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List of Type Specimens in the Fish Collection at the Yale Peabody Museum, with a Brief History of Ichthyology at Yale University

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Abstract

All known type specimens in the fish collection of the Division of Vertebrate Zoology, Peabody Museum of Natural History published prior to 1991 are listed. There are a total of 925 specimens representing 190 nominal species including 159 holotypes, 2 lectotypes, 24 syntypes of 13 nominal species, and paratypes and paralectotypes of 65 nominal species now found in our collection. Most of these specimens were described by David S. Jordan, Louis L. Mowbray, Charles Breder, Albert E. Parr, James E. Morrow, and Alfred W. Ebeling. The large majority of specimens were formerly part of the Bingham Oceanographic Collection which was donated to the Peabody Museum by Mr. Harry P. Bingham. Each listing includes: Species name as originally published; Literature reference to original description; Current type status; YPM catalog number; Locality and collection data; and Remarks, including clarification or correction of information, changes in type status, current taxonomic status with citations where possible, and other information when merited.

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Key Words

Type list, holotype, synonyms, taxonomic, history.

Introduction

Considering the long history and relative importance of ichthyological research and the Fish Collection at Yale University, a full list of type specimens is overdue. This list includes all the type specimens in the Peabody Museum of Natural History's Recent Fish Collection that, to our knowledge, were described by the end of 1990. We would appreciate being notified of any omissions or other errors in this list so that the appropriate records may be updated. Every entry has been checked against the original publication, specimen jars, card catalogue and outstanding loan forms. Included with this list is a brief historical account of ichthyology at Yale. Many of the titles and dates for curators and staff associated with the Fish Collection are taken from Remington (1977).

Historical Background

Yale's collections in natural history were first started in the eighteenth century. As was typical for that time, they consisted of natural

curiosities, including a few "odd-looking fishes in jars of 'spirits of wine,' " but unfortunately, none of this material has survived to the present day (Narendra 1988). What does survive today are fish specimens from the late 1840s and later, which were gathered by various collectors associated with Yale and living in the New Haven area.

In 1850, James Dwight Dana was appointed the Professor of Natural History at Yale. His main interests were in geology and mineralogy; however, he did oversee the small zoology collections in what had become known as the "Yale College Cabinet." This consisted mostly of rocks, minerals and fossil specimens displayed on the second floor of the Connecticut Hall and later in the building called the Cabinet after the collection it housed. In 1864, Dana's title was changed to Professor of Geology and Mineralogy concurrent with the appointment of Addison E. Verrill as the first Professor of Zoology and unofficial curator of the zoological collections at Yale. Verrill was officially made curator in 1867, shortly after the establishment of the Peabody Museum in 1866.

On Verrill's arrival at Yale, he took it upon himself to "overhaul, catalogue, label and generally put in shape the small existing collection of zoological specimens and to add to it as rapidly as possible" (G. E. Verrill 1958). Additions to the collections came rapidly. By 1866, a collection of fishes had arrived from the South China Sea collected by C. W. Bradley, former U.S. Consul in China and Singapore; the Smithsonian Institution had given many fish specimens to Yale in exchange; Prof. Jeffries Wyman of Harvard donated fishes from South America; and Frank H. Bradley of Yale was at that time making extensive collections of fishes in Panama and Peru. Bradley was given the title of Curator of Natural History Collections from 1865–67 by the Yale Corporation, apparently to give him more official status while collecting than while at work at Yale. Verrill and his students were also making collections from all over New England.

By 1870, additional fish collections arrived from C. F. Hartt in Brazil, William T. Coons and Col. E. Jewett at Egmont Key, Florida, and Dr. E. H. Bishop at St. Croix, Virgin Islands.

With the creation of the U.S. Commission on Fishes and Fisheries in 1870, Commissioner Spencer Baird appointed A. E. Verrill the Assistant Commissioner in charge of marine investigations. An arrangement was made so that Verrill received the invertebrate specimens for his own study while the fishes were to be sent to the Smithsonian Institution. However, as is the case with many large operations, a small number of fish specimens instead found their way eventually into the fish collection at Yale.

In 1876, the first building of the Peabody Museum was opened and the fish collections were moved in with zoology collections on the third floor. In 1917 that building was torn down and the present day Peabody Museum was constructed between 1923–24 and opened in 1925.

A. E. Verrill made the fish specimens freely available to ichthyologists of the day, especially David Starr Jordan, who wrote two papers specifically concerning Yale specimens (Jordan and Gilbert 1882; Jordan 1884; see also *Fierasfer dubius* in Putnam 1874). As indicated in the Peabody Museum's old Zoology Catalog, many specimens of catalogued fishes were retained at Indiana University by Jordan, presumably as comparative material for his studies. Some of these may now have found their way into the collections at the California Academy of Sciences (M. Eric Anderson, pers. comm., 1989) and some may have been destroyed in the disastrous fire at Jordan's labs in 1883 (Myers 1951).

Verrill's work with the Fish Commission and the invertebrate specimens gathered from trawls kept him busy during the 1870s and 1880s. As a result, the fish collection received less attention during this period. Small additions were made by James D. Dana and O. C. Marsh from their travels to Europe and the American West and by various local residents. But, the pace of acquisitions slackened.

A. E. Verrill made two trips to Bermuda in 1898 and 1901 and his son A. Hyatt Verrill

visited Dominica Island in 1906. During these trips good collections of fishes were made and were to be the last real contributions to the fish collection for more than two decades.

The Bingham Oceanographic Collection

The next phase of ichthyological research at Yale was initiated, unbeknownst to Yale at the time, by Harry Payne Bingham, a graduate of Yale and a businessman living in New York City. Bingham sponsored three oceanographic expeditions to obtain specimens of fishes and invertebrates for his own private research collection in New York. The first expedition, in 1925, was to the Caribbean Sea aboard Mr. Bingham's yacht *Pawnee.* The second expedition, in 1926, was to the Pacific coast of Central America and the Gulf of California aboard Mr. Bingham's newly built yacht *Pawnee II,* which was specially designed for deep sea trawling and research. The third expedition, with the *Pawnee II* in 1927, was concentrated around the Bahamas and, to a lesser extent, Bermuda (Ball 1928). Bingham used the expertise of such scientists as Louis L. Mowbray and Francis West to collect, preserve and identify the specimens acquired on the first two expeditions. Charles M. Breder, Jr. described many of the new fishes (Breder 1927, 1928a, 1928b, 1936).

In 1927, Bingham selected Albert E. Parr as curator of his growing fish collection, and it was Parr who went along on the third expedition. Also at this time, Bingham established the *Bulletin of the Bingham Oceanographic Collection* as an outlet for the research being conducted on his specimens. In 1928, Bingham brought his entire collection to New Haven for a two-year loan to the Peabody Museum. At this time Parr became an Assistant Curator of Zoology with the Peabody Museum. When the term of the loan expired in 1930, Bingham donated the entire collection to the Peabody Museum of Natural History and set up the Bingham Oceanographic Foundation (BOF) to continue the research into marine biology and oceanography and to publish the results (Smith 1953). Parr quickly started an exchange of Bingham Oceanographic Collection publications with other institutions and societies, so that the library at the Peabody Museum rapidly increased in size.

By 1929, the BOF had "under a joint research program with the U.S. Bureau of Fisheries . . . launched into a study of the spawning and early life history of the North and Middle Atlantic fishes of our shores. Mr. Parr directed a cruise in the Delaware Bay region for 4 months last summer [1929]." (Anonymous 1930). A great number of specimens were collected from 1929 to 1935, many of which are now at the Academy of Natural Sciences in Philadelphia.

In 1932, the Yale North India Expedition examined the geology, anthropology and biology of the region around the Ladak Range in northern India and western Tibet (Hutchinson 1934). A number of fishes were collected and subsequently reported on (Hora 1936, Mukerji 1936), including three new species of cobotids. Hutchinson (1939) also discussed various ecological aspects of the fishes from this region. None of these specimens are found in our collection nor have they ever been catalogued into our collection. It is presumed that they may be found in the collection of the Indian Museum in Calcutta.

Through the 1930s, the Bingham Oceanographic Foundation also conducted four joint cruises with the Woods Hole Oceanographic Institution (WHOI). Using WHOI's ship *Atlantis,* investigations were made of the fauna, flora and oceanography of the Gulf of Mexico, Caribbean, and Sargasso Sea. On these cruises, Parr made many hydrographic studies, examined the Sargassum weed and tested an experimental trawl net designed to capture larger fish specimens. Charles Breder, who was by this time a Research Associate of the Bingham Laboratory, accompanied Parr on the 1934 cruise in order to study the life history of flying fishes (Breder 1934, 1938). Despite various difficulties with trawl nets, numerous fishes, especially mesopelagic, bathypelagic and shallow benthic specimens, were collected.

Many articles pertaining to these studies can be found in the *Bulletin of the Bingham Oceanographic Collection.*

In 1937, based on a gift by Henry Sears, Parr established the Sears Foundation for Marine Research to promote research and publication in marine sciences. Sears had studied oceanography at Yale and donated a small collection of fishes from Tahiti. The two main publications coming from this foundation were the *Journal of Marine Research* and the *Memoirs of the Sears Foundation of Marine Research,* the latter including the series, Fishes of the Western North Atlantic. The editorial board for the Sears Foundation at the time of its inception included such distinguished ichthyologists as Charles M. Breder, Jr., Samuel Hildebrand, Albert E. Parr, William Schroeder, John Tee-Van, J. R. Norman and on the advisory committee William Beebe, Rolf Bolin, William K. Gregory, Luis Howell-Rivero, Carl Hubbs, Daniel Merriman, George Myers, John T. Nichols, and Leonard Schultz (Tee-Van 1948). Although the composition of the editorial board has changed greatly, both the *Journal of Marine Research* and the series Fishes of the Western North Atlantic continue to be published.

A good deal of trawling for marine fishes was also being done near the New York Aquarium's field station on Palmetto Key in the Pine Island Sound, as well as other parts of the Gulf Coast of Florida, by Marshall B. Bishop, a collector in the Zoology Department of the Peabody Museum, starting in the late 1930s and continuing through 1941.

When Parr left New Haven in 1942 to become the Director of the American Museum of Natural History, he left behind a strong legacy in deep sea ichthyology. His successor as Director of the Bingham Oceanographic Laboratory at Yale was Daniel Merriman, one of Parr's students. Merriman's interests ran towards fisheries and applied aspects of marine biology. Merriman conducted a number of studies of the striped bass (*Morone saxatilus*). During the Second World War, Merriman and his colleagues looked into more local matters of food fish production and utilization of greater proportions of the annual catch in southern New England. Many life history studies were made of southern New England food fishes.

Dr Ernest F. Thompson, formerly Fisheries Officer for Jamaica, became a Research Assistant at the Bingham Oceanographic Laboratory in 1944 and a Curator of the collection from 1946–1949. Dr. Thompson, like many of the others at the laboratory at that time, was interested in fisheries and had authored many papers on the fisheries of various countries in the Caribbean.

After the war, although Merriman was occupied more by the administration of the Bingham oceanographic laboratory and as Master of Yale's Davenport College, a number of collecting expeditions were launched to Nepal (1947), New Zealand (1948), Kenya (1950), Alaska (1951), Peru and British Guiana (1953), Sri Lanka, Maldives, Seychelles, and Chagos Archipelago (1957). The Nepal expedition was conducted by Edward C. Migdalski, a preparator and collector for the fish collection. According to DeWitt (1960), the fish specimens from this expedition were sent to Dr. S. L. Hora for identification and publication; however, no paper was written before Dr. Hora's death. The Peabody Museum then had some difficulty getting the collection returned. At this time, some if not all, of the specimens from that expedition are present in our catalogued collection.

