THE FISHERIES AND FISH TRADE OF PORTO RICO IN 1902.

By W. A. WILCOX,

Agent of the United States Fish Commission.

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INTRODUCTION.

During the winter of 1898-99, soon after the occupation of Porto Rico by the United States Government, an investigation of the fishery resources and fishery business of that island was made by the United States Commission of Fisheries. Four years having elapsed since the change from Spanish to United States rule, it was thought desirable to revisit the island and make a canvass of the fisheries, with special reference to the present conditions, the amount of capital invested, apparatus used, amount and value of products, and number of fishermen; also the amount and value of fishery products imported during the past four years. The results of this canvass, which was made by the writer in January, February, and March, 1903, are here presented. The statistical and general information pertain to the calendar year 1902 unless otherwise stated.

For courtesies and assistance rendered acknowledgments are given to the following persons: Hon. Charles Hartzell, secretary of state; Hon. James S. Harlan, judge-advocate; Hon. John R. Garrison, auditor; Hon. A. R. Cruzen, collector of customs and deputies; F. D. Griffith, of the auditor's office; Messrs. Fritze Lundt & Co., of San Juan and Mayaguez; and the French Transatlantic Steamship Company.

IMPORTATIONS OF FISHERY PRODUCTS.

Porto Rico is divided into seven districts, the population of each, by the census of 1899, being as follows:

Arecibo	99, 6 162, 160, 111, 88, 127, 203,	308 046 986 501 566
Total	953	243

The values of fishery products imported into Porto Rico during the past ten years, with the duties paid, are shown in the following table. The amounts given for 1899 to 1902 are in United States money,

but for 1893 to 1897 are in the fluctuating Spanish currency,	which
averaged in value about 60 cents on the dollar:	

Year.	Pounds.	Value.	Duty.	Year.	Pounds.	Value.	Duty.
1893	26, 046, 061 30, 339, 922 29, 128, 693	1,649,601 1,987,676	\$87,677 94,834 122,087 117,497 139,661	1898 a	17,867,619 11,934,589 14,145,017	\$634,559 397,548 537,645 641,409	\$43,246 38,869 80,993 97,914

a Data for 1898 are not attainable, on account of the war.

This table shows a large decrease in the importations of fishery products during the past four years. This is partly, perhaps chiefly, accounted for by the great destruction of property and loss of life caused by the hurricane of August 8, 1899. The coffee districts of the western and southern parts of the island, which are the largest consumers of imported fishery products, were the heaviest sufferers from the hurricane. Under the most favorable conditions recovery from such disaster is necessarily slow, as several years are required for the planting and maturing of coffee trees. The very low prices for coffee discouraged planters and prevented capitalists from advancing financial aid to the impoverished native coffee-planters. In the opinion of some the generally improved conditions in the island have enabled the people to buy better food, hence the decrease in importations of dried fish. Labor of all kinds, city and country, has been in steady demand at increased wages over those received under Spanish rule. With increased incomes a more varied food is said to be in demand at the expense of fish products, which for many years furnished so important a part of the diet of the natives. The decrease in fishery imports has probably been in part from both causes. As time restores the devastated sections to normal conditions, with continued prosperity, the demand for fish products may equal that of former years.

Trade conditions in receiving and handling fish products show few changes. Of the imports 90 per cent are dry fish and 10 per cent pickled, smoked, and canned. The proportion of dry fish is about 90 per cent cod, 7 per cent haddock, and 3 per cent hake. Boneless fish have been received in small shipments. Besides being more expensive, these products have usually been imperfectly cured, and are therefore not received with favor, and future shipments are not encouraged.

Canned sardines from Europe are quite largely used, the imports in 1902 being valued at \$12,094, while those from the United States amounted to only \$2,185.

All dry fish intended for this market should be thoroughly and well cured and dried. The best keeping season is said to be January, February, and March. The largest demand for dry and pickled fish is from October to February, inclusive.

Since the occupation of the island by the United States several of the custom-houses under Spanish rule have been discontinued. At

present the chief office remains at San Juan. Mr. A. R. Cruzen is collector of customs for the entire island, with branch offices in charge of deputy collectors at the following ports: Ponce, Mayagüez, Arecibo, Aguadilla, Arroyo, Humacao, and Fajardo. The fishery imports at San Juan, Ponce, and Mayagüez will be referred to in some detail. The five remaining ports of entry, with several ports of less size and note, are quite large receivers of fish, most of which is drawn from the three first-mentioned, very few goods being imported direct.

A large amount of fish donated as relief supplies for sufferers by the hurricane of 1899 was admitted duty free during 1899 and 1900. Since July 1, 1901, all fishery products from the United States (except bonded imported fish) have been admitted free of duty, those from foreign countries being subject to the following duties:

Duties on fishery products. (Approved May 23, 1902; revised to July 1, 1902.)

Duty free: Lobsters, canned or uncanned, shrimp and other shellfish, and turtles. Dutiable: Anchovies, sardines, sprats, brislings, sardells or sardellen, packed in oil or otherwise. In bottles, jars, tin boxes or cans, containing 7½ cubic inches or less, 1½ cents per package; containing more than 7½ cubic inches and no more than 21 cubic inches, 2½ cents per package; containing more than 33 and not more than 70 cubic inches, 10 cents per package.

Fish (except shellfish) in tin packages or packages containing less than one-half barrel; Herring, mackages | saluen, and other fish, 30 per cent, caviar, 20 per cent.

barrel: Herring, mackerel, salmon, and other fish, 30 per cent; caviar, 20 per cent.

Cents per lb.	Cents per lb.
Cod, haddock, hake, and pollock: Dried, smoked, salted, or pickled, fresh frozen or packed in ice	Mackerel, fresh, pickled, or salted 1 Salmon, fresh, pickled, or salted 1 Alewives, smoked or salted 3 Other fish, dried or smoked, pickled or salted, fresh frozen or packed in ice
Herring, pickled or salted.	vided for

SAN JUAN.

San Juan, the capital city, is credited by the last census with 19,487 population, the district of San Juan having 32,048. The city is one of the leading ports of entry for fishery products, a large portion of which on arrival are at once reshipped on local steamers or by sail to the numerous scaports of the island to which they are consigned. Several commission houses are large receivers of fishery products, the business in 1902, as compared with 1897, the last year of Spanish rule, showing an increase of 567,416 pounds and a decrease in value of \$75,853, the decrease in value being chiefly due to the change from Spanish silver to United States money.

The fishery importations for 1897 and 1902, were as follows:

	1891	7.	1902.		
From—	Lbs.	Value.	Lbs.	Value.	
British North American provinces United States Spain France Germany	4, 863	15,458 287	3, 328, 959 2, 377, 801 56, 380 4, 850 4, 572	\$116, 178 103, 163 9, 956 865 318	
Total	5, 205, 146	306, 333	5, 772, 562	230, 480	

MAYAGÜEZ.

The city of Mayagüez ranks third, with a population of 15,187. The district of Mayagüez has a population of 127,566. This district suffered severely from the hurricane of 1899. The importations of fishery products received at this port in 1897 and 1902 were as follows:

Country from sold learness 2	189	97.	1902,		
Country from which exported.	Lbs.	Value.	Lbs.	Value.	
British North American provinces United States Spain France	4,863	287	947, 560 420, 192 125 550	\$32,418 16,199 24 132	
Total	5, 205, 146	306, 333	1, 368, 427	48, 773	

Besides the direct imports here shown, quite a large amount of fishery products from the United States was received in 1902 by local steamers from San Juan.

The fishery products are handled by Fritze Lundt & Co., Morales, Gonzales & Co., Sabater & Co., and Bravo & Co. The wholesale prices of fish at the date visited, February 16, 1903, were as follows: Codfish, 54 cents per pound; haddock, 44; hake, 3; pollock, 3; split herring, \$6 per barrel; smoked herring, 20 cents a box.

Average wholesale values per pound of dry cod at Mayagüez (expressed in cents).

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
		j					ļ	i			: ::	
1899	4₹	5	413	-1 3	5	5	51	41	51	54	44	43
1900	41	44	41	41	-4	44	44	41	-11	53	68	53
1901	4	61	61	51	51	. 6∤	6	61	6}	51	51	51
1902	ñ	51	5	5	-13	-12	41	41	51	6	43	5

Hake, haddock, and pollock meet with only a small demand; split herring in moderate request; round herring, alewives, and boneless fish are not desirable. Quite an amount of canned fishery products of various kinds is imported from Europe, sardines predominating. With the exception of canned salmon, canned fish from the United States is seldom seen.

PONCE.

In the number of inhabitants and the amount of fishery products handled the city and district of Ponce largely lead any other section of Porto Rico. The last census reports the city with 27,952, and the district 203,191 inhabitants.

The Spanish records show the total amount of fishery imports received at Ponce in 1897 as 17,289,196 pounds, of a value in Spanish silver of \$1,030,854, on which the duties amounted to \$72,332. In

1902 the total direct imports amounted to 8,377,680 pounds, valued at \$330,074 in United States money, on which the duty was \$56,008.

The imports from the United States in 1902 being admitted free accounts in part for the decrease in duties. The large decrease in direct imports in 1902 is due partly to the fact that the receipts were entered at the San Juan custom-house and forwarded from that port by local steamers, which was not the case in 1897.

The following quotations of values and notes on the market are of interest:

Feb. 10, 1903.—Total receipts of the past two weeks, 285 tierces, 79 drums, and 42 boxes of cod; 80 tierces of haddock, 8 of pollock, and 2 of hake. Last sales, cod 54 cents, haddock 44 cents, and split herring \$6 per barrel.

Feb. 24.—Receipts past two weeks, 619 tierces and 100 boxes of cod, 90 tierces of haddock, 253 barrels of herring. Sales of cod 5½ cents, haddock 4½ cents, and split herring \$5.50 per barrel. The demand just at present for cod is anything but satisfactory, and the explanation we offer is the low prices which our planters are receiving for our Porto Rico coffee, owing to the unsatisfactory situation of this article in the world's markets, and for this reason merchants and planters in the interior are buying only what they require for immediate consumption; therefore sales of round lots, such as were formerly effected, are nowadays quite out of the question.

THE DOMESTIC FISHERIES OF PORTO RICO.

Although there are many species of excellent food-fishes native to Porto Rican waters, none of them are canned, dried, smoked, or pickled. The local demand is good, yet poorly supplied with fresh fish at high prices. Whether fish can be well cured in the trying climate of the Tropics remains to be demonstrated. If some of the fine food-fishes now found are in ample abundance after supplying the local demand, they could be sent to northern markets quicker and cheaper than is now possible with fresh fish from the Pacific coast, from which shipments are made every year in increased quantities. The profitable canning of the spiny lobster, which is quite plentiful on the south side and eastern end of Porto Rico, is also a possibility.

Oysters of good flavor and small size are quite plentiful in the lagoons and arms of the sea at several places on the south side of the island; also in the waters of San Juan Harbor. At the latter place the sea wall is covered with small oysters ½ to 1½ inches in length. On the south side of the island they are usually attached to the roots and lower branches of the mangrove trees at the shore. The largest of the öysters compare with 2-year-old seed of Virginia waters, but are very poor and quite salty. No oysters are planted, nor is any attention given to their improvement or cultivation. Occasionally a few are gathered and peddled at 10 cents a dozen through the streets of the cities.

The few fishermen at most of the numerous ports are satisfied with small incomes derived from a small amount of labor. Many of the men combine a little fishing with work on the plantations, lightering of vessels, and other work. During the past few years a steady demand for labor on shore at increased wages has induced the most enterprising of the fishermen to give more time to shore work at the expense of the fisheries.

