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# Puerto Rico/NMFS Cooperative Fisheries Statistics Program
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by

Daniel Matos-Caraballo
Principal Investigator
DNER Fisheries Research Laboratory

Approved by

Aida Rosario
Director
DNER Fisheries Research Laboratory

Submitted by

Honorable Javier Velez-Arocho
Secretary
DNER

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## SUMMARY

The Fisheries Research Laboratory (FRL) of the Puerto Rico Department of Natural and Environmental Resources (DNER) monitors the commercial landings of fish and shellfish in Puerto Rico. The Commercial Fisheries Statistics Program (CFSP) was implemented in 1967 under the Commercial Fisheries Research and Development Act of 1964 (PL 88-309) to collect data on the commercial fishery. Currently, this project is funded by the NOAA/National Marine Fisheries Service (NMFS) through the State/Federal Cooperative Fisheries Program, Interjurisdictional Fisheries Programs and DNER. The Puerto Rico/NMFS State Federal Cooperative Fisheries Statistics proposal (CSP) NA04NMF4340063 started in April 1st 2004 and finished in March 31st, 2007. Through this was funded Job 1, Collection of Puerto Rico's commercial landings data, for the period of April 2004- March 2007. This job includes the following objectives: commercial fisheries landings reports, collection of biostatistics data, data entry of collected data into computer format and estimate catch per unit effort. All the objectives for the project were reached.

A total of 1.86 millions pounds were reported in 2004, 1.57 million pounds in 2005, and 1.34 million pounds for 2006. For the period of January to March 2007, 385,234 pounds were reported, although data entry process continues and this amount would increase, when the whole calendar year is tabulated. A correction factor was estimated for non reported landings. The estimated correction factor for 2004 has been estimated as of 61%, for a total of 3.06 million pounds were landed in Puerto Rico. In 2005, the correction factor was 50% and a total of 3.1 millions pounds landed. In 2006, the correction factor was 52% and total of 2.6 millions pounds were landed.

Biostatistics data of fish and lobster were collected. Biostatistics data were obtained for a total of 15,603 organisms during 2004-06. All data were entered in computers and sent to NOAA/Southeast Fisheries Science Center, at Miami, FL. The CPUE for landings and biostatistics data were estimated and are presented in this report.



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# INTRODUCTION

The objective of the Puerto Rico/NMFS State Federal Cooperative Fisheries Statistics Program (CSP) is to maintain reporting services on the commercial finfish and shellfish resources of Puerto Rico, as well as manage and disseminate the fisheries statistics through coordination of activities between NMFS and the Commercial Fishery Statistics Program (CFSP) of the Department of Natural and Environmental Resources (DNER). This includes the processing and summary of monthly landings (by species or species group, weight, value, numbers of trips, hours fishing, gear type, etc.), which is need to manage marine resources effectively. Close cooperation in these activities will avoid duplication and promote efficiency of operations.

This report includes data from January 2004 - March 2007. Raw data form, have been submitted by e-mail to Joshua Bennett, and Steve Turner, Technical Monitor of the Research Management Division, NOAA/NMFS Southeast Fisheries Science Center, Miami, Florida.

The Puerto Rico/NMFS CSP has seven principal goals:

1. Collect landing data from the island of Puerto Rico ensuring coverage of all coastal municipalities and their major fishing centers.
2. Determine the total weight of principal finfish and shellfish landed in Puerto Rico each month.
3. Determine the ex-vessel value of principal finfish and shellfish species landed in Puerto Rico each month.
4. Manage, correct, evaluate, summarize data and prepare semiannual and annual performance reports.
5. Collect biostatistics data (i.e. individual lengths and weight, species composition) as needed.
6. Collect data to estimate catch per unit effort (CPUE) for landing and biostatistics data.
7. Disseminate data thru the NOAA/NMFS/Fisheries Information Network.

# PROCEDURES

Job 1. Collection of Commercial Fisheries Statistics Data

## *Commercial Fishery Landings Data*

Commercial fishery landing data were collected from fishers, fish buyers and fishing associations from around Puerto Rico. Commercial fishery statistics has be submitted to

DNER/CFSP as a compulsory requirement of Law Number 278 of November 29, 1998 and the PR Fishing Regulations of March 11, 2004. Four port agents and the principal investigator visited the 88 identified fishing centers at the 42 coastal municipalities including the islands of Vieques and Culebra, (Figure 1). The data collection covered from January 1, 2004 to March 31st 2006. Data were collected using a landing trip ticket system (Figure 2) on a monthly basis during along the project duration. Started in 2003, the Trip Ticket System (only one trip reported by one ticket) was established by the CFSP. Efforts were made to collect the following data: fishing date; name of fish buyer, fisherman and/or helper (to avoid data duplication); fishing license number; municipality; fishing center (municipality landing area); number of trips; gear type; fishing effort (hours spent fishing); weight in pounds by species or taxonomic family; market value to the fisherman (price in U.S. dollars/pound); maximum and minimum fishing depth; and fishing area. Trip tickets were completed using species common names and identification was possible by using an amended version of the bilingual technical report "Common Names of Fishes in Puerto Rico" (Erdman, 1987). A numerical system of species identification was developed to correspond with species codes used in Erdman's publication. Species reported not included in the mentioned publication are added and numbered by CFSP's principal investigator. Fishers usually landed fishes in the round (not eviscerated), except the deepwater snapper and large grouper that they usually landed gilled and gutted. Lobster, oyster and octopus were also landed in the round, and conch weights included meat only. Land crab statistics were reported in number of dozens with each dozen assumed to produce 1 lb. of meat. Some landings were reported as one of four classes of fish (first, second, third and "trash" fish) reflecting their market value: "trash" fish are perceived to have little or no market value. Classification varied somewhat by region but the following descriptions were used to characterize each class broadly: first class fish included large snappers, grouper, grunt, trunkfish and hogfish; second class included small snapper and grouper, parrotfish, goatfish, and triggerfish; third class included smaller individuals of second class fish and large squirrelfish. The "trashfish" category included butterflyfish, angelfish, surgeonfish, small squirrelfish and small fishes of a large number of species (Matos-Caraballo and Sadovy, 1990).

Catch per unit of effort (CPUE) was evaluated in two ways: 1) for landings data by calculation of total pounds per trip; 2) use of the biostatistics sampling program (explained in biostatistics procedures).

Landings data were entered in MS-DOS computers, using Microsoft FoxPro and DBASE III+, checked against the original landing trip tickets; corrected and analyzed using, Microsoft FoxPro and Microsoft Excel. All data presented in this report are raw data. As in previous years (1988-2004) a correction factor was used in calculations to correct for under-reporting. During 2002-04, the correction factor was determined sending port samplers to most active fishing centers per coast, five days in a row (when possible). The port samplers collect data of all landings occurred during those five days visits. Later the principal investigator compared the landings data obtained by port samplers with data submitted by commercial fishers. This process is repeated two times per year, the difference between both data permitted to estimate the under reported data. For 2004 the correction factor was 61%, for 2005 was 50% and for 2006, it was estimated as 52%. Historical correction factors methods and results are shown in previous CFSP publications and reports as Matos-Caraballo and Sadovy (1990; 1991) and Matos-Caraballo

(1992; 1993; 1995, 1998, 2001A; 2001B 2004A;2004B).

## *Commercial Fisheries Biostatistics Data*

Biostatistics data from finfish and spiny lobster were collected by port agents three days per week and principal investigator helped three days per month. Each individual was identified by species to determine catch composition. Finfishes were measured in fork length (FL) and spiny lobster in carapace length (CL), both in millimeters (mm), and weighed in grams. Data were recorded on the field and copied in the biostatistics data sheets using the format shown in Figure 3. The form was designed to facilitate entry and processing of effort data. Biostatistics data were entered in Trip Interview Program (TIP) developed by NOAA/NMFS Southeast Science Center. Later, the data stored in TIP was converted to .dbf format and analyzed using Microsoft FoxPro and Microsoft Excel. The data collected include date, name of fisherman, fishing area, depth, gear, species, length, weight and effort by gear type. When possible, the whole catch was identified at species level, weight in grams (g), identified by sex visual gonad stage and fork length measured in millimeters (mm). When measuring the whole catch was not possible (incomplete sample), port agents tried to identify the species level, and tried to sample at least 50 randomly selected individuals measured and weighed. However, sometimes fishers or fish buyers did not allow the port agents to sample 50 individuals and/or the landing includes less than 50 individuals and fish buyers remove the landing before data was collected. Thus, some incomplete samples resulted in $n < 50$. Biostatistics CPUE data was handled as follows: catch is total capture expressed in pounds. Effort is expressed by gear:

a) net categories are measured as "fathom/hour".
b) trap categories are measured as "trap/day".
c) hook categories are measured as "hook/hours".
d) diving categories are presented as "man/hours".

## Other Data Users

Although the Puerto Rico's DNER use the project fishery data, other institution used the mentioned data to do biological and socioeconomic research. Some of the mentioned institutions were the University of Puerto Rico (UPR), Mayaguez Campus (Marine Sciences Department and Biology Department), Humacao Campus and Río Piedras Campus. Data was also used by UPR Sea Grant College Program, NOAA/NMFS Caribbean Fisheries Management Council, NOAA Fisheries SEDAR, NOAA/NMFS Fisheries Information Network, P.R. Department of Agriculture (Agro-Statistics Division, Fisheries Development Program and Mayaguez Regional Office), Puerto Rico's Legislature, Puerto Rico's Planner Board, Government Developing Bank, Promoting Cooperative Administration, NOAA/NMFS SEFSC, Florida Fish and Wildlife Conservation Commission, Food and Agriculture Organization of the United Nations. Fishery data was also requested by three local newspapers (The San Juan Star, Primera Hora and El Nuevo Día) and T.V. news of Telemundo Channel 2, WIPR Channel 6 to provide information to

the general public. Elementary, secondary school level students, and college (Metropolitan University, Interamerican University, Rhode Island University, North Carolina University, Miami University RSMAS) students requested fishery statistics data. Commercial fishing associations and fishers for personal affairs also used fishery statistics data. Private institutions use the statistics data, for example; Estudios Técnicos, ASC Group, Plasmath Corporation.

***A very important note - Historical event that affected the commercial fisheries landings reported in Puerto Rico during 2004-07.***

In March 12, 2004, Honorable Luis E. Rodríguez Rivera, DNER Secretary, offered a conference press to announce the establishment of Puerto Rico Fishing Regulation Number 6768. This document includes many important regulations to protect and improve the Puerto Rico's over fished resources. Closed seasons, permits for species of high value in the fisheries and size limits were establish to manage the fishery resources. On the other hand, under the previous Puerto Rico' Fishing Law, dated in May 1936, very few regulations were developed and implemented. The new fishing regulations were a drastic change to all that fishers were used to making them very angry. The commercial fisher leaders decided that a protest to DNER was in order. Under the former fishing law they were not required to submit their catch data being a cooperation with the Statistic Program. Therefore, they were used to make pressure stopping their cooperation of supplying the commercial trip tickets landings data. Thus many fishers the instructions from their leaders and stopped the submission of the trip tickets to the CFSP/DNER. Although the regulations were developed to conserve the fishery resources and keep the commercial fishery most fishers felt that the regulations were to eliminate the commercial fishery. Many fishers also were hostile to the port samplers and principal investigator. Many fishers that were very friendly to CFSP personnel before the Fishing Regulation 6768, stopped the cooperation with the biostatistics data collection. The DNER started educational meetings around Puerto Rico to explained them need of the regulations and the importance of the trip ticket information. It was also explained to them that they were affecting their status as fishing license holder, since by law to maintain their license they are required to submit their catch information to DNER. These meetings help commercial fishers to understand the true meaning of the regulations and they started to comply with the Fishing Regulations.

Two other events occurred in Puerto Rico that affects the landings fishery program. During the spring of 2005, in approximately 4-5 weeks the cost of the gasoline increased from $1.40/gallon to a record of $3.20/gallon. Over 90% of fishers use gasoline motor in their fishing vessels, thus this price increase reduce the frequency of trips and increase the fishing time. The last event that affected the commercial fishery occurred in October 1$^{st}$, 2006, when the Puerto Rico's government implemented the tax sales. Although the fishers were exempt from the state tax sale they have to report monthly the municipality sales tax. After the occurrence of this third event, the CFSP personnel observed that many part time commercial fishers retired from fisheries and some of them have become illegal fishers (no license, no sale tax, no reports to DNER).

Although these three mentioned events affected the fishery and the CFSP, port samplers and the principal investigator were able to collect biostatistics data and many fisher associations

and fish stores keep submitting the trip ticket landings data.

# RESULTS

## Commercial Landings Data

A total of 1.86 millions pounds were reported in 2004, 1.57 million pounds in 2005, and 1.34 millions in 2006 (Table 1A, 1B and 1C). During January-March, 2007, a total of 190,821 pounds were reported, although data entry process continues and this number of pounds would increase. A total catch for calendar year 2007 corresponds to a different project period, and therefore will be reported with the corresponding report. A correction factor was estimate for the non reported landings. The correction factor for 2004 was estimated as 61%, a total of 3.06 millions of pounds were estimated being landed in Puerto Rico applying this factor. In 2005, the correction factor was 50% and a total of 3.1 millions pounds landed. In 2006 the correction factor was 52%, for a total of 2.6 million pounds landed. During January-March, 385,234 pounds were reported, although data entry process continues and this number of pounds would increase.

A total of 32,639, trip tickets were collected during 2004; 27,404 during 2005, 23,607 during 2006; and 5,653 during January – March 2007 (Table 2). Landings were principally comprised by six species of shellfish and 43 categories of species, or families of finfish (Figure 2), although a total of 76 finfish groups and/or species and 10 shellfish species were reported by fishers (Table 3). The most important fish, in terms of percentage of total pounds landed (fish and shellfish), for 2004-07, were the yellowtail snapper (*Ocyurus chrysurus*) 7.5%; queen snapper (*Etelis oculatus*) 7.1%; silk snapper (mainly *Lutjanus vivanus* ) 6.6%; lane snapper (*Lutjanus synagris*); 5.8%, various species of tuna 5.2%; white grunt (mainly *Haemulon plumieri*), 4.1%; dolphinfish (*Coryphaena hippurus*) 3.5%; king mackerel (*Scomberomorus cavalla*) 2.9%; various species of parrotfish 2.4%; various species of trunkfish 2.9%; red hinds (*Epinephelus guttatus*) reported 2.0%; and cero (*Scomberomorus regalis*) 1.5%; and (Table 1A, 1B and 1C). The most important of the shellfish species were the queen conch (*Strombus gigas*) 11.8% and the spiny lobster (*Panulirus argus*) 11.6% of the reported landings, and (Table 1A, 1B and 1C).

Matos-Caraballo (1998; 2001A; 2001B; 2004A; 2004B) mentioned that several fish and shellfish species, usually discarded by fishers in the past, have now become commercial species. These species did not have market value years ago, but are now sold at reasonable prices. The Table 1A, 1B and 1C shows that the squirrelfish (e.g. *Holocentrus ascensionis* and *H. rufus*) were sold in 2004-06 at an average price of $1.33 per pound. Shellfish species in the same situation are *Carpilius corallinus* and *Mythrax spp* (Table 3). On the other hand, *Acanthurus spp*, *Holocanthus ciliaris*, *Pomacanthus. arcuatus*, and *P. paru* are fished in the municipality island of Vieques, to be sold in the market of Saint Thomas and Saint Croix, USVI.

During 2004-06, prices varied markedly by species (Tables 1A, 1B and 1C) and

municipality (Table 4). For example, the lowest average price per pound for fish and shellfish was obtained on the east coast, in the municipality of Yabucoa at $1.23 during 2004 (Table 4), and the highest average price was obtained in the North Coast, in the municipality of Luquillo at $5.40, however only 43 pounds were reported (Table 4). The highest fish price value during 2004-06, was the deep water snappers silk snapper and queen snapper, $3.46 and $3.42 per pound in 2006, respectively (Table 4). The most valued shellfish during 2004-06, were the land crab $11.2 per pound during 2004 (Table 1A), and the spiny lobsters, $6.07 per pound during 2006 (Table 1C). However, port sampler observed that the land crab landings reported were too low for number of pounds and the price. The port samplers mentioned that land crab fishers are mostly opportunistic, did not have permit, thus they did not report to CFSP. The price of land crab was observed to $30.00-$40.00 per dozen (approximately one pound of meat). The most productive of the 42 municipalities during 2004-06, was Cabo Rojo accounting for 25.2% of the total landings, by weight (Table 4). The west coast reported 51.1% of the total weight, was the most productive, followed by the south coast that reported 25.1%, east coast with 16.5% and north coast with 7.3% (Tables 1A, 1B and 1C).

The gear types (as defined in Matos and Torres, 1989), which accounted for the highest percentage of landing, by weight during 2004-06, were lines (hand line, troll line, long line and rod and line together) taking 43.9.0% (2,097,080 pounds) of the total catch (Table 5A, 5B and 5C). Lines were followed by divers (skin and SCUBA) caught 24.8% (1,181,641 pounds), followed by traps (fish trap and lobster trap) with 18.6% (888,156 pounds) from the total catch. Traps were followed by nets 12.7% (608,468 pounds) of the total reported catch (Table 5A, 5B and 5C).

Landings reported during 2004-06, by species and by month are in Tables 6A, 6B and 6C. Some species were reported in greater quantities in some months of the year. The dolphinfish were caught mostly during January to April (Table 6A, 6B and 6C), which corresponds to the months when they migrate close to Puerto Rico. The tunas (Scombridae) were caught in greater quantities during May –September, reflecting their migration. The yellowtail snappers were caught in greater quantities during the 12 months, showing picks for January-April and August-September (Tables 6A, 6B and 6C). Fishing activity was affected during the hurricane season, especially during August and September. In August and September 2004-06, many hurricanes and storms passed close to Puerto Rico, affecting the whole coastal areas with surge wave action, winds and rain that produced flooded areas. These conditions resulted in a decrease in commercial fishing effort.

Fishing trips are generally of half-day duration. The CPUE average for landings/trip during 2004-06, was reported in Table 7A, 7B, 7C. In 2004, the average CPUE was 62.23 pounds per trip (Tables 7A). In 2005, the average CPUE was 61.06 pounds per trip (Table 7B) and for 2006, was 59.04 pounds per trip (Table 7C). The months of February, March and April have higher average CPUE landings per trip (Table 7A, 7B and 7C), probably due to the religious season of the Lent, this tradition involve an increase in human fish consumption. Table 7D shows the CPUE average landings per trip by coast during the 2004-06. The results show that east coast obtained the highest CPUE during this period.

## Commercial Biostatistics Data

A total of 54,685 individuals were measured during 2004-06. A total of 5,752 spiny lobsters and 48,928 were finfish (Tables 8A, 8B and 8C). Approximately 2,500 finfish and 400 lobsters were measured during January-March 2007. Most of the mentioned individuals were weighed. Sex determination of fishes in the field has been difficult due to several factors such as the reluctance of fishers to allow this activity, the general limitation in available time for measuring samples, and the difficulties in assessing any but the ripest individuals, for sex. Tables 8A, 8B and 8C, lists and ranks all individuals species and lobster, by measures and shows average length. The species most frequently measured from 2004-06 were *Ocyurus chrysurus*, *Haemulon plumieri*, *Lutjanus vivanus*, *L. synagris*, *Etelis oculatus*, *Sparisoma viride*, *Panulirus argus*, *Sparisoma chrysopterum, Epinephelus guttatus, Scomberomorus cavalla* and *Lutjanus synagris* (Tables 8A,8B, and 8C).

Biostatistics effort data is shown in Table 9. The CPUE gear efforts were analyzed only when n >= 10. SCUBA divers, troll lines and bottom lines were the most effective gears during 2004-06 (Table 9).

# DISCUSSION

## Commercial Landings Data

Commercial landings reported data have been around two millions pounds from 1987-94 (Matos-Caraballo, in press a). Throughout 1997-2000, it was observed that fishers cooperated more with the Statistics Program, resulting an 3.8, 3.5 and 3.3 millions pounds reported. One possible reason to explain the increased landings would be the increases of 500 more active commercial fishers that cooperated with FSP during 1987-94 (Matos-Caraballo, 1996; 2004A). Also, the increase in participation occurred because the PRDNER and the Puerto Rico Department of Agriculture provided economical help to fishers who regularly cooperated with the FSP (Matos-Caraballo, 2004A). When we compare the landings reported in late 70's and early 80's (around 5 million-7 million pounds), with the reported landings of 1987-96, an indication of over fishing is observed. During 2001-02 it was observed that 86% of the active commercial fishers cooperated with the CFSP. This resulted in over 3 millions pounds reported. However, in 2003, a drastic reduction in landings reported to 2.38 millions of pounds. Two reasons were observed that explain this reduction. First, the fishers cooperation decreased from 2001-02 of 86% to 56% in 2003 (Matos-Caraballo, 2004A). The mentioned reduction occurred because the CFSP required a trip ticket system and many fishers prefers to report the whole month in a single trip ticket. Many did not report for the mentioned reason. However, many fishers that initially resisted the change at the end of the 2003 started to cooperate with CFSP. Second, since 1996 to 2002, commercial fishery had a reduction of approximately 600 active commercial fishers (Matos-Caraballo, et. al., 2005). Due to limited fishery resources many commercial fishers change to work on construction, agriculture or migrate to work in the continental USA (Matos-Caraballo, et. al., 2005).

During 2004-06, the reported a decreased in landings of 1.8-1.3 millions pounds. The Puerto Rico's Fishing Regulation 6768 was implemented in March 12th, 2004, affected significantly the cooperation of the commercial fishers. The commercial fisher's leaders ordered fishers to stop report to the DNER/CFSP. The result was that 61% of the landings were reported in 2004, 50% in 2005 and 52% in 2006. Figure 4 shows the landings reported historically since 1971-2006 and Figure 5 shows the estimated landings using the correction factor for the same period. Both figures showed a decrease since 2001-2006. The decrease observed occurred probably due to two factors. First, the over fished resources might be responsible for a reduction of 600 commercial fishers during 1996-2002 (Matos-Caraballo, 2005). Second, the Fishing Regulation 6768, order close seasons for mutton snapper, red hind and established minimum size limits to silk snapper and other important commercial species, resulting in more commercial fishers out of fishery and reduce the number of pounds landed. If the regulations will be enforced it is expected a significant improve in the Puerto Rico fishery stocks in the future.

Landings reported by species for 2004-2006, showed that snappers, grunts, groupers, tunas, parrotfishes, mackerels, dolphinfish and trunkfishes were the most reported groups by weight in the commercial fisheries. This CFSP has been successful to educate commercial fishers to report by species the group of deep water snappers that in previous reports in which four species were reported as silk snapper. In previous reports it was mentioned that 90% of the silk snapper landed were juveniles (below 420mm FL). The Fishing Regulation 6768 established a minimum legal size for silk snapper of 420 mm FL, due to this regulation many commercial fishers stopped to catch this species. This fact explains why the queen snapper was the deep water snapper most landed in pounds during 2004 and 2005. On the other hand, the fishers asked the DNER's Secretary to eliminate the silk snapper minimum size of 420mm FL for a closed season during October-December. The DNER Secretary accepted the recommendation and is in effect since April 2007.

Snappers (Lutjanidae) is the main fish category in pounds landed and price per pound caught in Puerto Rico's in the commercial fishery during 2001-2004. The lobster and queen conch were the most important shellfish in pounds landed and price per pound. CFSP personnel observed a reduction in landing spiny lobster under the legal size of 3.5 inches carapace length. SCUBA divers reported to CFSP that they were diving at 60-120 feet to catch queen conch. The shallow water population of this specie has been over exploited. DNER has a close season for queen conch (July 1st- September 30th) and a quota (150 queen conch per fisher or 450 queen conch per vessel per day). The Caribbean Fishery Management Council close the queen conch fishery in federal waters in 2006.

CFSP personnel observed that all closed season (queen conch, land crab, red hind and mutton snapper) should be enforced more frequently because many fishers continue to catch close season species.

The fish market of Saint Croix and Saint Thomas USVI, purchase the Vieques landings of *Acanthurus spp, Holocanthus ciliaris, Pomacanthus. arcuatus, Pomacanthus paru* and many juvenile reef fish species. The mentioned species are subject to severe fishing pressure. Thus,

the CFSP must continue to monitor the exploitation of these resources.

