REMARKS ON THE LIFE AND WORKS OF FENNER A. CHACE, JR. (1908-2004), WITH A LIST OF HIS TAXA AND COMPLETE BIBLIOGRAPHY

BY

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Fenner A. Chace, Jr. was officially a Zoologist Emeritus in the Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution, when he died peacefully on Sunday, May 30, 2004, at his home in Chevy Chase, Maryland, a suburb of Washington D.C. He was 95, and was survived by his wife of 69 years, Janice Dexter Grinnell. The two had married on September 1, 1934. Fenner and Janice had one adopted daughter, Linda Dee (deceased). Linda married Richard Walden Mayo (deceased), and the two had a son, Richard Walden, who chose to change his last name to Chace. Richard Walden (son) and his wife Diane, have two children, Jordan and Ryan.

Fenner A. Chace, Jr. was born in Fall River, Massachusetts on October 5, 1908, the son of Fenner A. Chace (a physician) and Mary D. Buffinton. In 1934 Fenner earned his Ph.D. from Harvard University, where he stayed to become Assistant Curator of Invertebrates (1934-1942), and then Curator of Crustacea (1942-1946) at the Museum of Comparative Zoology. During World War II he "served as a civilian oceanographer and commissioned officer (first lieutenant to major) in the Army Air Corps (subsequently transferred to the Oceanographic Unit of the U.S. Navy Hydrographic Office in Suitland, Md [Maryland]" (Chace, 1996: 7; in a letter to L. B. Holthuis, Chace characterized this as his "auto-obituary").

In 1946 he joined the staff of the U.S. National Museum as curator, succeeding Waldo L. Schmitt, where he worked until his retirement in 1978. At the Museum he was supervisor of the Division of Marine Invertebrates from 1946 to 1963, and in his own words "this was the unhappiest period of my career" (from same 1996 Chace letter to L. B. Holthuis). Administrative duties, for which he felt not fully capable, took up most of his time leaving little of it for research. It came

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as a relief to him, when on 24 June 1963, he was freed of these duties and appointed Senior Scientist. In 1985 he was presented with the "The Crustacean Society's Excellence in Research" award, and an issue of the Journal of Crustacean Biology (vol. 6, no. 3) was dedicated to him. In 1998, he was given an award for "Outstanding Contributions in the Biological Sciences" by the Washington Academy of Sciences, an event to which he nearly had to be dragged.

Fenner A. Chace, Jr. was one the most influential carcinologists of the 20th century. His professional career spanned 66 years, 22 of which he spent as Zoologist Emeritus at the Smithsonian Institution. While in retirement, Fenner continued to work, although in the last few years of his life he began to curtail his work schedule in order to be home to attend his ailing wife. However, one day in January of 2000, by coincidence a few days before his colleague Raymond B. Manning died, Fenner announced it was his last at the office, and went home, never to return. I wish to provide here a perspective on F. A. Chace, Jr., an outstanding carcinologist.

Despite having spent many of his years (1946-2000) at the Smithsonian performing administrative duties, they were still the most productive times for Fenner. During his long career he produced 94 scientific works (see bibliography) furthering our knowledge of decapod crustaceans in general, and of caridean shrimps in particular. He named 201 decapod and stomatopod taxa, including 177 species or subspecies, 20 genera, 3 families, and one superfamily (see list). His Ph.D. dissertation (1934), and most of his earlier papers dealt with the taxonomy of bathypelagic carideans although he also collaboratively published several pioneering papers on their eye structure (Welsh & Chace, 1937, 1938) and vertical migration (Welsh et al., 1937; Waterman et al., 1939). He later developed an interest in the decapod fauna of marine islands (e.g., Clipperton, Ascension, St. Helena, the Antilles), cave shrimps, and stomatopods. Most will not know, however, that his first love was porcellanid and hermit crabs, on which he published only sparingly. He kept a male specimen of Coenobita clypeatus on his desk for 11 years on a diet chiefly of fresh lettuce, an event that lead to a note on the longevity of this West Indian terrestrial hermit crab (Chace, 1972b). It was left unrecorded in the annals of science that after the death of that male C. clypeatus, Fenner kept another specimen of that same species under the same conditions for well over 25 years.

