An Illustrated Guide
to the
Marine Decapod Crustaceans
of Florida

Part 1

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Introduction

There are more species of shrimps, lobsters, and crabs in the marine waters of the state of Florida than in any other region of the continental United States. This great diversity is the result of three factors: (1) Florida's coastline is extensive; (2) a tremendous number of marine habitats occurs in Florida; and (3) two biogeographic regions come together in Florida, the northern Carolinian and the southern Caribbean (or West Indian). The total number of decapods in the marine shallow waters of Florida is probably close to 900 (see Methods and Materials).

The literature on Florida's decapods is scattered and incomplete and often lacks keys or illustrations. The present contribution is an attempt to remedy this situation. We have compiled a checklist, keys, and illustrations of all marine, shallow-water (<300 m) decapod crustaceans known to occur in Florida, a total of 724 species.

Brief Review of the Literature

Published work on the decapod crustaceans occurring in Florida dates from the earliest explorations by Europeans in the Caribbean and western Atlantic. Many of these contained brief descriptions and even some illustrations (e.g., Sloane, 1725), which were given nomenclatural status by Linnaeus (1758). Many of the species described by Gibbes (1850), Stimpson (1860, 1871), and Kingsley (1878) occurred in the marine waters of Florida. Professor H. E. Webster collected along the gulf coast of Florida, and these collections were published on by Kingsley (1879). Additional Florida collections were reported on by Ives (1891). The Blake expeditions included Florida material, which was published by A. Milne Edwards and Bouvier (1893, 1897, 1902, 1909, 1923).

Modern published work dealing explicitly with Florida marine decapods is scattered. Chace (1942a) described five new species of decapods from the west coast of Florida. Wass (1955) published an annotated list of the decapods of northwestern Florida and described three new species. Provenzano (1959) reviewed the hermit crabs of Florida and described one new species. Hulings (1961) added several new records from deeper water in the northeastern gulf. Wells and Wells (1961) described a new species of crab from the northern gulf, as did Salmon and Atkins (1968) and Nowak and Salmon (1974). Although not dealing specifically with Florida, William's (1965a) excellent volume on the decapods of the Carolinas contains a tremendous amount of information relevant to the Florida fauna. The 1984 revision of this work (Williams, 1984) extended the coverage to include the northeastern Atlantic coast of Florida.

Methods and Materials

The checklist is derived from several sources. First, it is based on a search of the literature, and we have cited these sources in the text. Additions were made based on our own collections, those of Dr. Patsy McLaughlin, and those housed in the following institutions: the Smithsonian Institution's National Museum of Natural History (SI-NMNH); the State of Florida's Department of Natural Resources Collections in St. Petersburg, Florida; and the collections of Harbor Branch Foundation's Indian River Coastal Zone Museum in Fort Pierce, Florida.

Keys were prepared from the literature sources cited in the headings of the keys and verified by us in so far as was possible.

This volume is intended as an identification guide, and we wished to provide a standard format for the illustrations. The illustrations were therefore re-drawn from the sources cited. We were able to locate source illustrations for 722 of the 724 species, although they varied in quality. We were unable to locate specimens or illustrations of the majid crab *Colloses nudus* and the gonoplacid crab *Pilumnoplax elata*. We urge our readers to verify their identifications using the primary literature. The scaling is in a standard format: a single line indicates that the scale is in millimeters, and a double line indicates centimeters; the number of units is indicated by the number of tick marks shown on the scale.

We made every effort to indicate all species known from Florida's marine waters. The checklist, however, is not complete for three reasons: (1) we were working on a time schedule and could not search indefinitely; (2) there are numerous undescribed species that are either currently being studied or in museums, and we did not believe it appropriate to include these; and (3) we are sure that we simply missed some species.

Classification and Arrangement of Taxa and Illustrations

We have generally followed the classification given in Bowman and Abele (1982) and the arrangement in Abele and Felgenhauer (1982). Within families we have arranged the genera (and species within genera) alphabetically. The illustrations are grouped by family and follow the key to that family. They are grouped by genera and within genera by the sequence that they occur in the key with the following exception: Genera containing a single species are grouped together at the end of the family. This was done simply to save space.

Taxonomic nomenclature follows the most recent revision available unless general usage dictates otherwise. This is an identification guide not a revision.
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We thank Lisa Velez for her help in library research and for entering thousands of references into our computerized literature system. Anne Thistle typed the keys and legends, patiently revising them numerous times. This work was supported, in part, by the Department of Environmental Regulation, State of Florida, through a contract administered by the Florida Institute of Government. Partial support was provided by the National Science Foundation grant no. BSR 85-08430.
DORSAL VIEW

VENTRAL VIEW

Schematic of a...
Checklist of the Decapod Crustaceans of Florida

SUBORDER
DENDROBRANCHIATA

FAMILY ARISTEIDAE
Aristaeomorpha foliacea (Risso, 1827)
Description: Zaniquey Alvarez, 1968:42, figs. 22a, b, 24a.--Holthuis, 1980b:8.
Type-locality: Vicinity of Nice.
Distribution: Eastern Atlantic: Bay of Biscay to NW Africa and the entire Mediterranean.
Western Atlantic: South of Massachusetts to the Straits of Florida, Gulf of Mexico, Caribbean Sea and off Venezuela. Indo-West Pacific: East Africa to Japan, Australia, New Zealand and Fiji (Holthuis, 1980b).

Plesiopenaeus edwardsianus (Johnson, 1867)
Description: Crosnier and Forest, 1973:292, figs. 98, 99a, b.--Holthuis, 1980b:11.
Type-locality: Madeira
Distribution: Eastern Atlantic: Portugal to South Africa; (not in the Mediterranean).
Western Atlantic: Grand Bank (43°42'N) to Gulf of Mexico, Caribbean Sea and north coast of South America (Holthuis, 1980b).
Indo-West Pacific: off east Africa to Japan, Australia.

FAMILY BENTHESICYMIDAE
Benthoeogennema intermedia (Bate, 1888)
Description: Bate, 1888:343, pl. 58: fig. 3.--Roberts and Pequegnat, 1970:39.
Type-locality: Off Siera Leone, 01°47'N, 24°26'W; 3386 m; Challenger station 106.
Distribution: Appears to be distributed worldwide; probably pelagic (Roberts and Pequegnat, 1970); Florida (personal communication, P. M. Mikkelsen).

FAMILY PENAEIDAE
Funchalia villosa (Bouvier, 1905)
Description: Burkenroad, 1936:129
Type-locality: Between Canary Islands and Azores.
Distribution: Adults are known from the eastern and western North Atlantic, Mediterranean, the south central South Atlantic, and the Caribbean; larvae known from the western North Atlantic and South Pacific. Florida (personal communication, D. K. Camp, P. M. Mikkelsen).

Metapeneaops gerardoi Pérez Farfante, 1971
Description: Pérez Farfante, 1971:20, figs. 11, 12, 13c.
Type-locality: Off Mayaguez, Puerto Rico, 18°8.3'N, 67°23'W.
Distribution: Bahamas, Florida Keys, West Indies, and Caribbean coast of Central and South America (Pérez Farfante, 1971).

Metapeneaops goodui (Smith, 1885)
Description: Pérez Farfante, 1971:9, figs. 4-8.--Williams, 1984:36, 37, figs. 17-18.
Type-locality: Bermuda.
Distribution: Bermuda; between Capes Hatteras and Lookout, North Carolina, through Florida Straits and along west Florida to Pensacola; Isla de Lobos reef, Veracruz (Ray, 1974), around Yucatan Peninsula, through Caribbean Sea, and along South American coast to Espíritu Santo, Brazil (Coelho and Ramos, 1972; Williams, 1984).

Metapeneaops smithi (Schmitt, 1924)
Description: Schmitt, 1924a:62, figs. 1b, c, 2a, c.--Pérez Farfante, 1971: 29, figs. 13E, 18-22.
Type-locality: Caracas Baai, Curaçao.
Distribution: Bermudas and southeastern Florida to Curaçao, mostly near islands; western Caribbean; Lesser Antilles (Chace, 1972).

Parapeneaus americanus (Rathbun, 1901)
Description: A. Milne Edwards and Bouvier, 1909:231.
Type-locality: Off Mayaguez Harbor, Puerto Rico, 412 m. Fish Havok Stn. 6070.
Distribution: 40°03'N, 70°49'W northeastern Uruguay, 33°26'S, 59°58'W; Puerto Rico; St. Lucia; Martinique.

Parapenea dus politus Smith, 1881
Description: Pérez Farfante, 1982:200, figs. 3-5.--Williams, 1984:37, fig. 19.
Type-locality: Off "Martha's Vineyard" (Smith, 1885) 39°55'00"N, 70°54'15"W, 260 m.
Distribution: Martha's Vineyard, Massachusetts, through Gulf of Mexico; Gulf of Paria off Venezuela (Williams, 1984).
Florida (personal communication, P. M. Mikkelsen).
**Penaeopsis serrata** Bate, 1881
Description: Pérez Farfante, 1980b;748, figs. 28-36.
Type-locality: Off Barbados, "Gulf of Mexico", *Blake Stn.* 275, 399 m.
Distribution: Western Atlantic: from east of Barranque, New Jersey south of Martha's Vineyard, Massachusetts, through the Gulf of Mexico and the Caribbean south to French Guiana; off Rio Grande do Sul, Brazil.
Eastern Atlantic: from south of Cabo San Vicente, Portugal, to off Cadiz, Spain and off the northwest coast of Africa to Tamzak ("Tamxt"), Mauritania (Pérez Farfante, 1980b).

**Penaeus azteca** Ives, 1891
Description: Pérez Farfante, 1969;527, figs. 39-43, 46-48, 50.--Williams, 1984:24, figs. 9, 10.
Type-locality: Veracruz, Mexico.
Distribution: Martha's Vineyard, Massachusetts around Florida Peninsula to northwestern Yucatan (Williams, 1984).

**Penaeus brasiliensis** Latreille, 1817
Description: Pérez Farfante, 1969;562, figs. 68, 75, 76.--Williams, 1984:28, figs. 11-12.
Type-locality: Brazil.
Distribution: Bermudas; off Cape Hatteras, North Carolina to Florida Keys, off Campeche and Yucatan; through Caribbean Sea to Rio Grande do Sul, Brazil (Williams, 1984).

**Penaeus duorarum** Burkenroad, 1939
Type-locality: Off Mobile Bay, Alabama (29°15'N and 88°11'W, 36.5 m *Atlantic Stn.* 2813).
Distribution: Lower Chesapeake Bay through Florida Straits, around Mexico to Cape Catoche and Isla Mujeres at the tip of Yucatan Peninsula (Williams, 1984).

**Penaeus setiferus** (Linnaeus, 1767)
Description: Pérez Farfante, 1969;468, figs. 4-11.--Williams, 1984:32, figs. 15-16.
Type-locality: Off Matanzas Inlet, Florida.
Distribution: Fire Island, New York, to Saint Lucie Inlet, Florida; near Dry Tortugas, Florida (rarely); Gulf of Mexico from Ochelokee River, Florida, to Campeche, Mexico (Williams, 1984).

**Trachypenaeus constrictus** (Stimpson, 1874)
Description: Williams, 1984:38, figs. 20, 21.
Type-locality: Beaufort, North Carolina.
Distribution: Tangier Sound, Chesapeake Bay, to Veracruz, Mexico; Bermuda; Cuba, Puerto Rico and Sombrero Island; Surinam; off Ceara, Sao Paulo, and Santa Catarina, Brazil (Williams, 1984).

**Trachypenaeus similis** (Smith, 1885)
Description: Burkenroad, 1934;96, figs. 10, 11.
Type-locality: Gulf of Paria, Venezuela, 10°37'40"N, 61°42'40"W.
Distribution: Gulf of Mexico to Estado do Pará, Brazil.

**Trachypenaeopsis mobilispinis** (Rathbun, 1920)
Description: Rathbun, 1920;320, figs. 1, 2a-c --Chace, 1972:10.
Type-locality: Cave Round Bay, Saba.
Distribution: Bermudas and Bay of Campeche eastward to Cuba, Cay Sal Bank, Turks, Saba, Barbuda, Jamaica, Virgin Islands and Saint Christopher Islands (Chace, 1972).

**Xiphopenaeus kroyeri** (Heller, 1862)
Description: Williams, 1984:40, figs. 22, 23.
Type-locality: Rio de Janeiro, Brazil.
Distribution: Between Cape Hatteras and Lookout, North Carolina, through Gulf of Mexico and Caribbean Sea to Ponta do Zimbro, Santa Catarina, Brazil (Pérez Farfante, 1978).

**FAMILY SOLENOCERIDAE**

**Hadropenaeus affinis** (Bouvier, 1906)
Description: Pérez Farfante, 1977;317 figs. 9, 43, 44A, 45-49.
Type-locality: Off Cape Verde Island (16°53'N, 25°10'W, 410-460 m).

**Hadropenaeus modestus** (Smith, 1885)
Description: Pérez Farfante, 1977;323, figs. 9, 44, 46, 49-52.
Type-locality: Off Bethany Beach, Delaware, 38°31'N, 73°21'W, 285 m *Fish Hawk Stn.* 1047.
Distribution: Off Delaware Bay, to the Straits
of Florida, and in the Gulf of Mexico, northwest of Charlotte Harbor, Florida; Bahamas throughout the Caribbean to off Barra Grande, Brazil (Pérez Farfante, 1977).

**Hymenopenaeus aphoticus** Burkenroad, 1936
Description: Pérez Farfante, 1977:275, figs. 4C, 8-12.
Type-locality: Turks Island Passage, 1,646-1,728 m, 21°15'40"N, 71°17'06"W, Pawnee Stn. 54.

**Hymenopenaeus debilis** Smith, 1882
Type-locality: Syntypes: SE of Savannah Beach, Georgia, 31°57'00"N, 78°18'35"W, 609 m, Blake Stn. 317; SE of Cape Fear, North Carolina, 33°19'00"N, 76°13'30"W, 836 m, Blake Stn. 323; E of Cape Fear, North Carolina 33°42'15"N, 76°00'50"W, 849 m, Blake Stn. 326.
Distribution: Western Atlantic: from Hudson Canyon, New Jersey (39°55'N, 70°31"W) through Gulf of Mexico and Caribbean Sea to Guyana (08°14'N, 57°38'W). Eastern Atlantic: Azores Islands and northwest Africa from Cape Spartel, Morocco, to Cape Verde Islands, including Canary Islands (Pérez Farfante, 1977).

**Mesopenaeus tropicalis** (Bouvier, 1905)
Description: Pérez Farfante, 1977:332, figs. 56-58, 60-63.--Williams, 1984:18, fig. 5.
Type-locality: Mes des Antilles (Pérez Farfante 1977).
Distribution: Northeast of Cape Lookout, North Carolina, 34°43'N, 76°40'W, through Florida Straits to Alabama; off Cape Catoche and Bahamas through Caribbean Sea and along coast of South America to Rio Grande do Sul, Brazil (Williams, 1984).

**Pleoticus robustus** (Smith, 1885)
Description: Pérez Farfante, 1977:297, figs. 9, 29-36.
Type-locality: South of Curacao 11°43'00"N, 69°09'30"W, 380 m, Albatross Stn. 2125.
Distribution: South of Martha's Vineyard, Massachusetts, through Gulf of Mexico, and the Caribbean to French Guiana (Pérez Farfante, 1977).

**Solenocera atlantis** Burkenroad, 1939
Description: Pérez Farfante and Bullis, 1973:20, figs. 11, 13, 14.--Williams, 1984:19, fig. 6.
Type-locality: Gulf of Mexico off Alabama, 29°45'N, 88°11'W, 37 m, Atlantis Stn. 281.
Distribution: Off Oregon Inlet, North Carolina, around Gulf of Mexico and Caribbean Sea to Cananeia, Sao Paulo, Brazil (Pérez Farfante and Bullis, 1973).

**Solenocera necopina** Burkenroad, 1939
Description: Pérez Farfante and Bullis, 1973:14, figs. 7, 9, 10.--Williams, 1984:20, fig. 7.
Type-locality: Off Mobile Bay, Alabama, 29°16'N, 87°54'W, 229 m, Atlantis Stn. 2377.
Distribution: South of New England (40°04'N, 70°29'W) through Gulf of Mexico and Caribbean Sea to Rio Grande do Sul, Brazil and Uruguay (Williams, 1984; Pérez Farfante, 1977).

**Solenocera vioscui** Burkenroad, 1939
Description: Pérez Farfante and Bullis, 1973:3, figs. 1A, B, 3.--Williams, 1984:21, fig. 8.
Type-locality: About 5 mi. (8km) off Pass a L'Outre, Louisiana, 27 m.
Distribution: Southeast of Cape Lookout, North Carolina, to Dry Tortugas, Florida (but rare off Florida); northern and western Gulf of Mexico to Tabasco (Williams, 1984).

**FAMILY SICYONIIDAE**

**Sicyonia brevirostris** Stimpson, 1871
Description: Williams, 1984:43, figs. 25, 26.
Type-locality: Cuba.
Distribution: Off Norfolk, Virginia, through Bahamas to Southern Cuba; around Gulf of Mexico to southern Texas; Campeche Banks to Isla Contoy, Yucatan; doubtful record of its occurrence on Pacific Coast of southern Mexico (Williams, 1984).

**Sicyonia burkenroadi** Cobb, 1971
Description: Williams, 1984:46, fig. 27.
Type-locality: Gulf of Mexico off Port Isabel, Texas, 26°13'N, 96°45'W, 42 m.
Distribution: Off Cape Lookout, North
Carolina, 34°12'N, 76°11'W, through Gulf of Mexico to Bahía, Brazil (Pérez Farfante 1980a); occasionally as deep as 585 m.

**Sicyonia dorsalis** Kingsley, 1878
Description: Williams, 1984:46, fig. 28.
Type-locality: Fort Jefferson, Dry Tortugas, Florida.
Distribution: Cape Hatteras, North Carolina to Texas; Colombia to French Guiana; Ceara to Santos and Santa Catarina, Brazil (Williams, 1984).

**Sicyonia laevigata** Stimpson, 1871
Description: Williams, 1984:47, fig. 29.
Type-locality: Charleston, South Carolina.
Distribution: Cape Hatteras, North Carolina to northwest Florida; through West Indies to Colombia, and Santa Catarina, Brazil (Pérez Farfante 1980a). Pacific Coast of Panama.

**Sicyonia parri** (Burkenroad, 1934)
Description: Williams, 1984:48, fig.30.
Type-locality: Crooked Island, Bahamas.
Distribution: Beaufort, North Carolina through Gulf of Mexico and West Indies to Bahía, Brazil (Williams, 1984).

**Sicyonia stimpsoni** Bouvier, 1905
Description: Williams, 1984:49, fig. 31.
Type-locality: Off Barbados, 13°03'05"N, 59°36'18"W, 185 m.
Distribution: Near Cape Hatteras through Florida Straits, and including west Florida, to Barbados and Columbia to Surinam (Williams, 1984).

**Sicyonia typica** (Boeck, 1864)
Description: Williams, 1984:49, fig.32.
Type-locality: Molde Fjord, west coast of Norway (erroneous locality, evidently incorrectly labeled).
Distribution: Off Wrightsville Beach, North Carolina, through Gulf of Mexico; Cuba through West Indies to near Ilha de Santa Catarina, Brazil (Williams, 1984).

**FAMILY SERGESTIDAE**

**Acetes americanus caroliniae** Hansen, 1933
Description: Williams, 1984:50, fig. 33.
Type-locality: Beaufort Inlet (about 34°47'N), North Carolina.
Distribution: Lower Chesapeake Bay (Mobjack Bay and York River) through Gulf of Mexico to Panama, Surinam and French Guiana (Williams, 1984).

**Sergestes armatus** Kröyer, 1855
Description: Kensley, 1971:232, fig. 8.
Type-locality: Tropical Atlantic.
Distribution: North Atlantic, Mediterranean, off Azores and Canaries, South Atlantic. Florida (85-250 m) (personal communication, P. M. Mikkelsen).

**Sergestes atlanticus** H. Milne Edwards, 1830
Description: Kensley, 1971:234, fig. 9.
Type-locality: Near Azores.
Distribution: Mediterranean, North Atlantic, off Azores and Canaries, Sagassum Sea, Off Cape Point. Florida (75-250 m) (personal communication, P. M. Mikkelsen).

**Sergestes edwardsii** Kröyer, 1855
Description: Crosnier and Forest, 1973:320, figs. 108b, 106b-c, 110c-d.
Type-locality: Tropical Atlantic from 3 degrees S to 10 degrees N.
Distribution: Atlantic Ocean; also reported from the Indo-Pacific and Eastern Pacific but there is some question about the identity of material outside of the Atlantic (Crosnier and Forest, 1973). Florida (65-300 m) (personal communication, P. M. Mikkelsen).

**Sergestes henseni** Ortmann, 1893
Description: Ortmann, 1893:38, pl. 3: fig. 3.
Type-locality: Northern Atlantic off West Africa.
Distribution: Mediterranean; north Atlantic; western and southern Atlantic; (Crosnier and Forest, 1973). Florida (85-250 m) (personal communication, P. M. Mikkelsen).

**Sergestes paraseminudus** Crosnier and Forest, 1973
Description: Crosnier and Forest, 1973:313, figs. 105d, 106c-d.f.
Type-locality: Tropical eastern Atlantic; 01°55'S, 8°30'E; 0-50 m.
Distribution: Tropical eastern Atlantic; Florida (85-250 m) (personal communication, P. M. Mikkelsen).

**Sergestes pectinatus** Sund, 1920
Description: Kensley, 1971:240, fig. 13.
Type-locality: "Atlantic Ocean, equatorial region."

**Sergestes sargassi** Ortmann, 1893
Description: Hansen, 1922:148, pl. 9: fig. 2a-p
SUBORDER PLEOCYEMATA

INFRAORDER STENOPODIDEA

FAMILY STENOPODIDAE

Microprosthema semilaeve (Von Martens, 1872)
Description: Holthuis, 1946:54, pl. 3: fig. 1.
Type-locality: Cuba.
Distribution: Bahamas, southern Florida, and Yucatan to Fernando de Noronha, Brazil (Chace, 1972).

Odontozona libertae Gore, 1981
Description: Gore, 1981:153, figs. 4a-c, 5a-l.
Type-locality: Elbow Reef, off Key Largo, Monroe County, Florida.
Distribution: Known only from the type-locality.

Stenopus hispidus (Olivier, 1811)
Description: Williams, 1984:54, fig. 35.
Type-locality: "Australasian seas.'
Distribution: Western Atlantic from North Carolina (Kuczynski and Jenner, 1969) and Bermuda, southern Florida through Gulf of Mexico (Ray, 1974) to Fernando de Noronha and Espirito Santo, Brazil (Coelho and Ramos, 1972). Indo-Pacific from Durban, South Africa, and Red Sea, to Japan, Hawaii, western Australia south to ~24 degrees South and eastern Australia as far south as Shellharbour, New South Wales, through New Caledonia, New Hebrides, Lord Howe Island, northern New Zealand, to Tuamotu Archipelago (Yaldwyn, 1968; Williams, 1984).

STENOPODIDEA

FAMILY LUCIFERIDAE

Lucifer faxoni Borradaile, 1915
Description: Williams, 1984:52, fig. 34.
Type-locality: Hampton Roads, Virginia (Chace 1972).
Distribution: "Coastal waters of North and South America from Long Island Sound to Rio de Janeiro," around Gulf of Mexico and throughout Caribbean Sea (probably widespread); Bermuda and scattered mid-Atlantic occurrences in path of Gulf Stream; Bay of Dakar, Senegal (Bowman and McCain, 1967).

Lucifer typus H. Milne Edwards, 1837
Description: Bowman and McCain, 1967:660, figs. 1a, b, 2-7.
Type-locality: Tropical North Atlantic.
Distribution: Warmer open waters of the north and south Atlantic oceans approximately between the 40 degrees parallels. Unlike L. faxoni, this species is not usually found in inshore waters (Bowman and McCain, 1967).
Type-locality: Rio Itahai Itahai, state of Santa Catarina, Brazil.
Distribution: Rio Itahai Itahai, State of Santa Catarina, and Rio Gujaú, Recife, state of Pernambuco, Brazil; introduced into the freshwaters of southern Florida (Abele, 1972c).

FAMILY OPHOPHORIDAE

Acanthephyra purpurea A. Milne Edwards, 1881
Description: Chace, 1940a:134, figs. 11-17.
Type-locality: Berlengas Island, off the West Coast of Portugal, 2590 m.
Distribution: North Atlantic between about 20° and 53° N latitude (Chace, 1940a).
Florida (85-250 m over 750 m) (personal communication, P. M. Mikkelsen).

Janicella spinicuda (A. Milne Edwards, 1883)
Description: Chace, 1986: figs. 23, 24.
Type-locality: Off Casablanca, Morocco: Travailleur Stn. 65; 34°13'30"N, 7°43'00"W, 636 m, muddy sand.
Distribution: Apparently widespread mesopelagically in the tropical seas of the world (except in the eastern Pacific off the Americas) (Chace, 1986).

Oplophorus gracilirostris A. Milne Edwards, 1881
Description: Chace, 1986: figs. 32a-32c.
Type-locality: Off Dominica, Lesser Antilles, 216 m.
Distribution: Off southeastern Africa, Indian Ocean, Indonesia, Philippines, southern Japan, Fiji Islands, Hawaii, Gulf of Mexico, Bahamas, Caribbean Sea; mesopelagic (Chace, 1986).

Oplophorus spinosus (Brullé, 1839)
Description: Crosnier and Forest, 1973:25.
Type-locality: Canary Islands (Holthuis, 1949b).
Distribution: Indian Ocean, southern Japan, off Hawaii, seamounts west of North America, and northeast of Easter Island, western and eastern subtropical North Atlantic, central South Atlantic; mesopelagic (Chace, 1986). Florida (150 m) (personal communication, P. M. Mikkelsen).

Systellaspis debilis (A. Milne Edwards, 1881)
Description: Chace, 1986: figs. 34g-4, 35 e-f.
Type-locality: "... trouvée à une profondeur de 500 brasses dans le canal de Bahama."
Distribution: South Africa, Indian Ocean, Philippines, Indonesia, Hawaii, western Atlantic from south of Greenland to Gulf of Mexico and Bahamas and eastern Atlantic from the Faeroe Islands to Angola; mesopelagic (Chace, 1986).

FAMILY PASIPHAEIDAE

Leptocheila bermudensis Gurney, 1939
Description: Chace, 1976:7, figs. 5-7.
Type-locality: Seven miles south of Bermuda between 1000 m and surface.
Distribution: Bermuda to Barbados and southwestern Gulf of Mexico (Chace, 1976).

Leptocheila carinata Ortmann, 1893
Description: Chace, 1976:45, figs. 35-37.--Williams, 1984:59, fig. 39.
Type-locality: Off Baia de Marajo, Para, Brazil, 50-100 m.
Distribution: Georges Bank; South Carolina; Gulf of Mexico through Bahamas to Para, Brazil (Williams, 1984).

Leptocheila papulata Chace, 1976
Description: Chace 1976:26, figs. 22-24.
Type-locality: East of Cape Lookout, North Carolina, 34°35'30"N, 75°45'30"W, 59 m.
Distribution: Georges Bank off Cape Cod, Massachusetts (Fontaine, 1977); North Carolina to Georgia; eastern Gulf of Mexico (Williams, 1984).

Leptocheila serratorbita Bate, 1888
Description: Chace, 1976:36, figs. 29-31.--Williams, 1984:58, fig. 38.
Type-locality: Saint Thomas, Virgin Islands.
Distribution: Beaufort, North Carolina; South Carolina; western Gulf of Mexico and Florida Keys to Leeward Islands (Williams, 1984).

FAMILY BRESILIIDAE

Disclus atlanticus Gurney, 1939
Description: Williams, 1984:62, fig. 41.
Type-locality: The Reach, Bermuda.
Distribution: Bermuda; off Savannah, Georgia, off Fort Pierce, Florida; Guadeloupe; Cape Verde Islands and Gabon; off northern Kenya (Bruce, 1975; Gore and Wilson, 1978); (Williams, 1984).
Discias serratiostris Lebour, 1949
Description: Wilson and Gore, 1979:311, fig. 1
Type-locality: Off Castle Roads, Bermuda.
Distribution: 3 mi. off Castle Roads,
Bermuda, Vero Beach, Indian River County,
on the central eastern coast of Florida.

Pseudocheles chacei Kensley, 1983
Description: Kensley, 1983:22, figs. 18-22.
Type-locality: Looe Key, Florida.
Distribution: Looe Key, Florida to Carrie
Bow Cay, Belize.

FAMILY EUGONATONTIDAE
Eugonatontus crassus (A. Milne Edwards, 1881)
Description: A. Milne Edwards, 1881:10.--
Boone, 1927:106, figs. 22, 23.
Type-locality: Caribbean Sea, off Grenada,
479 m, Blake Sm. 249.
Distribution: Bahamas, Guianas, and
westward into eastern Gulf of Mexico,
Yucatan, and Honduras; 26°28'N, 84°42'W,
228 m; 26°20'N, 84°42'W, 216 m, from
stomach of Epinephalus flavidimbatus.
Pacific: from Borneo through the Philippines
to Japan.

FAMILY RHYNCHOCINETIDAE
Rynchocinetes rigens Gordon, 1936
Description: Gordon, 1936:75, figs. 1-7.--
Manning, 1961a:1, figs. 1, 2.
Type-locality: Pontinha Bay, Madeira Island.
Distribution: Florida; Bahamas; Virgin
Islands; Bermuda; Madeira and Azores.

FAMILY GNATHOPHYLLIDAE
Gnathophyllum mineri Schmitt, 1933
Description: Schmitt, 1933:7, fig. 3.
Type-locality: Coral reefs at Ballena Point,
Ensenada, Puerto Rico.
Distribution: Southeastern Florida, Yucatan,
and Caribbean Sea (Chace, 1972).

Gnathophyllum americanum Guérin-Meneville, 1855
Description: Manning, 1963:58, figs. 5, 6.
Type-locality: Cuba.
Distribution: Bermudas, southern Florida,
Gulf of Mexico, and Caribbean Sea; Canary
Islands and Indo-Pacific region from the Red
Sea to the Tuamotu Archipelago (Chace,
1972).

Gnathophyllum circeum Manning, 1963
Description: Manning, 1963:54, figs. 3, 4.
Type-locality: Alligator Reef, Monroe
County, Florida.
Distribution: Florida Keys and Great Exuma
Island, Bahamas (Chace, 1972).

Gnathophyllum modestum Hay, 1917
Description: Williams, 1984:90, fig. 62.
Type-locality: 20 mi. SW Beaufort, North
Carolina.
Distribution: Off Beaufort, North Carolina
(Williams, 1984); Florida Middle Grounds,
Panama City and Biscayne Bay Florida
(Dardeau et al., 1980).

FAMILY PALAEONIDAE
Anchistiodes antiquensis (Schmitt, 1924)
Description: Williams, 1984:78, fig. 52.
Type-locality: English Harbor, Antigua.
Distribution: Off Charleston, South Carolina
(Wenner and Read, 1982); off west Florida
through West Indies to Maranhao,
Pernambuco, and Alagoas, Brazil (Coelho
and Ramos, 1972); Bermuda (Williams,
1984).

Brachycarpus biunguiculatus (Lucas, 1849)
Description: Williams, 1984:63, fig. 42.
Type-locality: Oran and Bone, Algeria.
Distribution: Virtually pantropical (Bruce,
1974); east and west American coasts,
Mediterranean; West Africa; and Indo-Pacific
region. Western Atlantic distribution: Cape
Fear, North Carolina, western Gulf of Mexico
(Ray, 1974; Pequegnat and Ray, 1974)
through West Indies to Curacao and Old
Providence Island; Bermuda (Williams,
1984).

Leander paulensis Ortmann, 1897
Description: Manning, 1961b:525.-- Chace,
1972: 19.
Type-locality: Sao Paulo, Brazil.
Distribution: Sandy Key Basin, in Florida
Bay off Flamingo, Florida; Sao Paulo, Brazil.

Leander teniscornis (Say, 1818)
Description: Williams, 1984:65, fig. 43.
Type-locality: Newfoundland Banks.
Distribution: Tropical and subtropical waters
all over world except for west coast of
Americas; Newfoundland Banks (occasionally
mouth of Bay of Fundy and New England;
Wigley, 1970; Williams and Wigley, 1977) to
Falkland Islands in Western Atlantic (Holthuis, 1952; Bruce, 1974; Williams, 1984).

**Lipkebe holthuisi** Chace, 1969
Type-locality: Gulf of Mexico: west-northwest of Dry Tortugas, 25°13′N, 83°55′W.
Distribution: Northeastern Gulf of Mexico off Florida; Dry Tortugas; Brazil (Shaw et al., 1977).

**Macrobrachium acanthurus** (Wiegmann, 1836)
Description: Williams, 1984:66, fig. 44-45.
Type-locality: Brazilian coast.

**Macrobrachium carcinus** (Linnaeus, 1758)
Description: Holthuis, 1952:114, pl. 30, pl. 31: figs. a-c.
Type-locality: "in Americal fluvii" (restricted to Jamaica by Holthuis, 1952).
Distribution: Distribution of this species lies largely along the temperate east coast of the United States. The range extends from St. Augustine, St. Johns County, and Silver Glen Springs, Marion County, Florida, southward around the Gulf of Mexico and Caribbean Sea to Santa Catarina, Brazil (Williams, 1984).

**Macrobrachium crenulatum** Holthuis, 1950
Description: Holthuis, 1952:107, pl. 27: figs. a-d, pl. 28.
Type-locality: Rio Peje Bobo, Panama.

