahoo	61,055	\$55,750	\$0.91	
Skipjack tuna	28,025	\$16,831	\$0.60	
Dogtooth tuna	5	\$9	\$1.94	
Albacore	986,449	\$987,363	\$1.00	
Yellowfin tuna	74,742	\$67,020	\$0.90	
Bigeye tuna	29,761	\$32,811	\$1.10	
Spiny lobster	818	\$3,501	\$4.28	*
Octopus	69	\$180	\$2.61	*
Tilapia	400	\$571	\$1.43	*

A.31

Table A-12 (Cont)
American Samoa November 2005 Estimated Commercial Landings

Species	Pounds	Value	\$/Lb
Angler flatfish	30	\$68	\$2.25 *
TOTAL	1,186,479	\$1,174,695	\$0.99

<sup>\*</sup> Data replaced or modified by Actual Commercial Landings Data

A.32

Table A-13 American Samoa December 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Black jack	4	\$9	\$2.60
Barracudas (misc)	47	\$84	\$1.78
Groupers (misc)	7	\$15	\$2.00
Peacock grouper	0	\$1	\$1.73
Tomato grouper	3	\$7	\$2.50
White-edged lyretail	1	\$1	\$1.85
Spotted grouper	1	\$4	\$2.59
Lunartail grouper	16	\$32	\$2.00
Blue lined snapper	10	\$19	\$1.97
Rufous snapper	6	\$15	\$2.60
Yellow margined snapper	1	\$3	\$2.00
Onespot snapper	2	\$3	\$1.94
Paddletail snapper	24	\$46	\$1.91
Gray jobfish	15	\$ <del>40</del> \$29	\$1.95
Pink snapper (opakapaka)	219	\$645	\$2.95 *
Yellowtail snapper	2	\$4 \$21	\$1.96
Smalltooth jobfish (lehi)	15	\$31	\$2.05
Squirrel snapper (ehu)	11	\$24	\$2.20
Bigeye emperor	2	\$3	\$2.05
Longnose emperor	4	\$8	\$1.87
Ambon emperor	6	\$16	\$2.75
Redgill emperor	21	\$53	\$2.50
Pomfret	6	\$12	\$2.00
Surgeonfishes/tangs	727	\$1,450	\$1.99
Unicornfishes (misc)	65	\$130	\$2.00
Squirrelfish	177	\$406	\$2.29
Parrotfishes (misc)	546	\$1,276	\$2.34
Inshore groupers	38	\$76	\$2.00 *
Inshore snappers	1	\$1	\$2.43
Red snapper	10	\$20	\$2.00
Mahimahi	858	\$961	\$1.12
Swordfish	696	\$1,768	\$2.54
Blue marlin	1,488	\$1,579	\$1.06
Rainbow runner	9	\$17	\$1.91
Wahoo	62,316	\$56,708	\$0.91
Skipjack tuna	46,764	\$28,132	\$0.60
Dogtooth tuna	15	\$30	\$1.94
Albacore	612,316	\$613,562	\$1.00
Yellowfin tuna	96,219	\$86,474 \$35,303	\$0.90 \$1.11
Bigeye tuna	31,989	\$35,393	\$1.11 \$4.25
Spiny lobster	893	\$3,800	Ψ4.23
Octopus	156	\$376	\$2.40 *
Tilapia	355	\$413	\$1.16
TOTAL	856,061	\$833,634	\$0.97

<sup>\*</sup> Data replaced or modified by Actual Commercial Landings Data

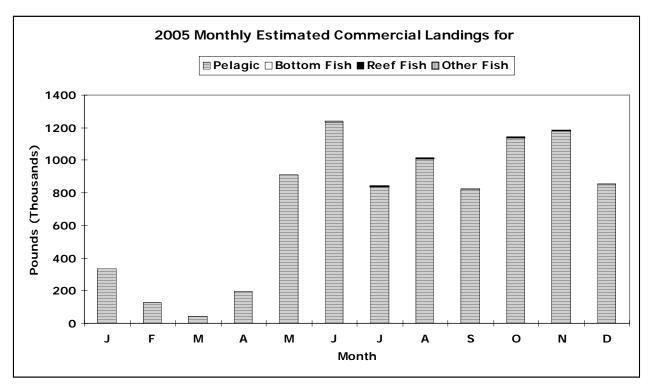


Figure A-1-1

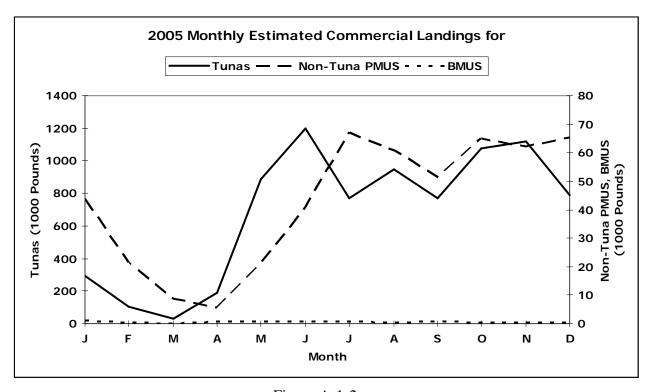


Figure A-1-2

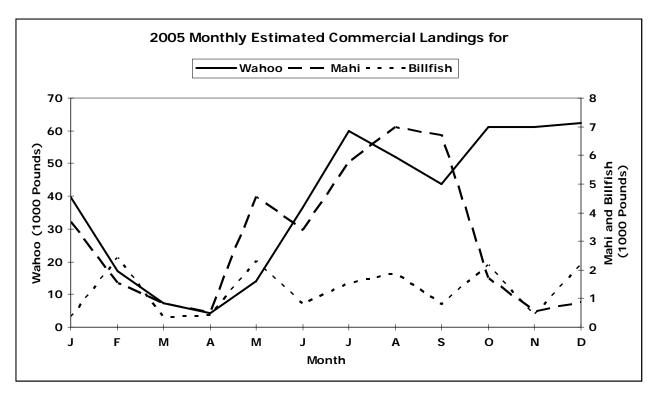


Figure A-1-3

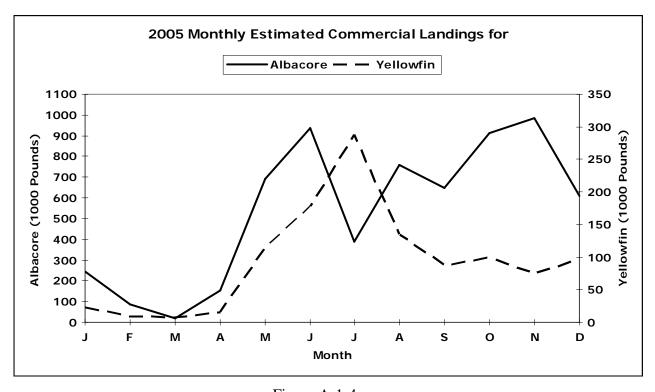


Figure A-1-4

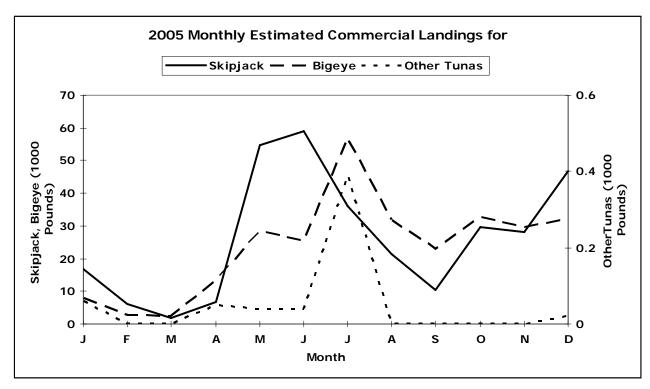


Figure A-1-5

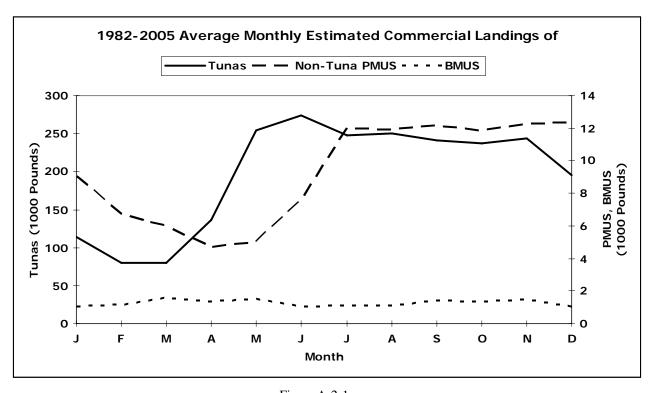


Figure A-2-1

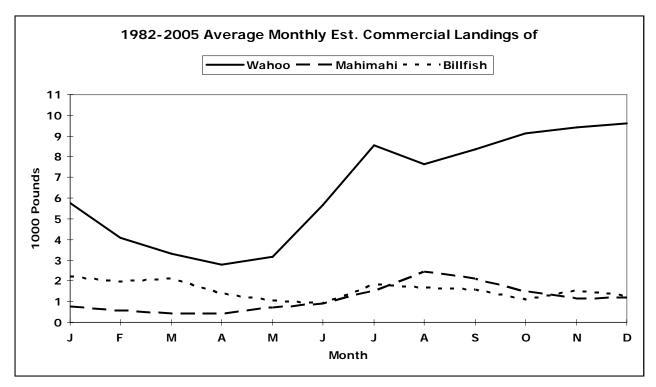


Figure A-2-2

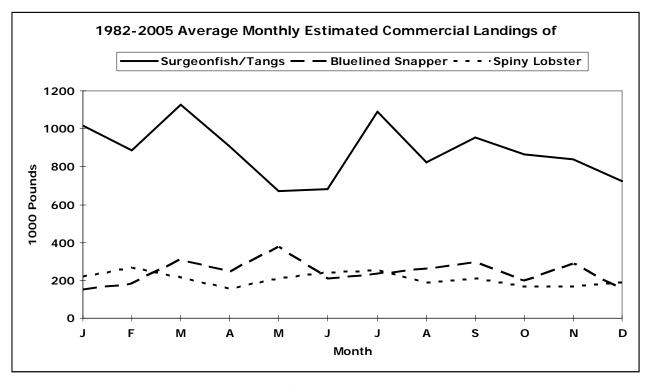


Figure A-2-3

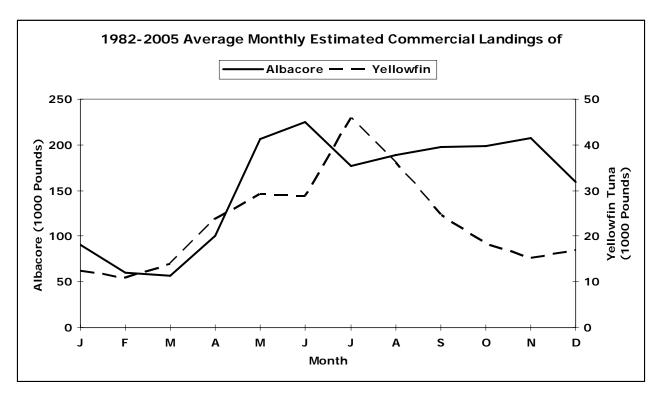


Figure A-2-4

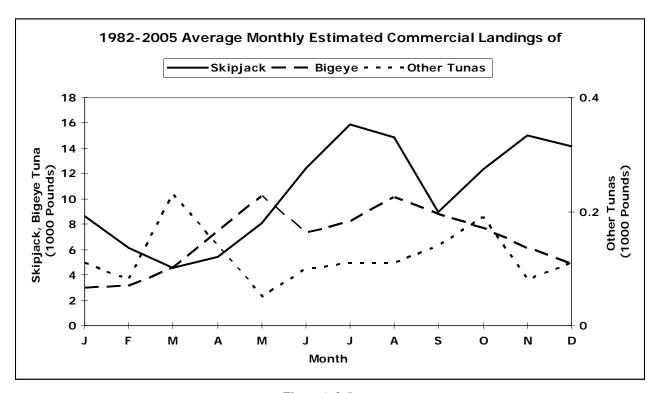


Figure A-2-5

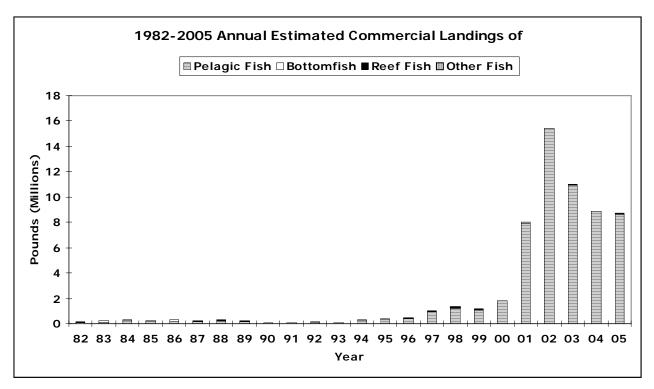


Figure A-3-1

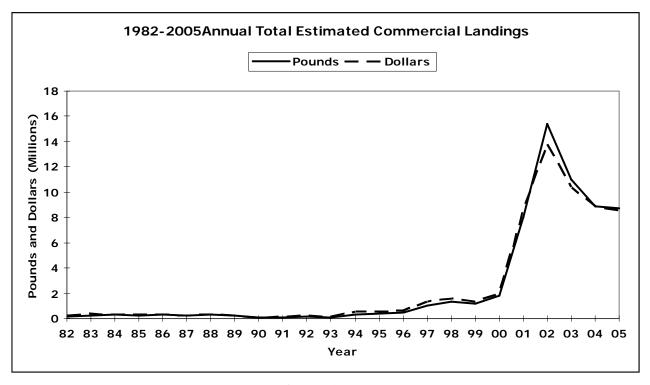


Figure A-3-2

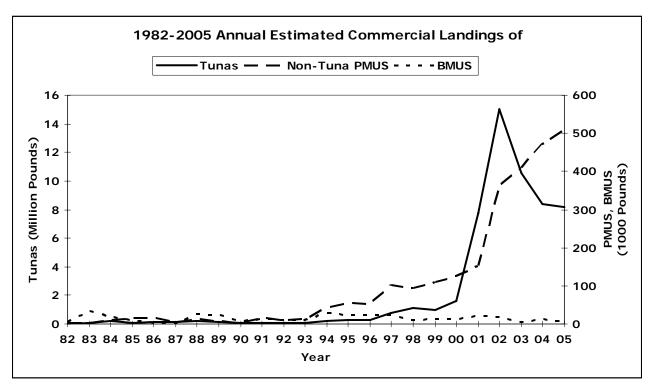


Figure A-3-3

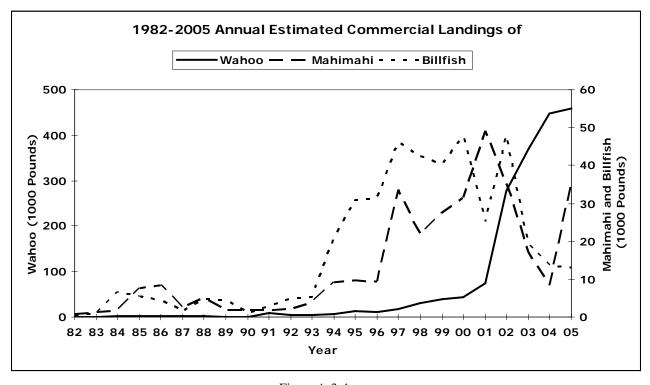


Figure A-3-4

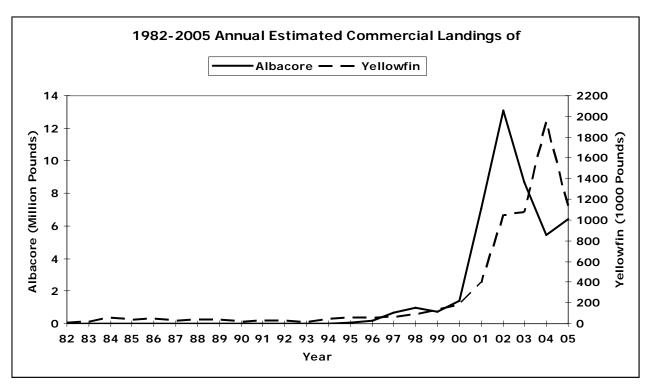


Figure A-3-5

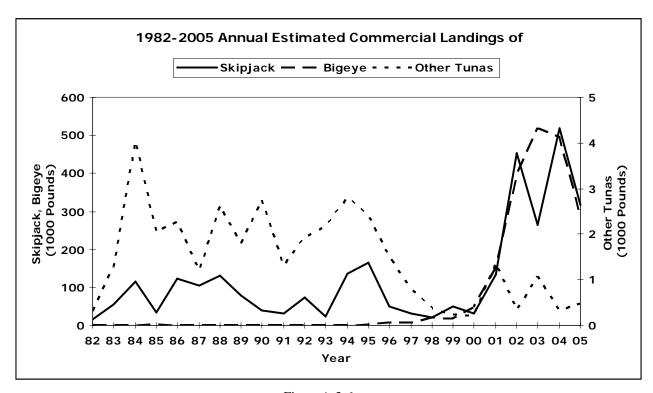


Figure A-3-6

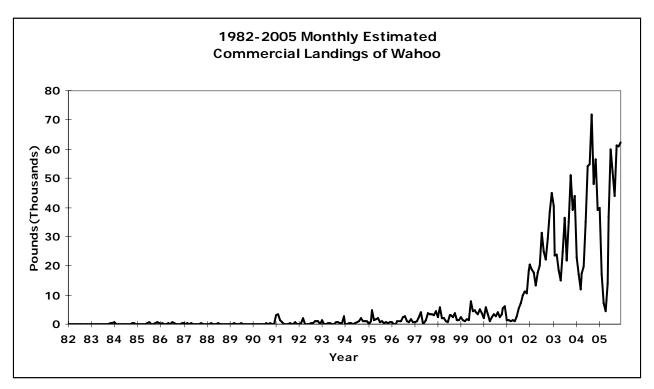


Figure A-4-1

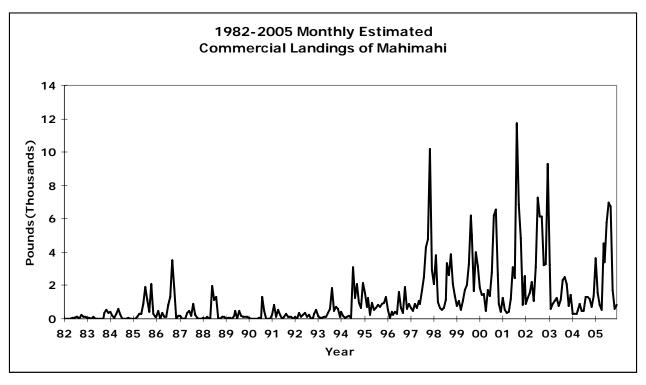


Figure A-4-2

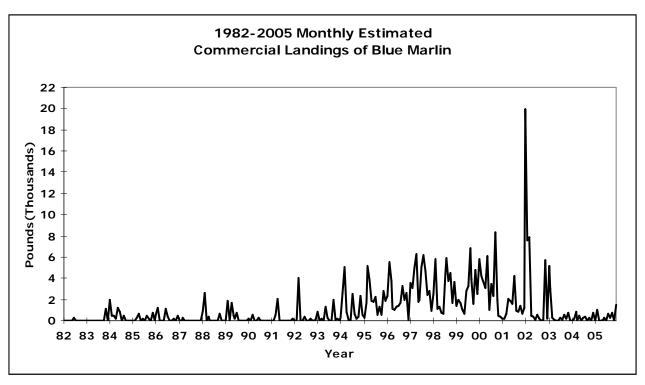


Figure A-4-3

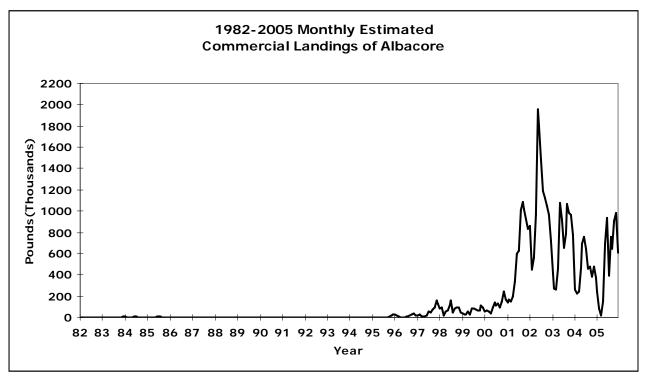


Figure A-4-4

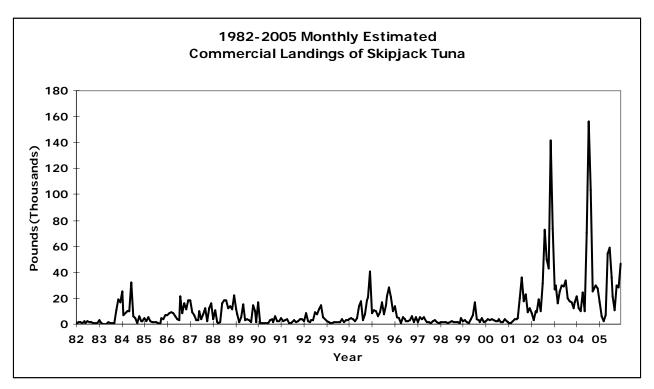


Figure A-4-5

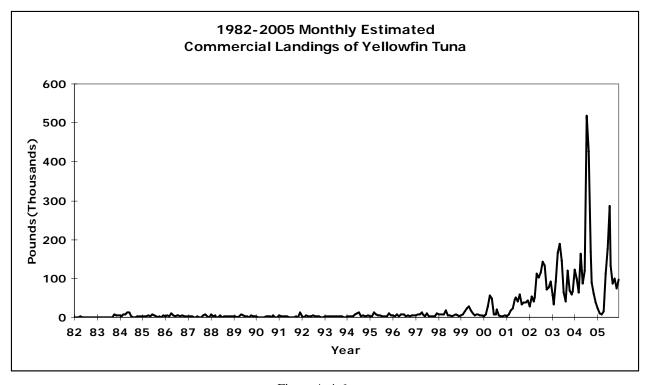


Figure A-4-6

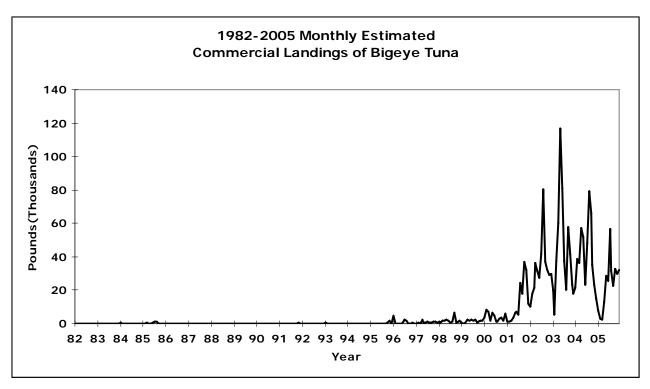


Figure A-4-7

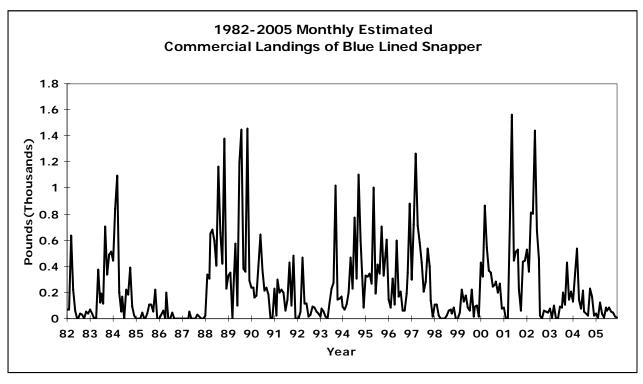


Figure A-4-8

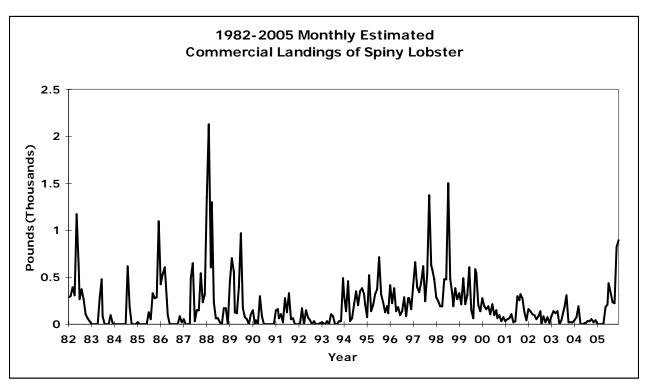


Figure A-4-9

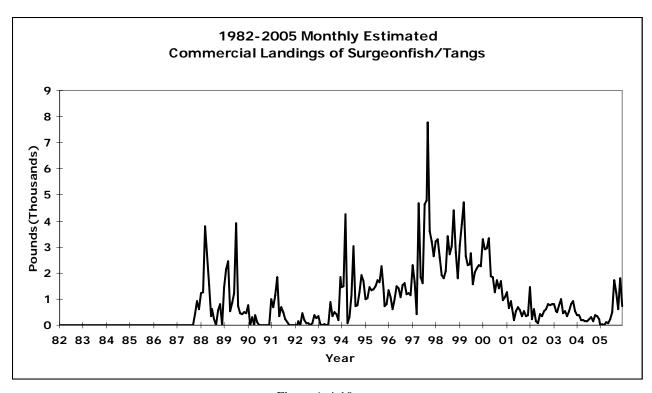


Figure A-4-10

# COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS 2005 FISHERY STATISTICS

Compiled by

Division of Fish and Wildlife

and the

Western Pacific Fishery Information Network

### B.iii

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## COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS 2005 FISHERY STATISTICS

#### INTRODUCTION

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

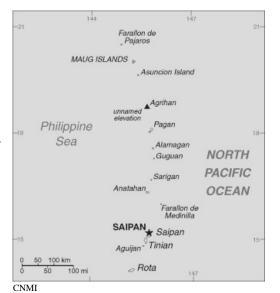
Main Islands: Saipan, Rota, Tinian

Population: about 84,500; (The World Factbook, 2007)

Economy: tourism, agriculture

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 bottomfish fishing around the islands north of Saipan, and a small charter fleet also exists.



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 SYSTEM

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.

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 SYSTEM

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 data were entered correctly. On a quarterly basis, copies of the database are sent to the Pacific Islands Fisheries Science Center, where the data are transferred to the central computer for additional verification before generating summary reports. These reports and databases are then ready for use by qualified WPacFIN participants.

#### DATA REPORTING SYSTEM

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 <a href="http://www.pifsc.noaa.gov/wpacfin">http://www.pifsc.noaa.gov/wpacfin</a>.

The following species, species groups, and abbreviations are used in the tables and graphs of CNMI's data:

Note: 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 FSWP volume will maintain the original species categorizations from previous volumes for comparative purposes. As such, tunas are kept in a separate category.

