

ICTIOLOGIA

THE SHORE FISHES OF THE COLOMBIAN CARIBBEAN

BY

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The present paper is a report on the marine fishes observed and studied on my trip to the Caribbean coast of Colombia during August and September of 1949, for slightly over a month's duration. This was made possible by a grant in aid from the Eldridge Reeves Johnson Fund by the American Philosophical Society. Leaving New York by steamer on August 12 I sailed to Barranquilla, arriving August 18, after which I proceeded to Cartagena, which I used as a base until my return from Barranquilla on September 8. During this interval very interesting opportunities were afforded to visit the fish market at Cartagena. When the influx of fishes brought in was large, as in fair weather or under favorable conditions, it was possible to see great numbers daily, so that I made several trips at times. The number of species seen varied from 30 to 50. I seldom missed finding at least one or more species daily that I had not seen previously.

Little has been published on the fishes of the Colombia shore line of the Caribbean Sea. The work of Andrés Posada-Arango (1), for the loan of which I am indebted to Dr. Cecil Miles, treats of Colombia as a whole, with only an occasional reference to Cartagena or the Caribbean. Mostly only the name of the species is given without comment, and its occurrence is therefore merely inferential. In this paper I indicate the Posada-Arango references as (P.). In a paper entitled "Some marine fishes from Colombia and Ecuador" Charles

(1) Estudios Científicos. Los Peces. Medellín, 1909, pp. 285-322.

Wilson (2) lists 84 species, of which only 33 are from Cartagena. These I indicate (W.). Records by Schmitt and Schultz (3) pertaining to the island of Old Providence (Providencia) I indicate as (SS.). Finally I have reported the marine fishes recorded (4) from the off shore Colombian islands and keys in the Caribbean as Serranilla Bank, Roncador Bank, Courtown Keys, St. Andrews (San Andrés) Island, Old Providence (Providencia) Island, and Albuquerque Keys. These are indicated by the sign =. The grand total of species listed here is 259.

Acknowledgement is due Dr. Cecil Miles, of Bogotá, who very expeditiously arranged for the grant of a permit to me by the Ministerio de la Economía Nacional, Sección Piscicultura, to collect fishes while in Colombia. Through Dr. Miles' intercession Señor Alberto H. Lemaitre met me at the dock in Barranquilla and most graciously accompanied me about the city. We were thus enabled to see and examine the great quantities of food and commercial fishes contained in the large refrigeration plant there. Señor Lemaitre also guided me to Cartagena and most kindly afforded me every consideration and favor during my stay. The hours spent at the Club de Pesca, in Cartagena Bay, will be long remembered, not only for the most delicious cuisine, but also the many enjoyable features of the surroundings and sociability. Situated in an old Spanish fort, the battlements with some of the antique cannon still extant, lend a combination and charm that is not readily forgotten. Besides all these activities I had many opportunities to visit some of the inland localities as well as different points along the coast.

It is to Señor Ernesto D. Lemaitre, uncle of Señor Alberto, that I have very much to be grateful for. This kindly and ever enthusiastic naturalist, also an experienced angler, accompanied me through the market. His familiarity and knowledge of all the more usual fishes about Cartagena was as revealing as was his delightful conversation during our trips about the country. He sent me a number of interesting specimens and put his stock of notes, sketches and pictures of Cartagena fishes at my disposal, and some of special interest he presented to me.

(2) Ann. Carnegie Mus., vol. 10, nos. 1 and 2, art. 4, Jan. 31, 1918, pp. 57-70.

(3) List of fishes taken on the presidential cruise of 1938. Smithsonian. Miscel. Collections, vol. 98, no. 25, Jan. 4, 1940, pp. 1-10.

(4) Fifth George Vanderbilt Expedition (1941). Acad. Nat. Sci. Phila., Monogr. no. 6, 1944. Colombia, pp. 80-163, 454-475.

Altogether I discovered 59 species which are additions to the fauna of Colombia, and these are indicated below by the preceded asterisk. Many of these, besides others, were found at Cartagena for the first time, and are therefore important items of distribution, so indicated by the sign + following the scientific name. Of 36 previously recorded species from Cartagena I met with 27, though I found altogether 143 species. I brought back but few of the market fishes, as most all were large or of moderate size, and the species are all well represented in the Academy collections.

I am indebted to Professor Armando Dugand, former Director of the Instituto de Ciencias Naturales, Bogotá, for many of the vernacular names used on the Caribbean coast of Colombia, mainly at Puerto Colombia and Barranquilla. Other common names used in the West Indies or in English are also given.

ORECTOLOBIDAE

- * *Nebrius cirratus* (Bonnaterre) +. Gata, Gato

An adult about 1250 mm., and 3 small ones, uniform gray brown, at Cartagena.

RHINCODONTIDAE

- Rhincodon typus* A. Smith. Whale Shark

This giant tropical shark is reported by Gudger (Science, n. s. 1918, p. 622) from between Colón and Cartagena.

LAMNIDAE

- * *Isurus paucus* Rafinesque +. Tiburón Carite, Mako

Mounted specimen about 750 mm. seen in a taxidermist's shop, taken at Cartagena.

GALEORHINIDAE

- * *Galeocerdo cuvier* (Le Sueur) +. Tintorera, Tiger Shark

Señor Alberto H. Lemaitre showed me a photograph of one caught on hook and chain at Cartagena, November 17, 1948, with an estimated weight of 450 lbs.

- * *Negaprion brevirostris* (Poey) +. Yellow Shark

I report this on the basis of a set of jaws about 305 mm. long, in which the upper teeth numbered 30 and 18-1-17 below. The larger

typical ones had a basal width of 25 mm., with the erect cusp an isosceles triangle, its edges entire. The large second dorsal and anal fins, as seen in the model of the adult, are very diagnostic. This shark, a female, contained 14 young according to Señor Alberto H. Lemaitre, and is from Cartagena.

* **Galeolamna leucas** (Valenciennes) +. Tiburón

One 2135 mm. (7 feet) uniformly gray, taken at Cartagena. Snout short and rounded. Another 2445 mm. (9 feet) was similar. A fine drawing of a specimen taken off Salgar, between Puerto Colombia and the mouth of the Magdalena River, was kindly sent to me by Professor A. Dugand.

Galeolamna porosa (Ranzani) +. Tiburón, Chicharo

Small one mounted in a taxidermist's shop at Cartagena.
Atrato (P.).