**Macrobrachium ohione** (Smith, 1874)
Description: Williams, 1984:68, fig. 46.
Type-locality: Ohio River at Cannelton, Indiana.
Distribution: A narrow zone along Atlantic seaboard from James River, Hopewell, Virginia (Hobbs and Massmann, 1952), to southern Georgia; widespread from coastal Alabama to Aransas Bay, Texas; Mississippi River and tributaries upstream to McCurtain County, Oklahoma, Fort Smith, Arkansas; St. Louis, Missouri; Washington County, Ohio (Hedgepeth, 1949; Williams, 1984).

**Macrobrachium ofersii** (Wiegmann, 1836)
Description: Williams, 1984:70, figs. 47-48.
Type-locality: "Brazilian Coast."
Distribution: Lower Cape Fear River near Southport, North Carolina; Florida; Louisiana; Texas; Veracruz, Mexico, to Santa Catarina, Brazil. Villalobos (1969) gave a distributional map for this and related species (Williams, 1984).

**Neopontoides beaufortensis** Borradale, 1920
Description: Williams, 1984:80, fig. 53.
Type-locality: Beaufort, North Carolina.
Distribution: Beaufort, North Carolina, to Grand Isle, Louisiana; Caledonia Bay, Panama; Antigua (Williams, 1984).

**Palaemon florianus** Chace, 1942
Description: Holthuis, 1952:197, pl. 48: figs. a-j.
Type-locality: Captiva Island, W Florida.
Distribution: West coast of Florida.

**Palaemon northropi** (Rankin, 1898)
Type-locality: Nassau, New Providence, Bahama Islands.
Distribution: Bermudas and Florida to Estado de Sao Paulo, Brazil (Chace, 1972).

**Palaemonetes intermedius** Holthuis, 1949
Description: Williams, 1984:75, fig. 50.
Type-locality: Iron Box Bay, Chincoteague Bay, Virginia.
Distribution: Vineyard Sound, Massachusetts, to Port Aransas, Texas (Holthuis, 1952); Bahia de la Ascension, Quintana Roo, Mexico (Chace, 1972; Williams, 1984).

**Palaemonetes paludosus** (Gibbes, 1850)
Description: Holthuis, 1952:207, pl. 51: figs. e-i.
Type-locality: St. Andrews, Charleston County, South Carolina.
Distribution: Fresh-waters E of Alleghenies, from New Jersey to Florida. Indian River lagoon, Florida (personal communication, P. M. Mikkelsen).

**Palaemonetes pugio** Holthuis, 1949
Description: Williams, 1984:76, fig. 51.
Type-locality: Lagoon near Cove Point Light, Chesapeake Bay.
**Palaemonetes vulgaris** (Say, 1818)
Description: Williams, 1984:72, fig. 49.
Type-locality: Atlantic coast of United States.
Distribution: Southern Gulf of St. Lawrence from northern Cape Breton Island (Bousfield, 1956) through Northumberland Strait to St. Simons Inlet and Miscou Harbor near Portage Bay (Bousfield and Laubitz, 1972), southward to Cameron County, Texas (Williams, 1984).

**Periclimenaeus chacei** Abele, 1971
Description: Abele, 1971:38, figs. 1, 2.
Type-locality: Northeastern Gulf of Mexico off the west coast of Florida.
Distribution: Known from the type-locality and Indian River, Florida (Personal communication with R. H. Gore).

**Periclimenaeus maxillulidens** (Schmitt, 1936)
Description: Holthuis, 1951b:87, pl. 26: figs. a-o.
Type-locality: Entrance to Lac. Bonaire.
Distribution: Northeastern Gulf of Mexico and Bonaire (Chace, 1972).

**Periclimenaeus pearsei** (Schmitt, 1932)
Description: Holthuis, 1951b:93, pl. 28: figs. a-r.
Type-locality: Tortugas, Florida.
Distribution: Tortugas, Florida.

**Periclimenaeus perlatus** (Boone, 1930)
Description: Holthuis, 1951b:99, pl. 30: figs. a-l, pl. 32: fig. a.
Type-locality: Gonave Bay, Haiti.
Distribution: Dry Tortugas, Florida to Panama (Chace, 1972).

**Periclimenaeus schmitti** Holthuis, 1951
Description: Williams, 1984:81, fig. 54.
Type-locality: Tortugas, Florida.

**Periclimenaeus wilsoni** (Hay, 1917)
Description: Williams, 1984:82, fig. 55.
Type-locality: Fishing grounds, 20 mi. off Beaufort Inlet. North Carolina.
Distribution: Off Beaufort, North Carolina; off Sapelo Island, Georgia; off Loggerhead Key, near Tortugas, and Franklin County, Florida (Williams, 1984).

**Periclesus americanus** (Kingsley, 1878)
Description: Williams, 1984:83, fig. 56.
Type-locality: Key West, Florida.
Distribution: Beaufort, North Carolina; to western Gulf of Mexico (Felder and Chaney, 1979), and through West Indies to Aruba; Para to São Paulo, Brazil (Coelho and Ramos, 1972; Williams, 1984).

**Periclesus carabicus** Holthuis, 1951
Description: Holthuis, 1951b:110, pl. 32: figs. h-j, pl. 34.
Type-locality: Buccoo Reef, Tobago.
**Periclimenes harringtoni** Lebour, 1949
Description: Holthuis, 1951b:35, pl. 9: figs. a-k.
Type-locality: Harrington Sound, Bermuda.
Distribution: Harrington Sound, Bermuda, and Dry Tortugas, Florida.

**Periclimenes iridescens** Lebour, 1949
Description: Williams, 1984:85, fig. 57.
Type-locality: Off Castle Roads, Bermuda.
Distribution: Northeast off Cape Hatteras, 35°32.9'N, 75°11.9'W (Herbst et al. 1979); southern and northwestern Florida; Tobago; Cabagua Island, Venezuela; Bermuda (Chace 1972; Williams, 1984).

**Periclimenes longicaudatus** (Stimpson, 1860)
Description: Williams, 1984:86, fig. 58.
Type-locality: Coast of Carolina.
Distribution: Cape Hatteras, North Carolina, to southwestern Florida; West Indies to São Paulo, Brazil. There are doubtful records from the Indian Ocean and deeper waters of the Gulf of Mexico (Holthuis, 1951b; Williams, 1984).

**Periclimenes magnus** Holthuis, 1951
Description: Holthuis, 1951b:52, pl. 15: figs. a-f.
Type-locality: Gulf of Mexico, off Aransas, Texas, 27°40'N, 96°34'W, 50 m, *Pelican* Sm. 42.
Distribution: Type-locality and Murray Key, Florida Bay (Rouse, 1970).

**Periclimenes pandionis** Holthuis, 1951
Description: Holthuis, 1951b:41, pl. 11: figs. a-i—l—Gore et al., 1981:254, fig. 1.
Type-locality: Gulf stream off Key West, Florida, 24°21'55"N, 81°58'25"W (179 m, *Fish Hawk* Sm. 7279).
Distribution: Indian River and Key West, Florida (Gore et al., 1981).

**Periclimenes pedersoni** Chace, 1958
Description: Williams, 1984:87, fig. 59.
Type-locality: Simms (Lyford) Cay, New Providence Island, Bahamas.
Distribution: East of Cape Lookout, North Carolina, 34°35.5'N, 75°5.5'W (Herbst et al. 1979); off northwest Florida, Bahamas, through West Indies to Bonaire; Belize (Williams, 1984).

**Periclimenes perryae** Chace, 1942
Description: Holthuis, 1951b:31, pl. 7: figs. a-o.
Type-locality: Off Sanibel Island, Lee County, W Florida.
Distribution: Florida Middle Grounds (Hopkins et al., 1977) and from shallow water (10 m) off Sanibel Island, Lee County, West Florida.

**Periclimenes rathbunae** Schmitt, 1924
Description: Holthuis, 1951b:58, pl. 17: figs. a-h.
Type-locality: Spanish Port, Curaçao.
Distribution: Netherlands West Indies, Spanish Port, Curaçao; tentatively Dry Tortugas, Florida.

**Periclimenes yucatanicus** (Ives, 1891)
Description: Limbaugh, Pederson, and Chace, 1961:240, fig. 2.
Type-locality: Off Progreso, Estado de Yucatan, Mexico.
Distribution: Southern Florida to Colombia (Chace, 1972).

**Pontonia domestica** Gibbes, 1850
Description: Williams, 1984:88, fig. 60.
Type-locality: South Carolina.
Distribution: Atlantic Beach near Beaufort Inlet, North Carolina, to Gulf of Mexico S of Houma, Terrebonne Parish, Louisiana (USNM); Bahamas; Madeira (Williams, 1984).

**Pontonia margarita** Smith, 1869
Description: Williams, 1984:89, fig. 61.
Type-locality: Bay of Panama.
Distribution: Atlantic coast: Drumm Inlet to Beaufort Inlet, North Carolina; east and west Florida. Pacific coast: Gulf of California to Colombia; Galapagos Islands (Williams, 1984).

**Pontonia unidens** Kingsley, 1880
Type-locality: Key West, Florida.
Distribution: Known only from the original type-series from Key West, Florida.

**Pontoniopsis pauleae** Gore, 1981
Description: Gore, 1981:139, figs. 1a-p.
Type-locality: Carys Fort Reef, off Key Largo, Monroe county, Florida.
Distribution: Known only from the type-locality.
**Pseudocutieerea antillensis** Chace, 1972
Description: Chace, 1972:43, figs. 11a-b.
Type-locality: Saba Bank at 17°28'N, 63°13'W.
Distribution: Known from the type-locality; eastern Florida.

**Tuleariocaris neglecta** Chace, 1969
Description: Chace, 1969:266, figs. 10, 11.
Type-locality: St. James, Barbados.
Distribution: Florida Keys, Dominica, Barbados, Curaçao, Madeira, on *Diadema antillarum* (Chace, 1972).

**Typton carneus** Holthuis, 1951
Description: Chace, 1972:46, fig. 12.
Type-locality: Tortugas, Florida.
Distribution: South and west coasts of Florida and Bahamas to Tobago (Chace, 1972).

**Typton distinctus** Chace, 1972
Description: Chace, 1972:49, figs. 13, 14.
Type-locality: Los Arroyos, Provincia de Pinar del Rio, Cuba.

**Typton gnathophyloides** Holthuis, 1951
Description: Holthuis, 1951b:159, pl. 50: figs. a-l.
Type-locality: Dry Tortugas, Florida.
Distribution: Same as the type-locality.

**Typton prionurus** Holthuis, 1951
Description: Holthuis, 1951b:165, pl. 52: figs. a-l.
Type-locality: Tortugas, Florida between Middle Ground and White Shoal, 18 m. (W. L. Schmitt coll., Sm 45-30).
Distribution: Same as the type-locality.

**Typton tortugas** McClendon, 1911
Description: Holthuis, 1951b:153, pl. 48: figs. a-o.
Type-locality: Dry Tortugas, Florida.
Distribution: Outside Castle Harbour, Bermuda (Gurney, 1936), Dry Tortugas, Florida (McClendon, 1911; Schmitt, 1930; Pearse, 1932); Gulf of California (Holthuis, 1951).

**Typton vulcanus** Holthuis, 1951
Description: Holthuis, 1951b:157, pl. 49: figs. a-n.
Type-locality: Dry Tortugas, Florida.
Distribution: South of Tortugas, Florida.

**Veleroniopsis kimallynae** Gore, 1981
Description: Gore, 1981:147.
Type-locality: Elbow Reef, off Key Largo, Monroe County, Florida.
Distribution: Known only from the type-locality.

**FAMILY ALPHEIDAE**

**Alpheopsis labis** Chace, 1972
Description: Chace, 1972:55, fig. 15.
Type-locality: Charlotte Point, English Harbor, Antigua Island.

**Alpheopsis trispinosus** (Stimpson, 1861)
Description: Banner and Banner, 1973:337, fig. 14.
Type-locality: Port Jackson, Australia.

**Alpheus ambyonyx** Chace, 1972
Description: Chace, 1972:59, fig. 16.
Type-locality: Near center of Arrecife Nictehabin, Bahia de la Ascension, Territorio de Quintana Roo, Mexico, on or under coral in 1-5 feet of water.
Distribution: Territorio de Quintana Roo, Mexico; Puerto Rico; Saint Thomas; and Dominica; (Chace, 1972). Eastern and Southern Florida (personal communication, P. M. Mikkelsen).

**Alpheus armatus** Rathbun, 1901
Type-locality: Ponce, Puerto Rico.
Distribution: Throughout the West Indian region from the Bahamas and southern Florida to Tobago and westward to the Yucatan Peninsula (Chace, 1972).

**Alpheus armillatus** H. Milne Edwards, 1837
Description: Williams, 1984:92, fig. 63.
Type-locality: Antilles.
Distribution: North Carolina, through Gulf of
Mexico and West Indies to Cananeia, São Paulo, Brazil; Bermuda (Holtshuis, 1956).

**Alpheus bouvieri** A. Milne Edwards, 1878
Description: Crosnier and Forest, 1966:273, fig. 22.
Type-locality: Cape Verde Islands.
Distribution: Bermudas and Antigua Island to Tobago and Fernando de Noronha; eastern Atlantic from the Cape Verde Islands and Guinea to São Tomé and Congo (Chace, 1972). Eastern and Southern Florida.

**Alpheus candei** Guérin-Méneville, 1855
Description: Coutière, 1910:486, fig. 1.
Type-locality: Cuba.
Distribution: Apparently known only from the Dry Tortugas, Florida and Cuba (Chace, 1972).

**Alpheus cristulifrons** Rathbun, 1900
Description: Crosnier and Forest, 1966:260, figs. 17, 18.
Type-locality: Fernando de Noronha.
Distribution: Western tropical Atlantic from the Dry Tortugas, Florida to Fernando de Noronha and westward to the Yucatan Peninsula; also the islands of São Tomé and Príncipe in the eastern Atlantic (Chace, 1972).

**Alpheus cylindricus** Kingsley, 1878
Description: Crosnier and Forest, 1966:257, fig. 16.
Type-locality: Archipiélago de las Perlas, Gulf of Panama.
Distribution: Bermudas and Florida to Barbados; eastern Atlantic from the islands of Príncipe, São Tomé, and Annobon; eastern Pacific from the Gulf of California, the Gulf of Panama, and the Galapagos Islands (Chace, 1972).

**Alpheus estuariensis** Christoffersen, 1984
Description: Christoffersen, 1984:191, figs. 1, 2.
Type-locality: Rio Potengi estuary, Natal, State of Rio Grande do Norte, Brazil.
Distribution: Florida; Mississippi to Texas; Cuba; Dominican Republic; Curaçao; Trinidad; Ceará to Parana, Brazil.

**Alpheus floridanus** Kingsley, 1878
Type-locality: Fort Jefferson, Dry Tortugas, Florida.
Distribution: Gulf of Mexico to Estadio da Bahia, Brazil; eastern Atlantic from Guinea to Congo (Chace, 1972).

**Alpheus formosus** Gibbes, 1850
Description: Williams, 1984:94, fig. 64.
Type-locality: Key West, Florida.
Distribution: Near Beaufort, North Carolina through Gulf of Mexico (Ray, 1974; Felder and Chaney, 1979) and West Indies to São Paulo, Brazil.

**Alpheus heterochaelis** Say, 1818
Description: Williams, 1984:95, figs. 65.--Christoffersen, 1984:200, figs. 5-7.
Type-locality: Amelia Island, Nassau County, Florida.
Distribution: North Carolina to the State of Paraíba, Brazil (Christoffersen, 1984).

**Alpheus malleator** Dana, 1852
Description: Crosnier and Forest, 1966:240, fig. 10.
Type-locality: Rio de Janeiro, Brazil?
Distribution: Puerto Rico to Estadio de São Paulo, Brazil; eastern Atlantic from Senegal to Congo; eastern Pacific from the Gulf of California, Ecuador, and the Galapagos Islands (Chace, 1972).

**Alpheus normanni** Kingsley, 1878
Description: Williams, 1984:97, fig. 66.
Type-locality: Pacific coast of Panama.
Distribution: Bermuda; around Cape Charles, Virginia, and lower Chesapeake Bay through Gulf of Mexico (Ray, 1974) and West Indies to São Paulo, Brazil (Christoffersen, 1979); Gulf of California and Panama (Chace, 1972; Williams, 1984).

**Alpheus nuttingi** (Schmitt, 1924)
Description: Schmitt, 1924b:78, pl. 2: figs. 4-6.
Type-locality: Pelican Island, Barbados.
Distribution: Florida Keys to Estadio de Alagoas, Brazil and westward to Isla de Providencia and Panama (Chace, 1972).

**Alpheus paracrinus** Miers, 1881
Description: Crosnier and Forest, 1966:253, fig. 15.
Type-locality: Goree, Senegal.
Distribution: Virtually pantropical; to a depth of 18 m. In Western Atlantic, from the Bermudas and the northeastern Gulf of Mexico to Tobago (Chace, 1972).
Alpheus peasei (Armstrong, 1940)  
Description: Verrill, 1922:68, fig. 68, fig. 5b, pl.19: figs. 3a-d, pl. 20: fig. 1, pl. 21: figs. 6, 6a, pl. 24: figs. 2-4, pl. 29: fig. 1a-t.  
Type-locality: Castle Harbour, Bermudas.  
Distribution: Bermudas and Florida Keys to Tobago and westward to Isla de Providence and the Yucatan Peninsula (Chace, 1972).

Alpheus schmitti Chace, 1972  
Description: Chace, 1972:70, figs. 21, 22.  
Type-locality: Grand Anse Bay outside Saint Georges Harbour, Grenada, in partially exposed conglomerate rock and coral ledge along shore.  
Distribution: Known from the type-series, the Florida Keys, Antigua Island, and Tobago (Chace, 1972).

Alpheus thomasi Hendrix and Gore, 1973  
Description: Hendrix and Gore, 1973:413, figs. 1-3.  
Type-locality: Virginia Beach, Virginia Key, Miami, Florida.  
Distribution: Cape Florida, Key Biscayne, Dade County; and from Jupiter Inlet in Palm Beach County, and Walton Rocks, St. Lucie County, about 5 miles south of Ft. Pierce, Florida (Hendrix and Gore, 1973).

Alpheus viridarii (Armstrong, 1949)  
Description: Armstrong, 1949:8, fig. 2.  
Type-locality: Barahona, Dominican Republic.  
Distribution: Florida Keys to Trinidad and westward to Curaçao and the Yucatan Peninsula (Chace, 1972).

Alpheus websteri Kingsley, 1880  
Description: Rankin, 1898:249, pl. 30: fig. 6 (as Alpheus nigropinnatus).--Crosnier and Forest, 1966:236 (as Alpheus ridleyi).  
Type-locality: Key West, Florida.  
Distribution: Bahamas to Fernando de Noronha, Brazil and westward to the Yucatan peninsula (Chace, 1972). Looe Key, Florida (personal communication, D. L. Felder).

Automate evermannii Rathbun, 1901  
Description: Williams, 1984:99, fig. 67.  
Type-locality: Off Aguadilla, Puerto Rico.  
Distribution: North Carolina(?); Georgia to Texas and Puerto Rico; eastern Atlantic from Cape Verde Islands and Liberia to Nigeria (Chace, 1972).

Automate gardineri Coutière, 1902  
Description: Banner and Banner, 1966:37, fig. 8.--Chace, 1972:74, fig. 23.--Williams, 1984:100, fig. 68.  
Type-locality: Maldives and Laccadive Islands.  

Automate rectifrons Chace, 1972  
Description: Chace, 1972:75, fig. 24.  
Type-locality: Inner side of Arrecife Nicchehabin, Bahia de la Ascension, Territorio de Quintana Roo, Mexico.  

Leptalpheus forceps Williams, 1965  
Description: Williams, 1984:101, fig. 69.  
Type-locality: Gallant's Point, Newport River, Carteret County, North Carolina.  
Distribution: Drum Inlet, Beaufort, Banks Channel near Wrightsville Beach, and Lockwoods Folly Inlet, North Carolina; Old Tampa Bay, Florida (Säkman, 1971; Simon and Dauer, 1977); Davis Bayou, Mississippi (Dawson, 1967a; Williams, 1984).

Metalpheus rostratipes (Pocock, 1890)  
Description: Crosnier and Forest, 1966:246, figs. 12-14.  
Type-locality: Fernando de Noronha.  
Distribution: Southern Florida; Puerto Rico and the Yucatan Peninsula to Fernando de Noronha; probably pantropical (Chace, 1972).

Synalpheus aegale Pequegnat and Heard, 1979  
Description: Pequegnat and Heard, 1979:110, figs. 1-4.--Daude, 1984:12, figs. 3-6.  
Type-locality: West Flower Garden Bank, Gulf of Mexico (27°52'N, 93°48'W) in 25 m.  
Distribution: Atlantic: Grand Bahama Island; Gulf of Mexico: Florida Middle Ground, Sonnier Bank, 28 Fathom Bank, West Flower Garden Bank, North Hospital Bank and Hospital Rock (Pequegnat and Heard, 1979); Caribbean, off Puerto Rico (Daude, 1984).

Synalpheus arioceros Coutière, 1909  
Description: Coutière, 1909:27, fig. 9.  
Type-locality: Marco, Florida.  
Distribution: Southern Florida to Surinam.
westward to the Yucatan Peninsula (Chace, 1972).

**Synalpheus bousfieldi** Chace, 1972
Description: Chace, 1972:86, figs. 29, 30.
Type-locality: West side of reef east of anchorage, Bahia del Espiritu Santo, Territorio de Quintana Roo, Mexico.
Distribution: Atlantic: Grand Bahama Island (Darreau, 1984) and possibly south to Brazil (Christoffersen, 1979); Gulf of Mexico: Florida Middle Ground, Bonnier Bank, Bright Bank; and West Flower Garden Bank (Darreau, 1984); Caribbean: Yucatan Peninsula and Virgin Islands (Chace, 1972).

**Synalpheus brevicarpus** (Herrick, 1891)
Description: Coutiere, 1909:50, fig. 29;--
Christoffersen, 1979:333, fig. 19.
Type-locality: Nassau, New Providence, Bahamas; in green sponge.
Distribution: Bermudas; east Florida to Dry Tortugas; southwest Florida; Bahamas Island; Cuba to Virgin Islands; Los Roques Islands; Curaçao; Panama; Pernambuco to the north of Rio Grande do Sul; eastern Pacific, Bay of Panama (Christoffersen, 1979).

**Synalpheus brooksi** Coutiere, 1909
Description: Coutiere, 1909:69, fig. 41;--
Darreau, 1984:26, figs. 11-14.
Type-locality: Sugar Loaf Key, Florida.
Distribution: Gulf of Mexico, Florida Keys; Bahamas and the Yucatan Peninsula to Estadio do Rio Grande do Norte Brazil (Chace, 1972).

**Synalpheus curacaoensis** Schmitt, 1924
Description: Schmitt, 1924a:66, fig. 3.
Type-locality: Spanische Water, Curaçao.

**Synalpheus frischmulleri** Coutiere, 1909
Description: Williams, 1984:102, fig. 70.
Type-locality: Marco, Florida.
Distribution: Off Beaufort, North Carolina to Santa Catarina, Brazil; Bermuda; St. Helena Island, South Atlantic; Baja California (Chace, 1972).

**Synalpheus goodii** Coutiere, 1909
Description: Coutiere, 1909:58, fig. 33;--
Darreau, 1984:40, figs. 18-21.
Type-locality: Bermudas.
Distribution: Bermudas and the Gulf of Mexico to Curaçao and Panama (Chace, 1972).

**Synalpheus heardi** Darreau, 1984
Description: Darreau, 1984:47, figs. 23-26.
Type-locality: Florida Middle Ground, Gulf of Mexico.
Distribution: Eastern Gulf of Mexico, off central western Florida; Grand Bahama Island (Darreau, 1984).

**Synalpheus hemphilli** Coutiere, 1909
Description: Coutiere, 1909:38, fig. 20.
Type-locality: Off the west coast of Florida (28°04'N, 83°21'W).
Distribution: Bermudas and the eastern Gulf of Mexico to Curaçao and Islas los Roques (Chace, 1972).

**Synalpheus herricki** Coutiere, 1909
Description: Coutiere, 1909:74, fig. 44;--
Type-locality: "Off Anclote, Florida" presumably Anclote Key off Tarpon Springs.
Distribution: Atlantic: questionably from Eleuthera, Bahama Islands (Chace, 1972); Gulf of Mexico: questionably from Florida Bay (Tabb and Manning, 1961); off central western Florida from Sanibel Island to Cape San Blas (Coutiere, 1909; Darreau, 1984).

**Synalpheus longicarpus** (Herrick, 1891)
Description: Williams, 1984:104, fig. 71;--
Darreau, 1984:64, figs. 32-35.
Type-locality: Bahamas, probably Nassau, New Providence Island.
Distribution: Beaufort, North Carolina to west Flower Garden Reef, SSE of Galveston, Texas; Yucatan, Mexico through West Indies to Rio de Janeiro, Brazil (Williams, 1984).

**Synalpheus mclendonii** Coutiere, 1910
Description: Chace, 1972:95, figs. 33, 34;--
Type-locality: Dry Tortugas, Florida.
Distribution: Atlantic: Grand Bahama Island; Gulf of Mexico: Dry Tortugas (Coutiere, 1910) and Isla de Lobos Reef, off Veracruz (Ray, 1974); Caribbean: Yucatan Peninsula, Windward Islands (Chace, 1972) and Barbados (Schmitt, 1924a; Darreau, 1984).

**Synalpheus minus** (Say, 1818)
Description: Williams, 1984:105, fig. 72.
Type-locality: "Coasts of the southern states and off East Florida."
Distribution: Near Cape Hatteras, North Carolina to São Paulo, Brazil (Christoffersen, 1979); Bermuda (Williams, 1984).

*Synalphes pandonis* Coutière, 1909
Description: Coutière, 1909:67, fig. 39.--Dardeau, 1984:78, figs. 40-43.
Type-locality: Off Saint Thomas, 36-42 m.
Distribution: Eastern Gulf of Mexico to Barbados and Curaçao (Chace, 1972).

*Synalphes paranepetinus* Coutière, 1909
Description: Coutière, 1909:86, fig. 52.--Dardeau, 1984:92, figs. 47-50.
Type-locality: Off Golfo de Morrosoquillo, Colombia (9°30'15"N, 76°20'30"W) in 77 m.
Distribution: Dry Tortugas, Florida and the Yucatan Peninsula to the Grenadines and Colombia (Chace, 1972). Possibly from the Gulf of Mexico, off central western Florida, and the West Flower Garden Bank (Dardeau, 1984).

*Synalphes pectiniger* Coutière, 1907
Description: Coutière, 1909:78, figs. 48, 49.--Dardeau, 1984:98, figs. 51-53.
Type-locality: Curaçao.
Distribution: Gulf of Mexico, Florida keys and Bahamas to Curaçao (Chace, 1972).

*Synalphes rathbunae* Coutière, 1909
Description: Coutière, 1909:84, fig. 51.
Type-locality: Off Saint Thomas in 37-55 m.
Distribution: Bahamas to the Grenadines westward to the Yucatan Peninsula; (Chace, 1972). Loce Key, Florida (personal communication, D. L. Felder).

*Synalphes sanctithomae* Coutière, 1909
Description: Coutière, 1909:61, fig. 35.--Christoffersen, 1979:552, figs. 29-30.
Type-locality: Off Saint Thomas in 37-42 m.

*Synalphes tawnsendi* Coutière, 1909
Description: Williams, 1984:106, fig. 73.
Type-locality: Gulf of Mexico south of Cape San Blas, Florida (29°14'00"N, 85°29'15"W) in 46 m.
Distribution: Off Beaufort, North Carolina to Rio de Janeiro, Brazil; Bermuda; Gulf of California (Williams, 1984)

*Thunor simus* (Guérin-Méneville, 1856)
Description: Armstrong, 1949:13, figs. 3, 4A-I, L, (as *Thunor rathbunae*).--Chace, 1972:104, fig. 39, (as *Thunor rathbunae*).
Type-locality: Cuba.
Distribution: Key West, Florida and Yucatan Peninsula to Barbados (Chace, 1972); Piscadera Bay, Curaçao (Holthuis, 1980a).

**FAMILY HIPPOLYTIDAE**

*Bythocaris nana* Smith, 1885
Description: Smith, 1885:449; 1886:600, pl. 12: fig. 2.
Type-locality: Massachusetts, off Martha's Vineyard; 263 m.
Distribution: Off Martha's Vineyard, Massachusetts to Southern Florida and northeastern Gulf of Mexico.

*Exhippophyasma opolhoroides* (Holthuis, 1948)
Description: Williams, 1984:114, fig. 79.
Type-locality: Mouth of Suriname River near Resolute, Surinam.
Distribution: Off Cape Fear River, North Carolina, to Port Aransas, Texas; Guyana to the north of Uruguay (Williams, 1984).

*Hippolyte coerulescens* (Fabricius, 1775)
Description: Williams, 1984:116, fig. 80.
Type-locality: "Pelago inter Tropicos" Distribution: Widespread in tropical and subtropical Atlantic Ocean (Chace 1972).

*Hippolyte curacaoensis* Schmitt, 1924
Description: Williams, 1984:117, fig. 81.
Type-locality: West Punt, Curaçao.
Distribution: Beaufort and Sneads Ferry, North Carolina; West Indies from Cuba to Curaçao (Williams, 1984).

*Hippolyte nicholsoni* Chace, 1972
Description: Chace, 1972:113, figs. 46, 47.
Type-locality: Milford Bay, between Pigeon Point and Crown Point, Tobago, in 9-12 m.

*Hippolyte pleuracanthus* (Stimpson, 1871)
Description: Williams, 1984:117, fig. 82.
Type-locality: Norfolk Harbor, Virginia, and Somers Point, Great Egg Harbor, New Jersey.
Distribution: Connecticut to North Carolina (Williams, 1984).

*Hippolyte zostericola* (Smith, 1873)  
**Description:** Chace, 1972:118, figs. 49-50.  
**Type-locality:** Vineyard Sound, Massachusetts.  
**Distribution:** Southern Massachusetts; North Carolina to Yucatan; Trinidad and Curacao; Ceara, Brazil (Fausto-Filho, 1975); Bermuda.

*Latreutes fucorum* (Fabricius, 1798)  
**Description:** Williams, 1984:119, fig. 84.  
**Type-locality:** Floating gulfweed.  
**Distribution:** Western North Atlantic between 10° and 50° N; Azores and Cape Verde Islands (Chace, 1972).

*Latreutes parvulus* (Stimpson, 1866)  
**Description:** Williams, 1984:120, fig. 85.  
**Type-locality:** St. Joseph Island, Texas.  
**Distribution:** Beaufort, North Carolina, to Rio de Janeiro, Brazil; West Africa (Williams, 1984).

*Lysmata amboinensis* (De Man, 1888)  
**Description:** Limbaugh, Pederson, and Chace, 1961:247, fig. 5.—Hayashi, 1975:285, figs. 1-4, pl. 4.  
**Type-locality:** Amboina, Indonesia.  
**Distribution:** Circumtropical (Bruce, 1974; Hayashi, 1975). In Florida: northern Gulf of Mexico through the Florida Keys.

*Lysmata intermedia* (Kingsley, 1878)  
**Description:** Sivertsen, 1933:5, pl. 2: fig. 9-15.  
**Type-locality:** Dry Tortugas, Florida.  
**Distribution:** The Florida Middle Grounds (Dardeau et al., 1980) to the Florida Keys to Tobago and Curacao; Azores; Galapagos Islands (Chace, 1972). The Galapagos Islands record is questionable (Abele, 1975).

*Lysmata rathbunae* Chace, 1970  
**Description:** Williams, 1984:126, fig. 89.  
**Type-locality:** Off Boynton Beach, Florida, 26°31'N, 80°1'W, 55-64 m.  
**Distribution:** Typical form: SE Cape Fear, North Carolina, 33°30'24"N, 77°24'30"W, 25 m; east coast of Florida to Yucatan. Bermuda; Miami, Florida, Venezuela (Williams, 1984).

*Lysmata wurdemanni* (Gibbes, 1850)  
**Description:** Williams, 1984:127, fig. 90.  
**Type-locality:** Key West, Florida.  
**Distribution:** Great Egg Harbor, New Jersey, to Port Aransas, Texas; Surinam; French Guiana; Mambangupe, Sao Paulo, Brazil (Williams, 1984).

*Merehipolyte americana* Holthuis, 1961  
**Description:** Holthuis, 1961:1, fig. 1.  
**Type-locality:** 20°59'30"N, 86°23'45"W, Yucatan Channel, 237.6 m, coral.  
**Distribution:** North Carolina; South Florida; Yucatan Channel; Sao Paulo; Rio Grande do Sul to Province of Buenos Aires (Christoffersen, 1979).

*Thor amboinensis* (De Man, 1888)  
**Description:** Chace, 1972:130, figs. 55, 56.  
**Type-locality:** Ambon, Indonesia.  
**Distribution:** Florida Keys to Tobago and Yucatan; Bay of Bengal, Indonesia, and Caroline Islands (Chace, 1972).

*Thor dobinki* Chace, 1972  
**Description:** Williams, 1984:134, fig. 94.  
**Type-locality:** Punta Rassa (near mouth of Caloosahatchee River), Lee County, Florida.  
**Distribution:** Off Shackleford Bank, North Carolina, to Yucatan; Louisiana; north coast of Cuba (Williams, 1984).

*Thor floridanus* Kingsley, 1878  
**Description:** Williams, 1984:135, fig. 95.  
**Type-locality:** Key West, Florida.  
**Distribution:** Black Rocks off New River, North Carolina (?) to Yucatan (Williams, 1984).

*Thor manningi* Chace, 1972  
**Description:** Williams, 1984:137, fig. 96.  
**Type-locality:** English Harbour, Antigua Island.  
**Distribution:** Beaufort, North Carolina, to Yucatan and through West Indies to Curacao; Islas Tres Marias, off west coast of Mexico (Chace 1972).