I. Pelagic Management Unit Species (PMUS)

Mahimahi (dolphin) Marlin Shortbill spearfish Sailfish Wahoo Sharks

### II. Bottomfish Management Unit Species (BMUS)

Jacks (unclassified, but excluding bigeye scad)

Amberjack

Bottomfish (unclassified)

Ehu (red snapper)

Gindai (flower snapper)

Grouper (unclassified)

Kalekale (pink snapper)

Lehi (silverjaw snapper)

Onaga (red or longtail snapper)

Opakapaka (pink snapper)

Uku (gray snapper)

Emperorfish

#### III. Billfish

Marlin (probably all blue marlin but could also include the rarely landed striped and black marlins)

Shortbill spearfish

Sailfish

#### IV. Tunas

Tunas (unclassified)

Skipjack tuna

Yellowfin tuna

Dogtooth tuna

### V. Other Tuna

The above tunas excluding skipjack and yellowfin tunas

#### VI. Fisheries Categories

#### A. Pelagics

All PMUS and tuna species plus the following:

Troll fish (unclassified)

Barracuda

Rainbow runner

### B. Bottomfish

Same as BMUS

### C. Reef Fish

Reef fish (unclassified)

Giant wrasse

Rabbitfish (hitting, hitting feda, menahac, and sesjun)

Rudderfish Squirrelfish Parrotfish

Snapper

Surgeonfish

Unicornfish

Goatfish

### D. Other

Miscellaneous Eels

Mullet Invertebrates (unclassified)

Milkfish Coconut crab

Crabs (unclassified) Shrimp
Lobster Squid
Octopus Seaweeds
Turtle Imported

Bigeye scad

B.6

Table B-1 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Bigeye scad	8,680	\$20,455	\$2.36
Jacks (misc)	1,547	\$3,765	\$2.43
Mullet	46	\$112	\$2.44
Blackjack	1,104	\$2,887	\$2.62
Giant trevally	66	\$164	\$2.50
Bottomfish	20,530	\$53,500	\$2.61
Sickle pomfret	208	\$515	\$2.48
Ehu (red snapper)	1,040	\$3,383	\$3.25
Gindai (flower snapper)	1,961	\$6,432	\$3.28
Grouper (misc)	2,477	\$7,726	\$3.12
Kalekale (yellowtail)	2,927	\$7,358	\$2.5
Onaga (red snapper)	2,063	\$7,891	\$3.83
Opakapaka (pink snapper)	1,034	\$2,984	\$2.88
Jobfish (uku)	866	\$1,884	\$2.18
Silvermouth (deep lehi)	1,016	\$2,794	\$2.73
Amberjack	323	\$857	\$2.65
Giant coral trout	5	\$10	\$2.00
Blueline snapper	596	\$1,529	\$2.5
Reef fish	55,584	\$141,391	\$2.54
Wrasse	210	\$449	\$2.14
Rabbitfish	2,110	\$6,774	\$3.2
Emperor (mafute/misc)	17,766	\$46,657	\$2.63
Parrotfish (misc)	7,293	\$21,892	\$3.00
Surgeonfish (misc)	3,212	\$6,464	\$2.0
Orangespine unicornfish	50	\$125	\$2.50
Unicornfish (misc)	146	\$361	\$2.4
Goatfish (misc)	123	\$340	\$2.70
Troll fish (misc)	49	\$93	\$1.90
Barracuda	10	\$25	\$2.50
Mahimahi	21,128	\$41,551	\$1.9
Blue marlin	1,253	\$1,730	\$1.3
Sailfish	30	\$45	\$1.50
Rainbow runner	8,856	\$16,937	\$1.9
Wahoo	2,631	\$5,470	\$2.0
Skipjack tuna	204,768	\$361,930	\$1.7
Dogtooth tuna	6,130	\$12,095	\$1.9
Yellowfin tuna	40,868	\$80,322	\$1.9
Saba (kawakawa)	6,648	\$12,609	\$1.90
Spiny lobster	4,408	\$22,091	\$5.0
Octopus	2,903	\$6,149	\$2.12
Shrimp (saltwater)	126	\$1,310	\$10.44
TOTAL	432,790	\$911,059	\$2.1

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Table B-2 January 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	1,923	\$4,404	\$2.29
Jacks (misc)	239	\$550	\$2.31
Blackjack	42	\$84	\$2.00
Bottom fish	3,187	\$7,760	\$2.44
Ehu (red snapper)	4	\$7	\$2.00
Gindai (flower snapper)	7	\$14	\$2.00
Grouper (misc)	143	\$409	\$2.86
Kalekale (yellowtail)	108	\$216	\$2.00
Onaga (red snapper)	260	\$1,170	\$4.50
Jobfish (uku)	151	\$317	\$2.10
Blueline snapper	11	\$23	\$2.00
Reef fish	3,586	\$8,932	\$2.49
Rabbitfish	157	\$507	\$3.23
Emperor (mafute/misc)	1,350	\$3,456	\$2.56
Parrotfish (misc)	178	\$657	\$3.69
Mahimahi	3,226	\$6,515	\$2.02
Sailfish	30	\$45	\$1.50
Rainbow runner	698	\$1,361	\$1.95
Wahoo	146	\$302	\$2.07
Skipjack tuna	9,870	\$21,373	\$2.17
Dogtooth tuna	1,390	\$2,348	\$1.69
Yellowfin tuna	2,869	\$5,867	\$2.04
Saba (kawakawa)	264	\$501	\$1.90
Spiny lobster	64	\$450	\$7.00
Octopus	317	\$757	\$2.39
Shrimp (saltwater)	61	\$724	\$11.8
TOTAL	30,280	\$68,751	\$2.27

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Table B-3 February 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
	4.50	4000	4.
Bigeye scad	450	\$900	\$2.00
Jacks (misc)	29	\$91	\$3.15
Blackjack	100	\$229	\$2.29
Bottomfish	2,340	\$5,852	\$2.50
Sickle pomfret	41	\$102	\$2.50
Ehu (red snapper)	57	\$171	\$3.00
Gindai (flower snapper)	39	\$118	\$3.00
Grouper (misc)	137	\$412	\$3.01
Kalekale (yellowtail)	87	\$226	\$2.60
Onaga (red snapper)	137	\$549	\$4.00
Opakapaka (pink snapper)	3	\$6	\$2.00
Jobfish (uku)	14	\$34	\$2.40
Amberjack	21	\$62	\$3.00
Giant coral trout	5	\$10	\$2.00
Reef fish	3,245	\$7,744	\$2.39
Rabbitfish	131	\$425	\$3.25
Emperor (mafute/misc)	1,649	\$4,322	\$2.62
Parrotfish (misc)	141	\$477	\$3.39
Mahimahi	5,423	\$10,864	\$2.00
Rainbow runner	718	\$1,368	\$1.90
Wahoo	521	\$1,259	\$2.42
Skipjack tuna	10,043	\$20,483	\$2.04
Dogtooth tuna	506	\$972	\$1.92
Yellowfin tuna	2,452	\$4,681	\$1.91
Saba (kawakawa)	154	\$309	\$2.00
Spiny lobster	50	\$333	\$6.66
Octopus	141	\$314	\$2.22
Shrimp (saltwater)	64	\$586	\$9.14
TOTAL	28,697	\$62,899	\$2.19

B.9

Table B-4
March 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	200	\$433	\$2.17
Jacks (misc)	43	\$107	\$2.50
Blackjack	139	\$362	\$2.60
Bottom fish	1,834	\$5,163	\$2.81
Sickle pomfret	18	\$45	\$2.50
Gindai (flower snapper)	53	\$136	\$2.59
Grouper (misc)	159	\$472	\$2.97
Kalekale (yellowtail)	161	\$410	\$2.55
Onaga (red snapper)	17	\$77	\$4.50
Opakapaka (pink snapper)	46	\$126	\$2.75
Jobfish (uku)	129	\$321	\$2.50
Amberjack	34	\$92	\$2.75
Blueline snapper	51	\$132	\$2.61
Reef fish	3,413	\$9,189	\$2.69
Wrasse	36	\$89	\$2.50
Rabbitfish	131	\$427	\$3.25
Emperor (mafute/misc)	1,693	\$4,352	\$2.57
Parrotfish (misc)	537	\$1,603	\$2.99
Surgeonfish (misc)	69	\$137	\$2.00
Mahimahi	5,463	\$10,351	\$1.89
Blue marlin	200	\$500	\$2.50
Rainbow runner	488	\$980	\$2.01
Wahoo	420	\$856	\$2.04
Skipjack tuna	21,350	\$39,821	\$1.87
Dogtooth tuna	761	\$2,149	\$2.82
Yellowfin tuna	3,553	\$6,940	\$1.95
Saba (kawakawa)	120	\$240	\$2.00
Spiny lobster	179	\$1,013	\$5.67
Octopus	96	\$223	\$2.32
TOTAL	41,390	\$86,747	\$2.10

Table B-5
April 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	71	\$143	\$2.00
Jacks (misc)	7	\$18	\$2.50
Blackjack	226	\$574	\$2.54
Bottomfish	268	\$729	\$2.72
Sickle pomfret	21	\$54	\$2.50
Gindai (flower snapper)	211	\$793	\$3.75
Grouper (misc)	70	\$210	\$3.00
Kalekale (yellowtail)	49	\$134	\$2.75
Onaga (red snapper)	30	\$120	\$4.00
Jobfish (uku)	4	\$9	\$2.00
Blueline snapper	71	\$196	\$2.75
Reef fish	3,127	\$8,242	\$2.64
Rabbitfish	64	\$198	\$3.11
Emperor (mafute/misc)	1,852	\$5,282	\$2.85
Parrotfish (misc)	502	\$1,447	\$2.88
Surgeonfish (misc)	194	\$409	\$2.10
Goatfish (misc)	11	\$27	\$2.50
Mahimahi	3,527	\$6,658	\$1.89
Blue marlin	106	\$106	\$1.00
Rainbow runner	435	\$797	\$1.83
Wahoo	314	\$654	\$2.08
Skipjack tuna	22,435	\$36,580	\$1.63
Dogtooth tuna	594	\$1,033	\$1.74
Yellowfin tuna	3,575	\$7,105	\$1.99
Saba (kawakawa)	153	\$306	\$2.00
Spiny lobster	286	\$1,432	\$5.00
Octopus	91	\$203	\$2.23
TOTAL	38,295	\$73,456	\$1.92

Table B-6
May 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
T	22	<b>.</b>	Φ2.00
Bigeye scad	33	\$66	\$2.00
Jacks (misc)	16	\$41	\$2.50
Blackjack	6	\$12	\$2.00
Giant trevally	66	\$164	\$2.50
Bottomfish	2,401	\$6,527	\$2.72
Ehu (red snapper)	211	\$736	\$3.48
Gindai (flower snapper)	729	\$2,595	\$3.56
Grouper (misc)	184	\$645	\$3.50
Kalekale (yellowtail)	649	\$1,742	\$2.68
Onaga (red snapper)	293	\$1,051	\$3.59
Opakapaka (pink snapper)	440	\$1,293	\$2.94
Silvermouth (deep lehi)	84	\$253	\$3.00
Reef fish	3,353	\$9,040	\$2.70
Wrasse	46	\$103	\$2.25
Rabbitfish	31	\$101	\$3.26
Emperor (mafute/misc)	1,664	\$4,937	\$2.97
Parrotfish (misc)	789	\$2,158	\$2.73
Surgeonfish (misc)	21	\$32	\$1.50
Unicornfish (misc)	54	\$136	\$2.50
Mahimahi	529	\$975	\$1.84
Blue marlin	86	\$86	\$1.00
Rainbow runner	102	\$182	\$1.78
Wahoo	99	\$166	\$1.67
Skipjack tuna	22,184	\$35,586	\$1.60
Dogtooth tuna	257	\$536	\$2.09
Yellowfin tuna	2,113	\$4,124	\$1.95
Spiny lobster	829	\$4,447	\$5.36
Octopus	163	\$378	\$2.31
TOTAL	37,434	\$78,110	\$2.09

Table B-7
June 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	873	\$2,597	\$2.98
Jacks (misc)	9	\$21	\$2.50
Bottomfish	1,649	\$4,281	\$2.60
Sickle pomfret	42	\$116	\$2.75
Ehu (red snapper)	176	\$595	\$3.37
Gindai (flower snap)	164	\$544	\$3.31
Grouper (misc)	310	\$930	\$3.00
Kalekale (yellowtail)	286	\$732	\$2.55
Onaga (red snapper)	111	\$390	\$3.50
Amberjack	25	\$45	\$1.75
Reef fish	3,991	\$10,604	\$2.66
Rabbitfish	86	\$280	\$3.25
Emperor (mafute/misc)	531	\$1,462	\$2.75
Parrotfish (misc)	384	\$1,158	\$3.02
Surgeonfish (misc)	251	\$503	\$2.00
Unicornfish (misc)	51	\$129	\$2.50
Mahimahi	209	\$488	\$2.34
Blue marlin	154	\$154	\$1.00
Rainbow runner	930	\$1,847	\$1.99
Wahoo	24	\$41	\$1.75
Skipjack tuna	21,029	\$31,882	\$1.52
Dogtooth tuna	99	\$205	\$2.08
Yellowfin tuna	2,226	\$4,259	\$1.91
Saba (kawakawa)	101	\$189	\$1.86
Spiny lobster	186	\$926	\$4.99
Octopus	180	\$386	\$2.15
TOTAL	34,078	\$64,763	\$1.90

Table B-8
July 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
D'1	65	¢100	φ <b>2</b> .00
Bigeye scad	65	\$188	\$2.89
Jacks (misc)	309	\$744	\$2.41
Mullet	5	\$11	\$2.00
Blackjack	304	\$835	\$2.75
Bottomfish	2,046	\$5,247	\$2.57
Sickle pomfret	16	\$41	\$2.50
Ehu (red snapper)	93	\$325	\$3.50
Gindai (flower snapper)	206	\$669	\$3.24
Grouper (misc)	641	\$2,126	\$3.32
Kalekale (yellowtail)	591	\$1,551	\$2.62
Opakapaka (pink snapper)	241	\$665	\$2.76
Jobfish (uku)	63	\$158	\$2.52
Silvermouth (deep lehi)	169	\$349	\$2.07
Amberjack	30	\$90	\$3.00
Blueline snapper	109	\$296	\$2.70
Reef fish	7,012	\$17,713	\$2.53
Rabbitfish	146	\$474	\$3.24
Emperor (mafute/misc)	712	\$1,743	\$2.45
Parrotfish (misc)	1,941	\$5,833	\$3.00
Surgeonfish (misc)	316	\$633	\$2.00
Unicornfish (misc)	7	\$13	\$1.75
Goatfish (misc)	7	\$21	\$3.00
Troll fish (misc)	29	\$57	\$2.00
Barracuda	10	\$25	\$2.50
Mahimahi	106	\$196	\$1.84
Rainbow runner	1,329	\$2,376	\$1.79
Wahoo	99	\$194	\$1.96
Skipjack tuna	22,120	\$33,478	\$1.51
Dogtooth tuna	357	\$720	\$2.01
Yellowfin tuna	3,414	\$6,539	\$1.92
Saba (kawakawa)	144	\$216	\$1.50
Spiny lobster	885	\$4,423	\$5.00
Octopus	237	\$474	\$2.00
TOTAL	43,760	\$88,422	\$2.02

Table B-9
August 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	39	\$116	\$3.00
Jacks (misc)	307	\$798	\$2.60
Mullet	26	\$66	\$2.50
Blackjack	20	\$60	\$3.00
Bottomfish	1,550	\$4,124	\$2.66
Ehu (red snapper)	96	\$317	\$3.29
Gindai (flower snapper)	39	\$112	\$2.88
Grouper (misc)	66	\$201	\$3.06
Kalekale (yellowtail)	51	\$141	\$2.75
Onaga (red snapper)	29	\$107	\$3.75
Jobfish (uku)	134	\$267	\$2.00
Silvermouth (deep lehi)	24	\$91	\$3.75
Blueline snapper	125	\$313	\$2.50
Reef fish	5,252	\$13,129	\$2.50
Rabbitfish	298	\$909	\$3.05
Emperor (mafute/misc)	691	\$1,777	\$2.57
Parrotfish (misc)	1,169	\$3,536	\$3.02
Surgeonfish (misc)	453	\$909	\$2.00
Orangespine unicornfish	50	\$125	\$2.50
Unicornfish (misc)	31	\$79	\$2.50
Goatfish (misc)	60	\$166	\$2.75
Mahimahi	356	\$625	\$1.76
Rainbow runner	1,303	\$2,354	\$1.81
Wahoo	44	\$93	\$2.14
Skipjack tuna	19,416	\$31,543	\$1.62
Dogtooth tuna	96	\$171	\$1.78
Yellowfin tuna	5,576	\$10,165	\$1.82
Saba (kawakawa)	76	\$141	\$1.86
Spiny lobster	807	\$4,001	\$4.96
Octopus	549	\$1,117	\$2.03
TOTAL	38,733	\$77,552	\$2.00

Table B-10 September 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	1,735	\$4,532	\$2.61
Jacks (misc)	125	\$316	\$2.52
Mullet	14	\$35	\$2.50
Bottom fish	1,138	\$2,946	\$2.59
Ehu (red snapper)	115	\$351	\$3.05
Gindai (flower snapper)	170	\$434	\$2.55
Grouper (misc)	16	\$47	\$3.00
Kalekale (yellowtail)	328	\$796	\$2.42
Onaga (red snapper)	423	\$1,538	\$3.63
Opakapaka (pink snapper)	77	\$205	\$2.67
Jobfish (uku)	23	\$54	\$2.38
Silvermouth (deep lehi)	230	\$671	\$2.92
Amberjack	113	\$313	\$2.78
Reef fish	6,592	\$16,522	\$2.51
Rabbitfish	125	\$396	\$3.18
Emperor (mafute/misc)	1,510	\$3,805	\$2.52
Parrotfish (misc)	696	\$2,189	\$3.15
Surgeonfish (misc)	383	\$765	\$2.00
Goatfish (misc)	28	\$75	\$2.67
Mahimahi	238	\$501	\$2.10
Rainbow runner	1,067	\$2,345	\$2.20
Wahoo	196	\$377	\$1.93
Skipjack tuna	17,085	\$32,790	\$1.92
Dogtooth tuna	498	\$904	\$1.82
Yellowfin tuna	4,459	\$9,301	\$2.09
Saba (kawakawa)	672	\$1,216	\$1.81
Spiny lobster	573	\$2,549	\$4.44
Octopus	371	\$774	\$2.09
TOTAL	38,999	\$86,746	\$2.22

Table B-11 October 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	1,540	\$3,383	\$2.20
Jacks (misc)	184	\$447	\$2.20 \$2.44
Blackjack	140	\$350	\$2.50
Bottom fish	1,852	\$4,827	\$2.61
Sickle pomfret	69	\$158	\$2.28
Ehu (red snapper)	150	\$430	\$2.87
Gindai (flower snapper)	276	\$820	\$2.96
Grouper (misc)	316	\$935	\$2.95
Kalekale (yellowtail)	513	\$1,185	\$2.31
Onaga (red snapper)	472	\$1,784	\$3.78
Opakapaka (pink snapper)	101	\$387	\$3.84
Jobfish (uku)	31	\$56	\$1.81
Silvermouth (deep lehi)	341	\$1,043	\$3.06
Amberjack	82	\$199	\$2.42
Blueline snapper	131	\$329	\$2.50
Reef fish	6,156	\$15,458	\$2.51
Wrasse	129	\$257	\$2.00
Rabbitfish	203	\$659	\$3.25
Emperor (mafute/misc)	2,717	\$6,978	\$2.57
Parrotfish (misc)	396	\$1,171	\$2.95
Surgeonfish (misc)	396	\$793	\$2.00
Unicornfish (misc)	2	\$5	\$2.50
Goatfish (misc)	11	\$32	\$3.00
Troll fish (misc)	21	\$36	\$1.75
Mahimahi	705	\$1,409	\$2.00
Rainbow runner	809	\$1,541	\$1.90
Wahoo	377	\$759	\$2.01
Skipjack tuna	14,903	\$30,501	\$2.05
Dogtooth tuna	757	\$1,440	\$1.90
Yellowfin tuna	2,871	\$5,740	\$2.00
Saba (kawakawa)	2,235	\$3,956	\$1.77
Spiny lobster	278	\$1,202	\$4.33
Octopus	416	\$831	\$2.00
TOTAL	39,581	\$89,100	\$2.25

Table B-12 November 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Discove seed	1 111	\$2,200	\$2.07
Bigeye scad	1,111	\$2,299	
Jacks (misc)	109	\$280	\$2.57
Bottomfish	1,431	\$3,833	\$2.68
Ehu (red snapper)	40	\$130	\$3.25
Grouper (misc)	393	\$1,231	\$3.13
Kalekale (yellowtail)	12	\$30	\$2.50
Onaga (red snapper)	206	\$772	\$3.75
Opakapaka (pink snapper)	14	\$39	\$2.75
Jobfish (uku)	117	\$204	\$1.74
Silvermouth (deep lehi)	56	\$167	\$3.00
Amberjack	19	\$56	\$3.00
Reef fish	5,450	\$13,786	\$2.53
Rabbitfish	368	\$1,193	\$3.24
Emperor (mafute/misc)	1,683	\$4,303	\$2.56
Parrotfish (misc)	330	\$988	\$2.99
Surgeonfish (misc)	400	\$828	\$2.07
Goatfish (misc)	6	\$19	\$3.00
Mahimahi	491	\$1,059	\$2.16
Rainbow runner	577	\$1,022	\$1.77
Wahoo	267	\$541	\$2.02
Skipjack tuna	16,362	\$31,193	\$1.91
Dogtooth tuna	350	\$661	\$1.89
Yellowfin tuna	3,699	\$6,698	\$1.81
Saba (kawakawa)	181	\$341	\$1.88
Spiny lobster	73	\$327	\$4.47
Octopus	224	\$449	\$2.00
TOTAL	33,970	\$72,450	\$2.13

Table B-13
December 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	641	\$1,394	\$2.18
Jacks (misc)	171	\$351	\$2.05
Blackjack	127	\$381	\$3.00
Bottom fish	834	\$2,210	\$2.65
Ehu (red snapper)	97	\$321	\$3.30
Gindai (flower snapper)	65	\$197	\$3.03
Grouper (misc)	41	\$108	\$2.59
Kalekale (yellowtail)	90	\$196	\$2.17
Onaga (red snapper)	84	\$334	\$3.96
Opakapaka (pink snapper)	113	\$263	\$2.33
Jobfish (uku)	201	\$464	\$2.31
Silvermouth (deep lehi)	113	\$221	\$1.96
Blueline snapper	96	\$241	\$2.50
Reef fish	4,408	\$11,032	\$2.50
Rabbitfish	371	\$1,206	\$3.25
Emperor (mafute/misc)	1,714	\$4,242	\$2.48
Parrotfish (misc)	231	\$676	\$2.93
Surgeonfish (misc)	728	\$1,456	\$2.00
Mahimahi	857	\$1,909	\$2.23
Blue marlin	707	\$884	\$1.25
Rainbow runner	401	\$763	\$1.90
Wahoo	125	\$229	\$1.83
Skipjack tuna	7,971	\$16,702	\$2.10
Dogtooth tuna	465	\$957	\$2.06
Yellowfin tuna	4,059	\$8,902	\$2.19
Saba (kawakawa)	2,547	\$5,195	\$2.04
Spiny lobster	198	\$988	\$5.00
Octopus	117	\$242	\$2.06
TOTAL	27,572	\$62,062	\$2.25

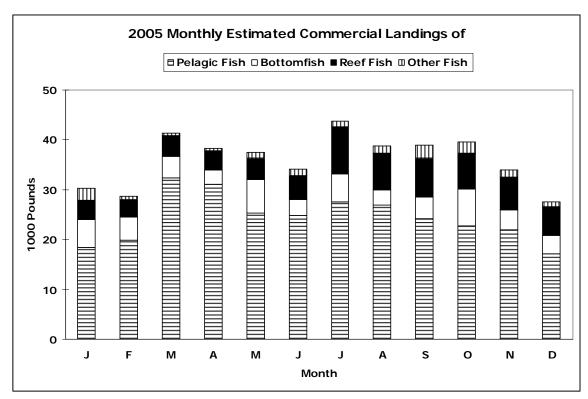


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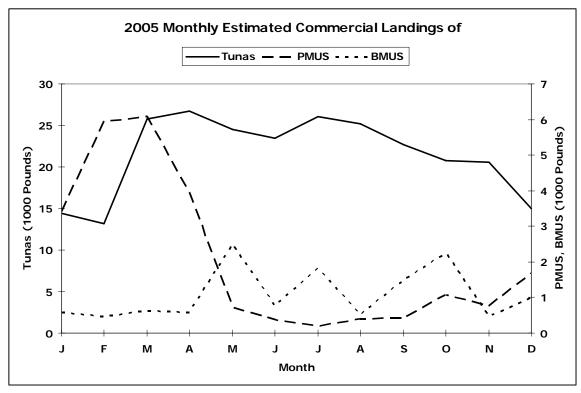


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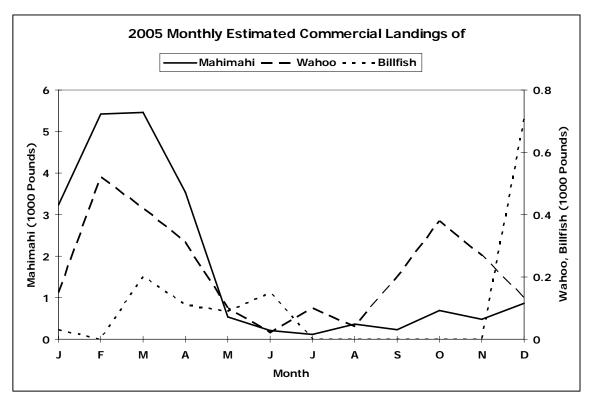


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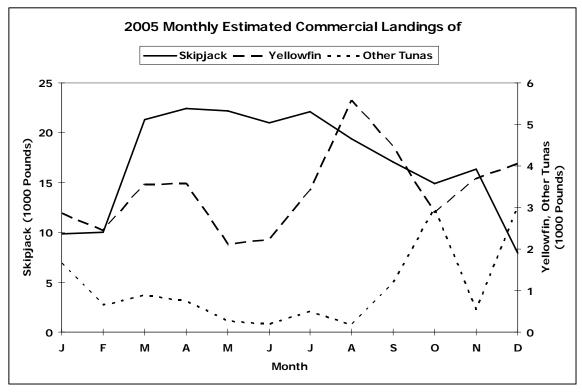


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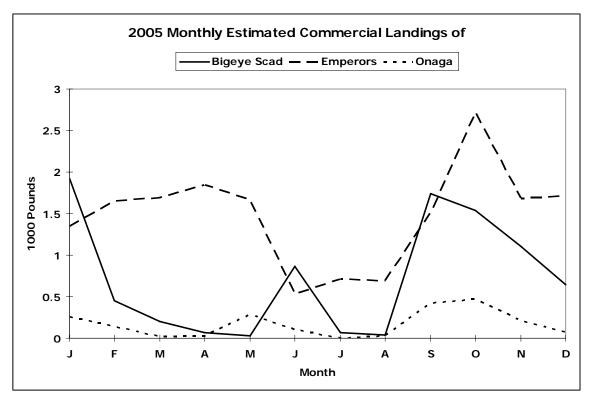


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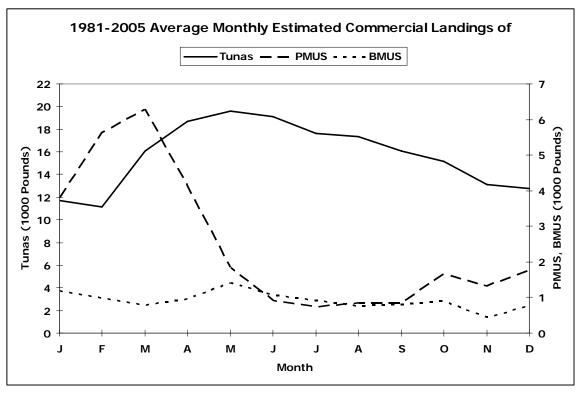