His works. — There is little doubt that Fenner's work had, and continues to have, a profound impact on the knowledge of the taxonomy, classification, and evolution of caridean shrimps, and even on the Decapoda as whole. He achieved great stature in the carcinological world, not only because of the usefulness, quality, and depth of his works, but also because he helped every colleague who asked for his advice, which he always gave generously and freely. Fenner's total number of publications was relatively low given his longevity, a fact he was well aware of although unconcerned. At one time he rightfully said that anybody who had the

fortune of living long enough could publish many papers without much effort. His first paper came out in 1936 (excluding his Ph.D. dissertation), his last in 1997, giving him an average of 1.5 papers per year. However, the quality of Fenner's works made up well for this low total of publications. His style was impeccable and meticulous, leaving out no details. It is rare that taxonomic works can be read and used with pleasure, and Fenner's are prime examples. He did most of the illustrations that appear in his papers, which are not only artistically outstanding but accurate. It is difficult to single out any one of Fenner's works as the most significant. Nevertheless, it is seems that some deserve special mention.

One of Fenner's most celebrated papers originated from a collaboration between a taxonomist (himself) and two ecologists/behaviorists. It was based on a major biological discovery that some today might take for granted, but that at the time was perhaps as significant as the recent findings of unusual species around hydrothermal vents. In 1954, Harry Pederson of McAllen, Texas, photographed some remarkable fish-cleaning habits by some shrimp at New Providence Island, Bahamas. However, it was not until two years later that specimens were actually collected by Conrad Limbaugh of the Scripps Institute of Oceanography, La Jolla, California, who collaborated with Mr. Pederson on a study of fish cleaning by various marine shrimps. The specimens turned out to be a new species, which Fenner then described and named as Periclimenes pedersoni Chace, 1958b. Fenner later co-authored, with these colleagues, a classic paper on the symbiotic habits and color patterns of six caridean and stenopodidean shrimps that remove parasites from fishes (Limbaugh et al., 1961). Again, this study developed from observations recorded on motion-picture film in the Bahamas by Pederson, beginning in 1952. Similar observations were subsequently made of shrimps at Clipperton Island, and San Diego, California.

Fenner's paper on the shrimp from the Smithsonian-Bredin Expedition (Chace, 1972a), summarizing the taxonomy and distribution of the shallow-water species from the West Indies, is perhaps one of the most widely used references among caridean workers in the Americas. As are many of Fenner's works, this is a practical paper with carefully crafted keys for the identification of families and species, unequaled to this day. No practicing taxonomist can begin to identify any caridean from the region without this reference.

For more than half a century an intriguing lobster-like crustacean 11.5 cm in length, collected on board the U.S. Fisheries Steamer "Albatross", remained unidentified in the collections of the Smithsonian Institution. Ted Bayer found the specimen and gave it to Fenner who kept it on his desk, and asked visitors if they had any ideas. Although Fenner suspected this specimen to be some new taxon, he did not want to describe it because it lacked both first pereopods, the perfectionist that he was. When the French carcinologist Michèle de Saint Laurent

visited the Museum in 1975, she took a photograph of the specimen back to Paris, and when she showed it to Sylvie Sécretan she immediately recognized it as belonging to the Glypheidae, a family with an extensive fossil record but one that was presumed to lack a living representative. When his French colleagues asked permission to describe this new lobster, and invited him as co-author, Fenner granted permission but refused authorship because, in his opinion, three authors were too many for such an important taxon. This "living fossil" was named *Neoglyphea inopinata* Forest & De Saint Laurent, 1975. Fenner, however, did collaborate shortly thereafter in a paper about this key organism (Forest et al., 1976). This glypheid is now thought to represent the ancestral stock of Recent decapod crustaceans, and as such is considered of great importance in evolutionary studies of decapods.

The discovery, in marine pools on Ascension Island, of the unusual, nonchelate shrimp *Procaris ascensionis* Chace & Manning, 1972, surely ranks among the most significant developments in caridean systematics. This species was originally assigned to a primitive superfamily of the Caridea. Subsequently, its intriguing morphology, and habitat, fueled much research. The discussion on the classification of *P. ascensionis*, as well as the origin and zoogeography of congeneric species and related anchialine shrimps in caves from islands such as Ascension, Bermuda, and Hawaii, rages to this day.