The only boats employed in the fisheries of Porto Rico are small open sail or row boats, and these are used only when the weather

conditions are favorable.

The total consumption of fish-food products in Porto Rico during 1902 and the average amount per capita were as follows:

Kind.	Lbs.	Average pounds per capita.
Imported, cured Local catch of fresh fish	20, 503, 507 2, 169, 770	211 21

SAN JUAN.

The city of San Juan is but poorly supplied with fresh fish, sold from two stalls in the city market and to a small extent by street vendors, who carry their stock on their shoulders suspended from a pole, a small pair of scales completing the outfit. The market prices for undressed fish range from 8 to 12 cents a pound, the fishermen receiving an average of 5 cents a pound.

The local fishermen of 1902 numbered 25, having 10 small boats. Their aggregate catch amounted to 120,000 pounds, valued at \$6,000. This catch was all by hook and line and most of it from the waters of San Juan Harbor, the species being the same as those taken by the neighboring fishermen of Palo Seco, which furnishes the chief supply to the citizens of San Juan.

PALO SECO.

This small fishing village is at the mouth of Bayamon River, nearly opposite the city of San Juan and the entrance to its harbor. During 1902 the fishermen numbered 80, with some \$6,000 invested in boats and fishing gear. Their catch amounted to 280,000 pounds, valued at \$16,800. They appear satisfied with a small income which might be largely increased by working more continuously. Of the 80 fishermen, the number daily engaged in fishing is said not to average over 20. The catch is in the waters of the harbor, and, at times, by trawls, hand lines, and trolling a few miles outside of the harbor, and is marketed at San Juan. This is one of the few places where fish are sold by weight, averaging the fishermen 6 cents a pound gross. Fish are fairly abundant at all seasons.

The fishing apparatus consists of haul-seines of 125 to 150 fathoms each, drift gill-nets 150 fathoms each, trawls with 150 hooks each, and hard lines with 3 or 4 hooks each, used in deep water. Fish pots have been discontinued.

The leading species taken by the several forms of apparatus are as follows:

Trolling: Spanish mackerel, king-fish, barracuda, hound-fish, gray snapper, dog snapper, schoolmaster, red grouper, Nassau grouper.

Cast-nets: Leather-jack, sardines, robalo, mullet, eels, pargo prieto, lane snapper.

Weirs: Sardines, pargo, picuda, jurel, liza, robalo, mullet, mojarra.

Haul-seine: Lane snapper, moon-fish, trunk-fish, toro, barracuda, hound-fish, mero, mullet, pargo prieto, balaju, robalo, leather-jack, sardines, mutton-fish, spadefish, margate, runner, pompano, red goat, yellow goat; red snapper, dog snapper,

gray snapper, schoolmaster.

Trawl: Margate, yellow-tail, red snapper, dog snapper, parrot-fish, mutton-fish.

Hook and line: Candil, toro, pargo prieto, yellow-tail, robalo, cabra mora, red goat, yellow goat, chopa amarilla, mero, lane snapper, cherna, margate, red snapper, dog snapper, schoolmaster.

ARECIBO.

Arecibo is located on the northwestern end of the island near the mouth of the Rio Grande. The city is credited with a population of 8,008, the district of Arecibo having 162,308. Quite a large amount of imported fish is used. The fresh-fish business is conducted by 50 fishermen who divide their time between fishing and work on the sugar plantations, an average of 25 men being engaged in fishing during the year when the conditions are favorable.

Fish are reported to be fairly abundant, yet the aggregate catch for 1902 amounted to only 75,000 pounds, which could have been greatly increased had the needed energy been shown. The eatch is all disposed of locally by peddlers, who sell nearly everything by the bunch, averaging 5 cents a pound for undressed fish. A few large fish, among them the mero, are taken by hooks in deep water. These are cut up and sold for 6 to 8 cents a pound. Many cast-nets are also used. Bow hooks and lines have 2 to 4 hooks attached to short snoods, which are fastened near the end of the two long lines that are attached to the bow. These lines are as long as 150 fathoms and are fished 2 to 3 miles from shore in 50 to 150 fathoms of water during the summer; there is no hook-and-line fishing during the winter on account of rough water. These hook-and-line fishermen usually begin the day's work at 4 in the morning and leave off about noon. Fishpots are used in and near the mouth of the Rio Grande during the high waters of May, June, July, and August. Haul-seines are more or less used at all seasons, from the beaches adjoining the city.

Sardines are taken by haul-seines during June, July, and August. The greater part of the seine catch is the jurel, which are most plentiful during November, December, and January, their weight being from 1 to 20 pounds.

Candil or squirrel-fish are taken by hook and line in 50 fathoms of water, but are not plentiful. Spanish mackerel are taken by trolling and by seines at all seasons, but most plentifully during June and July. A few pompano are taken by seines. The following are taken by hook and line: Cabra mora, in 3 to 70 fathoms; cherna or red

grouper, weight 15 to 30 pounds; cabrilla, but few caught; pargo prieto, plentiful in 10 to 25 fathoms of water; toro are taken by hooks near the rocks in from 3 to 10 fathoms; mero by line with a single hook in deep water, weight 10 to 20 pounds; mullet are seined.

Small wooden box-pots are set in and near the mouth of the river, their catch being chiefly the common eel of small size. Eels are also taken with hook and line, and are sold in bunches of about $2\frac{1}{2}$ pounds at 15 cents a bunch.

Commercial fishing of the Rio Grande is of small extent, being confined to the season of high water, at which time the river is fished at the mouth and for a short distance above. A little fishing is done higher up the river by the natives for family use.

AGUADILLA.

The city of Aguadilla has a population of 6,425, the district of the same name having 99,645.

Fishing is carried on at all seasons, when the weather is favorable, by 50 fishermen, who have \$10,000 invested in boats and fishing apparatus. In 1902 the catch amounted to 160,000 pounds, valued at \$10,310. This was largely disposed of by peddlers in filling a local demand from the city and near-by sugar plantations, any surplus finding a ready market in Mayaguez. The average prices received for the common species is 6 cents per pound. Spanish mackerel, kingfish, red snapper, and a few others of the best species bring 8 to 10 cents a pound for undressed fish.

The most important apparatus is the haul-seine, 100 fathoms in length and 15 to 20 feet deep, 2 to 3 inch mesh in the wings and 4 inch in the bunt. The seines are hauled on the beach in front of the city by 8 to 12 men. The catch is chiefly made during March and April. Of the species taken in seines, scad are the most plentiful, as high as a ton or more having been taken at a single haul. Salmonete are quite plentiful. A few Spanish mackerel of small size, 1 to 2 pounds, are taken; also a few flying robin.

Next in amount to the eatch by seines is that by the bow-rigged hook and line. These are used as far as 4 miles from shore in 5 to 100 fathoms of water. Of the numerous species taken, the following are the most important: Runner, or *Curanx crysos*, very plentiful in 8 to 9 fathoms of water; catalufa and toro, plentiful in 6 to 7 fathoms; a few cabrilla or red-hind in 20 to 25 fathoms (by hook and line only); gray snapper, not plentiful; schoolmaster and red snapper, weighing from 2 to 25 pounds, are plentiful in 10 to 12 fathoms; yellow-tail of 1 to 2 pounds, plentiful in 50 fathoms (only taken by bow-hooks and lines); margate of 1 to 3 pounds, plentiful in 150 fathoms of water; moon-fish, 2 to 3 pounds, in 25 fathoms.

Fish-pots made of woven bamboo splints are used at all seasons, and are anchored without bait near the mouth of the Culebrinas River,

and up the same for about 2 miles. The native name of these fish-pots is "nasa." Of the numerous species taken in pots the following are noted: Salmonete, plentiful; lane snapper, of 1½ to 2 pounds; red parrot, of 3 to 4 pounds; mud-fish or old wife, of 5 to 6 pounds, are plentiful; blue parrot, 2 pounds; spade-fish, 1 to 1½ pounds; rockbeauty; palmoneta, of 3 to 6 pounds, are plentiful; mariposa, ½ to 1 pound; medico or barbero, ½ to 1 pound; old-wife (Balistes vetula), average weight 2 pounds. When sold in the market the skins of this fish are taken off and bring 2 or 3 cents a dozen, being dried and used for polishing or scouring. Spotted trunk-fish of 2 to 3 pounds are here sold for food; gobies (Dormitator maculatus) weighing ½ pound are taken in 4 fathoms, only by pots; spiny lobsters (Palinurus interruptus), occasionally taken in pots, are not much used by the natives. Outside the river, about 2 miles from shore, pots are fished in 5 to 6 In the river pots are more or less fished at all seasons. Hooks and lines are also used in the river by 12 men having 6 boats. Their catch comprises the following, which are reported plentiful: Eels, big-eyed herring, bony-fish, and robalo.

Trawls are set as far as 3 miles from shore in 85 fathoms, 75 hooks on each trawl, the following species being taken: A few pompano in 50 fathoms; cabra mora, plentiful in 5 to 7 fathoms near shore, in deep water some weighing over 50 pounds are reported to be taken; cherna or Nassau grouper, plentiful in 5 to 6 fathoms; red grouper in 10 fathoms; catalufa; toro, plentiful; gray snapper, scarce, taken in 25 fathoms; dog snapper, a few from 7 fathoms; schoolmaster, not plentiful, 8 fathoms; red snapper, plentiful; mutton-fish; pargo, from 1 to 10 pounds, plentiful, taken only by trawl; pluma (Catamus bajonado), plentiful in 25 to 30 fathoms, average weight 4 to 10 pounds, taken here only by trawls.

Cast nets are used near the shore in the surf, no boats being used. Their catch consists chiefly of sardines and mullet, which are plentiful.

Trolling hooks and lines are used as the fishermen visit and return from the offshore fishing grounds, the following species being then taken: Spanish mackerel of 5 to 10 pounds; king-fish of 20 to 30 pounds, plentiful; also bonito of 15 to 20 pounds.

MAYAGUEZ.

The large city market at Mayaguez has at most seasons a greater abundance and larger variety of fresh fish than is elsewhere found on the island, yet the supply seldom, if ever, fills the steady demand. In addition to the fish furnished by the few local fishermen, small amounts are received from Aguadilla by rail and sail, and from the few fishermen of several near-by places north and south of the city. Fish are most plentiful during the winter months, but there is more or less fishing all through the year. The one fish stall of the city market handles about 150,000 pounds of fish a year, 50,000 pounds

additional being sold through the streets by peddlers. Fresh fish, as sold in the market, average 8 to 10 cents a pound, undressed, with very small changes in prices of species or for seasons.

The market officials and fish handlers report very little, if any, change in the amount of receipts, prices, or abundance of the several species during the past four years. No record is kept of the receipts or sales, the aggregate for the year being from estimates of market officials and dealers. Of the numerous species at times found in the market, the following are the most common at all seasons: Salmonete, or red and yellow goat-fish, lane snapper, mullet, sardines, Spanish mackerel, king-fish, runner, grouper, scad, and snappers.

The following shows the catch by different forms of apparatus:

Haul seines (chinchorro): Leather-jack, runner, barbudo, and casabe, all very plentiful; pompano, Nassau grouper, red hind, red grouper, lane snapper, and jurel. Trolling hook and line: Colirubia, picuda, jurel, green parrot, madregal, Spanish mackerel, and king-fish, the last two chiefly during December, January, February, and March; a few during other months.