Since 1968-99, the municipality of Cabo Rojo and the West coast had been the most productive municipality and coast respectively (Weiler and Suárez-Caabro, 1980; Collazo and Calderón, 1988; Matos-Caraballo and Sadovy, 1990 and 1991; Matos-Caraballo, 1993; 1998, 2001 A;2001B). In 2000, the south coast reported 268,923 more pounds than the west coast. This result can be associated with the silk snapper fishery and the over fished resources of the west coast. During 2001-03, west coast reported 31.0% and south coast reported 30.6% (Matos-Caraballo, 2004A). During 2004-06, the west coast and Cabo Rojo returned to be the most productive municipality and coast. The CFSP personnel observed that Cabo Rojo and the municipalities of the west coast have more full time fishers that produce more fish trips than other coasts.

Various storms and hurricanes passed close to Puerto Rico during August and September 2004-06. The mentioned storms caused ocean surge action affecting negatively the fishing activity. However thanks to the good Lord, no hurricane has impacted directly Puerto Rico since 1998, thus the negative factor has not be as with Hurricane Georges (Matos-Caraballo, 2004A; 2004B).

Traps caught 22.4% of the total catch during 1997-99 (Matos-Caraballo, 2001A; 2001B). During 2000, traps catches reported 19.6%, exceeded by lines (40.0%), nets (19.7%) and diving (20.5). During 2001-04 traps reported 22.1% (Matos-Caraballo, 2004A). During 2004-06, the fish trap accounted for only 18.6%. That means this gear landings decrease during this project. CFSP's personnel observed that no new commercial fisher enter in the fish trap fishery and most of the fish trappers are over 50 years old. Another possible explanation is the low catch of this gear and the high cost of the traps. The fishers entering the fishery are using SCUBA diving gear. However, during 1982 fish traps alone caught 71.2% of the total pounds reported (Collazo and Calderón, 1988), decreasing during the late 1980's to the 22%-25% during the last 10 years. On the other hand, an increasing trend was observed in the percentage of reported landings taken by all lines combined, when compared with year 1982, in which the percentage was 12.4% (Collazo and Calderón, 1988) to 40.0% during 2000-04 (Matos-Caraballo, 2004A). During 2004-06, the lines increased to 43.9%. The gill nets and trammel nets caught 2.7% in 1982 (Collazo and Calderón, 1988), while in 1997-99 they caught 21.9%, although decreased to 18.3 during 2001-03 (Matos-Caraballo, 2004B). During 2004-06, nets catch shown a decrease to only 12.7% of total catch. This decrease occurred for two main reasons. First, port samplers and principal investigator reported that many trammel net and gill net fishers retired from the commercial fishery, probably because the over fished resource did not produce the expected profit and the enactment of the Fishing Regulation 6768. Second, the Fishing Regulation 6768, forbidden the use of beach seine three years after the establishment of the fishing regulations (March 12$^{th}$, 2007). Diving shows a trend to increase. Principal Investigator and port agents of this project observed that approximately 90% of the new and young commercial fishers are divers. This observation resulted in the fact that diving was the third gear category most productive in landings reported during 2001-03 (Matos-Caraballo, 2004B), and increase to be the second more productive gear during 2004-06, reported 24.8%. It is expected that the percentage of divers will increase in the following years. On the other hand, many young divers are not

certified and many accidents had been reported, unfortunately some accidents were fatal.

During 2001-03, the CPUE in pounds reported by trip was steady, 71 pounds/trip in 2001, 63 in 2002 and 61 in 2003 (Matos-Caraballo, 2004A). In 1995 the annual average pounds per trip was 80. In 1996, the annual average pounds per trip were 63. In 1997, the annual average pounds per trip were 72 (Matos-Caraballo, 1998). On the other hand the result for 1998 was 54 pounds annual average pounds per trip and 53 for 1999 (Matos-Caraballo, 2004B). In 2000, the annual average pound per trip was 71. During 2004-06, the CPUE decrease from 62.23 pounds/trip in 2004, to 59.04 pounds /trip in 2006. Commercial fishers mentioned that due to the increase in gasoline cost they decrease the number of trips and increase the fishing hours to capitalize the fishing expenses. Although this fact a little decrease was observed. The CFSP will continue to monitor this trend in CPUE in the future.

## Commercial Biostatistics Data

All the biostatistics data collected in this project during 2001-04 is available in NMFS/SEFSC in Miami FL and in CFSP at Cabo Rojo Puerto Rico. The CFSP principal investigator and personnel from CFMC (Graciela-García-Moliner) and NMFS /SEFSC (Nancie Cummings), and NOAA/SEDAR personnel will study and analyzed the collected data to provide knowledge to fishery managers at NMFS and DNER. The fishery managers will take decisions that address the wisely use of the over fished resources of Puerto Rico.

## CONCLUSION

Since 1987, Puerto Rico's reported landings of fish and shellfish have continued to be in the vicinity of 2-3 million pounds. In 1979, reports of landings in Puerto Rico recorded 7,212,000 pounds of fish and shellfish. During the decade of the eighties, landings decreased consistently. During 1995-2002, reported landings were ranged between 3,617,039 to 3,895,980 pounds of fish and shellfish. In 2003, a decrease in landings reported occurred mainly due to the CFSP change to trip ticket system. The landings showed that the fishery resource has been steady during 1997-2003. During 2004-06, a decrease was observed, probably due to the decrease in active commercial fishers and the enactment of the PR Fishing Regulations 6768, which established close seasons and minimum legal size for many species. The mentioned regulations and the establishment of the sales tax resulted in the retirement of many active commercial fishers. On the other hand, if the fishing regulations are properly enforced, it is expected a recuperation of the over fished resources of Puerto Rico. During the 70's the traps were the most productive gear. During 2004-06, the traps were the third more productive gear with 18.61% of the total pounds reported. Lines and divers were the most productive gears during 2004-06. SCUBA diver was the fishing gear that recruits more young fishers.

The DNER needs to increase the surveillance during the closing seasons for queen conch,

red hind, mutton snapper and land crab.

After the analysis of these facts, it is concluded that during 2004-06, the Puerto Rico's fishery resources receive less fishing pressure due to the establishment of the Fishing Regulation 6768. These regulations resulted in a decrease in active commercial fishers. The CFSP will conduct a fishery census to determine the number of active commercial fishers at the present time. Also, the CFSP will continue to collect landings, biostatistics, effort data of the Puerto Rico's fishery to help DNER and NOAA to do a responsible management of the fishery resources.

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| TABLE 1A. LANDINGS REPORTED BY SPECIES AND BY COAST IN PUERTO RICO DURING 2004. | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES FISH | NORTH | | EAST | | SOUTH | | WEST | | TOTAL | |
| | POUNDS | *P/P | POUNDS | *P/P | POUNDS | *P/P | POUNDS | *P/P | POUNDS | *P/P |
| Tunas | | | | | | | | | | |
| Blackfin tuna | 530 | 1.93 | 317 | 1.73 | 216 | 1.53 | 27,940 | 1.60 | 29,003 | 1.17 |
| Little tunny | 652 | 1.81 | 25 | 2.00 | 827 | 0.94 | 11,948 | 0.90 | 13,452 | 1.03 |
| Skipjack tuna | 346 | 2.02 | 569 | 2.74 | 487 | 1.54 | 20,994 | 0.84 | 22,396 | 1.07 |
| Yellowfin tuna | 562 | 2.05 | 503 | 2.84 | 98 | 1.57 | 14,390 | 1.11 | 15,553 | 1.35 |
| Tuna category | 883 | 2.15 | 1,154 | 1.64 | 239 | 1.59 | 6,698 | 0.99 | 8,974 | 1.29 |
| Ballyhoo | 2,138 | 1.29 | 5,872 | 1.33 | 13,692 | 1.15 | 5,087 | 1.05 | 26,789 | 1.19 |
| White Grunt | 3,469 | 1.71 | 16,662 | 1.42 | 34,118 | 1.65 | 35,064 | 0.85 | 89,313 | 1.40 |
| Hogfish | 277 | 2.89 | 17,057 | 2.19 | 12,065 | 2.74 | 10,477 | 2.48 | 39,876 | 2.51 |
| Trunkfish | 471 | 2.89 | 11,580 | 1.53 | 16,200 | 1.67 | 24,076 | 2.00 | 52,327 | 1.80 |
| Dolphinfish | 10,176 | 2.66 | 2,417 | 2.38 | 12,786 | 1.96 | 50,948 | 1.47 | 76,327 | 1.71 |
| Squirrelfishes | 1,291 | 1.09 | 1,100 | 1.61 | 4,361 | 1.31 | 360 | 1.22 | 7,112 | 1.33 |
| Mullets | 7,604 | 1.25 | 1,555 | 1.43 | 10,184 | 1.19 | 7,550 | 0.92 | 26,893 | 1.15 |
| Jacks | | | | | | | | | | |
| Bar jack | 4,403 | 1.92 | 5,805 | 1.41 | 8,880 | 1.61 | 14,715 | 1.08 | 33,803 | 1.44 |
| Horse-eye jack | 701 | 1.73 | 85 | 1.92 | 126 | 1.32 | 988 | 1.05 | 1,900 | 1.43 |
| Yellow jack | 8 | 3.00 | 30 | 1.13 | 142 | 1.41 | 526 | 1.44 | 706 | 1.44 |
| Jack Category | 6,741 | 1.73 | 953 | 1.80 | 1,311 | 1.16 | 7,537 | 1.13 | 16,542 | 1.51 |
| Parrotfishes | 1,404 | 1.97 | 5,644 | 1.67 | 31,256 | 1.64 | 13,375 | 0.91 | 51,679 | 1.55 |
| Groupers | | | | | | | | | | |
| Coney | 725 | 2.12 | 1,817 | 2.08 | 2,292 | 2.09 | 3,024 | 1.84 | 7,858 | 1.99 |
| Red hind | 3,158 | 2.72 | 8,733 | 2.23 | 10,473 | 2.31 | 20,720 | 1.93 | 43,084 | 2.17 |
| Misty grouper | 138 | 3.33 | 485 | 2.02 | 299 | 2.55 | 3,864 | 2.24 | 4,786 | 2.22 |
| Nassau grouper | 313 | 1.98 | 1,539 | 2.31 | 285 | 1.52 | 2,093 | 1.51 | 4,230 | 1.85 |
| Yellowfin grouper | 66 | 2.21 | 608 | 2.04 | 81 | 2.61 | 1,433 | 1.86 | 2,188 | 2.04 |
| Grouper category | 2,264 | 2.57 | 6,262 | 2.23 | 10,034 | 2.31 | 7,377 | 1.92 | 25,937 | 2.18 |
| Mojarras | 3,435 | 1.76 | 1,004 | 1.54 | 921 | 1.53 | 1,012 | 1.05 | 6,372 | 1.55 |
| Snappers | | | | | | | | | | |
| Lane snapper | 3,954 | 2.61 | 11,690 | 2.26 | 55,174 | 2.16 | 28,371 | 2.02 | 99,189 | 2.14 |
| Yellowtail snapper | 36,374 | 2.52 | 44,235 | 2.31 | 37,542 | 2.15 | 32,475 | 1.86 | 150,626 | 2.19 |
| Silk snapper | 17,133 | 3.13 | 8,701 | 3.01 | 9,799 | 3.44 | 83,233 | 2.98 | 118,866 | 3.06 |
| Mutton snapper | 2,764 | 2.63 | 11,680 | 2.33 | 16,478 | 2.18 | 16,136 | 2.11 | 47,058 | 2.22 |
| Queen snapper | 3,490 | 3.40 | 1,359 | 2.88 | 2,855 | 3.62 | 71,840 | 3.21 | 79,544 | 3.25 |
| Vermillion snapper | 4,715 | 2.45 | 3,887 | 2.11 | 432 | 2.60 | 515 | 2.52 | 9,549 | 2.36 |
| Wenchman | 473 | 3.12 | 709 | 1.89 | 619 | 3.53 | 4,476 | 3.25 | 6,277 | 2.97 |
| Blackfin snapper | 446 | 3.33 | 697 | 3.15 | 664 | 3.49 | 1,586 | 2.68 | 3,393 | 3.12 |
| Snapper category | 3,580 | 2.75 | 4,326 | 2.35 | 11,563 | 2.24 | 10,089 | 2.39 | 29,558 | 2.43 |
| Triggerfishes | 2,309 | 2.02 | 8,790 | 1.45 | 14,009 | 1.79 | 18,002 | 1.22 | 43,110 | 1.46 |
| Barracudas | 1,352 | 1.65 | 517 | 1.66 | 3,228 | 1.59 | 2,265 | 1.18 | 7,362 | 1.50 |

| TABLE 1A. LANDINGS REPORTED BY SPECIES AND BY COAST IN PUERTO RICO DURING 2004. | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES FISH | NORTH | | EAST | | SOUTH | | WEST | | TOTAL | |
| | POUNDS | *P/P | POUNDS | *P/P | POUNDS | *P/P | POUNDS | *P/P | POUNDS | *P/P |
| Porgies | 435 | 1.61 | 4,974 | 1.58 | 9,747 | 1.69 | 2,746 | 1.33 | 17,902 | 1.58 |
| Snooks | 6,911 | 1.96 | 2,774 | 1.78 | 3,129 | 1.56 | 5,825 | 1.51 | 18,639 | 1.72 |
| Tarpon | 564 | 1.07 | 0 | 0.00 | 8 | 1.00 | 180 | 1.70 | 752 | 1.18 |
| Goatfishes | 292 | 1.82 | 3,921 | 2.04 | 3,183 | 2.04 | 868 | 1.12 | 8,264 | 1.85 |
| Sardines | 11,067 | 1.02 | 476 | 1.13 | 478 | 1.00 | 2,263 | 1.13 | 14,284 | 1.05 |
| Mackerel | 6,075 | 1.89 | 13,429 | 2.34 | 6,185 | 1.96 | 26,940 | 1.79 | 52,629 | 1.98 |
| Cero | 2,501 | 2.15 | 5,023 | 2.34 | 7,921 | 2.01 | 4,301 | 1.96 | 19,746 | 2.10 |
| Sharks | 3,397 | 1.83 | 6,130 | 1.90 | 1,732 | 1.79 | 3,826 | 1.29 | 15,085 | 1.68 |
| Wahoo | 25 | 2.00 | 447 | 3.48 | 185 | 1.78 | 3,879 | 1.59 | 4,536 | 1.77 |
| CLASSIFFIED | | | | | | | | | | |
| First Class | 33 | 2.00 | 11,711 | 2.05 | 1,922 | 2.02 | 8,289 | 2.00 | 21,955 | 2.02 |
| Second Class | 0 | 0.00 | 2,102 | 1.69 | 3,396 | 1.28 | 6,529 | 0.94 | 12,027 | 1.05 |
| Third Class | 8 | 1.00 | 8,026 | 1.15 | 215 | 1.50 | 0 | 0.00 | 8,249 | 1.15 |
| Trash | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Other fishes | 2,943 | 2.10 | 924 | 2.09 | 2,684 | 2.02 | 6,590 | 1.83 | 13,141 | 1.93 |
| Total Fishes | 162,596 | 1.90 | 248,304 | 1.60 | 364,521 | 1.56 | 633,420 | 1.43 | 1,408,841 | 1.95 |
| | | | | | | | | | | |
| SHELLFISH | | | | | | | | | | |
| Conch | 60 | 3.50 | 57,772 | 2.50 | 25,679 | 3.31 | 132,529 | 2.13 | 216,040 | 2.42 |
| Land crab | 194 | 13.80 | 884 | 15.00 | 86 | 9.43 | 237 | 2.59 | 1,401 | 11.20 |
| Lobster | 3,734 | 6.61 | 47,796 | 5.96 | 70,085 | 5.96 | 90,611 | 5.31 | 212,226 | 5.58 |
| Octopus | 608 | 2.46 | 841 | 2.87 | 16,934 | 2.59 | 1,789 | 2.09 | 20,172 | 2.52 |
| Other shellfish | 856 | 2.10 | 586 | 2.09 | 2,523 | 2.02 | 2,035 | 1.83 | 6,000 | 1.93 |
| Total Shellfish | 5,452 | 5.90 | 107,879 | 5.04 | 115,307 | 4.61 | 227,201 | 3.98 | 455,839 | 4.40 |
| **TOTAL** | 168,048 | 2.03 | 356,183 | 2.16 | 479,828 | 2.09 | 860,621 | 1.96 | 1,864,680 | 2.46 |

* P/P = Average Price Per Pound in U.S. Dollar.

| TABLE 1B. LANDINGS REPORTED BY SPECIES AND COAST IN PUERTO RICO IN 2005. | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | NORTH | | EAST | | SOUTH | | WEST | | TOTAL | |
| | Pounds | *P/P | Pounds | *P/P | Pounds | *P/P | Pounds | *P/P | Pounds | *P/P |
| FISH | | | | | | | | | | |
| Tunas | | | | | | | | | | |
| Blackfin tuna | 840 | 1.37 | 692 | 1.62 | 438 | 1.73 | 20,069 | 1.06 | 22,039 | 1.45 |
| Little tunny | 2,345 | 1.19 | 0 | 0.00 | 37 | 2.75 | 5,714 | 1.03 | 8,096 | 1.24 |
| Skipjack tuna | 456 | 1.62 | 327 | 1.96 | 246 | 2.08 | 24,820 | 0.83 | 25,849 | 1.62 |
| Yellowfin tuna | 518 | 1.91 | 517 | 1.54 | 284 | 2.07 | 19,915 | 1.11 | 21,234 | 1.66 |
| Tuna category | 927 | 2.16 | 1,554 | 1.70 | 12 | 1.50 | 3,222 | 1.15 | 5,715 | 1.63 |
| Ballyhoo | 1,312 | 1.39 | 436 | 1.55 | 6,293 | 1.10 | 9,091 | 0.60 | 17,132 | 1.16 |
| White Grunt | 1,791 | 1.76 | 13,060 | 1.58 | 21,955 | 1.68 | 16,869 | 0.94 | 53,675 | 1.49 |
| Hogfish | 155 | 3.22 | 5,506 | 2.30 | 9,359 | 2.58 | 10,871 | 2.67 | 25,891 | 2.69 |
| Trunkfish | 90 | 2.63 | 7,626 | 1.60 | 13,949 | 1.57 | 22,931 | 2.05 | 44,596 | 1.96 |
| Dolphinfish | 4,956 | 2.52 | 1,086 | 2.10 | 7,888 | 1.97 | 28,883 | 1.58 | 42,813 | 2.04 |
| Squirrelfishes | 803 | 1.07 | 1,102 | 1.69 | 3,444 | 1.35 | 534 | 0.97 | 5,883 | 1.27 |
| Mullets | 3,533 | 1.29 | 1,000 | 1.65 | 7,757 | 1.25 | 3,233 | 1.05 | 15,523 | 1.31 |
| Jacks | | | | | | | | | | |
| Bar jack | 2,894 | 1.96 | 5,201 | 1.67 | 7,951 | 1.51 | 6,598 | 1.31 | 22,644 | 1.61 |
| Horse-eye jack | 755 | 1.54 | 183 | 1.89 | 129 | 1.43 | 658 | 1.11 | 1,725 | 1.49 |
| Yellow jack | 30 | 1.75 | 28 | 2.00 | 25 | 1.72 | 444 | 1.07 | 527 | 1.64 |
| Jack Category | 1,114 | 1.77 | 2,959 | 1.72 | 906 | 1.48 | 2,734 | 1.29 | 7,713 | 1.57 |
| Parrotfishes | 1,160 | 1.86 | 3,974 | 1.80 | 15,543 | 1.68 | 10,455 | 0.94 | 31,132 | 1.57 |
| Groupers | | | | | | | | | | |
| Coney | 206 | 2.18 | 479 | 2.09 | 1,295 | 2.13 | 2,226 | 1.94 | 4,206 | 2.09 |
| Red hind | 1,766 | 2.47 | 4,102 | 2.39 | 3,957 | 2.41 | 19,235 | 1.96 | 29,060 | 2.31 |
| Misty grouper | 93 | 2.60 | 436 | 2.00 | 85 | 2.57 | 6,781 | 2.39 | 7,395 | 2.39 |
| Nassau grouper | 98 | 2.23 | 469 | 1.87 | 172 | 1.59 | 1,258 | 1.41 | 1,997 | 1.78 |
| Yellowfin grouper | 4 | 3.00 | 514 | 2.02 | 83 | 2.30 | 151 | 2.00 | 752 | 2.33 |
| Grouper category | 2,366 | 2.60 | 1,214 | 2.37 | 6,204 | 2.36 | 5,797 | 2.10 | 15,581 | 2.36 |
| Mojarras | 1,327 | 2.01 | 977 | 2.03 | 792 | 1.52 | 516 | 1.55 | 3,612 | 1.78 |
| Snappers | | | | | | | | | | |
| Lane snapper | 2,020 | 2.54 | 9,713 | 2.30 | 51,574 | 2.20 | 24,882 | 2.12 | 88,189 | 2.29 |
| Yellowtail snapper | 24,722 | 2.51 | 37,462 | 2.47 | 29,740 | 2.23 | 23,032 | 2.02 | 114,956 | 2.31 |
| Silk snapper | 11,493 | 3.16 | 9,433 | 3.76 | 6,668 | 3.62 | 82,863 | 2.93 | 110,457 | 3.37 |
| Mutton snapper | 3,214 | 2.55 | 3,480 | 2.46 | 12,038 | 2.22 | 14,737 | 2.24 | 33,469 | 2.37 |
| Queen snapper | 2,047 | 3.69 | 2,380 | 2.91 | 2,348 | 3.70 | 149,973 | 2.89 | 156,748 | 3.30 |
| Vermillion snapper | 1,886 | 2.35 | 2,942 | 1.95 | 363 | 3.29 | 654 | 2.54 | 5,845 | 2.53 |
| Wenchman | 324 | 2.98 | 436 | 1.66 | 1,151 | 3.51 | 9,462 | 2.70 | 11,373 | 2.71 |
| Blackfin snapper | 88 | 2.63 | 626 | 3.07 | 762 | 3.50 | 1,421 | 2.18 | 2,897 | 2.85 |
| Snapper category | 3,052 | 2.50 | 4,668 | 2.33 | 9,553 | 2.12 | 8,285 | 2.03 | 25,558 | 2.25 |
| Triggerfishes | 1,161 | 1.97 | 3,505 | 1.66 | 10,932 | 1.72 | 16,562 | 1.27 | 32,160 | 1.66 |
| Barracudas | 759 | 1.85 | 330 | 2.21 | 2,322 | 1.68 | 1,716 | 1.43 | 5,127 | 1.79 |

| TABLE 1B. LANDINGS REPORTED BY SPECIES AND COAST IN PUERTO RICO IN 2005. | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | NORTH | | EAST | | SOUTH | | WEST | | TOTAL | |
| | Pounds | *P/P | Pounds | *P/P | Pounds | *P/P | Pounds | *P/P | Pounds | *P/P |
| Porgies | 138 | 2.19 | 3,585 | 1.50 | 6,897 | 1.72 | 1,420 | 1.59 | 12,040 | 1.75 |
| Snooks | 1,136 | 1.89 | 1,386 | 2.03 | 2,080 | 1.83 | 3,523 | 1.66 | 8,125 | 1.85 |
| Tarpon | 28 | 0.88 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 28 | 0.22 |
| Goatfishes | 25 | 1.83 | 2,773 | 2.10 | 2,576 | 1.71 | 544 | 1.21 | 5,918 | 1.71 |
| Sardines | 8,042 | 1.04 | 369 | 1.19 | 727 | 1.27 | 1,678 | 1.85 | 10,816 | 1.34 |
| King mackarel | 13,114 | 2.06 | 3,337 | 2.44 | 9,693 | 1.82 | 20,782 | 1.86 | 46,926 | 2.05 |
| Cero | 3,707 | 2.12 | 6,306 | 2.15 | 16,394 | 1.68 | 3,684 | 1.97 | 30,091 | 1.98 |
| Sharks | 6,018 | 1.82 | 5,307 | 2.08 | 2,533 | 1.73 | 3,538 | 1.17 | 17,396 | 1.70 |
| Wahoo | 21 | 3.50 | 19 | 2.75 | 185 | 1.42 | 2,920 | 1.54 | 3,145 | 2.30 |
| CLASSIFFIED | | | | | | | | | | |
| First Class | 0 | 0.00 | 3,677 | 2.05 | 2,115 | 1.75 | 4,077 | 1.94 | 9,869 | 1.44 |
| Second Class | 0 | 0.00 | 1,917 | 1.00 | 455 | 1.00 | 1,837 | 0.94 | 4,209 | 0.74 |
| Third Class | 2 | 3.00 | 1,363 | 1.21 | 0 | 0.00 | 3 | 0.75 | 1,368 | 1.24 |
| Trash | 0 | 0.00 | 0 | 0.00 | 32 | 0.75 | 40 | 0.90 | 72 | 0.41 |
| Other fishes | 60 | 2.25 | 11,096 | 2.46 | 3,029 | 2.73 | 10,850 | 1.62 | 25,035 | 2.27 |
| Total Fishes | 112,596 | 1.79 | 169,552 | 1.81 | 282,971 | 1.58 | 611,488 | 1.47 | 1,176,607 | 1.66 |
| | | | | | | | | | | |
| SHELLFISH | | | | | | | | | | |
| Conch | 397 | 3.94 | 35,935 | 2.76 | 18,595 | 3.62 | 140,626 | 2.22 | 195,553 | 3.14 |
| Land crab | 308 | 7.29 | 1,069 | 6.05 | 1,094 | 3.06 | 1,805 | 6.54 | 4,276 | 5.74 |
| Lobster | 3,834 | 6.58 | 29,975 | 5.54 | 56,128 | 5.62 | 83,036 | 5.30 | 172,973 | 5.76 |
| Octopus | 39 | 2.92 | 231 | 2.89 | 7,739 | 2.68 | 1,591 | 2.00 | 9,600 | 2.62 |
| Other shellfish | 816 | 3.15 | 1,078 | 3.14 | 2,396 | 4.07 | 5,736 | 2.05 | 10,026 | 3.10 |
| Total Shellfish | 5,394 | 5.99 | 68,288 | 4.61 | 85,952 | 4.74 | 232,794 | 3.98 | 392,428 | 4.83 |
| **TOTAL** | 117,990 | 1.95 | 237,840 | 2.19 | 368,923 | 2.14 | 844,282 | 2.06 | 1,569,035 | 2.09 |