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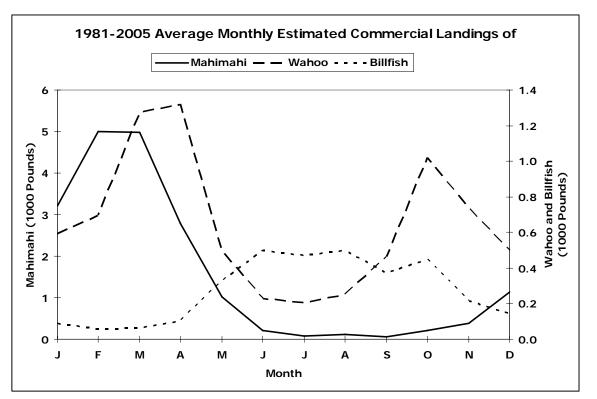


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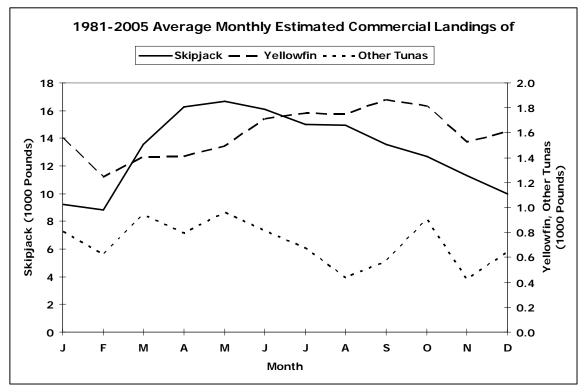


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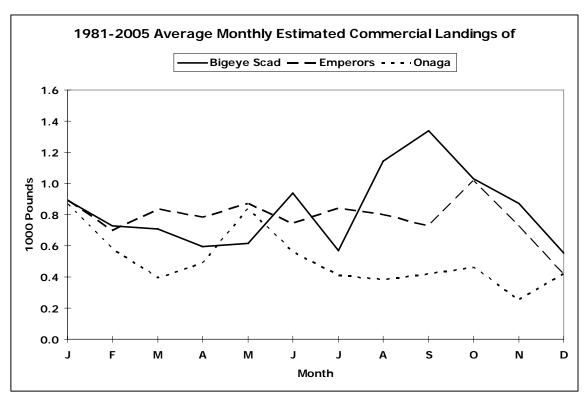


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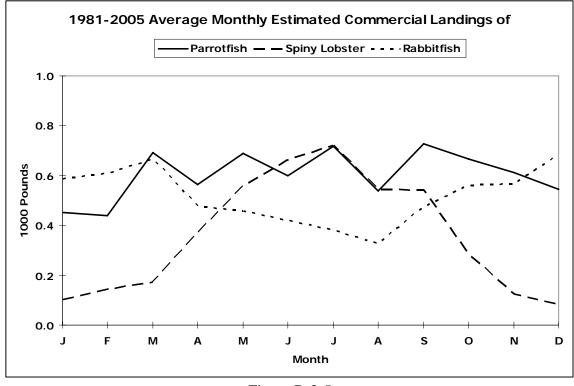


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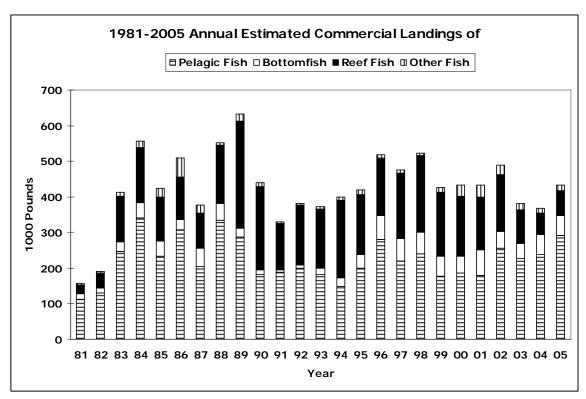


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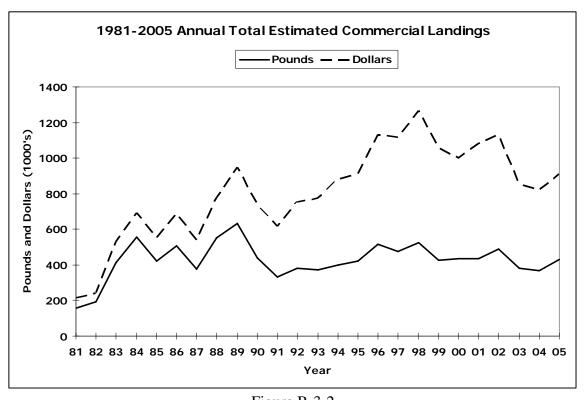


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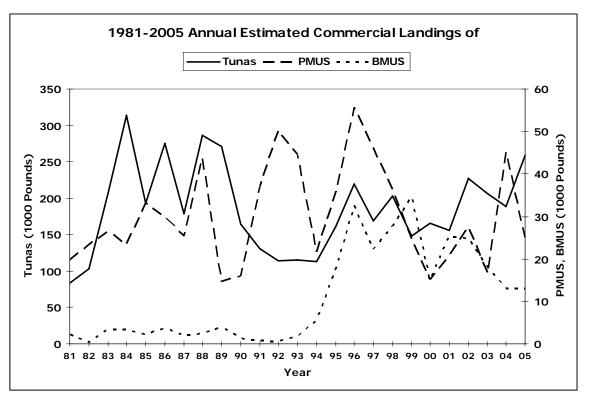


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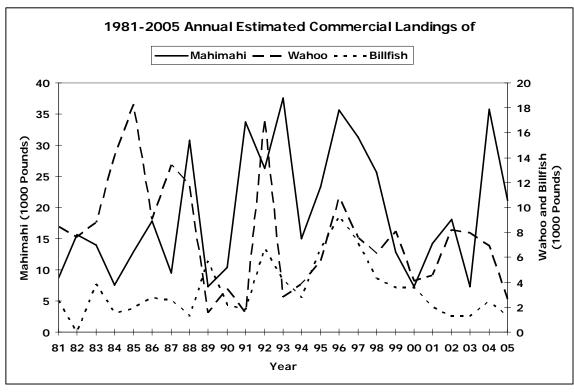


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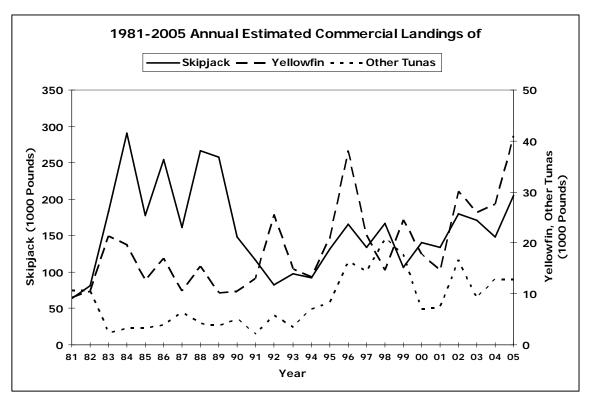


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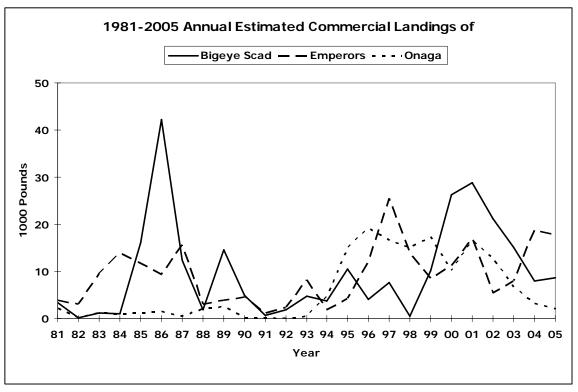


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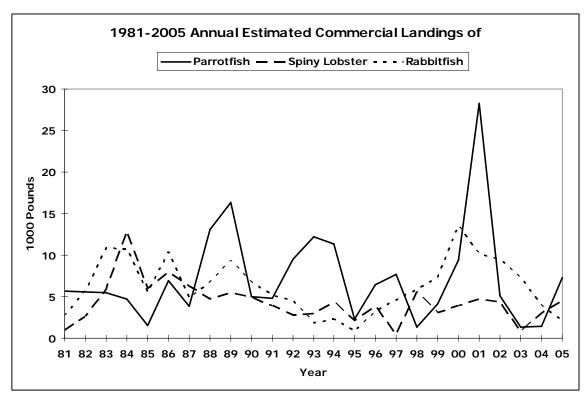


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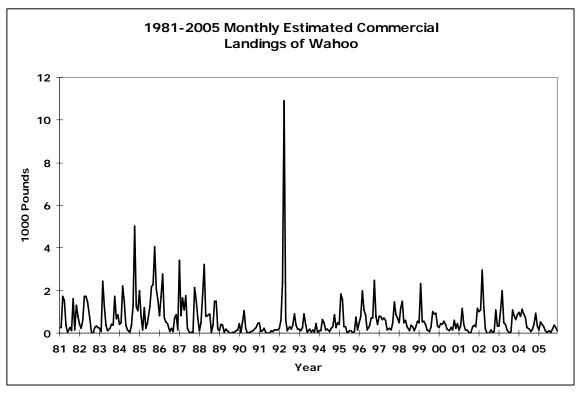


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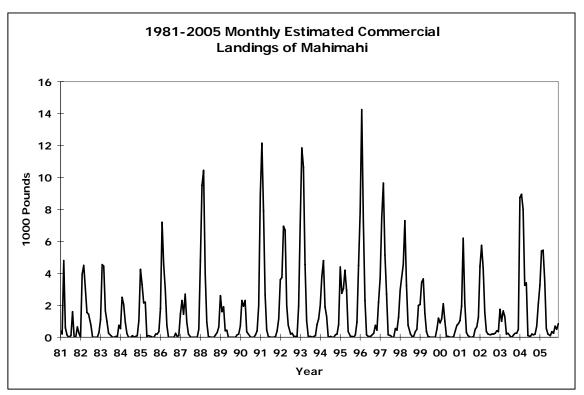


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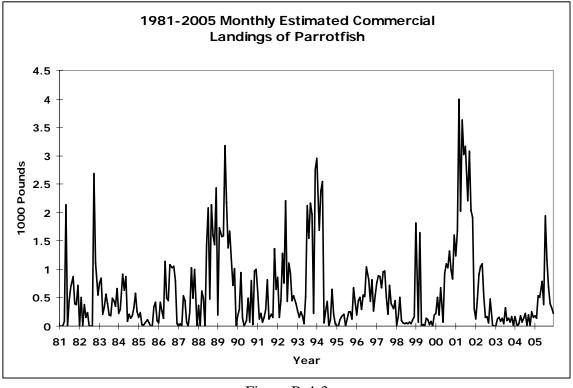


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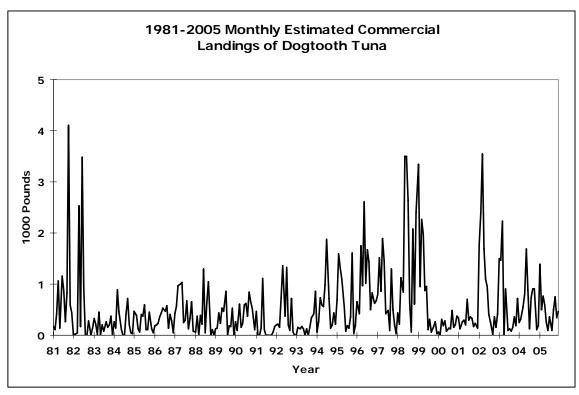


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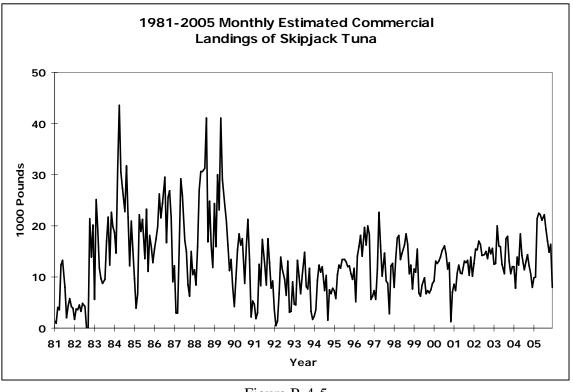


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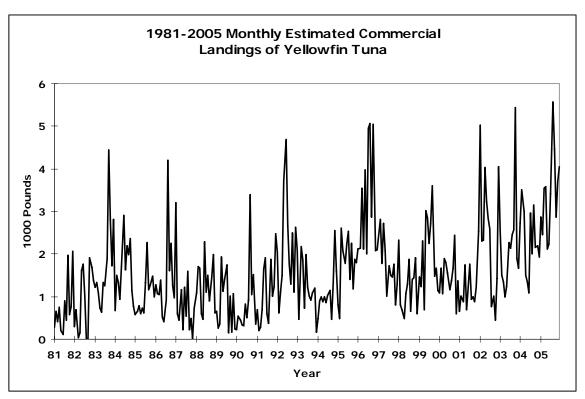


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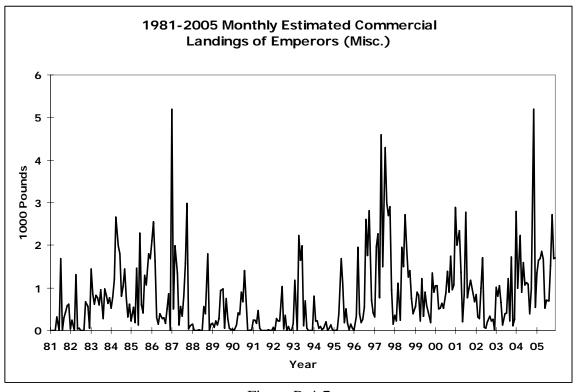


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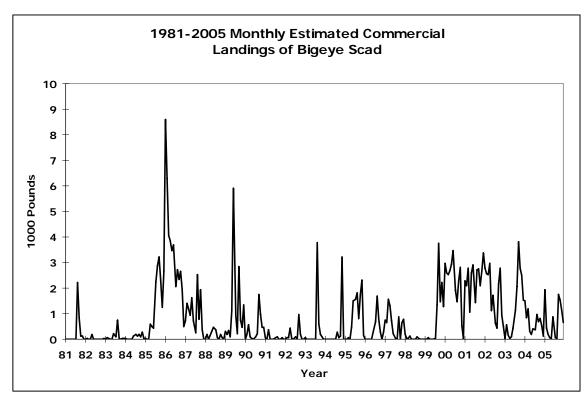


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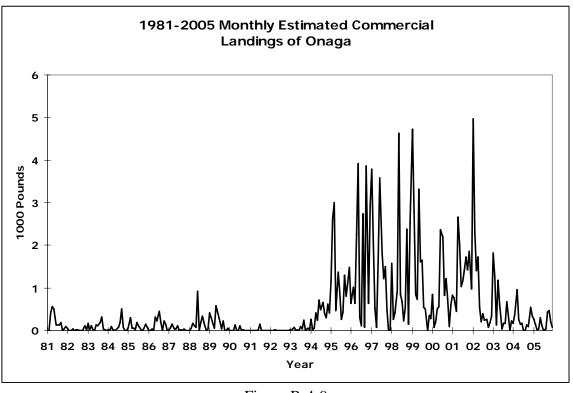


Figure B-4-9

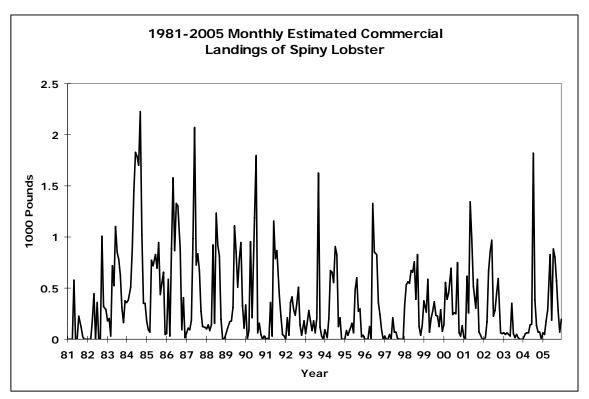


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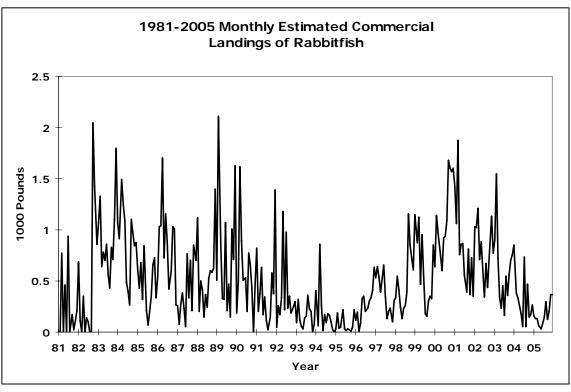


Figure B-4-11

## **GUAM 2005 FISHERY STATISTICS**

Compiled by

Guam Division of Aquatic and Wildlife Resources

and the

Western Pacific Fishery Information Network

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## **GUAM 2005 FISHERY STATISTICS**

#### **INTRODUCTION**

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

Location: 13.4°N latitude, 144.4°E longitude

Population: about 173,500 (The World Factbook, 2007)

Economy: U.S. military and tourism



Guam

Source: https://www.cia.gov/library/publications/the-world-factbook/maps/gq-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.

In 1982, WPacFIN began working with staff of the 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.

#### COMMERCIAL LANDINGS DATA COLLECTING SYSTEM

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.

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

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 collected on commercial receipts forms include

- Date
- Number of Fishermen
- Area Fished
- Number of Pieces Caught
- Price per Pound

- Fisherman Code
- Hours Fished
- Species Caught
- Pounds Caught

#### COMMERCIAL LANDINGS DATA PROCESSING SYSTEM

In earlier years 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 practicable, number of pieces is also recorded). Once all the edits, adjustments, verifications, and corrections are made, summary reports are generated. Numerous standard reports are available, but only the monthly and annual landings by species are provided in this document.

#### COMMERCIAL LANDINGS DATA REPORTING SYSTEM

After completing all editing, adjusting, and quality control activities for the commercial landings data, monthly and annual summary reports by species are generated. 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. Included with the estimated commercial landings summary reports are graphs of some of the important statistics.

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 <a href="http://www.pifsc.noaa.gov/wpacfin">http://www.pifsc.noaa.gov/wpacfin</a>.

The following groupings of species, species categories, and abbreviations are used in the tables and graphs for Guam's commercial landings:

Note: 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 FSWP volume will maintain the original species categorizations from previous volumes for comparative purposes. As such, tunas are kept in a separate category.

## I. Pelagic Management Unit Species (PMUS)

Mahimahi (dolphin) Marlin (probably all blue but possibly striped or black) Spearfish Sailfish Wahoo Sharks

## II. Bottomfish Management Unit Species (BMUS)

Kalekale (pink snapper)

Jacks (unclassified but excluding bigeye scad) Amberjack Bottomfish (unclassified) Ehu (red snapper) Gindai (flower snapper) Grouper

# II. Bottomfish Management Unit Species (BMUS) (cont.)

Lehi (silverjaw snapper) Onaga (red or longtail snapper) Opakapaka (pink snapper) Uku (gray snapper) Emperor (mafute)

## III. Billfish

Marlin (probably all blue but possibly striped or black) Spearfish Sailfish

# IV. Tunas

Tunas (unclassified) Skipjack tuna Yellowfin tuna Dogtooth or white tuna Kawakawa

## V. Other Tuna

All the above tunas excluding skipjack and yellowfin tunas

# VI. Fisheries Categories

# A. Pelagic Species

All PMUS and tuna species plus the following:

Troll fish (unclassified) Barracuda Rainbow runner

#### B. Bottomfish

Same as the BMUS

# VI. Fisheries Categories (cont.)

#### C. Reef Fish

Reef fish (unclassified)
Giant wrasse
Rabbitfish
Surgeonfish
Rudderfish
Squirrelfish
Goatfish
Parrotfish
Suapper
Surgeonfish
Unicornfish
Goatfish

#### D. Other

Miscellaneous (unclassified)

Bigeye scad

Mullet

Eels

Milkfish

Invertebrates (unclassified)

Crabs (unclassified)

## INTERPRETATION OF STATISTICS

The user is reminded again to pay heed to the precautions and assumptions identified earlier in this document when making interpretations of or inferences from data reported in the tables and graphs. Remember also that the commercial landings summaries are adjusted numbers based on samples of fishing activities.

C.6

Table C-1 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Unknown	65	\$162	\$2.50
Fillets	19	\$42	\$2.25
Miscellaneous	286	\$858	\$3.00
Bigeye scad (atulai)	982	\$3,004	\$3.06
Black jack	2,304	\$5,274	\$2.29
Jacks	2,364	\$5,845	\$2.47
Napoleon wrasse	191	\$515	\$2.69
Sharks	21	\$513 \$51	\$2.50
Eel (freshwater - old code)	11	\$42	\$4.00
Milkfish	37	\$94	\$2.52
Bottom fish	52	\$26	\$0.50
Alfonsin	9	\$9	\$1.00
Ehu (red snapper)	396	\$1,549	\$3.91
Gindai (flower snapper)	740	\$2,770	\$3.74
Grouper	2,006	\$5,434	\$2.71
Kalikali (pink snapper)	403	\$1,233	\$3.06
Lehi (silverjaw)	904	\$3,285	\$3.64
Onaga (red snapper)	5,020	\$23,926	\$4.77
Opakapaka (pink snapper)	347	\$1,379	\$3.97
Uku (gray snapper)	1,676	\$4,107	\$2.45
Tagafi (red snapper)	57	\$109	\$1.91
Amberjack	964	\$2,607	\$2.70
Reef fish	86,307	\$252,000	\$2.70
Wrasse	1,396	\$3,756	\$2.69
Rabbitfish	879	\$2,576	\$2.93
Rudderfish (guilli)	374	\$1,064	\$2.85
Mafute (emperor)	3,886	\$9,985	\$2.57
Parrotfish	1,164	\$3,039	\$2.61
Snapper	621	\$1,628	\$2.62
Surgeonfish	707	\$1,890	\$2.67
Unicornfish	22,861	\$61,218	\$2.68
Goatfish	227	\$588	\$2.59
Troll fish	32	\$65	\$2.00
Barracuda	1,801	\$3,260	\$1.81
Mahi/dolphinfish	81,266	\$121,632	\$1.50
Marlin	22,849	\$24,470	\$1.07
Spearfish	108	\$24,470 \$111	
Sailfish	1,398	\$111 \$1,757	\$1.03 \$1.26
Rainbow runner	4,313	\$1,737 \$7,108	
	4,313 1,384		\$1.65 \$2.16
Monchong Wahoo		\$2,991 \$67,308	\$2.16 \$1.05
	34,545 34,212		\$1.95 \$1.06
Bonita/skipjack tuna		\$36,264 \$2,824	\$1.06 \$1.00
Dogtooth tuna	2,581	\$2,824	\$1.09

C.7 Table C-1 (cont.)

Species	Pounds	Value	Price/Lb.
Yellowfin tuna	28,610	\$58,411	\$2.04
Crabs (misc)	25	\$73	\$2.87
Lobster	2,704	\$9,182	\$3.40
Octopus	4,860	\$12,516	\$2.58
TOTAL	357,965	\$748,036	\$2.09

C.8

Table C-2 January 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Black jack	6	\$16	\$2.75
Jacks	136	\$345	\$2.54
Gindai (flower snapper)	2	\$9	\$4.00
Grouper	107	\$288	\$2.69
Lehi (silverjaw)	12	\$43	\$3.50
Onaga (red snapper)	595	\$2,436	\$4.10
Opakapaka (pink snapper)	17	\$68	\$4.00
Uku (gray snapper)	23	\$58	\$2.51
Amberjack	140	\$376	\$2.69
Reef fish	5,887	\$17,188	\$2.92
Wrasse	99	\$253	\$2.55
Rabbitfish	56	\$169	\$3.00
Mafute (emperor)	22	\$58	\$2.66
Unicornfish	2,081	\$5,273	\$2.53
Goatfish	22	\$54	\$2.50
Barracuda	90	\$173	\$1.92
Mahi/dolphinfish	11,271	\$17,068	\$1.51
Sailfish	168	\$252	\$1.50
Rainbow runner	151	\$233	\$1.54
Monchong	83	\$182	\$2.20
Wahoo	4,159	\$7,907	\$1.90
Bonita/skipjack tuna	1,515	\$1,807	\$1.19
Dogtooth tuna	164	\$183	\$1.12
Yellowfin tuna	1,487	\$2,807	\$1.89
Lobster	179	\$525	\$2.94
Octopus	191	\$476	\$2.50
TOTAL	28,662	\$58,249	\$2.03

Table C-3
February 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
D	_	<b>0.1.2</b>	Φ2.25
Black jack	6	\$13	\$2.25
Jacks	172	\$401	\$2.32
Gindai (flower snapper)	16	\$66	\$4.00
Grouper	162	\$442	\$2.73
Kalikali (pink snapper)	6	\$19	\$3.00
Onaga (red snapper)	78	\$311	\$4.00
Uku (gray snapper)	5	\$15	\$2.75
Reef fish	8,193	\$23,773	\$2.90
Wrasse	131	\$361	\$2.75
Rabbitfish	69	\$204	\$2.93
Rudderfish (guilli)	41	\$122	\$3.00
Mafute (emperor)	243	\$567	\$2.33
Snapper	8	\$19	\$2.25
Unicornfish	1,679	\$4,757	\$2.83
Goatfish	52	\$131	\$2.50
Barracuda	144	\$265	\$1.84
Mahi/dolphinfish	16,648	\$24,532	\$1.47
Marlin	797	\$945	\$1.19
Sailfish	49	\$49	\$1.00
Rainbow runner	264	\$395	\$1.50
Wahoo	4,448	\$8,514	\$1.91
Bonita/skipjack tuna	2,625	\$2,567	\$0.98
Dogtooth tuna	112	\$112	\$1.00
Yellowfin tuna	2,209	\$4,150	\$1.88
Lobster	74	\$272	\$3.69
Octopus	104	\$275	\$2.64
TOTAL	38,337	\$73,274	\$1.91

C.10

Table C-4 March 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Jacks	53	\$123	\$2.33
Alfonsin	9	\$9	\$1.00
Grouper	89	\$226	\$2.55
Uku (gray snapper)	21	\$58	\$2.75
Tagafi (red snapper)	29	\$51	\$1.75
Reef fish	8,995	\$26,180	\$2.91
Rabbitfish	266	\$798	\$3.00
Mafute (emperor)	63	\$168	\$2.66
Unicornfish	2,025	\$5,709	\$2.82
Barracuda	71	\$141	\$2.00
Mahi/dolphinfish	14,329	\$21,120	\$1.47
Marlin	1,274	\$1,380	\$1.08
Spearfish	58	\$58	\$1.00
Sailfish	54	\$54	\$1.00
Rainbow runner	161	\$242	\$1.50
Wahoo	3,481	\$6,798	\$1.95
Bonita/skipjack tuna	3,515	\$3,520	\$1.00
Dogtooth tuna	220	\$220	\$1.00
Yellowfin tuna	4,161	\$8,443	\$2.03
Lobster	149	\$541	\$3.63
Octopus	238	\$600	\$2.52
TOTAL	39,259	\$76,439	\$1.95