MUSTELIDAE

* **Mustelus canis** (Mitchill) +. Cazón, Tollo, Toyo, Smooth Dogfish
Several about 600 mm. long, examined at Cartagena.

SPHYRNIDAE

* **Sphyrna tiburo** (Linnaeus) +. Cornúa de rueda, Cabeza de batea,
Bonnet-head Shark, Shovelhead

Occasional in the market at Cartagena. Largest seen about 700 mm.

* **Sphyrna zygaena** (Linnaeus) +. Pez Martillo, Cornúa, Cornúa
de Cruz, Hammer-head Shark

One of moderate size at Cartagena.

PRISTIDAE

* **Pristis microdon** Latham . Pez Sierra, Pejesierra, Pez Espada

Saw of an adult seen at Club de Pesca, Cartagena, with teeth 24-23. A large mounted male had 28-29 teeth. A smaller one was 1250 mm.

Pristis pectinatus Latham +. Pez Sierra, Pejesierra, Pez Espada

At the Club de Pesca I found a saw with 17-18 teeth. A large mounted female at Cartagena had teeth 17-17. Eigenmann (1922) mentions it from the Quito R., Atrato basin. Miles (1945) say "Saws

corresponding to this species and to *P. perrotteti* Valenciennes, were obtained from trustworthy sources at Calamar, at the juncture of the Dique with the Magdalena River... as far up the river as Puerto Wilches (some 600 kilometers from the mouth)."

RHINOBATIDAE

- * *Rhinobatos percellens* (Walbaum) +. Puraque, Fiddler Fish
One 500 mm. at Cartagena.

PARATRYGONIDAE

- Paratrygon magdalenae* (Valenciennes). Raya
Reported in fresh water from the Magdalena and Atrato basins.

DASYATIDAE

- * *Dasyatis guttatus* (Schneider) +. Raya

Disk wide as long, with its length measured from snout tip to hind end of ventrals. Tail from vent 3 times length of disk, long, whip like, with a short, low keel or fold for an extent equal to 2 lengths of caudal spine; no upper fold apparent. Snout pointed and moderately protruded. Eyes small. Interorbital width $1\frac{1}{2}$ in snout length to eye. Mouth width small, $1\frac{1}{3}$ in interorbital width. About 30? rows of low teeth in each jaw.

Broad median area of disk above finely roughened or asperous, in front extending from near middle of snout until above hind portions of ventrals, narrowing posteriorly. Median vertebral row of 28 spines, each laterally compressed, last 5 largest, though penultimate spine nearer the last one than the latter is to the base of the caudal spine. Caudal spine long, slender, with small, sharp, antrorse serrae each side. Though the long tail is with some scattered asperities, the disk above other than described, smooth; entire under surface smooth, also tail basally.

Color of dried specimen largely uniform dull chocolate brown above, with outer borders of disk more or less grayish. The darker cloudings and blackish spots appear to have been painted on by the taxidermist who prepared the specimen, probably without very accurate reference to the details. Under surfaces dull or pale buff brown, evidently uniform whitish in life. Tail beyond caudal spine blackish brown, now with its end broken off.

Cartagena. Length to base of caudal spine 405 mm., from this point on tail estimated possibly 1055 mm.; disk width 390 mm.

Though I obtained only the above specimen, two others were also seen at Cartagena, one much smaller and the other larger. Both agreed in the rough asperous areas on the back, but had no enlarged

lateral or shoulder tubercles, vertebral similar, also the long tails with the low inferior keel or fold beginning below the base of the caudal spine. They all agree with Garman's partial outline figures of *Dasybatus tuberculatus* 1888 in showing a vertebral row of 43 spines, the more posterior last spine and this much longer than any of the others.

Trygon sayi (P.) is without sufficient evidence for identification.

Gymnura maclura (Le Sueur).

Butterfly Ray

Colombia (P.).

* **Urobatis jamaicensis** (Cuvier) +.

One about 300 mm. at Cartagena. Dark brown, with small yellowish or pale spots.

MYLIOBATIDAE

* **Aëtobatis narinari** (Euphrasen) +.

Chucho

Several, about 300 to 1200 mm. wide, at Cartagena. Dental plates of a small specimen given to me by Señor Ernesto D. Lemaitre.

MANTIDAE

* **Mantz birostris** (Walbaum) +.

Manta

Mounted specimen about 2440 mm. wide (8 feet), at Cartagena. A large female specimen about 3660 mm. wide (12 feet), same locality. With 6 dark or gray black blotches on the chest below and belly. No caudal spine.

TORPEDINIDAE

* **Narcine brasiliensis** (Olfers) +.

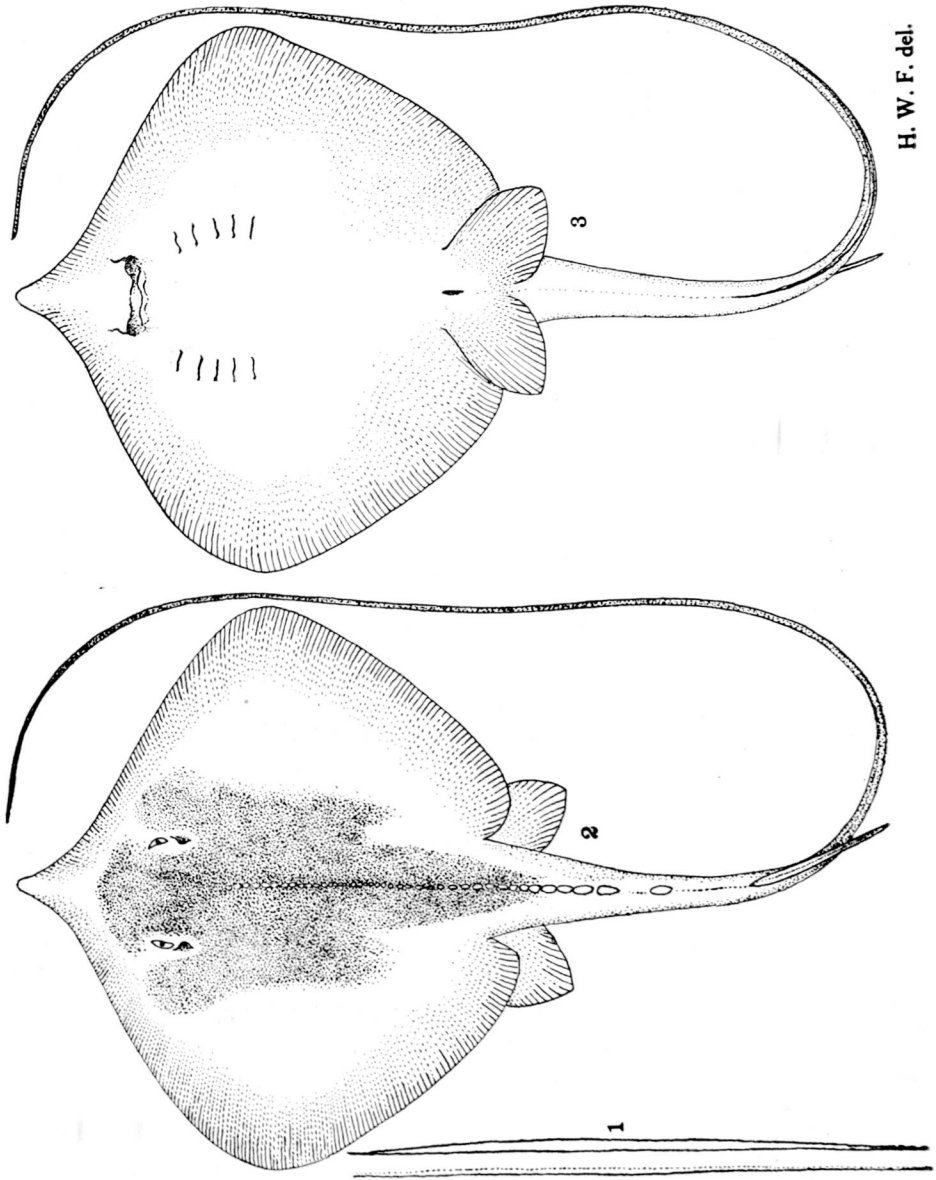
One about 495 mm. long at Cartagena.