* P/P = Average Price Per Pound in U.S. Dollar.

| TABLE 1C. LANDINGS REPORTED BY SPECIES AND COAST IN PUERTO RICO IN 2006. | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | NORTH | | EAST | | SOUTH | | WEST | | TOTAL | |
| | POUNDS | *P/P | POUNDS | *P/P | POUNDS | *P/P | POUNDS | *P/P | POUNDS | *P/P |
| FISH | | | | | | | | | | |
| Tunas | | | | | | | | | | |
| Blackfin tuna | 93 | 2.11 | 263 | 2.16 | 219 | 1.58 | 19,912 | 1.08 | 20,487 | 1.73 |
| Little tunny | 1,232 | 1.15 | 0 | 0.00 | 600 | 1.46 | 6,779 | 0.98 | 8,611 | 0.90 |
| Skipjack tuna | 61 | 1.03 | 36 | 2.38 | 233 | 2.29 | 22,157 | 0.80 | 22,487 | 1.63 |
| Yellowfin tuna | 370 | 1.89 | 508 | 2.25 | 1,700 | 2.04 | 18,162 | 1.13 | 20,740 | 1.83 |
| Tuna category | 1,902 | 1.42 | 1,248 | 2.24 | 588 | 2.04 | 1,997 | 0.98 | 5,735 | 1.67 |
| Ballyhoo | 54 | 1.75 | 740 | 1.51 | 3,763 | 1.39 | 11,667 | 0.81 | 16,224 | 1.37 |
| White Grunt | 936 | 1.93 | 10,849 | 1.65 | 15,548 | 1.80 | 24,380 | 1.30 | 51,713 | 1.67 |
| Hogfish | 121 | 3.50 | 7,367 | 2.27 | 9,701 | 2.83 | 11,012 | 2.83 | 28,201 | 2.86 |
| Trunkfish | 13 | 2.00 | 5,776 | 1.74 | 11,240 | 1.76 | 22,929 | 2.16 | 39,958 | 1.92 |
| Dolphinfish | 6,122 | 2.27 | 966 | 2.08 | 7,169 | 3.27 | 33,127 | 1.69 | 47,384 | 2.33 |
| Squirrelfishes | 458 | 1.18 | 761 | 1.72 | 2,998 | 1.38 | 306 | 1.05 | 4,523 | 1.33 |
| Mullets | 770 | 1.28 | 548 | 1.55 | 7,966 | 1.24 | 3,524 | 1.29 | 12,808 | 1.34 |
| Jacks | | | | | | | | | | |
| Bar jack | 810 | 1.88 | 3,284 | 1.49 | 3,922 | 1.45 | 8,671 | 1.14 | 16,687 | 1.49 |
| Horse-eye jack | 260 | 1.75 | 29 | 2.00 | 15 | 0.78 | 692 | 1.02 | 996 | 1.39 |
| Yellow jack | 27 | 2.00 | 0 | 0.00 | 147 | 1.82 | 76 | 1.75 | 250 | 1.39 |
| Jack Category | 1,753 | 1.79 | 565 | 1.57 | 842 | 1.37 | 3,622 | 1.12 | 6,782 | 1.46 |
| Parrotfishes | 318 | 1.88 | 2,725 | 1.83 | 19,861 | 1.71 | 9,109 | 1.53 | 32,013 | 1.74 |
| Groupers | | | | | | | | | | |
| Coney | 22 | 2.60 | 161 | 2.18 | 911 | 2.10 | 3,880 | 1.60 | 4,974 | 2.12 |
| Red hind | 360 | 2.49 | 2,161 | 2.46 | 2,468 | 2.52 | 17,299 | 2.08 | 22,288 | 2.39 |
| Misty grouper | 12 | 2.67 | 522 | 2.00 | 582 | 3.17 | 4,477 | 2.58 | 5,593 | 2.61 |
| Nassau grouper | 6 | 2.00 | 169 | 2.71 | 28 | 2.20 | 1,547 | 1.49 | 1,750 | 2.10 |
| Yellowfin grouper | 0 | 0.00 | 604 | 2.04 | 134 | 1.63 | 237 | 2.00 | 975 | 1.42 |
| Grouper category | 709 | 2.53 | 3,664 | 2.26 | 2,639 | 2.51 | 7,607 | 2.13 | 14,619 | 2.36 |
| Mojarras | 518 | 1.60 | 329 | 2.02 | 922 | 1.45 | 188 | 1.71 | 1,957 | 1.70 |
| Snappers | | | | | | | | | | |
| Lane snapper | 1,037 | 2.33 | 13,205 | 2.33 | 47,886 | 2.28 | 25,078 | 2.17 | 87,206 | 2.28 |
| Yellowtail snapper | 13,520 | 2.51 | 27,721 | 2.45 | 24,864 | 2.32 | 27,789 | 2.13 | 93,894 | 2.35 |
| Silk snapper | 5,886 | 3.14 | 9,843 | 3.75 | 9,100 | 3.87 | 58,482 | 3.09 | 83,311 | 3.46 |
| Mutton snapper | 1,035 | 2.48 | 3,030 | 2.49 | 7,300 | 2.33 | 14,118 | 2.31 | 25,483 | 2.40 |
| Queen snapper | 1,338 | 3.82 | 828 | 2.60 | 2,590 | 3.89 | 98,126 | 3.37 | 102,882 | 3.42 |
| Vermillion snapper | 1,396 | 2.51 | 869 | 1.82 | 350 | 2.59 | 536 | 2.72 | 3,151 | 2.41 |
| Wenchman | 277 | 3.09 | 396 | 1.72 | 440 | 4.37 | 2,775 | 3.38 | 3,888 | 3.14 |

| TABLE 1C. LANDINGS REPORTED BY SPECIES AND COAST IN PUERTO RICO IN 2006. | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | NORTH | | EAST | | SOUTH | | WEST | | TOTAL | |
| | POUNDS | *P/P | POUNDS | *P/P | POUNDS | *P/P | POUNDS | *P/P | POUNDS | *P/P |
| Blackfin snapper | 112 | 2.68 | 429 | 2.77 | 540 | 3.93 | 2,379 | 2.38 | 3,460 | 2.94 |
| Snapper category | 1,907 | 2.66 | 4,715 | 2.29 | 7,029 | 2.16 | 6,557 | 2.15 | 20,208 | 2.32 |
| Triggerfishes | 466 | 1.62 | 3,321 | 1.68 | 10,261 | 1.90 | 13,460 | 1.33 | 27,508 | 1.63 |
| Barracudas | 578 | 1.81 | 184 | 2.07 | 2,257 | 1.67 | 2,035 | 1.59 | 5,054 | 1.79 |
| Porgies | 47 | 2.50 | 3,092 | 1.56 | 5,057 | 1.93 | 779 | 1.40 | 8,975 | 1.85 |
| Snooks | 1,581 | 2.11 | 1,028 | 1.78 | 2,414 | 1.73 | 3,828 | 1.77 | 8,851 | 1.85 |
| Tarpon | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 32 | 1.13 | 32 | 0.28 |
| Goatfishes | 34 | 1.71 | 1,737 | 2.08 | 2,669 | 2.16 | 286 | 1.17 | 4,726 | 1.78 |
| Sardines | 2,134 | 1.22 | 216 | 1.06 | 1,369 | 1.33 | 2,023 | 0.84 | 5,742 | 1.11 |
| Mackerel | 2,917 | 2.01 | 9,605 | 2.53 | 4,243 | 1.82 | 19,929 | 1.88 | 36,694 | 2.06 |
| Cero | 2,105 | 2.09 | 1,573 | 2.36 | 16,122 | 1.71 | 4,248 | 1.94 | 24,048 | 2.03 |
| Sharks | 4,574 | 1.69 | 4,200 | 2.08 | 3,614 | 1.71 | 9,975 | 1.50 | 22,363 | 1.75 |
| Wahoo | 97 | 1.92 | 0 | 0.00 | 267 | 2.18 | 4,020 | 1.71 | 4,384 | 1.45 |
| CLASSIFFIED | | | | | | | | | | |
| First Class | 0 | 0.00 | 2,220 | 2.11 | 10 | 2.00 | 2,604 | 1.94 | 4,834 | 1.51 |
| Second Class | 0 | 0.00 | 1,624 | 1.30 | 19 | 1.00 | 1,022 | 0.98 | 2,665 | 0.82 |
| Third Class | 0 | 0.00 | 343 | 1.24 | 0 | 0.00 | 0 | 0.00 | 343 | 0.31 |
| Trash | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Other fishes | 2,051 | | 75 | | 6,794 | | 7,384 | | 16,304 | |
| Total Fishes | 60,019 | 1.87 | 133,529 | 1.86 | 249,391 | 1.77 | 540,822 | 1.61 | 983,761 | 1.78 |
| | | | 0 | | 0 | | 0 | | | |
| SHELLFISH | | | | | | | | | | |
| Conch | 126 | 3.50 | 32,170 | 3.14 | 15,734 | 4.51 | 105,431 | 3.18 | 153,461 | 3.58 |
| Land crab | 216 | 6.02 | 102 | 8.03 | 4,457 | 6.06 | 302 | 7.54 | 5,077 | 6.91 |
| Lobster | 1,620 | 6.76 | 27,060 | 6.05 | 57,149 | 5.81 | 83,269 | 5.66 | 169,098 | 6.07 |
| Octopus | 0 | 0.00 | 692 | 4.29 | 16,818 | 3.03 | 2,521 | 2.23 | 20,031 | 2.39 |
| Other shellfish | 140 | 3.00 | 621 | 2.83 | 2,840 | 4.29 | 3,895 | 2.44 | 7,496 | 3.14 |
| Total Shellfish | 2,102 | 6.14 | 60,645 | 5.02 | 96,998 | 5.11 | 195,418 | 4.56 | 355,163 | 5.21 |
| **TOTAL** | 62,121 | 2.02 | 194,174 | 2.34 | 346,389 | 2.66 | 736,240 | 2.37 | 1,338,924 | 2.35 |

* P/P = Average Price Per Pound in U.S. Dollar.

| **TABLE 2. TOTAL TRIP TICKETS COLLECTED IN PUERTO RICO BY MONTH FROM JANUARY 2004 TO MARCH 2007.** | | | | |
|---|---|---|---|---|
| MONTH | 2004 NUMBER OF TICKETS | 2005 NUMBER OF TICKETS | 2006 NUMBER OF TICKETS | 2007 NUMBER OF TICKETS |
| JANUARY | 3,611 | 1,513 | 2,460 | 1,817 |
| FEBRUARY | 3,049 | 1,633 | 2,539 | 1,607 |
| MARCH | 2,950 | 2,996 | 2,491 | 2,229 |
| APRIL | 3,057 | 3,158 | 1,974 | |
| MAY | 2,737 | 2,914 | 2,298 | |
| JUNE | 2,591 | 2,922 | 2,155 | |
| JULY | 2,513 | 2,669 | 1,996 | |
| AUGUST | 2,598 | 3,009 | 2,192 | |
| SEPTEMBER | 2,193 | 2,522 | 2,192 | |
| OCTOBER | 2,875 | 2,059 | 2,144 | |
| NOVEMBER | 2,223 | 1,594 | 1,919 | |
| DECEMBER | 2,280 | 927 | 1,624 | |
| TOTAL | 32,677 | 27,916 | 25,984 | 5,653 |

| TABLE 3. LIST OF FISH AND SHELLFISH REPORTED IN PUERTO RICO LANDINGS DATA DURING 2004-07. | | |
|---|---|---|
| FAMILY | GENUS | SPECIES |
| Albulidae | *Albula* | *vulpes* |
| Balistidae | *Balistes* | *vetula* |
| Belonidae | *Ablennes* | *hians* |
| Belonidae | *Tylosurus* | *crocodilus* |
| Carangidae | *Caranx* | *bartholomaei* |
| Carangidae | *Caranx* | *crysos* |
| Carangidae | *Caranx* | *latus* |
| Carangidae | *Caranx* | *ruber* |
| Carangidae | *Chloroscombrus* | *chrysurus* |
| Carangidae | *Selar* | *crumenophthalmus* |
| Carangidae | *Seriola* | *rivoliana* |
| Carangidae | *Trachinotus* | *falcatus* |
| Carangidae | *Vomer* | *setapinnis* |
| Carangidae | | |
| Carcharhinidae | *Prionace* | *glauca* |
| Centrarchidae | *Lepomis* | *macrochirus* |
| Centropomidae | *Centropomus* | *parallelus* |
| Centropomidae | *Centropomus* | *undecimalis* |
| Clupeidae | | |
| Coryphaenidae | *Coryphaena* | *hippurus* |
| Coryphaenidae | | |
| Dasyatidae | *Dasyatis* | *americana* |
| Elopidae | *Megalops* | *atlanticus* |
| Elopidae | | |
| Exocoetidae | *Hemiramphus* | *brasiliensis* |
| Gerreidae | | |
| Holocentridae | *Holocentrus* | *ascensionis* |
| Kyphosidae | | |
| Labridae | *Lachnolaimus* | *maximus* |
| Lamnidae | | |
| Lutjanidae | *Apsilus* | *dentatus* |
| Lutjanidae | *Etelis* | *oculatus* |
| Lutjanidae | *Lutjanus* | *analis* |
| Lutjanidae | *Lutjanus* | *buccanella* |
| Lutjanidae | *Lutjanus* | *synagris* |
| Lutjanidae | *Lutjanus* | *vivanus* |
| Lutjanidae | *Ocyurus* | *chrysurus* |
| Lutjanidae | *Pristipomoides* | *macrophtalmus* |
| Lutjanidae | *Rhomboplites* | *aurorubens* |
| Lutjanidae | | |
| Mobulidae | *Manta* | *birostris* |
| Mugilidae | *Mugil* | *curema* |
| Mullidae | *Mulloidichthys* | *martinicus* |

| TABLE 3. LIST OF FISH AND SHELLFISH REPORTED IN PUERTO RICO LANDINGS DATA DURING 2004-07. | | |
|---|---|---|
| FAMILY | GENUS | SPECIES |
| Mullidae | *Pseudupeneus* | *maculatus* |
| Ostraciidae | | |
| Pomadasydae | *Haemulon* | *album* |
| Pomadasydae | *Haemulon* | *plumieri* |
| Scaridae | | |
| Sciaenidae | *Micropogonias* | *furnieri* |
| Sciaenidae | *Odontoscion* | *dentex* |
| Scombridae | *Acanthocybium* | *solanderi* |
| Scombridae | *Euthynnus* | *alletteratus* |
| Scombridae | *Euthynnus* | *pelamis* |
| Scombridae | *Scomberomorus* | *cavalla* |
| Scombridae | *Scomberomorus* | *regalis* |
| Scombridae | *Thunnus* | *alalunga* |
| Scombridae | *Thunnus* | *albacares* |
| Scombridae | *Thunnus* | *atlanticus* |
| Scombridae | | |
| Serranidae | *Cephalopholis* | *fulvus* |
| Serranidae | *Epinephelus* | *guttatus* |
| Serranidae | *Epinephelus* | *mystacinus* |
| Serranidae | *Epinephelus* | *striatus* |
| Serranidae | *Mycteroperca* | *venenosa* |
| Serranidae | *Myctoperca* | *bonaci* |
| Serranidae | | |
| Sparidae | | |
| Sphyraenidae | *Sphyraena* | *guachancho* |
| Sphyraenidae | *Sphyraena* | *picudilla* |
| Sphyraenidae | | |
| Trichiuridae | *Trichiurus* | *lepturus* |
| Trichiuridae | | |
| Other fishes | | |
| First class | | |
| Second class | | |
| Third class | | |
| List of Shellfish | | |
| COMMON NAME | *GENUS* | *SPECIES* |
| Land crab | *Cardisoma* | *quanhumi* |
| Mangrove oyster | *Crassostrea* | *rhizophorae* |
| Octopus | *Octopus* | *spp.* |
| Queen conch | *Strombus* | *gigas* |
| Spiny lobster | *Panulirus* | *argus* |
| Marine Crab | *Mithrax* | *spinosissimus* |
| Coral crab | *Carpilius* | *corallinus* |
| Whelk | *Cittarium* | *pica* |

TABLE 4. LANDINGS REPORTED BY MUNICIPALITY AND COAST IN PUERTO RICO DURING 2004 TO 2006.

| | 2004 | | | 2005 | | | 2006 | | |
|---|---|---|---|---|---|---|---|---|---|
| LOCATION | POUNDS | VALUE | P/P* | POUNDS | VALUE | P/P* | POUNDS | VALUE | P/P* |
| **NORTH** | **168,048** | **390,451** | **2.03** | **117,990** | **269,202** | **1.95** | **62,121** | **149,102** | **2.03** |
| Isabela | 854 | 2,781 | 3.08 | 968 | 3,928 | 3.73 | 928 | 4,058 | 4.03 |
| Quebradillas | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| Camuy | 4,070 | 7,822 | 1.88 | 7,237 | 20,480 | 2.36 | 1,639 | 4,018 | 1.80 |
| Hatillo | 993 | 2,964 | 1.27 | 0 | 0 | 0.00 | 55 | 193 | 3.50 |
| Arecibo | 20,771 | 54,172 | 2.37 | 22,091 | 47,701 | 1.61 | 9,657 | 21,292 | 1.02 |
| Barceloneta | 5,435 | 14,003 | 1.94 | 4,423 | 11,715 | 1.75 | 3,821 | 7,255 | 1.75 |
| Manatí | 0 | 0 | 0.00 | 1,565 | 2,821 | 1.96 | 0 | 0 | 0.00 |
| Vega Baja | 5,518 | 16,459 | 2.48 | 1,899 | 5,662 | 2.43 | 773 | 2,436 | 2.95 |
| Vega Alta | 5,962 | 14,482 | 2.05 | 5,144 | 10,635 | 1.69 | 1,995 | 4,025 | 1.79 |
| Dorado | 5,938 | 14,241 | 2.21 | 4,679 | 10,473 | 2.03 | 3,650 | 6,634 | 2.00 |
| Toa Baja | 766 | 3,099 | 2.50 | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| Cataño | 19,407 | 47,379 | 2.34 | 12,330 | 29,938 | 2.33 | 8,113 | 20,754 | 2.81 |
| San Juan | 55,475 | 126,592 | 2.13 | 35,858 | 77,842 | 2.16 | 22,882 | 54,222 | 2.21 |
| Carolina | 0 | 0 | 0.00 | 748 | 748 | 0.50 | 1,326 | 3,396 | 3.06 |
| Loíza | 20,381 | 37,560 | 1.31 | 10,357 | 21,574 | 1.37 | 2,011 | 6,165 | 2.15 |
| Río Grande | 19,976 | 43,277 | 1.55 | 10,321 | 24,633 | 1.72 | 5,228 | 14,390 | 2.05 |
| Luquillo | 2,502 | 5,622 | 2.04 | 370 | 1,052 | 2.48 | 43 | 264 | 5.40 |
| **EAST** | **356,183** | **927,459** | **2.16** | **237,840** | **658,324** | **2.19** | **194,174** | **566,311** | **2.34** |
| Fajardo | 92,087 | 275,993 | 2.06 | 77,691 | 244,036 | 2.12 | 54,425 | 177,326 | 2.38 |
| Ceiba | 43,386 | 102,706 | 1.94 | 25,086 | 70,978 | 1.90 | 15,930 | 45,604 | 1.92 |
| Naguabo | 66,529 | 168,206 | 2.52 | 44,422 | 119,865 | 2.49 | 18,756 | 52,604 | 2.53 |
| Humacao | 57,314 | 140,524 | 2.39 | 35,290 | 97,755 | 2.42 | 41,300 | 119,821 | 2.52 |
| Yabucoa | 7,995 | 16,093 | 1.23 | 18,756 | 36,533 | 1.84 | 20,682 | 46,261 | 1.76 |
| Maunabo | 5,116 | 13,495 | 2.72 | 3,925 | 8,981 | 2.27 | 3,788 | 10,887 | 2.91 |
| Culebra | 6,833 | 19,773 | 2.78 | 425 | 1,256 | 2.55 | 1,437 | 5,297 | 3.77 |
| Vieques | 76,923 | 190,669 | 1.88 | 32,245 | 78,920 | 1.86 | 37,856 | 108,511 | 2.29 |
| **SOUTH** | **479,828** | **1,243,362** | **2.11** | **368,923** | **1,010,151** | **2.15** | **346,389** | **1,049,970** | **2.67** |
| Patillas | 19,438 | 59,638 | 2.80 | 10,016 | 28,452 | 2.43 | 789 | 4,064 | 4.93 |
| Arroyo | 42,530 | 103,717 | 1.89 | 9,697 | 19,267 | 1.65 | 9,019 | 19,554 | 1.94 |
| Guayama | 80,128 | 226,130 | 2.19 | 50,127 | 154,795 | 2.29 | 59,417 | 190,095 | 2.54 |
| Salinas | 57,482 | 168,769 | 2.38 | 51,031 | 164,295 | 2.55 | 47,449 | 166,307 | 2.84 |
| Santa Isabel | 17,428 | 49,981 | 2.53 | 21,055 | 68,409 | 2.44 | 9,557 | 31,039 | 3.07 |
| Juana Díaz | 64,785 | 169,379 | 1.88 | 50,969 | 141,381 | 2.02 | 35,700 | 93,779 | 2.04 |
| Ponce | 45,079 | 101,013 | 1.82 | 71,734 | 170,518 | 1.92 | 56,112 | 137,378 | 2.00 |
| Peñuelas | 49,456 | 172,846 | 2.48 | 32,630 | 122,011 | 2.59 | 68,366 | 256,656 | 3.09 |
| Guayanilla | 16,087 | 28,273 | 1.38 | 13,874 | 30,587 | 1.78 | 16,406 | 49,792 | 3.21 |
| Guánica | 22,121 | 47,094 | 2.02 | 8,368 | 20,443 | 1.91 | 22,307 | 58,050 | 2.70 |
| Lajas | 65,294 | 116,522 | 1.68 | 49,422 | 89,993 | 1.71 | 21,267 | 43,256 | 1.92 |
| **WEST** | **860,621** | **1,956,347** | **1.96** | **844,282** | **12,067,618** | **2.06** | **736,240** | **2,008,144** | **2.37** |
| Cabo Rojo | 440,399 | 1,072,261 | 2.09 | 404,978 | 11,003,676 | 2.25 | 358,517 | 1,123,916 | 2.64 |
| Mayaguez | 84,606 | 193,260 | 2.04 | 88,283 | 214,866 | 2.21 | 71,210 | 160,571 | 2.25 |

TABLE 4. LANDINGS REPORTED BY MUNICIPALITY AND COAST IN PUERTO RICO DURING 2004 TO 2006.

| | 2004 | | | 2005 | | | 2006 | | |
|---|---|---|---|---|---|---|---|---|---|
| LOCATION | POUNDS | VALUE | P/P* | POUNDS | VALUE | P/P* | POUNDS | VALUE | P/P* |
| Añasco | 17,736 | 56,194 | 1.89 | 18,489 | 58,295 | 1.52 | 4,735 | 13,318 | 1.71 |
| Rincón | 113,719 | 339,463 | 1.96 | 185,312 | 561,048 | 1.92 | 139,381 | 458,924 | 2.23 |
| Aguada | 87,595 | 122,303 | 1.52 | 31,301 | 53,660 | 1.73 | 56,210 | 85,099 | 1.72 |
| Aguadilla | 116,566 | 172,867 | 1.34 | 115,919 | 176,073 | 1.28 | 106,187 | 166,316 | 1.46 |
| **TOTAL** | **1,864,680** | **4,517,619** | **2.05** | **1,569,035** | **14,005,295** | **2.10** | **1,338,924** | **3,773,527** | **2.45** |

P/P* = Price per Pound.