C.11

Table C-5 April 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
DI I : I	20	Φ.CO	Φ2.50
Black jack	28	\$69	\$2.50
Jacks	50	\$123	\$2.43
Gindai (flower snapper)	45	\$181	\$4.00
Grouper	32	\$93	\$2.88
Kalikali (pink snapper)	8	\$25	\$3.00
Lehi (silverjaw)	4	\$15	\$3.75
Uku (gray snapper)	66	\$165	\$2.49
Tagafi (red snapper)	28	\$58	\$2.08
Reef fish	7,734	\$22,569	\$2.92
Rabbitfish	61	\$184	\$3.00
Mafute (emperor)	62	\$166	\$2.69
Snapper	11	\$26	\$2.44
Surgeonfish	22	\$59	\$2.72
Unicornfish	1,562	\$3,916	\$2.51
Barracuda	215	\$316	\$1.47
Mahi/dolphinfish	13,108	\$19,385	\$1.48
Marlin	1,316	\$1,509	\$1.15
Sailfish	242	\$242	\$1.00
Rainbow runner	265	\$398	\$1.50
Monchong	54	\$108	\$2.00
Wahoo	4,544	\$8,876	\$1.95
Bonita/skipjack tuna	4,314	\$4,194	\$0.97
Dogtooth tuna	215	\$215	\$1.00
Yellowfin tuna	2,731	\$5,156	\$1.89
Lobster	219	\$820	\$3.75
Octopus	224	\$589	\$2.62
TOTAL	37,161	\$69,458	\$1.87

Table C-6

Table C-6
May 2005 Estimated Commercial Landings

C.12

Species	Pounds	Value	Price/Lb.
Bigeye scad (atulai)	4	\$11	\$3.00
Black jack	325	\$757	\$2.33
Jacks	202	\$429	\$2.13
Sharks	21	\$51	\$2.50
Bottom fish	52	\$26	\$0.50
Ehu (red snapper)	58	\$231	\$4.00
Gindai (flower snapper)	232	\$794	\$3.42
Grouper	296	\$863	\$2.91
Kalikali (pink snapper)	138	\$418	\$3.04
Lehi (silverjaw)	111	\$390	\$3.53
Onaga (red snapper)	651	\$3,213	\$4.94
Opakapaka (pink snapper)	114	\$460	\$4.05
Uku (gray snapper)	205	\$491	\$2.39
Amberjack	80	\$193	\$2.41
Reef fish	7,878	\$22,659	\$2.88
Mafute (emperor)	751	\$1,978	\$2.63
Unicornfish	1,113	\$3,102	\$2.79
Troll fish	14	\$28	\$2.00
Barracuda	319	\$550	\$1.72
Mahi/dolphinfish	3,055	\$5,192	\$1.70
Marlin	1,985	\$1,952	\$0.98
Rainbow runner	630	\$945	\$1.50
Monchong	239	\$478	\$2.00
Wahoo	1,470	\$3,073	\$2.09
Bonita/skipjack tuna	3,521	\$3,556	\$1.01
Dogtooth tuna	478	\$483	\$1.01
Yellowfin tuna	2,239	\$4,298	\$1.92
Lobster	212	\$746	\$3.52
Octopus	354	\$941	\$2.66
TOTAL	26,744	\$58,305	\$2.18

C.13

Table C-7
June 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Black jack	218	\$531	\$2.44
Jacks	220	\$579	\$2.63
Ehu (red snapper)	54	\$202	\$3.77
Gindai (flower snapper)	19	\$56	\$3.00
Grouper	171	\$462	\$2.70
Kalikali (pink snapper)	3	\$9	\$3.00
Lehi (silverjaw)	31	\$116	\$3.81
Onaga (red snapper)	662	\$3,202	\$4.84
Opakapaka (pink snapper)	4	\$10	\$2.75
Uku (gray snapper)	149	\$364	\$2.45
Amberjack	56	\$138	\$2.45
Reef fish	7,104	\$20,573	\$2.90
Wrasse	30	\$68	\$2.25
Rabbitfish	18	\$26	\$1.50
Mafute (emperor)	426	\$991	\$2.32
Parrotfish	79	\$217	\$2.75
Snapper	76	\$216	\$2.84
Unicornfish	1,060	\$2,823	\$2.66
Goatfish	41	\$124	\$3.00
Barracuda	155	\$281	\$1.82
Mahi/dolphinfish	491	\$840	\$1.71
Marlin	7,468	\$7,518	\$1.01
Spearfish	38	\$38	\$1.00
Sailfish	165	\$234	\$1.42
Rainbow runner	629	\$943	\$1.50
Monchong	215	\$490	\$2.28
Wahoo	572	\$1,282	\$2.24
Bonita/skipjack tuna	5,252	\$5,185	\$0.99
Dogtooth tuna	228	\$228	\$1.00
Yellowfin tuna	5,911	\$12,299	\$2.08
Lobster	184	\$600	\$3.25
Octopus	665	\$1,760	\$2.65
TOTAL	32,392	\$62,405	\$1.93

Table C-8
July 2005 Estimated Commercial Landings

C.14

Species	Pounds	Value	Price/Lb
Black jack	955	\$2,173	\$2.27
Jacks	417	\$1,054	\$2.53
Eel (Freshwater Old code)	11	\$42	\$4.00
Ehu (red snapper)	97	\$388	\$4.00
Gindai (flower snapper)	148	\$574	\$3.8
Grouper	178	\$515	\$2.9
Kalikali (pink snapper)	61	\$184	\$3.0
Lehi (silverjaw)	13	\$45	\$3.5
Onaga (red snapper)	1,009	\$4,948	\$4.9
Opakapaka (pink snapper)	38	\$151	\$4.0
Uku (gray snapper)	613	\$1,497	\$2.4
Amberjack	164	\$395	\$2.4
Reef fish	7,892	\$22,945	\$2.9
Rabbitfish	17	\$26	\$1.5
Mafute (emperor)	1,155	\$2,978	\$2.5
Snapper	259	\$663	\$2.5
Unicornfish	1,404	\$3,774	\$2.6
Barracuda	185	\$361	\$1.9
Mahi/dolphinfish	581	\$649	\$1.1
Marlin	3,592	\$4,041	\$1.1
Sailfish	174	\$256	\$1.4
Rainbow runner	658	\$1,039	\$1.5
Monchong	328	\$742	\$2.2
Wahoo	688	\$1,549	\$2.2
Bonita/skipjack tuna	3,883	\$3,876	\$1.0
Dogtooth tuna	466	\$475	\$1.0
Yellowfin tuna	2,174	\$4,436	\$2.0
Crabs (misc)	12	\$35	\$3.0
Lobster	353	\$1,312	\$3.7
Octopus	723	\$1,864	\$2.5
TOTAL	28,246	\$62,985	\$2.2

C.15

Table C-9 August 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
	0	424	<b>42.7</b> 0
Unknown	8	\$21	\$2.50
Black jack	256	\$591	\$2.31
Jacks	484	\$1,237	\$2.56
Ehu (red snapper)	55	\$205	\$3.75
Gindai (flower snapper)	102	\$408	\$4.00
Grouper	291	\$790	\$2.72
Kalikali (pink snapper)	149	\$450	\$3.02
Lehi (silverjaw)	243	\$910	\$3.75
Onaga (red snapper)	368	\$1,825	\$4.96
Opakapaka (pink snapper)	30	\$120	\$4.00
Uku (gray snapper)	121	\$285	\$2.36
Amberjack	38	\$101	\$2.65
Reef fish	8,349	\$24,588	\$2.95
Wrasse	442	\$1,215	\$2.75
Rabbitfish	6	\$16	\$2.45
Mafute (emperor)	382	\$990	\$2.59
Parrotfish	538	\$1,346	\$2.50
Snapper	87	\$241	\$2.76
Unicornfish	1,683	\$4,320	\$2.57
Barracuda	86	\$164	\$1.89
Mahi/dolphinfish	175	\$291	\$1.67
Marlin	2,599	\$2,544	\$0.98
Sailfish	101	\$126	\$1.25
Rainbow runner	428	\$805	\$1.88
Monchong	142	\$319	\$2.25
Wahoo	320	\$720	\$2.25
Bonita/skipjack tuna	1,860	\$2,179	\$1.17
Dogtooth tuna	104	\$139	\$1.34
Yellowfin tuna	615	\$1,194	\$1.94
Crabs (misc)	14	\$37	\$2.75
Lobster	314	\$1,154	\$3.68
Octopus	802	\$2,099	\$2.62
TOTAL	21,189	\$51,431	\$2.43

C.16

Table C-10 September 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
		*	
Bigeye scad (atulai)	329	\$1,122	\$3.41
Black jack	76	\$167	\$2.18
Jacks	258	\$611	\$2.37
Milkfish	12	\$32	\$2.57
Ehu (red snapper)	61	\$242	\$4.00
Gindai (flower snapper)	24	\$94	\$4.00
Grouper	300	\$793	\$2.64
Kalikali (pink snapper)	5	\$19	\$3.50
Lehi (silverjaw)	196	\$722	\$3.68
Onaga (red snapper)	406	\$2,032	\$5.00
Opakapaka (pink snapper)	111	\$436	\$3.92
Uku (gray snapper)	145	\$384	\$2.65
Amberjack	84	\$230	\$2.73
Reef fish	5,615	\$16,536	\$2.93
Wrasse	348	\$951	\$2.73
Rabbitfish	21	\$64	\$3.00
Rudderfish (guilli)	28	\$71	\$2.50
Mafute (emperor)	271	\$715	\$2.64
Parrotfish	215	\$560	\$2.6
Snapper	53	\$142	\$2.68
Surgeonfish	353	\$924	\$2.6
Unicornfish	2,322	\$6,203	\$2.6
Barracuda	66	\$118	\$1.77
Mahi/dolphinfish	474	\$899	\$1.90
Marlin	1,912	\$2,348	\$1.23
Rainbow runner	201	\$411	\$2.04
Monchong	38	\$85	\$2.25
Wahoo	558	\$1,232	\$2.2
Bonita/skipjack tuna	1,361	\$1,649	\$1.2
Dogtooth tuna	35	\$44	\$1.25
Yellowfin tuna	864	\$1,815	\$2.10
Lobster	291	\$1,092	\$3.75
Octopus	711	\$1,806	\$2.54
TOTAL	17,744	\$44,548	\$2.5

C.17

Table C-11 October 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
) (C. 11)	206	Φ0.50	Φ2.00
Miscellaneous	286	\$858	\$3.00
Bigeye scad (atulai)	45	\$129	\$2.88
Black jack	434	\$958	\$2.21
Jacks	162	\$412	\$2.54
Napoleon Wrasse	37	\$102	\$2.75
Ehu (red snapper)	72	\$281	\$3.88
Gindai (flower snapper)	104	\$397	\$3.84
Grouper	343	\$853	\$2.49
Kalikali (pink snapper)	6	\$18	\$3.00
Lehi (silverjaw)	268	\$954	\$3.56
Onaga (red snapper)	655	\$2,974	\$4.54
Opakapaka (pink snapper)	32	\$127	\$4.00
Uku (gray snapper)	176	\$424	\$2.41
Amberjack	189	\$538	\$2.84
Reef fish	6,961	\$20,501	\$2.95
Wrasse	346	\$908	\$2.63
Rudderfish (guilli)	78	\$194	\$2.50
Mafute (emperor)	391	\$1,045	\$2.67
Parrotfish	266	\$718	\$2.70
Snapper	11	\$29	\$2.75
Surgeonfish	109	\$272	\$2.50
Unicornfish	2,879	\$7,458	\$2.59
Barracuda	184	\$343	\$1.87
Mahi/dolphinfish	5,856	\$8,609	\$1.47
Marlin	1,152	\$1,079	\$0.94
Rainbow runner	459	\$831	\$1.81
Monchong	198	\$412	\$2.08
Wahoo	2,803	\$5,221	\$1.86
Bonita/skipjack tuna	1,802	\$2,283	\$1.27
Dogtooth tuna	294	\$353	\$1.20
Yellowfin tuna	2,987	\$6,289	\$2.11
Lobster	366	\$1,337	\$3.65
Octopus	543	\$1,391	\$2.56
TOTAL	30,494	\$68,298	\$2.24

C.18

Table C-12 November 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Unknown	56	\$141	\$2.50
Bigeye scad (atulai)	605	\$1,743	\$2.88
Jacks	88	\$224	\$2.54
Napoleon Wrasse	89	\$234	\$2.63
Milkfish	25	\$62	\$2.50
Grouper	5	\$14	\$3.00
Onaga (red snapper)	54	\$268	\$5.00
Opakapaka (pink snapper)	2	\$7	\$3.00
Uku (gray snapper)	126	\$298	\$2.36
Reef fish	6,373	\$18,764	\$2.94
Rudderfish (guilli)	35	\$104	\$3.00
Mafute (emperor)	39	\$100	\$2.57
Snapper	29	\$74	\$2.50
Unicornfish	1,944	\$5,142	\$2.65
Barracuda	26	\$48	\$1.81
Mahi/dolphinfish	7,888	\$11,594	\$1.47
Marlin	526	\$802	\$1.53
Sailfish	141	\$176	\$1.25
Rainbow runner	228	\$396	\$1.74
Monchong	88	\$175	\$2.00
Wahoo	6,545	\$12,080	\$1.85
Bonita/skipjack tuna	3,559	\$4,062	\$1.14
Dogtooth tuna	25	\$25	\$1.00
Yellowfin tuna	1,865	\$4,376	\$2.35
Lobster	54	\$199	\$3.70
Octopus	195	\$441	\$2.26
TOTAL	30,610	\$61,549	\$2.01

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Table C-13
December 2005 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Fillets	19	\$42	\$2.25
Jacks	122	\$307	\$2.51
Napoleon Wrasse	65	\$180	\$2.75
Gindai (flower snapper)	48	\$191	\$4.00
Grouper	33	\$95	\$2.90
Kalikali (pink snapper)	26	\$93	\$3.50
Lehi (silverjaw)	25	\$89	\$3.50
Onaga (red snapper)	544	\$2,718	\$5.00
Uku (gray snapper)	26	\$68	\$2.64
Amberjack	212	\$635	\$3.00
Reef fish	5,328	\$15,722	\$2.95
Rabbitfish	364	\$1,091	\$3.00
Rudderfish (guilli)	192	\$573	\$2.98
Mafute (emperor)	82	\$230	\$2.81
Parrotfish	66	\$198	\$3.00
Snapper	88	\$220	\$2.51
Surgeonfish	223	\$635	\$2.85
Unicornfish	3,111	\$8,741	\$2.81
Goatfish	112	\$279	\$2.50
Troll fish	18	\$36	\$2.00
Barracuda	258	\$501	\$1.94
Mahi/dolphinfish	7,391	\$11,454	\$1.55
Marlin	229	\$354	\$1.54
Spearfish	12	\$15	\$1.25
Sailfish	304	\$367	\$1.21
Rainbow runner	240	\$468	\$1.95
Wahoo	4,958	\$10,055	\$2.03
Bonita/skipjack tuna	1,005	\$1,384	\$1.38
Dogtooth tuna	241	\$348	\$1.44
Yellowfin tuna	1,366	\$3,149	\$2.30
Lobster	311	\$585	\$1.88
Octopus	109	\$274	\$2.50
TOTAL	27.126	Φ <i>c</i> 1.00 <i>c</i>	Φ2.27
TOTAL	27,126	\$61,095	\$2.25

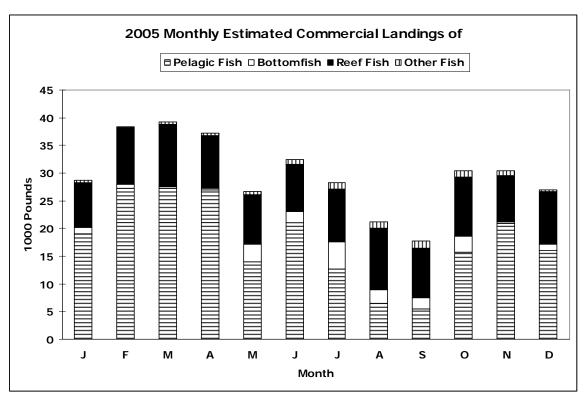


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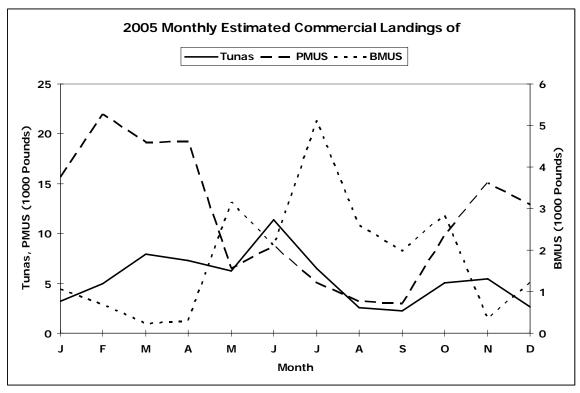


Figure C-1-2

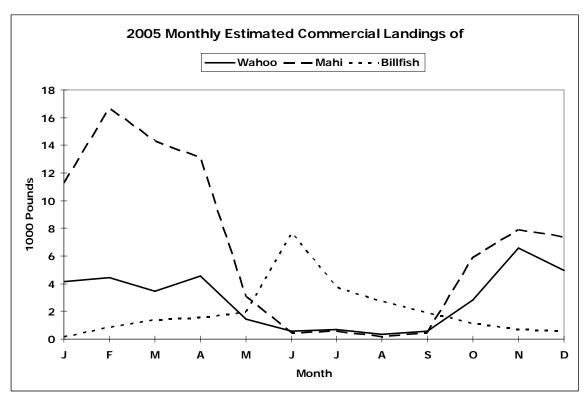


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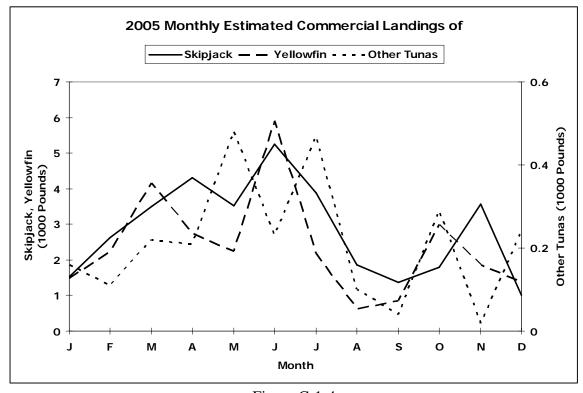


Figure C-1-4

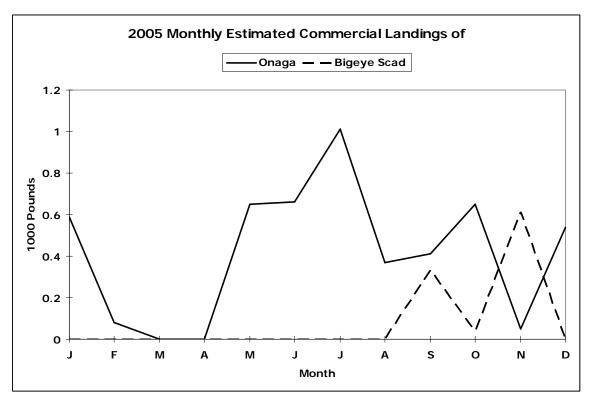


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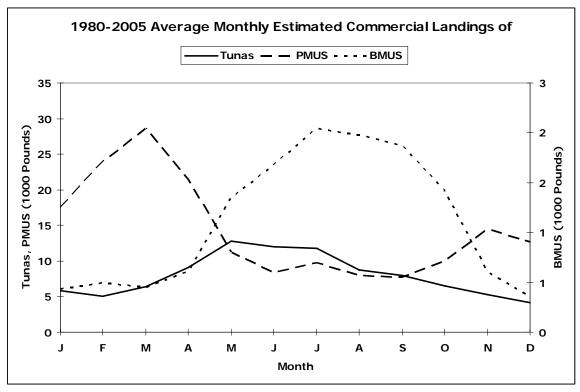


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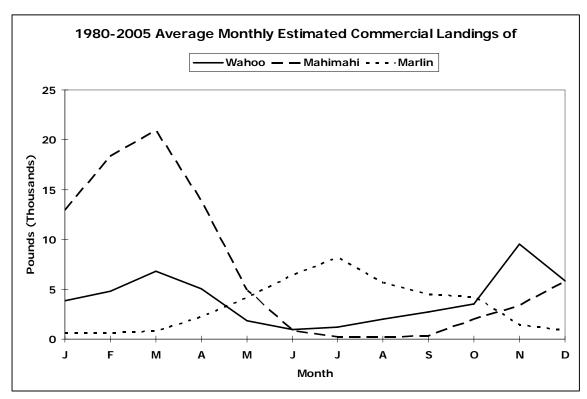


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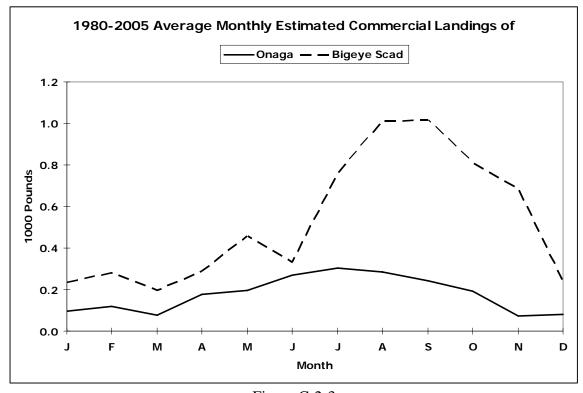


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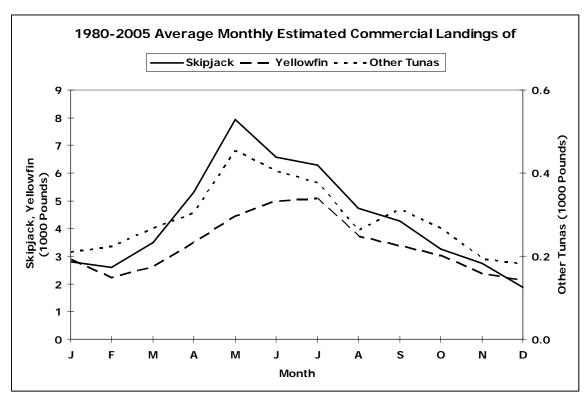


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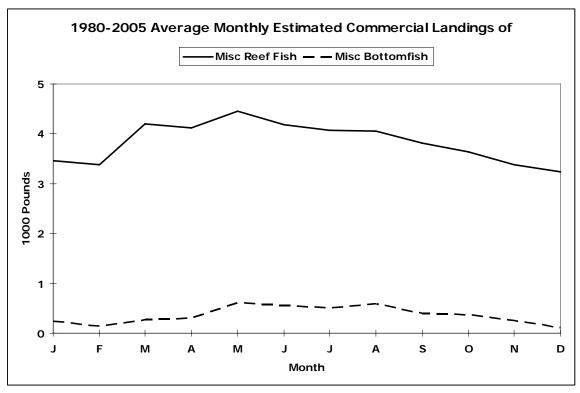


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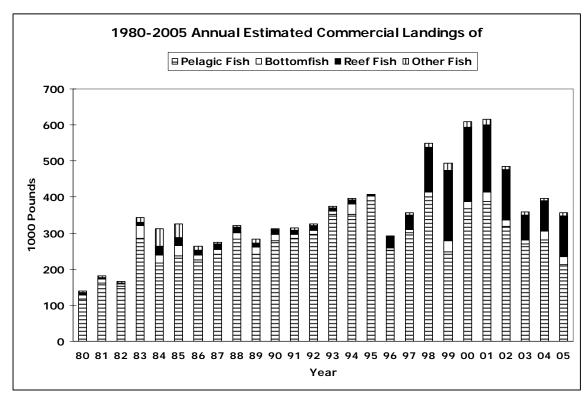


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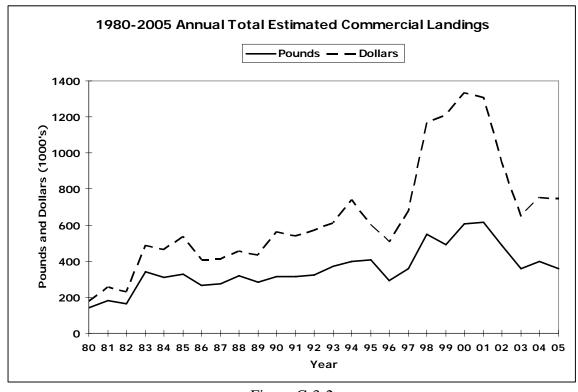


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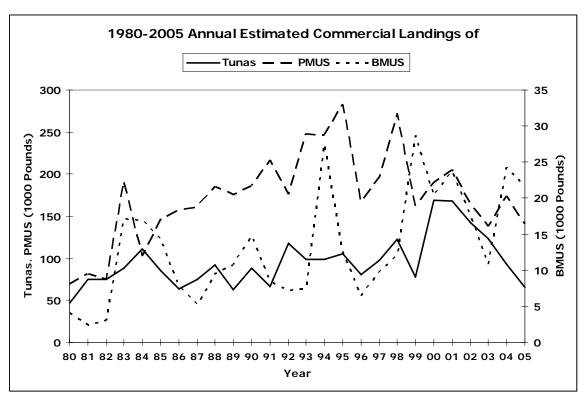


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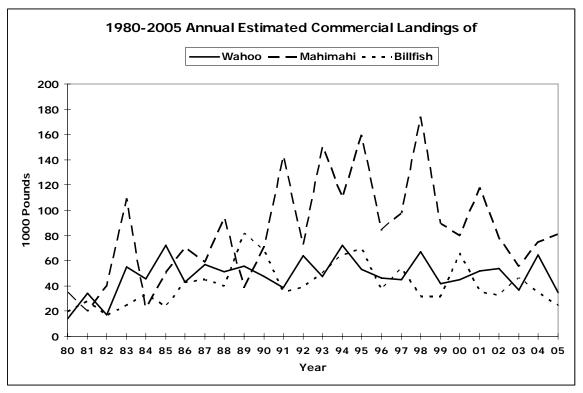


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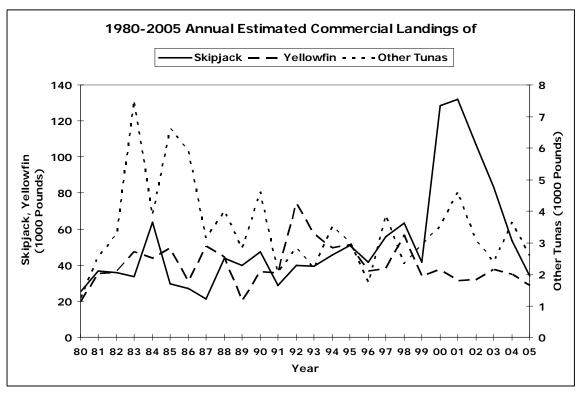


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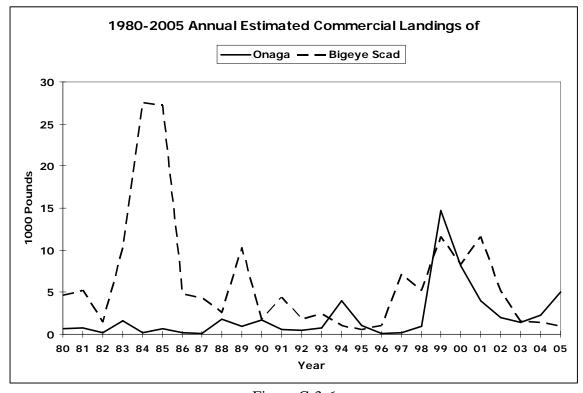


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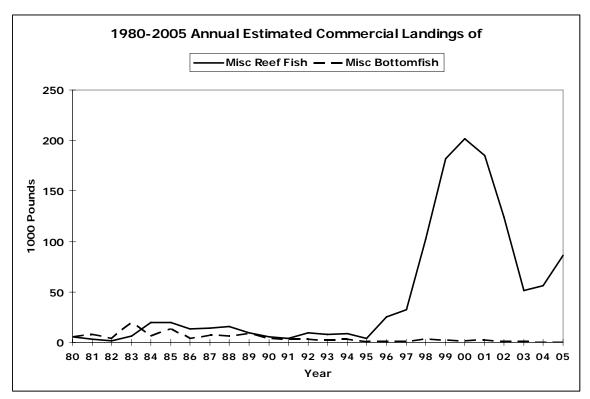