*Tozeuma carolinense* Kingsley, 1878  
**Description:** Williams, 1984:138, fig. 97.  
**Type-locality:** Fort Macon, North Carolina.  
**Distribution:** Vineyard Sound, Massachusetts, through Gulf of Mexico to Yucatan and southward to Colon, Panama; through West Indies to Curacao; Pernambuco to Bahia, Brazil (Coelho and Ramos 1972).

*Tozeuma cornutum* A. Milne Edwards, 1881  
**Description:** A. Milne Edwards, 1881:16;
1883, pl. 32.—Chace, 1972:141.
Type-locality: Off Barbados.
Distribution: Off Barbados, in 73 m; in deep water east of Florida Keys; in Great Lameshur Bay, St. John, Virgin Islands (Chace, 1972).

_Toeuna serratum_ A. Milne Edwards, 1881
Description: Williams, 1984:140, fig. 98.
Type-locality: Off Barbados.
Distribution: Nonamesset Island, Massachusetts; Off Capes Hatteras and Lookout, North Carolina (Herbst et al., 1979); Cape Canaveral, extreme southern and northwestern Florida, Colombia and Barbados (Chace, 1972; Williams, 1984).

_Trachycaris restrictus_ (A. Milne Edwards, 1878)
Description: Holthuis, 1949b:233, figs. 2, 3.
Type-locality: Cape Verde Islands.
Distribution: Bermudas; Cape San Blas, Florida (Darreau et al., 1980) south to Estado do Para, Brazil; eastern Atlantic from the Canary Islands to St. Helena Island (Chace, 1972).

**FAMILY OGYRIDIDAE**

_Ogyrides alphaerostis_ (Kingsley, 1880)
Description: Williams, 1984:107, fig.74.
Type-locality: Northampton County, Virginia, eastern shore, Atlantic side.
Distribution: Eastern shore of Accomack County, and lower James River, Virginia, through Gulf of Mexico to Rio Grande do Sul, Brazil (Christoffersen 1979). Florida (26 m) (personal communication, P. M. Mikkelsen).

_Ogyrides hayi_ Williams, 1981
Description: Williams, 1984:109, fig. 75.
Type-locality: Off Bogue Bank west of Ft. Macon, North Carolina, ~ 3.5 m.
Distribution: Beaufort, North Carolina, to Sebastian Inlet, Florida; northwestern Florida to Mississippi; Puerto Rico (Williams, 1984).

**FAMILY PROCIDIDAE**

_Ambidexter symmetricus_ Manning and Chace, 1971
Description: Manning and Chace, 1971:3, figs. 1, 2.
Type-locality: Matheson Hammock Wading Beach, Biscayne Bay, Miami, Florida.
Distribution: Gulf of Mexico to Trinidad (Chace, 1972).

_Nikoides schmitti_ Manning and Chace, 1971
Description: Williams, 1984:141, fig. 99.
Type-locality: 1.25 km south of Garden Key, Tortugas, Monroe County, Florida.
Distribution: East of Cape Lookout, North Carolina (Herbst et al., 1979), Biscayne Bay and Dry Tortugas; Guadeloupe and the Guianas (Williams, 1984).

_Processa bermudensis_ (Rankin, 1900)
Description: Williams, 1984:143, fig. 100.
Type-locality: Harrington Sound, Bermuda.
Distribution: Bermuda; North Carolina near Cape Hatteras to northwestern Florida; Veracruz, Mexico (Ray, 1974); Cuba; Puerto Rico; Guadeloupe; Peninsula de Arogo, Estado Sucre, Venezuela, in Sargassum; Bahia and Rio de Janeiro, Brazil (Christoffersen, 1979; Williams, 1984).

_Processa fimbriata_ Manning and Chace, 1971
Description: Williams, 1984:144, fig. 101.
Type-locality: Off East Key, Tortugas, Monroe County, Florida.

_Processa guayanae_ Holthuis, 1959
Description: Williams, 1984:145, fig. 102.
Type-locality: NW of the Canopenne River (Surinam) 6°54'N, 56°14'W, 49 m.
Distribution: Off Cape Hatteras, North Carolina, to eastern Gulf of Mexico, including northern coast of Cuba; Surinam, Ceara, Brazil, to Uruguay (Williams, 1984). Florida (40-200 m) (personal communication, P. M. Mikkelsen).

_Processa hemphilli_ Manning and Chace, 1971
Description: Williams, 1984:146, fig. 103.
Type-locality: Marco, Collier County, Florida.
Distribution: E Cape Lookout, and Bogue Sound, North Carolina; E coast of Florida; NW Florida (Saloman, 1979); Guadeloupe; Rio de Janeiro, Brazil, to Province of Buenos Aires, Argentina (Christoffersen, 1979; Williams, 1984).

_Processa profundus_ Manning and Chace, 1971
Description: Williams, 1984:147, fig. 104.
Type-locality: Gulf of Mexico off the west coast of Florida, 202 m.
Distribution: Southeast of Cape Hatteras; off South Carolina; Gulf of Mexico off southern
and western Florida; Surinam (Williams, 1984).

**Processa riveroi** Manning and Chace, 1971
Description: Manning and Chace, 1971:28, fig. 16.
Type-locality: Maguey Island, La Parguera, Puerto Rico.

**Processa vicina** Manning and Chace, 1971
Description: Williams, 1984:148, fig. 105.
Type-locality: Off North Carolina, 34°35'30"N, 75°45'30"W, 59 m.

**FAMILY Pandalidae**

**Pantomus parvulus** A. Milne Edwards, 1883
Description: Williams, 1984:157, fig. 110.
Type-locality: Northern part of Yucatan Bank, 23°13'N, 89°16'W, 153.6 m.
Distribution: Cape Lookout, North Carolina, to Yucatan, Mexico; Puerto Rico; St. Croix, Virgin Island; Surinam (Williams, 1984).

**Plesionika acanthonotus** (Smith, 1882)
Description: Holthuis, 1951a:62, figs. 13b-t.--Pequegnat, 1970:91.
Type-locality: Off South Carolina, 32°43'N, 77°21' W, 426 m. *Blake* Stn. 321.
Distribution: Western Atlantic: from off South Carolina to off southern Florida and off Nicaragua and Brazil, NE and NW Gulf of Mexico. Eastern Atlantic: off Portugal and Spain in the north; and off Angola and Rio Mundi, Africa, in the south and in the Mediterranean (Pequegnat, 1970).

**Plesionika edwardsii** (Brandt, 1851)
Description: Chace, 1985:62, fig. 26.
Type-locality: Unknown.
Distribution: In the western and eastern Atlantic (including the Gulf of Mexico and the Mediterranean) and in the Indo-Pacific region (Chace, 1985).

**Plesionika ensis** (A. Milne Edwards, 1881)
Description: Holthuis, 1951a:55, fig. 11.
Type-locality: Off Barbados, 434m. *Blake* Stn. 283.

**Plesionika escutellis** (Stimpson, 1860)
Description: Crosnier and Forest, 1973:221, fig. 69a.
Type-locality: Madeira Islands, Eastern Atlantic.
Distribution: The exact status and range of this species is yet to be determined. It occurs in the eastern and western Atlantic regions. Mesopelagic.

**Plesionika longicauda** (Rathbun, 1901)
Description: Rathbun, 1901:117, fig. 24.--Pequegnat, 1970:86.
Type-locality: Northeast Gulf of Mexico, 161 m, *Albatross* Ocean Stn. 2403, 28°42.5'N, 85°29'W.

**Plesionika martia** (A. Milne Edwards, 1883)
Description: Holthuis, 1951a:51, fig. 10.
Type-locality: "east Atlantic," *Travaillieu* Stn. 400-1, 200 m.
Distribution: Western Atlantic: off South Carolina to Florida and off Bermuda; NE and SW Gulf of Mexico. Eastern Atlantic: off SW Ireland, Bay of Biscay, throughout Mediterranean, Gulf of Guinea, and Cape of Good Hope. Indo-West Pacific: from Gulf of Aden and east African coast to Japan and Hawaii (Pequegnat, 1970).

**Plesionika tenuipes** (Smith, 1881)
Description: Smith, 1881:441; 1882:59, pl. 13: fig. 12.--Pequegnat, 1970:103, figs. 4-15.
Type-locality: Off Block Island, Rhode Island, 183-461 m, *Fish Hawk* Stn. 870, 871, 873, 877, 880.
Distribution: Western Atlantic: off east coast of United States from Rhode Island to southern tip of Florida; eastern and western Gulf of Mexico (Pequegnat, 1970).

**Stylopondalus richardi** (Coutière, 1905)
Description: Chace, 1985:136, fig. 62.
Type-locality: West of Madeira at 32°13'N, 23°58'W, 2000-0 m, and Canary Islands at
27°43'N, 18°28'W, 3000-0 m. Distribution: Probably occurs in all major tropical and temperate seas (Chace, 1985). Florida (65-300 m) (personal communication, P. M. Mikkelsen).

FAMILY CRANGONIDAE

Crangon septemspinosa Say, 1818 Description: Williams, 1984:159, fig. 112. Type-locality: "Bay shores and inlets of the sea" (east coast of the United States). Distribution: Subarctic-boreal (Haeftner, 1979) although extending beyond these limits; northern part of Gulf of St. Lawrence, doubtfully Baffin Bay (Squires, 1965) to east Florida; Arctic Alaska southward to Shumagin Islands, Alaska; Sea of Okhotsk, and Rausnima, Hokkaido Japan (Williams, 1984).

Metacrangon jaccuet agassizii (Smith, 1882) Description: Crosnier and Forest, 1973:233, figs. 74b, 75a, 76c. Type-locality: Smith (1882) did not designate a type but described specimens from Blake Sns. 317, 326, 332 and 329 off the east coast of the United States. Distribution: Western Atlantic from about 41° N south to Florida.

Parapontocaris caribbaea (Boone, 1927) Description: Boone, 1927:125, fig. 28.-- Dardeau and Heard, 1983:10, figs. 2f-3. Type-locality: Caribbean Sea, off Honduras, north of Glover Reef, 870 m, Pawnee Sns. 1 Distribution: Western Atlantic, Bahama Islands and Straits of Florida; northwestern Gulf of Mexico, off Galveston Bay; Caribbean Sea, off Honduras (Dardeau and Heard, 1983).

Philoceras gorei (Dardeau, 1980) Description: Williams, 1984:161, fig. 114. Type-locality: 135 km due west of Sanibel Island Light, [Florida], 26°24'N, 83°22'W, 55 m. Distribution: Off Georgia; off SW Florida, Cape San Blas and Padre Island, Texas (Williams, 1984).

Pontophilus brevirostris Smith, 1881 Description: Williams, 1984:161, fig. 113. Type-locality: Material described from a series of United States Fish Commission Sns. (Fish Hawk) 865-867, 870-874, 877 and 878, 119 to 283 m, off Martha’s Vineyard, Massachusetts, constitutes the type-series (Smith, 1881). In 1882, Smith essentially repeated the original description, gave locality data for specimens studied from Sns. 314-315, 321, 327, 333, 344-345, and illustrated a mature female from Sns. 873, one of the stations listed in the original description. Two females from this lot, 40°02'N, 70°57'W, 183 m, are in the type collection of the USNM as are many syntypes from Sns. 865-67, 871, and 872 (Williams, 1984).

Distribution: Gulf of Maine to Gulf of Mexico off Dry Tortugas and Cuba (Williams and Wigley, 1977; Pequegnat, 1970).

FAMILY GLYPHOCRANGONIDAE


Glyphocrinon spinicuda A. Milne Edwards, 1881 Description: A. Milne Edwards, 1881:3.-- Holthus, 1971:295, figs. 6, 7. Type-locality: St. Kitts (17°19'27"N, 62°50'30"W, 458 m, fine gray sand and ooze). Distribution: Western Atlantic from the east coast of Florida south to Barbados and into the Caribbean area as far west as Yucatan, Honduras, and Nicaragua (Holthus, 1971).

INFRAORDER ASTACIDEA

FAMILY NEPHROPIDAE

Acanthacaris caeca (A. Milne Edwards, 1881) Description: Holthus, 1974:741, figs. 4-8. Type-locality: Off Grenada, 12°03'15"N, 61°48'30"W, 761 m. Distribution: Throughout the Gulf of Mexico
and the Caribbean Sea, including the Straits of Florida (Holtzhaus, 1974).

Metanephrops binghami (Boone, 1927)
Description: Holtzhaus, 1974:827, figs. 25, 26.
Type-locality: From north of Glover Reef, British Honduras (Belize).
Distribution: From the Bahamas to French Guiana, including the Gulf of Mexico and the Caribbean Sea (Holtzhaus, 1974).

Nephrops aculeata Smith, 1881
Description: Holtzhaus, 1974:776, figs. 15, 16A, 16B.
Type-locality: East of New Jersey, United States of America, 40°02'N, 70°57'W, 183 m, bottom soft stickney mud.
Distribution: From east of New Jersey, to French Guiana, including the entire Gulf of Mexico and Caribbean Sea (Holtzhaus, 1974).

INFRAORDER THALASSINIDEA

FAMILY AXIIDAE

Axioptis hirsutinana (Boesch and Smalley, 1972)
Description: Boesch and Smalley, 1972:45, figs. 1-9.
Type-locality: Off British Guiana, 6°50'N, 54°47'W.
Distribution: Off British Guiana; SE Pascagoula Sea Buoy, Mississippi; about 80 km northeast of tip of Mississippi River delta (Boesch and Smalley, 1972). Tortugas shrimp grounds, Florida (Williams, 1974c).

Axioptis oxypleura (Williams, 1974)
Description: Williams, 1974c:457, figs. 11-18.
Type-locality: Straits of Florida west of Riding Rocks, 25°15'N, 79°13'W, 365 m.
Distribution: Known only from the type-locality.

Axioptis serratifrons (A. Milne Edwards, 1873)
Description: Kelsey, 1981:1253, figs. 1-5.
Type-locality: "Upolu [presumably the island in western Samoa] et les iles Sandwich" [presumably the Hawaiian Islands].
Distribution: See Kelsey, 1981:1260

Coralaxius abelei Kelsey and Gore, 1981
Description: Kelsey and Gore, 1981:1278, figs. 1-6.

Type-locality: Atlantic Ocean, French Reef, off Key Largo, Monroe County, Florida; 25°02'N, 80°19'W; 76 m.
Distribution: French Reef, off Key Largo, Florida; Caribbean Sea, Carrie Bow Cay, Belize.

FAMILY CALLIANASSIDAE

Callianassa acanthochirus (Stimpson, 1866)
Description: Biffar, 1971a:655, figs. 3, 4.
Type-locality: Florida Keys.
Distribution: Miami; Florida Keys; Dry Tortugas, Puerto Rico; Jamaica; Barbados; Antigua; Venezuela (Biffar, 1971a).

Callianassa atlantica Rathbun, 1926
Description: Williams, 1984:180, fig. 125.
Type-locality: "Our species ranges from the coast of Southern [United] States north to Long Island Sound" (Smith, 1873). Distribution: Bass River, Nova Scotia, to Georgia; Franklin County, Florida (Williams, 1984).

Callianassa biforis Biffar, 1971
Description: Williams, 1984:182, fig. 126.
Type-locality: South end of Sapelo Island, mouth of Doboy Sound, McIntosh County, Georgia.
Distribution: Bass River, Yarmouth and Nantucket Sound, Massachusetts (Williams and Wigley, 1977); Chesapeake Bay(?); North Inlet, South Carolina (Holland and Polgar, 1976), to McIntosh County, Georgia; Franklin County, NW Florida (Williams, 1984).

Callianassa branneri (Rathbun, 1900)
Description: Rathbun, 1900:150, pl. 8: figs. 5-8.—Biffar, 1971a: 661, figs. 5, 6.
Type-locality: Mamanguape Stone Reef, Brazil.
Distribution: Bermuda, southeastern Florida, including Keys and Dry Tortugas; Bimini; Little San Salvador; Puerto Rico; Barbados; Curacao; Tobago; Brazil (Biffar, 1971a).

Callianassa fragilis Biffar, 1970
Description: Biffar, 1970:45, fig. 3; 1971a:667, figs. 7, 8.
Type-locality: Punta Arenas, Puerto Rico.
Distribution: Southeastern Florida; Puerto Rico; Antigua; Venezuela (Biffar, 1971a).

Callianassa guassuntinga Rodrigues, 1966
Description: Rodrigues, 1966:45, figs. 41c-
60.--Biffar, 1971a: 674, figs. 9, 10.
Type-locality: São Sebastião, Brazil.
Distribution: Southeastern Florida, Puerto Rico; Brazil (Biffar, 1971a).

**Callianassa jamaicensis** Schmitt, 1935
Description: Schmitt, 1935b:9, pl. 1: fig. 2, pl. 2: figs. 6-8, pl. 4: figs. 1-4.
Type-locality: Brackish pond at Montego Bay, Jamaica.
Distribution: Grand Isle, Louisiana to Brazil; Jamaica.

**Callianassa longiventris** A. Milne Edwards, 1870
Description: Biffar, 1971a:685, figs. 13, 14.
Type-locality: Martinique.
Distribution: Bermuda; southeastern Florida; Jamaica; Martinique (Biffar, 1971a).

**Callianassa marginata** Rathbun, 1901
Description: Rathbun, 1901:92, fig. 15.--Biffar, 1971a:689, figs. 15, 16.
Type-locality: Mayaguez Harbor, Puerto Rico, 315 m.
Distribution: Southeastern Florida, Arrowsmith Bank; Puerto Rico; Barbados (Biffar, 1971a).

**Callianassa quadracuta** Biffar, 1970
Description: Biffar, 1970:40, fig. 2; 1971a:694, figs. 17, 18.
Type-locality: Cumana, Venezuela.
Distribution: Southeastern Florida; Venezuela (Biffar, 1971a).

**Callianassa rathbunae** Schmitt, 1935
Description: Schmitt, 1935b:15, pl. 1: fig. 5, pl. 2: fig. 2, pl. 3: fig. 1, pl. 4: fig. 2.--Biffar, 1970:699, figs. 19, 20.
Type-locality: Bluefields, Jamaica.
Distribution: Miami; Jamaica (Biffar, 1970).

**Callianassa trilobata** Biffar, 1970
Description: Biffar, 1970:36, fig. 1; 1971a:704, figs. 21, 22.
Type-locality: Off Finellas Point, Tampa Bay, Florida, 2-3 m.

**Callichirus islagrande** (Schmitt, 1935)
Description: Schmitt, 1935b:5, pl. 1: fig. 3, pl. 3: fig. 2, pl. 4: fig. 5.
Type-locality: Grand Isle, Louisiana.

Distribution: Grand Isle, Louisiana; Alligator Harbor, Florida.

**Callichirus major** (Say, 1818)
Description: Williams, 1984:183, fig. 127.
Type-locality: Bay Shore of St. Johns River in east Florida, near low-water mark.
Distribution: Beaufort Inlet, North Carolina, to Cape Canaveral, Florida; Grand Terre Island to Timbalier Island, Louisiana; Espirito Santo and São Paulo, Brazil (Rodrigues, 1965, 1971; Williams, 1984).

**Gourettea latispina** (Dawson, 1967)
Description: Dawson, 1967b:190, fig. 1.--Biffar, 1971a:679, figs. 11, 12.
Type-locality: Grand Isle, Louisiana, 14 m.
Distribution: Grand Isle, Louisiana; off southwestern Florida; Honduras (Biffar, 1971a).

**FAMILY UPOGEBIIDAE**

**Upogebia affinis** (Say, 1818)
Description: Williams, 1984:191, fig. 133.
Type-locality: Georgia.
Distribution: Wellfleet, Massachusetts, to Rockport, Texas (Hedgepeth, 1950); through West Indies to Estado de São Paulo, Brazil (Coelho, 1966, 1970; Gomes Corrêa, 1968; Williams, 1984).

**Upogebia operculata** Schmitt, 1924
Description: Schmitt, 1924b:91, pl. 5: figs. 1-4.
Type-locality: Okra Reef, Barbados.
Distribution: Okra Reef, Barbados; St. Thomas, Savannah Passage; Dry Tortugas, Florida (Schmitt, 1935a). Looe Key, Florida (personal communication, D. L. Felder).

**INFRAORDER PALINURA**

**FAMILY PALINURIDAE**

**Justitia longimanus** (H. Milne Edwards, 1837)
Description: Bouvier, 1925:442, pl. 8: fig. 1.--Manning, 1978:24.
Type-locality: The Antilles.
Distribution: Bermuda and from southern tip of Florida through most of the Antilles (Manning, 1978).

**Panulirus argus** (Latreille, 1804)
Description: Williams, 1984:170, fig. 120.
Type-locality: Erroneously given as East Indies ("des Grandes-Indies").
Distribution: North Carolina through Gulf of Mexico and West Indies to Rio de Janeiro, Brazil; Bermuda (Williams, 1984).

Panulirus guttatus (Latreille, 1804)
Description: Gruvel, 1911:29, fig. 12, pl. 3: fig. 3.--Holthuis, 1959:124, fig. 20.
Type-locality: Surinam.
Distribution: Western Atlantic Ocean from Bermuda and Florida to Brazil and the West Indies (Holthuis, 1959).

Panulirus laevicauda (Latreille, 1817)
Description: Gruvel, 1911:45, fig. 21.--Holthuis, 1959:123.
Type-locality: Brazil.
Distribution: Bermuda, Florida, Cuba, Jamaica, Curacao, French Guiana, and Brazil (Holthuis, 1959).

FAMILY SCYLLARIDAE

Parribacus antarcticus (Lund, 1793)
Description: Holthuis, 1985:73, figs. 21, 25A.
Type-locality: Ambonina Mouuccas (Holthuis, 1985).
Distribution: The species is known both from the western Atlantic from Florida to Brazil including the West Indies and Caribbean Sea, and from the Indo-West Pacific (E and SE Africa to Formosa) (Holthuis, 1985).

Scyllarides aequinocialis (Lund, 1793)
Description: Lyons, 1970:15, pl. 2: figs. A, B.
Type-locality: Jamaica.
Distribution: West Indies and Caribbean Sea; Gulf of Mexico; southern Florida to Bermuda (Lyons, 1970).

Scyllarides nodifer (Stimpson, 1866)
Description: Williams, 1984:174, fig. 121.
Type-locality: Florida Keys.
Distribution: Bermuda; Cape Lookout, North Carolina, to Florida and throughout Gulf of Mexico to Yucatan (Lyons, 1970); a postlarva from south of Long Island (29°11'N, 71°56'W) was taken in the stomach of a lancefish (Alepisaurus) (Williams, 1984).

Scyllarus americanus (Smith, 1869)
Description: Williams, 1984:176, fig. 122.
Type-locality: Egmont Key, Florida.
Distribution: Off Bougre Inlet, North Carolina, to Campeche Banks off Mexico, and Venezuela (Williams, 1984).

Scyllarus chacei Holthuis, 1960
Description: Williams, 1984:177, fig. 123.
Type-locality: North-northwest mouth of Marowijne River, about 20 mi. off coast of Surinam.
Distribution: Off Cape Hatteras, North Carolina, through Gulf of Mexico, West Indies, and Caribbean Sea to off Cape Sao Roque, Brazil (Williams, 1984).

Scyllarus depressus (Smith, 1881)
Description: Williams, 1984:178, fig. 124.
Type-locality: South of Martha's Vineyard, 40°5'39"N, 70°23'52"W, 157.3 m.
Distribution: Off Martha's Vineyard, Massachusetts; off Cape Hatteras, North Carolina, through Gulf of Mexico and West Indies to State of Sao Paulo, Brazil (Williams, 1984). Florida (78 m) (personal communication, P. M. Mikkelson).

FAMILY SYNAXIDAE

Palinurellus gundlachi (Von Martens, 1881)
Description: Manning, 1978:35.
Type-locality: Cuba, Barbados.
Distribution: Bermuda, southern Florida, most of the West Indies, Yucatan (Manning, 1978).

INFRAORDER ANOMURA

FAMILY COENOBITIDAE

Coenobita clupeatus (Herbst, 1791)
Description: Provenzano, 1959:359, fig. 3.
Type-locality: West Indies.
Distribution: Florida, Bermuda, West Indies to Venezuela (Provenzano, 1959).

FAMILY DIOTIDAE

Calcinus tibicen (Herbst, 1791)
Description: Provenzano, 1959:363, fig. 4.
Type-locality: Not given by Herbst.
Distribution: Bermuda, West Indian region from NW Florida to Brazil (Provenzano, 1959, Abele, 1970).

Cancillus ornatus Benedict, 1901
Description: Williams, 1984:193, fig. 134.
Type-locality: Northeast Gulf of Mexico between Mississippi delta and Cedar Keys, Florida, 28°45'N, 85°02'W, 55 m.
Distribution: Off Cape Fear, North Carolina, 33°43'N, 76°40'W to 33°42.7'N, 76°40.2'W, 90-110 m (Herbst et al., 1979) through eastern Gulf of Mexico, Greater and Lesser Antilles, to
near Los Abrolhos off central Brazil (Williams, 1984).

*Cancillus viridis* Mayo, 1973
Description: Mayo, 1973:28, figs. 9-11.
Type-locality: Southwest Caribbean Sea, north of Panama.
Distribution: Known from the type-locality.
Southern Florida (personal communication, P. A. McLaughlin).

*Clibanarius antillensis* Stimpson, 1862
Description: Provenzano, 1959:368, fig. 5B.
Type-locality: Barbados.
Distribution: Southern Florida through West Indies to Curacao and Brazil (Provenzano, 1959).

*Clibanarius cubensis* (Saussure, 1858)
Description: Provenzano, 1959:369, fig. 5C.
Type-locality: Cuba.
Distribution: Florida, from Miami southward, West Indies to South America (Provenzano, 1959).

*Clibanarius tricolor* (Gibbes, 1850)
Description: Provenzano, 1959:366, fig. 5A.
Type-locality: Key West, Florida.
Distribution: Bermuda, Florida from Miami through the Keys, West Indies (Provenzano, 1959).

*Clibanarius vittatus* (Bosc, 1802)
Description: Williams, 1984:194, fig. 135.
Type-locality: "Les cotes de la Caroline."
Distribution: Potomac River, Gunston, Virginia, to Florianopolis, Santa Catarina, Brazil (Forest and de Saint Laurent, 1967).

*Dardanus fucosus* Biffar and Provenzano, 1972
Description: Williams, 1984:196, fig. 136.
Type-locality: Off French Guiana-Brazil border, 05°29'N, 51°37'W, 64 m, Oregon Stn. 4202.
Distribution: Near Cape Hatteras, North Carolina, 35°02'N, 75°26'W, to off Amapa, extreme northern Brazil, 04°02'N, 50°33'W (Williams, 1984).

*Dardanus insignis* (Saussure, 1858)
Description: Williams, 1984:197, fig. 137.
Type-locality: Guadeloupe.
Distribution: Off Oregon Inlet, North Carolina, 31 m. (Cerame-Vivas et al., 1963), to Port Aransas, Texas; through West Indies to Guadeloupe (Williams, 1984).

*Dardanus venosus* (H. Milne Edwards, 1848)
Description: Provenzano, 1959:374, fig. 6.
Type-locality: Guadeloupe.
Distribution: Bermuda, southern Florida, West Indies to Brazil (Provenzano, 1959).

*Isocheles wurdemanni* Stimpson, 1862
Description: Provenzano, 1959:375, fig. 7.
Type-locality: Gulf of Mexico, at mouth of Rio Grande.
Distribution: Texas, Louisiana, west coast of Florida and Venezuela (Provenzano, 1959).

*Paguristes anomalus* Bouvier, 1918
Description: Provenzano, 1959:391, figs. 12A-C.
Type-locality: Near San Diego de Cuba under old coral.
Distribution: Known only from type-locality and Long Reef, Florida (Provenzano, 1959).

*Paguristes cadenati* Forest, 1954
Description: Forest, 1954:353, figs. 1, 3.
Type-locality: Fort-de-France (Martinique).
Distribution: Martinique; Florida Keys.

*Paguristes erythrops* Holthuis, 1959
Type-locality: Between the mouths of the Coppename and Suriname Rivers, 06°42'N, 55°38'W; bottom mud and fine shells; depth 44 m.
Distribution: From the the type-locality and southern Florida (personal communication, P. A. McLaughlin).

*Paguristes grayi* Benedict, 1901
Description: Provenzano, 1959:387, fig. 10B.
Type-locality: San Antonio Bridge, San Juan, Puerto Rico.
Distribution: Florida Keys, Tortugas, Puerto Rico. Santo Domingo and probably generally throughout the West Indian region (Provenzano, 1959).

*Paguristes hernancortezii* McLaughlin and Provenzano, 1974
Description: McLaughlin and Provenzano, 1974a:207, figs. 16a, 17d-f, 18c-d, g-h, 19f-j, 20b, f-h, 21.
Type-locality: 7 mi. off Sanibel Island, Florida, MV Hernan Cortez Stn. L., 26°24'N, 83°22'W, 55m.
**Pagurestes hummi** Wass, 1955  
Description: Williams, 1984:200, fig. 139.  
Type-locality: Alligator Harbor, Franklin County, Florida.  
Distribution: Newport River, North Carolina, to off Sapelo Island, Georgia; Marco Beach, southwestern Florida, to off Isles Dernieres, Louisiana (28°38'N, 90°55'W) (Williams, 1984).  

**Pagurestes inconstantis** McLaughlin and Provenzano, 1974  
Type-locality: Off east coast of Florida, 27°55'N, 79°05'W.  
Distribution: Western and eastern coasts of Florida, southward through Caribbean to Colombia (McLaughlin and Provenzano, 1974b).  

**Pagurestes invisicaculatus** McLaughlin and Provenzano, 1974  
Description: McLaughlin and Provenzano, 1974a:223, figs. 23b; 24d-f, 25c, d, g, h, 26e-i, 27.  
Type-locality: Ragged Key, Florida.  
Distribution: Florida Keys to Jamaica (McLaughlin and Provenzano, 1974a).  

**Pagurestes latilavus** McLaughlin and Provenzano, 1974  
Description: McLaughlin and Provenzano, 1974b:928, figs. 16-18.  
Type-locality: Off Colombia, 11°16'.9N, 74°17'W.  
Distribution: Florida through Caribbean to Colombia and Venezuela (McLaughlin and Provenzano, 1974b).  

**Pagurestes limonensis** McLaughlin and Provenzano, 1974  
Description: McLaughlin and Provenzano, 1974b:902, figs. 7-9.  
Type-locality: West side Limon Bay, Pulpit Point, Panama.  
Distribution: West coast of Florida, Panama, Colombia (McLaughlin and Provenzano, 1974b).  

**Pagurestes lymani** A. Milne Edwards and Bouvier, 1893  
Description: Williams, 1984:201, fig. 140.  
Type-locality: Sand-Key (Florida), 27 m.  
Distribution: Southeast of Cape Lookout, North Carolina (150-180 m); Florida Keys to Swan Island off Honduras; through West Indies to Guyana (Williams, 1984).  

**Pagurestes moretii** Benedict, 1901  
Description: Williams, 1984:202, fig. 141.  
Type-locality: Puerto Rico.  
Distribution: Edge of continental shelf off Cape Lookout, North Carolina; Florida Straits (Hazlett, 1966); Puerto Rico (Williams, 1984).  

**Pagurestes oxyphthalus** Holthuis, 1959  
Description: Holthuis, 1959:135, figs. 22b, 23.  
Type-locality: About 20 mi. NNW of the mouth of the Coppermine River, depth 31 m.  

**Pagurestes puncticeps** Benedict, 1901  
Description: Provenzano, 1959:384, fig. 10A.  
Type-locality: Jamaica.  
Distribution: Along northwestern Florida; South Florida from Miami southward, probably generally in the West Indies (Provenzano, 1959).  

**Pagurestes sericus** A. Milne Edwards, 1880  
Description: Williams, 1984:203.  
Type-locality: 23°34'N, 83°16'W, (near Dry Tortugas, Florida), 66m.  
Distribution: Off Cape Lookout, North Carolina; West Flower Garden Bank, NW Gulf of Mexico to Virgin Islands (Williams, 1984).  

**Pagurestes spinipes** A. Milne Edwards, 1880  
Description: Williams, 1984:204, fig. 143.  
Type-locality: Grenada, 168 m.  
Distribution: Gulf Stream south of Cape Lookout, North Carolina; off Cape Canaveral to Florida Straits, Sarasota, Florida; Barbados to Pernambuco, Brazil (Williams, 1984).  

**Pagurestes starki** Provenzano, 1965  
Description: Provenzano, 1965:726, figs. 1, 2.  
Type-locality: One-third mi. south-southwest of Alligator Light, Monroe County, Florida, at a depth of 6 m.  
Distribution: From the type-locality.  

**Pagurestes tenuirostris** Benedict, 1901  
Description: Bedeject, 1901:143, pl. 4; fig. 1.  
Type-locality: Grampus Stn. 5077, 125 m,
Gulf of Mexico, off west coast of Florida. Distribution: Known only from the type-locality.

*Paguristes tortucae* Schmitt, 1933
Description: Williams, 1984:205, fig. 144.
Type-locality: Off Fort Jefferson Dock, Garden Key, Dry Tortugas, Florida. Distribution: Reefs off Beaufort, North Carolina, to southern and southeastern Florida; through West Indies to northern Brazil; (?) northern Gulf of Mexico (Williams, 1984).

*Paguristes triangulatus* A. Milne Edwards and Bouvier, 1893
Description: Williams, 1984:206, fig. 145.
Type-locality: Barbados, 136 m. Distribution: Off Oregon Inlet, North Carolina, (12m) to Tortugas, Florida; Barbados; Trinidad (Williams, 1984).

*Paguristes wassi* Provenzano, 1961
Description: Provenzano, 1961:155, fig. 1.
Type-locality: One fourth mi. south-southeast of Alligator Light, Florida Keys, at 8 m, coral and sand bottom. Distribution: From Virgin Islands and Florida Keys.