MEGALOPIDAE

Tarpon atlanticus (Valenciennes) +.

Sábalo, Tarpon

Abundant food fish in the market of Cartagena, larger ones about 1000 mm. long. Miles (1945) says it ascends the Magdalena at least to Honda, in central Colombia.



H. W. F. del.

Fig. 1 — Lateral view of tail below caudal spine.
Fig. 2 — Dorsal view.
Fig. 3 — Ventral view.

Dasyatis guttatus (Schneider)

ELOPIDAE

Elops saurus Linnaeus +. Macabí, Chiro, Ten-pounder

Abundant and fishes of all sizes seen in the Cartagena market, the largest about 600 mm. long.

Old Providence Island =, St. Andrews Island =.

ALBULIDAE

* **Albula vulpes** (Linnaeus) +. Macabí

Frequent in the Cartagena market, the largest seen about 400 mm. I also saw 3 large mounted specimens.

DUSSUMIERIIDAE

Jenkinsia lamprotaenia (Gosse).

Old Providence Island =, St. Andrews Island =.

CLUPEIDAE

Sardinella anchovia (Valenciennes) +. Sardina

Several mounted specimens seen at Cartagena.

Courtown Keys =, Old Providence Island =, Albuquerque Keys =.

Harengula humeralis (Cuvier) +.

Señor Ernesto D. Lemaitre showed me a drawing of a specimen of this species which he secured at Cartagena.

Colombia (P.). Serranilla Bank =.

Harengula clupeola (Cuvier). Sardina

Old Providence Island =, St. Andrews Island =.

Harengula majorina Storey.

St. Andrews Island =.

ENGRAULIDAE

Anchoa hepsetus hepsetus (Linnaeus).

Old Providence Island =.

* **Cetengraulis edentulus** (Cuvier) +.

Señor Ernesto D. Lemaitre showed me a sketch of a small anchovy found at Cartagena, evidently this species.

SYNODIDAE

Synodus synodus (Linnaeus).

Reported from Santa Marta Bay by Norman (P. Z. S., 1935, 109).

Synodus poeyi Jordan.

Old Providence Island =.

MYCTOPHIDAE

Myctophum affine (Luetken).

Courtown Keys =.

Diaphus lucidus (Goode and Bean).

Courtown Keys =, St. Andrews Island =, Alburquerque Keys =.

Diaphus dumerilii (Bleeker).

Courtown Keys =, Old Providence Island =, St. Andrews Island =, Alburquerque Keys =.

SUDIDAE

Sudis vanderbilti Fowler.

St. Andrews Island =.

TACHYSURIDAE

* **Felichthys marinus** (Linnaeus) +. Pejechoivo, Pez Chivo

Mounted specimen 355 mm. long, at Cartagena.

PIMELODIDAE

Pseudoplatystoma fasciatum (Linnaeus) +. Bagre, Tiger Fish

A large specimen 1220 mm. (4 feet) long seen in the Cartagena market, September 4. Due to wear and tear the barbels were more or less mutilated or broken off. Its color was dark to blackish brown above, somewhat with still darker clouding, and the under surfaces pale brown.

BELONIDAE

Belone argalus argalus Le Sueur.

Courtown Keys =. Serranilla Bank =.

Strongylura caribbaea (Le Sueur).

Roncador Bank =.

Ablennes hians (Valenciennes).

Colombia (P.).

HEMIRAMPHIDAE

Hemiramphus brasiliensis (Linnaeus).

Aguja, Balajú

At Cartagena, August 22, I saw a halfbeak, evidently this species, skipping along the smooth water of the inlet. Another in the market August 26, apparently this species.

Cartagena (P.). Roncador Bank =, Serranilla Bank =.

Hemiramphus balao Le Sueur.

Courtown Key =.

Hyporhamphus hildebrandi (Jordan and Evermann).

Old Providence Island =.

Hyporhamphus unifasciatus (Ranzani) +.

Agujeta, Halfbeak

One in the Cartagena market, 250 mm. long, August 27, also one procured by Señor Ernesto D. Lemaitre 305 mm. and sent to me.

Colombia (P.).

Euleptorhamphus brevoortii Gill.

Courtown Keys =.

EXOCOETIDAE

Parexocoetus brachypterus hillianus (Gosse).

Colombia (P.). Courtown Keys =, St. Andrews Island =.

Oxyporhamphus micropterus similis Brunn.

Courtown Keys =.

Exocoetus volitans Linnaeus.

Pez Volador

Cartagena (P.).

Danichthys rondeletii (Valenciennes).

Courtown Keys =.

Hirundichthys affinis (Guenther).

Courtown Keys =.

Cypsilurus cyanopterus (Valenciennes).