Most of the other expeditions included James E. Morrow, a student of Merriman's, as the ichthyologist. One particular research interest of Morrow's was the anatomy and life history of the billfishes. Morrow worked as the unofficial curator of fishes from 1949 until 1960 when he left Yale. His immediate successor was Alfred W. Ebeling, Assistant Professor of Biology and Assistant Curator in Vertebrate Zoology, who, while at Yale, wrote a number of works on the deep sea stephanoberycoids before he left in 1963. At about this time, a good collection of mesopelagic fishes from the waters southwest of Portugal was donated to the Peabody Museum by Professor Talbot Waterman.

Also during the late 1940s to the 1960s,

Grace Pickford, a Research Associate of the Bingham Oceanographic Laboratory and Associate Professor of Zoology and later Professor of Biology, conducted a number of experiments on the endocrinology and biochemistry of fishes, including the coelacanth.

Up until 1959, the Bingham Oceanographic Laboratory was housed in a former residential mansion at 55 Hillhouse Avenue, in New Haven. It's not every oceanographic lab that could boast of having its library in a panelled grand ballroom lit by a crystal chandelier and its fish collection stored in a brick-paved wine cellar. Then in 1959 the new Bingham Oceanographic Laboratory opened up in a building adjoining the Peabody Museum. At this time, the integration of the Bingham Oceanographic Collection (BOC) fishes with the Peabody Museum's fishes (essentially those catalogued by Verrill) was begun.

Keith S. Thomson was appointed Assistant Curator of Zoology in 1965 and took over the care of the Fish Collection at that time. Professor Thomson quickly accumulated a number of graduate students who studied diverse topics in ichthyology including atherinids and cyprinodontids of the eastern U.S., African Great Lake cichlids, African and South American lungfishes, *Polypterus,* as well as fossil fishes. However, his lasting contribution to ichthyology at Yale was the acquisition of a frozen specimen of the coelacanth, which allowed for a number of new studies on the biochemistry and histology of this fish.

And finally, Kenneth McKaye served briefly as Assistant Curator of Vertebrate Zoology from 1975 to 1978 while he continued studies in the life history of Central American cichlids.

As can be seen, Yale with its researchers, curators and their students, has had a long and rich history in ichthyology. Future curators will hopefully add more to this history and the advancement of the science.

Format of the List

The list of types follows the highly informative format of E. B. Böhlke (1984) with the types organized by family, with species referred to families recognized by Nelson (1984) or in a few cases other specified authors. Within each family, species are listed alphabetically. An index of scientific names is also included at the end of the catalog. Each entry includes:

Species name Author, year:page, figures, plates

Type status YPM catalog number (number of specimens, length); locality; depth; ship—often with station number; date.

Remark Recent location of type. Notes about specimen condition or unusual features. Current taxonomic status, if changed. Clarification or correction of data. Other important information.

Explanation of Terms

Species Names are listed as they appear in the original description.

Literature Citation includes author's surname(s), year of publication, page number on which the description begins, and any accompanying figures or plates. A complete citation for each original description can be found in the bibliography at the end of this paper.

Type Status listed is that currently believed to be correct as: 1) that stated or inferred in the original description; 2) subsequently designated in the literature; or 3) interpreted by the author. Terms used include holotype, paratype, syntype, lectotype and paralectotype, all as defined by the 1985 edition of the International Code of Zoological Nomenclature.

Catalog Numbers are all YPM. When Verrill became Curator in Zoology, he instituted zoology catalogs, one of which grouped together the fishes, amphibians and reptiles. This catalog remained in use in the Peabody Museum until the 1930s. Because the Bingham Oceanographic Collection started as a separate entity, it had its own catalog numbers as well. In the 1930s, the reptiles and amphibians were separated out

from the old Zoology Catalog, which was no longer to be used. In 1959 when the new Bingham Lab was opened, a full integration of the Bingham collection into the Peabody Museum collection was begun. The result for the Fish Collection was that all of the fishes from the BOC have retained their old BOC catalog numbers, but the institutional prefix now used is YPM. The material from the old Zoology catalog has been given new YPM numbers. In three cases in the following list, specimens can no longer be found and the only catalog numbers to go by that exist are the old Zoology Catalog numbers. In a few cases, catalogued Yale specimens were published and subsequently given to the Smithsonian, so the USNM catalog number is given. These can be found in the addendum at the end of the listing.

Number of Specimens listed is the number in the collection at present. If this number is different from the original description, a note is made in the remarks for that species.

Length of Specimens is that recorded in the original description or according to jar labels if not published. Length is most often expressed in millimeters (*mm*) of standard length (*SL*) or total length (*TL*), occasionally length is expressed in inches (*in*). For clarity, in this catalog *TL* or *SL* is added to the lengths published even when not explicitly stated in the description.

Locality Data and Depth are given as in the original description, plus additional pertinent information available in the catalog and/or jar labels. For a few specimens the original descriptions listed "no data" or "———" for the locality (e.g. *Cypselurus vitropinna*). The example given, however, was collected on a particular cruise (first cruise *Pawnee I*, 1925) which only collected in one region (tropical and subtropical Western North Atlantic) and so this data is given for the specimen. Depth of trawl for most of the mesopelagic trawls aboard the *Pawnee* are given simply as feet wire out (*ft wire*). Other abbreviations for depth are: meters (*m*), feet (*ft*), or fathoms (*fath*).

Ship and Station Number are provided from the original description plus any additional information from the catalog or the jar labels.

Date of Collection is as given in the description or any additional source.

Remarks vary for each entry and may include any of the following:

Recent location of the type with justifications given for why the type is thought to have been relocated.

Condition of specimen or unusual features that might help distinguish the type specimen.

Clarification or correction of data for information that was erroneous in the original description.

Changes in the type status by subsequent authors are noted and cited.

Current taxonomic status, if changed from the original, has been indicated where possible. These changes are taken from three sources: 1) published works, in which case a citation is given with the page number where the synonymy appears; 2) written notes in our card catalog or on loan sheets when specimens were returned from various workers who have reidentified specimens, listed in this paper as "in cat."; or 3) jar labels from various workers reidentifying specimens, listed in this paper as "in jar."

Acknowledgments

We would like to thank Professor Willard D. Hartman and Barbara L. Narendra for commenting on earlier versions of this manuscript.

List of Types

Acanthuridae

Hepatus pawnee Breder, 1927:73, fig. 32

Holotype YPM 302 (26.5 mm in SL); Glover Reef, Belize; surface; *Pawnee I*; 15 Apr 1925.

Paratype YPM 303 (44); same as holotype; and YPM 304 (5); tropical or subtropical Western North Atlantic; *Pawnee I*; 1925.

Remark Paratypes YPM 304 are stained with Alizarin Red.

Acropomatidae

Symphysanodon berryi Anderson, 1970:338, fig. 4

Paratype YPM 5988 (125 mm in SL); 20°45′ N, 73°33′ W; 200–217 fath; R/V *Oregon* sta. 5414; 24 May 1965.

Remark This taxa is placed in the family Acropomatidae due to similarities with *Synagrops* noted by Johnson (1984:464).

Synagrops microlepis Norman, 1935b:12, fig. 3

Paratype YPM 3239 (1); off St. Paul de Loanda, Angola, Africa; 64–65 m; *Discovery* sta. 274; 4 Aug 1927.

Remark Placed in family Acropomatidae according to Johnson (1984:464).

Bathysphyraenops simplex Parr, 1933:28, fig. 13

Holotype YPM 2847 (88 mm in SL); 21°44′ N, 72°43′ W, Caicos Passage, Bahamas; 7000 ft wire; *Pawnee II* sta. 48; 6 Apr 1927.

Paratype YPM 2848 (1, 62 mm in SL); 23°37′ N, 77°15′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 22; 12 Mar 1927; and YPM 2849 (1, 69 mm in SL); 24°51′ N, 76°37.5′ W, off Eleuthera, Bahamas; 8000 ft wire; *Pawnee II* sta. 25; 17 Mar 1927.

Alepocephalidae

Binghamia microphos Parr, 1937:22, fig. 7

Holotype YPM 3724 (44.5 mm in SL); 23°37′25″ N, 77°15′10″ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 22; 12 Mar 1927.

Apogonidae

Amia aurolineatus Mowbray, 1927 (in Breder, 1927:35, fig. 18)

Holotype YPM 461 (44 mm in SL); Siguanea Bay, Isle of Pines, Cuba; *Pawnee I*; 6 Apr 1925.

Paratype YPM 462 (1) same as holotype.

Remark =*Apogon aurolineatus* (Mowbray). The type specimen lost its pelvic fins while alive and healed over the injured area. The paratype YPM 462 = *Apogon quadrisquamatus*—det. J. E. Böhlke 1968 (in cat.).

Amia gloverensis Mowbray, 1927 (in Breder, 1927:36, fig. 19)

Holotype YPM 466 (36 mm in SL); Washerwoman Cut, Bahamas; *Pawnee I*; 22 Mar 1925.

Paratype YPM 467 (4); Grand Cayman Island; *Pawnee I*; 9 Apr 1925; and YPM 470 (1); tropical or subtropical Western North Atlantic; *Pawnee I*; 1925.

Remark The type YPM 466 =*Apogon conklini*—det. J. E. Böhlke 1968 (in cat.).

Apogon parri Breder, 1936:18, fig. 7

Holotype YPM 1239 (50 mm in SL); Cabo San Lucas, Baja California Sur, Mexico; 25 ft; *Pawnee II*; 16 Apr 1926.

Paratype YPM 1240 (4); same as holotype.

Remark Catalog number of holotype was erroneously listed as BOC 682 in original description.

Amia townsendi Breder, 1927:34, fig. 17

Holotype YPM 460 (37 mm in SL); Saddle Rock, Washerwoman Cut, Bahamas; *Pawnee I*; 23 Mar 1925.

Paratype YPM 463 (1); same locality as holotype; 22 Mar 1925; and YPM 464 (1); same as holotype; and YPM 465 (2); Glover Reef, Belize; *Pawnee I*; 17 Apr 1925.

Remark =*Apogon townsendi* (Breder).

Astronesthidae

Astronesthes similus Parr, 1927b:32, fig. 22 and 23

Holotype YPM 2098 (60 mm in SL); 24°29′ N, 77°29′ W, Tongue of the Ocean, Bahamas; 8000 ft wire; *Pawnee II* sta. 23; 14 Mar 1927.

Barbourisiidae

Barbourisia rufa Parr, 1945:127, pl. 1

Holotype YPM 1119 (180 mm in SL); 27°01′ N, 94°22′ W, Gulf of Mexico; 750–1000 m; R/V *Atlantis* sta. 2852; 28 Mar 1937.

Remark Erroneously listed as BOC 1217 in *Copeia* article.

Bathylagidae

Bathylagus longiceps Parr, 1931:6, fig. 3

Holotype YPM 2711 (42 mm in SL); 24°07′ N, 108°40′ W, Gulf of California, off Sinaloa, Mexico; 286 fath; *Pawnee II*; 28 May 1926.

Paratype YPM 2712 (6); 22°50′20″ N, 109°48′15″ W, East Pacific; 525 fath; *Pawnee II*; 17 Apr 1926.

Bathylagus nigregenys Parr, 1931:4, fig. 2

Holotype YPM 2674 (82.5 mm in SL); 16°14′ N, 99°36.5′ W, East Pacific, off Mexico; 3750 ft wire; *Pawnee II*; 31 May 1926.

Paratype YPM 2675 (11); same as holotype.

Blenniidae

Rupiscartes cubensis Mowbray, 1927 (in Breder, 1927:85, fig. 35)

Holotype YPM 376 (49 mm in SL); Near Cayman Point, Cuba; *Pawnee I*; 3 Apr 1925.

Brotulidae

Brotulotaenia crassa Parr, 1934b:36, fig. 12

Holotype YPM 3205 (302 mm in SL); 25°39′ N, 77°18′ W, off New Providence, Bahamas; 1050–1100 m; R/V *Atlantis* sta. 1478; 20–21 Feb 1933.