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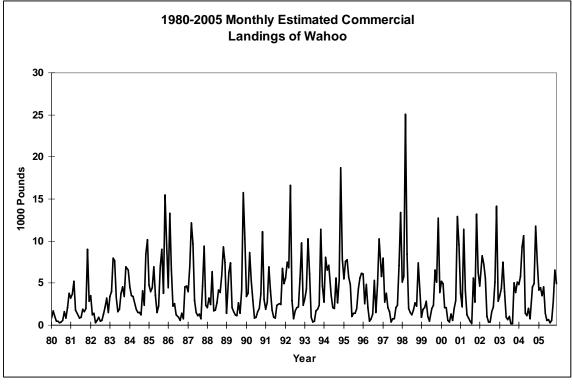


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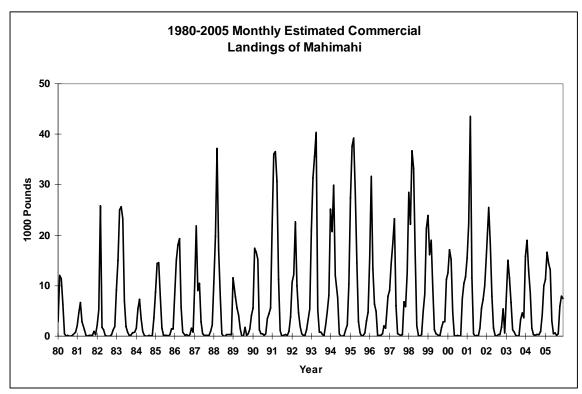


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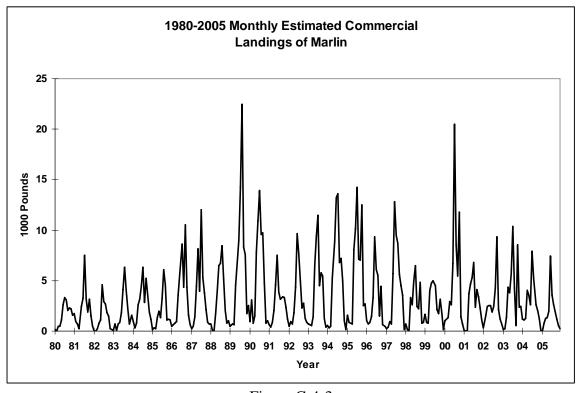


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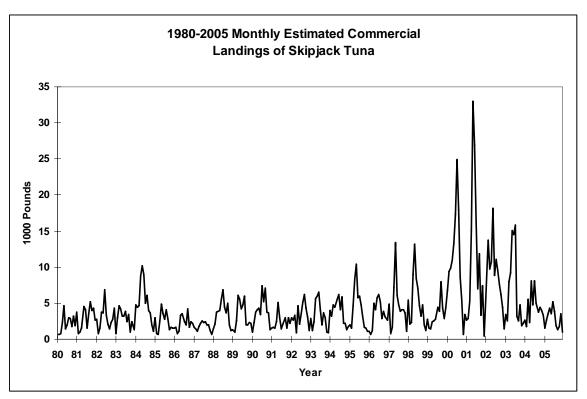


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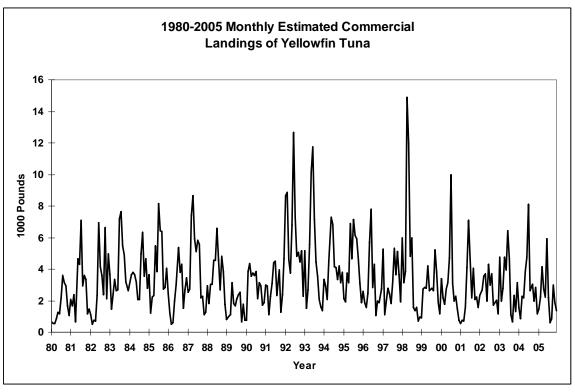


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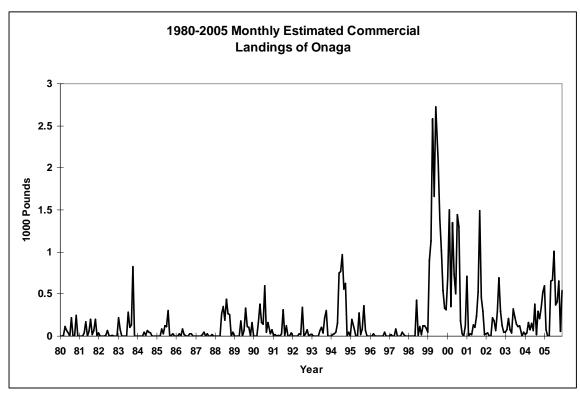


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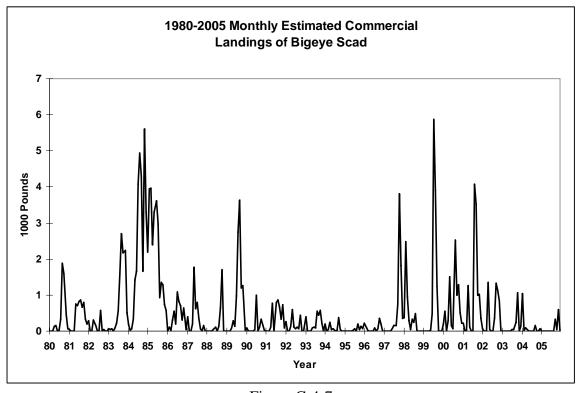


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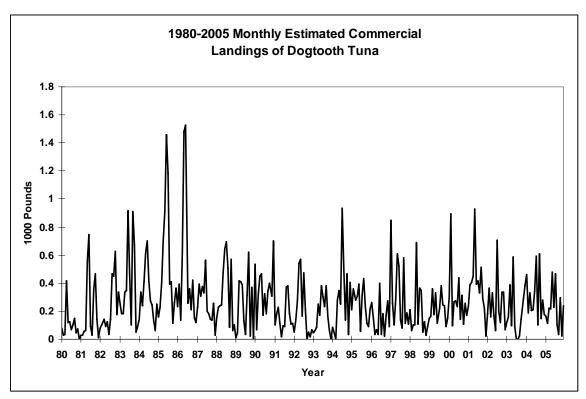


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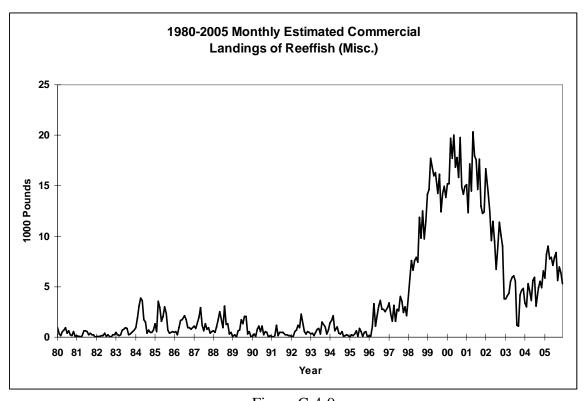


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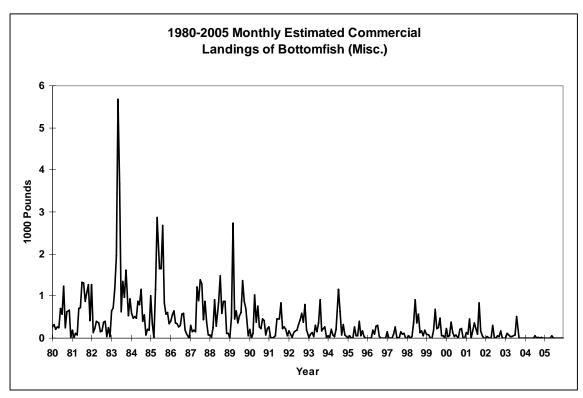


Figure C-4-10

# STATE OF HAWAII 2005 FISHERY STATISTICS

Compiled by

Division of Aquatic Resources

and the

Western Pacific Fishery Information Network

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#### STATE OF HAWAII 2005 FISHERY STATISTICS

#### **INTRODUCTION**

The Hawaiian Archipelago stretches northwestward over 1500 miles.

Location: 19° N latitude, 155° W longitude

to about 28° N latitude and

178° W longitude

Islands: Hawaii, Maui, Lanai, Molokai,

Oahu, Kauai, and Niihau (comprise over 99% of the

total land area)

Population: 1,286,000 (The State of

Hawaii Data Book, 2006

*Update*)

 $Commercial\ Catch\ Breakdown\ (lbs):$ 

84% on Oahu, 13% on Hawaii (Big Island), 2% on Maui, and

1% or less on other islands

Kaua`i Ni`ihau O`ahu Moloka`i Lana`i Maui Kaho`olawe Hawai`i

Hawaiian Islands; copied and modified from: http://satftp.soest.hawaii.edu/space/hawaii/maps/All\_Islands\_map.710x509.gif; SOEST Satlab Server

The fisheries of the State of Hawaii are quite diverse; they vary from shore-based algae harvesting by hand to large-vessel fisheries such as longlining and lobster fishing. There are several major fisheries: tuna fishing through various methods, lobster trapping, hook-and-line bottomfishing for the grouper-snapper-jack complex, net fishing for species such as the bigeye scad, and trolling for such pelagic species as marlin, wahoo, and mahimahi.

In 2001, prohibitions were placed on landing shark fins without their associated carcasses and on making shallow-sets with longline gear to target swordfish. Shark and swordfish catches dropped dramatically, and longline effort significantly shifted from swordfish to tunas.

In 2004, the swordfish fishery was reopened due to new technology that reduced sea turtle bycatch. With the reopening, new regulations were implemented that required fishing vessels to have a shallow-set certificate for each deployment of shallow-set longline fishing gear. A limited number of certificates were made available for purchase each year. In addition, the swordfish fishery would close for the remainder of the year if the number of allowable interactions with leatherback (16) or loggerhead (17) sea turtles was reached.

Commercial fishing (i.e., selling catches or providing charter fishing services) in Hawaii requires purchasing a commercial marine fishing license. In 2005, there were 4,242 licensed commercial fishers. The summary 2005 data were created from a combination of Hawaii Division of Aquatic Resources' (HDAR) fishers and dealer reporting forms processed

through their Dealer Reporting System (DRS) and Fisherman Reporting System (FRS) as well as fishery reporting forms (including federal longline logbooks). It is believed to represent over 95% of what may eventually be submitted and processed.

#### DATA COLLECTING SYSTEM

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

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

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

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

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

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

- Port of Landing
- Species Name
- Number Landed
- Pounds Landed
- Number Lost
- Number Released

Other FRS data collection forms include the Net, Trap and Dive Activity Report, Tuna Handline Trip Report, Deep Sea Handline Trip Report, Aku Boat Report, NWHI Bottomfish Trip Sales Report, and NWHI Bottomfish Trip Daily Log. Commercial collectors of tropical marine fish are required to have an aquarium permit in addition to their commercial marine license, and they are required to report monthly on the C-6 Aquarium Fish Catch Report. Aquarium fish catches, however, are not included in this report's statistics.

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

No real measurement is available for what percent of the total commercial catch is actually reported to HDAR via fishers and dealers, but estimates have ranged from about 10% to more than 99%, depending on the species and fishery. The overall percent coverage was probably over 80% for all commercial fisheries combined in 2005.

#### DATA PROCESSING SYSTEM

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

#### DATA REPORTING SYSTEM

More than 150 marine species and species groups are recorded in HDAR's monthly landings reports, many of which are insignificant in the total catch. To help reduce this document's size and improve the usability of the tables, WPacFIN staff combined some of the less important species, reorganized the order of presentation, created a new species coding system, and translated all records in the database. The new coding system has 100 species and species groups based on flexible ecological and phylogenetic criteria. All of the commercially important pelagic and bottomfish species or unique species groups have individual codes and are reported separately. Marine pond catches are included in the species totals, but make up less than 0.4% of the total landings for each year.

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

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

The following species, species groups, and abbreviations are used in the tables and graphs of Hawaii's fishery statistics:

Note: 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 FSWP volume will maintain the original species categorizations from previous volumes for comparative purposes. As such, tunas are kept in a separate category.

#### I. Pelagic Management Unit Species (PMUS)

Mahimahi (dolphin) Wahoo

Blue marlin Black marlin

Striped marlin Shortnose spearfish
Sailfish Broadbill swordfish
Sharks Billfish (misc)

#### II. Bottomfish Management Unit Species (BMUS)

Deep water jacks (misc) Amberjack Pig-lipped ulua (jack) White ulua

Hawaiian grouper
Ehu (red snapper)
Kalekale (pink snapper)
Onaga (long-tailed snapper)
Blue-lined snapper
Gindai (flower snapper)
Lehi (silverjaw snapper)
Opakapaka (pink snapper)

Uku (gray snapper) Snappers

#### III. Billfish

Billfish Blue marlin
Black marlin Striped marlin

Shortnose spearfish Sailfish

Broadbill swordfish

#### IV. Tunas

Other tunas Skipjack tuna Yellowfin tuna Albacore

Bigeye tuna

#### V. Other Tunas

Miscellaneous tunas Bluefin tuna Frigate tuna Kawakawa

# VI. Fisheries Categories

# A. Pelagic Species

# All PMUS and tuna species including the following:

Rainbow runner Barracuda
Japanese mackerel Frigate tuna
Ocean sunfish Ocean moonfish

#### B. Bottomfish

# All BMUS plus the following:

Blue crevally Dobe ulua

Paapaa ulua Blue spot grouper

Porgy

# C. Reef Fish

Reef jacks (misc) Squirrelfish Trumpetfish Scorpionfish Mountain bass Bigeyes Goatfish Cardinalfish Rudderfish Butterflyfish Damselfish Hawkfish Tipapia Wrasse Parrotfish Gobies Surgeonfish-tangs Flounders Triggerfish Filefish

Pufferfish

#### D. Other

Miscellaneous Rays

Eels Bigeye scad (akule)

Mackerel scad (opelu)

Anchovy

Ten pounder

Bonefish

Milkfish

Needlefish

Threadfin

Leatherback

Ten pounder

Herring-sardine

Flyingfish

Halfbeaks

Mullet

Pomfret Snake mackerel Freshwater fish Spiny lobster

Slipper lobster Crabs

Shrimp (freshwater) Shrimp (saltwater)

Octopus Squid

Limpets (saltwater) Limpets (freshwater)

Clams Stoney corals
Precious corals Sea urchins
Sea cucumbers Sea turtles

Algae

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Table D-1 2005 Annual Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	3,330	1,769	\$3,702	\$ 2.09
Sharks	441,007	275,455	\$101,519	\$ 0.37
Rays	44	0	\$0	\$ 0.00
Eels	694	680	\$714	\$ 1.05
Armorhead	6	0	\$0	\$ 0.00
Bigeye scad (akule)	656,434	247,637	\$492,812	\$ 1.99
Mackerel scad	232,714	153,808	\$341,824	\$ 2.22
Leatherjacket	518	351	\$460	\$ 1.31
Ten pounder	701	640	\$652	\$ 1.02
Bonefish	3,963	3,436	\$3,554	\$ 1.03
Milkfish	2,949	2,762	\$3,409	\$ 1.23
Needlefish	825	304	\$464	\$ 1.53
Threadfin	437	349	\$1,963	\$ 5.63
Mullet	8,945	8,753	\$30,423	\$ 3.48
Pomfret	676,741	646,123	\$1,440,166	\$ 2.23
Oilfish	388,568	385,809	\$704,254	\$ 1.83
Jacks (misc)	1,587	878	\$1,948	\$ 2.22
Amberjack	7,674	231	\$173	\$ 0.75
Sasa ulua	1,187	780	\$1,367	\$ 1.75
Pig-lipped ulua	14,959	13,241	\$34,965	\$ 2.64
Dobe ulua	131	131	\$427	\$ 3.27
Papa ulua	5,498	3,176	\$9,303	\$ 2.93
White ulua	15,058	11,547	\$22,293	\$ 1.93
Black ulua	1,783	1,364	\$2,438	\$ 1.79
Blue trevally	9,676	3,629	\$7,279	\$ 2.01
Hawaiian grouper	50,800	45,479	\$208,283	\$ 4.58
Blue spot grouper	457	156	\$355	\$ 2.27
Snappers	2,049	1,731	\$5,347	\$ 3.09
Yellowtail kali	44	0	\$0	\$ 0.00
Blue lined snapper	45,485	41,091	\$46,531	\$ 1.13
Ehu (red snapper)	33,909	28,063	\$130,921	\$ 4.67
Gindai (flower snapper)	7,462	6,128	\$21,192	\$ 3.46
Golden kalekale	9,594	8,129	\$30,803	\$ 3.79
Lehi (silverjaw)	6,940	6,415	\$21,695	\$ 3.38
Onaga (red snapper)	111,122	95,715	\$646,995	\$ 6.76
Opakapaka (pink snapper)	111,141	101,754	\$606,263	\$ 5.96
Uku (gray snapper)	155,167	145,233	\$483,929	\$ 3.33
Snake mackerel	4	0	\$0	\$ 0.00
Porgy	1,989	1,776	\$4,053	\$ 2.28
Other reef fish	65	3	\$10	\$ 3.00
Reef jacks	55	55	\$177	\$ 3.24
Squirrelfish	37,928	32,986	\$115,562	\$ 3.50
Trumpetfish	43	31	\$43	\$ 1.40

D.9

Table D-1 2005 Annual Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Scorpionfish	3,255	2,599	\$11,422	\$ 4.40
Mountain bass	2,238	1,355	\$4,611	\$ 3.40
Bigeyes	6,408	5,688	\$15,227	\$ 2.68
Goatfish	42,034	35,688	\$98,748	\$ 2.77
Rudderfish	20,417	19,436	\$19,899	\$ 1.02
Damselfish	2,223	1,326	\$3,482	\$ 2.63
Hawkfish	460	416	\$1,031	\$ 2.48
Tilapia	2,520	1,214	\$1,803	\$ 1.49
Wrasse	4,175	3,735	\$14,735	\$ 3.94
Parrotfish	33,111	30,032	\$89,446	\$ 2.98
Surgeon/tangs	94,495	82,250	\$119,655	\$ 1.45
Flounders	278	272	\$573	\$ 2.11
Filefish	1,416	1,134	\$1,698	\$ 1.50
Pufferfish	8	3	\$2	\$ 0.50
Other pelagic	2,756	123	\$12	\$ 0.10
Moonfish (opah)	1,099,729	1,086,076	\$1,897,337	\$ 1.75
Rainbow runner	5,433	4,265	\$6,726	\$ 1.58
Mahimahi (dolphin)	1,591,116	1,438,622	\$3,594,541	\$ 2.50
Barracudas	36,829	33,878	\$25,183	\$ 0.74
Wahoo	889,110	817,025	\$2,250,054	\$ 2.75
Tunas (misc)	27,335	8,726	\$29,986	\$ 3.44
Skipjack tuna	1,173,670	964,328	\$1,131,938	\$ 1.17
Yellowfin tuna	3,249,497	3,202,557	\$7,362,751	\$ 2.30
Albacore	1,033,073	1,007,931	\$1,506,812	\$ 1.50
Bigeye tuna	11,788,857	10,934,358	\$36,059,029	\$ 3.30
Kawakawa	7,977	3,342	\$4,845	\$ 1.45
Other billfish	8,986	315	\$318	\$ 1.01
Broadbill swordfish	3,599,151	3,445,598	\$7,778,160	\$ 2.26
Blue marlin	1,104,956	930,238	\$972,110	\$ 1.05
Black marlin	4,431	2,344	\$2,740	\$ 1.17
Striped marlin	1,213,824	1,193,272	\$1,536,412	\$ 1.29
Shortnose spearfish	493,220	467,748	\$420,144	\$ 0.90
Sailfish	20,831	7,420	\$8,480	\$ 1.14
Spiny lobster	11,864	10,091	\$110,927	\$10.99
Slipper lobster	57	12	\$101	\$ 8.36
Crabs	29,704	8,951	\$36,249	\$ 4.05
Shrimp (saltwater)	114,789	84	\$756	\$ 9.00
Octopus	24,244	21,198	\$63,724	\$ 3.01
Squid	1,561	1,444	\$2,669	\$ 1.85
Limpets (saltwater)	8,213	4,999	\$44,764	\$ 8.96
Invertebrates	11,668	7,268	\$216,340	\$29.77
Algae	10,399	7,209	\$39,840	\$ 5.53
TOTAL	30,825,996	28,072,163	\$71,013,543	\$ 2.53

D.10

Table D-2 January 2005 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	44	44	\$42	\$ 0.96
Sharks	29,100	15,345	\$6,449	\$ 0.42
Eels	25	25	\$25	\$ 1.00
Bigeye scad (akule)	53,460	14,705	\$31,988	\$ 2.18
Mackerel scad	7,508	4,486	\$9,288	\$ 2.07
Leatherjacket	20	20	\$25	\$ 1.24
Ten pounder	13	13	\$13	\$ 1.00
Bonefish	45	42	\$68	\$ 1.60
Milkfish	88	88	\$108	\$ 1.24
Needlefish	161	6	\$3	\$ 0.50
Threadfin	21	21	\$119	\$ 5.58
Mullet	110	110	\$523	\$ 4.75
Pomfret	43,224	41,537	\$108,618	\$ 2.62
Oilfish	33,908	33,908	\$62,248	\$ 1.84
Jacks (misc)	119	44	\$121	\$ 2.78
Amberjack	573	0	\$0	\$ 0.00
Sasa ulua	12	3	\$6	\$ 2.07
Pig-lipped ulua	878	842	\$2,452	\$ 2.91
Papa ulua	671	321	\$740	\$ 2.31
White ulua	647	647	\$1,290	\$ 1.99
Black ulua	12	0	\$0	\$ 0.00
Blue trevally	255	255	\$696	\$ 2.73
Hawaiian grouper	3,282	2,839	\$13,531	\$ 4.77
Blue spot grouper	8	8	\$20	\$ 2.50
Snappers	210	75	\$198	\$ 2.65
Blue lined snapper	3,273	2,478	\$2,379	\$ 0.96
Ehu (red snapper)	3,106	2,621	\$11,855	\$ 4.52
Gindai (flower snapper)	249	202	\$752	\$ 3.73
Golden kalekale	1,387	1,371	\$5,461	\$ 3.98
Lehi (silverjaw)	830	830	\$3,115	\$ 3.75
Onaga (red snapper)	11,612	11,169	\$76,836	\$ 6.88
Opakapaka (pink snapper)	17,968	17,968	\$112,103	\$ 6.24
Uku (gray snapper)	5,539	5,434	\$23,367	\$ 4.30
Porgy	69	69	\$131	\$ 1.90
Squirrelfish	1,230	1,230	\$4,067	\$ 3.31
Trumpetfish	8	5	\$7	\$ 1.50
Scorpionfish	249	249	\$1,019	\$ 4.10
Mountain bass	67	52	\$174	\$ 3.37
Bigeyes	624	624	\$1,470	\$ 2.35
Goatfish	5,474	3,687	\$9,504	\$ 2.58
Rudderfish	302	298	\$369	\$ 1.24
Damselfish	42	42	\$113	\$ 2.71

D.11

Table D-2

January 2005 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Hawkfish	12	12	\$31	\$ 2.65
Wrasse	301	301	\$1,065	\$ 3.54
Parrotfish	1,524	1,494	\$4,064	\$ 2.72
Surgeon/tangs	5,517	4,611	\$7,138	\$ 1.55
Filefish	230	36	\$36	\$ 1.00
Other pelagic	247	114	\$11	\$ 0.10
Moonfish (opah)	42,658	42,580	\$105,089	\$ 2.47
Rainbow runner	343	169	\$267	\$ 1.58
Mahimahi (dolphin)	109,176	107,575	\$242,511	\$ 2.25
Barracudas	1,900	680	\$668	\$ 0.98
Wahoo	62,220	61,218	\$176,363	\$ 2.88
Tunas (misc)	732	0	\$0	\$ 0.00
Skipjack tuna	74,509	24,368	\$19,069	\$ 0.78
Yellowfin tuna	448,157	448,157	\$916,042	\$ 2.04
Albacore	58,079	56,813	\$96,419	\$ 1.70
Bigeye tuna	1,125,864	962,146	\$2,333,333	\$ 2.43
Kawakawa	419	208	\$433	\$ 2.09
Other billfish	1,492	0	\$0	\$ 0.00
Broadbill swordfish	171,536	166,734	\$539,387	\$ 3.24
Blue marlin	56,443	24,929	\$26,074	\$ 1.05
Black marlin	180	180	\$268	\$ 1.49
Striped marlin	122,825	122,825	\$143,013	\$ 1.16
Shortnose spearfish	90,016	90,016	\$47,291	\$ 0.53
Sailfish	2,178	631	\$724	\$ 1.15
Spiny lobster	1,324	1,051	\$11,814	\$11.24
Crabs	2,599	932	\$3,478	\$ 3.73
Shrimp (saltwater)	2,000	0	\$0	\$ 0.00
Octopus	805	601	\$1,746	\$ 2.91
Squid	19	19	\$46	\$ 2.50
Limpets (saltwater)	1,221	465	\$2,459	\$ 5.29
Invertebrates	200	0	\$0	\$ 0.00
Algae	788	643	\$3,193	\$ 4.96
TOTAL	2,611,932	2,283,213	\$5,173,326	\$ 2.27

Table D-3

Table D-3
February 2005 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb
Miscellaneous	64	64	\$155	\$ 2.43
Sharks	30,814	24,607	\$12,672	\$ 0.52
Eels	183	183	\$183	\$ 1.00
Bigeye scad (akule)	53,273	19,877	\$42,349	\$ 2.13
Mackerel scad	6,191	6,148	\$12,757	\$ 2.07
Leatherjacket	16	16	\$21	\$ 1.37
Ten pounder	91	91	\$91	\$ 1.00
Bonefish	387	352	\$375	\$ 1.0
Milkfish	478	478	\$595	\$ 1.2
Needlefish	56	39	\$55	\$ 1.4
Threadfin	34	34	\$183	\$ 5.4
Mullet	113	113	\$529	\$ 4.7
Pomfret	65,566	58,502	\$133,030	\$ 2.2
Oilfish	47,344	45,535	\$74,858	\$ 1.6
Jacks (misc)	22	6	\$15	\$ 2.7
Amberjack	139	40	\$20	\$ 0.5
Sasa ulua	20	20	\$50	\$ 2.5
Pig-lipped ulua	2,310	2,027	\$4,945	\$ 2.4
Dobe ulua	64	64	\$225	\$ 3.5
Papa ulua	354	154	\$454	\$ 2.9
White ulua	2,225	452	\$609	\$ 1.3
Black ulua	183	113	\$183	\$ 1.6
Blue trevally	140	33	\$85	\$ 2.5
Hawaiian grouper	3,713	3,645	\$15,691	\$ 4.3
Blue spot grouper	30	3	\$6	\$ 2.0
Snappers	37	18	\$47	\$ 2.6
Blue lined snapper	2,791	1,549	\$1,247	\$ 0.8
Ehu (red snapper)	1,907	1,907	\$8,744	\$ 4.5
Gindai (flower snapper)	463	463	\$1,604	\$ 3.4
Golden kalekale	658	658	\$2,353	\$ 3.5
Lehi (silverjaw)	419	419	\$1,372	\$ 3.2
Onaga (red snapper)	9,068	9,068	\$56,422	\$ 6.2
Opakapaka (pink snapper)	9,573	9,573	\$52,235	\$ 5.4
Uku (gray snapper)	9,074	8,656	\$27,438	\$ 3.1
Porgy	145	61	\$77	\$ 1.2
Reef jacks	10	10	\$29	\$ 3.0
Squirrelfish	1,213	980	\$3,203	\$ 3.2
Scorpionfish	170	170	\$814	\$ 4.7
Mountain bass	156	41	\$100	\$ 2.4
Bigeyes	481	481	\$1,385	\$ 2.8
Goatfish	2,261	1,883	\$4,971	\$ 2.6
Rudderfish	1,460	1,460	\$1,504	\$ 1.0
Damselfish	21	21	\$58	\$ 2.8
Hawkfish	14	2	\$3	\$ 2.2