*Petrochirus diogenes* (Linnaeus, 1758)
Description: Williams, 1984:198, fig. 138.
Type-locality: Near shores of Bahama Islands [Catesby, 1743 (1754 ed. as cited in Holthuis 1959)]. Distribution: Off Cape Lookout, North Carolina, through Gulf of Mexico and West Indies to Ilha de São Sebastião, Brazil, 23°42.5’S, 45°14.5’W (Forest and De Saint Laurent, 1967).

**FAMILY LITHODIDAE**

*Paralomis cubensis* Chace, 1939
Description: Chace, 1939:49.

**FAMILY PAGURIDAE**

*Agaricochirus acanthinus* McLaughlin, 1982
Description: McLaughlin, 1982:838, figs. 1g, 2g, 3g, 4, 5a, b, e.
Type-locality: *Gerda* Stn. 1301, 24°57’N, 80°14’W.
Distribution: Straits of Florida, western Caribbean (McLaughlin, 1982).

*Agaricochirus alexandri* (A. Milne Edwards and Bouvier, 1893)
Description: A. Milne Edwards and Bouvier, 1893:87, pl. 6: figs. 23-26.—McLaughlin, 1982:834, figs. 1b, 2b, 3b.
Type-locality: *Blake* Stn. 132, off Santa Cruz (St. Croix), Virgin Islands. Distribution: Straits of Florida, Caribbean to Barbados and northern coast of South America (McLaughlin, 1982).

*Agaricochirus boletifer* (A. Milne Edwards and Bouvier, 1893)
Description: A. Milne Edwards and Bouvier, 1893:84, pl. 6: figs. 19-22.—McLaughlin, 1982:825, figs. 1a, 2a, 3a.
Type-locality: *Blake* Stn. 231, off St. Vincent, West Indies. Distribution: Eastern Gulf of Mexico, central Caribbean, St. Vincent, West Indies (McLaughlin, 1982).

*Agaricochirus gibbosimanus* (A. Milne Edwards, 1880)
Description: A. Milne Edwards, 1880:42.—McLaughlin, 1982:836, figs. 1e, 2e, 3e.
Type-locality: *Blake* Stn. 206, off Martinique. Distribution: Western Atlantic off Dominican Republic; Yucatan Channel and northern Caribbean; Windward Islands (McLaughlin, 1982). Florida (personal communication, P. A. McLaughlin).

*Anisopagurus bartlettii* (A. Milne Edwards, 1880)
Description: A. Milne Edwards and Bouvier, 1893:91, pl. 7: figs. 1-9.
Type-locality: Off St. Vincent, 146 fathoms, *Blake* Stn. 223. Distribution: Southern Florida and the islands of St. Vincent, Grenada and Barbados in the West Indies.

*Anisopagurus pygmaeus* (Bouvier, 1918)
Description: Williams, 1984:223, fig. 159.
Type-locality: Bahia de Socapa (Zocapaa) near Santiago de Cuba. Distribution: Off Little River Inlet, South Carolina; southern Florida, including Tortugas, to Puerto Rico; Curaçao (Williams, 1984).
**Catapagurus sharrei** A. Milne Edwards, 1880  
Description: Forest and De Saint Laurent, 1967:151, figs. 124-135.  
Type-locality: Antilles  
Distribution: Western Atlantic south to Brazil (Forest and De Saint Laurent, 1967).

**Iridopagurus caribbensis** (A. Milne Edwards and Bouvier, 1893)  
Description: Williams, 1984:207, fig. 146.  
Type-locality: Flannegan Passage, Virgin Islands, **Blake** Stn. 142.  
Distribution: ESE of Charleston, South Carolina (32°34'N, 79°03'W); WSW of Panama City, Florida (30°19'N, 86°15.5'W); southern Florida, Virgin Islands, and Guadeloupe (Williams, 1984). East and west coast of Florida; Alabama; Bahama Islands; Lesser Antilles; Venezuela; Curacao; off Santa Marta, Colombia (García-Gómez, 1983).

**Iridopagurus globulus** De Saint Laurent-Dechancé, 1966  
Description: De Saint Laurent-Dechancé, 1966:169, figs. 28, 33, 38.  
Type-locality: Northwest Providence Channel, Bahama Islands, **Gerda** Stn. 522.  
Distribution: The Straits of Florida; the Northwest Province Channel, Bahama Islands; off Barbados, and Golfo de Uraba, Colombia (García-Gómez, 1983).

**Iridopagurus iris** (A. Milne Edwards, 1880)  
Type-locality: Off Barbados, **Blake** Stn. 290.  
Distribution: Known in the western Atlantic from southern Florida, off northwest Little Bahama Bank south to North Bahama Islands, Puerto Rico, Saint Vincent in the Windward Islands, Barbados, Trinidad and Tobago, French Guiana, Venezuela, Colombia, off Southwest Cay in the southwestern Caribbean, and Islas Mujeres, off the Yucatan Peninsula, Mexico (García-Gómez, 1983).

**Iridopagurus reticulatus** García Gómez, 1983  
Description: García-Gómez, 1983:37, figs. 3, 4.  
Type-locality: Off north coast of Crooked Island, Bahama Islands; 3-5 m.  
Distribution: Off the coast of North Carolina; off Bermuda; Hollywood Beach, Florida; Cay Sal; off the Grand Bahama Island, southeast through various localities off the Bahama Islands, Jamaica, Dominican Republic, the United States Virgin Islands, the Leeward Islands and Bonaire in the Lesser Antilles, Venezuela, Curacao, Colombia, Surinam and to its southern and eastern range, off French Guiana (García-Gómez, 1983).

**Iridopagurus violaceus** De Saint Laurent-Dechancé, 1966  
Description: De Saint Laurent-Dechancé, 1966:165, figs. 16, 22, 26, 31, 36.  
Type-locality: Off Fernando do Norhona, Brazil, **Calypso** Stn. 19.  
Distribution: Off the west coast of Florida, the Florida Keys, Little Bahama Bank and off Castle Roads, South coast of Bermuda; through the Antillean arc, from Antigua to the Grenadines, off the north coast of Venezuela, Colombia and Panama, and from off the coast of Tobago southeast to French Guiana; Brazil (García-Gómez, 1983).

**Mancomplanus corallinus** (Benedict, 1892)  
Description: Williams, 1984:224, fig. 160.  
Type-locality: Off Key West, Florida.  
Distribution: Off Cape Lookout, North Carolina, to Gulf of Mexico between Cedar Keys, Florida, and Mississippi delta; off Cape Catoche, Yucatan (Williams, 1984).

**Nematopaguroides pusillus** Forest and Saint Laurent, 1967  
Description: Forest and St. Laurent 1967:159, figs. 142-146.  
Type-locality: **Calypso** Stn. 23, Brazil, 08°19.5'S, 34°39'W, 75 m.  
Distribution: Southern Florida and the type-locality.

**Ostracotonus spatulipes** A. Milne Edwards, 1880  
Description: A. Milne Edwards and Bouvier, 1893:169, pl. 12.  
Type-locality: **Sigshie** Stn. 50; 119 fathoms 26°31'N, 85°53'E; Florida.  
Distribution: Florida and Barbados.

**Pagurus annulipes** (Stimpson, 1860)  
Description: Williams, 1984:210, fig. 148.  
Type-locality: Beaufort Harbor, North Carolina.  
Distribution: Vineyard Sound, Massachusetts, to at least northern Florida (Mclaughlin, 1975).
**Pagurus brevidactylus** (Stimpson, 1859)
Description: Lemaître et al., 1982:675.
Type-locality: Bathsheba, Barbados.
Distribution: Western Atlantic from Bermuda, northeastern Florida and Bahamas to Brazil; Caribbean; Gulf of Mexico (Lemaître et al., 1982).

**Pagurus carolinensis** McLaughlin, 1975
Description: Williams, 1984:212, fig. 150.
Type-locality: Black Rocks, off New River, North Carolina.
Distribution: Newport River (Kellogg, 1971) and Cape Lookout, North Carolina, to Southern Florida (Williams, 1984).

**Pagurus criniticornis** (Dana, 1852)
Description: Dana, 1852:448.--Lemaître et al., 1982:684, figs. 1a, b.
Type-locality: Rio de Janeiro, Brazil.
Distribution: Gulf of Mexico; Caribbean; south Atlantic from Brazil to Argentina (Lemaître et al., 1982).

**Pagurus defensus** (Benedict, 1892)
Description: Williams, 1984:213, fig. 151.
Type-locality: Gulf of Mexico between delta of Mississippi River and Cedar Keys, Florida, 55 m.
Distribution: Cape Hatteras, North Carolina, to Georgia; Tortugas, Florida, to Alabama (Williams, 1984).

**Pagurus gymnodactylus** Lemaître, 1982
Type-locality: 21.75 mi. northeast Cedar Keys Light, Florida.
Distribution: Gulf of Mexico from Mexico to west Florida (Lemaître et al., 1982).

**Pagurus impressus** (Benedict, 1892)
Description: Williams, 1984:215, fig. 153.
Type-locality: Boca Ciega Bay, inner shore of Pine Key (mouth of Tampa Bay), Florida (from holotype jar label).
Distribution: Off Diamond Shoals, North Carolina, to near Cape Canaveral, Florida; Florida Bay, near Flamingo, north to vicinity of Pensacola, Florida (Cooley, 1978); Port Aransas, Texas (Williams, 1984).

**Pagurus longicarpus** Say, 1817
Description: Williams, 1984:216, fig. 154.
Type-locality: "Inhabits bay shore" (east coast of United States).
Distribution: Minas Basin and Chignecto Bay (Bousfield and Leimb 1960) to Hutchinson Island, Florida (Camp et al., 1977); southwestern Florida to coast of Texas (Provenzano 1959; Rouse 1970; Whitten et al., 1950; Williams, 1984).

**Pagurus maclaughlinae** García-Gómez, 1982
Description: García-Gómez, 1982:647, figs. 1, 2.
Type-locality: Wading Beach, Matheson Hammock, Miami, Florida.
Distribution: From northern Gulf of Mexico to Florida Keys, and from central eastern Florida to Puerto Rico (García-Gómez, 1982).

**Pagurus marshi** Benedict, 1901
Description: Provenzano, 1959:405, fig. 17.--Lemaître et al., 1982:680.
Type-locality: Ponce, Puerto Rico.
Distribution: South Florida, through Caribbean to Colombia (Lemaître et al., 1982).

**Pagurus pierrei** Wess, 1963
Description: Williams, 1984:218, fig. 155.
Type-locality: 39 mi. SE Port Aransas, Texas, 73 m.
Distribution: Texas around the gulf coast of Florida to Georgia.

**Pagurus polius** (Smith, 1882)
Description: Williams, 1984:219, fig. 156.
Type-locality: Not designated in original description, but syntypes from four localities off New Jersey to Massachusetts were indicated by Smith (1882). The male he illustrated, is in the type collection of USNM (21452), from off Martha's Vineyard, Massachusetts, 40°03'48"N, 70°45'54"W, 130 m, Fish Hawk Stn. 922; others in the collection of MCZ, Harvard University, are from United States Fish Commission Stn. 309, 40°11'40"N, 68°22'10"W, 556 m, and Stns. 310, 39°59'16"N, 70°18'30"W, 475.5 m (Williams, 1984).
Distribution: Georges Bank to off Dry Tortugas, Florida (Williams, 1974c).

**Pagurus pollicaris** Say, 1817
Description: Williams, 1984:220, fig. 157.
Type-locality: (East) "coast of the United States".
Distribution: Grand Manan, New Brunswick,
to northeastern Florida; Key West, Florida, to Texas (Provenzano, 1959, in part).

**Pagurus provenzanoi** Forest and De Saint Laurent, 1967
Description: Forest and De Saint Laurent, 1967:118, figs. 72-77, 93, 94.--Lemaire et al., 1982:672.
Type-locality: *Calypso* Stn. 27, 08°25.5'S, 30°48.5'W.
Distribution: Bermuda southeastern Florida and Bahamas through eastern Caribbean to Brazil, south as far as Uruguay; western Caribbean from Yucatan Peninsula to Colombia (Lemaire et al., 1982).

**Pagurus stimpsoni** (A. Milne Edwards and Bouvier, 1893)
Description: Lemaire et al., 1982:687, fig. 2.
Type-locality: West Coast of Florida.
Distribution: Western Atlantic from North Carolina to Florida; Gulf of Mexico; Caribbean coast of South America (Lemaire et al., 1982).

**Phimochirus holtluiisi** (Provenzano, 1961)
Description: Williams, 1984:225, fig. 161.
Type-locality: Sand patch on coral rock bottom, 4.5 mi. SE Ram's Head, St. John, Virgin Islands, 15-18 m.
Distribution: Off Oregon Inlet, North Carolina (Herbst et al., 1979) to Alabama(?); through West Indies to Surinam (Williams, 1984).

**Phimochirus leurocarpus** McLaughlin, 1981
Description: McLaughlin, 1981b:356, figs. 4a, 5b, 10b, 11a-f, 12a-e.
Type-locality: *Pillsbury* Stn. 736, 10°57'N, 65°52'W.

**Phimochirus opercularis** (Stimpson, 1859)
Description: McLaughlin, 1981b:336, figs. 4a, 5a, 7a.
Type-locality: Tortugas, Florida.
Distribution: South Florida, Curaçao, Colombia (McLaughlin, 1981b).

**Phimochirus randalli** (Provenzano, 1961)
Description: Provenzano, 1961:159, fig. 2.--McLaughlin, 1981b:340, figs. 4b, 5b, 7b.
Type-locality: Ridge 5 mi. southeast of Lameshur Bay, St. John, Virgin Islands.
Distribution: Bahama Islands, Straits of Florida, eastern and western Caribbean (McLaughlin, 1981b).

**Pyllopagurus atlantica** Wass, 1963
Description: Wass, 1963:153, fig. 10.
Type-locality: Off Surinam, 07°25'N, 54°35'W; 137-146 m; *Oregon* Stn. 2289.
Distribution: Known from the type-locality and Florida (27°47.3'N, 79°57.6'W, 95-99m) (personal communication, D. K. Camp).

**Pyllopagurus discoidalis** (A. Milne Edwards, 1880)
Description: Williams, 1984:226, fig. 162.
Type-locality: Montserrat, 220 m.
Distribution: ENE Oregon Inlet, North Carolina (Provenzano, 1963), through eastern Gulf of Mexico and West Indies to mouth of Amazon River, Brazil (Williams, 1984).

**Rhodochirus rosaceus** (A. Milne Edwards and Bouvier, 1893)
Description: Williams, 1984:227, fig. 163.
Type-locality: Grenada, 108 m.
Distribution: South of Cape Lookout, North Carolina; southern Florida; Grenada and Surinam (Williams, 1984).

**Solenopagurus lineatus** (Wass, 1963)
Description: Wass, 1963:139, fig. 3.
Type-locality: 07°25'N 54°35'W; 135-145 m; *Oregon* Stn. 2289.

**Tomopagopus problematica** (A. Milne Edwards and Bouvier, 1893)
Description: Williams, 1984:228, figs. 164-165.
Type-locality: Near Sand Key (SSW Key West, Florida), 228.6 m.
Distribution: NE Cape Lookout, North Carolina; southern Florida and Bahamas; Barbados; off Honduras (16°39'N, 82°29'W) (Williams, 1984).

**Tomopagopus chasei** (Wass, 1963)
Description: McLaughlin, 1981a:21, figs. 1h, 7h, 8g.--Wass, 1963: figs. 11a-g.
Type-locality: Off Surinam, *Oregon* Stn. 2289, 07°25'N, 54°35'W.
Distribution: Western Atlantic and Caribbean (McLaughlin, 1981a).

**Tomopagopus cokeri** (Hay, 1917)
Description: Hay, 1917:75.--McLaughlin,
1981a:13, figs. 1d, 2a, 3a, 4a, 7a, 8a. Type-locality: Thirty miles S of Cape Lookout (lightship), North Carolina. Distribution: Western Atlantic, Gulf of Mexico and Caribbean (McLaughlin, 1981a).

Munida miles A. Milne Edwards, 1880
Description: A. Milne Edwards, 1880:51.--Chace, 1942b:36.
Type-locality: Gulf of Mexico; Blake Stn. 45; of Havana, Cuba, Blake Stn. 53.
Distribution: North coast of Cuba; eastern Gulf of Mexico; the Caribbean off Honduras (Pequegnat and Pequegnat, 1970) and throughout the Lesser Antilles; south as far as Pernambuco, Brazil.

Munida pusilla Benedict, 1902
Description: Williams, 1984:236, fig. 171.
Type-locality: Albatross Stn. 2405, Gulf of Mexico (south of Cape San Blas, Florida, 28°45'N, 85°02'W, 55 m).
Distribution: Off Cape Lookout, North Carolina, to Straits of Florida and through eastern Gulf of Mexico to Yucatan; Colombia and Trinidad (Williams, 1984).

Munida santipaui Henderson, 1885
Description: Henderson, 1885:411.--Chace, 1942b:38.
Type-locality: Saint Peter and Saint Paul Rocks (00°56'N, 29°22'W), Atlantic Ocean.
Distribution: In Western Atlantic from off Florida to St. Paul's Rocks and in the eastern Atlantic from the Azores to the African coast in the region of the Canary Islands; off South Africa (Chace, 1942b).

Munida simplex Benedict, 1902
Description: Benedict, 1902:272, fig. 19.
Type-locality: Albatross Stn. 2169; depth 140 m.
Distribution: Off Havana, Cuba; Florida.

Munida spinifrons Henderson, 1885
Description: Henderson, 1888:144, pl. 15, fig. 1.
Type-locality: Challenger Stn. 113A, off Fernando Noronha; 7-25 fathoms.
Distribution: Southern Florida and the type-locality.

Munida stimpsoni A. Milne Edwards, 1880
Description: A. Milne Edwards and Bouvier, 1897:48, pl. 4: figs. 1-13.
Type-locality: The original material was collected from 20 Blake stations throughout the West Indies. A type-locality was not designated although the description was apparently based on material from Blake Stn. 143, 150 fathoms, 17°30'N, 69°43.5'E (A. Milne Edwards and Bouvier, 1897).
Distribution: From north coast of Cuba through the West Indian regions to Grenada (Chace, 1942b). 100 miles south of Panama City, Florida, 183 m (personal communication, D. K. Camp).

Munida valida Smith, 1883
Description: Williams, 1984:237, fig. 172, 173.
Type-locality: Off Southern New England Fish Hawk Stn. 1112, 39°56'N, 70°35'W, 448 m; Stn. 1124, 40°01'N, 68°54'W, 1171 m.
Distribution: Off southern New England through Gulf of Mexico to Golfo de Morrosquillo, Colombia, and Curaçao (Williams, 1984).

Munidopsis armata (A. Milne Edwards, 1880)
Description: Chace, 1942b:74.--Mayo, 1974:72, figs. 6, 7.
Type-locality: Fredericsted (St. Croix, Virgin Islands), Blake Stn. 135, 1144 m.
Distribution: Known from the Caribbean and from the Straits of Florida south to British Guiana in the western Atlantic (Mayo, 1974).

Munidopsis platiostris (A. Milne Edwards and Bouvier, 1894)
Description: Chace, 1942b:75.--Mayo, 1974:216, fig. 31.
Type-locality: Off Barbados, 183 m.
Distribution: Known in the western Atlantic from the Straits of Florida, Arrowsmith Bank in the northwest Caribbean, north and south of the Dominican Republic, and in the Lesser Antilles (southeastern Caribbean) from Dominica to Barbados (Mayo, 1974).

Munidopsis polita (Smith, 1883)
Description: Smith, 1883:50, pl. 2: fig. 1, pl. 3: figs. 1-5. --Pequegnat and Pequegnat, 1970:155.
Type-locality: Western North Atlantic (off Martha's Vineyard), Fish Hawk Stn.
Distribution: Off the east coast of the United States (off Martha's Vineyard) and in NW Gulf of Mexico. Florida (182-212 m) (personal communication, P. M. Mikkelsen).

Family Porcellanidae
Euceras praelongus Stimpson, 1860
Description: Williams, 1984:239, fig. 174.
Type-locality: Beaufort, North Carolina.
Distribution: Delaware Bay (USNM; Wailing and Maurer, 1976) to Aransas area of Texas coast (Williams, 1984).
**Megalobrachium poeyi** (Guérin-Méneville, 1855)
Description: Benedict, 1901:136, pl. 3: fig. 8.
Type-locality: Cuba.
Distribution: Widely distributed from eastern Central Florida throughout the eastern Caribbean to Brazil, rarely in Panama (Gore and Abele, 1976).

**Megalobrachium soriatum** (Say, 1818)
Description: Williams, 1984:240, fig. 175.
Type-locality: St. Catherines Island, Georgia.
Distribution: Off Cape Hatteras, North Carolina, to Port Aransas, Texas; West Indies to Barbados; Contoy, Mexico; Bahia Caledonia and Galeta Island, Panama (Williams, 1984).

**Neopisossoma angustifrons** (Benedict, 1901)
Description: Benedict, 1901:135, pl. 3: fig. 6.
Type-locality: Trinidad.
Distribution: Known from the southwestern Gulf of Mexico, the Lesser Antilles, Trinidad, Cubagua, Islas La Tortuga, Bonaire, Curacao, Panama and Venezuela; littoral (Gore and Abele, 1976). Florida (personal communication, P. A. McLaughlin).

**Pachycheles ackleianus** A. Milne Edwards, 1880
Description: A. Milne Edwards and Bouvier, 1923:295, pl. 2: fig. 12, pl. 4: fig. 2.
Type-locality: Blake Sn. 11, off west coast of Florida, and Sn. 39, Jolbos Islands.
Distribution: Tampa Bay, Florida; Gulf of Mexico; North of Dry Tortugas; Jolbos Islands; North of Yucatan; Jamaica; St. Thomas; Barbados (Haig, 1956).

**Pachycheles monilifer** (Dana, 1852)
Description: Dana, 1852:413; 1855, pl. 26: fig. 3.
Type-locality: Rio de Janeiro, Brazil.
Distribution: Outer Hillsboro Reef, Florida; Contoy, Mexico; Isla Cubagua, Venezuela; Mamanguape, Brazil; Pernambuco; Rio de Janeiro; Bahia, Brazil (Haig, 1956).

**Pachycheles pilosus** (H. Milne Edwards, 1837)
Description: Williams, 1984:241, fig. 176.
Type-locality: Vicinity of Charleston, South Carolina.
Distribution: Charleston, South Carolina; Key West to Sarasota Bay, Florida; through West Indies to Tobago and Aruba (Williams, 1984).

**Pachycheles riisei** (Stimpson, 1858)
Description: Schmitt, 1935a:188, fig. 48.
Type-locality: St. Thomas.
Distribution: Florida, Key West; Puerto Rico; St. Thomas; Barbados; Ilha Trinidad; Maceio, Alagoas, Brazil (Haig, 1956).

**Pachycheles rugimanus** A. Milne Edwards, 1880
Description: Williams, 1984:242, fig. 177.
Type-locality: Contoy and W of Florida.
Distribution: Off Cape Lookout, North Carolina, through Florida to St. Thomas, Virgin Islands, and Contoy Island, Mexico; Pernambuco, Brazil (Coelho, 1964; Williams, 1984).

**Parapetrolithes tortugensis** (Glassell, 1945)
Description: Glassell, 1945:228, fig. 2.
Type-locality: In and around Tortugas, Florida.
Distribution: Dry Tortugas, Florida; off Isla La Tortuga, Venezuela; Virgin Islands.

**Petrolithes armatus** (Gibbes, 1850)
Description: Haig, 1960:50, pl. 19: fig. 2.
Type-locality: Florida.
Distribution: Widely distributed from the tropical western coast of Africa, the east central coast of Florida, the Gulf of Mexico and throughout the Caribbean as far south as Santa Catharina, Brazil; in the eastern Pacific from the Gulf of California, Mexico, to Peru (Gore and Abele, 1976).

**Petrolithes galathinus** (Bosc, 1802)
Description: Williams, 1984:243, fig. 178.
Type-locality: Unknown.
Distribution: Cape Hatteras, North Carolina, through Gulf of Mexico and Caribbean Sea to Rio de Janeiro, Brazil; Ilha Trinidad of Brazil; Pacific Ocean from Isla San Lucas, Costa Rica, to off La Libertad, Ecuador (Williams, 1984).

**Petrolithes jugosus** Street, 1872
Type-locality: Saint Martin Islands.
Distribution: Known from the southwestern Gulf of Mexico, the Antilles in the eastern Caribbean, Trinidad, Tobago, and some islands along the northern coast of South America, westward to Panama; Boca Raton, Palm Beach County, Florida (Gore and Abele, 1976).
**Petrolistes politus** (Gray, 1831)  
Type-locality: Not designated.  
Distribution: Florida Keys; Vera Cruz, Mexico; Puerto Rico; West Indies; Panama; Curaçao.

**Polynyx gibbesi** Haig, 1956  
Description: Williams, 1984:244, fig. 179.  
Type-locality: Coast of South Carolina.  
Distribution: Woods Hole, Massachusetts, to Uruguay (Coelho and Ramos, 1972).

**Porcellana sayana** (Leach, 1820)  
Description: Williams, 1984:245, fig. 180.  
Type-locality: Coast of Georgia and Florida.  
Distribution: Cape Hatteras, North Carolina, around Gulf of Mexico and Caribbean Sea to Rio Grande de Sul, Brazil (Coelho and Ramos, 1972).

**Porcellana sigsbeiana** A. Milne Edwards, 1880  
Description: Williams, 1984:246, fig. 181.  
Type-locality: Blake Stn. 49, off delta of Mississippi River, 216 m; 36, north of Yucatan, 154 m; 142, Flannegan Passage (Virgin Islands), 49 m.  
Distribution: Off Martha's Vineyard, Massachusetts, to southwestern Caribbean Sea off Colombia (Gore, 1970); West Indies to Virgin Islands (Williams, 1984).

**Porcellana simsoni** A. Milne Edwards, 1880  
Description: A. Milne Edwards and Bouvier, 1923:292, pl. 1: figs. 4-5.  
Type-locality: Woman Key, Florida.  
Distribution: Florida, Woman Key.

**FAMILY ALBUNEIDAE**

**Albunea gibbesi** Simpson, 1859  
Description: Williams, 1984:248, fig. 182.  
Type-locality: St. Augustine, Florida.  
Distribution: East of Cape Lookout, North Carolina, to Texas; through West Indies to São Sebastião, São Paulo, Brazil (Williams, 1984).

**Albunea pareti** Guérin-Méneville, 1853  
Description: Williams, 1984:249, fig. 182, 183.  
Type-locality: (Uncertain), America.  
Distribution: Beaufort Inlet, North Carolina, to Corpus Christi, Texas; through West Indies to Santa Catarina, Brazil (Coelho and Ramos, 1972); West Africa from Cape Verde Islands and Senegal to Ghana (Williams, 1984).

**Lepidopa benedicti** Schmitt, 1935  
Description: Efford, 1971:76, figs. 1a, 23, 3a, 43, p. q. 5a, 63, n. 7a.  
Type-locality: The outer beach of Santa Rosa Island, Pensacola, Florida.  
Distribution: Florida; Gulf of Mexico; SE of Veracruz, near Mocambo, Mexico.

**Lepidopa websteri** Benedict, 1903  
Description: Williams, 1984:250, fig. 184.  
Type-locality: Beach near Fort Macon (Carteret County), North Carolina.  
Distribution: Around mouth of Chesapeake Bay (larvae); Drum Inlet, North Carolina, to Sapelo Island, Georgia; Tampa Bay, Florida; Ship Island and Petit Bois Island, Mississippi (Efford, 1971; Sandifer and Van Engle, 1972; Sandifer 1973; Williams, 1984).

**Zygopa michaelis** Holthuis, 1960  
Description: Holthuis, 1960:22, fig. 1, 2.  
Type-locality: Sint Michiels Baai, south coast of Curaçao, Netherlands Antilles; sandy-bottom; depth about 4 m.  
Distribution: From Curaçao, in southern Caribbean, to southern Florida and eastern Gulf of Mexico.

**FAMILY HIPPIDAE**

**Emeria benedicti** Schmitt, 1935  
Description: Williams, 1984:251, fig. 185.  
Type-locality: Tampa Bay, Florida.  
Distribution: Charleston County, South Carolina, to Veracruz, Mexico (Efford, 1976).

**Emeria portoricensis** Schmitt, 1935  
Description: Schmitt, 1935a:215, figs. 72a, b.  
Type-locality: Mayaguez, Puerto Rico.  
Distribution: South and West Florida; Texas; Honduras; Colombia; Puerto Rico; Jamaica; Trinidad (Schmitt, 1935a).

**Emeria talpoida** (Say, 1817)  
Description: Williams, 1984:252, fig. 186.  
Type-locality: (East) coast of United States.  
Distribution: Harwich (Barnstable County, Massachusetts to Horn Island, Mississippi; Progreso, Yucatan, Mexico (Schmitt, 1935a; Efford, 1976).

**Hippa cubensis** (Saussure, 1857)  
Type-locality: Cuba.
Distribution: Florida to Brazil; West Indies; Ascension Island; Bahamas; West Africa; Puerto Rico, Hucares, St. Thomas (Schmitt, 1955a).

INFRAORDER BRACHYURA

FAMILY DROMIIDAE

Dromia erythropus (George Edwards, 1771)
Description: Rathbun, 1937:31, fig. 11, pl. 6: figs. 1, 2, pl. 8: figs. 1, 2.
Type-locality: Not indicated.
Distribution: Bermuda; Bahamas; Florida Keys and Dry Tortugas; off Louisiana and Texas; north coast of Cuba; Jamaica; Haiti; Puerto Rico; St. Thomas to Barbados; Netherlands Antilles; Pernambuco to São Paulo, Brazil (Powers, 1977).

Dromia antillensis Stimpson, 1858
Description: Williams, 1984:255, fig. 187.
Type-locality: St. Thomas, Virgin Island, Key Biscayne and Dry Tortugas, Florida.
Distribution: Off Cape Hatteras, North Carolina, through Gulf of Mexico and Caribbean Sea to Rio de Janeiro, Brazil; Bermuda; Saint Helena (Forest, 1974; Williams, 1984).

Hypoconcha arcuata Stimpson, 1858
Description: Williams, 1984:257, fig. 188.
Type-locality: South Carolina sandy shores and St. Thomas (Virgin Island).
Distribution: Off Cape Lookout, North Carolina, to west Florida; St. Thomas, Virgin Island; Surinam (Holthuis, 1959) to Espírito Santo, Brazil (Williams, 1984).

Hypoconcha sabulosa (Herbst, 1799)
Description: Williams, 1984:258, fig. 189.
Type-locality: Listed as "Africa" (probably an error).
Distribution: Off Cape Hatteras, North Carolina, through Gulf of Mexico to Bahia, Brazil (Williams, 1984).

Hypoconcha spinosissima Rathbun, 1933
Description: Williams, 1984:258, fig. 190.
Type-locality: Off Cape Hatteras, North Carolina, 89.6 m.
Distribution: Off Cape Hatteras, North Carolina, to Gulf of Mexico off Mississippi delta and Yucatan; Jamaica (Williams, 1984).

FAMILY HOMOLODROMIIDAE

Dicranodromia ovata A. Milne Edwards, 1880
Description: Rathbun, 1937:60, fig. 15, pl. 13: figs. 3-4.
Type-locality: Barbados, 329 m.
Distribution: East and west coasts of Florida; Florida Keys and Straits; off north coast of Cuba; northwest Caribbean Sea; Guadeloupe; Barbados (Powers, 1977).

FAMILY CYMONOMIDAE

Cymonomus quadratus A. Milne Edwards, 1880
Description: Rathbun, 1937:98, fig. 23, pl. 30: fig. 3, pl. 31: fig. 3.
Type-locality: Havana to Grenada, 320-930 m.
Distribution: Northwest of Dry Tortugas; Cuba; Puerto Rico; Lesser Antilles, from St. Croix to Grenada (Powers, 1977).

Cymopolus agassizi A. Milne Edwards and Bouvier, 1899
Description: Rathbun, 1937:100, pl. 30: fig. 2, pl. 31: fig. 2.
Type-locality: Sand Key, 137 m.
Distribution: Florida Straits; Florida Keys; Puerto Rico (Powers, 1977).

FAMILY CYCLODORIPPIDAE

Clythrocerus granulatus (Rathbun, 1898)
Description: Williams, 1984:259, fig. 191.
Type-locality: Off Trinidad.
Distribution: ESE Cape Lookout, and SE Cape Fear, North Carolina; Honduras; southern Florida through Antilles to Venezuela and Trinidad (Williams, 1984).

Clythrocerus nitidus (A. Milne Edwards, 1880)
Description: Rathbun, 1937:109, figs. 26, 27, pl. 33: figs. 1, 2.
Type-locality: Florida Keys and Grenada.
Distribution: South Carolina to west Florida; Florida Keys; Grenada; 12-479 m.

Clythrocerus stimpsoni Rathbun, 1937
Description: Rathbun, 1937:121, fig. 32, pl. 34: figs. 1, 2.
Type-locality: West coast of Florida; 183 m.
Distribution: Known only from the type specimen.

Tymolus antennarius (A. Milne Edwards, 1880)
Description: Rathbun, 1937:104, fig. 24, pl.
32: figs. 1, 2.
Type-locality: Twenty stations, ranging from Havana to Barbados, 158 to 517 m.
Distribution: West coast of Cuba; north coast of Yucatan (Gulf); north coast of Cuba; Puerto Rico; Lesser Antilles, from Dominica to Grenada (Powers, 1977). Florida (26°48'N, 84°37'W, 190.5-210 m) (personal communication, D. K. Camp).

FAMILY HOMOLIDAE
Homola barbata (Fabricius, 1793)
Description: Williams, 1984:261, fig. 193.
Type-locality: Bay of Naples.
Distribution: Off southeastern Massachusetts to Rio de Janeiro, Brazil; eastern Atlantic Ocean from Portugal and Azores to Cape Verde Islands and Angola; South Africa; Mediterranean Sea (Williams, 1984).