Barathrodemus microps Parr, 1933:44, fig. 19

Holotype YPM 2850 (136 mm in SL); 23°54′10″ N, 77°09′ W, Tongue of the Ocean, Bahamas; 8000 ft wire; *Pawnee II* sta. 20; 11 Mar 1927.

Brotulotaenia nigra Parr, 1933:48, fig. 19 and 22

Holotype YPM 2855 (286 mm in SL); 21°30′ N, 71°11′04″ W, Turks Island Passage; 8000 ft wire; *Pawnee II* sta. 52; 11 Apr 1927.

Barathrites parri Nybelin, 1957:283, fig. 13; pl. 5, fig. 1

Holotype YPM 2736 (233 mm in SL) 21°15′40″ N, 71°17′06″ W, Turks Island Passage; 900–955 fath; *Pawnee II*; 12 Apr 1927.

Neobythites phyllosoma Parr, 1933:44, fig. 20

Holotype YPM 2902 (100.5 mm in SL); 21°30′ N, 71°11′ W, off Turks Islands, Bahamas; 8000 ft wire; *Pawnee II* sta. 52; 11 Apr 1927.

Callionymidae

Callionymus dubiosus Parr, 1930a:130, fig. 36

Holotype YPM 2531 (28 mm in SL); Cat Island, Bahamas; *Pawnee II* sta. 32; 21 March 1927.

Remark =*Callionymus pauciradiatus*—det. J. E. Böhlke 1968 (in cat.).

Caproidae

Antigonia combatia Berry & Rathjen, 1958:255, fig. 1

Paratype YPM 3739 (2) 07°30′ N, 54°16′ W, off Surinam, South America; 125 fath; M/V *Oregon* sta. 2013; 8 Nov 1957.

Ceratiidae

Parrichthys merrimani Barbour 1942:84, pl. XI

Holotype YPM 2004 (1.8 inches TL); 22°43′ N, 74°23′ W; 8000 ft wire; *Pawnee II* sta. 39; 20 Mar 1927.

Remark Specimen appears to be lost.

Cetomimidae

Cetomimus kerdops Parr, 1934b:25, fig. 6

Holotype YPM 3204 (47.5 mm in SL); 25°39′ N, 77°18′ W, off New Providence, Bahamas; 1050–1100 m; R/V *Atlantis* sta. 1478; 20–21 Feb 1933.

Gyrinomimus myersi Parr, 1934b:29, fig. 8 and 9

Holotype YPM 2111 (110 mm in SL); 23°39′ N, 76°41′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 18; 10 Mar 1927.

Gyrinomimus simplex Parr, 1946b:116, fig. A–C

Holotype YPM 1218 (66 mm in SL); 26°00′ N, 93°32′ W, Gulf of Mexico off Texas; 1200 m; R/V *Atlantis* sta. 2853; 9 Apr 1937.

Chiasmodontidae

Pseudoscopelus altipinnis Parr, 1933:41, fig. 18

Holotype YPM 2798 (195 mm in SL); 24°51′ N, 76°27′30″ W, off Cat Island, Bahamas; 8000 ft wire; *Pawnee II* sta. 25; 17 Mar 1927.

Paratype YPM 2800 (1,41.5 mm in SL); 21°44′ N, 71°43′ W; 7000 ft wire; *Pawnee II* sta. 48; 6 Apr 1927.

Chiasmodon niger pluriradiatus Parr, 1933:34

Holotype YPM 2827 (49 mm in SL); 23°49′ N, 76°58′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 16; 9 Mar 1927.

Paratype YPM 2827 (1); same as holotype; and YPM 2828 (1); 24°29′ N, 77°29′ W; 8000 ft wire; *Pawnee II* sta. 23; 14 Mar 1927; and YPM 2829 (3); 23°57′45″ N, 77°26′25″ W; 7000 ft wire; *Pawnee II* sta. 11; 2 Mar 1927.

Hemicyclodon macrurus Parr, 1933:35, fig. 15

Holotype YPM 2739 (120 mm in SL); 22°31′15″ N, 74°26′20″ W, off Acklins Island, Bahamas; 10 000 ft wire; *Pawnee II* sta. 41; 30 Mar 1927.

Dolichodon normani Parr, 1931:45, fig. 18

Holotype YPM 2693 (105 mm in SL); 16°14′ N, 99°36.5′ W, East Pacific off Mexico; 3750 ft wire; *Pawnee II*; 31 May 1926.

Remark The genus name was changed to *Hemicyclodon* due to preoccupation of the original genus name and synonymized with the genus *Kali* (Parr 1937:62–63).

Chlorophthalmidae

Bathypterois atricolor phenax Parr, 1928:30

Syntype YPM 2133 (1, 162 mm in SL); 21°16′ N, 71°18′ W, Turks Islands; 900–945 fath; *Pawnee II* sta. 54; 12 Apr 1927.

Remark =*Bathypterois phenax* Parr in Sulak (1977:90). The smaller specimen (123 mm in SL) in the syntypic series was dissected and is presumed destroyed.

Bathypterois nigrescens Parr, 1934b:19

Holotype YPM 3203 (61 mm in SL); 25°39′ N, 77°18′ W, off New Providence Island, Bahamas; 1050–1100 m; R/V *Atlantis* sta. 1478; 20–21 Feb 1933.

Remark =*Bathypterois viridensis* (Roule) in Sulak (1977:80).

Cirrhitidae

Pseudocirrhites pinas Mowbray, 1927 (in Breder, 1927:48, fig. 23)

Holotype YPM 382 (55 mm in SL); Pt. Francis, Isle of Pines, Cuba; *Pawnee I*; 5 Apr 1925.

Remark =*Amblycirrhitus pinos* (Mowbray).

Clupeidae

Opisthonema medirastre Berry & Barrett, 1963:118, fig. 1A

Paratype YPM 4359 (1, 64.8 mm in SL); Cabo Blanco, Peru; surface; 16 Apr 1953; and YPM 4360 (3, 34.6–46.3 mm in SL); Talara, Peru; surface; 9 Mar 1953; and YPM 4361 (3, 41.5–60.0 mm in SL); Cabo Blanco, Peru; surface; 8 Apr 1953; and YPM 4362 (1, 62.8 mm in SL); Talara, Peru; surface; 21 Mar 1953.

Remark All eight specimens were collected on the Yale South America Expedition and listed as *Opithonema libertate* (Gunther) in Morrow (1957:14).

Congridae

Promyllantor alcodei Gilbert & Cramer, 1897: 405, pl. 36, fig. 1

Syntype YPM 5569 (1); Kaiwi Channel, Hawaiian Islands; 295 fath; *Albatross* sta. 3472; Dec 1891.

Remark Gift from USNM (USNM #47724) and alizarin stained.

Pseudoxenomystax dubius Breder, 1927:6, fig. 2

Holotype YPM 25 (213 mm in TL); North of Glover Reef, Belize; 484 fath; *Pawnee I*; 20 Apr 1925.

Paratype YPM 26 (1,125 mm in SL); same as holotype.

Remark Paratype is cleared and stained.

Congrina macrosoma Ginsburg, 1951:443, fig. 1

Holotype YPM 3939 (128 mm in SL); 28°19′ N, 90°59′ W, northern Gulf of Mexico off Isle Dernière, Louisiana; 31 fath; R/V *Atlantis* sta. 2840; 25 Mar 1937.

Arisoma perturbator Parr, 1932:31, fig. 13 and 14

Holotype YPM 2738 (243 mm in SL); 23°54′20″ N, 77°09′ W, Tongue of the Ocean, Bahamas; 710–720 fath; *Pawnee II* sta. 20; 11 Mar 1927.

Cynoglossidae

Symphurus chabanaudi Mahadeva & Munroe, 1990:939

Paratype YPM 630 (10, 124–157 mm in SL); north of San Felipe, Gulf of California, Mexico; 14 fath; *Pawnee II*; 20 May 1926.

Dasyatidae

Urotrygon binghami Breder, 1928a:11, fig. 6 and 7

Holotype YPM 1019 (190 mm in TL); between San Felipe and Shoal Point, Rio Colorado, northern Gulf of California, Mexico; 10–14 fath; *Pawnee II*; 19 May 1926.

Remark =*Urotrygon rogersi* (Jordan & Starks) in Miyaki and McEachran (1986:297).

Diodontidae

Lyosphaera digitatus Breder, 1927:81, fig. 34

Holotype YPM 337 (10.5 mm in SL); tropical or subtropical Western North Atlantic; *Pawnee I*; 1925.

Engraulidae

Anchovia mundeoloides Breder, 1928b:9, fig. 5

Holotype YPM 1168 (129 mm in SL); San Felipe Bay, Gulf of California, Mexico; *Pawnee II*; 19 May 1926.

Paratypes YPM 1169 (9, 111–128 mm in SL); same as holotype.

Remark 5 other paratype specimens were given to the USNM according to a note in the bottle from L. Schultz.

Anchoviella parri Hildebrand, 1943:131, fig. 58

Holotype YPM 3852 (26 mm in SL); San Felipe Bay, Gulf of California, Mexico; 3 fath; *Pawnee II*; 19 May 1926.

Epigonidae

Brinkmannella elongata Parr, 1933:26, fig. 12

Holotype YPM 2837 (32.5 mm in SL); 23°37′25″ N, 77°15′10″ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 22; 12 March 1927.

Remark =*Brephostoma elongata* (Parr) in Fedoryako (1976).

Evermannellidae

Evermannella atrata atlantica Parr, 1928:166, fig. 39B and 40B

Lectotype YPM 2141 (41 mm in SL); 23°58′ N, 77°26′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 11; 2 Mar 1927.

Paralectotype YPM 2145 (1, 35 mm in SL); 24°00′ N, 77°17′ W; 6000 ft wire; *Pawnee II* sta. 7; 28 Feb 1927.

Remark =*Coccorella atlantica* (Parr) in Johnson (1982:117).

Evermannella indica melanoderma Parr, 1928: 170, fig. 39C and 40C

Syntype YPM 2144 (2, 48–60 mm in SL); 32°24′ N, 64°29′ W, near Bermuda; 10 000 ft wire; *Pawnee II* sta. 58; 20 Apr 1927.

Remark One specimen is stained with Alizarin red.

Evermannella normalops Parr, 1928:164, fig. 39A and 40A

Holotype YPM 2143 (57 mm in SL); 24°29′ N, 77°29′ W, Tongue of the Ocean, Bahamas; 8000 ft wire; *Pawnee II* sta. 23; 14 Mar 1927.

Remark =*Odontostomops normalops* (Parr) in Johnson (1982:148).

Exocetidae

Prognichthys tringa Breder, 1928b:21, fig. 10

Holotype YPM 763 (163 mm in SL); Eastern Pacific off Central America; *Pawnee II*; 1926.

Remark The type is unaccounted for at this time.

Cypselurus vitropinna Breder, 1927:20, fig. 11

Holotype YPM 459 (183 mm in SL); tropical or subtropical Western North Atlantic; *Pawnee I*; 1925.

Paratype YPM 125 (3); tropical or subtropical Western North Atlantic; *Pawnee I*; 1925; and YPM 167 (5); tropical or subtropical Western North Atlantic; *Pawnee I*; 1925.

Remark =*Cypselurus comatus*—det. Breder (in cat.).

Gibberichthyidae

Gibberichthys pumilus Parr, 1933:4, fig. 1

Holotype YPM 2838 (31.5 mm in SL); 31°44′ N, 72°43′25″ W, Caicos Passage; 7000 ft wire; *Pawnee II* sta. 48; 6 Apr 1927.

Gigantactinidae

Laevoceratius liparis Parr, 1927a:33, fig. 13

Holotype YPM 2013 (17 mm in SL); 24°11′ N, 75°37′ W, off Cat Island, Bahamas; 8000 ft wire; *Pawnee II* sta. 33; 22 Mar 1927.