Colombia (P.).

Cypsilurus heterurus (Rafinesque).

Roncador Bank =, St. Andrews Island =.

Prognichthys gibbifrons (Valenciennes).

Serranilla Bank =.

POECILIIDAE

* **Mollienesia sphenops** (Valenciennes) +.

Abundant in schools in the bays and inlets about Cartagena.

HOLOCENTRIDAE

Holocentrus ascensionis (Gmelin).

Candil

At Cartagena a mounted specimen 350 mm. long: species seen in market August 26, September 1 and 7.

Cartagena (W.), Roncador Bank =, Courtown Keys =, Old Providence Island =, St. Andrews Island =.

Holocentrus vexillarius Poey.

Old Providence Island (SS.) =, Courtown Keys =.

Holocentrus exasperatus Breder.

Courtown Keys =. Originally described with confused type locality "Swan Island or Glover Reef."

Myripristis jacobus Cuvier.

Courtown Keys =.

Beloholocentrus atractus Fowler.

Courtown Keys =.

BOTHIDAE

- Bothus lunatus** (Linnaeus) +. Peacock Flounder
 Cartagena August 28, one about 200 mm. long.
 Courtown Keys =, St. Andrews Island =.

SYNGNATHIDAE

Corythoichthys albirostris Heckel.

Colombia (P.).

Syngnathus pelagicus Linnaeus.

Colombia (P.).

Syngnathus rosseau (Kaup).

Cartagena (W.)

Hippocampus reidi Ginsburg. Caballito de mar

Cartagena (W.). Colombia (P.) as *H. punctulatus*.

AULOSTOMIDAE

Aulostomus maculatus Valenciennes +. Trumpet Fish

One at Cartagena, Old Providence Island =.

FISTULARIIDAE

* **Fistularia tabacaria** Linnaeus +. Trompetero, Corneta

Found at Cartagena.

URANOSCOPIDAE

* **Astroscopus y-graecum** (Valenciennes) +. Bulldog

Dried mounted specimen, about 300 mm. long, shown to me by
 Señor Ernesto D. Lemaitre and obtained at Cartagena.

MALACANTHIDAE

Malacanthus plumieri (Bloch).

Roncador Bank =, St. Andrews Island =.

PRIACANTHIDAE

Priacanthus cruentatus (Lacépède).

Albuquerque Keys =.

Priacanthus arenatus Cuvier.

Courtown Keys =, Albuquerque Keys =.

LOBOTIDAE

* **Lobotes surinamensis** (Bloch) +.

Mounted specimen 350 mm., at Cartagena. In the market one August 29, three 280 mm., September 6, with parasitic isopod in its gullet, and three September 7.

SERRANIDAE

Cephalopholis fulvus ruber (Schneider) +.

Two young in Cartagena market August 26: five September 3. Roncador Bank =, Courtown Keys =, St. Andrews Island =.

Cephalopholis fulvus punctatus (Linnaeus) +.

At Cartagena 12 August 23, mostly small, dark gray: common and young August 27: one August 30: two young September 4: three September 5: several September 6.

Roncador Bank =, St. Andrews Island =.

Petrometopon cruentatus coronatus (Valenciennes) +.

Señor Ernesto D. Lemaitre showed me a sketch of one 65 cm. long taken at Cartagena in 1938. Black moustache in the maxillary groove distinct.

Roncador Bank =, Courtown Keys =, St. Andrews Island =.

* **Mycteroperca venenosa apua** (Bloch) +.

Small one about 300 mm. long at Cartagena, August 23 and two on September 5.

Mycteroperca rubra (Bloch).

Colombia (P.) as *Serranus undulosus*.

* **Mycteroperca bonaci** (Poey) +.

Frequent in the Cartagena market, the largest 400 mm. Seen August 21, 22, 27, 28, 29, and September 1, 3, 4 and 6.

* **Aiphestes afer** (Bloch) +.

Six in the Cartagena market, largest about 300 mm. long.

Serranus morio Valenciennes) +. Mero

Three large one about 900 mm. long, evidently weighed upwards of 50 lbs. each, at Barranquilla. Others mostly smaller at Cartagena August 21, 22, 29, September 3 to 7.

Serranus punctatus (Bonnaterre) +. Cabra Moro, Rock Hind

Abundant and sometimes frequent at Cartagena, August 23 and September 3, largest 900 to 1000 mm.

St. Andrews Island =.

Serranus striatus (Bloch) +. Cherna

Seen at Cartagena, few August 29, two on August 30, two September 3, three September 4 and several September 5 and 6.

St. Andrews Island =.

Serranus guttatus (Linnaeus). Cabrilla, Mero, Red Hind

Cartagena, August 21 two about 370 mm. Smaller ones more frequently seen August 29 and 30, September 6 and 7.

Cartagena (W.), as *Epinephelus malosus*. Roncador Bank =.

* **Promicrops itaiara** (Lichtenstein) +. Mero, Jewfish

Large mounted specimen taken at Cartagena, about 2135 mm. (7 feet).

Hypoplectrus unicolor nigricans (Poey).

Old Providence Island =.

Prionodes sancti-andrewsi Fowler.

St. Andrews Island =.

Paranthias furcifer (Cuvier).

Colombia (P.), as *Serranus creolus*.

* **Rypticus arenatus** Cuvier +.

At Cartagena one 250 mm., dark brown, half grown August 26. common August 27, and five September 1.

APOGONIDAE

Apogon stellatus (Cope).

Alburquerque Keys =.

CENTROPOMIDAE

Centropomus pectinatus Poey.

Barranquilla (Steindachner 1879), as *C. pedimacula* Poey. Cartagena (W.).

Centropomus parallelus Poey.

Colombia (P.).

Centropomus ensiferus Poey.R. Magdalena (Steindachner 1879), as *C. affinis*.**Centropomus undecimalis** (Bloch).**Robalo**

An abundant food fish at both Barranquilla and Cartagena. Many examined were quite large, some at least 900 mm. long.

Cartagena (W.). Courtown Keys =.

CARANGIDAE

Trachurops crumenophthalmus (Bloch) +.

Abundant at Barranquilla and Cartagena.
Courtown Keys =, St. Andrews Island =.

Decapterus punctatus (Agassiz).Round Scad, **Scad**.

Abundant at Barranquilla. St. Andrews Island = Albuquerque
Keys =.