Pots: Runner and margate, very plentiful; corocoro, Nassau grouper, red hind, red grouper, gray snapper, dog snapper, schoolmaster, red snapper, lane snapper, pluma, squirrel-fish, scarce; spiny lobsters, of 3 to 4 pounds weight, fairly plentiful, pots often having from 3 to 10 lobsters each at a single lift.

Cast nets: Sardines and balaiu.

Cast nets: Sardines and balaju.

Trawl: Runner, mero cabrilla, red hind, red grouper, schoolmaster, mutton-fish, red

snapper, and lane snapper.

Randal (line with 3 to 4 snoods near its end, one hook on each snood): Runner, cabra mora, Nassau grouper, red hind, red grouper, gray snapper, dog snapper, mutton-fish, lane snapper, and pluma.

MONA ISLAND.

Mona Island, about 25 miles southwest from Mayaguez, is at times visited by fishermen from Aguadilla and Mayaguez for fish and hawksbill or tortoise-shell turtle. Fish are reported plentiful about the island, though but little fishing is done. The chief attraction for fishermen and others from more distant sections of the main island is the turtle fishery. Turtles are found during May, June, and July, but are never numerous. The hawksbill turtles weigh 25 to 75 pounds each; the shells from 5 to 10 pounds. During 1902, 700 pounds of the shells were sold at Mayaguez at an average of \$3 per pound, and the turtle meat at 6 to 7 cents a pound.

AÑASCO, SABINATA, AND ALGARROBO.

These three fishing settlements are a few miles north of Mayaguez. The amount of their fish business is small, and the species taken are the same as those taken by the fishermen of Mayaguez. This section of the island suffered much from the hurricane; many of the fishermen, having lost boats and fishing apparatus, gave up the business.

BOCA DE JOYUDA.

Eight miles south from Mayaguez a few fishermen live in a grove of cocoa palms that borders the beach. Their work is varied by fishing at times and extracting cocoa oil from the products of the trees at their doors. The men report fish fairly plentiful, and of the following species and weights, in pounds: Red grouper, 10 to 50; toro, 1; pargo, 5 to 30; dog snapper, 2 to 20; schoolmaster, 5 to 15; red snapper, 5 to 30; mutton-fish, 1 to 20; lane snapper, 1 to 4; margate-fish, 1 to 6; red parrot, 1 to 5; blue parrot, 1 to 5; rock beauty, 1 to 2; mariposa, 1; spotted trunk-fish, 1 to 5.

PORTO REAL.

This small settlement, near the southwestern end of Porto Rico, well represents the fisheries by its 30 fishermen who make it their entire business. Their catch during 1902 amounted to 175,000 pounds, all of which was sold fresh. The harbor is small and shallow but ample for their small draft boats. In this vicinity many species of food-fishes are quite plentiful, particularly during January, February, and March, at which time they are nearer land and the weather is most favorable. After March the fish draw away from the shore into deeper water, when the sea becomes too rough for the small boats.

Haul-seines were formerly used but have been discontinued. The bulk of the catch is now taken by pots that are anchored and buoyed in from 1 to 13 fathoms, no bait being used.

Pots are, as a rule, set singly, but occasionally in trawls, or a number are connected by a line. One trawl with 80 hooks is used in 7 to 8 fathoms. Trolling is chiefly carried on as the men go to and from the pots and trawls.

Fishing is done in the early hours of the day, pots and trawls being visited only once. The catch is then removed to the wells on their boats, the pots replaced, and hooks rebaited. On reaching the home harbor any fish not at once disposed of are removed to floating fish-cars and kept alive until such time as needed.

Buyers from Mayaguez visit Porto Real and purchase the bulk of the catch, paying 2½ cents a pound; the remainder of the catch is sold locally, at the village of Cabo Rojo, and at the sugar plantations of the vicinity. From the latter 4 to 5 cents a pound is received.

Spiny lobsters are scarce and of small size, $\frac{1}{2}$ to 2 pounds each. They are taken in 10 to 15 fathoms of water and sold at the same price as the fish.

Spanish mackerel are fairly plentiful, those taken near shore averaging 1 to 3 pounds; 5 to 10 miles from shore larger sizes are found, the largest seen being 8 to 10 pounds. The mackerel and the king-fish are caught with trolling hook and line.

Hawksbill or tortoise-shell turtle are taken by hand on the beaches of Salinas and Mona Island, and by turtle gill-nets set off the same, each net having attached a wooden decoy turtle. This is said to attract the turtle and also helps buoy up the net. Turtles are reported scarce, the total catch of 1902 by the fishermen of Porto Real being 10 by hand and 12 by nets. The turtles weigh from 40 to 100 pounds each, having

an average of 5 pounds of clear shell. The fishermen receive \$3 a pound for shells and 3 to 6 cents a pound for the meat of the turtles.

The fishermen keep no record of their catch by species, but report most of the several species plentiful. Very many fish too small to be marketed are caught. These are given away to the poor and nothing is wasted.

The following species are reported as being taken by the apparatus named:

Pots or nasa: Red goat, yellow goat, lane snapper, rock hind, Nassau grouper, red hind, red grouper, red snapper, gray snapper, mutton-fish, pluma, loro colorado, blue parrot, candil, margate, spade-fish, rock beauty, blue angel, trunk-fish (little esteemed), lobsters (scarce).

Cast nets: Sardines, sead, chopa anarilla.

Trawl (palangra): Runner, cabra mora, grouper, red hind, red grouper, gray snapper,

dog snapper, schoolmaster, red snapper, mutton-fish.

Trolling: Spanish mackerel, pluma, zapatero or leather-jack, runner, schoolmaster, yellow-tail, lane snapper.

PONCE.

The district of Ponce is bordered on the south by the Caribbean Sea for some 40 miles, about half the water front of the south side of the island. The long stretch of water front back to the foothills and mountains is largely engaged in sugar culture, back of which the mountainous district is engaged in coffee and tobacco raising. The fisheries are represented by a large variety of fine food fishes that the fishermen report as quite plentiful. No fish are dried, smoked, or pickled. Fresh fish are in demand at the several cities and villages, and at plantations, and prices are quite high. The business is apparently capable of being largely increased to the benefit of producer and consumer. The fisheries are represented, from west to east, by a few fishermen at the following places: Guanica, Guayanilla, Ponce, Isabel, and Salinas, the total being 110 men.

Guanica has 20 fishermen who dispose of their fish to a local demand and at the city of Yauco. The 14 fishermen of Guayanilla also sell at Yauco and to their own neighborhood.

Ponce has 40 men who fish more or less, about half of the number depending on the fisheries for a living; the remainder divide their time between fishing and other work on shore. Their catch is disposed of at the city market and by street peddlers.

Isabel has 22 fishermen who sell their catch near home and at Coamo by peddling.

The 14 fishermen of Salinas find a market near home and at Guayama: The fishermen of the several places mentioned fish more or less at all seasons of the year. The catch is made in the waters of the home harbors and for 4 to 6 miles out. Fish are most plentiful near shore during January, February, and March.

Two-thirds of the catch is made by the use of pots that are anchored without bait and visited once a day.

The following species comprise the bulk of the catch by pots at the several fishing stations of the district of Ponce:

Pols: Squirrel-fish, zapatero, red goat, yellow goat, rock hind, red hind, red grouper, toro, gray snapper, red snapper, mutton-fish, yellow-tail, margate, pluma, red parrot, blue parrot, spade-fish, rock beauty, blue angel, medico, trunk-fish.

Haud scine: Runner, pompano, red hind, red grouper, lane snapper, casabe, barbudo, sardines, and Spanish mackerel.

Trolling hook and line: Spanish mackerel, king-fish, barracuda, yellow-tail, rock hind, red hind, red grouper, schoolmaster, mutton-fish, red snapper, lane snapper.

Cast-nets: Sardines, pompano, jurel, cutlas-fish.

Trawl: Cabra mora, Nassau grouper, red hind, dog snapper, schoolmaster, red snap-

per, mutton-fish, lane snapper.

Hand hook and line: Madregal, red grouper, pargo prieto, dog snapper, gray snapper, lane snapper, mutton-fish, pluma, runner, mero, Nassau grouper, red hind.

. Spiny lobsters of 1 to 5 pounds each are taken in pots, but apparently are not very abundant. They are sold at same price as the fresh fish, or an average of about 4½ cents a pound.

Tortoise-shell turtles, weighing 20 to 100 pounds, are taken off the beaches of the main shore and the island of "Caja de Muertos," off the southeastern shore of Ponce, and other small islands. The catch is made by hand as the turtles come on shore to lay their eggs. Not over 400 pounds of shell are taken by the fishermen of the district.

Market fishery of Ponce. - The fisheries are represented in the large city market of Ponce by one fish stand, which poorly supplies the city demand for fresh fish. No account of the amount of sales is kept. The dealer and market official reported it as being about 200 pounds a day, or some 75,000 pounds a year. On visiting it February 20, about 200 pounds comprised the stock, which represented the following 14 species: Spanish mackerel, king-fish, runner, cabra mora, Nassau grouper, toro, margate, blue tang, medico, squirrel-fish, cabrilla, lane snapper, blue parrot, and file-fish. The fish are sold undressed, usually by the bunch instead of weight, averaging 8 to 10 cents a pound for fresh fish or spiny lobsters. A few small shell oysters arrive from Guayanilla in old kerosene tins, the fishermen receiving 20 cents a can for them. About 4,000 pounds of crawfish annually come from Portuguese or Dangerous River. These are taken by dip nets and bring at the market 8 to 10 cents a pound. Besides the 200 pounds of fish daily sold at the market, about half as much more is sold at the playa or landing and surrounding country by peddlers.

ARROYO.

This port has a population of 2,757, a custom-house, several stores that handle considerable dry fish, most of which comes from the larger cities, with occasional direct importations. The home fisheries are represented by 60 men who follow fishing, plantation, and other work. This is about the same number of fishermen as in 1899, though they fish less, work on shore being more plentiful and attractive.

Fish are reported fairly plentiful. When engaged in fishing, men leave the port at 4 a. m., returning about 8 a. m. of the same day, and as a rule do no more fishing that day. The catch is sold from half a dozen rough tables at the shore landing in front of the village. The local demand is poorly supplied, much of the time there being no fresh fish for several days, as was the case at the time of the writer's visit.

The boats are of small size, rough and strong, home-built. Sail or row boats, even the largest and best, do not venture over 3 or 4 miles from shore. No wells are in the boats, no ice or salt is used, and the catch must be disposed of at once on landing. If the catch is larger than needed for local use, it is peddled on the sugar plantations. Sales are usually by the bunch, single fish, or strips of the largest, which are cut up, the price averaging about 6 cents a pound, all species being sold at the same price. About four months of the year are lost to the fisheries from weather that is unfavorable for the small boats used, but would not prevent a New England fisherman, with good equipment, from fishing.

Hawksbill turtles, once plentiful, are now scarce, only 30 being taken during 1902. This small catch was made during January and February, one net being used on the coral reefs, and by hand as the turtles were found on the shore.

Spiny lobsters, weighing from 1 to 3 and 4 pounds, are taken quite plentifully in pots set in about 6 fathoms of water and also on the coral reefs at night, when a torch and forked stick are used. The torch attracts the lobsters, and the forked stick pokes them out from holes and impales them when emerging; or when found on the reefs they can be picked up by hand. Lobster pots are baited with refuse fish, either fresh or spoiled, of any kind. The runner, when taken in pots, will soon kill itself if not removed; moray, both black and olive, from 2 to 40 pounds, are plentiful at all times. Over two-thirds of the fresh-fish catch is by unbaited pots anchored in 3 to 6 fathoms if near the shore, and in 8 to 15 fathoms when 2 or 3 miles from land.