Remark =Gigantactinidae gen. et spec.? according to Pietsch (in jar).

Gobiidae

Garmannia binghami Parr, 1930a:124, fig. 34

Holotype YPM 2529 (18.5 mm in SL); Crooked Island, Bahamas; *Pawnee II*; 26 Mar 1927.

Remark =*Risor ruber*—det. J. E. Böhlke 1968 (in cat.).

Bollmannia communis Ginsberg, 1942:364

Paratype YPM 3922 (1); 29°08′ N, 89°45.5′ W, northern Gulf of Mexico; 11 fath; R/V *Atlantis I* sta. 2828; 23 Mar 1937; and YPM 3988 (8); 29°29′ N, 88°46′ W, northern Gulf of Mexico; 23 fath; R/V *Atlantis I* sta. 2853A; 9 Apr 1937; and YPM 3989 (15); 29°08′ N, 89°45′30″ W, northern Gulf of Mexico; 11 fath; R/V *Atlantis I* sta. 2828; 23 Mar 1937; and YPM 3990 (2); 28°19′ N, 90°59′ W, northern Gulf of Mexico; R/V *Atlantis I* sta. 2840; 25 Mar 1937; and YPM 3991 (3); 22°22.5′ N, 90°41′ W, Campeche Bank off Yucatan, Mexico; 28 fath; R/V *Atlantis I* sta. 2838; 25 Mar 1937; and YPM 3992 (1); 28°36′ N, 90°02′ W, northern Gulf of Mexico; 12.5 fath; R/V *Atlantis I* sta. 2839; 25 Mar 1937.

Gobius ebriosus Parr, 1930a:119, fig. 32

Holotype YPM 2614 (27 mm in SL); Rum Key, Bahamas; *Pawnee II* sta. 37; 26 Mar 1927.

Paratype YPM 2615 (3); same as holotype.

Remark 1 paratype specimen cleared and stained.

Microgobius erectus Ginsburg, 1938:120

Holotype YPM 1695 (82 mm in SL); 30°28′ N, 14°34′ W, northern Gulf of California, Mexico; 26 fath; *Pawnee II*; 18 May 1926.

Paratype YPM 3958 (7, 40–66 mm in SL); same as holotype.

Garmannia gemmata Ginsburg, 1939a:3, fig. 2

Paratype YPM 1692 (1, 13 mm in SL); Barahona Harbor, Santa Domingo, Dominica Island; 4 ft; 13 Jul 1933.

Lythrypnus heterochroma Ginsburg, 1939b:53

Holotype YPM 375 (22 mm in SL); Glover Reef, Belize; *Pawnee I*; 18 Apr 1925.

Bollmannia longipinnis Ginsburg, 1939b:60

Holotype YPM 1690 (127 mm in SL); Bahia de Los Angeles, Gulf of California, Mexico; *Pawnee II*; 13 May 1926.

Paratype YPM 3966 (3); Bahia de Los Angeles, Gulf of California, Mexico; *Pawnee II*; 13 May 1926.

Lepidogobius luculentes Ginsburg, 1938:119

Holotype YPM 1694 (51 mm in SL); Puerto Refugio, Angel de la Guarda Island, Gulf of California, Mexico; *Pawnee II*; 15 May 1926.

Paratype YPM 3974 (1, 33 mm in SL); San Franciscito Bay, Gulf of California, Mexico; *Pawnee II*; 10 May 1926; and YPM 3975 (1); same as holotype; and YPM 3976 (46, 35–53 mm in SL); same as holotype.

Parrella macropteryx Ginsburg, 1939b:56

Holotype YPM 1688 (55 mm in SL); Siguanea Bay, Isle of Pines, Cuba; *Pawnee I*; 6 Apr 1925.

Paratype YPM 3959 (1); same as holotype.

Risor mirus Ginsburg, 1939b:60

Holotype YPM 1691 (22 mm in SL); Siguanea Bay, Isles of Pines, Cuba; *Pawnee I*; 6 Apr 1925.

Remark =*Risor ruber* (Rosen) det. J. E. Böhlke (in cat.).

Lophogobius pallidus Parr, 1930a:122, fig. 33

Holotype YPM 2534 (1); Mangrove Channel, Crooked Island, Bahamas; *Pawnee II* sta. 38; 26 March 1927.

Paratypes YPM 2535 (6); same as holotype.

Remark =*Coryphopterus glaucophrenum* det. J. E. Böhlke (in cat.).

Bollmannia pawneea Ginsburg, 1939b:60

Holotype YPM 1689 (93 mm in SL); 8°29′40″ N, 78°52.5′ W, Perlas Islands, Panama Bay; 19–24 fath; *Pawnee II*; 31 Mar 1926.

Paratype YPM 3963 (1); 08°29′40″ N, 78°52.5′ W, Perlas Islands; 19–24 fath; *Pawnee II*; 31 Mar 1926; and YPM 3964 (1); 30°28′ N, 114°34′ W, Gulf of California near Gonzaga Bay; 26 fath; *Pawnee II*; 18 May 1926; and YPM 3965 (2); Bahia de Los Angeles, Gulf of California; *Pawnee II*; 13 May 1926.

Lythrypnus pulchellus Ginsburg, 1938:114

Holotype YPM 1693 (17.5 mm in SL); Espiritu Santo Island, Gulf of California, Mexico; *Pawnee II*; 21 Apr 1926.

Gonostomatidae

Diplophos proximus Parr, 1931:14, fig. 4

Holotype YPM 2676 (79.5 mm in SL); 24°07′ N, 108°40′ W, lower Gulf of California, Mexico; 286 fath; *Pawnee II*; 28 May 1926.

Remark The length measurement is actually to the posterior end of the specimen as the tail is missing.

Grammicolepididae

Grammicolepis squamilineatus Mowbray, 1927 (in Breder 1927:30, fig. 14)

Holotype YPM 517 (83 mm in SL); Pt. Francis, Isle of Pines, Cuba; *Pawnee I*; 5 Apr 1925.

Paratype YPM 518 (2, 73–82 mm in SL) North of Glover Reef, Belize; 484 fath; *Pawnee I*; 20 Apr 1925; and YPM 524 (1, 85 mm in SL); North of Glover Reef, Belize; 366 fath; *Pawnee I*; 20 Apr 1925.

Remark Myers (1937) examined all four specimens and redetermined the holotype and two paratypes as *Grammicolepis brachiusculus* Poey and reidentified one paratype as *Xenolepidichthys dalgleishi* Gilchrist which is now catalogued separately as YPM 9218. Both paratype specimens are illustrated in a photograph (Myers 1937:pl. 5).

Grammidae

Gramma hemichrysos Mowbray, 1927 (in Breder 1927:42, fig. 21)

Holotype YPM 526 (50 mm in SL); Royal Island Harbor, Bahamas; *Pawnee I*; 15 Mar 1925.

Paratype YPM 215 (1); same as holotype; and YPM 216 (1); Corrientes Bay, Cuba; *Pawnee I*; 3 Apr 1925; and YPM 218 (1); Glover Reef, Belize; *Pawnee I*; 17 Apr 1925; and YPM 219 (1); same as holotype; and YPM 220 (13); Cuba or Bahamas; *Pawnee I*; 1925.

Remark =*Gramma loreto* Poey—det. J. E. Böhlke 1963 (in bot.). YPM 215 is unaccounted for at this time.

Haemulidae

Paraconodon orthopristis Breder, 1936:27, fig. 10

Holotype YPM 564 (238 mm in SL); Eastern

Pacific coast of Central America; *Pawnee II*; 1926.

Remark The type specimen appears to be missing.

Anisotremis mowbrayi Breder, 1936:29, fig. 11

Holotype YPM 565 (252 mm in SL); Eastern Pacific coast of Central America; *Pawnee II*; 1926.

Remark The type specimen appears to be missing.

Holocentridae

Holocentrus exasperatus Breder, 1927:26, fig. 13

Holotype YPM 505 (34 mm in SL); tropical or subtropical Western North Atlantic; *Pawnee I*; 1925.

Paratype YPM 506 (2); Swan Island, Caribbean; *Pawnee I*; 12 Apr 1925; and YPM 507 (3); Glover Reef, Belize; *Pawnee I*; surface; 16 Apr 1925.

Remark =*Plectrypops retrospinis* (Guichenot)—in Parr (1930a:39) and Woods and Sonoda (1973).

Inermiidae

Emmelichthyops atlanticus Schultz, 1945:132–136

Holotype YPM 2515 (98 mm in SL); Cat Island, Bahamas; surface; *Pawnee II* sta. 34; 21–22 Mar 1927.

Labridae

Xyrichthys binghami Mowbray, 1925

Holotype YPM 13; Double-headed Shot Cay, Cay Sol Banks, Bahamas; 3 fath; *Pawnee I*; 3 Mar 1925.

Paratype YPM 265 (5) same as holotype; and YPM 266 (2); Royal Island Cay, Eleuthera, Bahamas; *Pawnee I*; 15 Mar 1925; and YPM 392 (1); tropical or subtropical Western North Atlantic; *Pawnee I*; 1925; and YPM 394 (1); tropical or subtropical Western North Atlantic; *Pawnee I*; 1925.

Remark =*Hemipteronotus novacula* det. J. E. Böhlke 1968 (in cat.). The original description was reprinted in Breder (1927:64, fig. 28). YPM 392 was mounted as an exhibit.

Halichoeres iridus torquatus Parr, 1930a:84, fig. 20

Holotype YPM 2613 (151 mm in SL); Green Key, Bahamas; *Pawnee II* sta. 37; 26 Mar 1927.

Linophrynidae

Linophryne bicornis Parr, 1927a:9, fig. 2

Holotype YPM 2030 (27 mm in SL); 32°19′ N, 64°32′ W, near Bermuda; 8000 ft wire; *Pawnee II* sta. 59; 21 Apr 1927.

Linophryne brevibarbis Parr, 1927a:7, fig. 1 and 2

Holotype YPM 2001 (25 mm in SL); 32°24′ N, 64°29′ W, near Bermuda; 10 000 ft wire; *Pawnee II* sta. 58; 20 Apr 1927.

Linophyrne coronata Parr, 1927a:13, fig. 4

Holotype YPM 2005 (37 mm in SL); 22°43′ N, 74°23′ W, off Samana Cay, Bahamas; 8000 ft wire; *Pawnee II* sta. 39; 29 Mar 1927.

Linophryne coronata diphlegma Parr, 1934b: 54, fig. 19 and 20

Holotype YPM 3207 (33 mm in SL); 25°39′ N, 77°18′ W, off New Providence Island, Bahamas; 1050–1100 m; R/V *Atlantis* sta. 1478; 20–21 Feb 1933.

Linophryne eupogon Regan & Trewavas 1932: 110

Holotype YPM 2029 (30 mm in SL); 32°19′ N, 64°32′ W, near Bermuda; 8000 ft wire; *Pawnee II* sta. 59; 21 Apr 1927.

Remark Although originally described as *L. arborifer* by Parr (1927a:10, fig. 3), this specimen was made the type for *Linophryne eupogon* Regan & Trewavas (1932:110). Parr (1934b:46, fig. 14) responded that this specimen represented at best a new subspecies as *L. arborifer eupogon* Regan & Trewavas.

Borophryne masculina Parr, 1934b:56, fig. 21

Holotype YPM 3208 (16 mm in SL); 25°39′ N, 77°18′ W, off New Providence Island, Bahamas; 1050–1100 m; R/V *Atlantis* sta. 1478; 20–21 Feb 1933.

Paratype YPM 3235 (1); same as holotype.

Remark The paratype is unaccounted for at this time.

Lutjanidae

Erythrobussothen gracilis Parr, 1933:31, fig. 14

Holotype YPM 2840 (56 mm in SL); 25°55′50″ N, 77°37′ W, Tongue of the Ocean, Bahamas; 5000 ft wire; *Pawnee II* sta. 5; 26 Feb 1927.