Alepes amblyrhynchus (Cuvier).Colombia (P.), as *Caranx amblyrhynchus*.**Caranx ruber** (Bloch) +.Ojo gordo, Skip **Jack**

Common in the Cartagena market, and many seen August 28 to 30,
and September 1. and September 3 to 7.

Courtown Keys =, Old Providence Island =, St. Andrews Island =.

Caranx hippos hippos (Linnaeus)

Burel, Hurel, Jurel, Jiguagua

One at Barranquilla, August 18 about 600 mm. Abundant at all ages
in Cartagena, the largest about 400 or 500 mm. Seen August 21, 23, 28,
29, 30, September 1, 3 to 5 and 7.

Cartagena (W.). Courtown Keys =.

Caranx bartholomaei Valenciennes +.

One 1000 mm. long in Cartagena, September 1, ten September 4,
and one September 6. Albuquerque Keys =.

Caranx crysos (Mitchill) +.Cojinudo, Cojinúa, Hard-tailed **Jack**

Abundant at Cartagena, largest 750 mm. Courtown Keys =. Old
Providence Island =.

Caranx latus Agassiz +. Jurelete, Ojo gordo, Jurel, Horse-eye Jack

Abundant at Cartagena, August 22, 29, September 1, 4, 5 and 7.
Albuquerque Keys =.

✧ **Caranx lugubris** Poey +.

A number of large ones 500 to 600 mm. long in Cartagena. Long dark to blackish pectorals, the body and other fins gray. No dark opercular blotch, August 27. Also several large ones September, one about 1000 mm. long.

Blepharis crinitis (Mitchill). Zapatero, Cascavito

Atlantic coast of Colombia (P.), as *B. sutor*.

Vomer setapinnis (Mitchill) +. Lamparosa, Moon Fish

Few seen in the Cartagena market, mostly less than 300 mm. August 27, 28, 30, September 3, 4, 5, 7. Colombia (P.).

✧ **Selene vomer** (Linnaeus) +. Jorobada, Look Down

Twelve adults at Barranquilla. At Cartagena two August 26, four August 28, three August 29 and 4 on September 2.

Trachinotus glaucus (Bloch) +. Palometa, Pompano

One at Cartagena August 29 about 200 mm. long. Cartagena (W.). Roncador Bank =.

Trachinotus falcatus (Linnaeus). Palometa, Round Pampano

Occasional in Cartagena market, as one seen September 7. Mounted specimen 375 mm. long. Cartagena (W.), as *T. culveri* Jordan and Starkes but without details.

✧ **Trachinotus carolinus** (Linnaeus). Pampano

Four large ones about 500 mm. long at Barranquilla. They seemed to agree in most details with Hudson's painting, as published by Evermann and Marsh in 1900.

✧ **Chloroscombrus chrysurus** (Linnaeus) +. Casabe

Frequent in the Cartagena market, reaching 250 mm.: six August 26: common August 27 to 29 and September 3: twenty September 4: ten September 5: six September 7.

SERIOOLIDAE

Seriola rivoliana Valenciennes.

St. Andrews Island =.

- * **Oligoplites saliens** (Bloch) +. Zapatero de mar

One at Cartagena 305 mm. long.

- * **Oligopiites saurus saurus** (Schneider). Sietecueros, Leatherjack

One at Cartagena 610 mm. In the market one 350 mm. August 27, two August 28 and one August 29.

Cartagena (W.), Puerto Colombia (Schultz 1945).

- * **Elagatis bipinnulatus** (Quoy and Gaimard) +.

Cartagena, one 610 mm. September 7.

POMATOMIDAE

- * **Pomatomus saltatrix** (Linnaeus) +. Blue Fish

Only one seen, about 305 mm. long, September 6, Cartagena.

RACHYCENTRIDAE

- * **Rachycentron canadus** (Linnaeus) +. Crab eater

Cartagena, large one.

SCIAENIDAE

- * **Cynoscion jamaicensis** (Vaillant and Bocourt) +.

Curbinata, Corvina

Cartagena, three 305 to 355 mm. August 22: one August 26: three August 28: one August 29: four September 1.

- * **Bairdiella ronchus** (Cuvier). Ronco, Roncador

Cartagena, one August 27 and 2 September 6. The first received from Señor Ernesto D. Lemaitre.

Caiman, R. Magdalena (Steindachner 1879) as *Corvina (Homoprión) acutirostris*. Cartagena (Eigenmann 1922).

- * **Odontoscion dentex** (Cuvier).

Cartagena (Eigenmann 1922).

- * **Plagioscion surinamensis** (Bleeker). Corbina, Curbina

R. Magdalena (Steindachner 1878), as *Sciaena magdalenae*. Barranquilla (Steindachner 1902).

- * **Umbrina coroides** Valenciennes +.

Cartagena, one August 27, ten August 28, three September 2, three September 5, one September 7.

* **Micropogon furnieri** (Desmarest) +. Roncador

Cartagena, two about 250 mm. August 22, one August 26, five August 28, one August 29, one September 1, three September 2, six September 3, twenty September 4, four September 5, five September 6, three September 7.

* **Menticirrhus martinicensis** (Cuvier) +. Pejiguana

Cartagena, one 250 mm. August 22, one August 26, common August 27, two August 28, one August 29, three September 6, two September 7.

* **Larimus breviceps** Cuvier +.

Cartagena, saw 4 small ones September 6. Señor Ernesto D. Lemaitre showed me a drawing of a specimen 305 mm. long, with subvertical mouth, short snout and uniform color.

MULLIDAE

Pseudupeneus maculatus (Bloch) +. Salmonete

Señor Ernesto D. Lemaitre presented me with a fine photograph of a specimen 225 mm. long, caught at Cartagena.

Serranilla Bank =, Roncador Bank =, Courtown Keys =, St. Andrews Island =, Albuquerque Keys =.

CHAETODIPTERIDAE

* **Chaetodipterus faber** (Broussonett) +. Palometa negra, Spade Fish

Barranquilla, twelve August 19, largest 400 mm. At Cartagena three September 4, two September 5, 6 and 7.

CHAETODONTIDAE

Chaetodon striatus Linnaeus +. Butterfly Fish

Cartagena, several small ones. Courtown Keys =, Old Providence Island =, St. Andrews Island =.

Chaetodon ocellatus Bloch +.

One 125 mm. at Cartagena. Old Providence Island =.

POMACANTHIDAE

Pomacanthus arcuatus (Linnaeus) +.