FAMILY LATREILLIIDAE
Latreillia manningi Williams, 1982
Description: Williams, 1984:262, fig. 194.
Type-locality: American Shoal Light, Florida, about 10 mi. N by W, 192-201 m.
Distribution: Nantucket Shoals off Massachusetts to off Havana, Cuba; Venezuela; Ascension Island; Frost (1936) reported a megalopa off Newfoundland (Williams, 1984). Florida (64 m) (personal communication, P. M. Mikkelsen).

FAMILY RANINIDAE
Lyridus nitidus (A. Milne Edwards, 1880)
Type-locality: Grenada, British West Indies, uStn. 259, 288m.
Distribution: Martha’s Vineyard; Gulf of Mexico; Greater Antilles; off Tortugas, Florida; off Surinam, NE of Paramaribo; north coast of Venezuela, off Puerto Cabello.

Ranilia constricta (A. Milne Edwards, 1880)
Description: Williams, 1984:265, fig. 196.
Type-locality: Near Sombrero (Florida?), 86 m. (see Rathbun, 1937).
Distribution: SE of Cape Fear, North Carolina, 33°42'N, 76°39.5'E, 140 m; Palm Beach, Florida, to Florida Straits and Yucatan Channel; Cuba; off Barbados; Ascension Island; eastern Atlantic from Sierra Leone and Annobon Island (Manning and Holthuis, 1981).

Ranilia muricata H. Milne Edwards, 1837
Description: Williams, 1984:266, fig. 197.
Type-locality: Unknown.
Distribution: North Carolina; Bahamas; Florida Straits; southern to northwestern Florida; Swan Island (Caribbean), Colombia.

Raninoides loevis (Latreille, 1825)
Description: Williams, 1984:267, fig. 198.
Type-locality: Unknown.
Distribution: S Cape Hatteras, 35°03.2'N, 75°35.1'W; around Gulf of Mexico and southern Caribbean Sea, including Leeward Islands, to Bahia, Brazil (Williams, 1984).

Raninoides louisianensis Rathbun, 1933
Description: Rathbun, 1937:12, figs. 6, 7, pl. 1: figs. 5, 6.
Type-locality: East of Mississippi delta, 122 m.

Synethis variolosa (Fabricius, 1793)
Description: Williams, 1984:264, fig. 195.
Type-locality: "In oceano Indico."
Distribution: SE Cape Lookout, North Carolina, 34°10'N, 76°10'W, through western Gulf of Mexico (Goeke, 1980) to Bahia, Brazil; Fernando de Noronha.

FAMILY DORIPPIDAE
Eithusa mascaronensis A. Milne Edwards, 1880
Description: Williams, 1984:269, fig. 199.
Type-localities: West Florida, 23.7 m, and West Florida, 26°16'N, 36.6 m (A. Milne Edwards, 1880).
Distribution: S of Cape Lookout, North Carolina (34°06'N, 76°15'W) to Gulf of Mexico and West Indies; Maranhao to Bahia, Brazil; Golfo de California; Taboga Island, Panama (Williams, 1984).

Eithusa microphthalmia Smith, 1881
Description: Williams, 1984:269, fig. 200.
Type-locality: Off Martha’s Vineyard, Massachusetts, 260.6 m, Stn. 878, Fish Hawk, 39°35'00"N, 70°54'15"W.
Distribution: Off Martha’s Vineyard, Massachusetts, to Cuba and around Gulf of Mexico (Pequegnat et al., 1971).
Eithusa tenipes  Rathbun, 1897
Description: Williams, 1984:270, fig. 201.
Type-locality: Off Key West, 91.5m.
Distribution: ESE Cape Lookout, North Carolina (94-77 m); East Florida to Gulf of Mexico E of Mississippi River delta; Cuba (Chace, 1940b; Williams, 1984).

Eithusa truncata A. Milne Edwards and Bouvier, 1899
Description: Rathbun, 1937:85, pl. 28: figs. 1-2.
Type-locality: Gulf of Mexico (Not Antilles) 217-218 m.
Distribution: Off west coast of Florida; off Mississippi delta and Louisiana; northwest of Trinidad (Powers, 1977).

FAMILY CALAPPIDAE

Acanthocarpus alexandri Stimpson, 1871
Type-locality: Off Quicksands, Florida Keys, 155 m.
Distribution: George Bank off Massachusetts to west coast of Florida; Puerto Rico to Grenadines; Rio de Janeiro, Brazil (Coelho and Ramos, 1972).

Acanthocarpus bispinosus A. Milne Edwards, 1880
Description: Rathbun, 1937:224, pl. 68: figs. 1-3.
Type-locality: Reefs of the Grenadines, 256 m.
Distribution: Off West and northwest coasts of Florida; Dry Tortugas; Grenadines, Windward Islands (Powers, 1977).

Calappa angusta A. Milne Edwards, 1880
Description: Williams, 1984:273, fig. 203.
Type-locality: Barbados.
Distribution: Off Cape Lookout, North Carolina, through eastern and southwestern Gulf of Mexico, to Venezuela (Turky, 1968) and Grenada (Williams, 1984).

Calappa flammata (Herbst, 1774)
Description: Williams, 1984:273, figs. 204-205.
Type-locality: America.
Distribution: Woods Hole region, Massachusetts, to Florida Keys; Gulf coast of United States and Mexico; Bahamas; Bermuda (Williams, 1984).

Calappa gallus (Herbst, 1803)
Description: Rathbun, 1937:214, pl. 65:

Calappa ocellata Holthuis, 1958
Description: Williams, 1984:275, figs. 206-207.
Type-locality: Klein Bonaire, Dutch West Indies.
Distribution: Cape Hatteras, North Carolina, to Rio de Janeiro, Brazil; Bermuda (Williams, 1984).

Calappa fulva Rathbun, 1898
Description: Williams, 1984:276, figs. 208-209.
Type-locality: Off Louisiana 29°24'30"N, 88°01'00"W, 64 m.
Distribution: Cape Hatteras, North Carolina, through Gulf of Mexico to Sergipe, Brazil (Williams, 1984).

Cyclopes bairdii Stimpson, 1860
Type-locality: Cape St. Lucas, Mexico.
Distribution: Bermuda; ESE Cape Lookout, North Carolina, to Espiritu Santo, Brazil, in west Atlantic; tip of Baja California to Ecuador and Galapagos Islands, including Clarion, Socorro and Cocos Islands, in eastern Pacific (Williams, 1984).

Hepatus epheliticus (Linnaeus, 1763)
Description: Williams, 1984:279, fig. 211.
Type-locality: Carolina.
Distribution: Chesapeake Bay to western Bay of Campeche, Mexico (Rickner, 1977); Cuba; Jamaica; Dominican Republic (Williams, 1984).

Hepatus pugnibundus (Herbst, 1785)
Description: Williams, 1984:280, figs. 212, 213.
Type-locality: Martinique.
Distribution: Georgia to State of São Paulo, Brazil, (Coelho and Ramos, 1972).
Osachila antillensis Rathbun, 1898
Description: Rathbun, 1937:251, pl. 77: fig. 2.
Type-locality: Off Havana, 209m.
Distribution: North coast of Cuba; St. Croix, Virgin Islands; Montserrat; Dominica; Barbados; Grenada (Powers, 1977). Florida (personal communication, F. A. McLaughlin).

Osachila semilevis Rathbun, 1916
Description: Williams, 1984:281, fig. 214.
Type-locality: Gulf of Mexico, 48 m.
Distribution: Off Beaufort, North Carolina, to northwest Florida (Williams, 1984).

Osachila tuberosa Stimpson, 1871
Description: Williams, 1984:282, fig. 215.
Type-locality: Five stations among the south Florida reefs.
Distribution: Off Cape Hatteras, North Carolina, to northwest Florida and Yucatan Channel (Pequegnat 1970; Springer and Bullis, 1956).

FAMILY LEUCOSIIDAE

Callidactylus asper Stimpson, 1871
Description: Williams, 1984:289, fig. 224.
Type-locality: Three stations off Florida keys, 29-69 m.
Distribution: S of Cape Lookout, North Carolina (Williams et al., 1968), through SE Gulf of Mexico to Panama and southeastward to Alagoas, Brazil (Coelho and Ramos, 1972).

Ebalia cariosa (Stimpson, 1860)
Description: Williams, 1984:284, fig. 216.
Type-locality: Beaufort, North Carolina.
Distribution: Beaufort, North Carolina, to west Florida; western Gulf of Mexico (Rickner, 1977); Jamaica; northeastern South America to Sao Paulo, Brazil (Williams, 1984).

Ebalia stimpsonii A. Milne Edwards, 1880
Description: Williams, 1984:284, fig. 217.
Type-locality: Barbados, 13.72 to 91.45 m.
Distribution: SE Cape Lookout, North Carolina; west Florida to Barbados; off mouth of Amazon River, Brazil (Williams, 1984).

Illicantha intermedia Miers, 1886
Description: Williams, 1984:290, fig. 225.
Type-locality: Bahia, Brazil.
Distribution: Off Beaufort, North Carolina, to NW Florida; St. Thomas, Virgin Islands; Venezuela; Ceara and Bahia, Brazil (Williams, 1984).

Illicantha lodactylus Rathbun, 1898
Description: Rathbun, 1937:186, text-fig. 41, pl. 55: figs. 1-2.
Type-locality: North of Trinidad, West Indies.
Distribution: West coast of Florida; Haiti; Puerto Rico; St. John, Virgin Islands; Trinidad; Alagoas to Bahia, Brazil (Powers, 1977).

Illicantha sparsa Stimpson, 1871
Description: Rathbun, 1937:190, pl. 56: figs. 1-2.
Type-locality: West of Tortugas, 55 m.
Distribution: Northwest of the Dry Tortugas; off north and southeast coasts of Puerto Rico; Barbados; Maranhao to Bahia, Brazil (Powers, 1977).

Illicantha subglobosa Stimpson, 1871
Description: Williams, 1984:290, fig. 226.
Type-locality: Three stations in Florida reefs, 73-146 m.
Distribution: Off Cape Hatteras, North Carolina, to northwest Florida; through eastern Gulf of Mexico and Caribbean Sea south to Alagoas, Brazil (Williams, 1984).

Lithadia cadaverosum Stimpson, 1871
Description: Rathbun, 1937:137, pl. 38: figs. 3-6.
Type-locality: West of Tortugas, 64 m, and off Conch Reef, Florida, 72 m.
Distribution: Bahamas; northwest coast of Florida and northeast portion of Gulf of Mexico (Powers, 1977).

Lithadia granulosa A. Milne Edwards, 1880
Description: Rathbun, 1937:140, fig. 36.
Type-locality: Off St. Croix Island, 210 m.
Distribution: Known from type specimen and southern Florida (personal communication, P. A. McLaughlin).

Myropis quinequispinosa Stimpson, 1871
Description: Williams, 1984:287, fig. 222.
Type-locality: Tennessee Reef, Florida Keys.
Distribution: South of Martha’s Vineyard, through Gulf of Mexico and Caribbean Sea to Surinam (Williams, 1984).

Persephonella crucroides Rathbun, 1931
Description: Rathbun, 1937:163, pl. 43: figs. 2, 3, pl. 44: figs. 1-3.
Type-locality: Horn Island Pass, Mississippi, 5 m.
Distribution: Northwest Florida to Texas;
Trinidad; Ilha São Sebastiao, Brazil (Powers, 1977).

**Persephona mediterranea** (Herbst, 1794)
Description: Williams, 1984:288, fig. 223.
Type-locality: Erroneously, Mediterranean Sea.
Distribution: New Jersey through Gulf of Mexico and Caribbean Sea to Santa Catarina, Brazil (Williams, 1984).

**Speleoephorus elevatus** Rathbun, 1898
Description: Rathbun, 1937:145, pl. 39: figs. 7-9.
Type-locality: Off Key West.
Distribution: Florida Keys; Jamaica; off Cape St. Roque and from Maranhao to Alagoas, Brazil (Powers, 1977).

**Speleoephorus nodosus** (Bell, 1855)
Description: Williams, 1984:285, figs. 218-219.
Type-locality: Unknown.
Distribution: Florida; West Indies (Williams, 1984).

**Speleoephorus pontifer** (Stimpson, 1871)
Description: Williams, 1984:286, figs. 220-221.
Type-locality: Barbados.
Distribution: Southeast of Cape Lookout and off Beaufort, North Carolina, to west Florida; West Indies to Barbados (Williams, 1984).

**Uhlia limbatis** Stimpson, 1871
Description: Rathbun, 1937:150, pl. 36: figs. 3-5.
Type-locality: St. Thomas.
Distribution: West of Key West, Florida; northeast coast of Cuba; Jamaica; Haiti; St. Thomas, Virgin Islands (Powers, 1977).

**FAMILY MAJIDAE**

**Acanthonyx petiveri** H. Milne Edwards, 1834
Description: Rathbun, 1925:142, fig. 52, pl. 44, pl. 222: figs. 1-6.
Type-locality: Antilles.
Distribution: Bahamas; southeast and northwest Florida; Texas; Cuba; Jamaica; Puerto Rico; Virgin Islands; Netherlands Antilles; Panama (Caribbean) to Rio de Janeiro, Brazil. Along the Pacific coast, from Baja California to Caldera, Chile; Galapagos Islands (Powers, 1977).

**Achaeopsis thomsoni** (Norman, 1873)
Description: Rathbun, 1925:29, text-fig. 7, pl. 10.
Type-locality: Deep water between the Faroes and Scotland.
Distribution: Western Atlantic from Faroes Shoals to Grenada. Eastern Atlantic from Faroe Islands to Cape Verde; Mediterranean, Gough Island (South Atlantic); Agulhas Bank, near cape of Good Hope. Indian Ocean. West and South Pacific Ocean. South Australia (Rathbun, 1925).

**Aepinus septemspinulosus** (A. Milne Edwards, 1879)
Description: Williams, 1984:292, fig. 227, 241c.
Type-locality: Florida Strait, 24°55′N, 83°25′W, 67.7 m.
Distribution: S Cape Lookout, North Carolina, 34°10′N, 76°10′W; SW Cape San Blas, Florida, and Bahamas Banks to Bahia, Brazil (Williams, 1984).

**Anasimus latus** Rathbun, 1894
Description: Williams, 1984:293, fig. 228, 241n.
Type-locality: Gulf of Mexico, east of delta of Mississippi River, 29°14′30″ N, 88°09′30″ W, 124.4 m.
Distribution: Off Cape Lookout, North Carolina, through Gulf of Mexico (Felder, 1973) to Amapa, Brazil (Coelho and Ramos, 1972).

**Anomalothir furcillatus** (Stimpson, 1871)
Description: Williams, 1984:294, fig. 229, 241a.
Type-locality: Off "The Samboes" (southern Florida), 225 m.
Distribution: Off Cape Lookout, North Carolina, through eastern Gulf of Mexico and West Indies to Grenada (Williams, 1984).

**Arachnopsis filipes** Stimpson, 1871
Description: Williams, 1984:295, fig. 230, 241d.
Type-locality: Off Conch, Carysfort and French reefs, Florida.
Distribution: SE Capes Hatteras and Lookout, North Carolina; Gulf of Mexico off NW Florida; through West Indies to off Rio Grande do Norte, Brazil.

**Batrachonotus fragosus** Stimpson, 1871
Description: Williams, 1984:296, 297, fig. 231, 241e.
Type-locality: South of Tortugas, (Florida), 24°36′40″ N, 80°02′20″ W, 29.3 m.
Distribution: Cape Hatteras, North Carolina, to southern and western Florida; West Indies to Barbados (Williams, 1984).
*Chorinus heros* (Herbst, 1790)
Description: Rathbun, 1925:305, fig. 101, pl. 107, pl. 246: figs. 3-5; 1933:20, fig. 21.
Type-locality: "The Ocean."
Distribution: Bermuda; Florida Keys and Dry Tortugas; Cuba; Caribbean coast of Yucatan, Mexico; Jamaica; Hispaniola; Puerto Rico; St. Croix; Barbados; Ceara to Bahia, Brazil (Powers, 1977).

*Coelocerus spinosus* A. Milne Edwards, 1875
Description: Williams, 1984:315, figs. 251, 259i.
Type-locality: Off Florida, 34.75 m.
Distribution: Off Cape Fear, North Carolina, to near Cape Canaveral, Florida; W Florida to E of Mississippi River delta (Williams, 1984).

*Colloides leptochaele* Rathbun, 1894
Description: Rathbun, 1925:117, fig. 42, pl. 38: figs. 5-6.
Type-locality: Gulf of Mexico, 124-309 m.
Distribution: All quadrants of Gulf of Mexico except southeast, off coasts of Florida, Alabama, and Texas; off Vera Cruz, Mexico (Powers, 1977).

*Colloides nudus* Stimpson, 1871
Description: Rathbun, 1925:110.
Type-locality: Off Carysfort Reef, 73 m.
Distribution: Known only from the male holotype off Carysfort Reef, Florida, 25°13'40"N, 80°10'45"W; 73 m; sand.

*Colloides obsesus* A. Milne Edwards, 1878
Description: Rathbun, 1925:109, pl. 36: figs. 3, 4, pl. 217: figs. 2-5.
Type-locality: Near Sombrero, Florida Strait, 99 m.
Distribution: Known only from the type-locality.

*Colloides robustus* Smith, 1883
Description: Rathbun, 1925:114, text-fig. 36-41, pl. 29.--Williams, 1984:297, fig. 241g.
Type-locality: Twenty-one stations between off Martha's Vineyard to off Chesapeake Bay, 1-2 to 285 m.
Distribution: North of Cape Cod, 42°12'N, 70°13'W, to southeast of Cape Lookout, North Carolina (Williams, 1984). Florida (27°37'N, 83°58'W, 73 m) [personal communication, D. K. Camp].

*Colloides trispinosus* Stimpson, 1871
Description: Williams, 1984:297, fig. 232, 241f.
Type-locality: Off the Quicksands, Carysfort Reef, and French Reef (Florida), 62.1 to 91 m.
Distribution: Near Cape Hatteras, North Carolina, to south and west Florida near Apalachicola (Williams, 1984).

*Epialtus bituberculatus* H. Milne Edwards, 1834
Description: Rathbun, 1925:148, figs. 53a, 54, pl. 45: figs. 3, 4.
Type-locality: Chile.
Distribution: East coast of Florida; Key West, Florida; Puerto Rico; Panama (Caribbean) to Colombia; Ceara to Pernambuco, Brazil (Powers, 1977).

*Epialtus dilatatus* A. Milne Edwards, 1878
Description: Williams, 1984:313, figs. 249, 259d.
Type-locality: St. Thomas.
Distribution: Off Beaufort Inlet and New River, North Carolina; southwest Florida; Yucatan; Bahamas to St. Thomas (Williams, 1984).

*Epialtus dilatatus forma elongata* Rathbun, 1923
Description: Rathbun, 1925:154, fig. 53k, pl. 48.
Type-locality: Off Duck Key, Florida.
Distribution: Florida Keys; south, west, and northwest coasts of Florida.

*Epialtus kingsleyi* Rathbun, 1923
Description: Rathbun, 1925:152, pl. 45: fig. 1.
Type-locality: Florida.
Distribution: Florida.

*Epialtus longirostris* Stimpson, 1860
Description: Rathbun, 1925:151, figs. 53g, 56.
Type-locality: Ensenada Honda, Culebra Island.
Distribution: Key West and west coast of Florida; Cuba; Jamaica; St. Thomas, Virgin Islands; northeast Brazil (Powers, 1977).

*Euprogynatha gracilipes* A. Milne Edwards, 1878
Description: Rathbun, 1925:101, pl. 34: figs. 3, 4.
Type-locality: 23°32'N, 88°05'W, 174 m.
Distribution: Florida Keys; north coast of
Yucatan; off north coast of Cuba; Puerto Rico; St. Croix, Virgin Islands; Barbados; Amapa to São Paulo, Brazil (Powers, 1977).

**Euprophatha rastellifera** Stimpson, 1871
Description: Williams, 1984:298, figs. 233, 241b.
Type-locality: Southwest of Martha’s Vineyard, Massachusetts, 40°00’N, 70°57’W, 155 m.
Distribution: Off Georges Bank (40°35’N, 67°37’W) to São Paulo, Brazil (Coelho and Ramos, 1972).

**Hemus cristulipes** A. Milne Edwards, 1875
Description: Williams, 1984:325, fig. 261.
Type-locality: Near Contoy (Yucatan), at the entrance to the Gulf of Mexico, 21.9 to 32.9 m.
Distribution: Off Cape Lookout, North Carolina and South Carolina; northwest of Gulf of Mexico and Yucatan, through West Indies to Pernambuco, Brazil (Powers, 1977; Herbst et al., 1979).

**Inachoides forceps** A. Milne Edwards, 1879
Description: Williams, 1984:299, figs. 234, 240i.
Type-locality: Guiana and Desterro, Brazil.
Distribution: SE Cape Lookout, North Carolina; west coast of Florida to Desterro (= Florianopolis), Brazil (Williams, 1984).

**Leptopisa setirostris** (Stimpson, 1871)
Description: Rathbun, 1925:375, pl. 134: figs. 1-3; pl. 253: fig. 2.
Type-locality: Florida Keys.
Distribution: From Miami to northern Brazil; Puerto Rico, Vieques, Culebra, St. Thomas (Rathbun, 1933).

**Libinia dubia** H. Milne Edwards, 1834
Description: Williams, 1984:316, figs. 252, 259g.
Type-locality: "Côtes des États-Unis."
Distribution: Cape Cod, Massachusetts, to southern Texas; Bahamas and Cuba (Williams, 1984).

**Libinia emarginata** Leach, 1815
Description: Williams, 1984:318, figs. 253, 259h.
Type-locality: Unknown.
Distribution: Windsor, Nova Scotia, to western Gulf of Mexico (Williams, 1984).

**Libinia erinacea** (A. Milne Edwards, 1879)
Description: Rathbun, 1925:321, pl. 109.
Type-locality: 24°44’N, 83°26’W, between Florida and Cuba, 69 m.
Distribution: Florida Keys; southeast to northwest Florida; north coast of Cuba (Powers, 1977).

**Macrocoeloma campiocerum** (Stimpson, 1871)
Description: Williams, 1984:326, figs. 262, 275m.
Type-locality: Near Key West (Florida), 3.7 to 9.2 m.
Distribution: Beaufort Harbor, North Carolina, around southern Florida to Alligator Harbor, Florida (Williams, 1984).

**Macrocoeloma diplacanthum** (Stimpson, 1860)
Description: Rathbun, 1925:478, pl. 169: fig. 1, pl. 269: fig. 1-3.
Type-locality: St. Thomas.
Distribution: Key West, Florida; Cuba; Jamaica; Puerto Rico; Virgin Islands; Guadeloupe; Curacao, Netherlands Antilles; Old Providence Island (Caribbean) (Powers, 1977).

**Macrocoeloma eutheca** (Stimpson, 1871)
Description: Williams, 1984:327, figs. 263, 275k.
Type-locality: Off French Reef (Florida), 27.4 m, and west of Tortugas, 67.7 m.
Distribution: SE of Cape Lookout, North Carolina; off NW Florida through Bahama Banks and West Indies; Panama (Williams, 1984).

**Macrocoeloma laevigatum** (Stimpson, 1860)
Description: Rathbun, 1925:483, fig. 136, pl. 169: figs. 2, 3.
Type-locality: St. Thomas.
Distribution: Florida Keys; north coast of Cuba; Jamaica; St. Thomas, Virgin Islands; Guadeloupe; Piaui to Alagoas, Brazil (Powers, 1977).

**Macrocoeloma septemspinosum** (Stimpson, 1871)
Description: Rathbun, 1925:477, pl. 173, figs. 2-3.
Type-locality: West of Tortugas, 65 m.
Distribution: South Carolina; Bahamas; Florida Keys; northeast quadrant of Gulf; Ceara to Rio Grande do Norte, Brazil (Powers, 1977).
Macrococeloma subparallellum (Stimpson, 1860)
Description: Rathbun, 1925:480, pl. 172.
Type-locality: St. Thomas.
Distribution: North coast of Cuba; Jamaica; Haiti; Puerto Rico; St. Thomas, Virgin Islands; Guadeloupe; Barbados; Old Providence Island (Caribbean); Rio Grande do Norte, Pernambuco; Brazil (Powers, 1977).

Macrococeloma trispinosum trispinosum
(Latreille, 1825)
Description: Rathbun, 1925:466, fig. 132, pl. 166: fig. 1, pl. 167.
Type-locality: "Nouvelle Hollande" (an error).
Distribution: North Carolina; Bermuda; south Florida to northwest Florida; off Louisiana and Texas; Gulf and Caribbean coasts of Yucatan, Mexico; Cuba; Jamaica; Puerto Rico; St. Thomas to St. Lucia; Curaçao; Netherlands Antilles; Pau ui to Bahia, Brazil (Powers, 1977).

Macrococeloma trispinosum nodipes
(Desbonne, 1867)
Description: Williams, 1984:328, figs. 264, 275.
Type-locality: "Nouvelle Hollande" (?) (error).
Distribution: Beaufort, North Carolina, to Alligator Harbor, Florida; Yucatan; through West Indies to Bahia, Brazil (Williams, 1984).

Macrococeloma trispinosum
(Variety)
Description: Rathbun, 1925:468, pl. 168: fig. 1.
Type-locality: None designated.
Distribution: From North Carolina to Gulf of Mexico, including Florida; Yucatan; West Indies and Caribbean Sea (Rathbun, 1925).

Metopophisichus calcarata (Say, 1818)
Description: Williams, 1984:300, figs. 235, 240h.
Type-locality: Bay of Charleston, South Carolina.
Distribution: Off Cape Hatteras, North Carolina, through Gulf of Mexico and Caribbean Sea to Rio de Janeiro, Brazil (Williams, 1984).

Microphryis antillensis Rathbun, 1920
Description: Williams, 1984:329, figs. 265, 275h.
Type-locality: Off Montego Bay Point, Jamaica.
Distribution: Near Capes Hatteras and Lookout, North Carolina, to Cape Fear, North Carolina; Cuba; Jamaica; Puerto Rico; Pernambuco, Brazil (Williams, 1984).

Microphryis bicornatus (Latreille, 1825)
Description: Williams, 1984:330, figs. 266, 275g.
Type-locality: "Nouvelle Hollande".
Distribution: Near Beaufort, North Carolina, through Gulf of Mexico (Ray, 1974) to Florianopolis, Santa Catarina, Brazil; Bermuda (Williams, 1984).

Mithrax acuticornis Stimpson, 1870
Description: Williams, 1984:332, figs. 267, 275a.
Type-locality: Off the Quicksands (Florida), 62.6 m; west of the Tortugas, 67.7 m and 76.8 m.
Distribution: Off Cape Lookout, North Carolina; west Florida and Yucatan Channel through West Indies to Espirito Santo, Brazil (Williams, 1984).

Mithrax caribbaeus Rathbun, 1900
Description: Rathbun, 1925:409, plates 148, 149.
Type-locality: St. Thomas.
Distribution: West Indies to South America, Puerto Rico, St. Thomas, St. Croix. Airport Lagoon, Key West, Dry Tortugas, 29-33 m (personal communication, D. K. Camp).

Mithrax cinctimanus (Stimpson, 1860)
Description: Rathbun, 1925:438, pl. 158.
Type-locality: Tortugas and St. Thomas.
Distribution: Bahamas and Florida Keys to West Indies and Curaçao (Rathbun, 1925).

Mithrax cornutus Saussure, 1857
Description: Rathbun, 1925:386, pl. 137: figs. 3-4, pl. 256.
Type-locality: Antilles.
Distribution: Bermuda; Florida Straits; north coast of Cuba; between Jamaica and Haiti; Dominica; Martinique; off Bahia, Brazil (Powers, 1977).

Mithrax corphye (Herbst, 1801)
Description: Rathbun, 1925:426, pl. 153.
Type-locality: Not Known.
Distribution: Miami to southern Brazil; Puerto Rico, Culebra, St. Thomas, St. Croix (Rathbun, 1933).
Mithrax forceps (A. Milne Edwards, 1875)
Description: Williams, 1984:337, figs. 272, 275f.
Type-locality: Guiana.
Distribution: From Cape Hatteras, North Carolina, through Gulf of Mexico to Rio de Janeiro, Brazil; Bermuda (Williams, 1984).

Mithrax hemphilii Rathbun, 1892
Description: Rathbun, 1925:395, pl. 139, pl. 259: fig. 2.
Type-locality: Indian Key, Florida.
Distribution: Florida Keys to Rio de Janeiro, Brazil; Culebra (Rathbun, 1933).

Mithrax hispidus (Herbst, 1790)
Description: Williams, 1984:333, figs. 268, 275d.
Type-locality: Unknown.
Distribution: Delaware Bay (Say, 1818), off Charleston Harbor, South Carolina, and Georgia (Gibbes, 1850). Northwestern Gulf of Mexico; Bahamas and Florida Keys through West Indies to São Paulo, Brazil; Bermuda (Williams, 1984).

Mithrax holderi Stimpson, 1871
Description: Rathbun, 1925:392, pl. 138: figs. 1, 2, pl. 257: fig. 2.
Type-locality: Tortugas, 13 m.
Distribution: Florida Keys and Dry Tortugas; north and south coasts of Cuba; Jamaica; Puerto Rico; Virgin Islands (Powers, 1977).

Mithrax pilosus Rathbun, 1892
Description: Rathbun, 1925:394, pl. 138: fig. 3, pl. 258.
Type-locality: Abaco, Bahamas.
Distribution: Bahamas; Florida Keys and Dry Tortugas; Vera Cruz, Mexico; Cuba; Puerto Rico; St. Thomas; Virgin Islands to Barbados; Caribbean coast of Panama; Venezuela (Powers, 1977).

Mithrax pleuranthus Stimpson, 1871
Description: Williams, 1984:334, figs. 269, 275e.
Type-locality: Key West, 3.6-9.1 m, Tortugas (Florida), 9.1-11 m; St. Thomas.
Distribution: Beaufort, North Carolina, to Pensacola, Florida, western Gulf of Mexico to Yucatan Channel off Cape Catoche, Mexico; West Indies to Venezuela; Bermuda (Williams, 1984).

Mithrax ruber (Stimpson, 1871)
Description: Rathbun, 1925:432, pl. 157.
Type-locality: Cruz del Padre, Cuba.
Distribution: Cuba to Curaçao and Barbados; Puerto Rico, St. Thomas, Water Island (Rathbun, 1933).

Mithrax sculptus (Lamarck, 1818)
Description: Rathbun, 1925:422, figs. 125, 126, pl. 152.
Type-locality: Unknown.
Distribution: From Miami to Brazil; Puerto Rico; Vieques; Culebra; St. Thomas; Water Island.

Mithrax spinosisimus (Lamarck, 1818)
Description: Williams, 1984:335, figs. 270, 275b.
Type-locality: "Ile-de-France," Locality erroneous.
Distribution: North (?) and South Carolina to Nicaragua, and through West Indies to Barbados and Venezuela (Williams, 1984).

Mithrax tortucae Rathbun, 1920
Description: Rathbun, 1925:417, pl. 147, fig. 2.
Type-locality: Tortugas.
Distribution: Bahamas; Florida Keys; Curaçao.

Mithrax verrucosus H. Milne Edwards, 1832
Description: Williams, 1984:336, figs. 271, 275c.
Type-locality: Robert Bay, Martinique.
Distribution: Charleston, South Carolina; Campeche Banks; through West Indies to Fernando Noronha Island, Brazil (Williams, 1984).

Mocosa crebripunctata Stimpson, 1871
Description: Rathbun, 1925:159, fig. 59, pl. 49: figs. 3-4.
Type-locality: Off French Reef, Florida, 27 m.
Distribution: Florida Straits; off Cape San Blas, northwest Florida; Maranhao to Espirito Santo, Brazil.

Nihila antilopra (Stimpson, 1871)
Description: Williams, 1984:320, figs. 254, 259f.
Type-locality: Florida, off Carysfort Reef, 95 and 109.7 m; and off Alligator Reef, 251.8 m.
Distribution: Off Cape Hatteras, North Carolina, to Gulf of Mexico; just east of Mississippi River delta and Gulf of Campeche.
Windward Islands, West Indies, off Guyana (Williams, 1984).

Oplopsa spinipes A. Milne Edwards, 1879
Description: Rathbun, 1925:228, pl. 232: figs. 1, 2.
Type-locality: Straits of Florida, 185 m.
Distribution: Known only from the type-locality.

Pelis mutica (Gibbes, 1850)
Description: Williams, 1984:321, figs. 255, 259a.
Type-locality: Charleston Harbor, off White Point Battery, South Carolina.
Distribution: Buzzards Bay and Vineyard Sound, Massachusetts, to off Port Mansfield, Willacy County, Texas (Felder, 1973); Cuba, Puerto Rico, and St. Thomas, West Indies (Williams, 1984).

Picroceroides tubularis Miers, 1886
Description: Rathbun, 1925:354, fig. 115, pl. 126, pl. 254: figs. 2-5.
Type-locality: Fernando Noronha and Bahia, in shallow water.
Distribution: Bahamas; southeast Florida; north and south coasts of Cuba; between Jamaica and Haiti; St. Thomas, Virgin Islands; Maranhao to Espirito Santo, Brazil (Powers, 1977).

Pitho aculeata (Gibbes, 1850)
Description: Rathbun, 1925:357, fig. 116c, pl. 127, pl. 251: fig. 1.
Type-locality: Key West, and "Florida".
Distribution: Bahamas; Florida Keys and Dry Tortugas; west coast of Florida; north coast of Cuba; Jamaica; Puerto Rico; St. Thomas, Virgin Islands; Guadeloupe; Old Province Island (Caribbean); Netherlands Antilles (Powers, 1977).