The following species are taken by the apparatus named, the average weight of many species being given:

Weight of many species being given:

Pots: Candil; red goat; yellow goat; zapatero, ½ to ¾ pound; runner, 1 to 20 pounds; pompano, 1 to 3 pounds; cabra mora, 1 to 3 pounds; Nassau grouper, 1 to 6; cabrilla, 1 to 3; gray snapper, 1 to 6; dog snapper, 1 to 6; schoolmaster, 1 to 3; red snapper, 4 to 5; mutton-fish, 1 to 3; lane snapper, 1 to 2; yellow-tail, 1 to 2; margate, 2 to 5; boca colorado, ½ to 1; chopa amarilla, 1 pound; red parrot, 1 to 10; old wife, 1 to 6; spade-fish 2 to 10; blue angel, 1 to 5; file-fish, ½ to 6; trunk-fish (scarce); puffer (not eaten); capitan or hog-fish (4 to 20 pounds).

Single hook and line: Cabra mora, 1 to 3 pounds; cabrilla, 3 to 30; red grouper, 20 to 50 pounds, in from 6 to 40 fathoms of water, are taken from July to October; gray snapper, 8 to 20; dog snapper, 8 to 20; schoolmaster, 5 to 20; red snapper, 10 to 20; yellow-tail, 2 to 3 pounds.

Trolling hook and line: King-fish, 10 to 60 pounds; Spanish mackerel, 1 to 10; red grouper, 20 to 50; gray snapper, 8 to 20; pompano, 5 to 10; cabra mora, 2 to 3; Nassau grouper, 5 to 70; gray snapper; dog snapper; schoolmaster; barracuda.

Haul seine: Zapatero, ½ to 1½ pounds; runner; pompano; Nassau grouper; mutton-fish; lane snapper; robalo, ½ to 15 pounds; Spanish mackerel; mullet, 1 to 3 pounds.

Cast nets: Sardines, mullet, robalo. These nets are here used only for taking bait.

Cill nets: Only 2 species reported, the balaju and hound-fish. The latter, weighing 5 to 8 pounds, are plentiful, but are not sold for food.

Bow hook and line (used in 40 to 60 fathoms): Catalufa, yellow-tail.

Trawls (seldom used): Yellow-tail, red snapper, cabrilla, Nassau grouper.

JOBOS HARBOR.

This small and quite good harbor is a few miles west of Arroyo. A few fishermen operate in the near-by waters on each side of the bay. The apparatus used and species taken are similar to those previously reported from Arroyo. The catch is disposed of at the city of Guayama and the surrounding sugar plantations; at the former to dealers at an average of 5 cents a pound; when peddled out at the plantations, 8 to 12 cents a pound is received. Not much system is used in disposing of the catch, sales being by the bunch, piece, single fish, or the lot. The catch is chiefly made by pots that are used inside of the bay. Haul seines are fished occasionally, but the rough water on the outside beaches interferes with their use. The fishermen divide their time between fishing and work on the sugar plantations.

Fish are reported of an average abundance both in the bay and the outside waters. Spiny lobsters are reported quite plentiful but are little cared for. Small-sized oysters are quite plentiful in the lagoons of the vicinity but receive very little attention.

The Guamani River, that has its outlet not far from Jobos Bay, is at times fished by the inhabitants living near its banks for their own use. Eels are plentiful in the river and are taken as needed by eel pots.

HUMACAO.

The district of Humacao, at the eastern end of Porto Rico, is credited with a population of 88,501; the city of Humacao with 4,428. The latter is 5 miles inland from the playa or landing at which is located the custom-house, several stores, and a small settlement of fishermen. The waters of this region are quite well supplied with a large number of species of fine food-fishes. Dry and pickled fish are received from the dealers of San Juan, Ponce, and Mayaguez. The fishermen and dealers find a good market for all fishery products at the city of Humacao and at the numerous large sugar plantations of the vicinity. This section of the island suffered severely by the hurricane of 1899, the local fishing business being almost ruined. Many fishermen and their families lost their lives, and all lost their fishing boats and fishing gear. Sugar plantations were for the time ruined and all business paralyzed.

The fishermen receive an average of 5 cents a pound for their catch. About one-third of the time is lost from the water being too rough for their small boats. The men appear satisfied with their small earnings that give them an average of \$125 a year, an amount that could be more than doubled with more energy given to the business. Only small sailboats with 3 men each and rowboats with 2 men are used. Most of the catch is by pots that are seldom baited. Hooks lines, and nets are but little used. All fishing is near shore, the extreme distance being some 4 miles.

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Spiny lobsters of 1 to 6 pounds weight are quite plentiful. They are taken by pots, and at night they are taken on coral reefs of the neighboring islands by hand, a torch and forked stick only being used.

Fish pots are anchored in 2 to 10 fathoms of water from near shore

out to a distance of 4 miles.

The catch by apparatus includes the following species:

Pols: Red goat, runner, Nassau grouper, red hind, red grouper, catalufa, gray snapper, dog snapper, candil, schoolmaster, red snapper, lane snapper, margate, pluma, boca colorado or red-mouth fish, red parrot, capitan, spiny lobster, yellow goat, rock beauty, yellow-spotted eel, old wife, spade-fish, blue parrot, mariposa, medico, trunk-fish, moray, and file-fish.

Hook and line: Schoolmaster, pargo prieto, red grouper, red hind, rock hind, Nassau grouper, gray snapper, dog snapper, red snapper, mutton-fish, lane snapper,

chopa amarilla.

Cast nets: Sardines, balaju.

Haul seine: Mutton-fish, lane snapper, pluma, trunk-fish, barracuda, mullet, balaju, hound-fish, soap-fish, moray, eagle ray, Spanish mackerel (small size), king-fish of small size, zapatero, runner, pompano, Nassau grouper, gray snapper, dog snapper, schoolmaster, red snapper.

Trolling: Spanish mackerel, barracuda, king-fish.

HUCARES.

This small town is 4 miles north of Humacao. A long sandy beach, bordered by cocoa and royal palms and settled by scattering homes of fishermen, connects the two ports. The total catch by the fishermen during 1902 was stated to be 80,000 pounds, consisting of the same species previously mentioned as caught by men of Humacao.

Fish are most plentiful during the winter months, and are disposed of fresh at Humacao, Hucares, and neighboring plantations. The catch is mainly by fishing pots. Two haul seines are at times used from the beach. Cast nets and hooks are also used to a limited extent.

GUAYANES.

The small harbor of Guayanes is about 8 miles south of Humacao. The river Guayanes, that is formed from several small mountain streams, enters the harbor. Near the mouth of the river a half dozen fishermen reside and use one haul seine and 20 fish pots in the fisheries. Their catch comprises the usual species of the section and finds a market in the vicinity.

FAJARDO.

The city of Fajardo, with 3,414 inhabitants, is 2 miles inland from the playa or landing, at the northeastern end of the island. This section has many natural advantages in connection with the fisheries, which in time will be more appreciated. The surrounding country is an important sugar-raising district, with numerous villages and towns, of which Fajardo is the largest. At the playa is located the customhouse, a few stores, and quite a little settlement of fishermen. The harbor contains several small islands that afford a shelter to the small boats of the fishermen. The surrounding waters are well supplied

with a large variety of fine food-fishes, much more so than at any other fishing station. The catch is all disposed of fresh; no salt or ice is used. The small amount of ice received from San Juan is sold to hotels and a few families at 5 cents a pound. Quite an amount of dry salt-cod and some pickled fish are received via San Juan from the United States and Canada. There appears to be an opening for the catch and cure of some of the local species (including the spiny lobster) that would in a measure take the place of imported fish.

Spanish mackerel and king-fish are plentiful from December to May, but especially during January and February. Albacore or frigate mackerel are found in large schools during February, March, April, and May, after which they are not seen during the remainder of the year. They weigh from 15 to 20 pounds and are taken by seines and by trolling. Red snapper are plentiful; pompano are taken weighing 1 to 10 pounds. Numerous other fine table fish, but unknown in the markets of the United States, will be found in the list of species of food-fish taken by the various appliances. The list, while not complete, comprises most of the leading species taken in these waters.

Spiny lobsters are reported as very plentiful, their weight being from 1 to 10 pounds, those taken in pots being the smaller size. The largest are found on the coral reefs and are taken at night by hand, a torch and forked stick being used. The lobsters, seeing the light, do not move, permitting themselves to be picked up by hand. When hidden in holes they are poked out with the sticks and secured. Most of the lobster catch is secured at night by hand.

Oysters of small size and good quality are quite plentiful on the roots and lower branches of the trees bordering the lagoons near the Fajardo light-house and off Ceiba. A few oysters are taken and sold locally at about 1 cent a dozen.

Clams are found at the mouth of the Fajardo River but not used. Of the 80 men of Fajardo that follow fishing more or less about 40 give nearly half their time to the sugar plantations. The fishing-grounds being more protected from rough seas by the several islands, less time is lost from rough water than at most places. The catch is all sold fresh to fill the local demand at Fajardo and vicinity. Prices average about 3 cents a pound for all species except Spanish mackerel and king-fish, which average 5 cents a pound.

After the volcanic eruptions at Martinique quite heavy showers of ashes fell in this vicinity, after which many small-sized fishes were found dead along the beaches.

Quite an important part of the revenue of some of the fishermen is from the sale of tortoise shell from the hawksbill turtles taken by them. The turtles are taken on and near the beaches of Mona, Vieques, and Culebra islands and those of the main shore. The catch is made from November to May, when the females come ashore to deposit their eggs in the sandy beaches, when they are taken by hand; the males

are said to remain a short distance offshore from the beach and await the return of the females; here they are taken by gill nets.

The nets are from 10 to 12 yards in length and of 10-inch square mesh, each having a wooden decoy turtle attached. Turtles taken weigh from 30 to 100 pounds, occasionally more. The average weight of shell that is saved is 5½ pounds, for which the men received \$3 a pound during 1902. The total amount of shells taken in this vicinity is reported as follows: By fishermen of Fajardo, 400 pounds; Culebra Island, 800 pounds; Viegues Island, 80 pounds; a total of 1,380 pounds, most of which was disposed of at Fajardo. Turtles are reported not very plentiful, and the fishermen pursue them with little energy; having taken and sold a few pounds, they are content to remain ashore and rest so long as any money is left.

Fajardo River is to a small extent fished for the first 6 or 7 miles up from its mouth by the citizens of the vicinity. The catch is chiefly a small-sized fish known as "dajao" (Agonostomus monticola) that is taken in small seines. Land crabs are quite plentiful along and in the banks bordering the river. The natives living along the river banks take the crabs from their holes in the bank during the dry season by digging them out. During the wet season the crabs are found above ground and are then caught by hand, a torch being used.

The proportion of the catch by fishing apparatus at Fajardo is approximately five-eighths by seine, one-eighth by hook and line, and one-fourth by fish pots, but a small amount is also taken by cast nets. All boats and nets are made by the fishermen. Seines are 125 to 150 fathoms long, with a bag in the center; mesh one-half inch in the center and 11 to 2 inches in the wings. Pots are not baited, but anchored in 2 to 12 fathoms in the harbor and around the neighboring islands. The boats are small, rough, and strong, without wells; none large enough to have custom-house register. Those with sails have cat or sloop rig. The apparatus employed, with the species taken, given somewhat in the order of their importance, are as follows:

given somewhat in the order of their importance, are as follows:

Fish pots: Candil; red goat, plentiful; yellow goat, scarce; runner or jurel, 5 to 10 pounds (in large schools during February, March, and April); cabra mora; Nassau grouper; red hind; red grouper; toro; pargo prieto; dog snapper; schoolmaster; red snapper; mutton-fish; lane snapper; yellow-tail; margate; porgy; pluma; loro colorado; oldwife; blue parrot; spade-fish; mariposa, one-fourth pound; rock beauty, 1 to 2 pounds; blue angel, 2 pounds; medico, 1 pound; trunk-fish, 1 to 4 pounds; file-fish, 3 pounds; chopa amarilla, 1 pound.