TABLE 5A. LANDINGS REPORTED BY SPECIES AND GEAR IN PUERTO RICO 1N 2004.

| SPECIES | BEACH SEINE (Pounds) | FISH TRAP (Pounds) | LOBSTER TRAP (Pounds) | GILL NET (Pounds) | BOTTOM LINE (Pounds) | TROLL LINE (Pounds) | LONG LINE (Pounds) | LAND CRAB TRAP (Pounds) | CAST NET (Pounds) | ROD AND LINE (Pounds) | SKIN DIVING (Pounds) | SCUBA DIVING (Pounds) | TRAMMEL NET (Pounds) | TOTAL (Pounds) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FISH** | | | | | | | | | | | | | | |
| **Tunas** | | | | | | | | | | | | | | |
| **Blackfin tuna** | 896 | 0 | 0 | 229 | 4,922 | 22,870 | 0 | 0 | 0 | 2 | 0 | 84 | 0 | 29,003 |
| **Little tunny** | 7,102 | 0 | 0 | 347 | 1,057 | 4,891 | 0 | 0 | 12 | 0 | 0 | 35 | 8 | 13,452 |
| **Skipjack tuna** | 624 | 50 | 0 | 550 | 4,020 | 17,111 | 0 | 0 | 0 | 10 | 0 | 31 | 0 | 22,396 |
| **Yellowfin tuna** | 40 | 0 | 0 | 122 | 3,709 | 11,632 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 15,553 |
| **Tuna category** | 51 | 100 | 0 | 72 | 2,157 | 6,523 | 0 | 0 | 0 | 20 | 0 | 51 | 0 | 8,974 |
| **Ballyhoo** | 4,557 | 146 | 0 | 20,098 | 142 | 232 | 126 | 0 | 39 | 0 | 0 | 960 | 489 | 26,789 |
| **White grunt** | 10,773 | 36,416 | 19 | 13,242 | 6,720 | 43 | 444 | 0 | 0 | 0 | 4 | 432 | 21,220 | 89,313 |
| **Hogfish** | 213 | 12,168 | 132 | 674 | 1,225 | 112 | 0 | 0 | 0 | 0 | 264 | 24,420 | 668 | 39,876 |
| **Trunkfish** | 1,217 | 32,352 | 1,371 | 2,414 | 947 | 16 | 10 | 0 | 8 | 0 | 11 | 11,329 | 2,652 | 52,327 |
| **Dolphinfish** | 190 | 0 | 0 | 203 | 16,481 | 58,271 | 0 | 0 | 0 | 532 | 0 | 650 | 0 | 76,327 |
| **Squirrelfishes** | 43 | 4,269 | 4 | 608 | 1,731 | 0 | 13 | 0 | 0 | 3 | 0 | 326 | 115 | 7,112 |
| **Mullets** | 1,661 | 404 | 61 | 21,157 | 1,095 | 10 | 0 | 0 | 745 | 0 | 0 | 71 | 1,689 | 26,893 |
| **Jacks** | | | | | | | | | | | | | | |
| **Bar jack** | 6,758 | 2,455 | 0 | 12,115 | 10,216 | 40 | 253 | 0 | 0 | 10 | 0 | 235 | 1,721 | 33,803 |
| **Horse-eye jack** | 298 | 18 | 0 | 339 | 1,126 | 69 | 10 | 0 | 0 | 0 | 0 | 28 | 12 | 1,900 |
| **Yellow jack** | 3 | 63 | 0 | 376 | 178 | 0 | 0 | 0 | 0 | 0 | 0 | 86 | 0 | 706 |
| **Jack Category** | 5,326 | 255 | 0 | 3,123 | 6,917 | 643 | 22 | 0 | 21 | 22 | 0 | 149 | 64 | 16,542 |
| **Parrotfishes** | 4,331 | 14,899 | 0 | 9,977 | 1,149 | 0 | 35 | 0 | 0 | 0 | 143 | 5,708 | 15,437 | 51,679 |
| **Groupers** | | | | | | | | | | | | | | |
| **Coney** | 14 | 3,492 | 0 | 516 | 3,507 | 0 | 59 | 0 | 0 | 0 | 56 | 72 | 142 | 7,858 |
| **Red hind** | 70 | 10,879 | 135 | 438 | 19,647 | 0 | 339 | 0 | 0 | 0 | 21 | 11,310 | 245 | 43,084 |
| **Misty grouper** | 0 | 377 | 0 | 129 | 4,045 | 0 | 133 | 0 | 0 | 0 | 0 | 102 | 0 | 4,786 |
| **Nassau grouper** | 0 | 244 | 0 | 127 | 2,576 | 0 | 0 | 0 | 0 | 0 | 0 | 1,283 | 0 | 4,230 |
| **Yellowfin grouper** | 0 | 433 | 0 | 34 | 935 | 0 | 0 | 0 | 0 | 0 | 0 | 786 | 0 | 2,188 |

TABLE 5A. LANDINGS REPORTED BY SPECIES AND GEAR IN PUERTO RICO 1N 2004.

| SPECIES | BEACH SEINE (Pounds) | FISH TRAP (Pounds) | LOBSTER TRAP (Pounds) | GILL NET (Pounds) | BOTTOM LINE (Pounds) | TROLL LINE (Pounds) | LONG LINE (Pounds) | LAND CRAB TRAP (Pounds) | CAST NET (Pounds) | ROD AND LINE (Pounds) | SKIN DIVING (Pounds) | SCUBA DIVING (Pounds) | TRAMMEL NET (Pounds) | TOTAL (Pounds) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Grouper category** | 280 | 5,314 | 0 | 838 | 6,619 | 132 | 69 | 0 | 0 | 0 | 69 | 12,478 | 138 | 25,937 |
| **Mojarras** | 202 | 341 | 0 | 4,611 | 648 | 0 | 28 | 0 | 210 | 0 | 0 | 306 | 26 | 6,372 |
| **Snappers** | | | | | | | | | | | | | | |
| **Lane snapper** | 1,113 | 34,152 | 133 | 14,621 | 31,875 | 128 | 15,707 | 0 | 28 | 0 | 8 | 894 | 530 | 99,189 |
| **Yellowtail snapper** | 7,235 | 14,089 | 0 | 5,485 | 118,977 | 646 | 833 | 0 | 0 | 86 | 3 | 1,563 | 1,709 | 150,626 |
| **Silk snapper** | 0 | 21,081 | 0 | 146 | 97,435 | 0 | 204 | 0 | 0 | 0 | 0 | 0 | 0 | 118,866 |
| **Mutton snapper** | 1,321 | 13,826 | 96 | 4,550 | 18,860 | 277 | 1,382 | 0 | 0 | 0 | 42 | 6,022 | 682 | 47,058 |
| **Queen snapper** | 0 | 350 | 0 | 44 | 78,924 | 0 | 226 | 0 | 0 | 0 | 0 | 0 | 0 | 79,544 |
| **Vermillion snapper** | 0 | 2,067 | 0 | 61 | 7,322 | 0 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 9,549 |
| **Wenchman** | 0 | 71 | 0 | 640 | 5,454 | 0 | 112 | 0 | 0 | 0 | 0 | 0 | 0 | 6,277 |
| **Blackfin snapper** | 0 | 1,048 | 0 | 25 | 2,320 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,393 |
| **Snapper category** | 446 | 6,660 | 0 | 5,881 | 7,566 | 140 | 64 | 0 | 5 | 36 | 69 | 7,364 | 1,327 | 29,558 |
| **Triggerfish** | 418 | 22,271 | 50 | 289 | 6,647 | 210 | 73 | 0 | 6 | 7 | 72 | 12,669 | 398 | 43,110 |
| **Barracudas** | 1,864 | 234 | 0 | 1,571 | 3,125 | 381 | 2 | 0 | 73 | 0 | 0 | 64 | 48 | 7,362 |
| **Porgies** | 326 | 9,127 | 0 | 4,800 | 1,564 | 2 | 73 | 0 | 0 | 0 | 0 | 1,002 | 1,008 | 17,902 |
| **Snooks** | 3,410 | 745 | 0 | 10,752 | 1,975 | 61 | 80 | 0 | 309 | 0 | 30 | 1,076 | 201 | 18,639 |
| **Tarpon** | 111 | 0 | 0 | 469 | 138 | 0 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 752 |
| **Goatfishes** | 269 | 6,384 | 45 | 826 | 535 | 49 | 0 | 0 | 0 | 0 | 0 | 102 | 54 | 8,264 |
| **Sardines** | 224 | 0 | 0 | 479 | 820 | 0 | 0 | 0 | 12,758 | 0 | 0 | 3 | 0 | 14,284 |
| **King Mackerels** | 1,810 | 750 | 0 | 3,925 | 30,717 | 14,559 | 88 | 0 | 92 | 76 | 0 | 565 | 47 | 52,629 |
| **Cero** | 108 | 210 | 42 | 3,393 | 10,834 | 4,731 | 12 | 0 | 20 | 247 | 0 | 146 | 3 | 19,746 |
| **Sharks** | 183 | 218 | 0 | 2,645 | 7,151 | 224 | 4,004 | 0 | 33 | 102 | 0 | 160 | 365 | 15,085 |
| **Wahoo** | 40 | 15 | 0 | 0 | 480 | 3,904 | 0 | 0 | 0 | 50 | 0 | 47 | 0 | 4,536 |
| **CLASSIFFIED** | | | | | | | | | | | | | | |
| **First Class** | 0 | 10,371 | 0 | 739 | 1,822 | 52 | 0 | 0 | 0 | 0 | 0 | 8,811 | 160 | 21,955 |
| **Second Class** | 5 | 8,337 | 0 | 2,471 | 298 | 0 | 0 | 0 | 0 | 0 | 0 | 844 | 72 | 12,027 |

TABLE 5A. LANDINGS REPORTED BY SPECIES AND GEAR IN PUERTO RICO 1N 2004.

| SPECIES | BEACH SEINE (Pounds) | FISH TRAP (Pounds) | LOBSTER TRAP (Pounds) | GILL NET (Pounds) | BOTTOM LINE (Pounds) | TROLL LINE (Pounds) | LONG LINE (Pounds) | LAND CRAB TRAP (Pounds) | CAST NET (Pounds) | ROD AND LINE (Pounds) | SKIN DIVING (Pounds) | SCUBA DIVING (Pounds) | TRAMMEL NET (Pounds) | TOTAL (Pounds) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Third Class** | 0 | 5,376 | 0 | 0 | 600 | 23 | 0 | 0 | 0 | 0 | 0 | 2,250 | 0 | 8,249 |
| **Trash** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Other fishes** | 778 | 1,306 | 0 | 3,579 | 4,061 | 482 | 1 | 0 | 1,280 | 0 | 1 | 1,599 | 54 | 13,141 |
| **Total Fishes** | 64,310 | 283,363 | 2,088 | 159,730 | 541,269 | 148,464 | 24,501 | 0 | 15,673 | 1,203 | 793 | 116,163 | 51,284 | 1,408,841 |
| | | | | | | | | | | | | | | |
| **SHELLFISH** | | | | | | | | | | | | | | |
| **Conch** | 10 | 1,475 | 0 | 227 | 0 | 0 | 0 | 0 | 0 | 0 | 7,526 | 206,732 | 70 | 216,040 |
| **Land crab** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,401 | 0 | 0 | 0 | 0 | 0 | 1,401 |
| **Lobster** | 364 | 64,655 | 28,889 | 3,236 | 301 | 0 | 0 | 0 | 0 | 0 | 2,705 | 101,169 | 10,907 | 212,226 |
| **Octopus** | 16 | 788 | 6 | 29 | 189 | 18 | 0 | 0 | 0 | 0 | 8,016 | 11,098 | 12 | 20,172 |
| **Other shellfish** | 0 | 1,660 | 0 | 385 | 96 | 186 | 0 | 0 | 182 | 0 | 522 | 2,394 | 575 | 6,000 |
| **Total Shellfish** | 390 | 68,578 | 28,895 | 3,877 | 586 | 204 | 0 | 1,401 | 182 | 0 | 18,769 | 321,393 | 11,564 | 455,839 |
| **TOTAL** | 64,700 | 351,941 | 30,983 | 163,607 | 541,855 | 148,668 | 24,501 | 1,401 | 15,855 | 1,203 | 19,562 | 437,556 | 62,848 | 1,864,680 |

| TABLE 5B. LANDINGS REPORTED BY SPECIES AND GEAR IN PUERTO RICO 1N 2005. | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | BEACH SEINE (Pounds) | FISH TRAP (Pounds) | LOBSTER TRAP (Pounds) | GILL NET (Pounds) | BOTTOM LINE (Pounds) | TROLL LINE (Pounds) | LONG LINE (Pounds) | LAND CRAB TRAP (Pounds) | CAST NET (Pounds) | ROD AND LINE (Pounds) | SKIN DIVING (Pounds) | SCUBA DIVING (Pounds) | TRAMMEL NET (Pounds) | TOTAL (Pounds) |
| FISH | | | | | | | | | | | | | | |
| Tunas | | | | | | | | | | | | | | |
| Blackfin tuna | 462 | 291 | 0 | 593 | 7,427 | 12,618 | 107 | 12 | 0 | 21 | 0 | 508 | 0 | 22,039 |
| Little tunny | 727 | 278 | 0 | 30 | 3,351 | 3,591 | 0 | 0 | 32 | 87 | 0 | 0 | 0 | 8,096 |
| Skipjack tuna | 164 | 222 | 0 | 131 | 6,310 | 18,866 | 0 | 17 | 0 | 10 | 0 | 129 | 0 | 25,849 |
| Yellowfin tuna | 209 | 19 | 0 | 8 | 6,402 | 14,304 | 20 | 0 | 0 | 0 | 23 | 249 | 0 | 21,234 |
| Tuna category | 11 | 50 | 0 | 26 | 2,134 | 3,478 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 5,715 |
| Ballyhoo | 3,507 | 181 | 0 | 10,410 | 1,579 | 778 | 0 | 0 | 28 | 0 | 0 | 639 | 10 | 17,132 |
| White grunt | 787 | 24,792 | 166 | 8,910 | 5,529 | 469 | 251 | 0 | 37 | 60 | 8 | 554 | 12,112 | 53,675 |
| Hogfish | 0 | 4,936 | 348 | 226 | 2,923 | 300 | 0 | 0 | 0 | 0 | 92 | 16,727 | 339 | 25,891 |
| Trunkfish | 247 | 24,156 | 3,347 | 1,614 | 2,142 | 301 | 0 | 0 | 0 | 0 | 17 | 10,447 | 2,325 | 44,596 |
| Dolphinfish | 0 | 486 | 27 | 121 | 13,800 | 27,622 | 0 | 0 | 0 | 0 | 0 | 757 | 0 | 42,813 |
| Squirrelfishes | 266 | 3,453 | 49 | 360 | 1,620 | 40 | 54 | 0 | 0 | 0 | 0 | 8 | 33 | 5,883 |
| Mullets | 927 | 386 | 0 | 12,381 | 902 | 443 | 0 | 0 | 343 | 0 | 0 | 112 | 29 | 15,523 |
| Jacks | | | | | | | | | | | | | | |
| Bar jack | 1,067 | 1,018 | 0 | 8,323 | 9,855 | 325 | 282 | 0 | 707 | 12 | 0 | 357 | 698 | 22,644 |
| Horse-eye jack | 57 | 0 | 0 | 228 | 1,342 | 53 | 31 | 0 | 0 | 14 | 0 | 0 | 0 | 1,725 |
| Yellow jack | 72 | 16 | 0 | 0 | 368 | 32 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 527 |
| Jack Category | 598 | 227 | 0 | 1,455 | 4,961 | 213 | 50 | 0 | 10 | 69 | 0 | 130 | 0 | 7,713 |
| Parrotfishes | 1,083 | 12,537 | 141 | 5,098 | 1,411 | 15 | 9 | 0 | 0 | 0 | 56 | 2,160 | 8,622 | 31,132 |
| Groupers | | | | | | | | | | | | | | |
| Coney | 2,014 | 0 | 0 | 96 | 1,562 | 162 | 0 | 0 | 0 | 0 | 0 | 372 | 0 | 4,206 |
| Red hind | 4,586 | 0 | 0 | 216 | 14,663 | 674 | 20 | 0 | 0 | 0 | 0 | 8,861 | 40 | 29,060 |
| Misty grouper | 0 | 469 | 0 | 0 | 5,057 | 1,865 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 7,395 |
| Nassau grouper | 45 | 342 | 7 | 10 | 1,062 | 334 | 9 | 0 | 0 | 0 | 0 | 188 | 0 | 1,997 |
| Yellowfin grouper | 0 | 494 | 0 | 8 | 129 | 0 | 0 | 0 | 0 | 0 | 0 | 121 | 0 | 752 |
| Grouper category | 154 | 1,185 | 12 | 144 | 5,914 | 644 | 22 | 0 | 0 | 50 | 67 | 7,370 | 19 | 15,581 |

TABLE 5B. LANDINGS REPORTED BY SPECIES AND GEAR IN PUERTO RICO 1N 2005.

| SPECIES | BEACH SEINE (Pounds) | FISH TRAP (Pounds) | LOBSTER TRAP (Pounds) | GILL NET (Pounds) | BOTTOM LINE (Pounds) | TROLL LINE (Pounds) | LONG LINE (Pounds) | LAND CRAB TRAP (Pounds) | CAST NET (Pounds) | ROD AND LINE (Pounds) | SKIN DIVING (Pounds) | SCUBA DIVING (Pounds) | TRAMMEL NET (Pounds) | TOTAL (Pounds) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mojarras | 70 | 297 | 0 | 2,237 | 827 | 33 | 25 | 0 | 93 | 0 | 0 | 30 | 0 | 3,612 |
| Snappers | | | | | | | | | | | | | | |
| Lane snapper | 382 | 30,842 | 413 | 7,380 | 34,494 | 868 | 11,642 | 0 | 3 | 49 | 0 | 1,979 | 137 | 88,189 |
| Yellowtail snapper | 2,214 | 7,778 | 26 | 3,292 | 96,776 | 2,688 | 889 | 0 | 0 | 96 | 14 | 613 | 570 | 114,956 |
| Silk snapper | 0 | 10,643 | 0 | 92 | 99,415 | 0 | 172 | 0 | 0 | 0 | 0 | 0 | 135 | 110,457 |
| Mutton snapper | 231 | 8,610 | 174 | 2,357 | 14,839 | 1,181 | 958 | 0 | 0 | 0 | 3 | 5,046 | 70 | 33,469 |
| Queen snapper | 0 | 194 | 0 | 0 | 156,485 | 0 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 156,748 |
| Vermillion snapper | 0 | 628 | 0 | 160 | 4,891 | 0 | 94 | 0 | 0 | 0 | 0 | 72 | 0 | 5,845 |
| Wenchman | 0 | 108 | 0 | 734 | 10,466 | 0 | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 11,373 |
| Blackfin snapper | 0 | 456 | 0 | 16 | 2,403 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 2,897 |
| Snapper category | 103 | 4,529 | 10 | 3,927 | 8,472 | 379 | 112 | 0 | 3 | 0 | 83 | 7,522 | 418 | 25,558 |
| Triggerfish | 149 | 14,774 | 425 | 190 | 4,791 | 435 | 0 | 0 | 0 | 0 | 50 | 11,128 | 218 | 32,160 |
| Barracudas | 1,569 | 214 | 0 | 444 | 2,304 | 233 | 0 | 0 | 0 | 180 | 0 | 138 | 45 | 5,127 |
| Porgies | 163 | 7,390 | 140 | 2,887 | 1,051 | 9 | 64 | 0 | 15 | 0 | 0 | 137 | 184 | 12,040 |
| Snooks | 1,110 | 0 | 0 | 5,569 | 1,264 | 42 | 30 | 0 | 2 | 0 | 0 | 108 | 0 | 8,125 |
| Tarpon | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| Goatfishes | 0 | 5,736 | 0 | 182 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,918 |
| Sardines | 214 | 19 | 0 | 26 | 835 | 0 | 35 | 0 | 9,687 | 0 | 0 | 0 | 0 | 10,816 |
| King Mackerels | 654 | 755 | 0 | 1,242 | 25,565 | 16,438 | 0 | 0 | 15 | 73 | 3 | 2,163 | 18 | 46,926 |
| Cero | 151 | 70 | 0 | 997 | 19,883 | 8,311 | 35 | 0 | 33 | 232 | 0 | 359 | 20 | 30,091 |
| Sharks | 75 | 0 | 0 | 2,386 | 7,661 | 394 | 5,949 | 0 | 0 | 0 | 0 | 613 | 318 | 17,396 |
| Wahoo | 90 | 0 | 0 | 0 | 1,824 | 1,231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,145 |
| CLASSIFFIED | | | | | | | | | | | | | | |
| First Class | 0 | 3,616 | 0 | 94 | 2,802 | 0 | 0 | 0 | 0 | 0 | 0 | 3,283 | 74 | 9,869 |
| Second Class | 0 | 3,167 | 0 | 117 | 689 | 4 | 0 | 0 | 0 | 0 | 0 | 146 | 86 | 4,209 |
| Third Class | 0 | 606 | 0 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 716 | 0 | 1,368 |
| Trash | 0 | 21 | 0 | 0 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 72 |

| TABLE 5B. LANDINGS REPORTED BY SPECIES AND GEAR IN PUERTO RICO 1N 2005. | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | BEACH SEINE (Pounds) | FISH TRAP (Pounds) | LOBSTER TRAP (Pounds) | GILL NET (Pounds) | BOTTOM LINE (Pounds) | TROLL LINE (Pounds) | LONG LINE (Pounds) | LAND CRAB TRAP (Pounds) | CAST NET (Pounds) | ROD AND LINE (Pounds) | SKIN DIVING (Pounds) | SCUBA DIVING (Pounds) | TRAMMEL NET (Pounds) | TOTAL (Pounds) |
| Other fishes | 1,192 | 1,025 | 376 | 1,382 | 12,724 | 3,013 | 543 | 0 | 943 | 987 | 456 | 1,497 | 897 | 25,035 |
| Total Fishes | 25,350 | 177,016 | 5,661 | 86,173 | 610,953 | 122,386 | 21,563 | 29 | 11,951 | 1,940 | 872 | 85,280 | 27,433 | 1,176,607 |
| | | | | | | | | | | | | | | |
| SHELLFISH | | | | | | | | | | | | | | |
| Conch | 0 | 454 | 30 | 25 | 14 | 0 | 0 | 0 | 10 | 0 | 1,098 | 193,670 | 252 | 195,553 |
| Land crab | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,276 | 0 | 0 | 0 | 0 | 0 | 4,276 |
| Lobster | 34 | 49,223 | 27,930 | 178 | 2,075 | 136 | 0 | 30 | 22 | 0 | 578 | 86,540 | 6,227 | 172,973 |
| Octopus | 0 | 480 | 0 | 31 | 87 | 11 | 0 | 0 | 22 | 0 | 3,429 | 5,530 | 10 | 9,600 |
| Other shellfish | 689 | 4,082 | 0 | 1,643 | 502 | 10 | 0 | 21 | 535 | 0 | 57 | 2,193 | 294 | 10,026 |
| Total Shellfish | 723 | 54,239 | 27,960 | 1,877 | 2,678 | 157 | 0 | 4,327 | 589 | 0 | 5,162 | 287,933 | 6,783 | 392,428 |
| TOTAL | 26,073 | 231,255 | 33,621 | 88,050 | 613,631 | 122,543 | 21,563 | 4,356 | 12,540 | 1,940 | 6,034 | 373,213 | 34,216 | 1,569,035 |