Remark =*Etelis oculatus* in Anderson and Fourmanoir (1975:181).

Macrouridae

Ventrifossa atlantica Parr, 1946a:32, fig. 10

Holotype YPM 2103 ("about 15 inches" in TL); 27°48′30″ N, 89°56′ W, Gulf of Mexico; 345–500 fath; R/V *Atlantis* sta. 2836; 24 Mar 1937.

Paratype YPM 8043 (1); noon position 28°22′ N, 86°40′ W; 485 fath; R/V *Atlantis* sta. 2853T; 12 Apr 1937.

Cariburus mexicanus Parr, 1946a:62, fig. 19

Holotype YPM 2211 (1, 382+ mm in TL); noon position 29°13′ N, 87°44′ W, NE Gulf of Mexico; 460–505 fath; R/V *Atlantis* sta. 2853Q; 11 Apr 1937.

Paratype YPM 8840 (4); 27°48.5′ N, 89°56′ W, northern Gulf of Mexico; 345–500 fath; R/V *Atlantis* sta. 2836; 24 Mar 1937; and YPM 8854 (2); 28°22′ N, 86°40′ W; 485 fath; R/V *Atlantis* sta. 2853T; 12 Apr 1937.

Remark =*Coryphaenoides mexicanus* (Parr) in Marshall and Iwamoto (1973:569).

Melamphaidae

Melamphaes janae Ebeling, 1962:81, fig. 30

Paratype YPM 3745 (33 mm in SL); 04°35′ S, 82°52′ W, off Talara, Peru; Yale South America Exped. sta. 41; 136 fath; 3 Apr 1953.

Melamphaes macrocephalus Parr, 1931:41, fig. 16

Holotype YPM 2697 (54 mm in SL); 16°14′ N, 99°36.5′ W, East Pacific off Mexico; 3750 ft wire; *Pawnee II*; 31 May 1926.

Paratype YPM 2698 (14); same as holotype; and YPM 2699 (3); 14°30.5′ N, 96°14′ W, East Pacific off Mexico; 3750 ft wire; *Pawnee II*; 1 June 1926.

Remark 4 specimens taken from YPM 2698 and 2 specimens from YPM 2699 were redetermined and designated as paratypes for *Melamphaes spinifer* Ebeling (1962:67).

Melamphaes microps longivelis Parr, 1933:16, fig. 6

Holotype YPM 2833 (43 mm in SL); 22°31′ N, 74°26′ W, off Acklins Island, Bahamas; 10 000 ft wire; *Pawnee II* sta. 41; 30 Mar 1927.

Paratype YPM 2834 (20.5 mm in SL); 24°11′

N, 75°37′ W, Bahamas; 8000 ft wire; *Pawnee II* sta. 33; 22 Mar 1927.

Remark Parr's subspecies was elevated to species, *M. longivelis* Parr in Ebeling (1962:73, fig. 28).

Melamphaes opisthopterus Parr, 1933:18, fig. 7

Holotype YPM 2816 (36 mm in SL); 24°29′ N, 75°53′ W, off Cat Island, Bahamas; 7000 ft wire; *Pawnee II* sta. 31; 21 Mar 1927.

Paratype YPM 2814 (3); 22°42′33″ N 74°23′ W; 8000 ft wire; *Pawnee II* sta. 39; 29 Mar 1927; and YPM 2815 (1); 23°54′10″ N, 77°09′ W; 8000 ft wire; *Pawnee II* sta. 20; 11 Mar 1927; and YPM 2817 (5, 31–36 mm in SL); 24°51′ N, 76°37′ W, off Cat Island, Bahamas; 8000 ft wire; *Pawnee II* sta. 25; 17 Mar 1927; and YPM 2818 (1); 24°28′40″ N, 75°53′ W; 7000 ft wire; *Pawnee II* sta. 31; 21 Mar 1927; and YPM 2819 (3); 21°46′12″ N, 72°49.5′ W; 10 000 ft wire; *Pawnee II* sta. 46; 4 Apr 1927; and YPM 2820 (1); 22°31′ N, 74°26′ W; 10 000 ft wire; *Pawnee II* sta. 41; 30 Mar 1927; and YPM 2821 (5); 32°19′ N, 64°33′ W; 8000 ft wire; *Pawnee II* sta. 59; 21 Apr 1927; and YPM 2822 (2); 24°29′ N, 77°29′ W; 8000 ft wire; *Pawnee II* sta. 23; 14 Mar 1927; and YPM 2823 (2); 23°57′45″ N, 77°26′25″ W; 7000 ft wire; *Pawnee II* sta. 11; 2 Mar 1927; and YPM 2824 (35); 32°24′15″ N, 64°29′ W; 10 000 ft wire; *Pawnee II* sta. 58; 20 Apr 1927.

Remark =*Scopeloberyx opisthopterus* (Parr) in Ebeling (1962:19) and in Ebeling and Weed (1973:449, fig. 23). Parr never designated any paratype in his original description nor in any of the jars and as a result all the additional specimens listed in the original description are paratypes.

Melamphaes pumilus Ebeling, 1962:106, fig. 40

Paratype YPM 2830 (14, 18–22 mm in SL); 32°24′ N, 69°29′ W, west of Bermuda; 10 000 ft wire; *Pawnee II* sta. 58; 20 Apr 1927; and YPM 2831 (1, 19 mm in SL); 24°11′ N, 75°37′ W, off Cat Island, Bahamas; 8000 ft wire; *Pawnee II* sta. 33; 22 Mar 1927.

Melamphaes spinifer Ebeling, 1962:67, fig. 26

Paratype YPM 8040 (4, 38–42 mm in SL); 16°14′ N, 99°36.5′ W, tropical East Pacific, off Mexico; 3750 ft wire; *Pawnee II*; 31 May 1926; and YPM 8041 (2, 41–43 mm in SL); 14°30.5′ N, 96°14′ W, tropical East Pacific, off Mexico; 3750 ft wire; *Pawnee II*; 1 June 1926.

Remark YPM 8040 was separated from YPM 2698, paratypes for *Melamphaes macrocephalus* Parr and YPM 8041 was separated from YPM 2699 also paratypes for *Melamphaes macrocephalus.*

Melanocetidae

Rhyncoceratias acanthirostris Parr, 1927a:31, fig. 11

Holotype YPM 2011 (20 mm in SL); 23°37′ N, 77°15′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 22; 12 Mar 1927.

Remark =male of *Melanocetus murrayi* Gunther in Pietsch and Van Duzer (1980:81).

Rhyncoceratias latirhinus Parr, 1927a:31, fig. 12

Holotype YPM 2012 (15 mm in SL); 24°11′ N, 75°37′ W, off Cat Island, Bahamas; 8000 ft wire; *Pawnee II* sta. 33; 22 Mar 1927.

Remark =male of *Melanocetus murrayi* Gunther in Pietsch and Van Duzer (1980:81).

Rhyncoceratias longipinnis Parr, 1930b:7, fig. 2, 3, 4, and 5

Holotype YPM 2592 (16 mm in SL); 32°19′18″ N, 64°32′30″ W, near Bermuda; 8000 ft wire; *Pawnee II* sta. 59; 21 Apr 1927.

Remark =male of *Melanocetus murrayi* Gunther in Pietsch and Van Duzer (1980:81).

Melanocetus tumidus Parr, 1927a:28, fig. 10

Holotype YPM 2022 (15 mm in SL); 23°58′ N, 77°26′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 11; 2 Mar 1927.

Remark =female of *Melanocetus murrayi* Gunther in Peitsch and Van Duzer (1980:81).

Melanostomiidae

Eustomias bibulbosus aborifer Parr, 1927b:70

Holotype YPM 2041 (105 mm in SL); 24°00′ N, 77°17′ W, Tongue of the Ocean, Bahamas; 6000 ft wire; *Pawnee II* sta. 7; 28 Feb 1927.

Remark =female *Eustomias bibulbosus* Parr in Morrow and Gibbs (1964:395).

Eustomias bibulbosus bibulbosus Parr, 1927b:70

Holotype YPM 2039 (121 mm in SL); 23°58′ N, 77°26′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 11; 2 Mar 1927.

Eustomias bibulbosus micraster Parr, 1927b: 70, fig. 41

Holotype YPM 2040 (115 mm in SL); 24°51′ N, 76°38′ W, off Eleuthera Island, Bahamas; 8000 ft wire; *Pawnee II* sta. 27; 17 Mar 1927.

Remark =male *Eustomias bibulbosus* Parr in Morrow and Gibbs (1964:395).

Eustomias bigelowi parvibulbus Parr, 1927b: 79, fig. 44 and 46

Holotype YPM 2096 (204 mm in SL); 22°31′ N, 74°26′ W, off Acklins Island, Bahamas; 10 000 ft wire; *Pawnee II* sta. 41; 30 Mar 1927.

Remark =*Eustomias parvibulbus* Parr in Morrow and Gibbs (1964:422).

Eustomias bigelowi paucifilis Parr, 1927b:79, fig. 45

Holotype YPM 2095 (125 mm in SL); 23°58′ N, 77°26′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 11; 2 Mar 1927.

Remark =male *Eustomias bigelowi* Welsh in Beebe and Crane (1939:227).

Eustomias binghami Parr, 1927b:80, fig. 47 and 48

Holotype YPM 2043 (99 mm in SL); 22°31′ N, 74°26′ W, off Acklins Island, Bahamas; 10 000 ft wire; *Pawnee II* sta. 41; 30 Mar 1927.

Eustomias brevibarbatus Parr, 1927b:68, fig. 36A and 40

Holotype YPM 2034 (63 mm in SL); 23°55′ N, 77°09′ W, Tongue of the Ocean, Bahamas; 4000–7000 ft wire; *Pawnee II* sta. 9; 1 Mar 1927.

Paratype YPM 2033 (57 mm in SL); 24°00′ N, 77°17′ W; 6000 ft wire; *Pawnee II* sta. 7; 28 Feb 1927.

Echiostoma calliobarba Parr, 1934b:15, fig. 4C

Holotype YPM 3201 (290 mm in SL); 37°47′ N, 31°41′ W, near Azores Islands; 610–930 m; R/V *Atlantis* sta. 1030; 4–5 Aug 1931.

Remark =*Echiostoma barbatum* Lowe in Morrow and Gibbs (1964:486).

Grammatostomias circularis Morrow, 1959:1, fig. 1

Holotype YPM 3773 (135.6 mm in SL); 18°55′ N, 66°10′ W to 19°05′ N, 66°59′ W, north of San Juan, Puerto Rico; 0–225 fath; R/V *Atlantis*; 4 March 1954.

Echiostoma ctenobarba Parr, 1927b:55, fig. 5, 32 and 33

Holotype YPM 2091 (285 mm in SL); 23°55′ N, 77°09′ W, Tongue of the Ocean, Bahamas; 4000–7000 ft wire; *Pawnee II* sta. 9; 1 Mar 1927.

Remark =*Echiostoma barbatum* Lowe in Morrow and Gibbs (1964:486).

Echiostoma ctenobarba ramifer Parr, 1934b: 17, fig. 4B

Holotype YPM 3202 (297 mm in SL); 25°39′ N, 77°18′ W, off New Providence Island, Bahamas; 1050–1100 m; R/V *Atlantis* sta. 1478; 20–21 Feb 1933.

Remark =*Echiostoma barbatum* Lowe in Morrow and Gibbs (1964:486).

Eustomias dubius Parr, 1927b:66, fig. 36D and 38

Holotype YPM 2036 (84 mm in SL); 23°58′ N, 77°26′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 11; 2 March 1927.