Haul scines: Mullet, red goat, Spanish mackerel of small size, king-fish, zapatero, scad, runner, bony-fish, pompano, Nassau grouper, pargo prieto, dog snapper, schoolmaster, red snapper, mutton-fish, tarpon, lane snapper, yellow-tail, margate, porgy, pluma, chopa amarilla, balaju, and hound-fish.

Hand lines: Candil; red goat; Spanish mackerel, 2 to 10 pounds; king-fish, 10 to 40 pounds; runner; cabra mora; Nassau grouper; red hind; toro; red grouper, 5 to 100 pounds; pargo prieto, 5 to 30 pounds; dog snapper, 5 to 20 pounds; schoolmaster; red snapper; mutton-fish; lane snapper; margate; yellow-tail; pluma, 2 to 8 pounds; chopa amarilla, 1 pound; red goat, 5 to 8 pounds; blue parrot, 3 to 8; trunk-fish, 1 to 4; robalo, 5 to 25 pounds; and balaju, ‡ to ‡ pound.

Trolling hook and lines: Bonito; hound-fish; frigate mackerel; tarpon; Spanish mackerel, 2 to 10 pounds; king-fish, 10 to 40 pounds; barracuda, 5 to 40 pounds.

Cast nets: Zapatero; scad; robalo; pompano; sardines, ‡ to 1 pound; banana-fish, 5 to 15 pounds; mullet; big-eyed herring.

CEIBA.

The village of Ceiba is 5 miles south from Fajardo and 2 miles inland from the water front and fishing-camp. The 15 fishermen take three-fourths of their catch by pots and one-fourth by cast-nets. The men divide their work between fishing and work on shore at the sugar plantations. Their catch meets with a ready local demand.

The manatee is occasionally taken off the beach near Ceiba. A few are taken each year, usually by means of haul seines. The weight is said to run from 500 to 1,200 pounds. The flesh is highly prized and resembles beef in flavor.

LUQUILIO.

Luquillo, near the eastern end of the island, is one of the very few places on the north side of Porto Rico in which the fisheries are represented. Eight men make a small catch with pots and cast-nets. A ready home demand exists for all fish taken.

VIEQUES ISLAND.

Of the several islands belonging to Porto Rico, Vieques is the largest in size and population. It is 17 miles long by 5 miles at its greatest width, its western end being 11 miles from the eastern shore of Porto Rico. The island has several thousand population, with many quite large sugar plantations. The fisheries are represented by a few fishermen on the north and south sides of the island who find a ready local demand for their catch. Fish are plentiful in the near-by waters, yet receive but little attention, dry cod imported from far distant waters being more in demand than fresh fish taken in their own home waters.

CULEBRA ISLAND.

This island has no fishery business of importance. A few fishermen supply the few hundred inhabitants with fresh fish at times. Some fish pots are used and some attention is given to the turtle fishery, the latter furnishing 800 pounds of tortoise shells in 1902. The turtle-shell catch was sold at Fajardo at \$3 per pound.

Table showing the fishermen, boats, and apparatus employed in the fisheries of Porto Rico in 1902.

Locality.	Fisher- men.			Cas	t nets.	Fish	Hooks and lines.	
		No.	Value.	No.	Value.	No.	Value.	Value.
guadilla	50	25	\$ 690	30	\$120	50	\$200	\$18
Igarrobo	15	8	310			28	35	10
recibo	50	20	695	30	120	. 5ŏ	25	5
fiasco	8	3	150	1		l	1	Ĭ
rroyo	6ŏ	30	1,400	4	20	300	900	7
loca de Joyuda	l ĭŏ l	4	1, 180	1 -		12	24	l i
loqueron	20	13	500	20	80	100	150	6
eiba	15	76	500	5	20	30	90	"
ulebra (island)	12	8	500		1 20	25	75	
ajardo	80	25	2, 190	4	32	100	300	1 7
uayanilla	14		280	. 2	8	20	60	1 8
uanica	20	6	435	- 3	12	40	120	1 8
uayanes	6	4	210	٥	1 12	20	50	, °
Iucares	32	13	660	2	8	104	260	2
Iumacao	25	10	525	2	8	80	200	í
sabel	22	iŏ	775	3		30		1 5
as Moreas	20	17			12		90	
as moreas			315	12	48	150	525]]
uquillo	8	.2	150	3	12	18	54	
ayaguez	20	14	465	6	36	25	45	
alo Seco	80	40	2,000	25	100		• • • • • • • • • • • • • • • • • • • •	8
once	40	27	2,530	6	24	210	630	8
atillas Bay	25	17	770	6	24	200	700	E
nerto Real	30	20	606	9	36	100	150	_
uerto de Jobos	12	8	450	4	16	75	225	2
alinas	14	14	560	3	12	16	48	
un Juan	25	10	500					4
icques (island)	35	15	525	4	16	125	375	•••••
Total	748	369	18,771	183	764	1,908	5, 331	1,03

	I	Iaul sein	es.		Gill net	s.	l w	Tota	
Locality.	No.	Length (feet).	Value.	No.	Length (feet).	Value.	No.	Value.	inves
guadilla	6	3,600	\$ 750						\$ 1,9
Igarrobo	2	450	65				1		42
recibo	3	1,800	375						1, 2
fiasco	i	360	40	i	1			• • • • • •	1, 2
rroyo	2	780	175	····i	480	\$15	· · · · · · ·		2,5
oca de Joyuda	í	480	75	1	400	210	• • • • •	• • • • • •	
oqueron	•	400	10		******				1
eiba		• • • • • • • • •					;· · · · · ·		7
ulebra (island)		• • • • • • • • •	[6
ajardo		9 900		50	1,800		, • • • • •		7
uayanilla	4	3,300	1,200	50	1,800	125	· · · · · ·		3,9
uanica		1,200	375						7
uallica	2	900	250						8
uayanes	ĭ	400	125						- 3
ucares	2	420	160						1,1
umacao	1	480	100				i		8
abel	2	1,000	250	¦		<i>.</i> .	١		1,1
as Moreas	2	600	150						1,0
uquillo									2
ayaguez	3	1,800	375						9
alo Seco	15	7,500	2, 250	20	18,000	1,500	4	\$400	6.3
once	3	1,200	375						3,6
atillas Bay	3	1,050	175			<i>.</i>	i		1,7
uerto Real				2	75	16			-' 8
uerto de Jobos	2	900	200		l				9
alinas	1	400	125	l					7
an Juan									5
ieques (island)	1	500	125	10	360	25			1,0
Total	60	29, 120	7,715	133	22,515	1,806	4	400	35, 8

Tuble showing the amount and value of the fishery products taken by the various forms of apparatus used in the fisheries of Porto Rico in 1902.