The seven-part series on the caridean shrimps obtained during the U.S. Fisheries Steamer "Albatross" Philippine Expedition (1907-1910), published by Fenner from 1983 to 1997 in the Smithsonian Contributions to Zoology, was his magnum opus, and perhaps his best crafted work. The series will continue to represent the basis for caridean taxonomic studies from the Indo-Pacific for many decades to come. Fenner finished this series while in retirement, and as usual prepared all of the illustrations. All but one of the parts in the series (Part 6) were published with Fenner as sole author. It is of interest to note that for this series he refused to consider any other material except that collected on the "Albatross". By his own admission, he did that in order to have any "hope of completing the study within the limits of mortal constraint" (Chace, 1983a: 2), and surely there is a lesson there for many of us.

His personality. — The impact of the works of a scientists are best left for history to judge for they will always be in the published records. The personality aspects, however, are lost if not recorded by contemporaneous colleagues. This is particularly true in the case of Fenner because he was a shy person (some wrongly perceived him as antisocial) who seldom traveled outside the Museum. The colleagues he met personally were those who visited the Museum in Washington, whereas many others were known only through correspondence (and they were numerous). He had such a fear of bridges that he was known to take routes from

home to the Museum across town by avoiding any and all semblances of bridges. Fenner was terrified of flying, and I do not think he ever boarded an airplane. It is known that he was a visiting scientist at the Bermuda Biological Station in 1935-1936, where he must have gone by boat. He also joined W. L. Schmitt in the first Smithsonian-Bredin Caribbean Expedition in 1956 on board the schooner "Freelance" to the Lesser Antilles and British Virgin Islands. Surely, the motivation and inspiration to complete his famous 1972 paper on the carideans from the West Indies originated from that expedition. As far as I can tell, these were Fenner's only foreign collecting trips.

A fact known but to a few friends was that Fenner would faint at the sight of human blood. His colleague and former student, Patsy A. McLaughlin, recounted that once she invited Fenner, his wife and others, to a dinner at her apartment. During the visit while the guests were in her living room, Pat began preparing her mashed potatoes, and somehow got her finger caught in the mixer, and it began to bleed badly. Fenner was called, and as the gentleman he was, proceeded to help Pat get her injured, bloody finger out of the mixer, and repaired with gauze, etc. After the incident was over, and dinner served, the episode was recounted, and Fenner's wife was amazed that he had not passed out. Well, that was in January of 1967, but in a letter to Pat 20 years later, Fenner reminded her of, among other things, to "just keep your fingers out of the blender"...

Fenner was meticulous in every aspect of his life. I confirmed this in dramatic fashion when after his death I opened a file cabinet in his office, and discovered about 40 hand-written notebooks in which he detailed his daily activities at half-hour intervals for all his years of employment and retirement at the Museum, a span of 54 years! It seemed that to Fenner, time was not a consideration, rather the product was more important. He confessed to his grandson that his life work was a wholly inadequate legacy and lamented about the amount of time it took him to complete each publication. Everything needed to be done right, no matter how long it took.

It was well known in the Museum that during more than 50 years Fenner always had the same menu at lunch: a grape jelly sandwich neatly wrapped in wax paper, which he ceremoniously unwrapped at exactly noon, two hydrox cookies, and a thermos with a cup of skimmed milk. While this may seem unusual or hilarious to some, I suspect it may be the recipe for a long life.

I remember Fenner as a humble person and a gentleman. His slight appearance belied his big intellect and influence. He helped everyone who sought his advice or opinion, and he always took the time to answer every inquiry he received with a straightforward personal letter. I was the victim of one of his judgments when I naively wrote to him back in the 1970's seeking advice on just about everything taxonomic while I was an undergraduate student in Colombia. He sent me his

reprints but also wrote a terse letter suggesting I abandon any attempt at taxonomic studies if I was not going to have access to the Zoological Record. I was greatly disappointed then, but I soon realized he was right and thus decided to pursue my career where I could have access to proper taxonomic information.