| TABLE 5C. LANDINGS REPORTED BY SPECIES AND GEAR IN PUERTO RICO 1N 2006. | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | BEACH SEINE (Pounds) | FISH TRAP (Pounds) | LOBSTER TRAP (Pounds) | GILL NET (Pounds) | BOTTOM LINE (Pounds) | TROLL LINE (Pounds) | LONG LINE (Pounds) | LAND CRAB TRAP (Pounds) | CAST NET (Pounds) | ROD AND LINE (Pounds) | SKIN DIVING (Pounds) | SCUBA DIVING (Pounds) | TRAMMEL NET (Pounds) | TOTAL (Pounds) |
| FISH | | | | | | | | | | | | | | |
| Tunas | | | | | | | | | | | | | | |
| Blackfin tuna | 1,611 | 25 | 0 | 45 | 9,702 | 9,038 | 0 | 0 | 0 | 0 | 0 | 66 | 0 | 20,487 |
| Little tunny | 3,220 | 142 | 0 | 110 | 3,226 | 1,913 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,611 |
| Skipjack tuna | 298 | 124 | 0 | 39 | 11,039 | 10,937 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 22,487 |
| Yellowfin tuna | 161 | 0 | 0 | 0 | 10,921 | 9,518 | 0 | 0 | 0 | 0 | 0 | 140 | 0 | 20,740 |
| Tuna category | 112 | 0 | 0 | 250 | 1,003 | 4,090 | 14 | 0 | 0 | 0 | 0 | 266 | 0 | 5,735 |
| Ballyhoo | 2,083 | 1,011 | 0 | 8,591 | 1,676 | 2,367 | 0 | 0 | 0 | 0 | 0 | 456 | 40 | 16,224 |
| White grunt | 567 | 18,593 | 243 | 4,930 | 9,946 | 186 | 99 | 0 | 0 | 0 | 28 | 1,419 | 15,702 | 51,713 |
| Hogfish | 4 | 4,164 | 395 | 64 | 953 | 1,372 | 20 | 0 | 0 | 0 | 287 | 20,178 | 764 | 28,201 |
| Trunkfish | 200 | 19,009 | 1,557 | 1,193 | 2,426 | 136 | 0 | 0 | 0 | 0 | 103 | 9,552 | 5,782 | 39,958 |
| Dolphinfish | 176 | 0 | 0 | 10 | 12,551 | 32,164 | 0 | 0 | 0 | 0 | 0 | 2,481 | 2 | 47,384 |
| Squirrelfishes | 88 | 2,986 | 0 | 499 | 766 | 117 | 61 | 0 | 0 | 0 | 2 | 0 | 4 | 4,523 |
| Mullets | 3,070 | 87 | 0 | 8,078 | 910 | 62 | 0 | 0 | 541 | 0 | 0 | 60 | 0 | 12,808 |
| Jacks | | | | | | | | | | | | | | 0 |
| Bar jack | 1,739 | 1,941 | 10 | 2,299 | 8,272 | 396 | 199 | 0 | 18 | 0 | 0 | 105 | 1,708 | 16,687 |
| Horse-eye jack | 12 | 91 | 0 | 9 | 803 | 81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 996 |
| Yellow jack | 7 | 105 | 0 | 21 | 116 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 250 |
| Jack Category | 2,463 | 80 | 0 | 1,481 | 2,565 | 61 | 25 | 0 | 0 | 0 | 30 | 77 | 0 | 6,782 |
| Parrotfishes | 604 | 9,782 | 2 | 7,296 | 1,190 | 0 | 2 | 0 | 0 | 0 | 259 | 3,382 | 9,496 | 32,013 |
| Groupers | | | | | | | | | | | | | | |
| Coney | 0 | 2,840 | 0 | 296 | 1,426 | 246 | 0 | 0 | 0 | 0 | 5 | 137 | 24 | 4,974 |
| Red hind | 0 | 5,669 | 0 | 121 | 6,622 | 3,036 | 69 | 0 | 0 | 0 | 325 | 6,401 | 45 | 22,288 |
| Misty grouper | 0 | 510 | 0 | 0 | 4,319 | 0 | 0 | 0 | 0 | 0 | 0 | 764 | 0 | 5,593 |
| Nassau grouper | 21 | 38 | 0 | 0 | 1,316 | 239 | 0 | 0 | 0 | 0 | 0 | 136 | 0 | 1,750 |
| Yellowfin grouper | 0 | 513 | 0 | 53 | 161 | 19 | 0 | 0 | 0 | 0 | 4 | 225 | 0 | 975 |
| Grouper category | 44 | 1,808 | 54 | 142 | 3,935 | 0 | 27 | 0 | 0 | 0 | 25 | 8,584 | 0 | 14,619 |

TABLE 5C. LANDINGS REPORTED BY SPECIES AND GEAR IN PUERTO RICO 1N 2006.

| SPECIES | BEACH SEINE (Pounds) | FISH TRAP (Pounds) | LOBSTER TRAP (Pounds) | GILL NET (Pounds) | BOTTOM LINE (Pounds) | TROLL LINE (Pounds) | LONG LINE (Pounds) | LAND CRAB TRAP (Pounds) | CAST NET (Pounds) | ROD AND LINE (Pounds) | SKIN DIVING (Pounds) | SCUBA DIVING (Pounds) | TRAMMEL NET (Pounds) | TOTAL (Pounds) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mojarras | 9 | 186 | 0 | 1,311 | 362 | 0 | 55 | 0 | 32 | 0 | 0 | 2 | 0 | 1,957 |
| Snappers | | | | | | | | | | | | | | 0 |
| Lane snapper | 360 | 28,840 | 696 | 3,101 | 37,979 | 1,867 | 11,305 | 0 | 29 | 0 | 118 | 2,559 | 352 | 87,206 |
| Yellowtail snapper | 280 | 6,779 | 121 | 2,322 | 81,117 | 39 | 801 | 0 | 7 | 0 | 48 | 1,670 | 710 | 93,894 |
| Silk snapper | 0 | 7,981 | 0 | 40 | 75,259 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 83,311 |
| Mutton snapper | 429 | 5,792 | 61 | 1,901 | 12,574 | 130 | 558 | 0 | 3 | 0 | 54 | 3,886 | 95 | 25,483 |
| Queen snapper | 0 | 419 | 0 | 0 | 102,463 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 102,882 |
| Vermillion snapper | 0 | 1,030 | 0 | 17 | 2,021 | 0 | 13 | 0 | 0 | 0 | 0 | 70 | 0 | 3,151 |
| Wenchman | 0 | 0 | 0 | 297 | 3,591 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,888 |
| Blackfin snapper | 0 | 1,204 | 0 | 12 | 2,202 | 0 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 3,460 |
| Snapper category | 140 | 5,971 | 0 | 2,237 | 6,027 | 0 | 0 | 0 | 0 | 0 | 119 | 5,158 | 556 | 20,208 |
| Triggerfish | 131 | 12,866 | 243 | 59 | 3,770 | 1,030 | 128 | 0 | 0 | 0 | 138 | 8,464 | 679 | 27,508 |
| Barracudas | 1,679 | 100 | 0 | 398 | 2,593 | 183 | 22 | 0 | 28 | 0 | 0 | 38 | 13 | 5,054 |
| Porgies | 223 | 6,549 | 0 | 1,457 | 460 | 34 | 20 | 0 | 0 | 0 | 4 | 40 | 188 | 8,975 |
| Snooks | 1,814 | 174 | 0 | 4,329 | 1,469 | 395 | 28 | 0 | 4 | 0 | 0 | 598 | 40 | 8,851 |
| Tarpon | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 32 |
| Goatfishes | 112 | 4,251 | 0 | 210 | 71 | 62 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 4,726 |
| Sardines | 0 | 71 | 0 | 11 | 884 | 507 | 25 | 0 | 4,244 | 0 | 0 | 0 | 0 | 5,742 |
| King Mackerels | 678 | 106 | 0 | 1,426 | 28,581 | 4,990 | 154 | 0 | 24 | 0 | 0 | 735 | 0 | 36,694 |
| Cero | 440 | 65 | 0 | 735 | 16,063 | 6,276 | 226 | 0 | 15 | 22 | 0 | 206 | 0 | 24,048 |
| Sharks | 55 | 0 | 0 | 974 | 9,249 | 2,641 | 6,617 | 0 | 0 | 0 | 29 | 1,845 | 953 | 22,363 |
| Wahoo | 287 | 0 | 0 | 0 | 642 | 3,384 | 0 | 0 | 0 | 0 | 0 | 71 | 0 | 4,384 |
| CLASSIFFIED | | | | | | | | | | | | | | |
| First Class | 0 | 2,916 | 0 | 23 | 1,234 | 0 | 0 | 0 | 0 | 0 | 0 | 661 | 0 | 4,834 |
| Second Class | 0 | 2,548 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 95 | 0 | 2,665 |
| Third Class | 0 | 262 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 0 | 343 |
| Trash | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| TABLE 5C. LANDINGS REPORTED BY SPECIES AND GEAR IN PUERTO RICO 1N 2006. | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | BEACH SEINE (Pounds) | FISH TRAP (Pounds) | LOBSTER TRAP (Pounds) | GILL NET (Pounds) | BOTTOM LINE (Pounds) | TROLL LINE (Pounds) | LONG LINE (Pounds) | LAND CRAB TRAP (Pounds) | CAST NET (Pounds) | ROD AND LINE (Pounds) | SKIN DIVING (Pounds) | SCUBA DIVING (Pounds) | TRAMMEL NET (Pounds) | TOTAL (Pounds) |
| Other fishes | 411 | 5,623 | 385 | 3,629 | 3,057 | 302 | 456 | 0 | 489 | 22 | 297 | 1,561 | 72 | 16,304 |
| Total Fishes | 23,552 | 163,251 | 3,767 | 60,016 | 487,534 | 97,818 | 20,997 | 0 | 5,434 | 44 | 1,875 | 82,248 | 37,225 | 983,761 |
| | | | | | | | | | | | | | | |
| SHELLFISH | | | | | | | | | | | | | | |
| Conch | 0 | 367 | 0 | 163 | 0 | 0 | 0 | 0 | 0 | 0 | 1,375 | 148,732 | 2,824 | 153,461 |
| Land crab | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,077 | 0 | 0 | 0 | 0 | 0 | 5,077 |
| Lobster | 509 | 47,548 | 22,954 | 988 | 775 | 250 | 0 | 0 | 0 | 0 | 637 | 87,474 | 7,963 | 169,098 |
| Octopus | 3 | 421 | 66 | 19 | 42 | 122 | 0 | 0 | 0 | 0 | 3,374 | 15,885 | 99 | 20,031 |
| Other shellfish | 40 | 1,982 | 0 | 1,036 | 14 | 24 | 16 | 0 | 266 | 0 | 667 | 3,009 | 442 | 7,496 |
| Total Shellfish | 552 | 50,318 | 23,020 | 2,206 | 831 | 396 | 16 | 5,077 | 266 | 0 | 6,053 | 255,100 | 11,328 | 355,163 |
| TOTAL | 24,104 | 213,569 | 26,787 | 62,222 | 488,365 | 98,214 | 21,013 | 5,077 | 5,700 | 44 | 7,928 | 337,348 | 48,553 | 1,338,924 |

| TABLE 6A. LANDINGS REPORTED IN PUERTO RICO BY SPECIES AND MONTH DURING 2004. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | JAN (Pounds) | FEB (Pounds) | MARCH (Pounds) | APRIL (Pounds) | MAY (Pounds) | JUNE (Pounds) | JUL (Pounds) | AUG (Pounds) | SEP. (Pounds) | OCT (Pounds) | NOV (Pounds) | DEC (Pounds) | TOTAL (Pounds) |
| FISH | | | | | | | | | | | | | |
| Tunas | | | | | | | | | | | | | |
| Blackfin tuna | 2,322 | 982 | 2,122 | 3,793 | 4,093 | 2,487 | 2,702 | 3,089 | 3,647 | 1,471 | 1,021 | 1,274 | 29,003 |
| Little tunny | 653 | 380 | 970 | 1,331 | 1,042 | 1,309 | 1,372 | 1,250 | 1,405 | 2,999 | 421 | 320 | 13,452 |
| Skipjack tuna | 1,905 | 984 | 740 | 1,109 | 2,435 | 4,425 | 2,548 | 1,484 | 2,029 | 909 | 1,510 | 2,318 | 22,396 |
| Yellowfin tuna | 861 | 423 | 662 | 811 | 2,415 | 3,159 | 1,639 | 1,846 | 2,334 | 542 | 531 | 330 | 15,553 |
| Tuna category | 1,287 | 573 | 685 | 713 | 832 | 538 | 1,067 | 1,333 | 124 | 588 | 869 | 365 | 8,974 |
| Ballyhoo | 3,524 | 2,037 | 2,269 | 2,174 | 1,949 | 1,081 | 1,593 | 3,529 | 1,671 | 3,160 | 2,013 | 1,789 | 26,789 |
| White grunt | 13,533 | 8,699 | 8,046 | 6,589 | 6,502 | 6,099 | 5,717 | 8,331 | 6,006 | 7,928 | 6,013 | 5,850 | 89,313 |
| Hogfish | 4,379 | 2,970 | 3,054 | 3,877 | 2,460 | 2,900 | 4,886 | 4,637 | 2,964 | 3,541 | 2,368 | 1,840 | 39,876 |
| Trunkfish | 5,556 | 4,773 | 4,124 | 3,847 | 3,752 | 3,947 | 4,309 | 6,278 | 4,197 | 4,468 | 3,339 | 3,737 | 52,327 |
| Dolphinfish | 17,881 | 8,286 | 5,380 | 5,209 | 4,319 | 1,660 | 757 | 833 | 1,923 | 3,833 | 8,331 | 17,915 | 76,327 |
| Squirrelfishes | 838 | 917 | 514 | 617 | 490 | 577 | 465 | 692 | 454 | 528 | 570 | 450 | 7,112 |
| Mullets | 2,913 | 3,217 | 3,040 | 2,814 | 1,338 | 2,249 | 2,276 | 2,211 | 2,001 | 1,891 | 1,662 | 1,281 | 26,893 |
| Jacks | | | | | | | | | | | | | |
| Bar jack | 3,379 | 2,555 | 2,973 | 2,831 | 1,986 | 3,675 | 3,222 | 2,886 | 3,223 | 3,197 | 1,644 | 2,232 | 33,803 |
| Horse-eye jack | 191 | 162 | 177 | 180 | 65 | 113 | 315 | 124 | 114 | 203 | 138 | 118 | 1,900 |
| Yellow jack | 38 | 48 | 116 | 157 | 37 | 52 | 68 | 81 | 40 | 18 | 37 | 14 | 706 |
| Jack Category | 1,317 | 994 | 998 | 925 | 958 | 2,312 | 1,041 | 2,132 | 1,951 | 1,199 | 393 | 2,322 | 16,542 |
| Parrotfishes | 5,328 | 7,152 | 6,580 | 4,420 | 3,730 | 3,008 | 3,688 | 4,012 | 4,519 | 3,766 | 2,415 | 3,061 | 51,679 |
| Groupers | | | | | | | | | | | | | |
| Coney | 1,303 | 1,283 | 736 | 702 | 479 | 460 | 372 | 769 | 442 | 589 | 449 | 274 | 7,858 |
| Red hind | 9,716 | 5,669 | 3,072 | 3,486 | 2,100 | 2,773 | 2,339 | 3,434 | 3,228 | 3,689 | 2,117 | 1,461 | 43,084 |
| Misty grouper | 366 | 1,069 | 623 | 586 | 538 | 96 | 331 | 175 | 257 | 534 | 82 | 129 | 4,786 |
| Nassau grouper | 623 | 563 | 411 | 462 | 442 | 187 | 243 | 411 | 469 | 346 | 40 | 33 | 4,230 |
| Yellowfin grouper | 355 | 393 | 230 | 244 | 397 | 74 | 62 | 110 | 21 | 226 | 63 | 13 | 2,188 |
| Grouper category | 6,003 | 4,038 | 2,016 | 1,276 | 1,055 | 1,823 | 1,631 | 2,164 | 2,143 | 1,886 | 1,044 | 858 | 25,937 |
| Mojarras | 732 | 894 | 779 | 499 | 339 | 399 | 709 | 779 | 292 | 323 | 336 | 291 | 6,372 |

| TABLE 6A. LANDINGS REPORTED IN PUERTO RICO BY SPECIES AND MONTH DURING 2004. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | JAN (Pounds) | FEB (Pounds) | MARCH (Pounds) | APRIL (Pounds) | MAY (Pounds) | JUNE (Pounds) | JUL (Pounds) | AUG (Pounds) | SEP. (Pounds) | OCT (Pounds) | NOV (Pounds) | DEC (Pounds) | TOTAL (Pounds) |
| Snappers | | | | | | | | | | | | | |
| Lane snapper | 11,684 | 11,099 | 9,787 | 8,498 | 7,546 | 5,441 | 6,301 | 8,006 | 6,863 | 9,235 | 7,318 | 7,411 | 99,189 |
| Yellowtail snapper | 23,487 | 12,225 | 12,291 | 13,579 | 8,212 | 12,075 | 11,827 | 17,562 | 11,024 | 14,313 | 6,561 | 7,470 | 150,626 |
| Silk snapper | 12,227 | 10,566 | 8,089 | 11,610 | 8,674 | 7,582 | 10,092 | 11,173 | 10,724 | 12,900 | 8,760 | 6,469 | 118,866 |
| Mutton snapper | 4,865 | 6,070 | 4,052 | 5,224 | 4,147 | 3,894 | 2,615 | 3,690 | 3,957 | 2,889 | 2,599 | 3,056 | 47,058 |
| Queen snapper | 11,761 | 10,146 | 7,227 | 7,682 | 7,120 | 2,805 | 3,848 | 6,952 | 6,064 | 7,407 | 4,167 | 4,365 | 79,544 |
| Vermillion snapper | 1,082 | 817 | 1,014 | 1,036 | 193 | 514 | 932 | 1,442 | 858 | 1,053 | 520 | 88 | 9,549 |
| Wenchman | 741 | 405 | 415 | 1,066 | 715 | 173 | 498 | 843 | 461 | 403 | 258 | 299 | 6,277 |
| Blackfin snapper | 455 | 456 | 303 | 130 | 210 | 204 | 184 | 223 | 271 | 411 | 411 | 135 | 3,393 |
| Snapper category | 2,801 | 2,618 | 2,280 | 2,494 | 2,792 | 2,191 | 1,803 | 2,775 | 3,018 | 3,000 | 2,064 | 1,722 | 29,558 |
| Triggerfishes | 4,013 | 4,441 | 4,466 | 3,915 | 3,498 | 2,959 | 3,884 | 5,119 | 3,339 | 2,661 | 2,528 | 2,287 | 43,110 |
| Barracudas | 1,490 | 746 | 770 | 586 | 282 | 650 | 818 | 565 | 490 | 401 | 366 | 198 | 7,362 |
| Porgies | 1,766 | 1,917 | 1,602 | 1,178 | 1,176 | 1,126 | 1,180 | 1,903 | 1,630 | 1,368 | 1,056 | 2,000 | 17,902 |
| Snooks | 2,182 | 1,494 | 1,789 | 830 | 1,498 | 1,902 | 1,790 | 1,722 | 1,486 | 1,321 | 1,484 | 1,141 | 18,639 |
| Tarpon | 80 | 44 | 43 | 37 | 42 | 71 | 31 | 11 | 47 | 0 | 136 | 210 | 752 |
| Goatfishes | 966 | 583 | 440 | 143 | 254 | 567 | 486 | 1,011 | 1,157 | 913 | 734 | 1,010 | 8,264 |
| Sardines | 1,508 | 1,015 | 1,889 | 1,564 | 1,538 | 1,279 | 975 | 1,079 | 683 | 1,174 | 744 | 836 | 14,284 |
| King Mackarels | 8,651 | 3,738 | 5,488 | 3,471 | 6,921 | 5,327 | 5,007 | 3,760 | 1,621 | 4,141 | 2,132 | 2,372 | 52,629 |
| Cero | 2,479 | 1,353 | 1,421 | 2,605 | 1,883 | 1,550 | 2,549 | 1,436 | 655 | 1,444 | 1,101 | 1,270 | 19,746 |
| Sharks | 1,754 | 620 | 906 | 1,622 | 1,806 | 710 | 1,542 | 561 | 2,269 | 620 | 1,226 | 1,449 | 15,085 |
| Wahoo | 1,107 | 123 | 185 | 231 | 263 | 1,213 | 410 | 69 | 288 | 450 | 48 | 149 | 4,536 |
| CLASSIFFIED | | | | | | | | | | | | | |
| First Class | 2,946 | 1,449 | 993 | 1,295 | 1,785 | 1,665 | 2,353 | 1,575 | 2,312 | 2,388 | 1,615 | 1,579 | 21,955 |
| Second Class | 1,883 | 845 | 655 | 921 | 755 | 699 | 1,201 | 1,060 | 1,343 | 1,033 | 782 | 850 | 12,027 |
| Third Class | 650 | 503 | 657 | 715 | 531 | 279 | 797 | 713 | 1,001 | 1,117 | 676 | 610 | 8,249 |
| Trash | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other fishes | 1,696 | 888 | 1,631 | 1,439 | 425 | 764 | 1,762 | 1,482 | 1,017 | 1,623 | 401 | 13 | 13,141 |

| TABLE 6A. LANDINGS REPORTED IN PUERTO RICO BY SPECIES AND MONTH DURING 2004. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | JAN (Pounds) | FEB (Pounds) | MARCH (Pounds) | APRIL (Pounds) | MAY (Pounds) | JUNE (Pounds) | JUL (Pounds) | AUG (Pounds) | SEP. (Pounds) | OCT (Pounds) | NOV (Pounds) | DEC (Pounds) | TOTAL (Pounds) |
| Total Fishes | 187,277 | 133,222 | 118,710 | 120,523 | 106,019 | 101,043 | 106,237 | 127,322 | 108,032 | 120,099 | 85,093 | 95,264 | 1,408,841 |
| | | | | | | | | | | | | | |
| SHELLFISH | | | | | | | | | | | | | |
| Conch | 22,511 | 21,477 | 25,901 | 26,536 | 19,611 | 19,094 | 141 | 165 | 213 | 33,528 | 21,135 | 25,728 | 216,040 |
| Land crab | 44 | 46 | 55 | 42 | 529 | 198 | 57 | 14 | 75 | 75 | 244 | 22 | 1,401 |
| Lobster | 20,140 | 16,353 | 17,180 | 17,172 | 17,433 | 14,040 | 16,309 | 19,241 | 24,360 | 19,390 | 15,724 | 14,884 | 212,226 |
| Octopus | 2,548 | 1,603 | 1,547 | 1,353 | 1,276 | 971 | 1,337 | 1,231 | 1,578 | 2,501 | 2,037 | 2,190 | 20,172 |
| Other shellfish | 454 | 752 | 756 | 430 | 546 | 351 | 638 | 564 | 384 | 508 | 347 | 270 | 6,000 |
| Total Shellfish | 45,697 | 40,231 | 45,439 | 45,533 | 39,395 | 34,654 | 18,482 | 21,215 | 26,610 | 56,002 | 39,487 | 43,094 | 455,839 |
| TOTAL | 232,974 | 173,453 | 164,149 | 166,056 | 145,414 | 135,697 | 124,719 | 148,537 | 134,642 | 176,101 | 124,580 | 138,358 | 1,864,680 |