Pitho anisodon (von Martens, 1872)
Description: Rathbun, 1925:368, figs. 116b, 117d, 118, pl. 131, pl. 251: fig. 2.
Type-locality: Cuba.
Distribution: Bahamas; south, west and northwest coast of Florida; Florida Keys; north coast of Cuba; Jamaica; Puerto Rico; Guadeloupe; Curaçao, Netherlands Antilles (Powers, 1977).

Pitho thermiferi (Schramm, 1867)
Description: Williams, 1984:311, figs. 246, 259a.

Type-locality: Guadeloupe.
Distribution: Off Beaufort Inlet, North Carolina, to west Florida; Veracruz, Mexico; West Indies to Islet of São Paulo, Brazil (Williams, 1984).

Pitho laevigata (A. Milne Edwards, 1875)
Description: Rathbun, 1925:372, pl. 132: figs. 3-4, pl. 133: fig 3, pl. 250: figs. 11-13.
Type-locality: Antilles.
Distribution: West and northwest coasts of Florida; Antilles, location unspecified; Colombia; Trinidad (Powers, 1977).

Pitho mirabilis (Herbst, 1794)
Description: Rathbun, 1925:366, figs. 116d, 117c, pl. 128: fig. 3; pl. 129: fig. 3; pl. 253: figs. 1.
Type-locality: Unknown.
Distribution: Bahamas and Florida Keys; Guadeloupe; Puerto Rico (Powers, 1977).

Pitho quadridensata (Miers, 1879)
Description: Rathbun, 1925:369, pl. 132: fig. 2, pl. 133: fig. 2; pl. 250: fig. 10.
Type-locality: West Indies.
Distribution: Jamaica; Puerto Rico; Content Keys, Monroe County, Florida, 5-6 m (personal communication, D. K. Camp).

Podochela curvirostris (A. Milne Edwards, 1879)
Description: Rathbun, 1925:58, pl. 19, 210.
Type-locality: Barbados, 180 m, and near Havana, 229 m.
Distribution: Florida Straits; north coast of Cuba; Caribbean coast of Yucatan; Montserrat; Barbados; Grenadines (Powers, 1977).

Podochela gracilipes Stimpson, 1871
Description: Williams, 1984:301, fig. 236, 241j.
Type-locality: West of Tortugas, off Pacific and Carysfort Reefs (Florida), 66 to 110 m.
Distribution: Off Cape Lookout, North Carolina, through Gulf of Mexico and Caribbean Sea to Santa Catarina, Brazil (Williams, 1984).

Podochela lamelligera (Stimpson, 1871)
Description: Rathbun, 1925:52, pl. 20: figs. 1-2.
Type-locality: Off Tennessee Reef, Florida Keys, 38 m.
Distribution: Southeast Florida; off Key West, Florida; off northwest Florida (Powers, 1977).

**Podocela macrodera** Stimpson, 1860
Description: Rathbun, 1925:44, fig. 11, pl. 16.
Type-locality: St. Thomas and Key Biscayne, Florida.
Distribution: Bahamas; Florida Keys; west coast of Florida; off Caribbean coast of Yucatan; Cuba; Puerto Rico; Virgin Islands; Guadelupe; Curacao, Netherlands Antilles; Brazil (Powers, 1977).

**Podocela riisei** Stimpson, 1860
Description: Williams, 1984:302, figs. 237, 241k.
Type-locality: Island of St. Thomas (West Indies).
Distribution: North Carolina to Campeche, Mexico; through West Indies to Trinidad; Rio de Janeiro, Brazil; Bermuda (Williams, 1984).

**Podocela sidneyi** Rathbun, 1924
Description: Williams, 1984:302, figs. 238, 241l.
Type-locality: Off Cape Hatteras, North Carolina, 90 m.
Distribution: Off Cape Hatteras, North Carolina, to Veracruz (Ray, 1974); northwestern Cuba; Yucatan Channel (Williams, 1984).

**Pyromaia arachna** Rathbun, 1924
Description: Rathbun, 1925:131, pls. 42-43.
Type-locality: Gulf of Mexico, SW of Cape San Blas, Florida; 309 m.
Distribution: Off South Carolina; off west coast of Florida to off east coast of Mexico, throughout the Gulf of Mexico.

**Pyromaia cuspidata** Stimpson, 1871
Description: Williams, 1984:303, figs. 239, 241m.
Type-locality: Off Sand Key, 150 m; Alligator Reef, 170 m; the Samboes, 170 and 221 m; southwest of Sand Key, 229 m (Florida).
Distribution: Off Cape Lookout, North Carolina, to west Florida; Cuba and Yucatan Channel to off Nicaragua 14°31'N, 80°41'W (Williams, 1984).

**Rochinia crassa** (A. Milne Edwards, 1879)
Description: Williams, 1984:322, figs. 256, 260a.
Type-locality: Between Cuba and Florida, 24°15'N, 82°13'W.
Distribution: Nantucket Shoals, Massachusetts, to Gulf of Mexico off southern Texas; northern Cuba; west of Cabo de la Vela, Colombia; off French Guiana (Williams, 1984).

**Rochinia hystricis** (Stimpson, 1871)
Description: Rathbun, 1925:214, pls. 70, 71.
Type-locality: Off Sand Key, Florida, 24°16'N, 81°42'W, 252 m.
Distribution: Off Key West (Rathbun, 1925); off Cuba (Chace, 1940b); Gulf of Mexico.

**Rochinia tanneti** (Smith, 1883)
Description: Williams, 1984:323, figs. 257, 260b.
Type-locality: Off Delaware Bay.
Distribution: Off Martha's Vineyard, Massachusetts, to Straits of Florida (Williams, 1984).

**Rochinia umbonata** (Stimpson, 1871)
Description: Williams, 1984:323, figs. 258, 260c.
Type-locality: Off Sand Key, Florida.
Distribution: Southeast of Cape Lookout, North Carolina, through eastern and northern Gulf of Mexico to northeast of Nicaragua; through West Indies to St. Vincent (Williams, 1984).

**Sphenocarcinus corrosus** A. Milne Edwards, 1875
Description: Williams, 1984:314, figs. 250, 259c.
Type-locality: Off Barbados, 180 m.
Distribution: Off Cape Lookout, North Carolina; Gulf of Mexico (Goede and Shaw, 1980) to Barbados (Williams, 1984).

**Stenocionops furcata coelata** (A. Milne Edwards, 1878)
Description: Williams, 1984:338, figs. 273, 275i.
Type-locality: Ten mi. from Jolbos Islands (Yucatan), and near Havana (Cuba), 320 m.
Distribution: Shelly reefs off Beaufort, North Carolina, to northwest Florida and Alabama; Yucatan Channel; West Indies to Barbados, (Williams, 1984).

**Stenocionops furcata furcata** (Olivier, 1791)
Description: Rathbun, 1925:449, text-fig. 131,
Stenocionops spinimana (Rathbun, 1892)
Description: Williams, 1984:339, figs. 274, 275.
Type-locality: Off Cape Lookout, North Carolina, 227 m.
Distribution: Off Cape Hatteras, North Carolina, to Florida Straits and Gulf of Mexico off Mobile Bay, Alabama, and east of Chandeleur Island, off Mississippi (Franks et al., 1972; Williams, 1984).

Stenocionops spinossimina (Saussure, 1857)
Description: Rathbun, 1925:445, pl. 165: fig. 2, pl. 264: figs. 374, pl. 265.
Type-locality: Guadeloupe.
Distribution: North Carolina; south and southwest Florida; off Texas and east coast of Mexico; north coast of Cuba; Haiti; Guadeloupe; Dominica; Rio de Janeiro and Fernando de Noronha, Brazil (Powers, 1977).

Stenorhynchos seticornis (Herbst, 1788)
Description: Williams, 1984:304, fig. 240, 241o.
Type-locality: Guadeloupe (Holthuis 1959).
Distribution: North Carolina to Santa Catarina, Brazil; Bermuda (Williams, 1984).

Stilbomastax margaritifera (Monod, 1939)
Description: Monod, 1939:561, figs. 6-9.--Williams et al., 1977:887.
Type-locality: Basse-Terre, Guadeloupe, 15-20 m.
Distribution: southeast of Cape San Blas to southeast Florida; Guadeloupe (Williams et al., 1977).

Thoe puella Stimpson, 1860
Description: Rathbun, 1925:348, figs. 111, 112, pl. 125: figs. 1, 2.
Type-locality: Tortugas, Florida.
Distribution: Florida Keys and Dry Tortugas; Jamaica; Puerto Rico; St. Thomas; Guadeloupe; Curacao (Powers, 1977).

Tycha emarginata White, 1847
Description: Williams, 1984:312, figs. 247-248, 259b.
Type-locality: West Indies.
Distribution: Off Beaufort Inlet, North Carolina; through Bahamas to west coast of Florida (Williams, 1984).

FAMILY PARTHENOPOIDAE
Cryptopoda concava Stimpson, 1871
Description: Williams, 1984:346, figs. 281, 286a.
Type-locality: Off Conch Reef (Florida), 62.2 m.
Distribution: Southeast of Cape Lookout, North Carolina; central east Florida; Cape San Blas, Florida, to St. Thomas; Ceara to Bahia, Brazil (Williams, 1984).

Heterocrypta granulata (Gibbes, 1850)
Description: Williams, 1984:347, figs. 282, 286b.
Type-locality: Near Kiawah Island, Sullivans Island, and White Point Shoal, Charleston Harbor, South Carolina.
Distribution: Nantucket Sound, Massachusetts, around peninsular Florida to southern Texas; through West Indies to Trinidad; Ceara to Bahia, Brazil (Williams, 1984).

Leiolambrus nitidus Rathbun, 1901
Description: Rathbun, 1925:545, pl. 199; pl. 281: fig. 1.
Type-locality: Mayaguez Harbor, Puerto Rico, 22-33 m.
Distribution: Gulf of Mexico, from off Alabama to south Texas; Jamaica; Puerto Rico; French Guiana (Powers, 1977).

Mesorhoea sexspinosa Stimpson, 1871
Description: Williams, 1984:348, figs. 283, 286c.
Type-locality: Four mi. southwest of Loggerhead Key, Florida, 20 m.
Distribution: Southeast of Cape Lookout, North Carolina; off northeast Florida, to Planagan Passage, Virgin Islands (Williams, 1984).

Parthenope agona (Stimpson, 1871)
Description: Williams, 1984:342, figs. 276, 280a.
Type-locality: Off the Marquesas, Carysfort Reef, and Conch Reef, 73 and 89.6 m (southern Florida).
Distribution: Off Capes Hatteras and Lookout, North Carolina, and central eastern Florida;
Gulf of Mexico and Pensacola, Florida, to near Ft. Myers; through Florida Straits, West Indies and Caribbean Sea to Surinam (Williams, 1984).

**Parthenope fraterculus** (Stimpson, 1871)
Description: Williams, 1984:343, figs. 277, 280b.
Type-locality: Off Sand Key, Caryfort and Conch Reefs, west of Tortugas, 47.6-124.4 m (southern Florida).
Distribution: Off Cape Fear, North Carolina; central eastern Florida southward; Gulf of Mexico, off Cape San Blas, Florida, to Florida Straits; off Cape Catoche, Yucatan, Mexico; through West Indies to Mouth of Amazon River (Williams, 1984).

**Parthenope granulata** (Kingsley, 1879)
Description: Williams, 1984:344, figs. 278, 280c.
Type-locality: Tortugas, Florida.
Distribution: Off the three North Carolina Capes southward around Florida to Louisiana; Bermuda; Bahia Honda, Cuba(?); St. Thomas, Virgin Islands (Gore, 1977).

**Parthenope pourtalesii** (Stimpson, 1871)
Description: Williams, 1984:345, figs. 279, 280d.
Type-locality: Off Conch Reef, French Reef, and American Shoal (southern Florida) 73-214 m.
Distribution: Off Martha's Vineyard Massachusetts; New Jersey southward; Gulf of Mexico through West Indies to Grenada.

**Parthenope serrata** (H. Milne Edwards, 1834)
Type-locality: "L' Océan Indien" by original designation; erroneous locality for the West Indies. Veracruz, Mexico by selection of male lectotype (Gore, 1977).
Distribution: Bermuda; Ft. Pierce, Florida, around the Gulf of Mexico; Central America; Cuba; Lesser Antilles; islands off the northern coast of South America, southward to Bahia, Brazil (Gore and Scotto, 1979).

**Solenolambrus decemspinosus** Rathbun, 1894
Description: Rathbun, 1925:540, pl. 194: figs. 1, 2.
Type-locality: Off Cape San Blas, Florida, 28°44'N, 85°16'W, 110 m.
Distribution: Northeastern Gulf of Mexico and off San Juan, Puerto Rico.

**Solenolambrus typicus** Stimpson, 1871
Description: Williams, 1984:349, figs. 285, 286a.
Type-locality: Off the Samboes and off Alligator Reef (southern Florida), 146.3 to 201.2 m.
Distribution: SE Cape Lookout; western Gulf of Mexico offshore Corpus Christi, Texas, and N of Yucatan; Swan Island and Nicaragua Shelf; southern Florida through West Indies to Surinam and Brazil (Gore and Scotto, 1979).

**Solenolambrus tenellus** Stimpson, 1871
Description: Williams, 1984:348, figs. 284, 286d.
Type-locality: Off Carysfort, Conch, and French Reefs, 64-89.6 m (southern Florida).
Distribution: Off Cape Lookout, North Carolina; central east Florida southward; Gulf of Mexico, near Cape St. George, Florida, to Florida Keys; Bahamas; Barbados (Williams, 1984).

**Tutankhamen cristatipes** (A. Milne Edwards, 1880)
Description: Rathbun, 1925:530, pl. 277: figs. 3-5.
Type-locality: St. Vincent, Lesser Antilles.
Distribution: Pourtales Plateau, Florida Straits; St. Vincent, Lesser Antilles.

**FAMILY ATELEYCYCLIDAE**

**Trichopeltarion nobile** A. Milne Edwards, 1880
Description: Rathbun, 1930:168, pl. 73.--Pequegnat, 1970:184, figs. 6-4, 6-5.
Type-locality: Off St. Lucia, 276 m.
Distribution: Off northwest Florida and Mississippi; east coast of Mexico; Bay of Campeche; off St. Lucia (Powers, 1977).

**FAMILY CANCRIDAE**

**Cancer borealis** Stimpson, 1859
Description: Williams, 1984:351, fig. 287.
Type-locality: Nova Scotia to Cape Cod.
Distribution: Nova Scotia to south of Tortugas, Florida; Verrill (1908) judged that a Bermuda record was probably mislabelled (Williams, 1984).
Cancer irroratus Say, 1817
Description: Williams, 1984:353, fig. 288.
Type-locality: "Inhabits the ocean" (Atlantic coast of the United States).
Distribution: Labrador to off Miami, Florida (Williams, 1984).

FAMILY GERYONIDAE

Geryon fenneri Manning and Holthuis, 1984
Description: Manning and Holthuis, 1984:666, figs. 1, 2a, b, 3a-c, 4a, b.
Type-locality: Off Fernandina, Florida, Albatross Sín. 2669.
Distribution: Around coasts of Florida.

FAMILY PORTUNIDAE

Arenaeus cribnarius (Lamarck, 1818)
Description: Williams, 1984:362, fig. 292.
Type-locality: Brazil.
Distribution: Vineyard Sound, Massachusetts, to Santa Catarina, Brazil (Williams, 1984).

Bathyneectes longispina Stimpson, 1871
Description: Rathbun, 1930:28, pls. 9, 10. -- Manning and Holthuis, 1981:80.
Type-locality: Off Sand Key, Key West, and American Shoal, all in the Florida Straits, 183-275 m.
Distribution: Off Martha’s Vineyard, Massachusetts, to Gulf Stream in Florida Straits.

Benthochasen schmitti Rathbun, 1931
Description: Rathbun, 1931:125, pls. 1, 2. -- Pequegnat, 1970:187, fig. 6-6.
Type-locality: South of Loggerhead Key, Tortugas, Florida, 329 m.
Distribution: Off Dry Tortugas; deep waters off Mississippi to Texas; off southern Gulf coast of Mexico; recently found off New England (Powers, 1977).

Callineces bocourti A. Milne Edwards, 1879
Description: Williams, 1984:365, figs. 293f, 294.
Type-locality: Mullins River, 20 mi. south of Belize, (British) Honduras.
Distribution: Jamaica and Belize to Santa Catarina, Brazil; Florida, Mississippi, North Carolina, United States of America (Williams, 1974; Perschbacher and Schwartz, 1979; Williams and Williams, 1981).

Callineces danae Smith, 1869
Description: Williams, 1984:367, figs. 293d, 295.
Type-locality: Recife [=Pernambuco, Estado de Pernambuco], Brazil.
Distribution: Bermuda; New Hanover County, North Carolina, near Cape Fear, rare (Perschbacher and Schwartz, 1979); southern Florida and eastern side of Yucatan Peninsula to Estado de Santa Catarina, Brazil.

Callineces exasperatus (Gerstaecker, 1856)
Description: Williams, 1984:369, figs. 293e, 296.
Type-locality: Puerto Cabello, Venezuela.
Distribution: Duval County, east of Jacksonville, Florida (rarely) to Santa Catarina, Brazil; Veracruz, Mexico; Bermuda; also reported from extreme southern Texas (Williams, 1984).

Callineces larvatus Ordway, 1863
Description: Williams, 1984:371, figs. 293a, 297.
Type-locality: Key West, Florida; Tortugas; Bahama Islands; Haiti.
Distribution: Beaufort, North Carolina, through Caribbean Sea to south central Brazil off São Paulo; Bermuda. North Carolina records rare (Williams, 1974; Perschbacher and Schwartz, 1979). Florida (intertidal) (personal communication, P. M. Mikkelsen).

Callineces ornatus Ordway, 1863
Description: Williams, 1984:373, figs. 293c, 298.
Type-locality: Charleston, South Carolina; Gonaives, Haiti; Cumana, Venezuela; Tortugas and Bahamas also listed in original description.
Distribution: Bermuda; Virginia, North and South Carolina through southern Florida; northwestern Yucatan to Estado de Sao Paulo, Brazil (Williams, 1984).

Callineces sapidus Rathbun, 1896
Description: Williams, 1984:376, figs. 293g, 299.
Type-locality: East coast of United States.
Distribution: Occasionally Nova Scotia, Maine, and northern Massachusetts, to northern Argentina, Bermuda, and the Antilles; Resund, Denmark; the Netherlands and adjacent North Sea; northwest and southwest France; Golfo di Genova; northern Adriatic; Aegean, western Black, and eastern Mediterranean Sea; Lake Hamana-ko, central Japan (Williams, 1984).
Callinectes similis Williams, 1966
Description: Williams, 1984:383, figs. 293b, 300.
Type-locality: Off beach between St. Johns River jetties and Jacksonville Beach, Florida.
Distribution: Off Delaware Bay to Key West, Florida; northwestern Florida around Gulf of Mexico to off Campeche, Yucatan; also Isla de Providencia, Colombia; reported from northern Jamaica (Norse, 1978; Williams, 1984).

Cronius ruber (Lamarck, 1818)
Description: Williams, 1984:385, fig. 301.
Type-locality: Brazil.
Distribution: Vicinity of Little Egg Inlet, New Jersey (Milstein et al., 1977); Rehoboth Bay, Delaware; Virginia (rare, Van Engel and Sandifer, 1972); South Carolina to Santa Catarina, Brazil; Baja California to Peru; Clipperton, Galapagos Island; West Africa from Mauritania to Angola; Cape Verde, Principe, São Tomé and Annobon Islands (Williams, 1984).

Cronius tumidulus (Stimpson, 1871)
Description: Rathbun, 1930:142, pl. 64.
Type-locality: West of Tortugas, 68 m and off Conch Reef, 73 m.
Distribution: Bermuda; Bahamas; Florida Keys and Dry Tortugas; west coast of Florida; north and south coasts of Cuba; Jamaica; Puerto Rico; Virgin Islands; Netherlands Antilles; Old Province Island (Caribbean); Ceará to Bahia, Brazil (Powers, 1977).

Ovalipes floridanus Hay and Shore, 1918
Description: Turkay, 1971:139, fig. 3.
Type-locality: Pensacola, Florida.
Distribution: Southwest Florida to south Texas.

Ovalipes stephensi Williams, 1976
Description: Williams, 1984:361, fig. 291.
Type-locality: South of Beaufort Inlet, North Carolina, 31°11'N, 76°42'W, 35 m.
Distribution: Off Accomack County, Virginia, 37°31'N, to near Biscayne Bay, Florida.

Portunus aniceps (Saussure, 1858)
Description: Williams, 1984:387, fig. 302.
Type-locality: Cuba.
Distribution: Cape Hatteras, North Carolina (Park, 1978), to Bahia, Brazil; Bermuda (Williams, 1984).

Portunus binoculus Holthuis, 1969
Description: Holthuis, 1969:409, fig. 1.
Type-locality: Straits of Florida.
Distribution: Bahamas; Florida Straits; north coast of Cuba; east of Yucatan, in Caribbean Sea; off Caribbean coasts of Panama and Colombia (Powers, 1977).

Portunus depressifrons (Stimpson, 1859)
Description: Williams, 1984:387, fig. 303.
Type-locality: South Carolina and Florida Keys.
Distribution: Fort Macon, North Carolina (Coues, 1871; Kingsley, 1878-79), through northwest Florida to Bay of Campeche and Caribbean Sea; Bermuda (Williams, 1984).

Portunus floridanus Rathbun, 1930
Description: Williams, 1984:388, fig. 304.
Type-locality: Off Key West, Florida, 24°25'45"N, 81°48'00"W.
Distribution: East Cape Lookout, North Carolina, to Honduras and Nicaragua, through West Indies and northern South America to Surinam (Williams, 1984).

Portunus gibelii (Stimpson, 1859)
Description: Williams, 1984:389, fig. 305.
Type-locality: South Carolina and St. Augustine, Florida.
Distribution: Southern Massachusetts through Gulf of Mexico along coast to French Guiana, but reported absent from the Antilles (Park, 1978; Williams, 1984).

Portunus ordwayi (Stimpson, 1860)
Description: Williams, 1984:390, fig. 306.
Type-locality: Key Biscayne and Tortugas, Florida; St. Thomas (Virgin Islands).
Distribution: Vineyard Sound, Massachusetts; North Carolina through Gulf of Mexico, West Indies and Caribbean Sea to near Rio de Janeiro, Brazil (Park, 1978); Bermuda; Fernando de Noronha (Williams, 1984).

Portunus sayi (Gibbes, 1850)
Description: Williams, 1984:391, fig. 307.
Type-locality: South Carolina.
Distribution: North Atlantic Ocean from Nova Scotia through Gulf of Mexico to the Guianas; Bermuda; mid-Atlantic Ocean; Canary Islands and Morocco. The only record from Brazil is that of Gerstaecker for his Lupea pudica (=sayi), and modern collections have not confirmed this (Williams, 1984).
**Portunus sebae** (H. Milne Edwards, 1834)
Description: Rathbun, 1930:79, plates 34, 35.
Type-locality: Brazil.
Distribution: Bermuda; Florida Keys and Straits; Dry Tortugas; south coast of Cuba; Jamaica; Puerto Rico; St. Thomas, Virgin Islands; Dominica; Netherlands Antilles (Powers, 1977).

**Portunus spinicarpus** (Stimpson, 1871)
Description: Williams, 1984:392, fig. 308.
Type-locality: Straits of Florida south of Dry Tortugas, 24°23'N, 82°57'W to 24°24'N, 82°56'W, (Holthuis, 1969, restricted).
Distribution: East southeast Oregon Inlet, North Carolina, 35°42'00"N, 74°54'30"W (Musick and McEachren, 1972) to Santa Catarina, Brazil (Williams, 1984).

**Portunus spinimanus** Latreille, 1819
Description: Williams, 1984:393, fig. 309.
Type-locality: American waters, common in Brazil.
Distribution: New Jersey through Gulf of Mexico and West Indies to Santa Catarina, Brazil; Bermuda (Williams, 1984).

**Portunus ventralis** (A. Milne Edwards, 1879)
Description: Rathbun, 1930:43, pl. 13: figs. 1, 2.
Type-locality: Guadeloupe.
Distribution: Georgia to east coast of Florida; Dry Tortugas; Texas; north and west coasts of Cuba; Jamaica; Puerto Rico; St. Thomas, Virgin Islands; Barbados; Rio Grande do Norte to Rio de Janeiro, Brazil (Powers, 1977).

**Portunus vocans** (A. Milne Edwards, 1878)
Description: Rathbun, 1930:10, figs. 8, 9, pl. 25.
Type-locality: Cape Verde Islands.

**Eucratopus crassimanus** (Dana, 1852)
Description: Rathbun, 1918:52, fig. 22, pl. 12: fig. 3, pl. 159: figs. 1-2.—Guinot, 1969:258, figs. 6, 10, 25.
Type-locality: Rio de Janeiro.
Distribution: Florida Keys; south and west coasts of Florida; Yucatan; Jamaica; Bahia to Rio de Janeiro, Brazil (Powers, 1977).

**Euphrosynoplax clausa** Guinot, 1969
Description: Guinot, 1969:720, figs. 127, 139, pl. 4: fig. 3.—Pequegnat, 1970:194.
Type-locality: Florida, Tortugas.
Distribution: Dry Tortugas; off Alabama and Mississippi; Campeche, Yucatan, (91 to 210 m) (Powers, 1977).

**Euryplax nitida** Stimpson, 1859
Description: Williams, 1984:432, fig. 343.
Type-locality: Florida Keys.
Distribution: Off Beaufort, North Carolina, to Heald Bank, Texas; West Indies to St. Thomas; Bermuda; specimen from "Bresil, Dertero" [sic] (=Florianopolis?) figured by Guinot, 1969b (Williams, 1984).

**Frevillea barbata** A. Milne Edwards, 1880
Description: Rathbun, 1918:26, pl. 4: figs. 1, 3, pl. 5—Guinot, 1969:513, pl. 2: fig. 2.
Type-locality: 23°13'N; 89°16'W, 154 m. Stn. 36, Blake.
Distribution: West coast of Florida; Yucatan (Gulf); north coast of Cuba; off Grenada, (55 to 168 m) (Powers, 1977).

**Frevillea hirsuta** (Borradaile, 1916)
Description: Williams, 1984:432, fig. 344.
Type-locality: Off Rio de Janeiro, 72 m.
Distribution: North Carolina to Rio de Janeiro, Brazil (Williams, 1984).

**Glytoplax smithii** A. Milne Edwards, 1880
Description: Williams, 1984:434, fig. 346.
Type-locality: Reefs west of Florida, 23.8 m.
Distribution: From Cape Hatteras, North Carolina, to Gulf of Mexico and Yucatan Channel (Williams, 1984).

**Goneplax sigsbei** (A. Milne Edwards, 1880)
Description: Williams, 1984:433, fig. 345.
Type-locality: Grenada.
Distribution: East Cape Fear, North Carolina, 33°56'N, 76°26'W, to 33°55.3' N, 76°28.8'W, 130-120 m, Eastward Stn. 3213; Grenada,
11°27'N, 62°11'W, and 11°25'00''N, 62°04'15''W (Williams et al., 1968).

**Nanoplax xanthiformis** (A. Milne Edwards, 1881)
Description: Williams, 1984:436, fig. 348.
Type-locality: Off Grenada, 168.3 m.
Distribution: Cape Hatteras, North Carolina; through Gulf of Mexico and West Indies to Cabo Frio, Rio de Janeiro, Brazil (Williams, 1984).

**Neopilumnoplax americana** (Rathbun, 1898)
Description: Rathbun, 1918:21, figs. 5-6.---
Type-locality: Off Georgia, 792 m.
Distribution: Off North Carolina and Georgia; Florida Keys and Straits; north coast of Cuba; Guadeloupe; Espírito Santo, Brazil; Arabian Sea (Powers, 1977).

**Panoplax depressa** Stimpson, 1871
Description: Williams, 1984:435, fig. 347.
Type-locality: East and Middle Keys, Tortugas, Florida (Florida), 9.1 to 12.8 m.
Distribution: Southeast of Cape Lookout, North Carolina; off Jacksonville and Cape San Blas, Florida, through West Indies to Barbados (Williams, 1984).

**Pilumnoplax elata** (A. Milne Edwards, 1880)
Description: Guinot, 1969:688.
Type-locality: West Florida, 23.4 m.
Distribution: Only from the type-locality.

**Pseudohombila quadridentata** (Latreille, 1828)
Description: Hernandez, 1982:1, figs. 1e, 1d, 2c, 3c, 4c, 5c, 6c.
Type-locality: Unknown (Guinot, 1969).
Distribution: Specimens are known from southern Florida (Tortugas and northwest of New Grounds Shoal Light) Louisiana (west Delta lease area) and south of Lobos Islands, Mexico; Puerto Rico (North of Arecibo).

**Sotoplax robertsi** Guinot, 1984
Description: Guinot, 1984:92, figs. 1-3.
Type-locality: Gulf of Mexico, middle shelf region off Apalachicola Bay, lat. 28°30' long. 84°58', *Tursiops*, cruise T-7109, Sn. 4, 54 m.
Distribution: Only from the type locality.

**Spectocarinus lobatus** Guinot, 1969
Description: Guinot, 1969:710, figs. 124-125, pl. 4: fig. 2.---Felder 1973:70, pl. 10, fig. 3.
Type-locality: Sabine Pass, Texas.
Distribution: Dry Tortugas; off Louisiana and Texas (Powers, 1977).

**Thalassoplax angusta** Guinot, 1969
Description: Guinot, 1969:717; figs. 131-132, pl. 4: fig. 2.---Pequegnat, 1970:192.
Type-locality: Southwest of Cape San Blas, Florida, Albatross, Sn. 2402.
Distribution: East coast of Florida; off northwest Florida, Alabama and Mississippi; off east coast of Mexico; off Campeche, Yucatan (Powers, 1977).

**Trapezioplax tridentata** (A. Milne Edwards, 1880)
Description: Guinot, 1969:713, figs. 128-129, 142.
Type-locality: Barbados, 13.5-90 m.
Distribution: Florida Keys and Dry Tortugas; west coast of Florida; Barbados (Powers, 1977).

**FAMILY XANTHIDAE**

**Actaea acantha** (H. Milne Edwards, 1834)
Description: Rathbun, 1930:261, pl. 105: fig. 5, pl. 106: fig. 1, 2.
Type-locality: Unknown.
Distribution: Bahamas; Florida Keys and Dry Tortugas; northwest coast of Cuba; Jamaica; Haiti; Puerto Rico; Guadeloupe; St. Bartholomew; Fernando de Noronha, Brazil (Powers, 1977).

**Actaea bifrons** Rathbun, 1898
Description: Rathbun, 1930:255, fig. 41, pl. 104: figs. 3-6.
Type-locality: Colon, Panama.
Distribution: Key West, Florida; Puerto Rico; Virgin Islands; St. Bartholomew; Barbados; Caragua; Colon, Panama (Powers, 1977).

**Allactaea lithostrota** Williams, 1974
Description: Williams, 1984:397, figs. 311, 331a.
Type-locality: Southeast Cape Lookout, North Carolina, 33°43'N, 76°40.2'W, 90 m to 33°42.7'N, 76°40.2'W, 110m, *Eastward* Sn. 1087.
Distribution: Near edge of continental shelf southeast of Cape Lookout, North Carolina; Florida Straits; off Cape Catoche, Yucatan; off Venezuela and Surinam; Bermuda (Markham and McDermott, 1981; Williams, 1984).
Banarea palmeri (Rathbun, 1894)
Description: Rathbun, 1930:260, pl. 106, fig. 3-6.
Type-locality: Rodriguez Creek, Florida.
Distribution: Bahamas; east coast of Florida; Florida Keys; north coast of Cuba; Haiti; Virgin Islands; Curaçao (Powers, 1977).

Carpiulus corallinus (Herbst, 1783)
Description: Rathbun, 1930:240, pls. 97-99.
Type-locality: Unknown.
Distribution: Bermuda; Bahamas; West Flower Garden Bank, off Texas; north coast of Cuba; Jamaica; Puerto Rico; Virgin Islands; Guadeloupe; Dominica; Curaçao; Old Providence Island (Caribbean); Pernambuco and Ceará, Brazil (Powers, 1977). Monroe, County, Florida, lobster trap (personal communication, D. K. Camp).

Carpoporus papulosus Stimpson, 1871
Description: Williams, 1984:399, figs. 313, 331c.
Type-locality: Southwest of Tortugas and off Caysfort Reef, Florida.
Distribution: Between Capes Hatteras and Lookout, North Carolina; Gulf of Mexico off Mobile Bay southeastward; Cape Catoche, Yucatan (Williams, 1984).

Cataleptodius floridanus (Gibbes, 1850)
Description: Rathbun, 1930:297, pl. 137; figs. 1, 2, pl. 138: fig. 1--Guinot, 1968:706, figs. 20, 23, 29.
Type-locality: Key West, Florida.
Distribution: Bermuda; Bahamas; Florida Keys and Dry Tortugas; northwest coast of Florida; north coast of Cuba; Jamaica; Puerto Rico; Virgin Islands; Antigua; Barbados; Curaçao; Panama to Colombia (Caribbean coasts; Abolhos Islands to São Paulo, Brazil) (Powers, 1977).

Chlorodiella longimanus (H. Milne Edwards, 1834)
Description: Rathbun, 1930:462, pl. 186.
Type-locality: Puerto Rico.
Distribution: Florida to Curaçao and Barbados; West Africa. Puerto Rico, Culebra, St. Thomas, St. Croix (Rathbun, 1933).

Domecia acanthophora acanthophora (Desborne and Schramm, 1867)
Description: Williams, 1984:417, figs. 330, 331q.
Type-locality: Guadeloupe.
Distribution: Bermuda; Cape Lookout Shoals, North Carolina, NW Gulf of Mexico through West Indies and Caribbean Sea to Alagoas, Brazil (Williams, 1984). Florida (5-6 m) (personal communication, P. M. Mikkelsen).