Perhaps no other of Fenner's writings sums up his thoughts about life in natural history museums as those he expressed in an article he published on research collections and curatorial responsibilities in natural history museums (Chace, 1968a: 310). He admitted his dislike for the "paper pushing" he did in administrative posts for 17 years, but ended by stressing the most pleasant and rewarding experiences: "What yet remains to be done on research collections transcends all disappointments, great and small. The opportunities for adding to our knowledge of the plants and animals with which we share this planet are almost limitless and full of promise of inward satisfaction." Amen.

Humoristic side. — One of the most striking virtues of Fenner was his eloquent, dry humor. He named a genus of oplohorid, *Janicella*, for his wife, and in the etymology (Chace, 1986: 44) he wrote: "My wife, Janice, is fully aware of my opposition to the practice of naming biological taxa for relatives and personal friends who have not participated directly in activities associated with the description of those organisms. Credit for this first and last ostensible exception to that creed must go to some of my colleagues who have convinced me, after repeated appeals, that someone who has clearly modified her life style for more than 50 years in deference to the foibles of a spouse addicted to the rapture of descriptive zoology has surely contributed importantly to his professional research. The die having thus been cast, it is appropriate that *Janicella* be proposed as a component of the only crustacean family that is familiar to the honoree, as the result of editorial assistance rendered on my oplophorid doctoral dissertation during our courtship more than half a century ago."

Regarding the study of hermit crabs, and how difficult they were to investigate taxonomically, Fenner once said in a letter to P. A. McLaughlin: "I shall never understand why anyone wants to study these asymmetrical beasts that refuse to recline properly on demand and that vary to such an extreme that definition of specific characters is a ouija-board activity but I'm mighty glad that someone does." And in a letter to Mrs. S. K. Gerhardt, a pet hermit crab aficionado, when she asked for the name of his pet hermit crab, he answered: "The individual who shares my desk has remained nameless for about 25 years and will probably remain incognito at least as long as it continues to conceal its sex."

Fenner was very formal in his demeanor, manners, and attire (always with a tie), but none of that prevented him from being the butt of jokes from some of his colleagues on the floor, or not enjoying himself in whatever fun they poked at him. Perhaps the greatest joke on him came from his floor colleagues Tom

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Fig. 1. FENNER A. CHACE, JR.: Harvard years (top left); early years at the Smithsonian, holding claws of a *Homarus* lobster (from "The Rhode Islander", January 16, 1949) (top right); mid-career years at the Smithsonian (bottom left). Symbol of the "Smithsonian Order of the Lobster" or S.O.L. (bottom right, claw is about 31 cm in length).

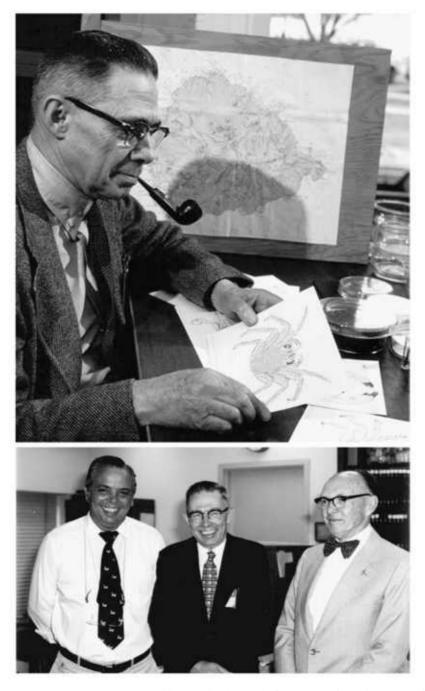


Fig. 2. FENNER A. CHACE, JR., working on the decapods from Ascension Island (Manning & Chace, 1990), and holding illustration of *Percnon abbreviatum* (Dana, 1851) (top). Photo known as "The Trilogy", left to right: R. B. Manning, F. A. Chace, Jr., and H. H. Hobbs, Jr., circa 1970's (bottom).