Table D-3
February 2005 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Tilapia	80	80	\$119	\$ 1.50
Wrasse	264	264	\$1,373	\$ 5.19
Parrotfish	1,770	1,242	\$3,513	\$ 2.83
Surgeon/tangs	4,870	3,805	\$5,961	\$ 1.57
Filefish	74	74	\$74	\$ 1.00
Other pelagic	1,836	9	\$1	\$ 0.10
Moonfish (opah)	56,731	54,447	\$129,076	\$ 2.37
Rainbow runner	105	99	\$125	\$ 1.26
Mahimahi (dolphin)	165,408	143,134	\$274,043	\$ 1.91
Barracudas	2,366	1,724	\$1,358	\$ 0.79
Wahoo	61,211	55,375	\$151,785	\$ 2.74
Tunas (misc)	385	0	\$0	\$ 0.00
Skipjack tuna	73,307	36,379	\$42,032	\$ 1.16
Yellowfin tuna	344,639	324,225	\$709,568	\$ 2.19
Albacore	95,135	80,739	\$123,911	\$ 1.53
Bigeye tuna	1,185,657	984,447	\$2,866,454	\$ 2.91
Kawakawa	450	150	\$227	\$ 1.51
Other billfish	331	0	\$0	\$ 0.00
Broadbill swordfish	217,834	135,566	\$452,418	\$ 3.34
Blue marlin	61,072	49,367	\$50,976	\$ 1.03
Black marlin	310	258	\$416	\$ 1.62
Striped marlin	105,638	101,650	\$130,113	\$ 1.28
Shortnose spearfish	71,842	65,757	\$47,664	\$ 0.72
Sailfish	2,107	453	\$479	\$ 1.06
Spiny lobster	1,269	882	\$8,488	\$ 9.63
Slipper lobster	3	3	\$23	\$ 9.00
Crabs	1,586	366	\$1,307	\$ 3.57
Shrimp (saltwater)	203	0	\$0	\$ 0.00
Octopus	1,211	949	\$2,834	\$ 2.99
Limpets (saltwater)	1,281	270	\$1,220	\$ 4.52
Invertebrates	800	0	\$0	\$ 0.00
Algae	1,248	735	\$4,336	\$ 5.90
TOTAL	2,714,750	2,242,457	\$5,473,634	\$ 2.44

Table D-4
March 2005 Reported Commercial Landings

Charies	Cought	Sold	Value	Price/Lb.
Species	Caught	Sold	value	FIICE/LU.
Miscellaneous	16	16	\$32	\$ 2.03
Sharks	37,861	35,249	\$11,020	\$ 0.31
Rays	9	0	\$0	\$ 0.00
Eels	107	107	\$107	\$ 1.00
Armorhead	6	0	\$0	\$ 0.00
Bigeye scad (akule)	72,365	31,096	\$51,108	\$ 1.64
Mackerel scad	12,181	8,078	\$17,248	\$ 2.14
Leatherjacket	28	28	\$38	\$ 1.39
Ten pounder	117	117	\$117	\$ 1.00
Bonefish	142	142	\$182	\$ 1.28
Milkfish	150	150	\$187	\$ 1.25
Needlefish	37	29	\$50	\$ 1.76
Threadfin	17	17	\$101	\$ 6.12
Mullet	90	90	\$428	\$ 4.75
Pomfret	58,111	58,111	\$132,868	\$ 2.29
Oilfish	47,286	47,286	\$63,927	\$ 1.35
Jacks (misc)	226	226	\$324	\$ 1.43
Amberjack	612	4	\$2	\$ 0.50
Sasa ulua	3	0	\$0	\$ 0.00
Pig-lipped ulua	3,258	3,102	\$6,984	\$ 2.25
Dobe ulua	15	15	\$51	\$ 3.50
Papa ulua	520	292	\$663	\$ 2.27
White ulua	864	728	\$1,322	\$ 1.82
Black ulua	93	48	\$61	\$ 1.29
Blue trevally	188	188	\$463	\$ 2.47
Hawaiian grouper	3,706	3,606	\$20,426	\$ 5.67
Blue spot grouper	22	4	\$8	\$ 2.00
Snappers	156	156	\$550	\$ 3.54
Yellowtail kali	4	0	\$0	\$ 0.00
Blue lined snapper	2,764	2,764	\$2,986	\$ 1.08
Ehu (red snapper)	3,115	2,847	\$14,207	\$ 4.99
Gindai (flower snapper)	545	481	\$1,699	\$ 3.53
Golden kalekale	930	896	\$3,592	\$ 4.01
Lehi (silverjaw)	790	790	\$2,673	\$ 3.39
Onaga (red snapper)	16,042	14,993	\$97,792	\$ 6.52
Opakapaka (pink snapper)	16,718	16,493	\$101,725	\$ 6.17
Uku (gray snapper)	7,765	7,345	\$28,970	\$ 3.94
Porgy	114	114	\$199	\$ 1.76
Squirrelfish	1,732	1,732	\$5,802	\$ 3.35
Trumpetfish	7	7	\$10	\$ 1.50
Scorpionfish	315	302	\$1,658	\$ 5.49
Mountain bass	221	104	\$387	\$ 3.73
Bigeyes	606	606	\$1,451	\$ 2.40
Goatfish	4,163	4,163	\$10,111	\$ 2.43

Table D-4
March 2005 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Rudderfish	441	200	\$305	\$ 1.53
Damselfish	62	36	\$94	\$ 2.64
Hawkfish	34	5	\$10	\$ 1.98
Wrasse	277	242	\$1,267	\$ 5.24
Parrotfish	1,282	1,049	\$2,964	\$ 2.83
Surgeon/tangs	6,113	3,405	\$5,261	\$ 1.55
Flounders	184	184	\$461	\$ 2.50
Filefish	173	173	\$236	\$ 1.37
Pufferfish	3	3	\$2	\$ 0.50
Other pelagic	192	0	\$0	\$ 0.00
Moonfish (opah)	50,376	50,376	\$121,248	\$ 2.41
Rainbow runner	188	177	\$253	\$ 1.43
Mahimahi (dolphin)	167,842	164,335	\$383,174	\$ 2.33
Barracudas	3,372	3,188	\$2,538	\$ 0.80
Wahoo	99,165	99,165	\$256,523	\$ 2.59
Tunas (misc)	339	0	\$0	\$ 0.00
Skipjack tuna	113,428	92,587	\$76,858	\$ 0.83
Yellowfin tuna	284,691	284,691	\$770,197	\$ 2.71
Albacore	67,947	59,270	\$135,630	\$ 2.29
Bigeye tuna	755,021	755,021	\$2,758,384	\$ 3.65
Kawakawa	345	129	\$211	\$ 1.63
Broadbill swordfish	707,284	707,284	\$1,646,811	\$ 2.33
Blue marlin	48,290	44,466	\$59,605	\$ 1.34
Striped marlin	130,019	130,019	\$196,886	\$ 1.51
Shortnose spearfish	70,751	70,751	\$66,620	\$ 0.94
Sailfish	782	220	\$196	\$ 0.89
Spiny lobster	1,982	1,852	\$20,954	\$11.32
Slipper lobster	4	4	\$31	\$ 8.50
Crabs	1,908	982	\$3,886	\$ 3.96
Shrimp (saltwater)	2,920	30	\$270	\$ 9.00
Octopus	1,334	1,334	\$4,278	\$ 3.21
Limpets (saltwater)	902	391	\$4,220	\$10.79
Invertebrates	740	0	\$0	\$ 0.00
Algae	1,062	847	\$4,835	\$ 5.71
TOTAL	2,813,461	2,714,927	\$7,105,738	\$ 2.62

D.16

Table D-5 April 2005 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	1,279	270	\$454	\$ 1.68
Sharks	22,818	21,060	\$7,866	\$ 0.37
Rays	9	0	\$0	\$ 0.00
Eels	6	6	\$9	\$ 1.49
Bigeye scad (akule)	89,593	38,643	\$75,601	\$ 1.96
Mackerel scad	11,497	7,705	\$15,476	\$ 2.01
Leatherjacket	18	11	\$12	\$ 1.13
Ten pounder	33	33	\$33	\$ 1.02
Bonefish	240	240	\$240	\$ 1.00
Milkfish	125	125	\$156	\$ 1.25
Needlefish	43	10	\$10	\$ 1.02
Threadfin	6	6	\$36	\$ 6.23
Mullet	2,114	2,114	\$6,882	\$ 3.26
Pomfret	77,199	76,474	\$140,242	\$ 1.83
Oilfish	41,259	41,259	\$59,930	\$ 1.45
Jacks (misc)	308	5	\$13	\$ 2.50
Amberjack	650	21	\$11	\$ 0.52
Sasa ulua	33	4	\$11	\$ 3.00
Pig-lipped ulua	745	723	\$2,296	\$ 3.18
Dobe ulua	11	11	\$38	\$ 3.34
Papa ulua	219	214	\$678	\$ 3.18
White ulua	631	407	\$795	\$ 1.95
Black ulua	69	19	\$33	\$ 1.76
Blue trevally	483	128	\$293	\$ 2.30
Hawaiian grouper	3,871	3,614	\$18,974	\$ 5.25
Blue spot grouper	66	16	\$31	\$ 2.00
Snappers	39	37	\$128	\$ 3.49
Yellowtail kali	5	0	\$0	\$ 0.00
Blue lined snapper	1,809	1,809	\$2,087	\$ 1.15
Ehu (red snapper)	1,602	1,586	\$8,141	\$ 5.13
Gindai (flower snapper)	610	603	\$1,979	\$ 3.28
Golden kalekale	558	522	\$2,390	\$ 4.58
Lehi (silverjaw)	614	485	\$1,749	\$ 3.61
Onaga (red snapper)	8,665	8,196	\$48,085	\$ 5.87
Opakapaka (pink snapper)	8,436	8,436	\$48,773	\$ 5.78
Uku (gray snapper)	9,369	7,485	\$25,280	\$ 3.38
Porgy	90	90	\$252	\$ 2.80
Other reef fish	4	0	\$0	\$ 0.00
Reef jacks	21	21	\$74	\$ 3.50
Squirrelfish	4,033	3,557	\$12,133	\$ 3.41
Trumpetfish	3	3,337	\$3	\$ 1.25
Scorpionfish	234	229	\$709	\$ 3.09
Mountain bass	335	310	\$921	\$ 2.98
Bigeyes	646	646	\$1,758	\$ 2.72

Table D-5
April 2005 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Goatfish	3,129	2,340	\$5,408	\$ 2.31
Rudderfish	481	315	\$390	\$ 1.24
Damselfish	167	138	\$363	\$ 2.63
Hawkfish	23	23	\$47	\$ 2.00
Tilapia	232	232	\$348	\$ 1.50
Wrasse	221	219	\$1,086	\$ 4.96
Parrotfish	2,483	2,483	\$7,597	\$ 3.06
Surgeon/tangs	8,024	8,024	\$12,633	\$ 1.57
Flounders	14	14	\$14	\$ 1.05
Filefish	249	249	\$293	\$ 1.18
Other pelagic	144	0	\$0	\$ 0.00
Moonfish (opah)	40,274	39,363	\$100,345	\$ 2.55
Rainbow runner	233	155	\$221	\$ 1.43
Mahimahi (dolphin)	159,595	155,501	\$431,457	\$ 2.77
Barracudas	6,726	6,726	\$7,796	\$ 1.16
Wahoo	123,165	118,879	\$239,073	\$ 2.01
Tunas (misc)	1,158	0	\$0	\$ 0.00
Skipjack tuna	64,352	52,610	\$61,066	\$ 1.16
Yellowfin tuna	172,195	169,311	\$495,100	\$ 2.92
Albacore	97,347	97,135	\$190,398	\$ 1.96
Bigeye tuna	543,826	490,631	\$2,070,196	\$ 4.22
Kawakawa	621	621	\$790	\$ 1.27
Other billfish	458	0	\$0	\$ 0.00
Broadbill swordfish	830,854	770,403	\$1,711,003	\$ 2.22
Blue marlin	92,199	92,199	\$91,688	\$ 0.99
Black marlin	393	0	\$0	\$ 0.00
Striped marlin	120,237	113,100	\$150,564	\$ 1.33
Shortnose spearfish	36,869	36,653	\$40,696	\$ 1.11
Sailfish	825	111	\$124	\$ 1.12
Spiny lobster	1,135	1,055	\$10,369	\$ 9.83
Crabs	2,876	1,405	\$5,809	\$ 4.14
Shrimp (saltwater)	2,947	0	\$0	\$ 0.00
Octopus	1,383	1,383	\$4,411	\$ 3.19
Limpets (saltwater)	1,324	672	\$7,296	\$10.87
Invertebrates	730	0	\$0	\$ 0.00
Algae	1,304	231	\$1,505	\$ 6.52
TOTAL	2,608,586	2,389,307	\$6,132,669	\$ 2.57

Table D-6

May 2005 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb
Miscellaneous	723	237	\$970	\$ 4.09
Sharks	46,833	20,958	\$6,693	\$ 0.32
Eels	59	59	\$62	\$ 1.06
Bigeye scad (akule)	69,018	35,394	\$69,980	\$ 1.98
Mackerel scad	10,014	8,385	\$18,987	\$ 2.26
Leatherjacket	37	22	\$34	\$ 1.52
Ten pounder	55	55	\$55	\$ 1.00
Bonefish	427	393	\$398	\$ 1.01
Milkfish	204	135	\$161	\$ 1.19
Needlefish	97	77	\$98	\$ 1.28
Threadfin	29	26	\$158	\$ 6.13
Mullet	1,173	1,173	\$3,926	\$ 3.35
Pomfret	71,289	71,289	\$115,168	\$ 1.62
Oilfish	42,727	42,727	\$46,927	\$ 1.10
Jacks (misc)	258	258	\$706	\$ 2.74
Amberjack	790	0	\$0	\$ 0.00
Sasa ulua	35	22	\$53	\$ 2.40
Pig-lipped ulua	556	556	\$1,612	\$ 2.90
Dobe ulua	13	13	\$47	\$ 3.52
Papa ulua	167	67	\$169	\$ 2.52
White ulua	1,480	1,480	\$2,694	\$ 1.82
Black ulua	100	48	\$108	\$ 2.20
Blue trevally	1,130	287	\$593	\$ 2.07
Hawaiian grouper	5,418	5,379	\$23,734	\$ 4.4
Blue spot grouper	58	14	\$29	\$ 2.00
Snappers	230	230	\$746	\$ 3.24
Blue lined snapper	3,978	3,679	\$3,925	\$ 1.0
Ehu (red snapper)	2,714	2,568	\$12,804	\$ 4.99
Gindai (flower snapper)	505	487	\$1,750	\$ 3.59
Golden kalekale	590	531	\$2,184	\$ 4.1
Lehi (silverjaw)	484	484	\$1,730	\$ 3.57
Onaga (red snapper)	4,276	4,173	\$32,622	\$ 7.82
Opakapaka (pink snapper)	6,784	6,784	\$45,350	\$ 6.69
Uku (gray snapper)	23,788	23,788	\$77,401	\$ 3.25
Porgy	238	238	\$548	\$ 2.30
Other reef fish	1	0	\$0	\$ 0.00
Reef jacks	18	18	\$54	\$ 3.00
Squirrelfish	4,668	4,480	\$15,611	\$ 3.4
Scorpionfish	116	104	\$500	\$ 4.80
Mountain bass	229	66	\$194	\$ 2.92
Bigeyes	855	636	\$1,508	\$ 2.3
Goatfish	5,262	5,262	\$13,495	\$ 2.50
Rudderfish	1,693	1,693	\$1,836	\$ 1.08
Damselfish	105	105	\$231	\$ 2.20

Table D-6
May 2005 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Hawkfish	35	35	\$95	\$ 2.74
Tilapia	154	154	\$231	\$ 1.50
Wrasse	337	270	\$1,045	\$ 3.88
Parrotfish	4,028	3,863	\$1,643 \$11,641	\$ 3.00
	6,080	5,265	\$11,041 \$7,618	\$ 1.45
Surgeon/tangs Filefish	216	216	\$7,018 \$221	\$ 1.43
	48		\$221 \$0	
Other pelagic		0	•	\$ 0.00
Moonfish (opah)	66,269	66,269	\$129,983	\$ 1.96
Rainbow runner	441	441	\$445	\$ 1.01 \$ 2.97
Mahimahi (dolphin)	112,747	98,141	\$291,817	
Barracudas	9,311	9,311	\$3,553	\$ 0.38
Wahoo	111,723	97,779	\$208,653	\$ 2.13
Tunas (misc)	2,703	0	\$0	\$ 0.00
Skipjack tuna	103,709	78,162	\$75,210	\$ 0.96
Yellowfin tuna	236,730	236,730	\$602,439	\$ 2.54
Albacore	166,341	165,751	\$223,902	\$ 1.35
Bigeye tuna	548,967	493,917	\$1,872,903	\$ 3.79
Kawakawa	533	391	\$531	\$ 1.36
Other billfish	422	0	\$0	\$ 0.00
Broadbill swordfish	770,692	770,692	\$1,273,603	\$ 1.65
Blue marlin	158,819	134,010	\$65,981	\$ 0.49
Black marlin	434	222	\$147	\$ 0.66
Striped marlin	217,169	210,280	\$128,231	\$ 0.61
Shortnose spearfish	43,756	41,706	\$27,826	\$ 0.67
Sailfish	1,356	253	\$85	\$ 0.34
Spiny lobster	10	10	\$65	\$ 6.79
Crabs	153	153	\$683	\$ 4.46
Shrimp (saltwater)	19,406	30	\$270	\$ 9.00
Octopus	3,457	3,457	\$6,980	\$ 2.02
Squid	31	31	\$155	\$ 5.00
Limpets (saltwater)	792	681	\$5,075	\$ 7.45
Invertebrates	1,130	0	\$0	\$ 0.00
Algae	943	704	\$4,042	\$ 5.74
TOTAL	2,898,161	2,663,302	\$5,449,281	\$ 2.05

D.20

Table D-7 June 2005 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	156	156	\$676	\$ 4.35
Sharks	26,940	26,940	\$10,038	\$ 0.37
Eels	30	30	\$33	\$ 1.09
Bigeye scad (akule)	98,988	29,035	\$57,077	\$ 1.97
Mackerel scad	5,823	4,807	\$10,945	\$ 2.28
Leatherjacket	31	9	\$11	\$ 1.27
Ten pounder	69	41	\$47	\$ 1.13
Bonefish	566	434	\$448	\$ 1.03
Milkfish	201	135	\$170	\$ 1.26
Needlefish	62	8	\$17	\$ 2.20
Mullet	401	276	\$1,108	\$ 4.01
Pomfret	49,471	49,471	\$128,774	\$ 2.60
Oilfish	37,013	37,013	\$75,667	\$ 2.04
Jacks (misc)	59	47	\$169	\$ 3.59
Amberjack	31	4	\$2	\$ 0.50
Sasa ulua	42	42	\$68	\$ 1.63
Pig-lipped ulua	597	162	\$467	\$ 2.88
Papa ulua	298	298	\$949	\$ 3.19
White ulua	1,416	773	\$1,608	\$ 2.08
Black ulua	602	602	\$1,187	\$ 1.9
Blue trevally	909	167	\$357	\$ 2.14
Hawaiian grouper	3,724	713	\$4,842	\$ 6.79
Blue spot grouper	46	6	\$12	\$ 2.0
Snappers	153	96	\$309	\$ 3.2
Yellowtail kali	4	0	\$0	\$ 0.00
Blue lined snapper	2,957	2,957	\$3,516	\$ 1.19
Ehu (red snapper)	1,778	1,070	\$6,000	\$ 5.6
Gindai (flower snapper)	787	84	\$401	\$ 4.80
Golden kalekale	502	347	\$1,218	\$ 3.5
Lehi (silverjaw)	85	80	\$242	\$ 3.0
Onaga (red snapper)	3,252	3,095	\$22,023	\$ 7.12
Opakapaka (pink snapper)	3,252	2,465	\$14,983	\$ 6.0
Uku (gray snapper)	20,731	18,548	\$61,338	\$ 3.3
Porgy	408	408	\$1,037	\$ 2.5
Other reef fish	2	0	\$0	\$ 0.00
Reef jacks	1	1	\$4	\$ 3.5
Squirrelfish	3,053	1,436	\$4,617	\$ 3.2
Scorpionfish	180	156	\$615	\$ 3.9
Mountain bass	99	68	\$193	\$ 2.84
Bigeyes	358	273	\$574	\$ 2.10
Goatfish	1,560	1,560	\$5,262	\$ 3.3
Rudderfish	430	142	\$219	\$ 1.54
Damselfish	335	233	\$680	\$ 2.92
Hawkfish	83	83	\$202	\$ 2.44

Table D-7
June 2005 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
TP11 ! -	155	0	ΦΩ.	¢ 0 00
Tilapia	155	0	\$0 \$412	\$ 0.00
Wrasse	193	156	\$412	\$ 2.65
Parrotfish	4,974	4,683	\$14,527	\$ 3.10
Surgeon/tangs	7,706	7,351	\$10,946	\$ 1.49
Filefish	192	192	\$221	\$ 1.15
Moonfish (opah)	81,698	81,698	\$168,145	\$ 2.06
Rainbow runner	330	282	\$469	\$ 1.67
Mahimahi (dolphin)	51,958	46,008	\$186,534	\$ 4.05
Barracudas	1,629	1,550	\$1,567	\$ 1.01
Wahoo	98,012	87,700	\$251,900	\$ 2.87
Tunas (misc)	3,159	0	\$0	\$ 0.00
Skipjack tuna	163,472	154,356	\$109,063	\$ 0.71
Yellowfin tuna	278,009	278,009	\$559,175	\$ 2.01
Albacore	65,096	65,096	\$112,953	\$ 1.74
Bigeye tuna	862,421	817,416	\$2,570,503	\$ 3.14
Kawakawa	1,310	305	\$345	\$ 1.13
Other billfish	373	0	\$0	\$ 0.00
Broadbill swordfish	457,301	457,301	\$1,115,104	\$ 2.44
Blue marlin	164,876	134,232	\$94,435	\$ 0.70
Black marlin	902	751	\$618	\$ 0.82
Striped marlin	165,095	165,095	\$152,600	\$ 0.92
Shortnose spearfish	22,247	22,247	\$21,060	\$ 0.95
Sailfish	354	88	\$23	\$ 0.27
Crabs	293	293	\$1,573	\$ 5.37
Shrimp (saltwater)	26,025	0	\$0	\$ 0.00
Octopus	1,918	1,918	\$6,192	\$ 3.23
Squid	137	137	\$167	\$ 1.22
Limpets (saltwater)	362	362	\$2,059	\$ 5.69
Invertebrates	7,198	7,198	\$215,940	\$30.00
Algae	524	237	\$1,799	\$ 7.60
111540	324	231	Ψ1,177	Ψ 7.00
TOTAL	2,735,400	2,518,927	\$6,016,433	\$ 2.39

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Table D-8 July 2005 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	150	150	\$387	\$ 2.59
Sharks	21,576	21,234	\$7,057	\$ 0.33
Eels	45	45	\$45	\$ 1.00
Bigeye scad (akule)	61,970	24,256	\$49,535	\$ 2.04
Mackerel scad	9,089	7,383	\$17,663	\$ 2.39
Leatherjacket	135	135	\$176	\$ 1.31
Ten pounder	57	57	\$57	\$ 1.00
Bonefish	257	257	\$215	\$ 0.84
Milkfish	368	351	\$433	\$ 1.24
Needlefish	20	20	\$31	\$ 1.54
Mullet	681	630	\$2,320	\$ 3.68
Pomfret	35,655	34,013	\$100,780	\$ 2.96
Oilfish	27,659	27,659	\$72,341	\$ 2.62
Jacks (misc)	49	26	\$75	\$ 2.94
Amberjack	461	24	\$36	\$ 1.50
Sasa ulua	153	153	\$146	\$ 0.95
Pig-lipped ulua	1,366	1,366	\$4,562	\$ 3.34
Dobe ulua	7	7	\$26	\$ 3.70
Papa ulua	264	139	\$379	\$ 2.73
White ulua	2,368	2,368	\$4,667	\$ 1.97
Black ulua	16	16	\$35	\$ 2.20
Blue trevally	3,315	1,358	\$2,637	\$ 1.94
Hawaiian grouper	3,486	3,486	\$15,815	\$ 4.54
Blue spot grouper	36	16	\$33	\$ 2.00
Snappers	118	118	\$413	\$ 3.51
Blue lined snapper	4,253	3,320	\$3,478	\$ 1.05
Ehu (red snapper)	1,347	1,347	\$6,178	\$ 4.58
Gindai (flower snapper)	728	728	\$2,494	\$ 3.43
Golden kalekale	321	321	\$1,255	\$ 3.90
Lehi (silverjaw)	218	171	\$562	\$ 3.28
Onaga (red snapper)	1,544	1,232	\$11,939	\$ 9.70
Opakapaka (pink snapper)	2,423	2,423	\$15,503	\$ 6.40
Uku (gray snapper)	13,518	13,518	\$47,820	\$ 3.54
Snake mackerel	4	0	\$0	\$ 0.00
Porgy	173	173	\$371	\$ 2.15
Other reef fish	14	0	\$0	\$ 0.00
Squirrelfish	4,653	2,285	\$7,935	\$ 3.47
Scorpionfish	381	191	\$716	\$ 3.75
Mountain bass	182	135	\$427	\$ 3.16
Bigeyes	610	464	\$1,253	\$ 2.70
Goatfish	2,235	2,041	\$5,960 \$2,403	\$ 2.92
Rudderfish	2,196	2,196	\$2,403	\$ 1.09
Damselfish	420	178	\$508	\$ 2.85
Hawkfish	29	29	\$69	\$ 2.42

Table D-8
July 2005 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Tilapia	240	0	\$0	\$ 0.00
Wrasse	239	239	\$391	\$ 1.63
Parrotfish	2,831	2,750	\$8,174	\$ 2.97
Surgeon/tangs	11,596	11,596	\$15,441	\$ 1.33
Flounders	10	10	\$17	\$ 1.70
Filefish	86	86	\$292	\$ 3.41
Other pelagic	48	0	\$0	\$ 0.00
Moonfish (opah)	123,785	117,130	\$221,191	\$ 1.89
Rainbow runner	866	762	\$1,664	\$ 2.18
Mahimahi (dolphin)	76,552	71,821	\$286,137	\$ 3.98
Barracudas	1,922	1,915	\$2,034	\$ 1.06
Wahoo	87,080	75,893	\$241,710	\$ 3.18
Tunas (misc)	2,937	0	\$0	\$ 0.00
Skipjack tuna	110,982	101,106	\$109,071	\$ 1.08
Yellowfin tuna	277,026	277,026	\$519,620	\$ 1.88
Albacore	132,862	132,862	\$145,746	\$ 1.10
Bigeye tuna	1,218,173	1,145,842	\$3,315,337	\$ 2.89
Kawakawa	586	384	\$495	\$ 1.29
Other billfish	880	0	\$0	\$ 0.00
Broadbill swordfish	150,478	147,659	\$356,077	\$ 2.41
Blue marlin	126,519	104,864	\$124,647	\$ 1.19
Black marlin	642	239	\$277	\$ 1.16
Striped marlin	54,238	54,238	\$97,887	\$ 1.80
Shortnose spearfish	16,700	15,391	\$25,198	\$ 1.64
Sailfish	566	216	\$264	\$ 1.22
Crabs	165	165	\$988	\$ 6.00
Shrimp (saltwater)	14,082	0	\$0	\$ 0.00
Octopus	3,191	3,191	\$10,212	\$ 3.20
Squid	162	162	\$375	\$ 2.32
Limpets (saltwater)	484	484	\$5,153	\$10.64
Invertebrates	34	34	\$101	\$ 3.00
Algae	771	731	\$3,324	\$ 4.55
TOTAL	2,621,277	2,422,811	\$5,880,554	\$ 2.43