Eriphita gonagra (Fabricius, 1781)
Description: Williams, 1984:419, figs. 332, 333a-c.
Type-locality: Jamaica.
Distribution: North Carolina to Patagonia; Bermuda (Williams, 1984).

Eisus maculatus (Stimpson, 1860)
Type-locality: Tortugas, Florida.
Distribution: Florida Keys and Dry Tortugas; Bahamas; north coast of Cuba; Puerto Rico; Virgin Islands (Powers, 1977).

Eurypanopeus abbreviatus (Stimpson, 1860)
Description: Williams, 1984:407, figs. 322, 331l.
Type-locality: Barbados, British West Indies.
Distribution: South Carolina, through West Indies and Gulf of Mexico to Santa Catarina, Brazil (Williams, 1984).

Eurypanopeus depressus (Smith, 1869)
Description: Williams, 1984:408, figs. 323, 331l.
Type-locality: New Haven, Connecticut.
Distribution: Massachusetts Bay through Florida to southern Texas; Dutch West Indies; Uruguay; Bermuda (Williams, 1984).

Eurypanopeus dissimilis (Benedict and Rathbun, 1891)
Description: Rathbun, 1930:411, fig. 66, pl. 173: figs. 1-2.
Type-locality: Trinidad.
Distribution: West coast of Florida; north coast of Cuba; Jamaica; Nicaragua; Trinidad; Brazil (Powers, 1977).

Eurypanopeus turgidus (Rathbun, 1930)
Description: Rathbun, 1930:364, pl. 166.
Type-locality: Chandelear Islands, Louisiana.

Eurytium limosum (Say, 1818)
Description: Williams, 1984:416, figs. 329,
331p.
Type-locality: "Inhabits shores of the Northern States".
Distribution: South Carolina to Louisiana through West Indies and Caribbean Sea to São Paulo, Brazil; Bermuda (Williams, 1984).

**Glyptoxanthus erosus** (Stimpson, 1859)
Description: Williams, 1984:398, figs. 312, 331b.
Type-locality: Florida.
Distribution: Cape Lookout, North Carolina, southward; off Grand Isle, Louisiana, southeastward; Yucatan; through West Indies to Guadeloupe (Williams, 1984).

**Heteractaeae ceratopus** (Stimpson, 1860)
Description: Rathbun, 1930:530, pl. 212: figs. 5-8, pl. 213.--Guinot, 1968:721, figs. 50, 56.
Type-locality: Key Biscayne, Florida.
Distribution: Bahamas; east coast of Florida Keys and Dry Tortugas; north coast of Cuba; Curaçao; Trinidad; Barbados (Powers, 1977).

**Hexapanaeus angustifrons** (Benedict and Rathbun, 1891)
Description: Williams, 1984:415, figs. 327, 331n.
Type-locality: Long Island Sound.
Distribution: Vineyard Sound, Massachusetts, to Port Aransas, Texas; Bahamas; Jamaica (Williams, 1984).

**Hexapanaeus caribbeae** (Stimpson, 1871)
Description: Rathbun, 1930:399, pl. 171: figs. 3-5.
Type-locality: St. Thomas.
Distribution: West Indies to state of Santa Catarina, Brazil; Puerto Rico, St. Thomas, (Rathbun, 1933). Florida (intertidal to 10 m) (personal communication, P. M. Mikkelsen).

**Hexapanaeus hemphilli** (Benedict and Rathbun, 1891)
Description: Rathbun, 1930:400, pl. 171: figs. 1, 2, 6.
Type-locality: Indian Key, Florida.
Distribution: Florida and West Indies; Puerto Rico; St. Thomas (Rathbun, 1933).

**Hexapanaeus lobipes** (A. Milne Edwards, 1880)
Description: Rathbun, 1930:329, fig. 50, pl. 155: figs. 3-5.--Menzies, 1948:23.
Type-locality: South of Florida, 24°43’N, 85°25’W; 68 m.
Distribution: Bahamas; off Key West, in Florida Straits; northwest of Dry Tortugas (Powers, 1977).

**Hexapanaeus paulensis** Rathbun, 1930
Description: Williams, 1984:416, figs. 328, 331a.
Type-locality: Santos, São Paulo, Brazil.
Distribution: South Carolina, through Gulf of Mexico to Uruguay (Milstein, et al., 1976).

**Hexapanaeus quinquedentatus** Rathbun, 1901
Description: Rathbun, 1930:402, fig. 62.
Type-locality: Mayaguez, Puerto Rico.
Distribution: Northwest Florida; Puerto Rico.

**Leptodiis parvulus** (Fabricius, 1793)
Description: Rathbun, 1930:305, pl. 141: figs. 1-3; 1933:58, fig. 50.
Type-locality: Islands of South America.
Distribution: Bermuda; Bahamas; Florida Keys; Jamaica; Haiti; Puerto Rico; Barbados; Curaçao; Fernando de Noronha, Brazil (Powers, 1977).

**Lobopismus agassizi** (Stimpson, 1871)
Description: Williams, 1984:429, figs. 340g, 341.
Type-locality: Typical form: East and Middle Keys, Tortugas, Florida.
Distribution: North Carolina; eastern Gulf of Mexico; Yucatan; Cuba; Venezuela and Trinidad; Bermuda (Williams, 1984).

**Melybia thalamita** Stimpson, 1871
Description: Williams, 1984:430, fig. 342.
Type-locality: Off French Reef, 27.4 m, and west of Tortugas (southern Florida) 64-76.8 m.
Distribution: About 30 mi. south southeast Cape Lookout, North Carolina (34°11’N, 76°09’W); southwest of Mississippi River delta, through West Indies to Bahia, Brazil (Williams, 1984).

**Menippe mercenaria** (Say, 1818)
Description: Williams, 1984:420, figs. 333d, e, 334.
Type-locality: "The Southern States".
Distribution: Cape Lookout, North Carolina, to Yucatan, Mexico; Bahamas; Cuba; Jamaica (Williams, 1984).
Menippe nodifrons Stimpson, 1859
Description: Rathbun, 1930:479, pl. 198: fig. 3; pl. 199.
Type-locality: Indian River, Florida.
Distribution: East coast of Florida; ?Louisiana; north and south coasts of Cuba; Jamaica; Virgin Islands; Trinidad; Caribbean coasts of Panama and Colombia; Paraiba to São Francisco do Sul, Brazil; Gabon, West Africa (Powers, 1977).

Micropanope barbadensis (Rathbun, 1921)
Description: Rathbun, 1930:446, fig. 72.
Type-locality: Barbados.
Distribution: Dry Tortugas; Barbados.

Micropanope lobifrons A. Milne Edwards, 1880
Description: Rathbun, 1930:429, pl. 178: figs. 4-6.
Type-locality: Off Montserrat, 161 m.
Distribution: South Florida, in Gulf Stream; Dry Tortugas; off northwest Florida; off north coast of Cuba; Puerto Rico; Virgin Islands; Santa Cruz Island (Caribbean); Grenada; Barbados; Colon, Panama (Powers, 1977).

Micropanope nuttingi (Rathbun, 1898)
Description: Williams, 1984:404, figs. 318, 331g.
Type-locality: Bahama Banks.
Distribution: Cape Hatteras, North Carolina, through Gulf of Mexico and West Indies to Bahia, Brazil (Williams, 1984).

Micropanope pusilla A. Milne Edwards, 1880
Description: Rathbun, 1930:431, pl. 179: figs. 7, 8.
Type-locality: Off west coast of Florida, 31 m.
Distribution: Dry Tortugas; northwest of Key West; west and northwest coasts of Florida; Alabama; north coast of Cuba; Jamaica; Puerto Rico; Virgin Islands (Powers, 1977).

Micropanope sculptipes Stimpson, 1871
Description: Williams, 1984:405, fig. 319.
Type-locality: Seven hauls in Florida Keys, 274 to 124 m.
Distribution: SE Cape Lookout, North Carolina, to Port Aransas, Texas; West Indies to Barbados.

Micropanope spinipes A. Milne Edwards, 1880
Description: Rathbun, 1930:443, fig. 71, pl. 181: figs. 1, 2.--Pequenogat and Ray, 1974:238, figs. 18-22.
Type-locality: Abrolhos Islands, Brazil, 55 m.
Distribution: Bermuda; Bahamas; Florida Keys; West Flower Garden Bank, off Texas; Curacao; Alagoas and off the Abrolhos Islands, Brazil (Powers, 1977).

Micropanope urinatrix (A. Milne Edwards, 1881)
Description: Williams, 1984:405, fig. 320.
Type-locality: Near Santa Cruz (St. Croix), West Indies, 448 m.
Distribution: Off Capes Hatteras and Lookout, North Carolina; Florida Keys to St. Croix, West Indies (Williams, 1984).

Neopanope packardi S. (Kingsley, 1879)
Description: Abele, 1972b:269, figs. 1B, 3A.
Type-locality: Key West, Florida.
Distribution: Southeast and south Florida; Bahama; Florida Keys and Dry Tortugas; west and northwest coasts of Florida; Louisiana; north coast of Cuba (Powers, 1977).

Neopanope sayi (Smith, 1869)
Description: Williams, 1984:409, figs. 324, 331k.
Type-locality: New Haven, Connecticut, and Cape Cod, Massachusetts.

Neopanope texana (Stimpson, 1859)
Type-locality: St. Joseph's Island, Texas.
Distribution: West coast of Florida (south as far as Charlotte County) to south Texas (Powers, 1977).

Panopeus americanus Saussure, 1857
Description: Rathbun, 1930:557, pl. 164: figs. 3, 4, 6.
Type-locality: Guadeloupe.
Distribution: Bahamas; Florida Keys; west coast of Florida; north coast of Cuba; Jamaica; Dominican Republic; Puerto Rico; St. Thomas, Virgin Islands; Guadeloupe; Trinidad; Caribbean coast of Colombia; Rio Parahyba do Norte to Santa Catarina, Brazil (Powers, 1977).
**Panopeus bermudensis** Benedict and Rathbun, 1891  
Description: Rathbun, 1930:360, fig. 56, pl. 165.  
Type-locality: Bermuda.  
Distribution: Bermuda; Bahamas; west coast of Florida; ?Texas; north coast of Cuba; Jamaica; Puerto Rico; St. Thomas, Virgin Islands; Trinidad; Old Providence Island (Caribbean); Colombia to Santa Catarina, Brazil. In the eastern pacific, from Magdalena Bay, Mexico to Peru (Powers, 1977).

**Panopeus hartii** Smith, 1869  
Description: Rathbun, 1930:355, pl. 164: figs. 1, 2, 5.  
Type-locality: Abrolhos Reefs, Brazil.  
Distribution: Florida Keys to State to São Paulo, Brazil, Puerto Rico, St. Thomas (Rathbun, 1933).

**Panopeus herbstdii** H. Milne Edwards, 1834  
Description: Williams, 1983:866, fig. 3.  
Type-locality: "Inhabit oyster beds, & found on oysters (O. virginica) in our markets" [by implication the eastern United States] (Say, 1817:58). Holthuis's (1979) selection of the specimen figured by Say (1817, pl. 4, fig. 3) as the lectotype for *P. herbstdii* restricts the nominal species to the common mud crab occurring on oyster bars of the eastern United States.  
Distribution: Shallow intertidal and subtidal waters of the eastern United States from Boston Harbor, Massachusetts, to Indian River County, southeastern Florida (Williams, 1983).

**Panopeus lacustris** Desbonne, 1867  
Description: Williams, 1983:868, fig. 11.  
Type-locality: The lagoons of Guadeloupe, hiding under rocks.  
Distribution: Shallow and subtidal waters from Bermuda and extreme southern Florida, through the West Indies, and along the continental margin of the Caribbean Sea and South America to Cabo Frio, Brazil. The species has been introduced in Hawaii, and, according to a report by Edmonson (1962), apparently has been known on the California coast for a number of years (Williams, 1983).

**Panopeus obesus** Smith, 1869  
Description: Williams, 1983:873, figs. 6, 7.  
Type-locality: Egmont Key (mouth of Tampa Bay) Florida (restricted by Williams, 1983).  
Distribution: Marsh edge, shallow intertidal, and subtidal waters of the Carolinian Province from environs of Beaufort, North Carolina to Georgia (and perhaps northeastern Florida), and from Sarasota County, Florida, to Louisiana; Texas and northeastern Mexico (Williams, 1983).

**Panopeus occidentalis** Saussure, 1857  
Description: Williams, 1984:413, figs. 326, 331 m.  
Type-locality: Guadeloupe.  
Distribution: North Carolina to State of Santa Catarina, Brazil; Bermuda (Williams, 1984). Florida (intertidal) (personal communication, P. M. Mikkelsen).

**Panopeus rugosus** A. Milne Edwards, 1880  
Description: Rathbun, 1930:353, pl. 162, 163.  
Type-locality: Bahia. (Brazil).  
Distribution: Florida Keys and Dry Tortugas; west and northwest coasts of Florida; north coast of Cuba; Haiti; Virgin Islands; Puerto Rico; Honduras to Nicaragua; Curaçao; Bahia to Santa Catarina, Brazil (Powers, 1977).

**Panopeus simpsoni** Rathbun, 1930  
Description: Williams, 1983:875, fig. 8.  
Type-locality: Saint George Sound, Apalachicola, Florida.  
Distribution: Shallow intertidal and subtidal waters of the northern Gulf of Mexico: Key West, Florida; Lee County, Florida to Corpus Christi, Texas (Williams, 1983).

**Paractaea rufopunctata nodosa** (Stimpson, 1860)  
Description: Williams, 1984:597, fig. 310.  
Type-locality: Tortugas, Florida.  
Distribution: Southeast Cape Lookout, North Carolina (34°12.2'N, 76°08'W, 90 m, to 34°12.27'N, 76°08'W, 50 m; 33°55.5'N, 76°28.4'W); off Mississippi River delta through West Indies to Rio de Janeiro, Brazil; Ascension Island (Williams, 1984).

**Paralimona dispar** (Stimpson, 1871)  
Description: Rathbun, 1930:244, fig. 38, pl. 101: figs. 4, 5.  
Type-locality: Cruz del Padre, Cuba.  
Distribution: Florida Keys to north coast of South America; Bermudas, Puerto Rico (Rathbun, 1933).
**Paraliomera longimana** (A. Milne Edwards, 1865)
Description: Rathbun, 1930:243, pl. 101: figs. 1-3.
Type-locality: Guadeloupe.
Distribution: Florida Keys and Dry Tortugas; Veracruz, Mexico; Puerto Rico; Virgin Islands; Barbados; Curaçao (Powers, 1977).

**Pilumnoides nudifrons** (Simpson, 1871)
Description: Rathbun, 1930:538, pl. 218: figs. 1-2.
Type-locality: Off Sombrero Key, 203-229 m.
Distribution: Florida Straits and Keys; Barbados.

**Pilumno caribaeus** Desbonne and Schramm, 1867
Description: Rathbun, 1930:491, pl. 200: figs. 3, 4.
Type-locality: Guadeloupe.
Distribution: Bahamas; Florida Keys; north coast of Cuba; Jamaica; Puerto Rico; Vieques and Culebra; Virgin Islands; Guadeloupe; Curaçao; Bahia to São Paulo, Brazil (Powers, 1977).

**Pilumnus dasypodus** Kingsley, 1879
Description: Williams, 1984:425, figs. 335, 340a.
Type-locality: Guadeloupe.
Distribution: Off Cape Hatteras, North Carolina, through Gulf of Mexico, Caribbean Sea and West Indies to Santa Catarina, Brazil (Williams, 1984).

**Pilumnus floridanus** Stimpson, 1871
Description: Williams, 1984:426, figs. 336, 340b.
Type-locality: Tortugas, (Florida).
Distribution: Off Cape Lookout, North Carolina, through Gulf of Mexico, and Yucatan Channel, to Honduras; through West Indies to Bahia, Brazil (Williams, 1984).

**Pilumnus gemmatus** Stimpson, 1860
Description: Rathbun, 1930:513, pl. 207: figs. 1-3.
Type-locality: St. Thomas and Tortugas.
Distribution: Dry Tortugas; Culebra; Virgin Islands; Curaçao (Powers, 1977).

**Pilumnus holohericus** Rathbun, 1898
Description: Rathbun, 1930:519, fig. 81, pl. 207: figs. 8, 9.
Type-locality: St. Thomas, Virgin Islands.
Distribution: Bahamas; Dry Tortugas; Puerto Rico; Virgin Islands; Trinidad; Curaçao (Powers, 1977).

**Pilumnus lacteus** Stimpson, 1871
Description: Williams, 1984:426, figs. 337, 340c.
Type-locality: Cruz del Padre, Cuba, and Key West, Florida.
Distribution: Near Beaufort, North Carolina, to Florida; Cuba (Williams, 1984).

**Pilumnus longleyi** Rathbun, 1930
Description: Rathbun, 1930:502, pl. 202: figs. 4-5.
Type-locality: South end of Loggerhead Key, Tortugas, Florida.
Distribution: Bahamas; Florida Keys and Dry Tortugas (Powers, 1977).

**Pilumnus marshii** Rathbun, 1901
Description: Rathbun, 1930:499, fig. 80.
Type-locality: St. Thomas, 37-55 m.
Distribution: Tortugas, Florida; St. Thomas, St. Croix.

**Pilumnus nudimanus** Rathbun, 1900
Description: Rathbun, 1930:523, fig. 82.
Type-locality: Arroyo, Puerto Rico.

**Pilumnus pannosus** Rathbun, 1896
Description: Williams, 1984:427, figs. 338, 340d.
Type-locality: Key West, Florida.
Distribution: Bogue Sound off Beaufort, North Carolina, to Port Aransas, Texas; West Indies to Virgin Islands (Williams, 1984).

**Pilumnus sayii** Rathbun, 1897
Description: Williams, 1984:428, figs. 339, 340e.
Type-locality: Georgia and east Florida.
Distribution: North Carolina through Gulf of Mexico and West Indies to Curaçao (Williams, 1984).

**Pilumnus spinossissimus** Rathbun, 1898
Description: Rathbun, 1930:494, fig. 79, pl. 200: figs. 7-8.
Type-locality: Off Key West, 10 m.
Distribution: Florida Keys and Dry Tortugas.
Platystactea setigera (H. Milne Edwards, 1834)  
Description: Rathbun, 1930:251, pl. 103.--Guinot, 1967:561, fig. 36.  
Type-locality: Antilles.  
Distribution: Bermuda; Bahamas; Florida Keys and Dry Tortugas; north coast of Cuba;  
Jamaica; Puerto Rico; Virgin Islands; Antigua; Barbados; Trinidad; Curaçao; Caribbean coast of Colúmbia (Powers, 1977).

Platypodiella spectabilis (Herbst, 1794)  
Description: Rathbun, 1930:247, fig. 39, pl. 102: fig. 4.—Guinot, 1967:562.—Felder, 1973:65, pl. 9: fig. 10.  
Type-locality: Unknown.  
Distribution: Bermuda; Bahamas; Florida Keys; Texas; Veracruz, Mexico; Jamaica; Puerto Rico; Virgin Islands; Guadeloupe; Martinique; Barbados; Curaçao; Fernando de Noronha, Brazil (Powers, 1977).

Pseudodemaus agassizii (A. Milne Edwards, 1880)  
Description: Williams, 1984:400, figs. 314, 331d.  
Type-locality: Florida Reefs, 21.9-32.9 m.  
Distribution: Cape Hatteras, North Carolina, to southern Texas (Williams, 1984).

Pseudodemaus distinctus (Rathbun, 1898)  
Description: Williams, 1984:400, figs. 315, 331e.  
Type-locality: Gulf of Mexico, northwest Dry Tortugas, 25°33'N, 84°21'W, 184.7 m.  
Distribution: Off Cape Hatteras, North Carolina, 34°57'N, 75°19'W, through Straits of Florida to northwest of Dry Tortugas; Puerto Rico; Barbados (Williams, 1984).

Rhithropocephalus harrisi (Gould, 1841)  
Description: Williams, 1984:401, figs. 316, 317, 331f.  
Type-locality: Cambridge Marshes and Charles River, Massachusetts.  
Distribution: The original range of this species is presumed to be in fresh to estuarine waters from the southwestern Gulf of St. Lawrence, Canada, to Veracruz, Mexico. The species has been introduced on the west coast of the United States and in parts of Europe (Williams, 1984).

Tetraxanthus bidentatus (A. Milne Edwards, 1880)  
Description: Rathbun, 1930:459, pl. 185 (As T. rugosus).—Chace, 1939:52.  
Type-locality: Grenada, 168 m.  
Distribution: Florida Keys; north and south coasts of Cuba; Grenada (Powers, 1977).

Tetraxanthus rathbunae Chace, 1939  
Description: Williams, 1984:406, fig. 321.  
Type-locality: Old Bahama Channel due north Punta Caldera, Camaguey Province, Cuba, 22°44'N, 78°41'W, 274-329 m.  
Distribution: Off Cape Lookout, North Carolina, to Rio de Janeiro, Brazil (Coelho and Ramos, 1972), including Gulf of Mexico (Pequegnat, 1970; Williams, 1984).

Xantho denticulata White, 1847  
Description: Monod, 1956:280, figs. 335-339.—Forest and Guinot, 1961:60, fig. 51.  
Type-locality: West Indies.  
Distribution: Bermuda; Bahamas; Florida Keys and Dry Tortugas; northwest Florida; Jamaica; Puerto Rico; Virgin Islands; Antigua; Barbados; Colon, Panama; Curaçao; Trinidad; Pernambuco to Abrolhos Islands, Brazil, Gulf of Guinea, west coast of Africa (Powers, 1977).

FAMILY GECARCINIDAE  
Cardiosoma guanhumi Latreille, 1825  
Type-locality: Brazil.  
Distribution: Bermuda; Bahamas; southeast Florida; Florida Keys; Louisiana and south Texas; eastern Mexico to Colombia; north and south coasts of Cuba; Jamaica; Puerto Rico; St. Thomas, Virgin Islands to Barbados; Trinidad; Netherlands Antilles; Colombia to São Paulo, Brazil (Powers, 1977).

Gecarcinus lateralis (Freminville, 1835)  
Description: Rathbun, 1918:355, fig. 161, pls. 119-120.—Turkay, 1973:974, fig. 2.  
Type-locality: Martinique, Guadeloupe, Marie Galante, Desiré and Îles des Saintes.  
Distribution: Bermuda; Bahamas; southeast Florida; Florida Keys; south Texas to north coast of Yucatan; north and south coasts of Cuba; Jamaica; Hispaniola; Puerto Rico; St. Thomas, Virgin Islands to Barbados; Netherlands Antilles; Honduras to Costa Rica; Caribbean coast of Colombia to Surinam (Powers, 1977).
Gecarcinus ruricola (Linnaeus, 1758)
Type-locality: America.
Distribution: Bahamas; southeast Florida; north and south coasts of Cuba; Cayman Islands; Jamaica; Navassa Island (Caribbean); Hispaniola; Puerto Rico; St. Croix to Barbados; Curacao; Old Providence and Swan Islands (Caribbean) (Powers, 1977).

FAMILY GRAPSIDAE

Aratus pisonii (H. Milne Edwards, 1837)
Description: Rathbun, 1918:323, pl. 96.--Chace and Hobbs, 1969:172, figs. 54, 58a.
Type-locality: Antilles.
Distribution: Bahamas; southeast to southwest Florida; north and south coasts of Cuba; New Province Island (Atlantic); Jamaica; Puerto Rico; Virgin Islands to Guadeloupe; Netherlands Antilles; Belize; Rio Parahyba do Norte to Sao Paulo, Brazil; in eastern Pacific, Nicaragua to Peru (Powers, 1977).

Cyclograpsus integer H. Milne Edwards, 1837
Description: Rathbun, 1918:326, pl. 97: figs. 1, 2.--Chace and Hobbs, 1969:173, figs. 55, 58b-d.
Type-locality: Brazil.
Distribution: Bermuda; Bahamas; south Florida; Florida Keys; Texas; Cuba; Jamaica; Hispaniola; Puerto Rico; St. Croix; Dominica; Islas Los Roques and Caribbean coast of Colombia; Ceara to Pernambuco, Brazil; eastern Atlantic, from Senegal to Zaire (Powers, 1977).

Euchirograpsus americanus A. Milne Edwards, 1880
Description: Williams, 1984:461, fig. 370.
Type-locality: Barbados, 126.2 m, Blake Sn. 278.
Distribution: Off Oregon Inlet, North Carolina, Florida through West Indies, and Colombia to Venezuela (Williams, 1984).

Euchirograpsus antillensis Turkay, 1975
Description: Turkay, 1975:112, figs 4-5, 16a, 19, 25.
Type-locality: Cuba, Havana, Playa Baracoa, 23°04'30"N, 82°34'00"W, 414 m.
Distribution: Off Havana, Cuba; Arrowsmith Banks, between Cuba and Yucatan; south of Florida Keys; Bahamas (Powers, 1977).

Geograpsus lividus (H. Milne Edwards, 1837)
Description: Rathbun, 1918:232, pl. 55.--Chace and Hobbs, 1969:157, figs. 48, 52a-c.
Type-locality: Antilles.
Distribution: Bermuda; Florida Keys, north and south coasts of Cuba; Jamaica; Puerto Rico; Virgin Islands to Barbados; Netherlands Antilles to Trinidad; Old Providence Island (Caribbean); Caribbean coast of Colombia to Sao Paulo, Brazil; eastern Atlantic, from Senegal to Angola; Cape Verde Islands; eastern Pacific, from southern part of Baja California to northern Chile; Clipperton Island; Galapagos Islands; Hawaiian Islands (Powers, 1977).

Goniopsis cruentata (Laureille, 1802)
Description: Rathbun, 1918:237, fig. 136, pl. 57.--Chace and Hobbs, 1969:160, figs. 49, 52d-f.
Type-locality: Islands of South America.
Distribution: Bermuda; Bahamas; northwest Florida (rare); Tampico, Mexico; north and south coasts of Cuba; Jamaica; Hispaniola; Puerto Rico; Virgin Islands to Barbados; Netherlands Antilles; Belize; Old Providence Islands (Caribbean); Surinam to Rio de Janeiro, Brazil; eastern Atlantic, from Senegal to northern Angola (Powers, 1977).

Grapsus grapsus (Linnaeus, 1758)
Description: Rathbun, 1918:227, fig. 135, pls. 53, 54.--Chace and Hobbs 1969:163, figs. 50, 52 g-i.
Type-locality: America and Ascension Island.
Distribution: Bermuda; Bahamas; southeast and south Florida; Texas; north and south coasts of Cuba; Jamaica; Puerto Rico; Hispaniola; Virgin Islands to Barbados; Netherlands Antilles to Trinidad; Old Providence Island and Swan Island (Caribbean); Colombia to northern Brazil; eastern Atlantic, and from Portugal to Angola; Cape Verde Islands and Azores; St. Helena Island; Ascension Island; eastern Pacific from central Baja California to central Chile; Galapagos Islands; Clipperton Island (Powers, 1977).

Pachygrapsus gracilis (Saussure, 1858)
Description: Rathbun, 1918:249, pl. 60: fig. 3, pl. 61: fig. 1.--Chace and Hobbs, 1969:167, figs. 51, 52).
Type-locality: St. Thomas.
Distribution: Bermuda; Bahamas; south Florida; Texas; north and south coasts of Cuba; Jamaica; Puerto Rico; Virgin Islands; Caribbean coast of Columbia; Pernambuco to Bahia, Brazil; eastern Atlantic, from Senegal to Zaire (Powers, 1977).

*Pachygrapsus transversus* (Gibbes, 1850)
Description: Williams, 1984:459, fig. 368.
Type-locality: Key West, (Florida).
Distribution: Cape Lookout, North Carolina, to Montevideo, Uruguay; Bermuda; Mediterranean Sea to northern Angola; eastern Pacific from California to Peru, Galapagos Islands (Williams, 1984).

*Percnon gibbesi* (H. Milne Edwards, 1853)
Description: Williams, 1984:462, fig. 371.
Type-locality: Antilles.
Distribution: Fort Macon, North Carolina; southern Florida and Bahamas to Brazil; Bermuda; Azores to Angola; Cape San Lucas, Baja California, to Chile; Galapagos Islands (Williams, 1984).

*Plagusia depressa* (Fabricius, 1775)
Description: Williams, 1984:463, fig. 372.
Type-locality: "In mari mediterraneo" (erroneous).
Distribution: Beaufort, North Carolina, through Gulf of Mexico and West Indies to Pernambuco, Brazil; Bermuda; Azores; Madeira; Morocco to northern Angola; St. Helena Island (Chace 1966; Williams, 1984).

*Planes minutus* (Linnaeus, 1758)
Description: Chace, 1951:67, figs. 1a, 2a, d, g, j, k, l, 3a-h.
Type-locality: "Habitat in Palgi Fuco natante, supra aquam saepius curtsians".
Distribution: From off eastern North America (south of Newfoundland) through the eastern coast of America, Florida to Bahamas; West Indies.

*Platyhieroegrapsus spectabilis* De Man, 1896
Description: Monod, 1956:426, figs. 584-588.
Type-locality: Gabon.
Distribution: Gulf coast of Mexico; west coast of Florida (Powers, 1977); Gabon.

*Sesarma benedicti* Rathbun, 1897
Description: Rathbun, 1918:316, pl. 93.--Abele, 1973:379, figs. 1A, 1G.

Type-locality: Surinam.
Distribution: Key West, Florida; Guyana and Surinam; Brazil (Powers, 1977).

*Sesarma cinereum* (Bosc, 1802)
Description: Williams, 1984:465, fig. 373.
Type-locality: "La Caroline."
Distribution: Magothy River, Chesapeake Bay, Maryland, to Palm Beach, east Florida; Collier County, west Florida, to Veracruz Mexico (Abele, 1973). Older records from the West Indies and elsewhere are erroneous (Williams, 1984).

*Sesarma curacaoense* De Man, 1892
Description: Rathbun, 1918:293, fig. 147, pl. 78: figs. 1, 2, pl. 160: fig. 3.--Abele, 1973:380, figs. 1C, 1F.
Type-locality: Curaçao.
Distribution: Key West, Florida; south and southwest Florida; north coast of Cuba; Jamaica; Puerto Rico; Curaçao; Bahia, Brazil (Powers, 1977).

*Sesarma miersii* Rathbun, 1897
Description: Abele, 1972a:166, figs. 1B, 1C, 2B, 2C, 1973:380, fig. 11.
Type-locality: Bahamas.
Distribution: Bahamas; Key West, Florida; south coast of Cuba; Swan Island (Caribbean); Dominica (Powers, 1977).

*Sesarma reticulatum* Say, 1817
Description: Williams, 1984:466, fig. 374.
Type-locality: Muddy salt marshes (east coast of United States).
Distribution: Woods Hole, Massachusetts, to Volusia County, east Florida; Sarasota, west Florida, to Calhoun County, Texas (Abele, 1973).

*Sesarma ricordi* H. Milne Edwards, 1853
Description: Chace and Hobbs, 1969:183, fig. 62k.--Abele, 1973:378, fig. 11.
Type-locality: Haiti.
Distribution: Bermuda; Bahamas; southeast Florida; Florida Keys; west coast of Florida; north coast of Yucatan; Cuba; Jamica; Hispaniola; Puerto Rico; Virgin Islands to Trinidad; Curaçao; Old Providence Island (Caribbean); Yucatan to Surinam (Powers, 1977).
FAMILY PINNOTHERIDAE

Dissodactylus borraidaiei Rathbun, 1918
Description: Rathbun, 1918:121, fig. 68, pl. 27: figs. 5-8.
Type-locality: Miami, Florida; 55 m.

Dissodactylus erinitichelis Moreira, 1901
Description: Williams, 1984:438, fig. 350.
Type-locality: Estado de Rio Grande do Sul, Brazil.
Distribution: Southeast of Cape Lookout, North Carolina off northwest Florida; Caribbean Sea and South America to Rio de la Plata, Argentina (Coelho and Ramos, 1972).

Dissodactylus mellitae (Rathbun, 1900)
Description: Williams, 1984:439, fig. 351.
Type-locality: Pensacola, Florida, on Melitta quinqueperforata.
Distribution: Western part of Vineyard Sound, Massachusetts, to Charleston, South Carolina; Hutchinson Island, east Florida (Camp et al., 1977); western Florida; off Galveston, Texas (Rogers 1968; Williams, 1984).

Dissodactylus primitivus Bouvier, 1917
Description: Milne Edwards and Bouvier, 1923:346, fig. 8, pl. 8: figs. 3, 4, pl. 9: fig. 1.
Type-locality: West of Tortugas, Florida.
Distribution: Known only from the type-locality.

Dissodactylus rugatus Bouvier, 1917
Description: Milne Edwards and Bouvier, 1923:238, fig. 9, pl. 8: figs. 5, 6, pl. 9: figs. 2.
Type-locality: Dominique.
Distribution: East coast of Florida; Dominica.

Dissodactylus stebbingi Rathbun, 1918
Description: Rathbun, 1918:123, fig. 69, pl. 28: figs. 1, 2.
Type-locality: Sarasota Bay, Florida.

Fabia byssomae (Say, 1818)
Description: Rathbun, 1918:105, fig. 56, pl. 24: figs. 6, 8.
Type-locality: Inhabits the Byssomia distorta (southern Atlantic coast of United States).

Fabia tellinae Cobb, 1973
Description: Cobb, 1973:70, figs. 1-2.
Type-locality: Gulf of Mexico off NW Florida, 30°13'N 85°53'W, 12.2 m.
Distribution: Off northwest Florida to Alabama.

Orthotheres strombi (Rathbun, 1905)
Description: Rathbun, 1918:90, fig. 45, pl. 20: figs. 1, 2.
Type-locality: Clearwater Harbor, Florida.

Parapinnixa bouvieri Rathbun, 1918
Description: Williams, 1984:447, fig. 357.
Type-locality: Off Cape Catoche, Yucatan (Mexico), 22°08'30"N, 86°53'30"W, 45.7 m, Albarross Sn. 2562.
Distribution: Off Charleston, South Carolina; south of Tortugas, Florida; Puerto Rico; and the type-locality (Williams, 1984).