Photonectes flagellatus Parr, 1927b:107, fig. 15B, 55A, and 56

Holotype YPM 2099 (280 mm in SL); 22°43′ N, 74°23′ W, off Acklins Island, Bahamas; 8000 ft wire; *Pawnee II* sta. 39; 29 Mar 1927.

Remark =*Photonectes margarita* (Goode and Bean) in Morrow and Gibbs (1964:504).

Photonectes intermedius Parr, 1927b:109, fig. 57 and 58

Syntype YPM 2101 (58 mm in SL); 32°24′ N, 64°29′ W, near Bermuda; 10 000 ft wire; *Pawnee II* sta. 58; 20 Apr 1927; and YPM 2100 (2, 44–51 mm in SL); same as YPM 2101 except 5000 ft wire out.

Remark =*Photonectes margarita* (Goode and Bean) in Morrow and Gibbs (1964:504). Parr did not designate a type in the original description of the species nor is there any designation on the jar labels. YPM 2101 is designated the type in our card catalog, however the handwriting is that of Y. Olsen, Parr's assistant. Morrow and Gibbs (1964:501) list YPM 2101 as the type specimen.

Eustomias longibarbus Parr, 1927b:64, fig. 35 and 36B

Syntype YPM 2037 (86 mm in SL); 24°00′ N, 77°17′ W, Tongue of the Ocean, Bahamas; 6000 ft wire; *Pawnee II* sta. 7; 28 Feb 1927; and YPM 2038 (82 mm in SL); 23°49′ N, 76°59′ W; 7000 ft wire; *Pawnee II* sta. 16; 9 Mar 1927.

Remark Again, Parr did not designate a type specimen in the original description nor on the jar labels. YPM 2037 is designated as the type in our card catalog, however the handwriting is that of Y. Olsen, Parr's assistant.

Eustomias macrophthalmus Parr, 1927b:67, fig. 36C and 39

Holotype YPM 2035 (104 mm in SL); 22°31′ N, 74°26′ W, off Acklins Island, Bahamas; 10 000 ft wire; *Pawnee II* sta. 41; 30 Mar 1927.

Eustomias microcephalus Parr, 1927b:75, fig. 43

Holotype YPM 2031 (66 mm in SL); 23°49′ N, 76°59′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 16; 9 Mar 1927.

Remark Possibly = *Eustomias longibarbus* Parr in Morrow and Gibbs (1964:415).

Eustomias micropterygias Parr, 1927b:65, fig. 37

Holotype YPM 2032 (57 mm in SL); 23°55′ N, 77°09′ W, Tongue of the Ocean, Bahamas; 4000–7000 ft wire; *Pawnee II* sta. 9; 1 Mar 1927.

Remark Doubtfully maintained as separate species in Gomon and Gibbs (1985:52).

Photonectes mirabilis Parr, 1927b:111, fig. 15A, 59, and 60

Holotype YPM 2077 (60 mm in SL); 24°45′ N, 76°21′ W, off Cat Island, Bahamas; 8000 ft wire; *Pawnee II* sta. 27; 18 Mar 1927.

Eustomias nigrifilis Parr, 1927b:81, fig. 8 and 49

Holotype YPM 2044 (112 mm in SL); 24°29′ N, 77°29′ W, Tongue of the Ocean, Bahamas; 8000 ft wire; *Pawnee II* sta. 23; 14 Mar 1927.

Remark =*Eustomias fissibarbis* (Pappenheim) in Morrow and Gibbs (1964: 410).

Bathophilus pawneei Parr, 1927b:88, fig. 51

Syntype YPM 2072 (2, 77–78 mm in SL); 25°56′ N, 77°37′ W; 5000 ft wire; *Pawnee II* sta. 5; 26 Feb 1927; and YPM 2073 (2); 24°00′ N, 77°17′ W; 6000 ft wire; *Pawnee II* sta. 7; 28 Feb 1927; and YPM 2074 (73 mm in SL); 24°29′ N 77°29′ W, Tongue of the Ocean, Bahamas; 8000 ft wire; *Pawnee II* sta. 23; 14 Mar 1927.

Remark Parr never designated a type specimen in his original description, although he used YPM 2074 for much of the species description and called it "the best preserved specimen" (1927b:90). There also are no designations on the jar labels. YPM 2074 is designated the type in our card catalog, however the entry is in Parr's assistant Y. Olsen's handwriting, and subsequent authors (Morrow and Gibbs 1964:477) have referred to this specimen as the holotype.

Eustomias polyaster Parr, 1927b:74, fig. 7 and 42

Holotype YPM 2042 (135 mm in SL); 22°31′ N, 74°26′ W, off Acklins Island, Bahamas; 10 000 ft wire; *Pawnee II* sta. 41; 30 Mar 1927.

Melanostomias problematicus Parr, 1927b:46, fig. 3, 26, 27, and 28A

Holotype YPM 2097 (172 mm in SL); 23°42′ N, 76°43′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 18; 10 Mar 1927.

Remark =*Leptostomias gladiator* (Zugmayer) in Morrow and Gibbs (1964:443).

Bathophilus simplex Parr, 1927b:87, fig. 9

Holotype YPM 2094 (85 mm in SL); 32°24′ N, 64°29′ W, near Bermuda; 5000 ft wire; *Pawnee II* sta. 58; 20 Apr 1927.

Remark =*Bathophilus metallicus* (Welsh) in Morrow and Gibbs (1964:475).

Flagellostomias tyrranus Parr, 1927b:49, fig. 4, 29 and 30

Syntype YPM 2045 (2, 192–195 mm in SL); 23°42′ N, 76°43′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 18; 10 Mar 1927.

Remark =*Flagellostomias boureei* (Zugmayer) in Morrow and Gibbs (1964:430).

Moringuidae

Anguillichthys bahamensis Mowbray, 1927 (in Breder, 1927:10, fig. 5)

Holotype YPM 34 (115 mm in TL); Green Cay, Bahamas; *Pawnee I*; 19 Mar 1925.

Paratype YPM 35 (1); same as holotype.

Remark =*Moringua edwardsi* (Jordan & Bollman)—det. J. E. Böhlke 1968 (in cat.).

Muraenidae

Uropterygius acuta Parr, 1930a:16, fig. 2

Holotype YPM 2604 (143 mm in TL); from stomach of *Epinephelus ascensionis,* West Caicos Island, Bahamas; 30 fath; *Pawnee II* sta. 45; 2 Apr 1927.

Remark =*Monopenchelys acuta* (Parr) det. J. E. Böhlke 1982 (in cat.).

Sidera verrilli Jordan & Gilbert, 1882:623

Holotype YPM 8042 (17.5 inches in TL); Panama; 1866.

Myctophidae

Lampadena anomala Parr, 1928:150, fig. 35

Holotype YPM 2272 (48 mm in SL); 32°24′ N, 64°29′ W, near Bermuda; 10 000 ft wire; *Pawnee II* sta. 58; 20 Apr 1927.

Myctophum aurolaternatum Garman, 1899:264, pl. 55, fig. 3

Syntype YPM 3704 (1); 06°21′ N, 80°41′ W, East Pacific off Panama; surface; *Albatross* sta. 3382; 1891.

Remark One specimen given for exchange from MCZ #28494

Myctophum fibulatum proximum Parr, 1929b:8

Holotype YPM 2184; 24°29′ N, 77°29′ W, Tongue of the Ocean, Bahamas; 8000 ft wire; *Pawnee II* sta. 23; 14 Mar 1927.

Diaphus hypolucens Parr, 1928:130, fig. 24

Holotype YPM 2197 (37 mm in SL); 23°58′ N, 77°26′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 11; 2 Mar 1927.

Remark =*Diaphus termophilus* Taning in Nafpaktitis et al. (1977:136).

Lampanyctus idostigma Parr, 1931:32, fig. 13

Holotype YPM 2686 (76 mm in SL); 16°14′ N, 99°36.5′ W, East Pacific off Guerrero, Mexico; 3750 ft wire; *Pawnee II*; 31 May 1926.

Paratype YPM 2687 (1); 24°07′ N, 108°40′ W; 286 fath; *Pawnee II*; 28 May 1926; and YPM 2688 (25); 11°05′ N, 89°20′ W; 1800 ft wire; *Pawnee II*; 3 June 1926.

Lampanyctus iselini Parr, 1934a:60, fig. 7

Syntype YPM 1414 (1, 44 mm in SL); 41°30′ N, 45°57′ W, 700–800 fath; R/V *Atlantis* sta. 116; 6 July 1928.

Remark =*Lampanyctus crocodilus* (Risso) in Nafpaktitis et al. (1977:209).

Myctophum laternatum Garman, 1899:267, pl. 56, fig. 1

Syntype YPM 3703 (1); 10°14′ N, 96°28′ W, East Pacific off Central America; 0–200 fath; *Albatross* sta. 3414; 1891.

Remark =*Diogenichthys laternatus* (Garman) in Wisner (1974:46). One specimen given for exchange from MCZ #28492.

Diaphus macrophus Parr, 1928:136, fig. 27

Holotype YPM 2172 (27 mm in SL); 24°11′ N, 75°35′ W, off Cat Island, Bahamas; 7500 ft wire; *Pawnee II* sta. 35; 23 Mar 1927.

Remark =*Diaphus effulgens* (Goode & Bean) in Nafpaktitis et al. (1977:149).

Lampanyctus melanothorax Parr, 1928:98, fig. 14

Holotype YPM 2260 (57 mm in SL); 21°30′ N, 71°11′ W, Turks Island Passage; 8000 ft wire; *Pawnee II* sta. 52; 11 Apr 1927.

Paratype YPM 2250 (23); 24°00′ N, 77°17′ W; 6000 ft wire; *Pawnee II* sta. 7; 28 Feb 1927; and YPM 2251 (8); 23°55′ N, 77°09′ W; 4000–7000 ft wire; *Pawnee II* sta. 9; 1 Mar 1927; and YPM 2252 (1); 23°58′ N, 77°26′ W; 7000 ft wire; *Pawnee II* sta. 11; 2 Mar 1927; and YPM 2253 (3); 23°49′ N, 76°58′ W; 7000 ft wire; *Pawnee II* sta. 16; 9 Mar 1927; and YPM 2254 (4); 23°42′ N, 76°43′ W; 7000 ft wire, *Pawnee II* sta. 18; 10 Mar 1927; and YPM 2255 (2); 23°37′ N, 77°15′ W; 7000 ft wire; *Pawnee II* sta. 22; 12 Mar 1927; and YPM 2256 (7); 24°29′ N, 77°29′ W; 8000 ft wire, *Pawnee II* sta. 23; 14 Mar 1927; and YPM 2257 (4); 24°11′ N, 75°37′ W; 8000 ft wire; *Pawnee II* sta. 33; 22 Mar 1927; and YPM 2258 (1); 24°11′ N, 75°35′ W; 7500 ft wire; *Pawnee II* sta. 35; 23 Mar 1927; and YPM 2259 (1); 21°44′ N, 72°43′ W; 7000 ft wire; *Pawnee II* sta. 48; 6 Apr 1927.

Remark =*Lepidophanes guntheri* (Goode & Bean) in Nafpaktitis et al. (1977:228). Parr never designated a paratype in his original description nor on his jar labels, therefore all the additional specimens listed in the original description for this species are paratypes.

Lampanyctus omostigma parvicauda Parr, 1931:26, fig. 9

Holotype YPM 2682 (89 in mm SL); 16°14′ N, 99°36.5′ W, East Pacific off Mexico; 3750 ft wire; *Pawnee II*; 31 May 1926.

Paratype YPM 2684 (11); same as holotype.

Remark =*Lampanyctus parvicauda* Parr in Wisner (1974:188).

Diaphus pacificus Parr, 1931:34, fig. 14

Holotype YPM 2690 (28 mm in SL); 16°14′ N, 99°36.5′ W, East Pacific off Mexico; 3750 ft wire; *Pawnee II*; 31 May 1926.