Bowman and Lou Kornicker who made up a system of informal, internal awards, just to make sure no one took themselves very seriously. This award they named "Smithsonian Order of the Lobster" or S.O.L., for which very detailed rules were written as to how one could win it, as judged by a special committee. As per this committee: "The S.O.L, was established to recognize an action of outstanding inconspicuousness and major insignificance by a member of the Department of Invertebrate Zoology. Upon election to membership, an in-house nominee receives a citation stating briefly the activity which led to his nomination, and also an award of suitability mounted lobster claw, the symbol of the Order". The symbol was to be kept by the winner for one year. The S.O.L. was awarded to Fenner in 4 October 1975 for "his having distinguished himself at the Smithsonian Institution over a 20 year period by resisting the internal impulse and external pressures to deliver a seminar", and jointly to Fenner and his Dutch colleague Lipke B. Holthuis when "Each gave a different name to the same new species of river shrimp from the West Indies, a shrimp which they had recognized as new, but did not name, in a joint publication in 1948." The citation was strengthened by Holthuis' "heroics as an oceanographer", the "drama when he fell overboard on a collecting trip ... how he fought back panic and calmly floated in the sea until rescued", and stated that the award "was presented to him despite the fact that it later developed that unknown to Dr. Holthuis the water was only waist deep."

LIST OF TAXA NAMED BY FENNER A. CHACE, JR.

(All taxa are included whether valid or not, and are arranged alphabetically within each major decapod group. The original spelling is retained. Holotype deposition and number is indicated when known. Abbreviations for repositories are as follows: AM, Australian Museum, Sydney; AMNH, American Museum of Natural History, New York; IRSNB, Institut royal des Sciences naturelles de Belgique, Brussels; BOCYU, Bingham Oceanographic Collection, Yale University; MCZ, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts; MNHN, Muséum national d'Histoire naturelle, Paris; NTM, Northern Territory Museum, Darwin, Australia; NYZS, New York Zoological Society, Department of Tropical Research; RMNH, Nationaal Natuurhistorisch Museum, Leiden; USNM, National Museum of Natural History, Smithsonian Institution, Washington, D.C.; YPM, Division of Invertebrate Zoology, Peabody Museum of Natural History, Yale University, New Haven; ZMA, Zoölogisch Museum, Amsterdam. An asterisk indicates that only paratypes were located.)

STOMATOPODA

Chloridella heptacantha Chace, 1939a, MCZ 10245. Lysiosquilla grayi Chace, 1958a, USNM 100931. Odontodactylus nigricaudatus Chace, 1942a, MCZ 12087. Tetrasquilla Manning & Chace, 1990.

DECAPODA

ASTACIDEA

Eunephrops cadenasi Chace, 1939a, MCZ 10235.

STENOPODIDEA

Microposthema inornatum Manning & Chace, 1990, USNM 221894. Odontozona anaphorae Manning & Chace, 1990, USNM 221886.

CARIDEA

Acanthephyra gracilipes Chace, 1940a, AMNH 12366 (ex NYZS 301689).

Alpheus amblyonix Chace, 1972a, USNM 135356.

Alpheus davaoensis Chace, 1988, USNM 205661.

Alpheus hyphalus Chace, 1988, USNM 205662.

Alpheus macellarius Chace, 1988, USNM 205663.

Alpheus quasirapacida Chace, 1988, USNM 205666.

Alpheus schmitti Chace, 1972a, USNM 135361.

Alpheus suluensis Chace, 1988, USNM 205668.

Alvinocaris Williams & Chace, 1982.

Alvinocaris lusca Williams & Chace, 1982, USNM 184534.

Ambidexter Manning & Chace, 1971.

Ambidexter symmetricus Manning & Chace, 1971, USNM 134097.

Athanas marshallensis Chace, 1955, USNM 94758.

Atyopsis Chace, 1983b.

Australatya Chace, 1983b.

Automate johnsoni Chace, 1955, USNM 94746.

Automate rectifrons Chace, 1972, USNM 135366.

Barbouria antiguensis Chace, 1972, USNM 135375.

 ${\it Batella\ leptocarpus\ Chace,\ 1988,\ USNM\ 205660}.$

Calliasmata rimolii Chace, 1975a, USNM 151205. Caridina blancoi Chace, 1997, USNM 264045.

Clytomanningus Chace, 1997.

Crago zacae Chace, 1937c, AMNH* (ex NYZS 361096).

Crangon arenensis Chace, 1937c, AMNH 12363 (ex NYZS 361059).

Ephyrina childressi Chace, 1986, USNM 211378.

Eugonatonotidae Chace, 1937b (family, replacement for Gomphonotidae Chace, 1936).

Glyphocrangon alispina Chace, 1939a, MCZ 10242.