Table D-9

August 2005 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	191	191	\$282	\$ 1.48
Sharks	38,293	23,744	\$10,985	\$ 0.46
Eels	50	50	\$50	\$ 1.00
Bigeye scad (akule)	37,309	12,059	\$26,121	\$ 2.17
Mackerel scad	16,068	11,725	\$28,176	\$ 2.40
Leatherjacket	76	35	\$43	\$ 1.23
Ten pounder	93	77	\$77	\$ 1.00
Bonefish	758	758	\$762	\$ 1.01
Milkfish	563	563	\$597	\$ 1.06
Needlefish	28	3	\$4	\$ 1.50
Threadfin	4	4	\$9	\$ 2.50
Mullet	659	659	\$2,212	\$ 3.35
Pomfret	55,705	52,594	\$129,849	\$ 2.47
Oilfish	16,721	16,721	\$49,822	\$ 2.98
Jacks (misc)	129	129	\$239	\$ 1.85
Amberjack	595	0	\$0	\$ 0.00
Sasa ulua	146	131	\$177	\$ 1.35
Pig-lipped ulua	343	266	\$717	\$ 2.69
Papa ulua	296	296	\$774	\$ 2.61
White ulua	2,300	2,300	\$4,585	\$ 1.99
Black ulua	44	9	\$16	\$ 1.75
Blue trevally	1,986	695	\$1,169	\$ 1.68
Hawaiian grouper	3,637	3,486	\$13,230	\$ 3.79
Blue spot grouper	44	10	\$20	\$ 2.00
Snappers	257	245	\$904	\$ 3.70
Yellowtail kali	14	0	\$0	\$ 0.00
Blue lined snapper	4,453	4,186	\$4,548	\$ 1.09
Ehu (red snapper)	2,756	2,003	\$8,900	\$ 4.44
Gindai (flower snapper)	698	619	\$2,108	\$ 3.40
Golden kalekale	596	481	\$1,592	\$ 3.31
Lehi (silverjaw)	483	483	\$1,707	\$ 3.53
Onaga (red snapper)	3,718	3,566	\$25,402	\$ 7.12
Opakapaka (pink snapper)	4,740	4,478	\$25,464	\$ 5.69
Uku (gray snapper)	20,973	20,376	\$64,816	\$ 3.18
Porgy	179	119	\$289	\$ 2.42
Other reef fish	14	0	\$0	\$ 0.00
Squirrelfish	5,187	5,187	\$18,387	\$ 3.54
Trumpetfish	7	0	\$0	\$ 0.00
Scorpionfish	346	297	\$1,289	\$ 4.34
Mountain bass	228	97	\$283	\$ 2.92
Bigeyes	617	539	\$1,433	\$ 2.66
Goatfish	5,346	4,214	\$12,619	\$ 2.99
Rudderfish	8,326	8,326	\$7,900	\$ 0.95
Damselfish	323	203	\$534	\$ 2.63

Table D-9
August 2005 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Hawkfish	120	120	\$307	\$ 2.56
Tilapia	421	0	\$0	\$ 0.00
Wrasse	671	630	\$2,305	\$ 3.66
Parrotfish	4,602	4,565	\$13,467	\$ 2.95
Surgeon/tangs	13,861	12,365	\$16,613	\$ 1.34
Flounders	20	20	\$25	\$ 1.24
Filefish	110	21	\$28	\$ 1.33
Moonfish (opah)	190,150	190,150	\$218,922	\$ 1.15
Rainbow runner	1,101	1,101	\$1,608	\$ 1.46
Mahimahi (dolphin)	91,491	90,391	\$295,142	\$ 3.27
Barracudas	5,889	5,889	\$2,674	\$ 0.45
Wahoo	75,207	66,730	\$210,567	\$ 3.16
Tunas (misc)	2,831	289	\$392	\$ 1.36
Skipjack tuna	165,644	155,184	\$264,160	\$ 1.70
Yellowfin tuna	275,598	275,598	\$730,394	\$ 2.65
Albacore	190,901	190,901	\$199,193	\$ 1.04
Bigeye tuna	900,887	866,476	\$3,153,289	\$ 3.64
Kawakawa	1,402	439	\$479	\$ 1.09
Other billfish	1,893	166	\$133	\$ 0.80
Broadbill swordfish	80,449	80,449	\$176,454	\$ 2.19
Blue marlin	111,343	107,043	\$127,626	\$ 1.19
Black marlin	313	90	\$105	\$ 1.16
Striped marlin	41,885	39,347	\$71,675	\$ 1.82
Shortnose spearfish	18,789	18,789	\$29,680	\$ 1.58
Sailfish	1,474	424	\$718	\$ 1.69
Crabs	2,356	471	\$2,075	\$ 4.41
Shrimp (saltwater)	16,473	24	\$216	\$ 9.00
Octopus	2,926	2,613	\$8,450	\$ 3.23
Squid	346	346	\$605	\$ 1.75
Limpets (saltwater)	462	462	\$4,144	\$ 8.96
Invertebrates	5	5	\$14	\$ 3.00
Algae	897	897	\$4,065	\$ 4.53
TOTAL	2,435,814	2,293,920	\$5,983,615	\$ 2.61

Table D-10 September 2005 Reported Commercial Landings

•	-		O	
Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	101	35	\$72	\$ 2.06
Sharks	27,528	22,308	\$12,877	\$ 0.58
Eels	14	14	\$15	\$ 1.09
Bigeye scad (akule)	10,049	8,253	\$19,381	\$ 2.35
Mackerel scad	27,139	17,251	\$42,358	\$ 2.46
Leatherjacket	22	22	\$29	\$ 1.31
Ten pounder	54	42	\$43	\$ 1.02
Bonefish	145	143	\$166	\$ 1.16
Milkfish	296	296	\$330	\$ 1.12
Needlefish	52	31	\$63	\$ 2.03
Threadfin	45	41	\$250	\$ 6.15
Mullet	1,350	1,344	\$4,798	\$ 3.57
Pomfret	65,007	55,244	\$116,950	\$ 2.12
Oilfish	14,853	14,354	\$43,084	\$ 3.00
Jacks (misc)	46	8	\$35	\$ 4.38
Amberjack	122	52	\$26	\$ 0.50
Sasa ulua	171	171	\$320	\$ 1.88
Pig-lipped ulua	1,411	821	\$2,412	\$ 2.94
Papa ulua	137	137	\$481	\$ 3.52
White ulua	545	403	\$796	\$ 1.97
Black ulua	121	10	\$20	\$ 2.00
Blue trevally	556	147	\$319	\$ 2.17
Hawaiian grouper	5,017	5,017	\$21,032	\$ 4.19
Blue spot grouper	22	8	\$17	\$ 2.01
Snappers	185	185	\$566	\$ 3.05
Yellowtail kali	1	0	\$0	\$ 0.00
Blue lined snapper	2,987	2,553	\$3,020	\$ 1.18
Ehu (red snapper)	1,929	1,929	\$8,082	\$ 4.19
Gindai (flower snapper)	803	803	\$2,698	\$ 3.36
Golden kalekale	298	298	\$1,344	\$ 4.51
Lehi (silverjaw)	290	290	\$913	\$ 3.15
Onaga (red snapper)	4,156	3,011	\$21,791	\$ 7.24
Opakapaka (pink snapper)	2,664	2,378	\$13,803	\$ 5.81
Uku (gray snapper)	12,160	9,646	\$29,654	\$ 3.07
Porgy	136	68	\$117	\$ 1.72
Reef jacks	2	2	\$7	\$ 3.50
Squirrelfish	2,826	2,826	\$9,918	\$ 3.51
Trumpetfish	2	2	\$2	\$ 1.00
Scorpionfish	141	134	\$557	\$ 4.15
Mountain bass	355	176	\$636	\$ 3.60
Bigeyes	372	248	\$647	\$ 2.61
Goatfish	1,455	1,377	\$4,674	\$ 3.39
Rudderfish	503	298	\$321	\$ 1.08
Damselfish	216	64	\$154	\$ 2.41

D.27

Table D-10
September 2005 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Hawkfish	33	33	\$75	\$ 2.30
Tilapia	540	50	\$100	\$ 2.00
Wrasse	291	230	\$786	\$ 3.43
Parrotfish	2,781	2,014	\$5,986	\$ 2.97
Surgeon/tangs	9,967	6,538	\$9,308	\$ 1.42
Flounders	12	12	\$19	\$ 1.60
Filefish	19	19	\$37	\$ 1.92
Moonfish (opah)	166,621	163,978	\$185,465	\$ 1.13
Rainbow runner	577	425	\$662	\$ 1.56
Mahimahi (dolphin)	85,008	72,827	\$263,421	\$ 3.62
Barracudas	1,110	1,110	\$930	\$ 0.84
Wahoo	45,909	40,053	\$147,623	\$ 3.69
Tunas (misc)	3,164	533	\$6,433	\$12.07
Skipjack tuna	147,936	147,936	\$196,938	\$ 1.33
Yellowfin tuna	217,674	217,674	\$573,675	\$ 2.64
Albacore	69,928	69,928	\$110,702	\$ 1.58
Bigeye tuna	953,159	880,379	\$3,300,604	\$ 3.75
Kawakawa	449	51	\$62	\$ 1.21
Other billfish	255	0	\$0	\$ 0.00
Broadbill swordfish	10,673	9,367	\$28,993	\$ 3.10
Blue marlin	96,163	86,241	\$119,115	\$ 1.38
Black marlin	546	188	\$203	\$ 1.08
Striped marlin	31,671	31,671	\$64,820	\$ 2.05
Shortnose spearfish	16,011	14,973	\$24,417	\$ 1.63
Sailfish	1,249	889	\$1,548	\$ 1.74
Spiny lobster	1,976	1,727	\$20,075	\$11.63
Slipper lobster	10	0	\$0	\$ 0.00
Crabs	4,215	890	\$3,694	\$ 4.15
Shrimp (saltwater)	8,649	0	\$0	\$ 0.00
Octopus	2,096	1,577	\$5,179	\$ 3.28
Squid	387	387	\$708	\$ 1.83
Limpets (saltwater)	330	157	\$1,534	\$ 9.75
Algae	554	554	\$2,530	\$ 4.57
TOTAL	2,066,241	1,904,846	\$5,440,416	\$ 2.86

D.28

Table D-11 October 2005 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	237	237	\$136	\$ 0.57
Sharks	49,752	16,687	\$6,954	\$ 0.42
Eels	150	150	\$169	\$ 1.13
Bigeye scad (akule)	8,334	8,334	\$11,603	\$ 1.39
Mackerel scad	42,291	23,773	\$55,777	\$ 2.35
Leatherjacket	81	11	\$12	\$ 1.14
Ten pounder	12	12	\$12	\$ 1.00
Bonefish	607	524	\$532	\$ 1.02
Milkfish	19	19	\$19	\$ 1.00
Needlefish	144	73	\$110	\$ 1.51
Threadfin	80	55	\$233	\$ 4.24
Mullet	520	520	\$1,601	\$ 3.08
Pomfret	67,960	67,960	\$134,050	\$ 1.97
Oilfish	21,233	21,233	\$50,523	\$ 2.38
Jacks (misc)	55	33	\$38	\$ 1.14
Amberjack	147	22	\$11	\$ 0.50
Sasa ulua	367	176	\$410	\$ 2.34
Pig-lipped ulua	1,466	1,466	\$4,380	\$ 2.99
Papa ulua	201	137	\$468	\$ 3.41
White ulua	771	636	\$1,066	\$ 1.68
Black ulua	58	58	\$128	\$ 2.20
Blue trevally	378	187	\$368	\$ 1.97
Hawaiian grouper	3,873	3,164	\$11,537	\$ 3.65
Blue spot grouper	72	59	\$138	\$ 2.34
Snappers	288	197	\$658	\$ 3.34
Yellowtail kali	8	0	\$0	\$ 0.00
Blue lined snapper	3,707	3,707	\$4,924	\$ 1.33
Ehu (red snapper)	1,440	1,124	\$5,547	\$ 4.94
Gindai (flower snapper)	636	575	\$1,664	\$ 2.89
Golden kalekale	465	353	\$1,375	\$ 3.90
Lehi (silverjaw)	206	186	\$740	\$ 3.98
Onaga (red snapper)	7,211	4,976	\$37,674	\$ 7.57
Opakapaka (pink snapper)	3,038	3,038	\$17,298	\$ 5.69
Uku (gray snapper)	11,889	11,889	\$38,573	\$ 3.24
Porgy	233	233	\$744	\$ 3.20
Other reef fish	21	3	\$10	\$ 3.00
Squirrelfish	2,858	2,858	\$10,202	\$ 3.57
Scorpionfish	192	115	\$502	\$ 4.38
Mountain bass	155	150	\$653	\$ 4.36
Bigeyes	360	294	\$894	\$ 3.05
Goatfish	1,524	1,524	\$5,655	\$ 3.71
Rudderfish	236	236	\$273	\$ 1.16
Damselfish	84	84	\$156	\$ 1.85
Hawkfish	37	37	\$97	\$ 2.64

Table D-11 October 2005 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Wrasse	565	565	\$1,427	\$ 2.52
Parrotfish	2,697	2,135	\$6,336	\$ 2.97
Surgeon/tangs	8,022	8,022	\$11,266	\$ 1.40
Flounders	24	24	\$24	\$ 1.00
Filefish	37	37	\$204	\$ 5.55
Pufferfish	5	0	\$0	\$ 0.00
Other pelagic	96	0	\$0	\$ 0.00
Moonfish (opah)	119,054	119,054	\$186,655	\$ 1.57
Rainbow runner	283	236	\$420	\$ 1.78
Mahimahi (dolphin)	149,474	130,980	\$313,192	\$ 2.39
Barracudas	294	163	\$272	\$ 1.67
Wahoo	34,605	32,287	\$113,188	\$ 3.51
Tunas (misc)	7,659	7,659	\$22,485	\$ 2.94
Skipjack tuna	62,735	55,218	\$79,871	\$ 1.45
Yellowfin tuna	190,258	184,357	\$412,136	\$ 2.24
Albacore	33,135	33,135	\$60,001	\$ 1.81
Bigeye tuna	1,192,628	1,167,314	\$3,692,371	\$ 3.16
Kawakawa	351	134	\$210	\$ 1.57
Other billfish	1,662	0	\$0	\$ 0.00
Broadbill swordfish	9,526	8,175	\$23,150	\$ 2.83
Blue marlin	75,393	69,500	\$97,968	\$ 1.41
Black marlin	432	137	\$217	\$ 1.58
Striped marlin	57,032	57,032	\$102,004	\$ 1.79
Shortnose spearfish	27,726	21,851	\$28,814	\$ 1.32
Sailfish	5,470	2,676	\$2,691	\$ 1.01
Spiny lobster	1,374	1,019	\$10,756	\$10.55
Slipper lobster	38	4	\$29	\$ 8.00
Crabs	3,390	677	\$2,631	\$ 3.89
Shrimp (saltwater)	31	0	\$0	\$ 0.00
Octopus	2,671	1,774	\$5,753	\$ 3.24
Squid	130	23	\$70	\$ 3.00
Limpets (saltwater)	303	303	\$4,434	\$14.63
Invertebrates	32	32	\$286	\$ 8.93
Algae	869	631	\$3,835	\$ 6.08
TOTAL	2,221,389	2,082,253	\$5,590,607	\$ 2.68

D.30

Table D-12 November 2005 Reported Commercial Landings

	-		9		
Species	Caught	Sold	Value	Price/Lb.	
Miscellaneous	124	124	\$61	\$ 0.49	
Sharks	61,657	24,156	\$5,147	\$ 0.21	
Rays	26	0	\$0	\$ 0.00	
Eels	6	6	\$8	\$ 1.30	
Bigeye scad (akule)	40,178	11,874	\$27,589	\$ 2.32	
Mackerel scad	48,050	31,714	\$67,630	\$ 2.13	
Leatherjacket	42	30	\$40	\$ 1.36	
Ten pounder	49	44	\$50	\$ 1.13	
Bonefish	289	51	\$56	\$ 1.11	
Milkfish	270	235	\$296	\$ 1.26	
Needlefish	88	11	\$24	\$ 2.14	
Threadfin	138	82	\$512	\$ 6.22	
Mullet	1,724	1,724	\$6,096	\$ 3.54	
Pomfret	48,356	44,356	\$106,255	\$ 2.40	
Oilfish	21,104	20,654	\$48,446	\$ 2.35	
Jacks (misc)	154	86	\$190	\$ 2.22	
Amberjack	718	24	\$29	\$ 1.21	
Sasa ulua	178	34	\$96	\$ 2.80	
Pig-lipped ulua	697	697	\$1,916	\$ 2.75	
Papa ulua	971	513	\$1,619	\$ 3.16	
White ulua	741	736	\$1,647	\$ 2.24	
Black ulua	125	81	\$162	\$ 1.99	
Blue trevally	170	29	\$73	\$ 2.54	
Hawaiian grouper	3,964	3,421	\$17,415	\$ 5.09	
Blue spot grouper	22	12	\$42	\$ 3.50	
Snappers	183	183	\$176	\$ 0.96	
Blue lined snapper	4,503	4,079	\$5,213	\$ 1.28	
Ehu (red snapper)	3,199	1,966	\$11,061	\$ 5.63	
Gindai (flower snapper)	637	503	\$2,037	\$ 4.05	
Golden kalekale	867	695	\$2,531	\$ 3.64	
Lehi (silverjaw)	659	658	\$2,388	\$ 3.63	
Onaga (red snapper)	13,016	8,563	\$59,705	\$ 6.97	
Opakapaka (pink snapper)	12,856	11,320	\$66,262	\$ 5.85	
Uku (gray snapper)	8,991	7,178	\$24,200	\$ 3.37	
Porgy	108	108	\$187	\$ 1.73	
Other reef fish	3	0	\$0	\$ 0.00	
Reef jacks	1	1	\$3	\$ 3.00	
Squirrelfish	3,496	3,496	\$13,026	\$ 3.73	
Trumpetfish	1	1	\$2	\$ 1.50	
Scorpionfish	257	173	\$860	\$ 4.96	
Mountain bass	102	47	\$231	\$ 4.87	
Bigeyes	394	394	\$1,366	\$ 3.47	
Goatfish	4,949	3,821	\$10,618	\$ 2.78	
Rudderfish	4,157	4,080	\$4,158	\$ 1.02	

Table D-12 November 2005 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Damselfish	92	92	\$246	\$ 2.69
Hawkfish	18	15	\$35	\$ 2.35
Tilapia	548	548	\$742	\$ 1.35
Wrasse	447	307	\$1,789	\$ 5.83
Parrotfish	2,421	2,216	\$6,655	\$ 3.00
Surgeon/tangs	5,901	5,901	\$9,375	\$ 1.59
Flounders	10	4	\$4	\$ 1.00
Filefish	8	8	\$14	\$ 1.66
Moonfish (opah)	96,563	95,482	\$191,492	\$ 2.01
Rainbow runner	520	300	\$424	\$ 1.41
Mahimahi (dolphin)	222,515	181,016	\$351,464	\$ 1.94
Barracudas	1,356	1,230	\$1,400	\$ 1.14
Wahoo	37,579	32,545	\$115,024	\$ 3.53
Tunas (misc)	1,348	240	\$668	\$ 2.78
Skipjack tuna	47,619	32,995	\$52,136	\$ 1.58
Yellowfin tuna	242,603	233,762	\$502,251	\$ 2.15
Albacore	10,216	10,216	\$23,101	\$ 2.26
Bigeye tuna	1,204,920	1,073,435	\$3,497,490	\$ 3.26
Kawakawa	749	343	\$590	\$ 1.72
Other billfish	720	149	\$186	\$ 1.25
Broadbill swordfish	53,568	53,014	\$128,431	\$ 2.42
Blue marlin	69,033	54,656	\$75,263	\$ 1.38
Black marlin	139	139	\$161	\$ 1.16
Striped marlin	69,936	69,936	\$118,953	\$ 1.70
Shortnose spearfish	34,190	25,750	\$27,139	\$ 1.05
Sailfish	3,354	1,171	\$1,331	\$ 1.14
Spiny lobster	1,385	1,193	\$13,612	\$11.41
Crabs	4,450	620	\$2,158	\$ 3.48
Shrimp (saltwater)	11,973	0	\$0	\$ 0.00
Octopus	1,809	1,333	\$4,340	\$ 3.26
Squid	282	282	\$432	\$ 1.53
Limpets (saltwater)	375	375	\$3,161	\$ 8.43
Algae	832	389	\$2,072	\$ 5.33
TOTAL	2,415,697	2,067,620	\$5,621,562	\$ 2.72

D.32

Table D-13
December 2005 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	247	247	\$435	\$ 1.76
Sharks	47,835	23,167	\$3,761	\$ 0.16
Eels	18	4	\$6	\$ 1.50
Bigeye scad (akule)	61,897	14,112	\$30,479	\$ 2.16
Mackerel scad	36,863	22,353	\$45,519	\$ 2.04
Leatherjacket	15	15	\$19	\$ 1.28
Ten pounder	59	59	\$59	\$ 1.00
Bonefish	100	100	\$113	\$ 1.13
Milkfish	190	190	\$357	\$ 1.88
Needlefish	40	0	\$0	\$ 0.00
Threadfin	65	65	\$362	\$ 5.60
Mullet	11	1	\$3	\$ 2.00
Pomfret	39,198	36,571	\$93,582	\$ 2.56
Oilfish	37,462	37,462	\$56,481	\$ 1.51
Jacks (misc)	163	13	\$25	\$ 1.96
Amberjack	2,836	40	\$36	\$ 0.90
Sasa ulua	28	25	\$30	\$ 1.20
Pig-lipped ulua	1,332	1,214	\$2,222	\$ 1.83
Dobe ulua	20	20	\$41	\$ 2.00
Papa ulua	1,401	609	\$1,928	\$ 3.16
White ulua	1,070	617	\$1,212	\$ 1.96
Black ulua	361	361	\$507	\$ 1.40
Blue trevally	167	155	\$227	\$ 1.47
Hawaiian grouper	7,110	7,110	\$32,057	\$ 4.51
Blue spot grouper	31	0	\$0	\$ 0.00
Snappers	193	193	\$653	\$ 3.37
Yellowtail kali	9	0	\$0	\$ 0.00
Blue lined snapper	8,011	8,011	\$9,207	\$ 1.15
Ehu (red snapper)	9,016	7,095	\$29,403	\$ 4.14
Gindai (flower snapper)	802	580	\$2,005	\$ 3.40
Golden kalekale	2,423	1,656	\$5,509	\$ 3.33
Lehi (silverjaw)	1,864	1,540	\$4,505	\$ 2.92
Onaga (red snapper)	28,562	23,673	\$156,704	\$ 6.62
Opakapaka (pink snapper)	22,690	16,399	\$92,763	\$ 5.60
Uku (gray snapper)	11,370	11,370	\$35,071	\$ 3.08
Porgy	96	96	\$102	\$ 1.00
Other reef fish	6	0	\$0	\$ 0.00
Reef jacks	2	2	<b>\$7</b>	\$ 3.50
Squirrelfish	2,979	2,918	\$10,661	\$ 3.65
Trumpetfish	17	15	\$20	\$ 1.38
Scorpionfish	675	478	\$2,182	\$ 4.50
Mountain bass	109	109	\$414	\$ 3.79
Bigeyes	485	485	\$1,490	\$ 3.07
Goatfish	4,676	3,816	\$10,468	\$ 2.74

Table D-13
December 2005 Reported Commercial Landings (Cont.)