| TABLE 6B. LANDINGS REPORTED IN PUERTO RICO BY SPECIES AND MONTH DURING 2005. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | JAN (Pounds) | FEB (Pounds) | MARCH (Pounds) | APRIL (Pounds) | MAY (Pounds) | JUNE (Pounds) | JULY (Pounds) | AUG (Pounds) | SEPT (Pounds) | OCT (Pounds) | NOV (Pounds) | DEC (Pounds) | TOTAL (Pounds) |
| FISH | | | | | | | | | | | | | |
| Tunas | | | | | | | | | | | | | |
| Blackfin tuna | 566 | 594 | 3,868 | 4,296 | 2,174 | 1,741 | 1,953 | 1,633 | 1,454 | 997 | 2,000 | 763 | 22,039 |
| Little tunny | 663 | 47 | 1,147 | 506 | 861 | 1,052 | 1,288 | 896 | 1,067 | 154 | 203 | 212 | 8,096 |
| Skipjack tuna | 483 | 210 | 1,585 | 3,355 | 3,751 | 3,261 | 4,704 | 2,073 | 1,695 | 2,006 | 1,540 | 1,186 | 25,849 |
| Yellowfin tuna | 411 | 565 | 4,113 | 2,214 | 3,138 | 2,875 | 1,951 | 2,097 | 2,299 | 853 | 585 | 133 | 21,234 |
| Tuna category | 344 | 266 | 558 | 1,998 | 399 | 325 | 443 | 418 | 240 | 275 | 214 | 235 | 5,715 |
| Ballyhoo | 1,815 | 1,200 | 2,429 | 2,452 | 1,579 | 1,067 | 2,007 | 1,221 | 561 | 368 | 708 | 1,725 | 17,132 |
| White grunt | 2,870 | 3,953 | 6,253 | 6,497 | 5,761 | 5,033 | 4,712 | 5,909 | 4,884 | 3,212 | 3,068 | 1,523 | 53,675 |
| Hogfish | 1,934 | 1,533 | 2,644 | 2,465 | 2,190 | 1,880 | 3,544 | 2,834 | 3,037 | 2,344 | 849 | 637 | 25,891 |
| Trunkfish | 2,826 | 2,907 | 4,667 | 4,896 | 5,132 | 4,567 | 4,010 | 5,160 | 4,258 | 2,770 | 2,400 | 1,003 | 44,596 |
| Dolphinfish | 11,018 | 4,621 | 5,862 | 5,668 | 2,374 | 1,307 | 594 | 382 | 1,374 | 2,002 | 5,190 | 2,421 | 42,813 |
| Squirrelfishes | 320 | 317 | 561 | 603 | 622 | 615 | 528 | 699 | 461 | 334 | 412 | 411 | 5,883 |
| Mullets | 658 | 774 | 1,280 | 1,276 | 2,245 | 2,211 | 2,424 | 1,594 | 1,074 | 641 | 727 | 619 | 15,523 |
| Jacks | | | | | | | | | | | | | |
| Bar jack | 1,522 | 1,658 | 3,084 | 2,292 | 1,678 | 2,604 | 1,847 | 2,275 | 1,872 | 1,655 | 1,235 | 922 | 22,644 |
| Horse-eye jack | 95 | 59 | 226 | 116 | 160 | 276 | 135 | 79 | 326 | 147 | 75 | 31 | 1,725 |
| Yellow jack | 12 | 0 | 172 | 0 | 27 | 97 | 61 | 56 | 30 | 21 | 41 | 10 | 527 |
| Jack Category | 125 | 197 | 658 | 1,065 | 1,059 | 1,169 | 720 | 1,163 | 840 | 474 | 132 | 111 | 7,713 |
| Parrotfishes | 1,544 | 2,268 | 3,453 | 3,195 | 3,010 | 3,368 | 2,304 | 3,321 | 3,178 | 1,598 | 2,280 | 1,613 | 31,132 |
| Groupers | | | | | | | | | | | | | |
| Coney | 309 | 270 | 327 | 384 | 302 | 281 | 522 | 562 | 436 | 308 | 428 | 77 | 4,206 |
| Red hind | 1,597 | 1,302 | 2,548 | 2,296 | 1,465 | 3,347 | 3,717 | 3,595 | 3,598 | 3,309 | 2,155 | 131 | 29,060 |
| Misty grouper | 225 | 92 | 1,262 | 870 | 568 | 911 | 1,165 | 701 | 339 | 556 | 379 | 327 | 7,395 |
| Nassau grouper | 64 | 44 | 283 | 245 | 184 | 147 | 203 | 290 | 233 | 169 | 128 | 7 | 1,997 |
| Yellowfin grouper | 49 | 21 | 37 | 71 | 110 | 83 | 63 | 111 | 72 | 68 | 53 | 14 | 752 |
| Grouper category | 3,555 | 574 | 1,086 | 1,004 | 1,088 | 1,560 | 1,486 | 1,861 | 1,679 | 950 | 489 | 249 | 15,581 |
| Mojarras | 137 | 77 | 404 | 348 | 581 | 220 | 514 | 271 | 291 | 307 | 445 | 17 | 3,612 |

| TABLE 6B. LANDINGS REPORTED IN PUERTO RICO BY SPECIES AND MONTH DURING 2005. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | JAN (Pounds) | FEB (Pounds) | MARCH (Pounds) | APRIL (Pounds) | MAY (Pounds) | JUNE (Pounds) | JULY (Pounds) | AUG (Pounds) | SEPT (Pounds) | OCT (Pounds) | NOV (Pounds) | DEC (Pounds) | TOTAL (Pounds) |
| Snappers | | | | | | | | | | | | | |
| Lane snapper | 4,503 | 4,325 | 10,244 | 11,431 | 7,960 | 7,259 | 8,890 | 11,488 | 7,667 | 6,068 | 5,400 | 2,954 | 88,189 |
| Yellowtail snapper | 4,560 | 7,035 | 21,410 | 14,260 | 9,823 | 11,603 | 10,723 | 15,389 | 10,810 | 5,056 | 2,743 | 1,544 | 114,956 |
| Silk snapper | 7,301 | 6,751 | 10,428 | 13,146 | 9,541 | 11,624 | 10,769 | 14,799 | 12,287 | 5,501 | 4,746 | 3,564 | 110,457 |
| Mutton snapper | 1,768 | 1,602 | 3,941 | 6,437 | 2,820 | 3,223 | 3,228 | 3,510 | 2,747 | 2,229 | 1,359 | 605 | 33,469 |
| Queen snapper | 1,750 | 1,871 | 22,762 | 15,227 | 16,608 | 16,465 | 20,066 | 13,347 | 13,119 | 12,540 | 12,562 | 10,431 | 156,748 |
| Vermillion snapper | 231 | 193 | 1,033 | 936 | 481 | 309 | 707 | 753 | 481 | 222 | 298 | 201 | 5,845 |
| Wenchman | 143 | 176 | 1,804 | 922 | 1,842 | 911 | 1,591 | 1,147 | 1,178 | 902 | 402 | 355 | 11,373 |
| Blackfin snapper | 220 | 180 | 103 | 103 | 230 | 548 | 352 | 442 | 337 | 140 | 153 | 89 | 2,897 |
| Snapper category | 1,111 | 1,201 | 2,709 | 3,065 | 2,359 | 2,187 | 3,513 | 3,437 | 2,624 | 1,819 | 1,058 | 475 | 25,558 |
| Triggerfishes | 1,397 | 1,515 | 3,255 | 3,352 | 2,760 | 3,163 | 4,023 | 4,671 | 3,184 | 2,214 | 1,723 | 903 | 32,160 |
| Barracudas | 128 | 374 | 697 | 323 | 536 | 511 | 480 | 558 | 594 | 625 | 171 | 130 | 5,127 |
| Porgies | 1,628 | 523 | 1,405 | 1,165 | 1,158 | 1,107 | 999 | 1,280 | 1,101 | 602 | 776 | 296 | 12,040 |
| Snooks | 196 | 1,310 | 755 | 537 | 1,004 | 725 | 1,009 | 880 | 616 | 452 | 376 | 265 | 8,125 |
| Tarpon | 0 | 0 | 0 | 13 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| Goatfishes | 612 | 801 | 646 | 613 | 474 | 397 | 321 | 528 | 585 | 581 | 284 | 76 | 5,918 |
| Sardines | 1,050 | 590 | 917 | 664 | 912 | 770 | 1,012 | 2,069 | 838 | 1,270 | 549 | 175 | 10,816 |
| King Mackarels | 1,307 | 1,630 | 5,128 | 9,098 | 11,049 | 5,837 | 4,610 | 3,040 | 1,654 | 1,039 | 940 | 1,594 | 46,926 |
| Cero | 418 | 569 | 3,736 | 5,576 | 6,039 | 2,107 | 4,541 | 2,919 | 1,459 | 767 | 1,025 | 935 | 30,091 |
| Sharks | 299 | 464 | 1,431 | 1,592 | 1,867 | 1,439 | 2,054 | 2,528 | 2,447 | 1,109 | 1,781 | 385 | 17,396 |
| Wahoo | 21 | 115 | 1,138 | 350 | 0 | 3 | 0 | 0 | 502 | 572 | 42 | 402 | 3,145 |
| CLASSIFFIED | | | | | | | | | | | | | |
| First Class | 1,523 | 514 | 1,360 | 1,465 | 1,001 | 548 | 1,085 | 689 | 967 | 415 | 190 | 112 | 9,869 |
| Second Class | 254 | 384 | 697 | 673 | 302 | 513 | 137 | 523 | 541 | 121 | 64 | 0 | 4,209 |
| Third class | 596 | 161 | 5 | 0 | 250 | 105 | 0 | 146 | 105 | 0 | 0 | 0 | 1,368 |
| Trash | 0 | 0 | 9 | 2 | 10 | 21 | 0 | 0 | 30 | 0 | 0 | 0 | 72 |
| Other fishes | 1,567 | 2,345 | 1,578 | 2,345 | 1,678 | 1,987 | 2,567 | 1,987 | 1,432 | 3,070 | 2,345 | 2,134 | 25,035 |

| TABLE 6B. LANDINGS REPORTED IN PUERTO RICO BY SPECIES AND MONTH DURING 2005. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | JAN (Pounds) | FEB (Pounds) | MARCH (Pounds) | APRIL (Pounds) | MAY (Pounds) | JUNE (Pounds) | JULY (Pounds) | AUG (Pounds) | SEPT (Pounds) | OCT (Pounds) | NOV (Pounds) | DEC (Pounds) | TOTAL (Pounds) |
| Total Fishes | 65,725 | 58,178 | 145,698 | 141,407 | 121,177 | 113,359 | 123,572 | 125,331 | 102,603 | 72,832 | 64,723 | 42,002 | 1,176,607 |
| | | | | | | | | | | | | | |
| SHELLFISH | | | | | | | | | | | | | |
| Conch | 15,869 | 19,714 | 26,868 | 26,541 | 24,694 | 26,330 | 264 | 181 | 731 | 24,117 | 18,130 | 12,114 | 195,553 |
| Land crab | 40 | 80 | 567 | 791 | 1,573 | 624 | 250 | 73 | 22 | 186 | 36 | 34 | 4,276 |
| Lobster | 10,373 | 13,350 | 16,025 | 14,941 | 14,153 | 16,132 | 18,392 | 18,357 | 16,671 | 14,696 | 11,448 | 8,435 | 172,973 |
| Octopus | 1,171 | 1,362 | 747 | 799 | 986 | 549 | 581 | 857 | 978 | 706 | 595 | 269 | 9,600 |
| Other shellfish | 143 | 922 | 1,756 | 790 | 1,224 | 944 | 1,192 | 574 | 1,220 | 353 | 698 | 210 | 10,026 |
| Total Shellfish | 27,596 | 35,428 | 45,963 | 43,862 | 42,630 | 44,579 | 20,679 | 20,042 | 19,622 | 40,058 | 30,907 | 21,062 | 392,428 |
| TOTAL | 93,321 | 93,606 | 191,661 | 185,269 | 163,807 | 157,938 | 144,251 | 145,373 | 122,225 | 112,890 | 95,630 | 63,064 | 1,569,035 |

| TABLE 6C. LANDINGS REPORTED IN PUERTO RICO BY SPECIES AND MONTH DURING 2006. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | JAN (Pounds) | FEB (Pounds) | MARCH (Pounds) | APRIL (Pounds) | MAY (Pounds) | JUNE (Pounds) | JULY (Pounds) | AUG (Pounds) | SEPT (Pounds) | OCT (Pounds) | NOV (Pounds) | DEC (Pounds) | TOTAL (Pounds) |
| FISH | | | | | | | | | | | | | |
| Tunas | | | | | | | | | | | | | |
| Blackfin tuna | 1,443 | 3,491 | 1,691 | 1,550 | 1,781 | 2,409 | 901 | 2,405 | 1,995 | 773 | 492 | 1,556 | 20,487 |
| Little tunny | 340 | 2,394 | 1,795 | 410 | 903 | 687 | 341 | 200 | 815 | 388 | 57 | 281 | 8,611 |
| Skipjack tuna | 1,031 | 1,629 | 1,379 | 1,842 | 696 | 2,067 | 2,922 | 5,100 | 1,644 | 1,867 | 396 | 1,914 | 22,487 |
| Yellowfin tuna | 1,026 | 1,094 | 763 | 1,937 | 2,884 | 4,971 | 2,114 | 2,347 | 2,155 | 569 | 359 | 521 | 20,740 |
| Tuna category | 56 | 143 | 82 | 440 | 861 | 1,068 | 815 | 583 | 990 | 398 | 98 | 201 | 5,735 |
| Ballyhoo | 1,204 | 819 | 1,638 | 786 | 1,128 | 1,077 | 859 | 1,621 | 1,983 | 2,224 | 1,673 | 1,212 | 16,224 |
| White grunt | 5,453 | 6,056 | 5,057 | 3,378 | 4,868 | 5,322 | 4,135 | 4,594 | 4,536 | 4,591 | 2,335 | 1,388 | 51,713 |
| Hogfish | 2,385 | 2,255 | 1,705 | 1,287 | 2,021 | 2,437 | 3,431 | 3,736 | 2,959 | 1,992 | 2,312 | 1,681 | 28,201 |
| Trunkfish | 3,932 | 3,549 | 2,914 | 3,010 | 4,393 | 3,708 | 3,703 | 3,350 | 3,360 | 3,199 | 2,504 | 2,336 | 39,958 |
| Dolphinfish | 7,351 | 9,151 | 8,550 | 5,210 | 5,054 | 916 | 858 | 1,262 | 1,253 | 2,226 | 2,243 | 3,310 | 47,384 |
| Squirrelfishes | 528 | 494 | 453 | 194 | 382 | 367 | 347 | 365 | 377 | 413 | 359 | 244 | 4,523 |
| Mullets | 1,481 | 1,987 | 846 | 1,108 | 1,029 | 1,270 | 1,367 | 1,168 | 737 | 816 | 394 | 605 | 12,808 |
| Jacks | | | | | | | | | | | | | |
| Bar jack | 1,450 | 2,563 | 2,295 | 885 | 1,114 | 1,105 | 1,384 | 1,221 | 2,226 | 981 | 901 | 562 | 16,687 |
| Horse-eye jack | 102 | 183 | 39 | 73 | 30 | 33 | 38 | 60 | 82 | 174 | 115 | 67 | 996 |
| Yellow jack | 105 | 0 | 14 | 0 | 0 | 21 | 75 | 20 | 8 | 7 | 0 | 0 | 250 |
| Jack Category | 749 | 992 | 909 | 307 | 423 | 293 | 600 | 415 | 539 | 567 | 451 | 537 | 6,782 |
| Parrotfishes | 2,439 | 2,835 | 2,992 | 3,051 | 3,464 | 3,233 | 3,277 | 2,823 | 2,517 | 2,842 | 1,426 | 1,114 | 32,013 |
| Groupers | | | | | | | | | | | | | |
| Coney | 299 | 258 | 424 | 361 | 361 | 1,060 | 454 | 456 | 444 | 209 | 438 | 210 | 4,974 |
| Red hind | 136 | 219 | 2,554 | 2,786 | 2,280 | 1,464 | 2,330 | 3,101 | 3,367 | 2,321 | 1,684 | 46 | 22,288 |
| Misty grouper | 1,005 | 803 | 622 | 289 | 340 | 293 | 175 | 447 | 544 | 265 | 480 | 330 | 5,593 |
| Nassau grouper | 37 | 193 | 430 | 157 | 206 | 115 | 54 | 68 | 138 | 118 | 222 | 12 | 1,750 |
| Yellowfin grouper | 154 | 111 | 104 | 9 | 85 | 109 | 60 | 57 | 72 | 92 | 58 | 64 | 975 |
| Grouper category | 358 | 438 | 1,082 | 941 | 946 | 919 | 1,985 | 1,990 | 2,733 | 1,040 | 888 | 1,299 | 14,619 |
| Mojarras | 258 | 182 | 210 | 97 | 137 | 118 | 280 | 273 | 122 | 80 | 118 | 82 | 1,957 |
| Snappers | | | | | | | | | | | | | |

| TABLE 6C. LANDINGS REPORTED IN PUERTO RICO BY SPECIES AND MONTH DURING 2006. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | JAN (Pounds) | FEB (Pounds) | MARCH (Pounds) | APRIL (Pounds) | MAY (Pounds) | JUNE (Pounds) | JULY (Pounds) | AUG (Pounds) | SEPT (Pounds) | OCT (Pounds) | NOV (Pounds) | DEC (Pounds) | TOTAL (Pounds) |
| Lane snapper | 8,357 | 10,396 | 8,198 | 7,081 | 7,148 | 6,608 | 6,934 | 7,648 | 6,470 | 6,000 | 6,559 | 5,807 | 87,206 |
| Yellowtail snapper | 6,879 | 10,310 | 13,181 | 9,202 | 6,741 | 6,210 | 4,130 | 7,732 | 9,604 | 10,480 | 6,448 | 2,977 | 93,894 |
| Silk snapper | 6,337 | 5,472 | 6,861 | 8,103 | 8,341 | 8,012 | 7,104 | 10,601 | 9,002 | 6,255 | 3,355 | 3,868 | 83,311 |
| Mutton snapper | 2,480 | 2,088 | 2,715 | 1,883 | 638 | 1,369 | 2,356 | 2,512 | 3,388 | 2,114 | 1,837 | 2,103 | 25,483 |
| Queen snapper | 12,321 | 10,392 | 12,000 | 7,136 | 3,306 | 3,696 | 2,980 | 5,194 | 12,222 | 12,212 | 12,847 | 8,576 | 102,882 |
| Vermillion snapper | 242 | 300 | 291 | 129 | 310 | 181 | 398 | 432 | 682 | 69 | 114 | 3 | 3,151 |
| Wenchman | 554 | 309 | 573 | 173 | 329 | 187 | 227 | 537 | 629 | 91 | 144 | 135 | 3,888 |
| Blackfin snapper | 295 | 143 | 482 | 150 | 291 | 237 | 916 | 420 | 302 | 56 | 88 | 80 | 3,460 |
| Snapper category | 1,484 | 1,499 | 1,860 | 2,505 | 1,754 | 1,365 | 1,677 | 2,076 | 2,694 | 1,365 | 1,297 | 632 | 20,208 |
| Triggerfishes | 1,908 | 2,241 | 2,100 | 1,912 | 2,617 | 2,453 | 3,750 | 3,501 | 2,506 | 1,666 | 1,646 | 1,208 | 27,508 |
| Barracudas | 724 | 679 | 291 | 522 | 303 | 690 | 483 | 314 | 195 | 217 | 412 | 224 | 5,054 |
| Porgies | 1,115 | 906 | 640 | 367 | 718 | 931 | 852 | 894 | 782 | 719 | 644 | 407 | 8,975 |
| Snooks | 678 | 806 | 778 | 531 | 878 | 855 | 600 | 1,013 | 936 | 878 | 604 | 294 | 8,851 |
| Tarpon | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 32 |
| Goatfishes | 378 | 367 | 243 | 210 | 373 | 478 | 312 | 595 | 660 | 517 | 304 | 289 | 4,726 |
| Sardines | 988 | 518 | 494 | 519 | 416 | 613 | 316 | 403 | 268 | 858 | 223 | 126 | 5,742 |
| King Mackarels | 2,489 | 3,016 | 5,483 | 4,067 | 3,961 | 2,870 | 3,291 | 3,530 | 2,693 | 2,076 | 1,695 | 1,523 | 36,694 |
| Cero | 1,663 | 3,396 | 1,735 | 4,292 | 4,992 | 1,923 | 1,772 | 812 | 713 | 892 | 902 | 956 | 24,048 |
| Sharks | 2,524 | 1,628 | 2,312 | 1,547 | 2,913 | 1,932 | 1,143 | 3,077 | 2,866 | 1,634 | 609 | 178 | 22,363 |
| Wahoo | 92 | 346 | 0 | 517 | 504 | 1,085 | 15 | 76 | 0 | 544 | 432 | 773 | 4,384 |
| CLASSIFFIED | | | | | | | | | | | | | |
| First Class | 354 | 315 | 368 | 814 | 511 | 377 | 1,055 | 269 | 285 | 72 | 176 | 238 | 4,834 |
| Second Class | 226 | 132 | 272 | 395 | 501 | 412 | 401 | 84 | 0 | 0 | 120 | 122 | 2,665 |
| Third class | 0 | 0 | 0 | 0 | 22 | 13 | 46 | 41 | 221 | 0 | 0 | 0 | 343 |
| Trash | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other fishes | 211 | 1,053 | 2,323 | 2,369 | 1,266 | 1,264 | 1,193 | 1,184 | 1,693 | 1,310 | 1,219 | 1,219 | 16,304 |
| Total Fishes | 85,621 | 98,151 | 101,756 | 84,532 | 84,219 | 78,823 | 74,456 | 90,607 | 94,431 | 78,177 | 61,678 | 51,310 | 983,761 |
| | | | | | | | | | | | | | |
| SHELLFISH | | | | | | | | | | | | | |

| TABLE 6C. LANDINGS REPORTED IN PUERTO RICO BY SPECIES AND MONTH DURING 2006. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPECIES | JAN (Pounds) | FEB (Pounds) | MARCH (Pounds) | APRIL (Pounds) | MAY (Pounds) | JUNE (Pounds) | JULY (Pounds) | AUG (Pounds) | SEPT (Pounds) | OCT (Pounds) | NOV (Pounds) | DEC (Pounds) | TOTAL (Pounds) |
| Conch | 19,692 | 18,510 | 19,211 | 13,228 | 19,888 | 20,558 | 126 | 304 | 574 | 17,042 | 13,016 | 11,312 | 153,461 |
| Land crab | 555 | 585 | 679 | 517 | 775 | 838 | 160 | 89 | 70 | 221 | 374 | 214 | 5,077 |
| Lobster | 19,486 | 15,722 | 13,355 | 9,277 | 12,077 | 13,628 | 14,489 | 15,010 | 18,899 | 12,707 | 12,667 | 11,781 | 169,098 |
| Octopus | 1,383 | 2,268 | 2,753 | 1,299 | 1,903 | 1,033 | 1,454 | 1,594 | 1,554 | 1,815 | 1,688 | 1,287 | 20,031 |
| Other shellfish | 1,069 | 943 | 861 | 483 | 608 | 575 | 594 | 549 | 583 | 397 | 409 | 425 | 7,496 |
| Total Shellfish | 42,185 | 38,028 | 36,859 | 24,804 | 35,251 | 36,632 | 16,823 | 17,546 | 21,680 | 32,182 | 28,154 | 25,019 | 355,163 |
| TOTAL | 127,806 | 136,179 | 138,615 | 109,336 | 119,470 | 115,455 | 91,279 | 108,153 | 116,111 | 110,359 | 89,832 | 76,329 | 1,338,924 |

**Table 7A. AVERAGE POUND PER TRIP IN PUERTO RICO BY MONYH DURING 2004.**

| *Month* | *Number of trips* | *Average Pounds Landed by Trip* | *Standard Deviation* |
|---|---|---|---|
| January | 3,182 | 65.63 | 206.33 |
| February | 3,049 | 59.45 | 206.46 |
| March | 2,950 | 56.91 | 186.86 |
| April | 3,057 | 58.11 | 154.25 |
| May | 2,737 | 55.43 | 184.49 |
| June | 2,591 | 58.03 | 399.98 |
| July | 2,513 | 55.37 | 120.36 |
| August | 2,598 | 60.10 | 162.65 |
| September | 2,193 | 74.43 | 159.17 |
| October | 2,875 | 71.69 | 225.30 |
| November | 2,223 | 61.11 | 175.47 |
| December | 2,280 | 71.21 | 146.57 |
| Total | 32,248 | 62.11 | 199.56 |