Three half grown and an adult 300 mm. long at Cartagena, August 23. Each with a pale transverse gray white band or area behind the head. Also several others August 24 and on August 29. St. Andrews Island =, as *P. paru*.

HOLACANTHIDAE

Holacanthus tricolor (Bloch) +.

One seen at Cartagena about 150 mm. long. St. Andrews Island =.

Angelichthys ciliaris (Linnaeus).

Isabelita

Adult seen at Cartagena. Listed from Cartagena (P.). St. Andrews Island =.

TEUTHIDAE

Rhomboteuthis coeruleus (Schneider) +.

Adult seen at Cartagena. Courtown Keys =, Old Providence Island =, St. Andrews Island =.

Teuthis hepatus Linnaeus.

Roncador Bank =, Courtown Keys =, Old Providence Island =, Albuquerque Keys =.

Teuthis bahianus (Castelnau) +.

One 200 mm. long at Cartagena. Courtown Keys =, St. Andrews Island =.

GERRIDAE

Diapterus olisthostomus (Goode and Bean).

At Cartagena, ten adults 200 mm. long August 22, frequent August 28. Cartagena (W.).

Diapterus rhombeus (Cuvier).

Mojarra blanca

Ten at Barranquilla, each about 300 mm. long. R. Magdalena mouth (Steindachner 1879).

Diapterus evermanni Meek and Hildebrand

Ciénaga (Steindachner 1879).

Eucinostomus argenteus Baird and Girard.

Mojarra

Four at Cartagena, August 22, largest 250 mm.: common August 28: five August 29: four August 30: five September 1: ten September 3: five September 5: common September 6: many September 7. Cartagena (W.).

Eucinostomus gula (Cuvier).

Cartagena, saw three. Cartagena (W.).

Eugerres brasilianus (Cuvier).

Six well striped specimens about 200 mm. long at Cartagena August 22; common September 4 and 6, with black dorsal fins and largest about 250 mm. Cartagena (W.), as *Gerres patao* Poey.

Eugerres cinereus (Walbaum).

Common at Cartagena, August 28 to 30, five September 1, common September 2 to 7. Cartagena (W.), Courtown Keys =. Ciénaga and R. Magdalena (Steindachner 1879), as *Gerres zebra*.

Eugerres plumieri (Cuvier) +. Mojarra de mar, Mojarra rayada

Common at Cartagena, August 28 to 30, four September 1 and 2, common September 3 and 4, four of 400 mm. September 5, others September 6 and 7. R. Magdalena mouth (Steindachner 1879).

KYPHOSIDAE

* **Kyphosus incisor** (Parkinson) +. Chopa, Rudder Fish

Large ones 600 to 750 mm. at Barranquilla. Four 250 to 300 mm. at Cartagena September 3.

Kyphosus palpebrosus M. Ribeiro.

Roncador Bank =, misidentified as *K. incisor*.

LUTJANIDAE

Lutjanus apodus (Walbaum). Pargo, Schoolmaster

Few at Cartagena, August 28, four August 29 and 30, common September 3 and 4, few September 5 and 6. Cartagena (W.) and St. Andrews Island =.

* **Lutjanus campechanus** (Poey) +. Pargo real, Pargo colorado

Many at Barranquilla, August 19. Abundant and many of medium or large size and large ones common August 29, September 5 to 7. Cartagena.

Lutjanus analis (Cuvier). Pargo

Abundant at Barranquilla, August 19. At Cartagena many of small size August 23, 29, September 3, 5 to 7. Cartagena (W.).

Lutjanus griseus (Linnaeus). Pargo moreno, Gray Snapper

Barranquilla, many August 19. At Cartagena adults reach upward of 610 mm. August 23, 29, September 5 to 7. Cartagena (W.).

Lutjanus cyanopterus (Cuvier) +.

At Cartagena, several large ones about 900 mm. long, uniform dark gray in color, August 29. Colombia (P.), as *Mesoprion pargus*.

Lutjanus mahogoni (Cuvier). Pargo Rubia, Mahogany Snapper

Several seen at Cartagena by me. Cartagena (W.).

Lutjanus synagris (Linnaeus) +. Pargo serrano, Lane Snapper

Rather small species, only seen once at Cartagena. Colombia (P.).

Lutjanus vivanus (Cuvier). Silk Snapper

Colombia (P.).

Ocyurus chrysurus (Bloch). Rubirrubia, Saltona, Yellow-tail

All ages and sizes abundant at Cartagena, August 29, September 6 to 7. Many of larger ones smoked. Small ones have a very distinct and contrasted golden lateral band. Colombia (P.), Cartagena (W.). Roncador Bank =.

* **Rhomboplites aurorubens** (Cuvier) +.

Two at Cartagena August 20.

POMADASYDAE

Brachygenys chysargyreus (Guenther).

Serranilla Bank =.

Haemulon album Cuvier.

Roncador Bank =.

Haemulon flavolineatum (Desmarest).

Cartagena, one 200 mm. long, August 23. Courtown Keys =.

Haemulon macrostomum Guenther. Gray Grunt, Striped Grunt

Cartagena, ten 250 mm. long August 23, Frequent August 28, ten September 3, three September 5 and 6. Cartagena (W.).

Haemulon melanurum (Linnaeus).

Roncador Bank =, Courtown Keys =, St. Andrews Island =.

Haemulon parra (Desmarest). Sailor's Choice

Four September 7, Cartagena. Also Cartagena (W.).

Haemulon plumieri (Lacépède). Ronco, Common Grunt

Cartagena and Soplaviento (W.).

Haemulon sciurus (Shaw). Ronco amarillo, Yellow Grunt

Cartagena, common August 27 to 29, September 3, 5 to 7. Cartagena (W.), Courtown Keys =.

* **Conodon nobilis** (Linnaeus) +. Canario

Cartagena, frequent and often large or 300 to 360 mm. Four August 26, common August 27 and 29, five August 30, Common September 1 to 7.

* **Anisotremus surinamensis** (Bloch) +.

Cartagena, three adults September 2, half grown and adult September 7. Largest seen about 250 mm.

* **Anisotremus virginicus** (Linnaeus) +. Catalineta, Pork Fish

Cartagena, one 305 mm. long.

SPARIDAE

Archosargus unimaculatus (Bloch). Mojarra Salvo, Raisalbo

Cartagena, one 125 mm. August 22, one 100 mm. August 26, three 125 to 150 mm. September 5. Cartagena (W.)

* **Calamus bajonado** (Schneider) +. Bajonado, Jolt-head Porgy

Cartagena, one 350 mm.