D.33

Species	Caught	Sold	Value	Price/Lb.
Rudderfish	194	193	\$221	\$ 1.14
Damselfish	357	131	\$343	\$ 2.61
Hawkfish	24	24	\$59	\$ 2.46
Tilapia	150	150	\$263	\$ 1.75
Wrasse	370	313	\$1,789	\$ 5.71
Parrotfish	1,717	1,537	\$4,524	\$ 2.94
Surgeon/tangs	6,839	5,369	\$8,095	\$ 1.51
Flounders	5	5	\$10	\$ 2.00
Filefish	23	23	\$41	\$ 1.75
Other pelagic	144	0	\$0	\$ 0.00
Moonfish (opah)	65,550	65,550	\$139,724	\$ 2.13
Rainbow runner	449	119	\$167	\$ 1.41
Mahimahi (dolphin)	199,350	176,894	\$275,649	\$ 1.56
Barracudas	956	392	\$393	\$ 1.00
Wahoo	53,236	49,402	\$137,646	\$ 2.79
Tunas (misc)	920	5	\$8	\$ 1.50
Skipjack tuna	45,977	33,428	\$46,464	\$ 1.39
Yellowfin tuna	281,917	273,016	\$572,153	\$ 2.10
Albacore	46,086	46,086	\$84,856	\$ 1.84
Bigeye tuna	1,297,334	1,297,334	\$4,628,165	\$ 3.57
Kawakawa	761	187	\$472	\$ 2.52
Other billfish	501	0	\$0	\$ 0.00
Broadbill swordfish	138,955	138,955	\$326,729	\$ 2.35
Blue marlin	44,807	28,733	\$38,733	\$ 1.35
Black marlin	141	141	\$328	\$ 2.32
Striped marlin	98,080	98,080	\$179,666	\$ 1.83
Shortnose spearfish	44,324	43,864	\$33,737	\$ 0.77
Sailfish	1,117	288	\$297	\$ 1.03
Spiny lobster	1,411	1,303	\$14,795	\$11.35
Slipper lobster	2	2	\$19	\$ 8.00
Crabs	5,714	1,998	\$7,967	\$ 3.99
Shrimp (saltwater)	10,080	0	\$0	\$ 0.00
Octopus	1,442	1,069	\$3,349	\$ 3.13
Squid	68	58	\$111	\$ 1.93
Limpets (saltwater)	376	376	\$4,009	\$10.65
Invertebrates	800	0	\$0	\$ 0.00
Algae	610	610	\$4,304	\$ 7.06
TOTAL	2,683,288	2,488,581	\$7,145,708	\$ 2.87

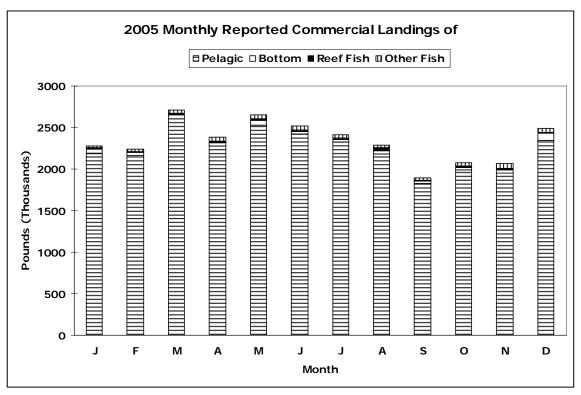


Figure D-1-1

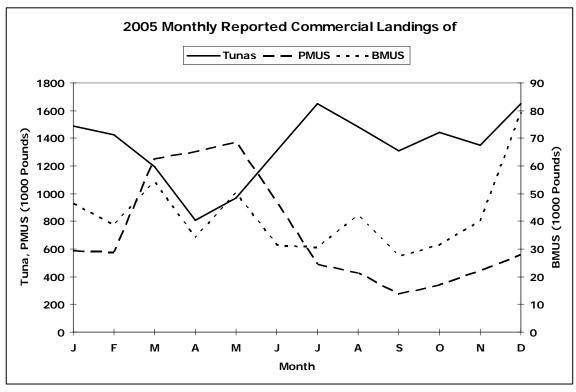


Figure D-1-2

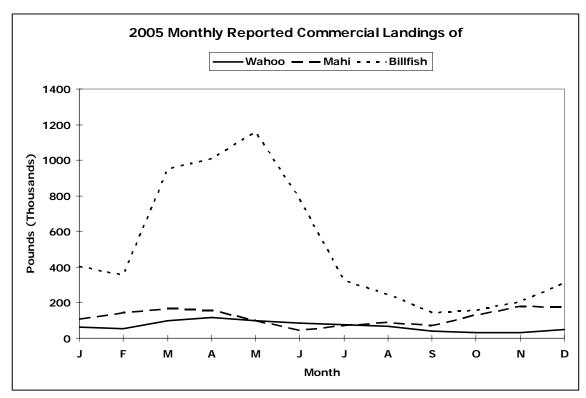


Figure D-1-3

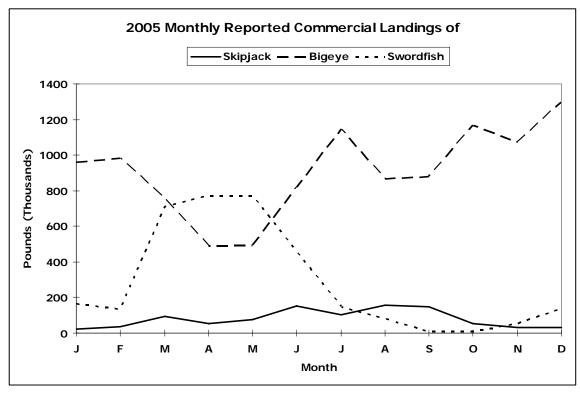


Figure D-1-4

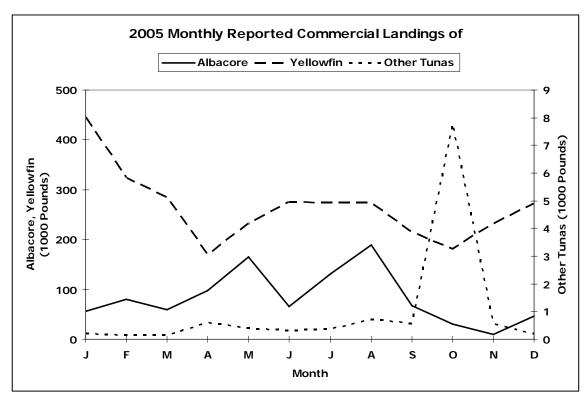


Figure D-1-5

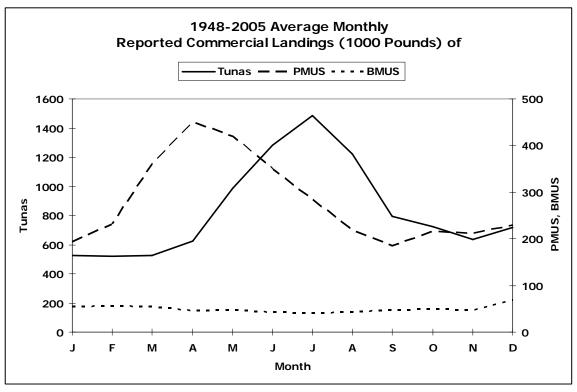


Figure D-2-1

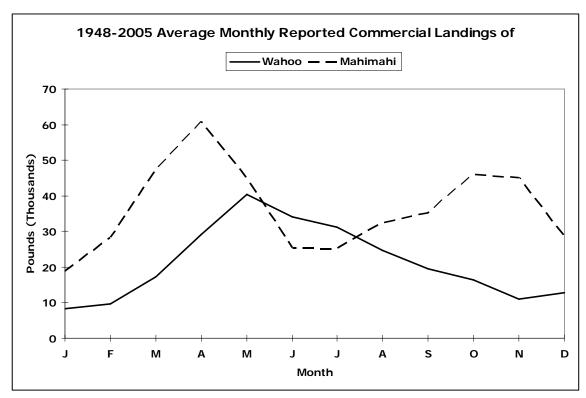


Figure D-2-2

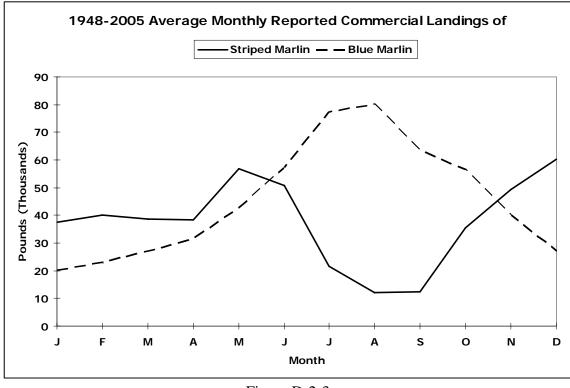


Figure D-2-3

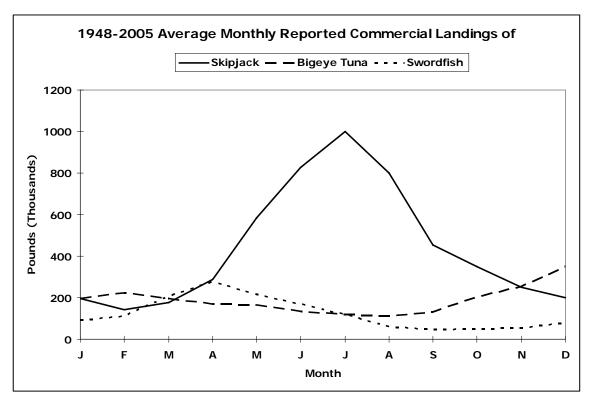


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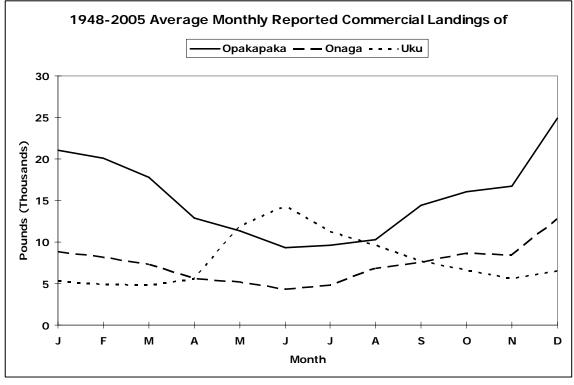


Figure D-2-5

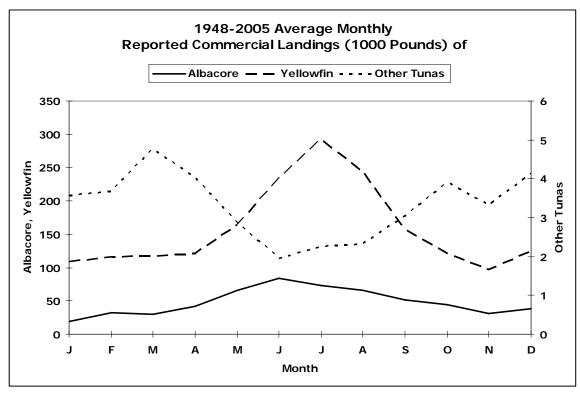


Figure D-2-6

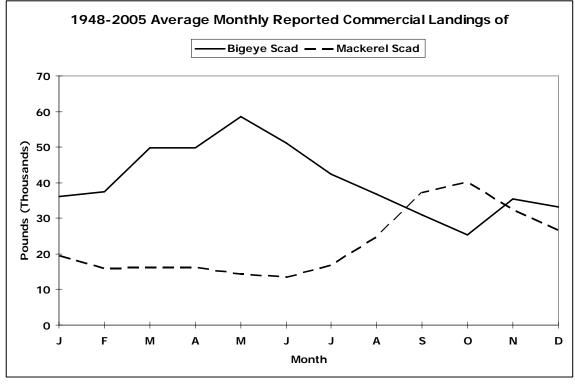


Figure D-2-7

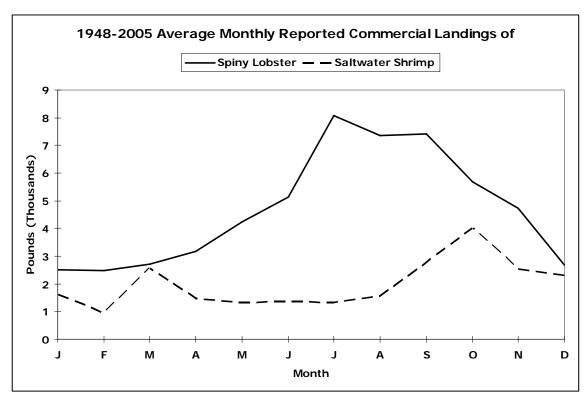


Figure D-2-8

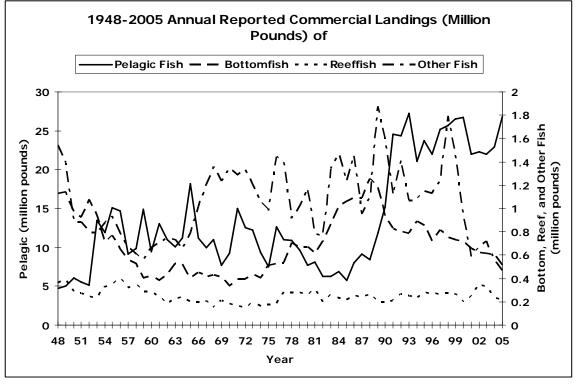


Figure D-3-1

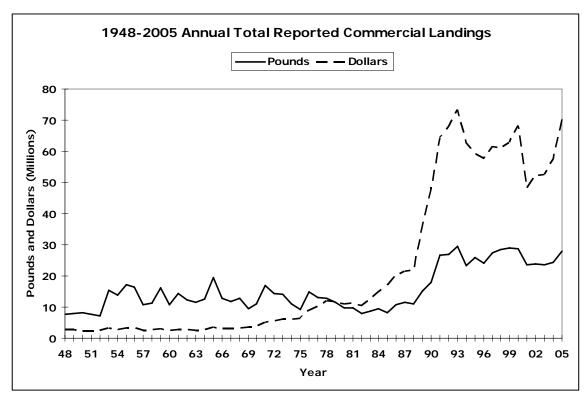


Figure D-3-2

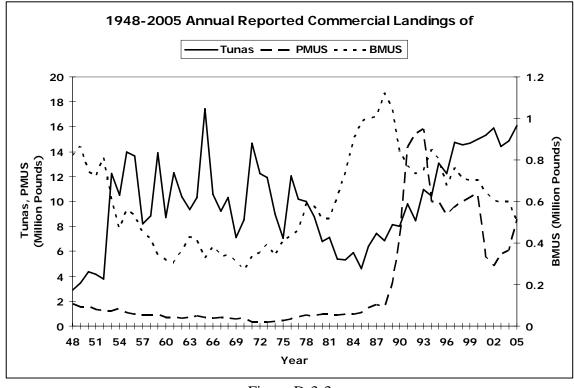


Figure D-3-3

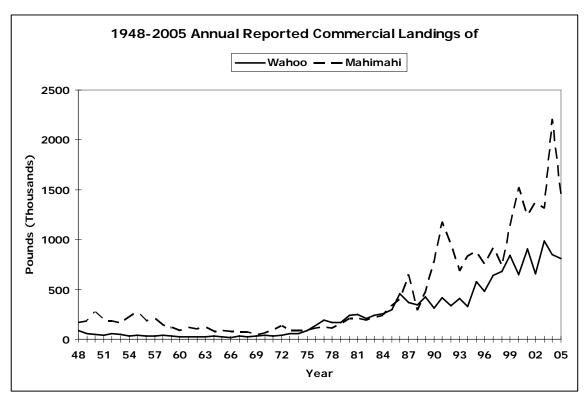


Figure D-3-4

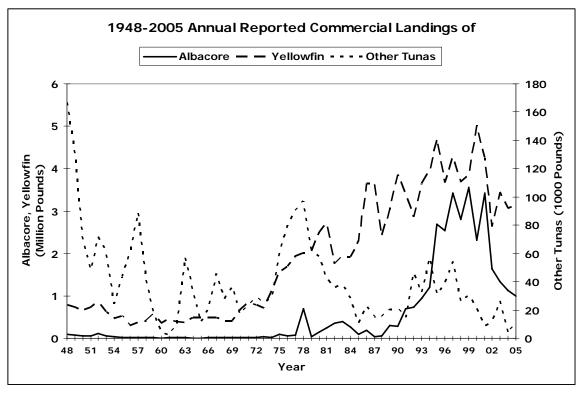


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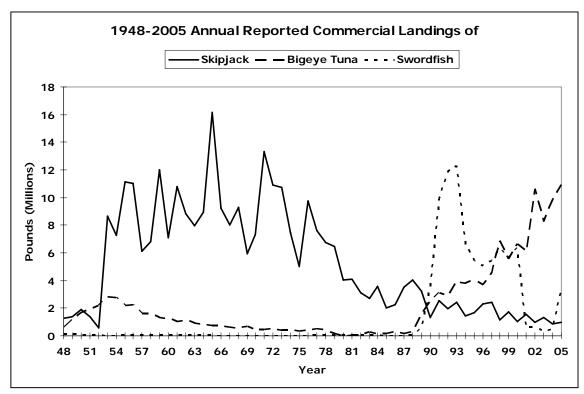


Figure D-3-6

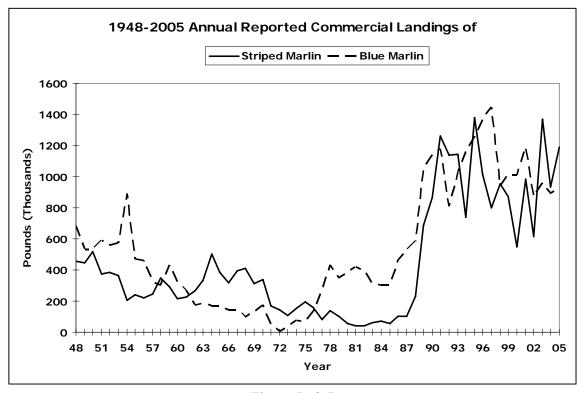


Figure D-3-7

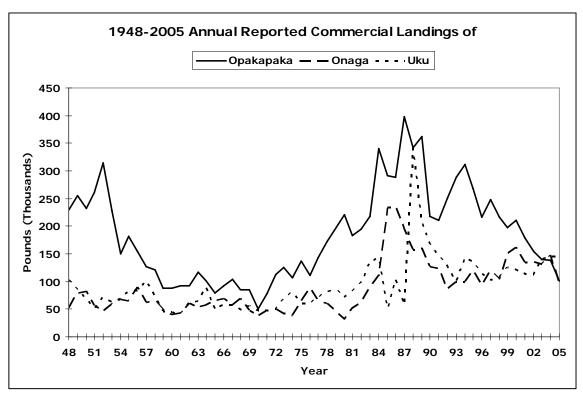


Figure D-3-8

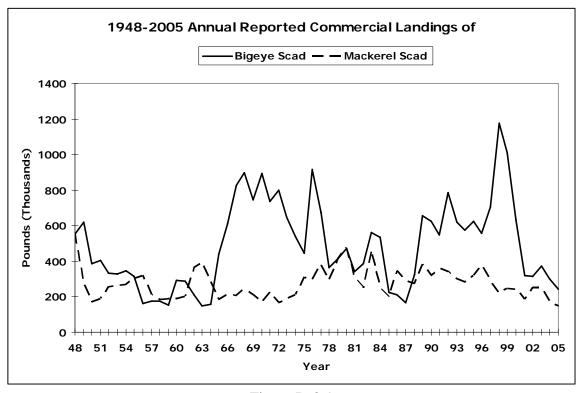


Figure D-3-9

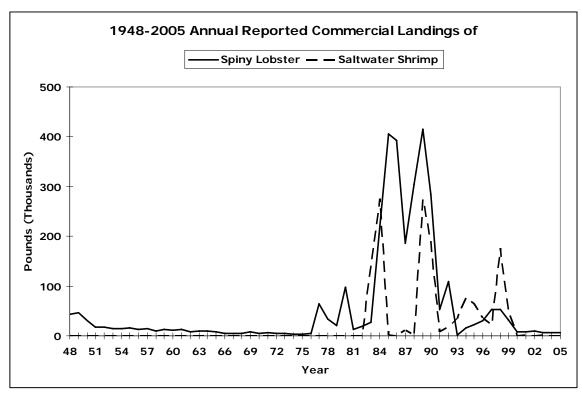


Figure D-3-10

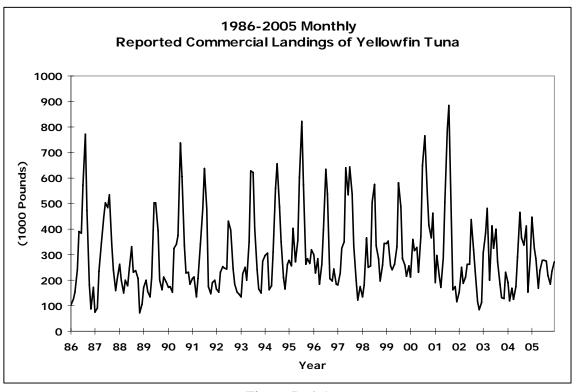


Figure D-4-1

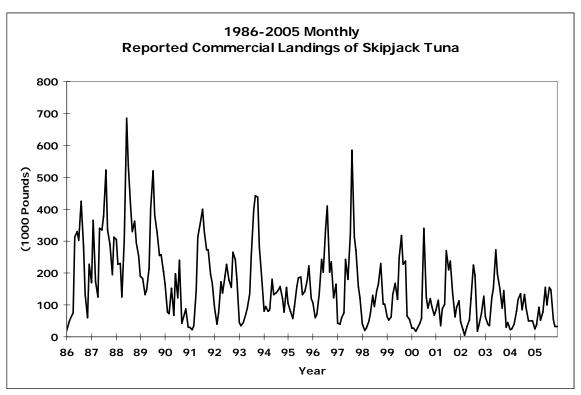


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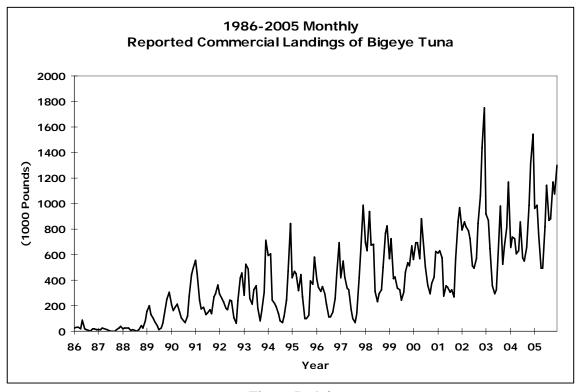


Figure D-4-3

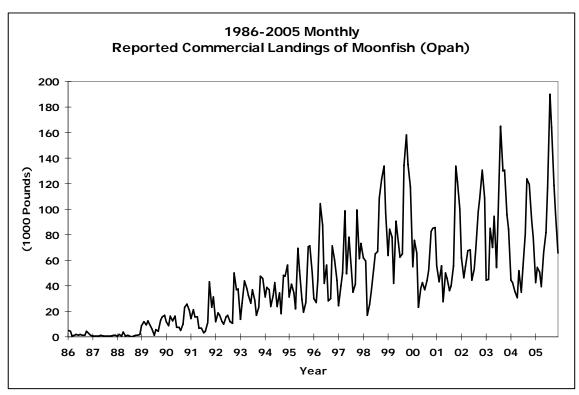


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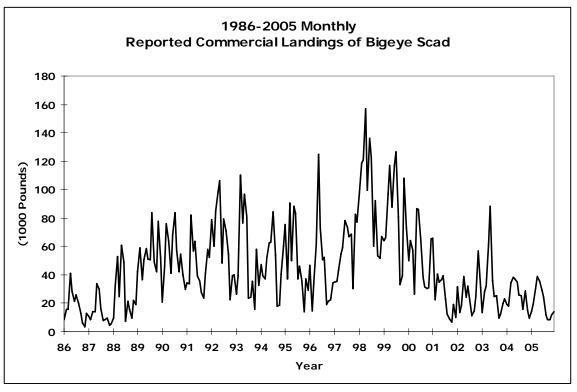


Figure D-4-5

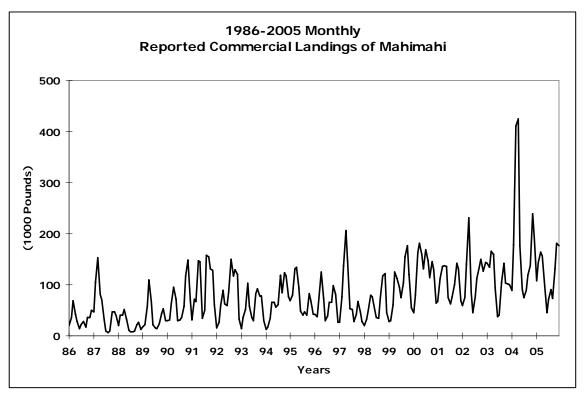


Figure D-4-6

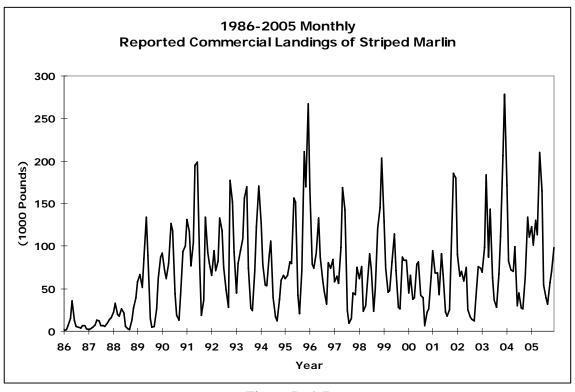


Figure D-4-7

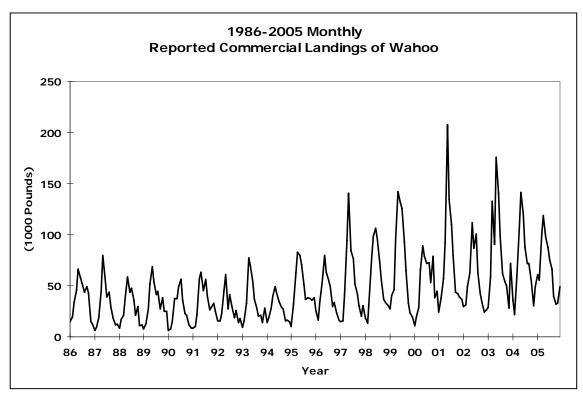


Figure D-4-8

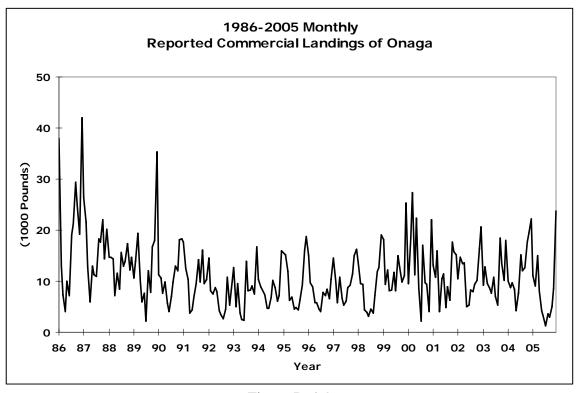


Figure D-4-9

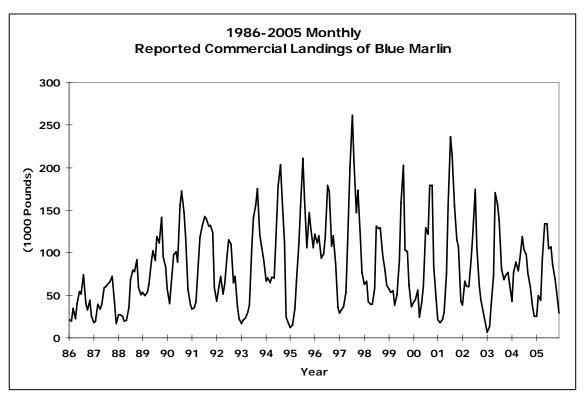


Figure D-4-10

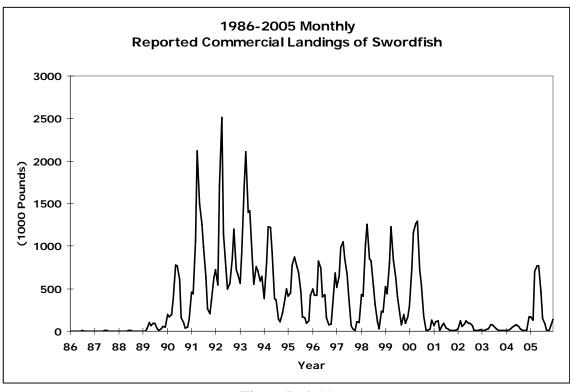


Figure D-4-11

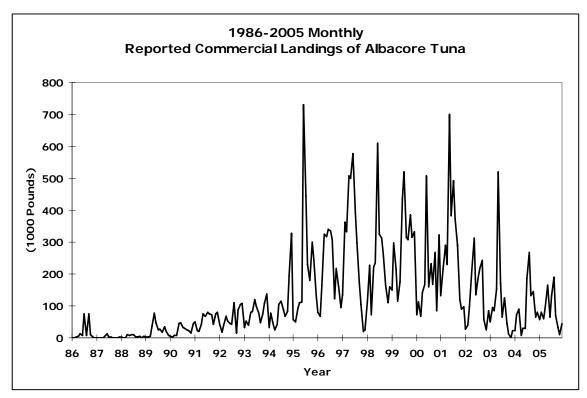


Figure D-4-12

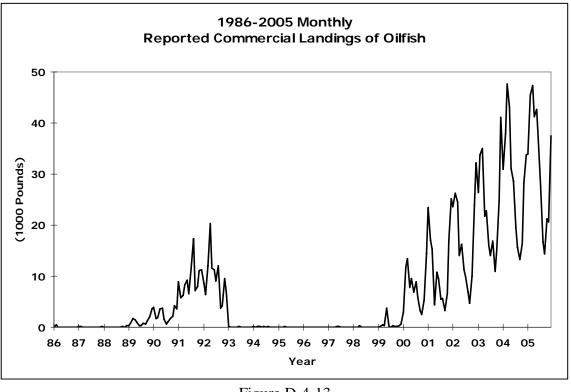


Figure D-4-13

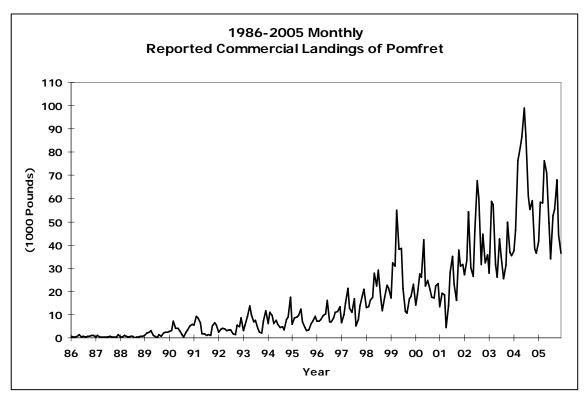


Figure D-4-14