Lampanyctus photonotus Parr, 1928:102, fig. 16

Holotype YPM 2261 (55 mm in SL); 22°43′ N, 74°23′ W, off Crooked Island, Bahamas; 8000 ft wire; *Pawnee II* sta. 39; 29 Mar 1927.

Lampanyctus photothorax Parr, 1928:95, fig. 13

Holotype YPM 2263 (56 mm in SL); 23°55′ N, 77°09′ W, Tongue of the Ocean, Bahamas; 4000–7000 ft wire; *Pawnee II* sta. 9; 1 Mar 1927.

Paratype YPM 2262 (7); 24°00′ N, 77°17′ W; 6000 ft wire; *Pawnee II* sta. 7; 28 Feb 1927; and YPM 2264 (9); same as holotype; and YPM 2265 (2); 23°58′ N, 77°26′ W; 7000 ft wire; *Pawnee II* sta. 11; 2 Mar 1927; and YPM 2266 (6); 23°49′ N, 76°58′ W; 7000 ft wire; *Pawnee II* sta. 16; 9 Mar 1927; and YPM 2267 (9); 24°29′ N, 77°29′ W; 8000 ft wire; *Pawnee II* sta. 23; 14 Mar 1927; and YPM 2268 (3); 24°51′ N, 76°37′ W, 8000 ft wire; *Pawnee II* sta. 25; 17 Mar 1927; and YPM 2269 (1); 24°11′ N, 75°37′ W; 8000 ft wire; *Pawnee II* sta. 33; 22 Mar 1927; and YPM 2270 (11); 32°24′ N, 64°29′ W; 10 000 ft wire; *Pawnee II* sta. 58; 20 Apr 1927; and YPM 2271 (5); 32°19′ N, 64°33′ W; 8000 ft wire; *Pawnee II* sta. 59; 21 Apr 1927.

Remark =*Bolinichthys photothorax* (Parr) in Nafpaktitis et al. (1977:236). Parr did not designate a paratype either in the original description or in the jar labels.

Diaphus problematicus Parr, 1928:143, fig. 32

Holotype YPM 2195 (30 mm in SL); 24°29′ N, 77°29′ W, Tongue of the Ocean, Bahamas; 8000 ft wire; *Pawnee II* sta. 23; 14 Mar 1927.

Paratype YPM 2194 (1, 27 mm in SL); 24°00′ N, 77°17′ W; 6000 ft wire; *Pawnee II* sta. 7; 28 Feb 1927.

Myctophum scofieldi Bolin, 1939:122, fig. 16

Paratype YPM 1409 (1); 34°29′ N, 120°43′ W, Off Pt. Arquello, California; 164 ft wire; 20 Jan 1930.

Remark =*Diogenichthys atlanticus* (Taning) in Nafpaktitis et al. (1977:59).

Lampanyctus subpectoralis Parr, 1928:101, fig. 15

Holotype YPM 2249 (35 mm in SL); 24°29′ N, 77°29′ W, Tongue of the Ocean, Bahamas; 8000 ft wire; *Pawnee II* sta. 23; 14 Mar 1927.

Remark =*Lepidophanes gaussi* (Brauer) in Nafpaktitis et al. (1977:231).

Lampanyctus supralateralis Parr, 1928:94, fig. 12

Holotype YPM 2229 (28 mm in SL); 23°42′ N, 76°43′ W, off Great Exuma, Bahamas; 7000 ft wire; *Pawnee II* sta. 18; 10 Mar 1927.

Paratype YPM 2228 (2, 25–27 mm in SL); 23°58′ N, 77°26′ W; 7000 ft wire; *Pawnee II* sta.

11; 2 Mar 1927; and YPM 2230 (1); 24°51′ N, 76°37′ W; 8000 ft wire; *Pawnee II* sta. 25; 17 Mar 1927.

Remark =*Bolinichthys supralateralis* (Parr) in Nafpaktitis et al. (1977:232).

Lampanyctus taningi Parr, 1929b:27

Holotype YPM 2301; 24°51′ N, 76°37.5′ W, off Great Exuma, Bahamas; 8000 ft wire; *Pawnee II* sta. 25; 17 Mar 1927.

Remark =*Lampanyctus photonotus* Parr in Nafpaktitis et al. (1977:214).

Nemichthyidae

Avocettina exopthalma Parr, 1932:16, fig. 8

Holotype YPM 2656 (620 mm in TL); 23°42′20″ N, 76°43′20″ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 18; 10 Mar 1927.

Oneirodidae

Dolopichthys analogus Parr, 1927a:20, fig. 7

Holotype YPM 2010 (17 mm in SL); 32°24′ N, 64°29′ W, near Bermuda; 10 000 ft wire; *Pawnee II* sta. 58; 20 Apr 1927.

Remark =*Microlophichthys microlophus* Regan in Grey (1956:249).

Chaenophryne longiceps var. *quadrifilis* Parr, 1927a:22, fig. 8A

Holotype YPM 2910 (26 mm in TL); 32°24′ N, 64°29′ W, east of Bermuda; 10 000 ft wire; *Pawnee II* sta. 58; 20 Apr 1927.

Remark =*Chaenophryne quadrifilis* (Parr) in Regan and Trewavas (1932:87, fig. 136). Erroneously listed as BOC 2007 in Parr (1927a).

Dolopichthys longicornis Parr, 1927a:18, fig. 6

Holotype YPM 2008 (20 mm in SL); 21°46° N, 72°49′ W, Caicos Passage; 10 000 ft wire; *Pawnee II* sta. 46; 4 Apr 1927.

Dolopichthys obtusus Parr, 1927a:16, fig. 5

Holotype YPM 2028 (13 mm in SL); 32°19′ N, 64°32′ W, east of Bermuda; 8000 ft wire; *Pawnee II* sta. 59; 21 Apr 1927.

Remark =*Oneirodes eschrichti* Lutken in Grey (1956:245).

Trematorhynchus phyllodon Parr, 1934b:40, fig. 13

Holotype YPM 3206 (14 mm in SL); 25°39′ N, 77°18′ W, off New Providence Island, Bahamas; 1050–1100 m; R/V *Atlantis* sta. 1478; 20–21 Feb 1933.

Ophichthidae

Myrophis dolichorhyncus Parr, 1930a:13, fig. 1

Holotype YPM 2602 (142 mm in TL); Washerwoman Cay, Bahamas; *Pawnee II* sta. 8; 28 Feb 1927.

Remark =*Myrophis punctatus* Lutken det. J. E. Böhlke (in cat.).

Myrophis macrophthalmus Parr, 1930a:10, fig. 1

Holotype YPM 2593 (275 mm in TL); Green Cay, Bahamas; *Pawnee II*; 8 Mar 1927.

Paratype YPM 2594 (1); Washerwoman Cay, Bahamas; *Pawnee II*; 28 Feb 1927; and YPM 2595 (1): Crooked Island, Bahamas; *Pawnee II*; 26 Mar 1927; and YPM 2596 (1); West Caicos Island; *Pawnee II*; 2–7 Apr 1927.

Remark =*Ahlia egmontis* (Jordan) det. J. E. Böhlke (in cat.).

Myrophis microps Parr, 1930a:11, fig. 1

Holotype YPM 2597 (167 mm in TL);

25°02′10″ N, 77°35′27″ W, off New Providence Island, Bahamas; surface; *Pawnee II* sta. 13; 7 Mar 1927.

Paratype YPM 2598 (1); same as holotype; and YPM 2599 (1); Bennets Harbour, Cat Island, Bahamas; *Pawnee II*; 19–20 Mar 1927; and YPM 2600 (1); Cat Island, Bahamas; *Pawnee II*; 22 Mar 1927.

Remark =*Ahlia egmontis* (Jordan) det. J. E. Böhlke (in cat.). YPM 2598 is cleared and stained.

Myrophis platyrhynchus Breder, 1927:8, fig. 3

Holotype YPM 30 (196 mm in TL); Glover Reef, Belize; surface; *Pawnee I*; 18 Apr 1925.

Paratype YPM 31 (5); same as holotype; and YPM 32 (1); S. W. Harbor, Bahamas; surface; *Pawnee I*; 16 Mar 1925; and YPM 33 (2); Saddle Rock, Bahamas; *Pawnee I*; 23 Mar 1925.

Remark 2 specimens in YPM 31 (146, 182 mm in SL) = *Myrophis punctatus* Lutken det. J. E. Böhlke (in jar).

Ophidiidae

Ophidion iris Breder, 1936:44, fig. 16

Holotype YPM 981 (113 mm in SL); Gonzago Bay, northern Gulf of California, Mexico; *Pawnee II*; 14–18 May 1926.

Ophidion nigricauda Breder, 1936:44, fig. 15

Holotype YPM 980 (130 mm in SL); Refugio Bay, Angel de la Guarda Island, Gulf of California, Mexico; *Pawnee II*; 16 May 1926.

Opisthoproctidae

Dolichopteryx brachyrhynchus Parr, 1937:37, fig. 15

Holotype YPM 2718 (95 mm in SL); 24°29′ N, 75°53′ W, off Cat Island, Bahamas, 7000 ft wire; *Pawnee II* sta. 31; 23 Apr 1927.

Opistognathidae

Lonchopisthus linderi Ginsburg, 1942:366

Paratype YPM 3968 (1, 61.7 mm in SL); 28°19′ N, 90°59′ W, northern Gulf of Mexico; 31 fath; *Atlantis* sta. 2840; 25 Mar 1937.

Paralepididae

Sudis bronsoni Parr, 1928:36, fig. 3

Holotype YPM 2135 (64 mm in SL); 22°43′ N, 74°23′ W, off Crooked Island, Bahamas; 8000 ft wire; *Pawnee II* sta. 39; 29 Mar 1927.

Remark =*Paralepis atlantica* Kroyer in Rofen (1966:243).

Lestidium elegans Parr, 1928:44, fig. 5

Holotype YPM 2139 (173 mm in SL); Turks Island, Bahamas; at surface; *Pawnee II* sta. 50; 8 Apr 1927.

Remark =*Lestidium atlanticum* Borodin in Rofen (1966:301).

Lestidium neles Harry 1953:199, fig. 18 and 22

Holotype YPM 2655 (78 mm in SL); 20°48′15° N, 106°11′50″ W, off Puerto Vallarta, Mexico; 3240 ft wire; *Pawnee II*; 29 May 1926.

Remark =*Lestidiops neles* (Harry) in Rofen (1966:301). *L. neles* was originally the paratype for *Paralepis pacificus* Parr (1931:19).

Paralepis pacificus Parr, 1931:19, fig. 6 and 7

Holotype YPM 2654 (164 mm in SL); 20°48′15″ N, 106°11′50″ W, off Puerto Vallarta, Mexico; 3240 ft wire; *Pawnee II*; 29 May 1926.

Paratype YPM 2655; see holotype *Lestidium neles* Harry.

Remark =*Lestidiops jayakari pacificum* (Parr) in Rofen (1966:302). The paratype became the holotype for *Lestidium neles* Harry (1953:199).

Lestidium speciosum brevirostris Parr, 1928: 42–43, fig. 4

Lectotype YPM 2136 (53 mm in SL); 21°30′ N, 71°11′ W, Bahamas; 8000 ft wire; *Pawnee II* sta. 52; 11 Apr 1927.

Paralectotype YPM 2136 (1) same as holotype.

Remark =*Lestidium brevirostris* Parr in Ege (1930:54) and lectotype designated (Ege, 1953:12). The lectotype is "in perfect condition" (Parr 1928:42) whereas the paralectotype is damaged enough to prevent body measurements.

Pempheridae

Pempheris polio Breder, 1927:32, fig. 15 and 16

Holotype YPM 182 (44 mm in SL); Isle of Pines, Cuba; *Pawnee I*; 5 Apr 1925; or Saddle Rock, Bahamas; *Pawnee I*; 23 Mar 1925.