Glyphocrangon juxtaculeata Chace, 1984, USNM 205090.

Glyphocrangon stenolepis Chace, 1984, USNM 205091.

Glyphocrangon (Plastocrangon) caecescens atlantica Chace, 1939a, MCZ 10243.

Gnathophyllum ascensione Manning & Chace, 1990, USNM 221888.

Gnathophyllum splendens Chace & Fuller, 1971, USNM 134422.

Gomphonotidae Chace, 1936 (family).

Gomphonotus Chace, 1936.

Hayashidonus Chace, 1997.

Heterogenys Chace, 1986.

Hippolyte clarki Chace, 1951a, USNM 91089.

Hippolyte nicholsoni Chace, 1972a, USNM 135377.

Hippolyte mexicana Chace, 1937c, AMNH (ex NYZS 361076) (no type specimens located). Kemphyra Chace, 1986.

Latreutes inermis Chace, 1972a, USNM 135382.

Leptochela (Leptochela) hawaiiensis Chace, 1976, USNM 30750.

Leptochela (Leptochela) irrobusta Chace, 1976, USNM 94729.

Leptochela (Leptochela) papulata Chace, 1976, USNM 23375.

Lipkebe Chace, 1969b.

Lipkebe holthuisi Chace, 1969b, USNM 97433.

Lucaya Chace, 1939a.

Lucaya bigelowi Chace, 1939a, MCZ 10239.

Lysmata anchisteus Chace, 1972a, USNM 135387.

Lysmata philippinensis Chace, 1997, USNM 264048.

Lysmata rathbunae Chace, 1970, USNM 99446.

Macrobrachium crybelum Chace, 1975a, USNM 151199.

Nematocarcinus bituberculatus Chace, 1986, USNM 211375.

Nikoides nanus Chace, 1955, USNM 94741.

Nikoides schmitti Manning & Chace, 1971, USNM 134109.

Notostomus compsus Chace, 1940a, AMNH* (ex NYZS 30322).

Notostomus distirus Chace, 1940a, AMNH 12372 (ex NYZS 311915).

 ${\it Notostomus\ marp to cheles\ Chace,\ 1940a,\ YPM\ 7290\ (ex\ BOCYU\ 1060)}.$

Notostomus miccylus Chace, 1940a, YPM 6620 (ex BOCYU 1061).

Palaemon floridanus Chace, 1942a, MCZ 10136.

Palaemonetes gibarensis Chace, 1943, MCZ 12277.

Palaemonetes inermis Chace, 1943, MCZ 12275.

Palaemonetes (Palaemonetes) cummingi Chace, 1954b, USNM 95795.

Palaemonetes (Palaemonetes) octaviae Chace, 1972a, USNM 135336.

Pantomus affinis Chace, 1937c, AMNH* (ex NYZS 361052).

Paralebbeus Bruce & Chace, 1986.

Paralebbeus zotheculatus Bruce & Chace, 1986, NTM Cr. 00574A (ii).

Paralebbeus zygius Chace, 1997, USNM 264050.

Parapasiphae macrodactyla Chace 1939a, MCZ 10238. [Originally as Parapasiphaë.]

Parapontocaris aspera Chace, 1984, USNM 205025.

Parapontocaris levigata Chace, 1984, USNM 205000.

Pasiphaea hoplocerca Chace, 1940a, AMNH* (ex NYZS 301688).

Pasiphaea liocerca Chace, 1940a, AMNH 12377 (ex NYZS 311229).

Pasiphaea poeyi Chace 1939a, MCZ 10237.

Periclimenaeus bredini Chace, 1972a, USNM 135339.

Periclimenaeus truncoideus Chace & Bruce, 1993, ZMA.

Periclimenes albatrossae Chace & Bruce, 1993, USNM 252658.

Periclimenes bowmani Chace, 1972a, USNM 135341.

Periclimenes calcaratus Chace & Bruce, 1993, USNM 252659.

Periclimenes crinoidalis Chace, 1969b, USNM 125084.

Periclimenes finlayi Chace, 1972a, USNM 135343.

Periclimenes meyeri Chace, 1969b, USNM 125086.

Periclimenes paivai Chace, 1969b, USNM 92855.

Periclimenes (Ancylocaris) lucasi Chace, 1937c, AMNH* (ex NYZS 361090).