Calamus calamus (Valenciennes) +. Pez de pluma

Cartagena, three September 5. St. Andrews Island =.

CHROMIDAE

Demoisellea caribbaea Fowler.

Old Providence Island =.

Demoisellea filiapes Fowler.

St. Andrews Island =.

Demoisellea marginata (Castelnau).

Old Providence Island =.

POMACENTRIDAE

Pomacentrus fuscus leucostictus Mueller and Troschel +.

Three at Cartagena during August. Old Providence Island (SS.) =, Roncador Bank =, Courtown Keys =, St. Andrews Island =, Albuquerque Key =.

Abudefduf saxatilis (Linnaeus) +. Sergeant major

Cartagena, on August 21, six August 29. Old Providence Island (SS.), Serranilla Bank =, Albuquerque Key =, as *A. marginatus*.

Abudefduf analogus (Gill).

Roncador Bank =. Courtown Keys =, St. Andrews Island =, Albuquerque Keys =.

LABRIDAE

Lachnolaimus maximus (Walbaum).

St. Andrews Island =.

Halichoeres radiatus (Linnaeus). Doncella

Cartagena, one in August. Also Cartagena (W.). Courtown Keys =, St. Andrews Island =.

Thalassoma bifasciatum (Bloch).

Courtown Keys =.

SPARISOMIDAE

Sparisoma radians (Valenciennes).

Old Providence Islands (SS.), as *S. hoplomystax*.

Sparisoma rubripinne (Valenciennes).

Old Providence Island (SS.).

Sparisoma pachycephalum Longley +.

Cartagena, three 400 mm. September 6. Courtown Keys =.

Sparisoma abildgaardi (Bloch) +.

Cartagena, six 250 to 305 mm., September 5, three young September 6. Courtown Keys =.

SCARIDAE

Scarus croicensis Bloch.

Cartagena, five 400 mm., September 5. Cartagena (W.).

Scarus coeruleus (Bloch) +.

Loro, Pez Loro

Cartagena, three 125 mm. and adult 600 mm. August 26, two 350 to 380 mm. September 5. Courtown Keys =.

Scarus vetula (Schneider).

Courtown Keys =, St. Andrews Island =.

Scarus roseiventer Fowler.

Courtown Keys =.

THUNNIDAE

Thunnus thynnus (Linnaeus).

Bonito, Albacora

Not seen by me, but reported at Barranquilla and Cartagena. Santa Marta (P.), as *Thynnus coreta*, with "color leaden, with blotches. Length 3 feet. Flesh good".

Parathunnus atlanticus (Lesson).

Courtown Keys =.

* **Euthynnus aileteratus** (Rafinesque) +.

Little Tunny

Cartagena, ten adults September 4, three September 6, three September 7, Without black spots on thorax.

* **Auxis thazard** (Lacepede) +.

Frigate Mackerel

Found one at Cartagena.

SCOMBEROMORIDAE

Scomberomorus maculatus (Mitchill) +.

Carite, Spanish Mackerel

Cartagena, twenty August 28, common August 29, ten August 30 and September 3, ten about 690 mm. September 4, twenty half grown September 5. Colombia (P.).

Scomberomorus regalis (Bloch) +.

Sierra, Sierra Pintada, Painted Mackerel

Cartagena, one 500 mm. August 27, also few small ones, twenty August 28, common August 29, ten September 4. Colombia (P.) with "Color leaden with spots. Good flesh. Length 18 inches".

- * **Scomberomorus cavalla** (Cuvier) +. Carite, Peto, King Mackerel

Cartagena, frequent, some large or about 800 mm. long. Ten August 28, one 900 mm. September 4, four half grown September 5.

- * **Acanthocybium solandri** (Cuvier) +. Peto, Wahoo

Adult in Cartagena, about 900 mm. taken early in August.

STROMATEIDAE

- * **Peprilus paru** (Linnaeus) +. Palometa, Pampano, Harvest Fish

Cartagena, one August 22, six August 27, two August 28, one August 29. An excellent pan fish.

- Thecopsenes chapmani** (Fowler).

Courtown Keys =, Old Providence Island =.

GEMPYLIDAE

- Gempylus serpens** Cuvier.

Escolar

Serranilla Bank =.

TRICHIURIDAE

- Trichiurus lepturus** Linnaeus +.

Machete, Sable, Tabulí, Tajali, Cutlass Fish

Cartagena, adult mounted specimen. Brackish water of R. Magdalena (Steindachner 1879).

CORYPHAENIDAE

- Coryphaena hippurus** Linnaeus +. Dorado, Great Dolphin

Cartagena, one 750 mm. September 4. When fresh uniform olive green, fins dark gray. Courtown Keys =.

XIPHIIDAE

- * **Xiphias gladius** Linnaeus +. Pez Espada, Sword Fish

Portion of a large one seen in the Cartagena market in August.

ISTIOPHORIDAE

- * **Istiophorus albicans** (Latreille) +. Aguja de Vela, Pejevela, Sail Fish

Señor Alberto H. Lemaitre tells me of one caught with the sail a meter in length, early in 1949, at Cartagena. I saw a mounted specimen 1835 mm. (6 feet) long mounted by a local taxidermist.

ATHERINIDAE

Atherinomorus stipes (Mueller and Troschel).

Serranilla Bank =, Roncador Bank =, Albuquerque Keys =.

Atherinomorus araeus (Jordan and Gilbert).

Serranilla Bank =, Old Providence Island =, St. Andrews Island =.

MUGILIDAE

Mugil brasiliensis Agassiz.

Lebranche

Abundant all during my stay, in the Cartagena market, many large. R. Magdalena mouth (Steindachner 1878), Cartagena (W.).

Mugil incilis Hancock.

R. Magdalena (Steindachner 1879).

Mugil curema Valenciennes +.

Lisa, White Mullet

Abundant at all times at Cartagena, and most individuals less than 300 mm. in length, Serranilla Bank =, St. Andrews Island =.

Mugil trichodon Poey.

Lisa

Serranilla Bank =, Courtown Key =.

Agonostomus monticola (Bancroft).

C d Providence Island =.

SPHYRAENIDAE

Sphyraena barracuda (Walbaum) +.

Barracuda, Picuda, Picúa

One seen at Barranquilla about 1500 mm. in length. Three brought to Club de Pesca, August 20, 375 to 1000 mm. All with more or less black in the fins. In Cartagena few August 27, large ones September 1, two 1220 mm., also 3 adults September 7.