**Table 7B. AVERAGE POUND PER TRIP IN PUERTO RICO BY MONYH DURING 2005.**

| *Month* | *Number of trips* | *Average Pounds Landed by Trip* | *Standard Deviation* |
|---|---|---|---|
| January | 1,513 | 75.97 | 212.40 |
| February | 1,633 | 60.08 | 177.21 |
| March | 2,996 | 70.66 | 182.66 |
| April | 3,158 | 60.98 | 221.02 |
| May | 2,914 | 55.81 | 164.22 |
| June | 2,922 | 59.25 | 174.65 |
| July | 2,669 | 60.28 | 185.08 |
| August | 3,009 | 56.15 | 197.23 |
| September | 2,522 | 56.55 | 149.05 |
| October | 2,059 | 56.89 | 128.43 |
| November | 1,594 | 62.70 | 117.85 |
| December | 927 | 59.62 | 206.96 |
| Total | 27,916 | 61.06 | 178.20 |

**Table 7C. AVERAGE POUND PER TRIP IN PUERTO RICO BY MONYH DURING 2006.**

| *Month* | *Number of trips* | *Average Pounds Landed by Trip* | *Standard Deviation* |
|---|---|---|---|
| January | 2,460 | 59.42 | 236.66 |
| February | 2,539 | 67.08 | 172.21 |
| March | 2,491 | 61.52 | 170.91 |
| April | 1,974 | 57.55 | 136.03 |
| May | 2,298 | 57.77 | 151.49 |
| June | 2,155 | 59.38 | 142.23 |
| July | 1,996 | 51.84 | 160.15 |
| August | 2,192 | 57.04 | 243.17 |
| September | 2,192 | 64.71 | 175.51 |
| October | 2,144 | 61.71 | 251.26 |
| November | 1,919 | 57.81 | 95.02 |
| December | 1,624 | 50.31 | 119.47 |
| Total | 25,984 | 59.04 | 178.79 |

**Table 7D. AVERAGE POUND PER TRIP IN PUERTO RICO BY COAST DURING 2004-06.**

| *Coast* | *Number of trips* | *Average Pounds Landed by Trip* | *Standard Deviation* |
|---|---|---|---|
| 2004 | | | |
| North | 3,414 | 59.14 | 257.61 |
| East | 5,319 | 68.93 | 153.88 |
| South | 8,965 | 61.85 | 229.54 |
| West | 14,977 | 60.03 | 226.46 |
| 2005 | | | |
| North | 2,502 | 51.20 | 132.41 |
| East | 3,790 | 74.45 | 129.52 |
| South | 7,281 | 57.68 | 150.82 |
| West | 14,320 | 63.00 | 244.69 |
| 2006 | | | |
| North | 1,537 | 45.42 | 72.00 |
| East | 2,923 | 69.63 | 152.27 |
| South | 8,075 | 54.54 | 155.93 |
| West | 13,461 | 65.42 | 242.98 |

| TABLE 8A. SUMMARY OF BIOSTATISTIC DATA (COMPLETE AND INCOMPLETE SAMPLES) IN PUERTO RICO DURING JANUARY TO DECEMBER 2004. | | | |
|---|---|---|---|
| RANK* | SPECIES | NUMBER MEASURED | AVERAGE FOR LENGTH |
| 1 | *Ocyurus chrysurus* | 2,871 | 303.09 |
| 2 | *Lutjanus vivanus* | 2,579 | 292.80 |
| 3 | *Panulirus argus* | 1,978 | 130.12 |
| 4 | *Lutjanus synagris* | 1,721 | 249.93 |
| 5 | *Epinephelus guttatus* | 1,130 | 337.52 |
| 6 | *Haemulon plumieri* | 992 | 226.13 |
| 7 | *Sparisoma viride* | 876 | 266.38 |
| 8 | *Sparisoma chrysopterum* | 519 | 264.73 |
| 9 | *Etelis oculatus* | 514 | 399.28 |
| 10 | *Caranx ruber* | 410 | 265.82 |
| 11 | *Lutjanus analis* | 394 | 361.45 |
| 12 | *Haemulon sciurus* | 347 | 230.54 |
| 13 | *Calamus pennatula* | 315 | 216.82 |
| 14 | *Euthynnus alletteratus* | 303 | 390.80 |
| 15 | *Scomberomorus cavalla* | 300 | 733.20 |
| 16 | *Coryphaena hippurus* | 294 | 848.70 |
| 17 | *Scomberomorus regalis* | 289 | 454.02 |
| 18 | *Cephalopholis fulvus* | 276 | 252.75 |
| 19 | *Caranx crysos* | 276 | 406.59 |
| 20 | *Lutjanus buccanella* | 255 | 301.21 |
| 21 | *Pseudupeneus maculatus* | 254 | 187.01 |
| 22 | *Balistes vetula* | 244 | 349.37 |
| 23 | *Rhomboplites aurorubens* | 215 | 232.48 |
| 24 | *Thunnus atlanticus* | 179 | 531.08 |
| 25 | *Myctoperca tigris* | 172 | 495.05 |
| 26 | *Lachnolaimus maximus* | 149 | 359.48 |
| 27 | *Acanthocybium solanderi* | 129 | 799.36 |
| 28 | *Scarus vetula* | 127 | 292.18 |
| 29 | *Lutjanus apodus* | 120 | 304.03 |
| 30 | *Acanthostracion poligonius* | 115 | 245.42 |
| 31 | *Acanthostracion quadricornis* | 98 | 255.82 |
| 32 | *Sphyraena picudilla* | 89 | 391.97 |
| 33 | *Caranx latus* | 83 | 364.12 |
| 34 | *Centropomus undecimalis* | 76 | 742.41 |
| 35 | *Scarus taeniopterus* | 68 | 259.34 |
| 36 | *Gerreidae* | 67 | 220.49 |
| 37 | *Caranx bartholomaei* | 64 | 440.48 |
| 38 | *Sparidae* | 64 | 251.52 |
| 39 | *Calamus bajonado* | 59 | 229.34 |
| 40 | *Lutjanus jocu* | 52 | 356.13 |
| 41 | *Thunnus albacares* | 52 | 1,054.63 |

| TABLE 8A. SUMMARY OF BIOSTATISTIC DATA (COMPLETE AND INCOMPLETE SAMPLES) IN PUERTO RICO DURING JANUARY TO DECEMBER 2004. | | | |
|---|---|---|---|
| RANK* | SPECIES | NUMBER MEASURED | AVERAGE FOR LENGTH |
| 42 | *Lactophrys trigonus* | 48 | 345.98 |
| 43 | *Lutjanus mahogoni* | 46 | 297.52 |
| 44 | *Anisotremus virginicus* | 43 | 223.00 |
| 45 | *Diapterus plumieri* | 42 | 221.76 |
| 46 | *Odontoscion dentex* | 41 | 330.56 |
| 47 | *Acanthostracion bicaudalis* | 41 | 222.59 |
| 48 | *Pristipomoides macrophthalmus* | 40 | 291.13 |
| 49 | *Haemulon flavolineatum* | 40 | 196.90 |
| 50 | *Trichiurus lepturus* | 38 | 678.26 |
| 51 | *Opisthonema ogiinum* | 36 | 175.67 |
| 52 | *Haemulon album* | 33 | 275.94 |
| 53 | *Haemulon carbonarium* | 31 | 212.52 |
| 54 | *Scyllarides aequinoctialis* | 31 | 96.87 |
| 55 | *Holocentridae* | 27 | 210.59 |
| 56 | *Hemiramphus brasiliensis* | 26 | 246.96 |
| 57 | *Selar crumenophthalmus* | 26 | 180.96 |
| 58 | *Scaridae* | 26 | 279.15 |
| 59 | *Epinephelus cruentatus* | 25 | 271.64 |
| 60 | *Coryphaenidae* | 25 | 722.56 |
| 61 | *Thunnus alalunga* | 25 | 350.72 |
| 62 | *Caranx hippos* | 24 | 414.58 |
| 63 | *Holocentrus ascensionis* | 23 | 205.13 |
| 64 | *Sparisoma rubripinne* | 23 | 268.09 |
| 65 | *Clupeidae* | 22 | 245.95 |
| 66 | *Acanthostracion triqueter* | 21 | 198.57 |
| 67 | *Elagatis bipinnulatus* | 20 | 641.85 |
| 68 | *Balistes capriscus* | 20 | 318.65 |
| 69 | *Euthynnus pelamis* | 19 | 544.89 |
| 70 | *Centropomus parallelus* | 15 | 645.00 |
| 71 | *Epinephelus mystacinus* | 15 | 612.20 |
| 72 | *Trachinotus falcatus* | 15 | 328.27 |
| 73 | *Micropogonias furnieri* | 14 | 351.29 |
| 74 | *Mugil curema* | 14 | 389.71 |
| 75 | *Epinephelus striatus* | 13 | 465.38 |
| 76 | *Archosargus rhomboidalis* | 13 | 177.46 |
| 77 | *Kyphosidae* | 13 | 458.85 |
| 78 | *Lobotes surinamensis* | 12 | 561.92 |
| 79 | *Mulloidichthys martinicus* | 12 | 242.92 |
| 80 | *Priacanthus arenatus* | 11 | 301.91 |
| 81 | *Chaetodontidae* | 11 | 394.00 |
| 82 | *Haemulon parra* | 11 | 240.82 |
| 83 | *Megalops atlantica* | 10 | 740.30 |

| TABLE 8A. SUMMARY OF BIOSTATISTIC DATA (COMPLETE AND INCOMPLETE SAMPLES) IN PUERTO RICO DURING JANUARY TO DECEMBER 2004. | | | |
|---|---|---|---|
| RANK* | SPECIES | NUMBER MEASURED | AVERAGE FOR LENGTH |
| 84 | *Strombus gigas* | 10 | 256.80 |
| 85 | *Manta birostris* | 9 | 1,048.89 |
| 86 | *Lutjanus griseus* | 9 | 326.67 |
| 87 | *Holacanthus ciliaris* | 9 | 298.22 |
| 88 | *Bodianus rufus* | 9 | 274.78 |
| 89 | *Ostraciidae* | 8 | 307.13 |
| 90 | *Sparisoma aurofrenatum* | 8 | 222.88 |
| 91 | *Mustelus norrisi* | 7 | 807.43 |
| 92 | *Acanthurus bahianus* | 7 | 252.43 |
| 93 | *Carpinus coralinus* | 7 | 237.14 |
| 94 | *Heptranchus perlo* | 6 | 820.00 |
| 95 | *Cephalopholis fulvus* | 6 | 304.83 |
| 96 | *Seriola dumerili* | 6 | 616.83 |
| 97 | *Gerres cinereus* | 5 | 206.20 |
| 98 | *Serranidae* | 4 | 308.00 |
| 99 | *Sphyraena barracuda* | 4 | 379.00 |
| 100 | *Scombridae* | 4 | 559.00 |
| 101 | *Scorpaena plumieri* | 4 | 148.75 |
| 102 | *Chaetodon striatus* | 4 | 127.25 |
| 103 | *Myctoperca bonaci* | 4 | 496.25 |
| 104 | *Other shellfish* | 4 | 122.00 |
| 105 | *Lutjanus cyanopterus* | 3 | 597.00 |
| 106 | *Fistularia tabacaria* | 2 | 225.00 |
| 107 | *Syngnathidae* | 2 | 230.00 |
| 108 | *Centropomus ensiferus* | 2 | 517.00 |
| 109 | *Lutjanidae* | 2 | 264.00 |
| 110 | *Anisotremus surinamensis* | 2 | 270.00 |
| 111 | *Sphyraenidae* | 2 | 925.00 |
| 112 | *Pomacanthus paru* | 2 | 320.00 |
| 113 | *Carcharhinidae* | 1 | 850.00 |
| 114 | *Galeocerdo cuvieri* | 1 | 2,292.00 |
| 115 | *Epinephelus itajara* | 1 | 900.00 |
| 116 | *Mycteroperca venenosa* | 1 | 684.00 |
| 117 | *Carangidae* | 1 | 335.00 |
| 118 | *Vomer setapinnis* | 1 | 652.00 |
| 119 | *Apsilus dentatus* | 1 | 444.00 |
| 120 | *Mullidae* | 1 | 199.00 |
| 121 | *Ephippidae* | 1 | 520.00 |
| 122 | *Balistidae* | 1 | 291.00 |
| 123 | *Canthidermis sufflamen* | 1 | 252.00 |
| 124 | *Lepomis gulosus* | 1 | 530.00 |
| 125 | *Cichia ocellaris* | 1 | 283.00 |

TABLE 8A. SUMMARY OF BIOSTATISTIC DATA (COMPLETE AND INCOMPLETE SAMPLES) IN PUERTO RICO DURING JANUARY TO DECEMBER 2004.

| RANK* | SPECIES | NUMBER MEASURED | AVERAGE FOR LENGTH |
|---|---|---|---|
| 126 | *Chaetodon ocellatus* | 1 | 140.00 |
| 127 | *Aluterus scriptus* | 1 | 450.00 |
| 128 | *Aluterus monocerus* | 1 | 503.00 |
| 129 | *Diodon holacanthus* | 1 | 142.00 |
| 130 | *Mithrax spinosissimus* | 1 | 80.00 |
| 131 | *Panulirus guttatus* | 1 | 83.00 |

* Species rank according to total number of individual measured.

TABLE 8B. SUMMARY OF BIOSTATISTIC DATA (COMPLETE AND INCOMPLETE SAMPLES) IN PUERTO RICO DURING JANUARY TO DECEMBER 2005.

| RANK* | SPECIES | NUMBER MEASURED | AVERAGE FOR LENGTH |
|---|---|---|---|
| 1 | *Ocyurus chrysurus* | 2,392 | 317.87 |
| 2 | *Panulirus argus* | 1,690 | 204.17 |
| 3 | *Sparisoma viride* | 875 | 281.73 |
| 4 | *Haemulon plumieri* | 801 | 224.54 |
| 5 | *Lutjanus vivanus* | 767 | 344.79 |
| 6 | *Epinephelus guttatus* | 742 | 340.83 |
| 7 | *Etelis oculatus* | 583 | 498.42 |
| 8 | *Haemulon sciurus* | 543 | 531.61 |
| 9 | *Lutjanus synagris* | 482 | 263.60 |
| 10 | *Sparisoma chrysopterum* | 462 | 265.48 |
| 11 | *Scomberomorus cavalla* | 419 | 1,615.13 |
| 12 | *Scomberomorus regalis* | 368 | 566.79 |
| 13 | *Balistes vetula* | 328 | 296.79 |
| 14 | *Thunnus atlanticus* | 283 | 528.78 |
| 15 | *Lutjanus analis* | 262 | 403.28 |
| 16 | *Strombus gigas* | 216 | 189.80 |
| 17 | *Hemiramphus brasiliensis* | 205 | 251.18 |
| 18 | *Coryphaena hippurus* | 200 | 935.86 |
| 19 | *Lactophrys trigonus* | 191 | 366.77 |
| 20 | *Calamus pennatula* | 185 | 208.51 |
| 21 | *Lachnolaimus maximus* | 174 | 957.68 |
| 22 | *Lutjanus buccanella* | 172 | 298.83 |
| 23 | *Caranx crysos* | 160 | 377.11 |
| 24 | *Mugil curema* | 144 | 311.60 |
| 25 | *Rhomboplites aurorubens* | 136 | 242.37 |
| 26 | *Caranx ruber* | 134 | 295.66 |
| 27 | *Lutjanus apodus* | 129 | 271.50 |
| 28 | *Acanthostracion quadricornis* | 101 | 245.85 |
| 29 | *Anisotremus virginicus* | 97 | 225.73 |
| 30 | *Calamus bajonado* | 94 | 253.45 |
| 31 | *Cephalopholis fulvus* | 93 | 246.65 |
| 32 | *Acanthostracion poligonius* | 81 | 256.42 |
| 33 | *Opisthonema ogiinum* | 75 | 155.55 |
| 34 | *Scarus taeniopterus* | 73 | 259.29 |
| 35 | *Pseudupeneus maculatus* | 69 | 203.23 |
| 36 | *Scyllarides aequinoctialis* | 64 | 97.03 |
| 37 | *Lutjanus jocu* | 62 | 392.63 |
| 38 | *Caranx latus* | 57 | 371.84 |
| 39 | *Vomer setapinnis* | 55 | 185.47 |
| 40 | *Acanthocybium solanderi* | 55 | 837.31 |
| 41 | *Thunnus albacares* | 52 | 1,005.77 |

| TABLE 8B. SUMMARY OF BIOSTATISTIC DATA (COMPLETE AND INCOMPLETE SAMPLES) IN PUERTO RICO DURING JANUARY TO DECEMBER 2005. | | | |
|---|---|---|---|
| RANK* | SPECIES | NUMBER MEASURED | AVERAGE FOR LENGTH |
| 42 | *Scarus vetula* | 51 | 292.65 |
| 43 | *Acanthostracion bicaudalis* | 49 | 255.39 |
| 44 | *Sphyraena picudilla* | 48 | 388.35 |
| 45 | *Pristipomoides macrophthalmus* | 44 | 359.57 |
| 46 | *Haemulon flavolineatum* | 43 | 190.51 |
| 47 | *Euthynnus pelamis* | 41 | 577.76 |
| 48 | *Centropomus undecimalis* | 32 | 458.34 |
| 49 | *Myctoperca tigris* | 32 | 485.19 |
| 50 | *Acanthurus chirurgus* | 31 | 209.23 |
| 51 | *Gerres cinereus* | 30 | 199.03 |
| 52 | *Holocentrus ascensionis* | 29 | 223.31 |
| 53 | *Caranx bartholomaei* | 28 | 488.46 |
| 54 | *Selar crumenophthalmus* | 28 | 211.18 |
| 55 | *Haemulon album* | 26 | 318.08 |
| 56 | *Trichiurus lepturus* | 26 | 612.12 |
| 57 | *Harengula jaguana* | 25 | 96.48 |
| 58 | *Lutjanus mahogoni* | 25 | 278.20 |
| 59 | *Sparidae* | 25 | 208.48 |
| 60 | *Mulloidichthys martinicus* | 24 | 209.00 |
| 61 | *Sparisoma rubripinne* | 23 | 265.83 |
| 62 | *Acanthostracion triqueter* | 23 | 216.09 |
| 63 | *Trachinotus goodei* | 19 | 291.79 |
| 64 | *Euthynnus alletteratus* | 17 | 389.76 |
| 65 | *Archosargus rhomboidalis* | 16 | 201.75 |
| 66 | *Holocentrus rufus* | 15 | 259.53 |
| 67 | *Epinephelus cruentatus* | 12 | 250.17 |
| 68 | *Chloroscombrus chrysurus* | 12 | 333.18 |
| 69 | *Lobotes surinamensis* | 11 | 505.82 |
| 70 | *Scaridae* | 11 | 310.27 |
| 71 | *Sparisoma aurofrenatum* | 11 | 243.18 |
| 72 | *Acanthurus coerulus* | 10 | 190.70 |
| 73 | *Cephalopholis fulvus* | 9 | 707.78 |
| 74 | *Epinephelus mystacinus* | 9 | 739.89 |
| 75 | *Sphyraenidae* | 9 | 1,405.50 |
| 76 | *Sphyraena guachancho* | 9 | 414.00 |
| 77 | *Carcharhinidae* | 7 | 623.57 |
| 78 | *Lutjanus griseus* | 7 | 385.57 |
| 79 | *Gerreidae* | 6 | 546.83 |
| 80 | *Canthidermis sufflamen* | 6 | 349.50 |
| 81 | *Pomacanthus arcuatus* | 6 | 317.17 |
| 82 | *Octopus sp.* | 6 | 92.17 |
| 83 | *Conodon nobilis* | 5 | 217.00 |

TABLE 8B. SUMMARY OF BIOSTATISTIC DATA (COMPLETE AND INCOMPLETE SAMPLES) IN PUERTO RICO DURING JANUARY TO DECEMBER 2005.

| RANK* | SPECIES | NUMBER MEASURED | AVERAGE FOR LENGTH |
|---|---|---|---|
| 84 | *Anisotremus surinamensis* | 5 | 339.40 |
| 85 | *Odontoscion dentex* | 5 | 192.40 |
| 86 | *Haemulon parra* | 5 | 240.00 |
| 87 | *Shrimp* | 5 | 100.40 |
| 88 | *Tylosurus crocodilus* | 4 | 654.50 |
| 89 | *Epinephelus adscensionis* | 4 | 391.25 |
| 90 | *Alectis cillaris* | 4 | 853.50 |
| 91 | *Elagatis bipinnulatus* | 4 | 614.50 |
| 92 | *Melichthys niger* | 4 | 245.00 |
| 93 | *Ictalurus nebulosus* | 4 | 407.50 |
| 94 | *Orthopristis rubra* | 4 | 213.75 |
| 95 | *Epinephelus striatus* | 3 | 329.33 |
| 96 | *Seriola dumerili* | 3 | 542.00 |
| 97 | *Scarus guacamaia* | 3 | 620.00 |
| 98 | *Acanthurus bahianus* | 3 | 214.67 |
| 99 | *Haemulon carbonarium* | 3 | 222.33 |
| 100 | *Megalops atlantica* | 2 | 330.50 |
| 101 | *Serranidae* | 2 | 357.50 |
| 102 | *Epinephelus morio* | 2 | 514.50 |
| 103 | *Malacanthus plumieri* | 2 | 457.50 |
| 104 | *Holacanthus ciliaris* | 2 | 305.50 |
| 105 | *Bodianus rufus* | 2 | 257.50 |
| 106 | *Scombridae* | 2 | 613.50 |
| 107 | *Carcharhinus springeri* | 2 | 103.50 |
| 108 | *Pomacanthus paru* | 2 | 265.00 |
| 109 | *Mustelus norrisi* | 1 | 460.00 |
| 110 | *Elops saurus* | 1 | 280.00 |
| 111 | *Mycteroperca venenosa* | 1 | 790.00 |
| 112 | *Caulolatilus cyanops* | 1 | 290.00 |
| 113 | *Lutjanus cyanopterus* | 1 | 385.00 |
| 114 | *Apsilus dentatus* | 1 | 520.00 |
| 115 | *Haemulon aurolineatum* | 1 | 240.00 |
| 116 | *Labridae* | 1 | 540.00 |
| 117 | *Halichoeres radiatus* | 1 | 350.00 |
| 118 | *Sphyraena barracuda* | 1 | 1,052.00 |
| 119 | *Acanthuridae* | 1 | 180.00 |
| 120 | *Balistidae* | 1 | 318.00 |
| 121 | *Caranx hippos* | 1 | 620.00 |
| 122 | *Halichoeres maculipinna* | 1 | 345.00 |
| 123 | *Myctoperca interstitialis* | 1 | 653.00 |
| | | 15,063 | |

* Species rank according to total number of individual measured.