Periclimenes (Periclimenes) pedersoni Chace, 1958b, USNM 101894.

Periclimenes (Periclimenes) perryae Chace, 1942a, MCZ 10140.

Physetocaris Chace, 1940a.

Physetocaris microphthalma Chace, 1940a, AMNH 12379 (ex NYZS 30523).

Plesionika acinacifer Chace, 1985, USNM 205209.

Plesionika beebei Chace, 1937c, AMNH* (ex NYZS 36948).

Plesionika fimbriata Chace, 1985, USNM 205210.

Plesionika intermedia Chace, 1985, USNM 205238.

Plesionika kensleyi Chace, 1985, USNM 205211.

Plesionika lophotes Chace, 1985, USNM 205212.

Plesionika macropoda Chace, 1939a, MCZ 10241.

Plesionika martia orientalis Chace, 1985, USNM 205220.

Plesionika mexicana Chace, 1937c, AMNH* (ex NYZS 36940).

Plesionika parvimartia Chace, 1985, USNM 205213.

Plesionika philippinensis Chace, 1985, USNM 205214.

Plesionika pumila Chace, 1985, USNM 205215.

Plesionika quasigrandis Chace, 1985, USNM 205216.

Plesionika reflexa Chace, 1985, USNM 205217.

Plesionika simulatrix Chace, 1985, USNM 205218.

Plesionika spinensis Chace, 1985, USNM 205219.

Pomagnathus Chace, 1937c.

Pomagnathus corallinus Chace, 1937c, AMNH 12383 (ex NYZS 361071).

Pontonia quasipusilla Chace, 1972a, USNM 135346.

Pontophilus demani Chace, 1984, ZMA.

Proboloura Chace, 1976 (subgenus of Leptochela).

Procaridoidea Chace & Manning, 1972 (superfamily).

Procarididae Chace & Manning, 1972 (family).

Procaris Chace & Manning, 1972.

Procaris ascensionis Chace & Manning, 1972, USNM 139461.

Processa fimbriata Manning & Chace, 1971, USNM 134113.

Processa hemphilli Manning & Chace, 1971, USNM 23386.

Processa packeri Manning & Chace, 1990, USNM 221891.

Processa profunda Manning & Chace, 1971, USNM 23382.

Processa riveroi Manning & Chace, 1971, USNM 134122.

Processa tenuipes Manning & Chace, 1971, USNM 97415. Processa vicina Manning & Chace, 1971, USNM 23383.

Psalidopus barbouri Chace, 1939a, MCZ 10240.

Pseudocheles enigma Chace & Brown, 1978, AM P.24190.

Pseudocoutierea antillensis Chace, 1972a, USNM 135347.

Rhynchocinetes albatrossae Chace, 1997, USNM 264046.

Salmoneus setosus Manning & Chace, 1990, USNM 221892.

Salmoneus teres Manning & Chace, 1990, USNM 221889.

Stylodactylus libratus Chace, 1983a, USNM 196081.

Stylodactylus licinus Chace, 1983a, USNM 196076.

 ${\it Stylodactylus\ macropus\ Chace,\ 1983a,\ USNM\ 196079.}$

Synalpheus anasimus Chace, 1972a, USNM 135367. Synalpheus bousfieldi Chace, 1972a, USNM 135369.

Synalpheus brevifrons Chace, 1972a, USNM 135371.

Syntapheus viewyrons Chace, 1972a, OSINN 135371.

Synalpheus obtusifrons Chace, 1972a, USNM 135372.

Thor dobkini Chace, 1972a, USNM 135396. Thor manningi Chace, 1972a, USNM 135393.

Tuleariocaris neglecta Chace, 1969b, USNM 107294.

Typhlatya garciai Chace, 1942b, MCZ 12210.

Typhlatya monae Chace, 1954b, USNM 96325.

Typhlatya rogersi Chace & Manning, 1972, USNM 139465. Typton distinctus Chace, 1972a, USNM 135352. Typton ascensionis Manning & Chace, 1990, USNM 221890. Urocaridella vestigialis Chace & Bruce, 1993, USNM 252657. Vexillipar Chace, 1988.

Vexillipar repandum Chace, 1988, USNM 205670.

ANOMURA

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