Paratype YPM 183 (1, 19 mm in SL); Corrientes Bay, Cuba; 3 fath; *Pawnee I*; 3 Apr 1925.

Pleuronectidae

Paralimanda inermis Breder, 1927:87, fig. 36

Holotype YPM 516 (90 mm in SL); North of Glover Reef, Belize; 484 fath; *Pawnee I*; 20 Apr 1925.

Hypsopsetta macrocephala Breder, 1936:4, fig. 1

Holotype YPM 809 (275 mm in SL); San Francisquito Bay, Gulf of California, Mexico; *Pawnee II*; 7 May 1926.

Rhinobatidae

Zapteryx xyster Jordan & Evermann, 1896:65

Syntype formerly old YPM zoology catalog #1994 (2, both over 500 mm in TL); Pacific coast of Panama; 1866.

Remark One of 2 syntypes is known to have been destroyed in the 1930s, the other was retained by Jordan in the early 1880s when he was at Indiana University and is presumed to have been lost or destroyed in the fire at his lab in 1883.

Scopelarchidae

Scopelarchoides nicholsi Parr, 1929a:16, fig. 5

Syntype YPM 2300 (2, 110–113 mm in SL); 16°14′ N, 99°36′ W, East Pacific off Mexico; 3750 ft wire; *Pawnee II*; 31 May 1926.

Remark "Parr referred to these two specimens as 'type' (110 mm) and 'cotype' (113 mm) in 1931 (p. 36) but did not distinguish between them in his original description" (Johnson 1974:136). The "cotype" is cleared & stained with Alizarin Red.

Scopelarchus candelops Rofen, 1963:1

Holotype YPM 2131 (112.5 mm in SL); 21°30′ N, 71°11′ W, Turks Passage, Bahamas; 8000 ft wire; *Pawnee II*; 11 Apr 1927.

Paratype YPM 2128 (60.5 mm in SL); 23°37′ N, 77°15′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II*; 12 Mar 1927; and YPM 2129 (74.7 mm in SL); 24°29′ N, 77°29′ W, Tongue of the Ocean, Bahamas; 8000 ft wire; *Pawnee II*; 14 Mar 1927.

Remark =*Scopelarchus analis* (Brauer) in Johnson (1974:154). The holotype is stained with Alizarin Red.

Scorpaenidae

Scorpaenodes triacanthus Parr, 1930a:115, fig. 30

Holotype YPM 2533 (36 mm in SL); Bennet's Harbor, Cat Island, Bahamas; *Pawnee II*; 19–20 Mar 1927.

Remark =*Scorpaenodes caribbaeus* Meek & Hildebrand in Ginsburg (1953:38).

Searsiidae

Searsia koefoedi Parr, 1937:16, fig. 4

Holotype YPM 3720 (69 mm in SL); 23°39′25″ N, 76°41′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 18; 10 Mar 1927.

Paratype YPM 3721 (47 mm in SL); 23°55′25″ N, 77°09′10″ W, Tongue of the Ocean, Bahamas; 4000–7000 ft wire; *Pawnee II* sta. 9; 1 Mar 1927.

Searsia koefoedi primicrops Parr, 1960:61, fig. 43

Holotype YPM 3723 (42 mm in SL); 23°49′15″ N, 76°58′30″ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 16; 9 Mar 1927.

Searsia polycoeca Parr, 1937:19, fig. 5

Holotype YPM 3719 (48 mm in SL); 32°24′15″ N, 64°29′ W, near Bermuda; 10 000 ft wire; *Pawnee II* sta. 58; 20 Apr 1927.

Remark It appears that the holotype of this species has been rediscovered in our collection. The specimen at hand agrees very well with measurements and counts, as well as in the form and placement of the luminous organs and teeth of the premaxilla and dentary and other features given in the original description and subsequent works by Parr (1937, 1951, 1960).

Serranidae

Alphestes immaculatus Breder, 1936:22, fig. 9

Holotype YPM 596 (82 mm in SL); San Franciscito Bay, Gulf of California, Mexico; *Pawnee II*; 7 May 1926.

Remark =*Epinephelus afer* (Breder) in C. L. Smith (1971:165)

Caribrhegma gregoryi Breder, 1927:44, fig. 22

Holotype YPM 476 (44 mm in SL); Glover Reef, Belize; *Pawnee II*; 18 Apr 1927.

Paratype YPM 221 (1, 41 mm in SL); same as holotype

Remark =*Pseudogramus gregoryi* (Breder) det. W. F. Smith-Vaniz, 1976 (in bot.). Only one paratype was found.

Serrivomeridae

Platuronides acutus Parr, 1932:8, fig. 3 and 4

Holotype YPM 2726 (220 mm in TL); 32°24′15″ N, 64°29′ W, near Bermuda; 10 000 ft wire; *Pawnee II* sta. 58; 20 Apr 1927.

Platuronides ophiocephalus Parr, 1932:5, fig. 1, 2, and 3

Holotype YPM 2725 (632 mm in TL); 32°24′15″ N, 64°29′ W, near Bermuda; 10 000 ft wire; *Pawnee II* sta. 58; 20 Apr 1927.

Soleidae

Aseraggodes morrowi Chabanaud, 1954 (in Morrow, 1954:800, fig. 1 and 2A)

Holotype YPM 3740 (52.5 mm in TL); in tidepool, Shimoni, Kenya, Indian Ocean; 2 Jan 1950.

Aseraggodes ocellatus Weed, 1961:292, fig. 1

Holotype YPM 1288 (57 mm in SL); Sweat

Bay, Trincomalee, Ceylon; 0–6 ft; 21 Aug 1957.

Paratype YPM 1289 (16, 26–51 mm in SL); same as holotype.

Sternoptychidae

Argyropelecus micracanthus Parr, 1937:52, fig. 21

Holotype YPM 3768 (13 mm in SL); 23°49′ N, 76°58′ W, Tongue of the Ocean, Bahamas; 7000 ft wire; *Pawnee II* sta. 16; 9 Mar 1927.

Remark =*Argyropelecus amabilis* (Ogilby) in Schultz (1964:255)

Syngnathidae

Amphelikturus brachyrhyncus Parr, 1930a:32, fig. 7

Holotype YPM 2532 ("about 46 mm" in SL); Crooked Island, Bahamas; *Pawnee II* sta. 38; 26 Mar 1927.

Corythoichthys brederi Parr, 1930a:30, fig. 6

Holotype YPM 2528 (123 mm in TL); Cat Island, Bahamas; *Pawnee II* sta. 32; 21 Mar 1927.

Ichthyocampus pawneei Herald, 1950:269

Holotype YPM 3327 (22 mm in SL); Green Cay, Bahamas; *Pawnee II* sta. 6; 27 Feb 1927.

Remark The type locality is not "Guen Cay" as stated in original description.

Synodontidae

Saurida caribbaeus Breder, 1927:14, fig. 7

Holotype YPM 57 (111 mm in SL); North of Glover Reef, Belize; 48 fath; *Pawnee I*; 20 Apr 1925.

Paratype YPM 110 (1): same as holotype.

Remark Of the five original paratypes, two were dissected and presumed destroyed, one was given to the BMNH, and a fourth is cleared and stained and in our collection. The fifth is unaccounted for.

Synodus nicholsi Breder, 1927:12, fig. 6

Holotype YPM 56 (86 mm in SL); Royal Island, Eleuthera, Bahamas; *Pawnee I*; 15 Mar 1925.

Remark =*Synodus synodus* (Linnaeus) in Anderson et al. (1966:83)

Saurida parri Norman, 1935a:126, fig. 15

Paratype YPM 3238 (1); Off Cape Lopez, French Congo; 31–37 fath; R/V *Discovery* sta. 279; Aug 1927.

Remark =*Saurida brasiliensis* Norman in Anderson et al. (1966:94).

Saurida suspicio Breder, 1927:15, fig. 8

Holotype YPM 62 (75 mm in SL); Misteriosa Bank, between Grand Cayman and Yucatan, Mexico; surface; *Pawnee I*; 10 Apr 1925.

Paratype YPM 111 (1); same as holotype.

Tetraodontidae

Sphoeroides andersonianus Morrow, 1957:8, fig. 2

Holotype YPM 3734 (46 mm in SL); Lobos de Afuera Is. Peru; Yale South America Exped.; 19 May 1953.

Paratype YPM 1418 (29, 38.6–50.5 mm in SL); same locality as holotype; 20 May 1953; and YPM 1432 (72, 32.0–51.5 mm in SL); same locality as holotype; 20 May 1953; and YPM 3735 (16); same as holotype; and YPM 3797 (99); same locality as holotype; 20 May 1953.

Remark Fifty specimens from YPM 3797

and 16 specimens from YPM 3535 = *Sphoeroides sechurae* Hildebrand det. W. J. Baldwin 1962 (in jar).

Arothron erethizon Jordan & Gilbert, 1882:631

Paratype YPM 5571 (1); Perlas Islands, Panama; 1866; and YPM 5572 (1); same data.

Remarks Jordan and Gilbert state that the type specimen was given a USNM number (#29679), however the Smithsonian never received the specimen, nor is it to be found on the shelves in their main collection. It is suspected that it may have been lost or possibly destroyed in the fire at Jordan's labs in 1883. The two specimens surviving in our collection are listed in Verrill's handwriting as types in the Peabody Museum's old zoology catalogue. Since Jordan and Gilbert did designate the specimen for the Smithsonian as a type, these surviving specimens must be paratypes.

Canthigaster punctatissimus reticulatus Breder, 1936:50, fig. 17

Holotype YPM 1067 (63 mm in SL); San Jose Island, Gulf of California, Mexico; *Pawnee II*; 15 Apr 1926.

Thaumatichthyidae

Thaumatichthys binghami Parr, 1927a:25, fig. 9

Holotype YPM 2015 (39 mm in SL); 24°51′ N, 76°37′ W, off Eleuthera, Bahamas; 8000 ft wire; *Pawnee II* sta. 25; 17 Mar 1927.

Torpedinidae

Narcine vermiculatus Breder, 1928a:6, fig. 3 and 4

Holotype YPM 1143 (204 mm in TL); 14°40′20″ N, 92°40′30″ W, East Pacific off Guatemala; *Pawnee II*; 9 Apr 1926.

Trachichthyidae

Korsogaster nanus Parr, 1933:9, fig. 3

Holotype YPM 2839 (18 mm in SL); 25°56′ N, 77°37′ W, Tongue of the Ocean, Bahamas; 5000 ft wire; *Pawnee II* sta. 5; 26 Feb 1927.

Remark = juvenile *Hoplostethus mediterraeneus* Cuvier in Woods and Sonoda (1973:319) and in Kotlyar (1986:103).

Zoarcidae

Lycodes verrilli Goode & Bean, 1877:474

Syntype YPM 3633 (1); Off Cape Sable, Nova Scotia, Canada; 1877.

Remark The type is unaccounted for at this time.

Addendum

Chaenopsidae

Emblemaria nivipes Jordan & Gilbert, 1882:627

Holotype USNM 29676; Panama; 1866.

Paratype USNM 195817 (2); Panama; 1866.

Remark Although these were catalogued Yale specimens, Jordan deposited them at the Smithsonian Institution, National Museum of Natural History.

Ophichthidae

Coecula bascanium Jordan, 1884:43

Holotype formerly old YPM Zoology catalog #826 (31 inches in TL); Egmont Key, Florida; 1869.

Remark This specimen is not to be found at either Yale, California Academy of Science or the Smithsonian and may have been lost or destroyed in the fire at Jordan's lab.

Myrophis egmontis Jordan, 1884:44

Syntype 2 specimens, formerly old YPM Zoology catalog #802 and 827 ("about 15 inches" in TL); Egmont Key, Florida; 1869

Remark One type specimen (old YPM Zoology cat. #827) from the Yale collection was deposited at the USNM (USNM #35086) by Jordan.

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