TABLE 8C. SUMMARY OF BIOSTATISTIC DATA (COMPLETE AND INCOMPLETE SAMPLES) IN PUERTO RICO DURING JANUARY TO DECEMBER 2006.

| RANK* | SPECIES | NUMBER MEASURED | AVERAGE FOR LENGTH |
|---|---|---|---|
| 1 | *Ocyurus chrysurus* | 3,044 | 325.61 |
| 2 | *Panulirus argus* | 2,089 | 109.74 |
| 3 | *Lutjanus vivanus* | 1,300 | 338.34 |
| 4 | *Lutjanus synagris* | 1,024 | 254.92 |
| 5 | *Epinephelus guttatus* | 882 | 346.65 |
| 6 | *Haemulon plumieri* | 803 | 227.12 |
| 7 | *Scomberomorus cavalla* | 699 | 781.68 |
| 8 | *Lutjanus analis* | 645 | 348.74 |
| 9 | *Sparisoma viride* | 625 | 275.73 |
| 10 | *Etelis oculatus* | 622 | 464.15 |
| 11 | *Sparisoma chrysopterum* | 593 | 269.04 |
| 12 | *Calamus pennatula* | 516 | 204.25 |
| 13 | *Caranx ruber* | 511 | 312.67 |
| 14 | *Haemulon sciurus* | 409 | 234.18 |
| 15 | *Lactophrys trigonus* | 362 | 358.08 |
| 16 | *Balistes vetula* | 358 | 293.65 |
| 17 | *Coryphaena hippurus* | 355 | 861.67 |
| 18 | *Pseudupeneus maculatus* | 290 | 172.21 |
| 19 | *Scomberomorus regalis* | 285 | 538.40 |
| 20 | *Thunnus atlanticus* | 268 | 511.31 |
| 21 | *Hemiramphus brasiliensis* | 213 | 219.95 |
| 22 | *Lachnolaimus maximus* | 170 | 386.29 |
| 23 | *Lutjanus apodus* | 164 | 291.16 |
| 24 | *Acanthostracion quadricornis* | 145 | 238.37 |
| 25 | *Lutjanus buccanella* | 144 | 318.00 |
| 26 | *Gerreidae* | 137 | 197.25 |
| 27 | *Calamus bajonado* | 134 | 223.19 |
| 28 | *Vomer setapinnis* | 124 | 192.77 |
| 29 | *Scyllarides aequinoctialis* | 110 | 96.76 |
| 30 | *Rhomboplites aurorubens* | 98 | 268.57 |
| 31 | *Acanthostracion poligonius* | 87 | 246.29 |
| 32 | *Acanthurus coerulus* | 85 | 197.49 |
| 33 | *Caranx crysos* | 80 | 351.11 |
| 34 | *Cephalopholis fulvus* | 77 | 246.19 |
| 35 | *Lutjanus jocu* | 75 | 396.55 |
| 36 | *Scarus taeniopterus* | 73 | 256.56 |
| 37 | *Scarus vetula* | 72 | 304.71 |
| 38 | *Pristipomoides macrophthalmus* | 67 | 361.15 |
| 39 | *Sparidae* | 65 | 233.31 |
| 40 | *Acanthocybium solanderi* | 61 | 922.31 |
| 41 | *Mugil curema* | 57 | 274.42 |

TABLE 8C. SUMMARY OF BIOSTATISTIC DATA (COMPLETE AND INCOMPLETE SAMPLES) IN PUERTO RICO DURING JANUARY TO DECEMBER 2006.

| RANK* | SPECIES | NUMBER MEASURED | AVERAGE FOR LENGTH |
|---|---|---|---|
| 42 | *Acanthostracion triqueter* | 56 | 194.45 |
| 43 | *Holocentrus ascensionis* | 55 | 237.55 |
| 44 | *Acanthostracion bicaudalis* | 55 | 252.71 |
| 45 | *Thunnus albacares* | 53 | 1,034.04 |
| 46 | *Gerres cinereus* | 52 | 183.42 |
| 47 | *Sphyraena picudilla* | 52 | 315.37 |
| 48 | *Centropomus parallelus* | 50 | 644.10 |
| 49 | *Caranx bartholomaei* | 47 | 441.15 |
| 50 | *Anisotremus virginicus* | 45 | 228.76 |
| 51 | *Acanthurus chirurgus* | 43 | 218.02 |
| 52 | *Holocentridae* | 41 | 154.12 |
| 53 | *Selar crumenophthalmus* | 40 | 155.20 |
| 54 | *Lutjanus mahogoni* | 38 | 310.03 |
| 55 | *Euthynnus pelamis* | 35 | 558.80 |
| 56 | *Mulloidichthys martinicus* | 33 | 200.42 |
| 57 | *Haemulon flavolineatum* | 29 | 201.07 |
| 58 | *Haemulon carbonarium* | 29 | 217.00 |
| 59 | *Centropomus undecimalis* | 27 | 589.11 |
| 60 | *Diapterus plumieri* | 26 | 229.38 |
| 61 | *Archosargus rhomboidalis* | 26 | 197.15 |
| 62 | *Scaridae* | 26 | 235.00 |
| 63 | *Elagatis bipinnulatus* | 23 | 570.35 |
| 64 | *Sparisoma rubripinne* | 22 | 310.00 |
| 65 | *Ostraciidae* | 21 | 304.81 |
| 66 | *Haemulon parra* | 19 | 241.05 |
| 67 | *Harengula humeralis* | 17 | 148.29 |
| 68 | *Tylosurus crocodilus* | 17 | 633.29 |
| 69 | *Lutjanus griseus* | 17 | 309.47 |
| 70 | *Caranx latus* | 16 | 490.75 |
| 71 | *Trachinotus goodei* | 16 | 364.69 |
| 72 | *Lutjanidae* | 16 | 274.13 |
| 73 | *Carpinus coralinus* | 16 | 116.88 |
| 74 | *Mullidae* | 15 | 153.67 |
| 75 | *Sphyraena guachancho* | 15 | 313.60 |
| 76 | *Malacanthus plumieri* | 14 | 343.43 |
| 77 | *Ephippidae* | 14 | 247.07 |
| 78 | *Kyphosus sectatrix* | 13 | 191.62 |
| 79 | *Euthynnus alletteratus* | 13 | 490.23 |
| 80 | *Diapterus rhombeus* | 12 | 136.92 |
| 81 | *Strombus gigas* | 12 | 33.60 |
| 82 | *Epinephelus cruentatus* | 11 | 250.27 |
| 83 | *Epinephelus mystacinus* | 11 | 713.18 |

TABLE 8C. SUMMARY OF BIOSTATISTIC DATA (COMPLETE AND INCOMPLETE SAMPLES) IN PUERTO RICO DURING JANUARY TO DECEMBER 2006.

| RANK* | SPECIES | NUMBER MEASURED | AVERAGE FOR LENGTH |
|---|---|---|---|
| 84 | *Trachinotus falcatus* | 11 | 496.00 |
| 85 | *Labridae* | 11 | 437.91 |
| 86 | *Cantherhines macrocerus* | 11 | 327.09 |
| 87 | *Pomacanthus paru* | 10 | 290.20 |
| 88 | *Haemulon aurolineatum* | 9 | 144.00 |
| 89 | *Sparisoma aurofrenatum* | 9 | 203.22 |
| 90 | *Coryphaenidae* | 8 | 710.75 |
| 91 | *Anisotremus surinamensis* | 8 | 362.25 |
| 92 | *Bodianus rufus* | 8 | 293.88 |
| 93 | *First class* | 8 | 114.69 |
| 94 | *Centropomus ensiferus* | 7 | 449.71 |
| 95 | *Cantherines pullus* | 7 | 250.43 |
| 96 | *Seriola rivoliana* | 6 | 571.67 |
| 97 | *Mycteroperca venenosa* | 5 | 745.00 |
| 98 | *Odontoscion dentex* | 5 | 327.00 |
| 99 | *Third class* | 5 | 14.80 |
| 100 | *Centropomidae* | 4 | 695.25 |
| 101 | *Priacanthus arenatus* | 4 | 395.25 |
| 102 | *Haemulon chrysargereus* | 4 | 314.50 |
| 103 | *Canthidermis sufflamen* | 4 | 439.75 |
| 104 | *Melichthys niger* | 4 | 304.25 |
| 105 | *Seriola dumerili* | 3 | 660.00 |
| 106 | *Lutjanus cyanopterus* | 3 | 885.67 |
| 107 | *Micropogonias furnieri* | 3 | 186.00 |
| 108 | *Halichoeres radiatus* | 3 | 315.00 |
| 109 | *Epinephelus afer* | 2 | 243.50 |
| 110 | *Epinephelus morio* | 2 | 690.00 |
| 111 | *Epinephelus adscensionis* | 2 | 155.50 |
| 112 | *Scarus coeruleus* | 2 | 295.00 |
| 113 | *Sphyraena barracuda* | 2 | 402.00 |
| 114 | *Thunnus alalunga* | 2 | 652.50 |
| 115 | *Second class* | 2 | 40.00 |
| 116 | *Mithrax spinosissimus* | 2 | 142.50 |
| 117 | *Carcharhinidae* | 1 | 540.00 |
| 118 | *Myripristis jacobus* | 1 | 165.00 |
| 119 | *Epinephelus inermis* | 1 | 234.00 |
| 120 | *Echeneis naucrates* | 1 | 370.00 |
| 121 | *Decapterus macarellus* | 1 | 600.00 |
| 122 | *Lobotes surinamenis* | 1 | 462.00 |
| 123 | *Eucinostomus guia* | 1 | 165.00 |
| 124 | *Scarus guacamaia* | 1 | 715.00 |
| 125 | *Scombridae* | 1 | 129.00 |

TABLE 8C. SUMMARY OF BIOSTATISTIC DATA (COMPLETE AND INCOMPLETE SAMPLES) IN PUERTO RICO DURING JANUARY TO DECEMBER 2006.

| RANK* | SPECIES | NUMBER MEASURED | AVERAGE FOR LENGTH |
|---|---|---|---|
| 126 | *Makaira nigricans* | 1 | 765.00 |
| 127 | *Lagocephalus laevigatus* | 1 | 216.00 |
| 128 | *Myctoperca tigris* | 1 | 658.00 |
| 129 | *Myctoperca bonaci* | 1 | 540.00 |
| 130 | *Myctoperca interstitialis* | 1 | 540.00 |

* Species rank according to total number of individual measured.

**TABLE 9. BIOSTATISTICS DATA - CATCH PER UNIT EFFORT (CPUE) AND MEAN LANDINGS PER TRIP FOR THE MOST SAMPLED GEARS IN PUERTO RICO DURING 2004-06.**

2004

| Gear | n | Mean CPUE (Pounds) | Effort Unit | Standard Deviation | Mean Gear Amount | Mean Unit of Time | Mean Landings per Trip | Standard Deviation |
|---|---|---|---|---|---|---|---|---|
| Beach Seine | 26 | 0.27 | Fathoms/Hour | 0.38 | 178 | 3 | 147 | 123 |
| Fish Trap | 51 | 0.31 | Trap/Day | 0.56 | 35 | 6 | 62 | 55 |
| Gill Net | 9 | 0.12 | Fathoms/Hour | 0.26 | 147 | 6 | 106 | 95 |
| Bottom Line | 106 | 1.71 | Hook/Hour | 2.14 | 6 | 8 | 77 | 102 |
| Troll Line | 31 | 7.22 | Hook/Hour | 4.12 | 3 | 8 | 136 | 114 |
| SCUBA Divers | 107 | 8.76 | Diver/Hour | 3.22 | 1 | 4 | 48 | 40 |
| Trammel Net | 63 | 0.01 | Fathoms/Hour | 0.25 | 1834 | 6 | 107 | 68 |

2005

| Gear | n | Mean CPUE (Pounds) | Effort Unit | Standard Deviation | Mean Gear Amount | Mean Unit of Time | Mean Landings per Trip | Standard Deviation |
|---|---|---|---|---|---|---|---|---|
| Beach Seine | 27 | 0.14 | Fathoms/Hour | 0.62 | 185 | 5 | 130 | 91 |
| Fish Trap | 45 | 0.41 | Trap/Day | 0.82 | 40 | 5 | 80 | 69 |
| Gill Net | 6 | 0.02 | Fathoms/Hour | 0.22 | 624 | 5 | 65 | 43 |
| Bottom Line | 37 | 1.65 | Hook/Hour | 2.3 | 6 | 9 | 82 | 82 |
| Troll Line | 26 | 7.79 | Hook/Hour | 2.8 | 2 | 9 | 135 | 118 |
| SCUBA Divers | 84 | 8.19 | Diver/Hour | 3.11 | 1 | 4 | 40 | 22 |
| Trammel Net | 61 | 0.01 | Fathoms/Hour | 0.42 | 2786 | 8 | 118 | 87 |

2006

| Gear | n | Mean CPUE (Pounds) | Effort Unit | Standard Deviation | Mean Gear Amount | Mean Unit of Time | Mean Landings per Trip | Standard Deviation |
|---|---|---|---|---|---|---|---|---|
| Beach Seine | 23 | 0.14 | Fathoms/Hour | 0.56 | 242 | 5 | 196 | 189 |
| Fish Trap | 48 | 0.36 | Trap/Day | 0.82 | 33 | 5 | 58 | 52 |
| Gill Net | 10 | 0.03 | Fathoms/Hour | 0.34 | 310 | 7 | 56 | 22 |
| Bottom Line | 153 | 1.54 | Hook/Hour | 2.01 | 5 | 9 | 70 | 73 |
| Troll Line | 33 | 9.27 | Hook/Hour | 12.15 | 2 | 9 | 164 | 139 |
| SCUBA Divers | 104 | 8.49 | Diver/Hour | 2.62 | 1 | 4 | 45 | 23 |
| Trammel Net | 50 | 0.01 | Fathoms/Hour | 0.03 | 2873 | 7 | 99 | 68 |


**Figure 1. Puerto Rico map.**

Figure 2. Trip ticket use in Puerto Rico during 2004 -07.

Estado Libre Asociado de Puerto Rico
DEPARTAMENTO DE RECURSOS NATURALES
Y AMBIENTALES
**Laboratorio De Investigaciones Pesqueras**
P.O. Box 3665 Mayagüez, P.R. 00681
**Teléfono: (787) 833-2025**
**PROGRAMA DE ESTADISTICAS PESQUERAS**
**SISTEMA DE UN BOLETO POR VIAJE**

Fecha de desembarco _____/_____/_____
Mes Día Año

Pueblo _____

Centro de desembarco _____ Uso Oficial _____

Número de teléfono _____ Número de horas pescando _____

Nombre del pescador 1 _____

Número licencia del pescador 1 _____ Fecha de Exp._____

Nombre del pescador 2 _____

Número licencia del pescador 2 _____ Fecha de Exp._____

Nombre del pescador 3 _____

Número licencia del pescador 3 _____ Fecha de Exp._____

Profundidad máxima en brazas _____ Profundidad mínima en brazas_____

Area donde capturó la pesca: Lat_____Min_____ Long_____Min_____

Pesca capturada a una distancia de la costa:

Mayor de 10 millas _____ Menor de 10 millas _____

| | | | | |
|---|---|---|---|---|
| (226) ATUN ALETA AMARILLA | | | | |
| (228) BONITO | | | | |
| (230) VACA | | | | |
| (229) BACORA | | | | |
| (225) ATUNES | | | | |
| (055) BALAJU | | | | |
| (155) BOQUICOLORADO | | | | |
| (189) CAPITAN | | | | |
| (256) CHAPINES | | | | |
| (128) DORADO | | | | |
| (064) GALLOS | | | | |
| (199) JAREA | | | | |
| (155) COJINUA | | | | |
| (116) GUAYMEN AMARILLO | | | | |
| (118) JUREL OJON | | | | |
| (109) JURELES | | | | |
| (192) LOROS | | | | |
| (088) CABRILLA | | | | |
| (089) CHERNA | | | | |
| (091) GUAJIL | | | | |
| (086) GUASA | | | | |
| (080) MANTEQUILLA | | | | |
| (079) MEROS | | | | |
| (147) MOJARRAS | | | | |
| (136) ARRAYADO | | | | |
| (142) BESUGO | | | | |
| **CLASE DE PESCADO** | **PESO** | **PRECIO POR** | **ARTE** | **CANTIDAD O TAMAÑO DE ARTE** |

| | | | | |
|---|---|---|---|---|
| | | **LIBRA** | | |
| (143) CARTUCHO | | | | |
| (140) COLIRRUBIA | | | | |
| (139) CHILLO | | | | |
| (144) MUNIAMA DE AFUERA | | | | |
| (138) NEGRA O ALINEGRA | | | | |
| (134) SAMA | | | | |
| (130) PARGO | | | | |
| (251) PEJE PUERCO | | | | |
| (202) PICUAS | | | | |
| (164) PLUMAS | | | | |
| (076) ROBALOS | | | | |
| (176) SALMONETE AMARILLO | | | | |
| (175) SALMONETE COLORADO | | | | |
| (036) SARDINAS | | | | |
| (234) SIERRA ALASANA | | | | |
| (233) SIERRA CARITE | | | | |
| (008) TIBURONES | | | | |
| (906) CANGREJOS MARINOS | | | | |
| (900) CARRUCHO | | | | |
| (904) JUEY DE TIERRA | | | | |
| (901) LANGOSTA | | | | |
| (903) OSTION | | | | |
| (902) PULPO | | | | |
| (905) OTROS MARISCOS | | | | |

Figure 3. Puerto Rico's Biostatitics Data Sheet used during 2004-07

PUERTO RICO FSP BIOSTATISTICS DATA SHEET

| Fishermen or Business name | Date | | |
|---|---|---|---|
| | month | day | year |

| Interview Number (Sequence) | Port Agent Initials | |
|---|---|---|
| | | |

| Landing Type | | Fishing Location |
|---|---|---|
| C | 1 | Latitude<br>Longitude |

| Gear Code | | | Distant from shore | |
|---|---|---|---|---|
| | | | > 10NM | < 10 NM |

| Total Effort | Total Weight (pounds) | |
|---|---|---|
| | | |

| Gear Code | Gear Amount | Length (Fathoms) | # of Sets | Mesh Size (Inches) | Soak Time | Fishing Time (Hours) | Max Depth (Fathoms) | Min Depth (Fathoms) | Effort Unit |
|---|---|---|---|---|---|---|---|---|---|
| 100 | | | | | | | | | Fathom/Hour |
| 101 | | ---------- | ---------- | ---------- | | | | | Trap/Day |
| 102 | | ---------- | ---------- | ---------- | | | | | Trap/Day |
| 103 | | | | | | | | | Fathom/Hour |
| 104 | | ---------- | ---------- | ---------- | | | | | Hook/Hour |
| 105 | | ---------- | ---------- | ---------- | | | | | Hook/Hour |
| 107 | | | ---------- | ---------- | | | | | Hook/Hour |
| 109 | | | | | | | | | Fathom/Hour |
| 112 | | ---------- | ---------- | ---------- | | | | | Hook/Hour |
| 114 | | ---------- | ---------- | ---------- | | | | | Diver/Hour |
| 116 | | ---------- | ---------- | ---------- | | | | | Diver/Hour |
| 118 | | | | | | | | | Fathom/Hour |

Figure 3. Puerto Rico's Biostatitics Data Sheet used during 2004-07

PUERTO RICO FSP BIOSTATISTICS DATA SHEET

Interview number _____

| Species Code | Fork Length | Length Code Fork Length in mm | Weight (grams) | WT Code<br><br>W or G | Sex | Gonad Stage | Sample Number<br><br>ot/gon |
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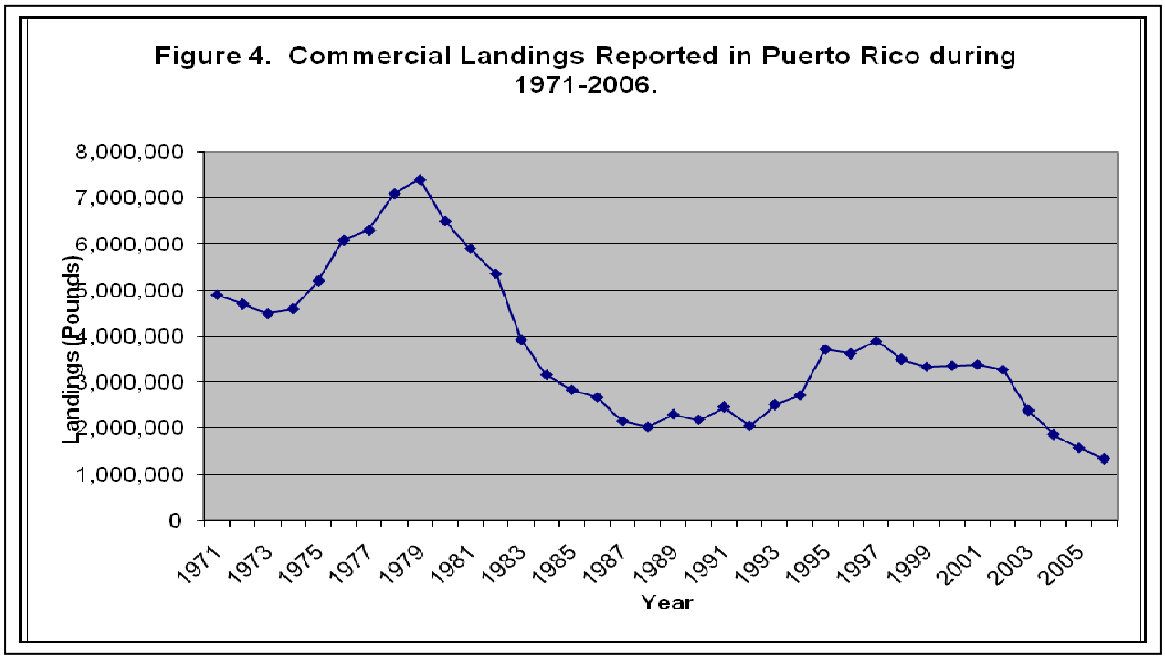
Figure 4. Commercial Landings Reported in Puerto Rico during 1971-2006.
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Landings (Pounds)
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
Year

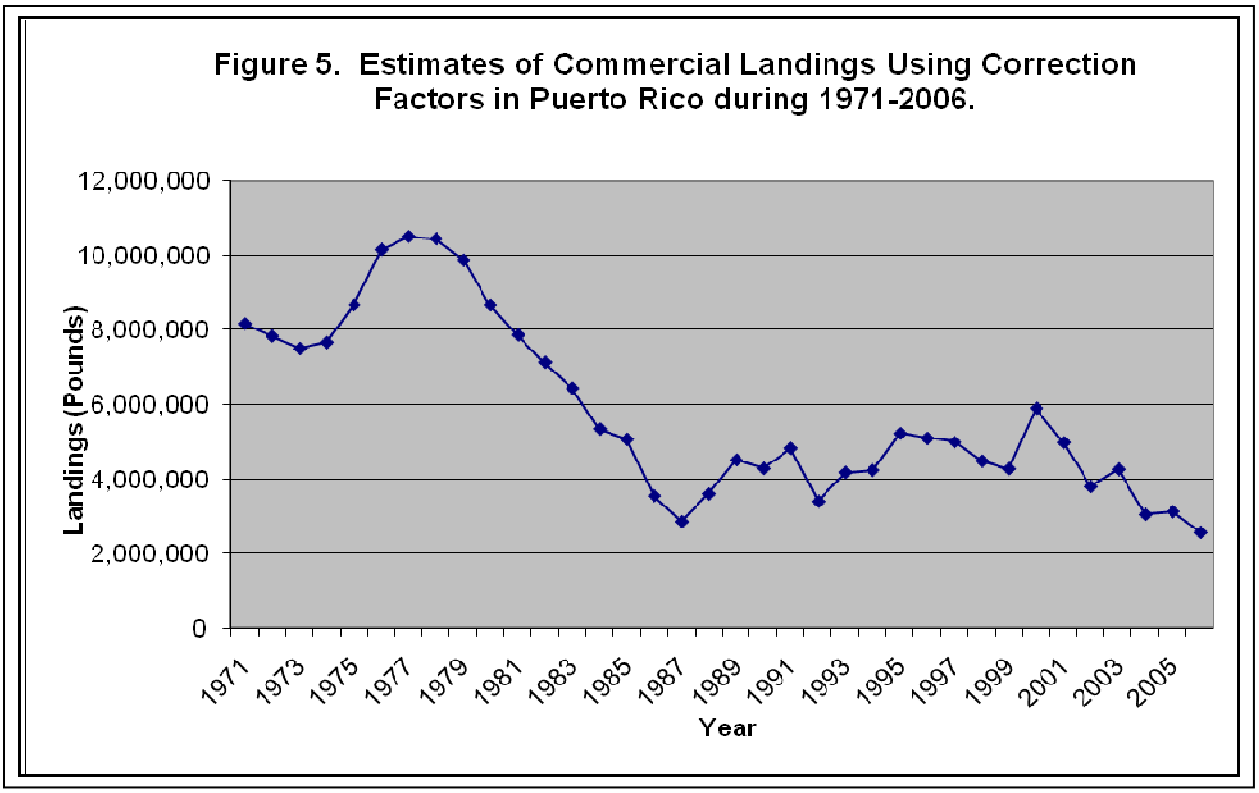
Figure 5. Estimates of Commercial Landings Using Correction Factors in Puerto Rico during 1971-2006.
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Landings (Pounds)
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
Year