Logalision	Fi	sh pots		Hau	l seines	. [Hooks an	d lines.
Localities.	Lbs.	V	alue.	Lbs.	Va	lue.	Lbs.	Value.
Aguadilla			\$900	60,0		,750	73,000	\$ 4,910
Algarrobo		000	450	31, 5	0 1,575		12,000	600
Arecibo	7,0	000	350	37,5	00 1	,875	22,500	1,125
Arroyo	40,0	von i	2,400	20, 0 7, 0	100	,000 420	8,000 16,000	400 960
Boca de Joyuda	5,0		150	36,5		. 095	8,000	90
Boqueron	58, 2		1,596	00,0		,000	29, 800	894
Ceiba	22.1	500	900					
Culebra (island)			480				3,000	120
FajardoGuayanilla	39,€	500	1,386	99,0	00 2	, 465	19,800	693
Guanica	15, 4 30, 9	100	695 1, 391	8, 3	3U	375 254	12, 116	549
Guayanes	10,0	200	500	5, 6, 5, 0		250	11,360	511
Hucares	50,0	igo l	2,500	20,0	00 1	, 000	8,000	400
Humacao	43,0	100	2,500 2,150	10,0	00	500	7,500	375
Isubel	23, 1	90 j	1,043	5, 5	53	250	19,840	893
Las Marias	25,0	000	1,250	8,0	00 [400	6,000	300
Luquillo	12,0 7,5	000	600 875		······	·:::- ··		
Palo Seco		w i	370	50, 70 175, 00		,535 ,500	28, 000 30, 000	1,400 1,800
Ponce	162. 4	181	7,312	8, 2		370	28, 515	1,283
Patillas Bay	30,0	100	1,800	12, 0		720	15,000	7,900
Puerto Real	87, 5		2,625				62, 350	1,871
Puerto de Jobos			750	6,00		300	4,000	200
Salinas	12, 8	368	556	2,7	76	125	12,786	575
San JuanVieques (island)	50, 0		2,000	20.00	,	800	120,000	6,000
Vicques (isitate)	50,0		2,000	20, 0				• • • • • • • • • • • • • • • • • • • •
Total	777,7	19 3	4, 159	628, 74	11 30	, 559	552, 567	26, 849
	Cast	nets,	Gil	l nets.	We	irs.	Total.	
Localities.					1		, 10	
:	Lbs.	Value.	Lbs.	Value.	Lbs.	Value	-	Value.
A mus dell'u			Lbs.				Lbs.	Value.
Aguadila	Lbs. 12,000	Value. \$750				Value	Lbs.	Value.
Algarrobo	12,000	\$750				Value	Lbs.	Value. \$10,310 2,625
Algarrobo						Value	Lbs.	Value. \$10,310 2,625 3,750
Algarrobo Arecibo Añaseo Arroyo	12,000	\$750				Value	. Lbs. 160,000 52,500 75,000 28,000	Value. 810, 310 2, 625 3, 750 1, 400 4, 350
AlgarroboArecibo Arecibo	12,000 8,000 2,000	\$750 400 120		0 \$450		Value	. Lbs. 160,000 52,500 75,000 28,000 65,150 44,500	Value. \$10,310 2,625 3,750 1,400 4,350 1,336
Algarrobo Arecibo Añuseo Arroyo Boca de Joyuda Boqueron	12,000 8,000 2,000 50,000	\$750 400 120 1,500		0 \$450		Value	Lbs. 160,000 52,500 75,000 28,000 65,150 44,500 133,000	Value. \$10,310 2,625 3,750 1,400 4,350 1,335 3,990
Algarrobo. Arecibo. Afinseo. Arroyo. Boca de Joyuda. Boqueron. Ceiba.	12,000 8,000 2,000	\$750 400 120 1,500 300	a 15	0 \$450		Value	. Lbs. 160,000 52,500 76,000 28,000 65,150 44,500 133,000	Value. \$10,310 2,625 8,750 1,400 4,350 1,336 1,336 1,350 1,200 1,
Algarrobo. Arecibo Añuseo Añuseo Arroyo. Boca de Joyuda Boqueron Ceiba Culebra (Island)	12,000 8,000 2,000 50,000 7,500	\$750 400 120 1,500	a 15	0 \$450		Value	Lbs. 160, 000 52, 500 75, 000 28, 000 44, 500 133, 000 30, 000	Value. \$10,310 2,625 3,750 1,400 4,350 1,335 3,990 1,200 3,000
Algarrobo Arecibo Añaseo Añaseo Arroyo Boca de Joyuda Boqueron Ceiba Culebra (Island) Fajardo Guayanilia	12,000 8,000 2,000 50,000 7,500	\$750 400 120 1,500 300	a 15 a 80 a 40	0 \$450 0 2,400 0 1,200		Value	Lbs. 160,000 52,500 75,000 28,000 44,500 133,000 30,000 15,800	Value. \$10,310 2,625 8,750 1,400 4,350 1,335 3,990 1,200 1,200 5,744
Algarrobo Arecibo Añusco Arroyo Boca de Joyuda Boqueron Celba Culebra (Island) Fajardo Guapia	12,000 8,000 2,000 50,000 7,500	\$750 400 120 1,500 300 38 56	a 15 a 80 a 40	0 \$450 0 2,400 0 1,200		Value	Lbs. 160,000 52,500 75,000 28,000 65,156 44,500 133,000 15,800 158,800 36,744 49,190	Value. \$10,310 \$2,625 \$7,750 \$1,400 \$1,335 \$1,200 \$1,000 \$1,657 \$1,657 \$2,212
Algarrobo Arecibo Añaseo Añaseo Arroyo Boca de Joyuda Boqueron Ceiba Culebra (Island) Fajardo Guayanilla Guayanes	12,000 8,000 2,000 50,000 7,500 838 1,257	\$750 400 120 1,500 300 38 56	a 15 a 80 a 40	0 \$450 0 2,400 0 1,200		Value	. Lbs. 160,000 52,500 75,000 28,000 65,150 44,500 133,000 15,800 15,800 36,744 49,190	Value. \$10,310 \$10,310 \$10,310 \$1,625 \$1,750 \$1,335 \$1,200
Algarrobo Arecibo Anaseo Arroyo Boca de Joyuda Boqueron Ceiba Culebra (Island) Fajardo Guayanilla Guanica Guayanes	12,000 8,000 2,000 50,000 7,500 838 1,257 2,000	\$750 400 120 1,500 300 38 56	a 15 a 80 a 40	0 \$450 0 2,400 0 1,200		Value	. Lbs. 160,000 52,500 75,000 28,000 65,150 44,500 133,000 15,800 15,800 36,744 49,190	Value. \$10, 310 2, 625 3, 750 1, 400 4, 350 1, 335 3, 990 1, 200 5, 744 1, 657 2, 212 750 4, 000
Algarrobo Arecibo Ariusco Arroyo Boca de Joyuda Boqueron Ceiba Culebra (Island) Fajardo Guayantila Guanica Guayanes Hucares Hucares	12,000 8,000 2,000 50,000 7,500 838 1,257 2,000 2,000	\$750 400 120 1,500 300 38 56 100 100	a 15	0 \$450 0 2,400 0 1,200		Value	160, 000 52, 500 28, 000 28, 000 133, 000 15, 800 36, 744 49, 190 15, 000 80, 000 69, 500	Value. 810, 310 2, 625 8, 750 1, 400 4, 350 1, 336 8, 990 1, 200 5, 744 1, 657 4, 000 8, 126
Algarrobo Arecibo Arecibo Anaseo Arroyo Boca de Joyuda Boqueron Ceiba Culebra (island) Fajardo Guayanilla Guanica Guayanes Hucares Humacao	12,000 8,000 2,000 50,000 7,500 838 1,257 2,000	\$750 400 120 1,500 300 38 56	a 15	0 \$450 0 2,400 0 1,200		Value	. Lbs 160, 000 . 52, 500 . 28, 000 . 28, 000 . 44, 500 . 15, 800 . 15, 800 . 28, 744 . 49, 190 . 80, 000 . 80, 000 . 49, 783	Value. 9 \$10, 310 2, 625 3, 750 1, 400 4, 350 9, 1, 335 9, 1, 200 1, 200 1, 5, 744 1, 657 2, 212 750 4, 000 3, 126 2, 240
Algarrobo Arecibo Arecibo Añaseo Arroyo. Boca de Joyuda Boqueron Ceiba Culebra (Island) Fajardo. Guayanilla Guanica Guayanes Hucares Hucares Humacao Isabel Las Marlas Las Marlas Lagullo.	12,000 8,000 2,000 50,000 7,500 838 1,257 2,000 2,000 1,200	\$750 400 120 1,500 300 38 56 100 100 54	a 15	0 \$450 0 2,400 0 1,200		Value	160,000 52,500 28,000 65,156 44,500 138,000 158,800 15,800 80,000 80,000 80,000 80,000 80,000 80,000 80,000 80,000	Value. 9 \$10, 310 2, 625 9, 760 9, 4, 350 1, 308 1, 338 1, 338 1, 200 9, 744 1, 657 2, 212 750 4, 000 8, 125 2, 240 2, 150
Algarrobo Arecibo Anaseo Arroyo Boca de Joyuda Boqueron Ceiba Culebra (Island) Fajardo Guayanilla Guanica Ouayanes Hucares Hucares Humacao Isabel Las Marias Luquillo Mayaguez	12,000 8,000 2,000 50,000 7,500 838 1,257 2,000 1,200 4,000 3,000 2,000	\$750 400 120 1,500 300 38 56 100 100 54 200 150	a 15 a 80 a 40	0 \$450 0 1,200 0 2,400 0 1,200		Value	. Lbs 160, 000 . 52, 500 . 28, 000 . 28, 000 . 44, 500 . 138, 000 . 36, 744 . 49, 190 . 15, 000 . 80, 000 . 49, 783 . 43, 000 . 88, 000 . 88, 83, 000 . 88, 340 . 88, 340 . 88, 340 . 88, 340 . 88, 340 . 88, 340 . 88, 340	Value. 9 \$10, 310 2 £625 1, 400 4, 350 5, 744 1, 657 750 4, 200 2, 212 750 4, 200 4, 2, 400 4, 4, 657 4, 2, 410 4, 647
Algarrobo Arecibo Arocibo Añusco Arroyo Boca de Joyuda Boqueron Ceiba Culebra (Island) Fajardo Guayanilla Guanica Guayanes Hucares Hucares Humacao Isabel Las Marias Luquillo Mayaguez Palo Seco	12,000 8,000 2,000 50,000 7,500 838 1,257 2,000 2,000 4,000 4,000 2,000 2,000 20,000	\$750 400 120 1,500 300 38 56 100 100 54 200 150 1,200	a 15 a 80 a 40	0 \$450 0 2,400 0 1,200	15,000	Value	160,000 52,500 28,000 30,000 158,800 36,744 49,190 49,193 49,183 43,000 49,883 43,000 48,8344 280,000	Value. 9 \$10,310 9 2,625 9 1,400 1,330 1,300 1,330 1,200 1,350 1,200 1,367 2,212 750 4,000 2,150 4,830 1,4830 1,687
Algarrobo Arecibo Arecibo Anaseo Arroyo Boca de Joyuda Boqueron Ceiba Culebra (Island) Fajardo Guayanilla Guanica Guayanes Hucares Humacao Isabel Las Marias Luquillo Mayagnez Palo Seco	12,000 8,000 2,000 50,000 7,500 2,000 2,000 4,000 3,000 2,000 2,000 2,000 2,514	\$750 400 120 1,500 300 38 56 100 54 200 150 100 1,200 1,200	a 15 a 80 a 40 a 140 a 144 40,000	0 \$450 0 2,400 0 1,200 0 2,400 0 2,400	15,000	Value	. Lbs 160, 000 . 52, 500 . 28, 000 . 28, 000 . 44, 500 . 183, 000 . 15, 800 . 36, 744 . 49, 190 . 15, 000 . 80, 000 . 49, 783 . 43, 000 . 15, 000 . 88, 340 . 280, 000 . 201, 740	Value. \$10,310 \$2,625 \$3,750 \$1,400 \$4,350 \$1,335 \$3,990 \$5,744 \$1,667 \$2,212 \$4,000 \$3,125 \$2,240 \$4,830 \$1,680 \$1,680 \$9,078
Algarrobo Arecibo Arecibo Arroyo Boca de Joyuda Boqueron Ceiba Culebra (Island) Fajardo Guayantilla Guanica Guayanes Hucares Hucares Humacao Isabel Las Marlas Luquillo Mayaguez Palo Seco Ponce Pattilas Bay	12,000 8,000 2,000 7,500 50,000 7,500 2,000 1,200 4,000 2,000 2,000 20,000 2,514 8,000	\$750 400 120 1,500 300 38 56 100 100 150 100 1,200 1,200 113	α 15 α 80 α 40 α 140,00	0 \$450 0 2,400 0 1,200	15, 000	Value	160,000 52,500 28,000 30,000 158,800 36,744 49,190 49,193 49,183 43,000 49,783 43,000 49,783 43,000 201,740 60,000	Value. 9 \$10,310 2,625 3,756 1,400 4,335 3,930 4,300 6,3,000
Algarrobo Arccibo Añasco Añroyo Boca de Joyuda Boqueron Ceiba Culebra (Island) Frajardo Guayanilla Guanica Guayanilla Hucares Hucares Hucares Hucares Luguillo Mayaguez Palo Seco Ponce Patilus Bay	12,000 8,000 2,000 50,000 7,500 838 1,257 2,000 2,000 1,200 4,000 2,000 2,000 2,514 8,000 25,150	\$750 400 1,500 300 38 56 100 100 54 200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200	a 15 a 80 a 40	0 \$450 0 1,200 0 1,200 0 2,400 0 2,400	15,000	Value	Lbs. 160, 000 52, 500 28, 000 28, 000 30, 000 15, 800 15, 800 15, 800 15, 800 15, 800 20, 744 49, 190 80, 000 80, 000 80, 000 15, 000 80, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 175, 000	Value. 9 \$10,310 9 2,625,26 9 3,760 1,400 4,350 1,385 3,990 9 1,200 9
Algarrobo Arecibo Añaseo Añroyo Boca de Joyuda Boqueron Ceiba Culebra (Island) Fajardo Guayanilla Guanica Juayanes Hucares Hucares Humacao Isabel Las Marlas Luquillo Mayaguez Palo Seco Ponce Patillas Bay Puerto Real	12,000 8,000 2,000 50,000 7,500 2,000 1,257 2,000 1,200 2,000 2,000 20,000 20,000 25,150 1,400	\$750 400 120 1,500 300 38 56 100 100 150 100 1,200 1,200 113	α 15 α 80 α 40 α 140,00	0 \$450 0 1,200 0 1,200 0 2,400 0 2,400	15, 000	Value	160,000 52,500 28,000 30,000 158,800 158,800 158,800 62,500 49,783 43,000 80,000 201,744 60,000 175,000	Value. \$10,310
Algarrobo Arceibo Añaseo Añaseo Arroyo Boca de Joyuda Boqueron Ceiba Culebra (island) Fajardo Guayanilla Guanica Guayanes Hucares Hucares Humacao Isabel Las Marlas Luquillo Mayagnez Palo Seco Ponce Patillas Buy Puerto Real Puerto de Jobos Isalinas San Juan	12,000 8,000 2,000 50,000 7,500 838 1,257 2,000 2,000 1,200 4,000 2,000 2,000 2,514 8,000 25,150	\$750 400 120 1,500 300 54 100 100 150 150 1,200 1,200 1,200 1,200 755 70	α 15 α 80 α 40 α 40, α 144 40, 00	0 \$450 0 2,400 0 1,200 0 2,400 0 2,400	15,000	Value	Lbs. 160, 000 52, 500 28, 000 28, 000 30, 000 15, 800 15, 800 15, 800 15, 800 15, 800 20, 744 49, 190 80, 000 80, 000 80, 000 15, 000 80, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 15, 000 175, 000	Value. 9 \$10,310 9 2,625 9 1,400 1,330 1,300 1,300 1,300 1,300 1,000 1,300 1,000 1,300 1,000
Algarrobo Arecibo Arecibo Añaseo Arroyo Boca de Joyuda Boqueron Ceiba Culebra (Island) Fajardo Guayanilla Guanica Guayanes Hucares Hucares Humacao Isabel Las Marlas Luquillo Mayagnez Palo Seco Ponce Patillas Bay Puerto Real Prerio de Jobos Salinas San Juan	12,000 8,000 2,000 50,000 7,500 838 1,257 2,000 2,000 1,200 4,000 2,000 20,000 2,514 8,000 25,150 1,400 1,314	\$750 400 120 1,500 300 38 56 100 54 200 0,150 1,200 1,200 1,200 755 70	a 15 a 80 a 40	0 \$450 0 2,400 0 1,200 0 2,400 0 2,400	15,000	Value	160,000 52,500 28,000 30,000 158,800 36,744 49,190 80,000 62,500 49,783 43,000 201,740 280,000 201,740 201,740 201,740 201,740 201,740 201,740 201,740 201,740 201,740 201,740 201,740 201,740	Value. 9 \$10,310 2,625 1,400 4,350 1,320 3,900 1,200 3,000 5,744 1,667 2,212 2,150 4,000 3,126 2,240 2,150 4,830 16,800 9,078 8,600 5,251 1,320 1,315 6,200
Algarrobo Arecibo Anusco Aroyo Boca de Joyuda Boqueron Ceiba Culebra (Island) Fajardo Guayanilla Guanica Guayanes Humacao Isabel Las Marlas	12,000 8,000 2,000 50,000 7,500 838 1,257 2,000 2,000 1,200 4,000 2,000 20,000 2,514 8,000 25,150 1,400 1,314	\$750 400 120 1,500 300 38 56 100 54 200 0,150 1,200 1,200 1,200 755 70	α 15 α 80 α 40 α 40, α 144 40, 00	0 \$450 0 2,400 0 1,200 0 2,400 0 2,400	15,000	Value	. Lbs 160, 000 . 52, 500 . 28, 000 . 28, 000 . 44, 500 . 30, 000 . 15, 800 . 15, 800 . 15, 800 . 15, 800 . 15, 800 . 15, 800 . 15, 800 . 15, 800 . 15, 800 . 15, 800 . 15, 800 . 15, 800 . 15, 800 . 15, 800 . 15, 800 . 15, 800 . 28, 600 . 201, 740 . 60, 000 . 205, 400 . 29, 243 . 125, 000 . 70, 080	Value. 9 \$10,310 2,625 1,400 4,350 1,320 3,900 1,200 3,000 5,744 1,667 2,212 2,150 4,000 3,126 2,240 2,150 4,830 16,800 9,078 8,600 5,251 1,320 1,315 6,200