* **Sphyraena guachancho** Cuvier +.

Picuda, Picúa

Common in the markets of Cartagena August 27 to 30, September 2 to 7.

POLYNEMIDAE

Polydactylus virginicus (Linnaeus).

Barbudo

Cartagena, of moderate size or usually about 300 mm. in length. Six August 26, few August 27, ten August 28, four August 29, five September 3, six September 4 and 5. Courtown Keys =, Old Providence Island =. Cartagena (W.).

ELEOTRIDAE

Dormitator maculatus (Bloch).

Mapo

Cartagena (W.)

Eleotris pisonis (Gmelin).

Gaira River, Gaira (Eigenmann 1922).

Pycnomma roosevelti Ginsburg.

Old Providence Island (Ginsburg 1939).

GOBIIDAE

Gobius seporator Valenciennes.

Mapo

Cartagena (W.), Old Providence (SS.), Roncador Bank =.

Garmannia gemmata Ginsburg.

Old Providence Island (Ginsburg 1939).

Gobiosoma lividiris Fowler.

Old Providence Island =.

ECHENEIDAE

* **Echeneis naucrates** Linnaeus.

Rémora

Mounted specimen 610 mm., seen in Cartagena.

Phtheichthys lineatus (Menzies).

Old Providence Island =.

CLINIDAE

Malacoctenus biguttatus Cope.

Old Providence Island (SS.).

Malacoctenus albuquerquensis Fowler

Albuquerque Keys =.

Starksia ocellata (Steindachner).Old Providence Island (SS.), as *Malacoctenus culebrae*.**Labrisomus bucciferus** Poey.

Old Providence Island (SS.).

Labrisomus nuchipinnis (Quoy and Gaimard).

Old Providence Island (SS.), Albuquerque Keys =.

Labrisomus albipes Fowler.

Courtown Keys =.

Paraclinus fajardo (Evermann and Marsh).

Old Providence Island (SS.).

Auchenistius stahli Evermann and Marsh.

Old Providence Island (SS.).

BLENNIIDAE

Ophioblennius ferox Beebe and Tee Van

Courtown Keys =. Old Providence Island =.

SCORPAENIDAE

Scorpaena plumieri Bloch +.

Rascasio

Mounted specimen 250 mm. long at Cartagena. St. Andrews Island =.

* **Scorpaena brasiliensis** Cuvier +.

One 200 mm. seen in Cartagena.

CEPHALACANTHIDAE

Cephalacanthus volitans (Linnaeus).

Pez Volador

Serranilla Bank =, Courtown Keys =, Albuquerque Keys =.

MURAENIDAE

Muraena bostoniensis Le Sueur.

Anguilla de mar

Gaira River, Gaira (Eigenmann 1922), as *Anguilla chrysypa*.

CONGRIDAE

Conger conger (Linnaeus).

Congrio

Colombia (P.).

Leptocephalus caribbaeus Fowler.

Old Providence Island =, Albuquerque Keys =.

Leptocephalus feathersi Fowler.

Old Providence Island =.

Leptocephalus incompositus Fowler.

Albuquerque Keys =.

Leptocephalus humilis Stroemman.

Old Providence Island =.

Leptocephalus mollis Fowler.

Old Providence Island =.

Leptocephalus undulatus Stroemman.

Old Providence Island =.

ECHELIDAE

Myrophis egmontis Jordan.

Courtown Keys =, Old Providence Island =.

ECHIDNIDAE

Lycodontis moringua (Cuvier).

Courtown Keys =, St. Andrews Island =.

* **Echidna catenata** (Bloch) +.

One about 600 mm. long, seen at Cartagena.

BALISTIDAE

Balistes carolinensis Gmelin +.

One 450 mm. at Cartagena, three large ones August 28 and September 4, one 610 mm. September 6. Courtown Keys =.

Balistes vetula Linnaeus +. Cachúa, Queen Trigger Fish

One 350 mm. long at Cartagena. Serranilla Bank =, Courtown Keys =, Old Providence Island =.

Melichthys piceus (Poey) +.

One 210 mm. at Cartagena. St. Andrews Island =.

MONACANTHIDAE

Monacanthus hispidus (Linnaeus).

St. Andrews Island =.

Monacanthus oppositus Poey.

Cartagena (W.). Courtown Keys =, Old Providence Island =.

Pseudomonacanthus amphioxys (Cope).

Old Providence Island =, St. Andrews Island =.

* **Aluterus scriptus** (Gmelin) +.

One 310 mm. at Cartagena.

Aluterus guntherianus Poey.

Old Providence Island =, Serranilla Bank =.

OSTRACIIDAE

Lactophrys triqueter (Linnaeus) +. Chapín, Cofre, Trunkfish

One 250 mm. at Cartagena. Courtown Keys =.

Lactophrys bicaudalis (Linnaeus) +. Chapín

Small one at Cartagena. St. Andrews Island =.

Lactophrys tricornis (Linnaeus) +. Toro

One 200 mm. at Cartagena. St. Andrews Island =.

TETRODONTIDAE

* **Lagocephalus laevigatus** (Linnaeus) +. Rabbit fish

One 375 mm. at Cartagena.

Sphoeroides spengleri (Bloch).

Courtown Keys =, St. Andrews Island =.

Sphoeroides testudineus (Linnaeus). Peje Sapo, Peje Globo, Yeque

R. Magdalena, Caimán (Steindachner 1879), Cartagena (W.).

CANTHIGASTERIDAE

Canthigaster rostratus (Bloch).

Old Providence Island (SS.) =.

DIODONTIDAE

Chilomycterus atinga (Linnaeus). **Erizo**

Colombia (P.).

Diodon hystrix Linnaeus +. **Erizo**

One 650 mm. at Cartagena, besides several smaller ones seen. St. Andrews Island =.

BATRACHOIDIDAE

Batrachoides surinamensis (Schneider) +. **Sapo**

Though not previously reported from Cartagena Señor Ernesto D. Lemaitre showed me a mounted specimen about 250 mm. long. Rio Truandó (Meek and Hildebrand 1923).

Thalassophryne quadrizonatus Eigenmann.

Rio Truandó, Atrato basin (Eigenmann 1922).

* **Porichthys porosissimus** (Cuvier) +. **Midshipman**

One seen at Cartagena, an adult.

ANTENNARIIDAE

Histrio gibba (Mitchill).

Old Providence Island =.