a Represents the amount and value of hawksbill-turtle shells.

Table showing the amount, value, and duty of fishery imports from the United States to Porto Rico during the years 1899, 1900, 1901, and 1902.

Description.		Aguadi	lla.		Arecib	0.		Arroy	0.
Description.	Lbs.	Value	Duty.	Lbs.	Value	. Duty	Lbs.	Value	Duty.
1899. Dry, pickled, smoked, canned fish, etc				77,466	\$2,34 3	\$239.69	900) \$ 2	5 \$ 2.30
Cod	. 4. 137	131	l \$31 . 79		=				
Mackerel, pickledCod oil	979	60	9.79	125	23	3.00			:: :
Total	74, 111	2,661	41.58	125	23	3.00			
1901.				. 4,500	150	Free.	28, 765	1,317	Free
1902. Alewives, pickled Cod	36, 240	115 1,449			2,534	Free.	., 3,465	5 1,722 5 140	Free Free
Herring, pickled Herring, smoked Mackerel, pickled Salmon, pickled Cod oil	2,500 1,000			7,000 1,000 1,926	51	Free.) 410	
Total	43, 7:10	1,719	Free.	76, 438	3, 226	Free.	75, 961	2, 442	Free
		Fajardo			Iumacac),		Mayagu	ez.
Description.	Lbs.	Value.	Duty.	Lbs.	Value.	Duty.	Lbs.	Value.	Duty.
1899. Dry, pickled, smoked, canned fish, etc				46, 891	\$1,404	\$ 136. 70	667, 941	\$ 25, 7 45	\$ 1,800.00
1900. Cod Herring, smoked Mackerel, pickled				· · · · · · · · · · ·	'		33, 250 1, 000 200 120	1, 086 13 14 29	Free. . 75 2. 00 Free.
Total							34,570	1,142	2.75
Cod							46, 237 12, 000 1, 625	2, 154 400 55	Free. Free. Free.
Total							59, 862	2,609	Free.
Alewives, pickled	7, 500 15, 680 6, 100 200	\$375 320 122 14	A				15,000 325,678 34,308 17,012	290 14,173 779 455	Free. Free. Free. Free.
Salmon, canned Fish guano	·····	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · ·			2, 944 25, 250	187 315	Free. Free.
Total	29, 480	831	Free.				420, 192	16, 199	Free.

Table showing the amount, ralue, and duty of fishery imports from the United States to Porto Rico during the years 1899, 1900, 1901, and 1902—Continued.

Thomas 41		Ponce		į :	San Juan	ι]	Total.	
Description.	Lbs.	Value.	Duty.	Lbs.	Value.	Duty.	Lbs.	Value.	Duty.
1899.				i	1	i I		!	i
Dry, pickled, smoked, canned fish, etc	770 011	810 600	 	 	2102 592	: 	: [6150 710	
	776,211	319, 092	\$1,672.79	3, 108, 282	\$103,653	262.00	1,679,691	\$102, 742 ======	\$10, 103. 4
1900.	1		ĺ	- 000					, n.
Alewives, pickled Cod	558, 376	20, 985	Free.	5,000 1,764,732	100 61,509	Free. Free.	5, 006 2, 425, 353 57, 710 165, 215	100 86,050	Free
Hake Herring, pickled	39, 150	1, 283 115	205.02	. 18.560) 569	139.20 551.96	57,710	1,852 2,391	432.8 568.1
Herring, smoked	4,780	106	21.73	64, 401	1,669	1000.90	(4, 515	(1,919	443.2
Hake Herring, pickled Herring, smoked Mackerel, pickled Mackerel, canned	278	313 21	5, 56	2, 238	1,466 235	43.51	2,516	256	297. 0 49. 0
Salmon, Dickled	(630)	48		39, 501 952	1,943 44	488, 93 23, 95	40, 131 985	1,991 46	495. 2 24. 3
Salmon, canned Sardines Shrimp, canned				520	62	13.34	520	62	13. 3
Cod oil	75	10	1.50	2,833	221	Free. 44, 70	700 3,033	254	
Fish in tinsLobsters, canned	540 132	0.5	39.00	230	50	15.00	770	180	54.0 Free
Shellfish				300	88	Free.	300	88	Free
				100	14	.48	100	1.1	4
Total	613, 564	23,088	445.06	2,087,868	70, 353	1,934.47	2,810,238	97, 267	2,426.8
1901.		i		[
Alewives, pickled Cod Haddock	1-11-151	أووه		3,800	76	Free.	3,800	76	Free
Haddock	14, 412	663 536	Free.	$\begin{bmatrix} 1,564,250 \\ 111,020 \end{bmatrix}$	4,561	Free.	1, 654, 873 125, 432	5,097	Free Free
Hake Herring nickled	985 809			62,370 740,051	1,940 15,989	Free.	62, 370 1, 037, 853	$1,940 \\ 20,981$	Free Free
Herring, smoked	2,080	54	Free.	44, 481	1,364	Free.	46, 561	: 1.418	Free
Mackerei, piekied Pollock	7,700	189	Free.	68,398 13,280	4, 198 699	Free.	77, 728 13, 280	4,442 699	Free Free
Salmon, pickled Salmon, canned.	1,200	50 13	Free. Free.	18,550 750	968 93	Free. Free.	19,750 867	1,018 106	Free Free
Sardines	700	40	Free.	745	105	Free.	1,445	145	Free
Sword-fish				1, 200	6 60	Free. Free.	30 1, 200		Free Free
Fish in tins	· · · · · · ·		• • • • • • • • •	400 100	75 10	Free.	100 100	75	Free Free
Haddock Hake Herring, pickled Herring, smoked Mackerel, pickled Pollock Salmon, pickled sardines Shrimp, canned Sword-fish Fish in tins Lobsters, canned Dysters, canned				1, 210	174	Free.	1,210	174	Free
Total	323, 132	6, 137	Free.	2, 630, 635	87,501	Free.	3, 046, 894	.97, 714	Free
1902.		i							
Alewives, pickled	45,000	775			1,248	Free.	141,500	2,598	Free
Inddock	53, 905	$18,340 \\ 1,962$	Free.	1,686,882 15,000	81,647 653	Free.	2, 562, 021 68, 905	120, 240 2, 615	Free Free
Inke	13,862 121 034	$\frac{399}{2,184}$	Free. Free.	10,000 357,500	8, 629	Free. Free.	27, 327 550, 522	$\frac{860}{12,322}$	Free Free
Ierring, smoked	83, 650	2, 164	· Free.	125, 198,	4, 178	Free.	241,460	7, 112	Free
Mackerel, pickled	5, 400; 9, 70 0	150 375	Free. Free.	41,652 16,500	1,712 520	Free. Free.	48, 052 26, 200	1,967 895	Free Free
Salmon, pickled	1, 158	215 598	Free. Free.	27,784 $21,236$	1,264 $2,194$	Free. Free.	33, 142 34, 660	1,547 $2,979$	Free Free
Shad	10, 1110			2, 185	99	Free.	2, 185 2, 520	99	Free
Sardines	580	82	Free.	1,940- 1,282	158 322	Free.	2,520 8,208	240′ 817	Free Free
obsters, canned	000			50	10	Free.	50.	10	Free
Sod oil Lobsters, canned Dysters, canned Fish guano	900	44	Free.	2, 092	208	Free.	2, 992 25, 250	252 315	Free Free
Total				2, 377, 801	103, 163	Free.	3, 769, 994	154, 868	Free
!		1		<u>.</u>		!			

Table showing the amount, value, and duty of fishery imports from the British North American provinces to Porto Rico during the years 1899, 1900, 1901, 1902.

December 1		Aguadil	la.			Arecibo		i	Arroyo.	
Description.	Lbs.	Value.	Duty	y.	Lbs.	Value.	Duty.	Lbs.	Value.	Duty.
1899. Dry, pickled, smoked, canned fish, etc				1,	554, 415	\$ 55, 570	6 \$3 , 536. 69			
1900. Cod Herring, pickled Mackerel, pickled	113, 540 13, 700 400	260		. 05 . 00 . 00	110, 400 15, 000 2, 000	26	3; 75.00			
Total	127, 640	4, 124	931.	. 05	127, 400	4,57	923.00			
1901.	298, 091	12, 162	2, 297.	55	986, 060	51 823	7,642.30			
Herring, pickled Herring, smoked Mackerel, pickled	26, 300 5, 800	478 198	131.	. 50	87, 600 1, 300 3, 500	1,831	438.00 9.75			
Total	330, 191	12,838	2, 487.	05 1,	078, 460	53, 830	8, 125. 05		·····	
1902. Cod. Haddock Herring, pickled Herring, smoked Mackerel, pickled Fish in tins	15,068	319	76.	34	814, 167 9, 000 160, 200 8, 350 900 150	19, 870 255 3, 081 97 20	67.50 801.00 29.19 9.00	• • • • • • •	\$189	\$81.00
Total	15,068	819	75.	34	987, 767	23, 350	7, 015. 34	10,800	189	81.00
Description.		Lbs. Val						Ponce. Value. Duty		
1899. Dry, pickled, smoked, offish, etc		399,	610	\$ 8,66	, ,	3796. 00	9, 022, 92	3 \$332	 	1, 053. 11
Cod. Haddock. Herring, pickled. Herring, smoked. Mackerel, pickled. Pollock.		142, 59,	675	4, 58 80	1 1,	070.08 295.43 2.20	5, 250, 64 69, 65 382, 24 32, 16 14, 65 2, 28	6 175, 2 1, 9 6, 2 1,	124 1 788	5, 103. 86 160. 36 1, 500. 45 166. 75 144. 76 5. 20
Total		202,	081	5, 89	4 1,	367. 71	5, 751, 640	6 184,	849 1	7, 081. 37
Cod		214, 12,	967 800	9, 10, 51; 110	i	627. 50 65. 27 28. 00	5, 208, 608 58, 983 891, 792 97, 250 122, 027 6, 300	5,	107 096	8, 748. 20 442. 00 4, 446. 02 660. 16 1, 219. 95 63. 00 Free.
Total		230,	675	9, 72	3 1,	720.77	6, 384, 979	246,	383 4	5, 579. 33
Cod . Haddock . Herring, pickled . Herring, smoked . Mackerel, pickled . Salmon, pickled .				28, 119 3, 840 14		774. 75 926. 29 6. 00 188. 50	6, 506, 594 30, 254 1, 043, 698 9, 000 17, 345 192 5, 400	1, 0 3 26, 1 0 2	134 180 705 5	8, 800, 56 226, 90 5, 153, 61 63, 75 173, 45 1, 92 806, 60
Total		947,	560	32, 418	6,	840. 54	7, 612, 485	299, 7	763 5-	1,726.79

Table showing the amount, value, and duty of fishery imports from the British North American provinces to Porto Rico during the years 1899, 1900, 1901, 1902—Continued.

Description,	1	San Juai	1.		Total.	
	Lbs.	Value.	Duty.	Lbs.	Value.	Duty.
1899.						
Dry, pickled, smoked, canned	1	!	}	1	ł	1
fish, etc	1,759,265	\$ 59, 803	\$4,437.00	12,736,213	\$457,004	\$29,822.80
1900.						
Cod	2, 673, 640	93, 304			281,063	31,565.55
Haddock. Herring, pickled	14,850			84, 502	2,275	271.74
Herring smoked	172, 299 21, 240	3,000		642, 434	10,663	2, 464. 09
Herring, smoked	4, 464	435 112		53, 392 21, 743	1,515	277.75
Pollock	2, 101	112	14.04	21,743	687 75	215. 59
Pollock Salmon, pickled	886	51	8.86	886	51	5. 20 8. 86
Total	2, 887, 379	97, 389	14,505.65	9, 096, 146	296, 329	34, 808. 78
1901.	•					
Alewives, pickled	980	15	7.00	980	15	
Cod	2.662.945	101, 486	18,627.81	9, 870, 612	392,525	7.00 68.943.36
Cusk	2 250	15	3.00	2,250	15	3.00
Haddock		1,239	273.00	95, 833	3, 268	715.00
Hake	14, 969	1 497	112.00	14, 969	497	112.00
Herring, pickled	266, 805		1,332.25	1, 285, 464	28, 132	6, 413, 04
Herring, smoked	12,750	379	118.70	111,300	2,520	783.61
Mackerel, pickled	39, 887 330	1, 326 15	399, 00	174, 014	6,937	1, 739. 95
Lobsters, canned	330	10	3, 00	6, 630 20	345	66.00
				20	6	Free.
Total	3,037,267	111, 177	20,870.76	11,061,572	434, 260	78, 782. 96
1902.						
Cod	9 029 006	107, 321	20, 930, 74	11 010 500	405 000	
Haddock	2, 352, 030	107, 321	20, 930. 74	11,012,566 39,254	425, 980	81,604.80
Herring nickled	380, 155	7,895	1, 920. 81	1,784,372	$\frac{1,302}{41,269}$	294, 40 8, 877, 05
Herring, smoked Mackerel, pickled Salmon, pickled		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1, 520.01	23, 150	466	173.94
Mackerel, pickled	14,708	560	147.03	33,553	1,299	335.48
Salmon, pickled Fish in tins				192	5	1.92
Į.	2,000	402	120.60	9, 550	1,902	570. 60
Total	3, 328, 959	116, 178	23, 119. 18	12, 902, 637	472, 228	91, 858. 19

Table showing quantity, value, and duty of fishery imports from Italy to Porto Rico in 1899, 1901, and 1902.

District.	Year.	Products.	Lbs.	Value.	Duty.
Arecibo	{ 1899 { 1902	Fish in tins. Dry, pickled, smoked, canned fish, etc. Fish sounds Dry, pickled, smoked, canned fish, etc.	2, 233 110	\$10 643 29 19	\$4.00 9.48 Free, 3.00

Table showing quantity, value, and duty of fishery imports from England, Cuba, and Norway to Porto Rico in 1899 and 1900.

Whence imported.	Products.	Year.	San Juan.			
	Trouters,	rear.	Lbs.	Value.	Duty.	
Cupa	Dry, pickled, smoked, canned fish, etc	1899 1900 1899 1899	43, 230 450 960 2, 619	\$1,941 21 28 384	\$190, 00 3, 38 2, 00 13, 00	

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Table showing the amount, value, and duty of fishery imports from Germany to Porto Rico during the years 1899, 1900, 1901, and 1902.

Description.	Mayaguez.				Ponce	once. S			San Juan.		Total.	
Description.	Lbs.	Val.	Duty.	Lbs.	Val.	Duty.	Lbs.	Val.	Duty.	Lbs.	Val,	Duty.
1899,]	}				<u> </u>						į .
Dry, pickled, smoked, canned fish, etc	1,741	\$ 64	\$ 10		ļ	 .	12, 398	\$ 878	\$31.10	14, 139	\$ 942	\$31.20
1900. Cod							8,045	541	48.86	8,045	541	48.86
1901. Cod		 		=			10.575	755	152. 69	10.575	257	150.00
Salmon, canned Sardines Fish in tins							150 2,000	25	7.50	150	755 25	152.69 7.50
Fish in tins		ļ _.	-	50	\$ 5	8 1.50	700	136	202, 50 40, 80	2,000 750	379 141	202.50 42.30
Total	·····	<u></u>		50	5	1.50	13, 425	1,295	403.49	13, 475	1,300	404.99
1902. Cod							4,572	318	40.33	4,572	318	40.33

Table showing the amount, value, and duty of fishery imports from Spain to Porto Rico during the years 1899, 1900, 1901, 1902.

Description.	ļ	Arecil	0.	İ	Humaçı	io.		Mayagu	ez.	
Description.	Lbs.	Value.	Value. Duty.		Value.	Duty.	Lbs.	Value.	Duty.	
1899. Dry, pickled, smoked, canned fish, etc	14, 616	\$ 615	\$ 92.34	100	\$ 13	\$ 2.00		!		
1902. Fish in tins							125	\$24	\$7.20	
Donostation		Ponce			San Jua	n.	Total.			
Description.	Lbs.	Value.	Duty.	Lbs.	Value.	Duty.	Lbs.	Value.	Duty.	
1899.										
Dry, pickled, smoked, canned fish, etc	39, 374	\$ 2,541	\$ 289. 85	290, 984	8 15, 125	\$2, 445, 00	345, 074	\$ 18, 294	\$2,829.19	
1900. Cod Devil-fish Herring, pickled Sardines Fish in tins		2 26	. 10 4. 00	1,500 1,587 10,650	109 59 1,936	7, 93 1, 236, 44	1,544 354 1,587 10,650	111 26 59 1,936	11.35 4.00 7.93 1,236.44	
Fish sounds Oysters, canned	61	29	.14	3, 350 300	857 58	257, 10 Free.	3,350 61 300	867 29 58	287, 10 , 14 Free,	
Total	459	57	4.24	17, 387	3,019	1,512.72	17,846	3,076	1, 516, 96	
Cod	400 4,060 30	32 716 5	5.00 301.20 Free.	369 217 9, 800 2, 900	39 9 2,079	6, 07 1, 62 1, 017, 17	769 217 13, 860 30 2, 900	71 9 2, 795 5 631	11. 07 1. 62 1, 318, 37 Free, 199, 20	
Total	4, 490	753	306. 20	13, 286	2,758	1, 224. 06	17,776	3, 511	1,530.26	
1902. Mackerel, pickled Sardines Shrimp, canned Fish in tins Total	13, 900 4, 225 80 18, 205	2,408 472 19 2,899	1, 256. 50 Free, 5. 70	1,000 49,900 2,300 3,180 56,380	30 8, 850 439 637	10.00 4,320.42 Free. 191.10	1,000 63,800 6,525 3,385	30 11, 258 911 680	10.00 5,576.92 Free. 204.00 5,790.92	

Table showing the amount, value, and duty of fishery imports from France to Porto Rico during the years 1899, 1900, 1901, 1902.

Year.	Description		Mayague	z.		Ponce.			
	Description	Lbs.	Value.	Duty.	Lbs.	Value.	Duty.		
1899	Dry, pickled, smoked, canned fish, etc				30, 038	\$1, 193	\$182.00		
1900	Herring, pickled		\$20		57 417	5 76	1.00		
	Total	120		4.00	474	81	19.97		
1901	Sardines			1	650 200	104 34	28. 75 10. 20		
	Total	·			850	138	38.95		
1902	Sardines	550	132	20.80	500	95	18.69		
Year.	Year. Description.		San Juan.			Total.			
		Lbs.	Value.	Duty.	Lbs.	Value.	Duty.		
1899	Dry, pickled, smoked, canned fish, etc.	13, 309	\$1,369	\$60,00	43, 347	\$ 2,562	\$242.00		
1900	Herring, pickled	1, 270	213	40.15	57 1,807	5 309	1.00 63.62		
	Total	1, 270	213	40. 15	1,864	314	64.62		
1901	SardinesFish in tins	4, 350	712	231.85	5, 000 200	816 34	260, 60 10, 20		
ĺ	Total	4, 350	712	231, 85	5,200	850	270.80		
1902	Sardines	3,550 1,300	609 256	108. 62 76. 80	4,600 1,300	836 256	148. 11 76. 80		
	Total	4,850	865	185, 42	5, 900	1,092	224. 91		

Table showing the quantity, value, and duty paid on fishery products imported into Porto Rico during 1899, 1900 1901, and 1902.

Year,	Foreig	gn impor	tations.	Dome	stic impo	rtations,	Total importations.			
Tear.	Lbs.	Value,	Duty.	Lbs.	Value.	Duty.	Lbs.	Value.	Duty.	
1899 1900 1901 1902	9, 124, 351 11, 098, 123	\$481, 817 300, 281 439, 931 486, 541	\$33, 142, 67 36, 442, 60 80, 993, 01 97, 914, 35	2,810 238 3,046,894	\$152, 742 97, 267 97, 714 154, 868		17, 867, 619 11, 934, 589 14, 145, 017 16, 757, 923	397, 548 537, 645		