Parapinnixa hendersoni Rathbun, 1918
Description: Williams, 1984:448, fig. 358.
Type-locality: Los Arroyos, Cuba.
Distribution: Southeast Cape Lookout, North Carolina, 34°29'N, 76°13'W, 33 m; 34°34'N, 75°50'W, 64 m; off Tampa Bay, Florida, through West Indies to Curacao; Maranhao to Bahia, Brazil (Coelho and Ramos, 1972).

Pinnaxodes floridensis Wells and Wells, 1961
Description: Williams, 1984:449, fig. 359.
Type-locality: Outer beach near Fort Walton Beach, Florida.

Pinnixa chacei Wass, 1955
Type-locality: Gulf Beach, Alligator Point, Franklin County, Florida.
Distribution: Northwest Florida; Louisiana and Texas (Powers, 1977).

Pinnixa chaetoptera Stimpson, 1860
Description: Williams, 1984:451, fig. 360.
Type-locality: Charleston Harbor, South Carolina, on muddy or clayey shores in tubes of Chaetopterus variopedans.
Distribution: Wellfleet, Massachusetts, to Rio Grande do Sul, Brazil (Williams, 1984).
Pinnixa cristata Rathbun, 1900
Description: Williams, 1984:453, fig. 361.
Type-locality: Beaufort, North Carolina.
Distribution: Beaufort, North Carolina, to Edisto Island, South Carolina; Grande Isle, Louisiana, to Long Lake, Blackjack Peninsula, Aransas County, Texas (Hedgpeth, 1950); Williams, 1984).

Pinnixa cylindrica (Say, 1818)
Description: Williams, 1984:453, fig. 362.
Type-locality: Jekyll Island, Georgia.
Distribution: North Falmouth, Massachusetts, to Pensacola, Florida (Cooley 1978), including Dry Tortugas (Williams, 1984).

Pinnixa floridana Rathbun, 1918
Description: Williams, 1984:454, fig. 363.
Type-locality: Marco, Florida, also Sarasota Bay.
Distribution: Southwest off Cape Lookout, North Carolina; Hutchinson Island, east central Florida (Camp et al., 1977); west coast of Florida (Williams, 1984).

Pinnixa leptosynaptae Wass, 1968
Type-locality: Bald Point at the entrance to Ochlockonee Bay, Franklin County, Florida.

Pinnixa lunzi Glassell, 1937
Description: Glassell, 1937:3, figs. 1-8.--Williams, 1984:455, figs. 364-365.
Type-locality: Isle of Palms (about 15 mi. NE of Charleston), South Carolina.
Distribution: Off Delmarva Peninsula, Virginia, North and South Carolina, Georgia; off Mississippi River delta and Seven and One-Half Fathoms Reef off Texas near 26°51'N, 96°18'W (Williams, 1984).

Pinnixa pearsei Wass, 1955
Type-locality: Indian Pass, Apalachicola, Florida.

Pinnixa retinens Rathbun, 1918
Description: Williams, 1984:456, fig. 366.
Type-locality: Chesapeake Bay, off Poplar Island, Maryland, 36.6 m., soft bottom.
Distribution: Delaware Bay (Watling and Maurer, 1976); Little River Inlet, South Carolina, Alligator Harbor, Florida; Aransas area of Texas coast (Williams, 1984).

Pinnixa sayana Stimpson, 1860
Description: Williams, 1984:457, fig. 367.
Type-locality: Mouth of Beaufort Harbor, North Carolina, 10.97 m., sandy mud.
Distribution: Vineyard Sound, Massachusetts, to Beaufort, North Carolina; Hutchinson Island, east central Florida (Camp et al., 1977), Sarasota Bay, Florida, to Grand Isle, Louisiana; Amapa, Para, Pernambuco, São Paulo, Brazil (Williams, 1984).

Pinnotheres hemphilli Rathbun, 1918
Description: Rathbun, 1918:99, fig. 51, pl. 23.
Type-locality: Cedar Keys, Florida.
Distribution: Cedar Keys, Florida.

Pinnotheres maculatus Say, 1818
Description: Williams, 1984:441, Fig. 353.
Type-locality: Given as "Inhabits the muretated Pinna of our coast."
Distribution: Off Martha's Vineyard, Massachusetts, to Golfo San Matias, Argentina (Penucci, 1975).

Pinnotheres moseri Rathbun, 1918
Description: Rathbun, 1918:94, text-fig. 47, pl. 21: figs. 3, 4, fig. 47.
Type-locality: Port Royal, Jamaica.
Distribution: West coast of Florida; Jamaica.

Pinnotheres ostreum Say, 1817
Description: Williams, 1984:444, figs. 354-356.
Type-locality: "United States" (see Schmitt, et al., 1973); these authors mentioned six probable syntypes from the United States and Virginia in the British Museum (Natural History) and that, according to DeKay (1844), Say's specimen was from New Jersey.
Distribution: Salem, Massachusetts, to Santa Catarina, Brazil.

Pinnotheres shoemakeri Rathbun, 1918
Description: Rathbun, 1918:95, fig. 48, pl. 22: figs. 1-4.
Type-locality: St. Thomas.
Distribution: West coast of Florida; St. Thomas, Virgin Islands.
FAMILY OCYPODIDAE

Ocydode quadrata (Fabricius, 1787)
Description: Williams, 1984:468, fig. 375.
Type-locality: Jamaica.
Distribution: Block Island, Rhode Island, to Santa Catarina, Brazil (megalopae have been taken at Woods Hole); Bermuda; Fernando de Noronha (Williams, 1984).

Uca burgesi Holthuis, 1967
Type-locality: Plantage Knip, Westpunt, Curaçao, Netherlands Antilles.
Distribution: Bahamas; east coast of Florida; northeast (Gulf) coast of Yucatan; north and south coasts of Cuba; Jamaica; Hispaniola; Puerto Rico; St. Thomas, Virgin Islands to Trinidad; Curaçao; east coast of Yucatan to Guatamala; Caribbean coast of Panama; Venezuela to Rio de Janeiro, Brazil (Powers, 1977).

Uca leptodactyla Rathbun, 1898
Description: Crane, 1975:304, f gs. 37M, 56F, 60N-0, 69K-L, 101, map 17, pl. 41A-D.
Type-locality: Near Fort Montague, Nassau, New Province, Bahamas.
Distribution: West coast of Florida (not recently); east coast of Yucatan; north coast of Cuba; Jamaica; Puerto Rico; St. Croix; Curaçao; Venezuela to Santa Catarina, Brazil (Powers, 1977).

Uca longisignalis Salmon and Atsaiade, 1968
Description: Salmon and Atsaiade, 1968:279, f gs. 1-4, 6, 7.
Type-locality: Ocean Springs, Mississippi.
Distribution: Northwest Florida to south Texas (Powers, 1977).

Uca minax (Le Conte, 1855)
Description: Williams, 1984:473, fig. 377a.
Type-locality: Beesleys Point, New Jersey.
Distribution: Buzzards Bay (Wareham and southwestern Cape Cod), Massachusetts, to northeast Florida, and from the area of Yankeetown, northwest Florida, to Louisiana, and on to Matagorda Bay, Texas (Williams, 1984).

Uca panacea Novak and Salmon, 1974
Type-locality: Panacea, Florida.

Distribution: Northwest Florida to south Texas.

Uca pugilator (Bosc, 1802)
Description: Williams, 1984:475, f gs. 376, 377c.
Type-locality: "Caroline."
Distribution: Cape Cod, Massachusetts; (rare on the north shore) southward around the tip of Peninsula Florida to near Pensacola (Heard, 1982); Old Providence Island, Bahamas, and Santo Domingo (Crane, 1975; Williams, 1984).

Uca pugnax (Smith, 1870)
Description: Williams, 1984:478, fig. 377b.
Type-locality: New Haven, (Connecticut).
Distribution: Provincetown, Massachusetts, to Daytona Beach, Florida (Williams, 1984).

Uca rapax (Smith, 1870)
Description: Crane, 1975:190, f gs. 52c-D, 54F, 67C, 86, 91E-F, 100, pl. 27A-D, 45C-F, map 14.
Type-locality: Atlantic coast of Panama: Aspinwall.
Distribution: Bahamas; east coast of Florida; Florida Keys; southwest coast of Florida; northeast coast of Mexico to northeast Yucatan; north and south coasts of Cuba; Jamaica; Hispaniola; Puerto Rico; St. Thomas, Virgin Islands to Trinidad and Tobago; Netherland Antilles; east coast of Yucatan to Guatamala; Caribbean coast of Panama to Santa Catarina, Brazil (Powers, 1977).

Uca speciosa (Ives, 1891)
Description: Crane, 1975:236, f gs. 68G, 101, map 15, pl. 31A-D.
Type-locality: Port of Silan, Yucatan.
Distribution: Southeast Florida; Florida Keys; west and northwest coasts of Florida; northeast Yucatan and northwest Cuba (Powers, 1977).

Uca spinicarpa Rathbun, 1900
Description: Rathbun, 1918:411, pl. 148.--Crane, 1975:239, f gs. 68k, 101, pl. 31E-H, map 15.
Type-locality: Galveston.
**Uca thayeri** Rathbun, 1900
Description: Crane, 1975:112, figs. 46K, 56E, 60H-I, 73A-B, 811, 821, 99, map 11, pl. 17.
Type-locality: Rio Parahyba do Norte at Cabeçudelo, Brazil.
Distribution: East and southwest coasts of Florida; north and south coasts of Cuba; Jamaica; Española; Puerto Rico; Guadeloupe; Trinidad; Tobago; Guatemala and Panama (Caribbean coasts) Venezuela to São Paulo, Brazil.

**Uca vocator** (Herbst, 1804)
Description: Crane, 1975:27, figs. 66D, 100, pl. 23E-G, pl. 24A-D, map 13.
Type-locality: "Amerika" (restricted by neotype selection of Holthuis, 1959, to Bank of Suriname River at Leosberg, Surinam).
Distribution: southern Florida; Tampico, Mexico; Belize to Guyana; Puerto Rico; Santo Domingo; Guadeloupe; Dominica; Trinidad and Tobago;Paraíba to Pernambuco, Brazil; ?Santa Catarina, Brazil.

**Ucides cordatus** (Linnaeus, 1763)
Description: Rathbun, 1918:347, fig. 158, pls. 110-113, pl. 159: figs. 3, 4.
Type-locality: America.
Distribution: Bahamas; southeast Florida; northeast Mexico to Panama; north and south coasts of Cuba; Jamaica; Española; Puerto Rico; St. Thomas, Virgin Islands to Grenada; Colombia to Santa Catarina, Brazil.

**FAMILY PALICIDAE**

**Palicus cristatipes** (A. Milne Edwards, 1880)
Description: Rathbun, 1918:186, fig. 116.
Type-locality: Grenada, 166 m.

**Palicus cursor** (A. Milne Edwards, 1880)
Description: Rathbun, 1918:215, figs. 130-131, pl. 52: figs. 1, 2.
Type-locality: Sand Key, Havana, St. Kitts, Dominique, Barbados, 252-448 m.
Distribution: North Carolina; Florida Keys; west and northwest coasts of Florida; north coast of Cuba; St. Christopher; Dominica; Barbados (Powers, 1977).

**Palicus denatus** A. Milne Edwards, 1880
Description: Rathbun, 1918:202, fig. 124.
Type-locality: Charlotte Harbor, 91 m, and Barbados, 110-176 m.
Distribution: Florida Keys; west coast of Florida; off Alabama; off Barbados (Powers, 1977).

**Palicus faxoni** Rathbun, 1897
Description: Williams, 1984:483, fig. 379.
Type-locality: Off Cape Hatteras, North Carolina, 89.6 m.
Distribution: Off Cape Hatteras, North Carolina, to near Cape Canaveral, Florida; off Yucatan, Mexico; near Qita Sueno Banks; southwest St. Christopher; off Cabo Frio, Rio de Janeiro (Williams, 1984).

**Palicus floridanus** (Rathbun, 1918)
Description: Rathbun, 1918:220, pl. 41: figs. 3, 4.
Type-locality: Off Sand Key, Florida; 216 m.
Distribution: Known only from the type-locality.

**Palicus gracilis** (Smith, 1883)
Description: Rathbun, 1918:218, text-fig. 132, pl. 50, pl. 51: fig. 1.
Type-locality: Martha's Vineyard, Massachusetts, 260 m.
Distribution: Off Massachusetts; east coast of Florida; northwest Florida; Louisiana to central east coast of Mexico; north coast of Cuba; Curaçao (Powers, 1977).

**Palicus obtusus** (A. Milne Edwards, 1880)
Description: Rathbun, 1918:205, fig. 125, pl. 49.
Type-locality: 23°13'N, 89°16'W, 154 m.
Distribution: Off northwest Florida and Mississippi; Campeche, Mexico (Powers, 1977).

*Palicus sica* (A. Milne Edwards, 1880)
Description: Williams, 1984:483, fig. 380.
Type-locality: Barbados, 150 m, *Blake Stn. 293*.
Distribution: Off Charleston, South Carolina, to northeast Cape Canaveral, Florida; west coast of Florida through West Indies to Barbados and Grenada (Williams, 1984).

**FAMILY CRYPTOCHIRIDAE**

*Pseudocryptochirus corallicola* (Verrill, 1908)
Description: Shaw and Hopkins, 1977:178, figs. 2b, 3b.
Type-locality: Dominica.
Distribution: Known only from Western Atlantic: Dominica Island on *Mussa*; Bermuda Islands on *Mussa, Meandra (=Manicina)* and *Dichocognia*; Dry Tortugas, Florida on *Meandra (=Manicina) areolata* and *Meandrina*; Florida Middle Ground on *Scolymia lacera*, multiple polyp *Scolymia*, and *Manicina areolata* (Shaw and Hopkins, 1977).

*Pseudocryptochirus hypostegus* Shaw and Hopkins, 1977
Description: Shaw and Hopkins, 1977:179, figs. 1, 2a, 3a.
Type-locality: Florida Middle Ground about 137 km west of Tarpon Springs, Florida
28°30'49"N, 84°20'30"W, 27 m, from *Agaricia fragilis*.
Distribution: Known only from the eastern Gulf of Mexico on the Florida Middle Ground, in 25-30 meters, on *Agaricia fragilis* (Shaw and Hopkins, 1977).
ADDENDUM

The records cited below came to our attention or were published after this volume was completed.

FAMILY PALAEMONIDAE

Neopontonides chacei Heard, 1986
Description: Heard, 1986:472, figs. 1A, 2, 3, 4B-D.
Type-locality: Reef south of Marigot Bay, St. Lucia Island.
Distribution: Florida Keys south to Carrie Bow Cay, Belize, on the gorgonian Pseudopterogorgia americana.

Periclimenaeus bredini Chace, 1972
Description: Chace, 1972:26, fig. 5.
Type-locality: Isla Mujeres off the Yucatan Peninsula.
Distribution: Known from the type-locality and the Florida Middle Grounds (Dardeau, 1984) where it was collected from a sponge.

Pontonia mexicana Guérin-Méneville, 1855
Description: Holthuis, 1951b:130, pl. 41.
Type-locality: Mexico (Holthuis, 1951b).
Distribution: Bahamas and Dry Tortugas; east coast of Mexico; West Indies (Chace, 1972).

Pseudopontonides principis (Cribales, 1980)
Description: Cribales, 1980:68.—Heard, 1986:481, Figs. 5A-F.
Type-locality: Awa di Oostpunt, Curacao.
Distribution: Northeastern Gulf of Mexico; Puerto Rico; Bonaire and Curacao. On antipatharians.

FAMILY ALPHEIDAE

Alpheus bahamensis Rankin, 1898
Description: Zimmer, 1913:405, figs. U1-Z1 (as A. hippocrhe var. edamensis?).—Chace, 1972:58.
Type-locality: New Providence Island, Bahamas.
Distribution: Bermudas; Dry Tortugas; Yucatan Peninsula; West Indies (Chace, 1972).

Fenneralpheus chacei Felder and Manning, 1986
Description: Felder and Manning, 1986:498, figs. 1-3.
Type-locality: Fort Pierce Inlet, St. Lucie Country, Florida.
Distribution: Fort Pierce and Key West, Florida (Felder and Manning, 1986).

Salmonus cavicolus Felder and Manning, 1986
Description: Felder and Manning, 1986:503, figs. 4-6.
Type-locality: South side of Fort Pierce Inlet, St. Lucie County, Florida.
Distribution: Known only from the type-locality.

Synalpheus scaphoceros Coutière, 1910
Description: Dardeau, 1986:491, figs. 1-3.
Type-locality: Dry Tortugas, Florida.
Distribution: Gulf of Mexico: Isla de Lobos, West Flower Garden Bank, East Flower Garden Bank, Florida Middle Grounds, off Sanibel Island, Dry Tortugas; Caribbean: Puerto Rico and Curacao; Brazil (Dardeau, 1986).

FAMILY GONEPLACIDAE

Chasmocarcinus chacei Felder and Rabalais, 1986
Description: Felder and Rabalais, 1986:548, figs. 1, 2a-g, 3a-h.
Type-locality: Vicinity of Flower Garden Banks, northwestern Gulf of Mexico (27°53.97N, 93°34.79W, 126 m).
Distribution: Gulf of Mexico from the Texas coast to Dry Tortugas, Florida; possibly off Anguilla (Felder and Rabalais, 1986).

Speocarcinus carolinensis Simpson, 1859
Description: Williams, 1984:437, fig. 349.—Felder and Rabalais, 1986:572, figs. 11d-f, 12.
Type-locality: Charleston Harbor, South Carolina.
Distribution: South of Cape Hatteras, North Carolina, through the West Indies to Amapá, Brazil (Williams, 1984). Dry Tortugas and the Margaritas Keys, Florida (Felder and Rabalais, 1986).
Key to families of Florida decapods

1. General form shrimplike, usually compressed; pleuron of second somite never overlapping that of first somite; first 3 pairs of pereopods usually chelate (except in some Sergestoidea), third pair never unusually robust ........................................... 2
   General form shrimplike, lobsterlike, or crablike; if shrimplike with pleuron of second abdominal somite overlapping that of first somite and third pair of pereopods not chelate or unusually enlarged (except Stenopodidae, with pleuron of second abdominal somite not overlapping that of first somite; third pereopods chelate, stronger than preceding) ........................................... 8

2. (1) Fourth and fifth pereopods well developed........................................... 3
   Fourth and fifth pereopods reduced or absent........................................... 7

3. (2) Postorbital spine present................................................................. Solenoceridae (page 97)
   Postorbital spine absent................................................................. 4

4. (3) Integument rigid, of stony appearance; cervical groove very faint or absent.................... Sicyoniidae (page 109)
   Integument more or less flexible, not stony and rigid in appearance; cervical groove present and easily discerned........................................... 5

5. (4) Eyestalks without tubercles on their mesial (inner) borders; epipods absent behind third pereopods .......................................................... Penaeidae (page 82)
   Eyestalks each with tubercle on its mesial (inner) border; epipods on all coxae from second maxillipeds through fourth pereopods ......................................... 6

6. (5) Distal, filamentous portion of upper antennular flagellum extensively developed.................................................. Benthescymidae (page 79)
   Distal, filamentous portion of upper antennular flagellum not extensively developed.......................................................... Aristidae (page 79)

7. (2) Anterior region of cephalothorax not greatly elongate; gills present.......................................................... Sergestoidea (page 115)
   Anterior region of cephalothorax greatly elongate; gills absent.......................................................... Luciferidae (page 125)

8. (1) Form shrimplike; usually with body compressed........................................... 9
   Form lobsterlike or crablike.............................................................. 24
9. (8) Pleuron of second abdominal somite not overlapping that of first somite; third pereopods chelate, stronger than preceding .......................... Stenopodidae (page 281)

Pleon of second abdominal somite overlapping that of first somite; third pair of pereopods never chelate .................................................. 10

10. (9) First pair of pereopods chelate or simple ............................................. 11

First pair of pereopods subchelate .............................................................. 23

11. (10) Fingers of all four chelae slender, their cutting edges pectinate .......................................................... Pasiphaeidae (page 137)

Cutting edges of fingers of chelae not all pectinate ..................................... 12

12. (11) Carpi of second pair of pereopods entire; first pair of pereopods always with well-developed chelae .................................................................................. 13

Carpi of second pair of pereopods usually subdivided into two or more segments; if not, first pair of pereopods not chelate ...................................................... 19

13. (12) First pair of pereopods stronger and heavier though often shorter than second .......... 14

First pair of pereopods usually more slender than, rarely subequal to, second ........... 16

14. (13) Ends of fingers of first two pairs of pereopods not dark colored; ultimate segment of second maxilliped placed at end of penultimate segment; exopod of first maxilliped without flagellum .................................... Bresiliidae (page 141)

Ends of fingers of first two pairs of pereopods dark colored; ultimate segment of second maxilliped applied as strip alongside of penultimate segment; exopod of first maxilliped with distinct flagellum ............................................. 15

15. (14) Rostrum immovable; exopods on pereopods ................ Eugonatonotidae (page 145)

Rostrum movable; no exopods on pereopods ........................................ Rhynchocinetidae (page 145)

16. (13) Pereopods usually with exopods; if not, fingers of chelae with terminal brushes of long hairs .............................................................. 17

Pereopods without exopods; chelae without terminal brushes of long hairs .......... 18

17. (16) Mandible without palp; fingers of chelae usually with conspicuous terminal brushes of hairs; last three pairs of pereopods not conspicuously lengthened; pereopods with or without exopods .................................. Atyidae (page 127)

Mandible with palp; fingers of chelae without terminal brushes of hairs; pereopod with exopods (last three pairs of pereopods not conspicuously lengthened; carpi of these pereopods distinctly shorter than propodi) .................. Oplophoridae (page 131)
18. (16) Mandible usually with incisor process; if not, third maxilliped not expanded or leaf-like ................................................................. **Palaemonidae** (page 152)

Mandible without incisor process; third maxillipeds expanded and leaf-like......

................................................................. **Gnathophyllidae** (page 149)

19. (12) Chelae of first pair of pereopods microscopically small or absent (mandible bifid, with palp; rostrum laterally compressed, distinctly dentate) ................................................................. **Pandalidae** (page 262)

Chelae of first pair of pereopods distinct, at least on one side .................. 20

20. (19) First pair of pereopods both chelate; rostrum dentate or unarmed, not with single subdiscal dorsal tooth ................................................................. 21

Usually right first pereopod chelate, the other ending in simple claw-like dactyl; if both chelate, rostrum with subdiscal dorsal tooth ........ **Processidae** (page 254)

21. (20) Ends of fingers of first pair of chelae usually dark colored; first pair of chelipeds short and rather heavy but not swollen; eyes free, never extremely elongate ........ ................................................................. **Hippolytidae** (page 230)

Ends of fingers of first pair of chelae not dark colored; eyes either extremely long or partly or wholly covered by carapace ................................................................. 22

22. (21) Eyes extremely elongate, reaching almost to end of antennular peduncle; cornea small; first pair of pereopods shorter than and about as robust as second .......... ................................................................. **Ogyrididae** (page 251)

Eyes usually partly or wholly covered by carapace, never very elongate; first pair of pereopods distinctly stronger than second, often unequal and swollen ........ ................................................................. **Alpheidae** (page 194)

23. (10) Carpi of second pair of pereopods multi-articulate ................................................................. **Glyphocrangonidae** (page 277)

Carpi of second pair of pereopods not subdivided...... **Crangonidae** (page 271)

24. (8) Body lobsterlike and strongly calcified; abdomen with pleura well developed; first three pairs of pereopods either all chelate or none chelate ........ 25

Body crablike or lobsterlike, sometimes weakly calcified in part; pleura often reduced or absent; first three pairs of pereopods never alike; first, second, or first and second pereopods chelate or subchelate ................................. 28

25. (24) First three pairs of pereopods chelate, first largest; uropods well developed, lateral ramus (uropodal exopod) transversely divided ... **Nephropidae** (page 285)

First three pairs of pereopods never chelate; uropods well developed, lateral ramus without transverse division ................................................................. 26
26. (25) Carapace with small rostrum; first pereopods much larger than others (body tubular; antennae cylindrical, shorter than body) .......... Synaxiidae (page 323)

Carapace without rostrum; first pereopods not enlarged except in Justitia .......... 27

27. (26) Carapace subcylindrical; antennal flagella long, strong, and spiny ..........
............................................................................................... Palinuridae (page 313)

Carapace more or less flattened dorsoventrally, lateral margins sharp; antennae short, flagella replaced by plates with dentate or lobulate margins
............................................................................................... Scyllaridae (page 316)

28. (24) Either lobsterlike or crablike; abdomen extended, bent upon itself, or flexed beneath thorax; last thoracic sternite free; uropods present; carapace not fused with epistome; first, second, or first 2 pairs of pereopods chelate or subchelate ....
............................................................................................... 29

Crablike; abdomen permanently flexed beneath carapace; last thoracic sternite fused with preceding; uropods rarely present, never biramous; carapace fused with epistome; first pair of pereopods chelate or subchelate .......... 40

29. (28) Second to fourth pereopods with dactyi conspicuously curved and flattened; abdomen much reduced in size and flexed beneath thorax .......... 30

Second to fourth pereopods with dactyi not conspicuously curved and flattened; abdomen well developed but may be flexed beneath thorax .......... 31

30. (29) First pair of pereopods subchelate; carapace depressed... Albuneidae (page 427)

First pair of pereopods simple; carapace subcylindrical...... Hippidae (page 433)

31. (29) Abdomen usually asymmetrical (rarely secondarily straightened), usually membranous and with uropods adapted for holding body in hollow objects; rarely leathery, unprotected, and bent under thorax .......... 32

Abdomen symmetrical and obviously segmented; uropods well developed for swimming, never for holding body in hollow objects .......... 35

32. (31) Third maxillipeds approximated at base; chelipeds subequal, or left much larger than right, rarely with right slightly larger than left .......... 33

Third maxillipeds widely separated at base by sternum; right cheliped usually much larger than left, left never larger than right, occasionally subequal .......... 34

33. (32) Ventral antennular flagellum ending in filament......... Diogenidae (page 330)

Ventral antennular flagellum ending bluntly.......... Coenobitidae (page 327)
34. (32) Carapace firm anteriorly, more or less membranous posteriorly; rostrum obsolete or nearly so; fourth pereopods unlike third .......................... Paguridae (page 359)

   Carapace firm all over, spiny in many species; rostrum more or less spiniform; fourth pereopods like third ................................. Lithodidae (page 355)

35. (31) Body subcylindrical; first two pairs of pereopods chelate or subchelate (first only in Upogebiidae); abdomen extended ........................................... 36

   Body slightly depressed; only first pereopods chelate; abdomen bent under thorax. ................................................................. 38

36. (35) No Linea thalassinica; both movable and fixed antennal thorns present; first pereopods strongly chelate and conspicuously hairy .......... Axiidae (page 289)

   Linea thalassinica present; fixed antennal thorn absent; first pereopods chelate or subchelate but not conspicuously hairy .................................................. 37

37. (36) First pereopods chelate; rostrum inconspicuous or absent.......................................................... Callianassidae (page 293)

   First pereopods subchelate; rostrum well developed, dorsally flattened, spiny, and hairy ...................................................... Upogebiidae (page 309)

38. (35) Form somewhat lobsterlike; rostrum extended, well developed; abdomen loosely flexed beneath posterior thorax; third maxilliped pediform ......................... 39

   Form crablike (Euceramus elongate) with abdomen completely folded under thorax; rostrum short and broad or wanting; third maxilliped flattened, operculiform ................................ Porcellanidae (page 410)

39. (38) Antennal peduncle composed of four movable segments; telson subdivided into two or more plates, not folded sharply against itself, without lateral indentation ..................................... Galatheidae (page 397)

   Antennal peduncle with five segments, third segment not being fused with second; telson never subdivided into two or more plates, folded sharply against itself, with lateral indentation .................................. Chirostylidae (page 393)

40. (28) Mouth-frame (buccal cavity) triangular......................................................... 41

   Mouth-frame (buccal cavity) more or less quadrate......................................... 46
41. (40) Posterior thoracic sternites narrow, keel-like (bases of 2nd-4th pereopods close together); last pair of pereopods dorsal in position; female genital openings coxal (body elongate in dorsal view, subcylindrical; pereopods adapted for burrowing; orbits hidden ventrolaterally if present; linea homolica absent) ........................................... Raninidae (page 455)

Posterior thoracic sternites broad (bases of walking legs far apart); last pair of pereopods normal in position, or last two pairs dorsal; female genital openings sternal (except in Cyclodorippidae) ........................................... 42

42. (41) Carapace subquadrilateral or subcircular, short, leaving the first 2 or 3 abdominal segments exposed; last two pairs of pereopods dorsal in position, ending in hook-like movable fingers .......................................................... 43

Carapace of usual crablike shape .............................................................. 45

43. (42) Third maxilliped leaving all anterior part of buccal cavity uncovered ........................................... Dorippidae (page 461)

Third maxilliped greatly elongate and not leaving any appreciable portion of buccal cavity uncovered .......................................................... 44

44. (43) Third maxilliped with flagellum ........................................... Cymonomidae (page 443)

Third maxilliped without flagellum ........................................... Cyclodorippidae (page 447)

45. (42) Afferent opening to each gill chamber in front of base of cheliped ........................................... Calappidae (page 465)

Afferent opening to each gill chamber at base of outer (third) maxilliped ........................................... Leucosiidae (page 479)

46. (40) Last pair of pereopods abnormal, dorsal; female openings coxal; first abdominal limbs of female present; gills usually many ........................................... 47

Last pair of pereopods normal, rarely reduced, not dorsal, except in Palicus (Palicidae) and Retropluma; female openings sternal; first abdominal limbs of female wanting; gills few ........................................... 50

47. (46) Sternum of female with longitudinal grooves; vestiges of sixth abdominal limbs usually present; eyes usually completely sheltered by orbits when retracted ........................................... 48

Sternum of female without longitudinal grooves; no vestiges of sixth abdominal limbs; eyes incompletely or not at all sheltered by orbits when withdrawn against body ........................................... 49
48. (47) Vestiges of sixth abdominal limbs present (except in *Hypoconcha*, where also no mastigobranchs are present); carapace usually not longer than broad, with well-marked side edge [mastigobranchs on first pereopods (chelipeds) only or none] .................. *Dromiidae* (page 437)

No vestige of sixth abdominal limbs; carapace longer than broad, with ill-marked side edge; first three pereopods with mastigobranchs, fourth and fifth small, subdorsal, and prehensile .................. *Homolodromiidae* (page 443)

49. (47) Body rectangular; basal article of eyestalk not much longer than terminal article.......................... *Homolidae* (page 451)

Body pyriform; basal article of eyestalk much longer than terminal article...................... *Latreilliiidae* (page 451)

50. (46) Forepart of body narrow, usually forming distinct rostrum; body more or less triangular; orbits generally incomplete .............................................. 51

Forepart of body broad; rostrum usually reduced or wanting; body oval, round, or square; orbits nearly always well enclosed .............................................. 52

51. (50) Chelipeds not much larger than other pereopods; hooked hairs almost always present; second segment of antenna well developed, usually fused with epistome and front .......................................................... *Majidae* (page 493)

Chelipeds very much larger than other pereopods; hooked hairs almost always absent; second segment of antenna small, short, and not fused with epistome or front .......................................................... *Parthenopidae* (page 558)

52. (50) Merus of third maxilliped small, bearing terminally carpus of nearly its own width; ischium very broad; body somewhat oblong; antennule not retractile into sockets; parasitic on corals .................. *Cryptochiridae* (page 727)

Carpus of third maxilliped articulate at or near antero-lateral angle of merus; body usually rounded or transversely oval; male openings nearly always coxal; right chela larger than left in many species .................................................. 53

Carpus of third maxilliped not articulating at or near inner angle of merus; body usually square or squarish; male openings sternal except in *Retrolamina*, where duct passes along a sternal groove to coxopodite; right chela almost never larger than left (except *Palcidae*) .................................................. 57

53. (52) Pereopods more or less distinctly adapted for swimming; usually a small lobe on inner angle of endopod in first maxillipeds; first antenna fold slanting or transverse .................................................. *Portunidae* (page 572)

Pereopods not adapted for swimming, or if so modified, then male genital duct opening sternal or running in sternal groove; inner lobe on endopod in first maxillipeds wanting .............................................. 54
54. (53) Antennule folds lengthwise.................................................. 55
    Antennule folds slanting or transversely.................................. 56

55. (54) Carapace subcircular; antennal flagella either long and hairy or wanting........
    ..................................................................................... Atelecyclidae (page 569)
    Carapace broadly oval or hexagonal; antennal flagella present, short, not hairy....
    ..................................................................................... Cancridae (page 569)

    [The following three families are not sharply separated.]

56. (54) Carapace usually transversely oval or transversely hexagonal (xanthoid); male
    openings coxal; male abdomen greatly narrowed in segments 4-7; tending to
    occur in shallow water ............................................................ Xanthidae (page 603)

    Carapace subquadrate to xanthoid; male openings coxal with genital duct lying in
    groove between sternites 7 and 8 or sternal; male abdomen somewhat more
    triangular than above; part of sternite 8 visible from above at level of second
    abdominal segment but variable in size (some species in above family share this
    character); tending to occur in deeper water near edge of continental shelf .........
    .......................................................................................... Goneplacidae (page 591)

    Carapace hexagonal to trapezoidal in shape, with anterolateral margins generally
    armed with three to five teeth, with front bearing four short teeth; orbits and eyes
    well developed; antennules transverse or transversely oblique; basal antennal
    article movable and not reaching front of carapace; genital openings in male coxal;
    pereopods long and compressed ............................................. Geryonidae (page 569)

57. (52) Small, usually commensal crabs, with very small eyes and orbits; body usually
    more or less rounded ......................................................... Pinnotheridae (page 681)
    Free-living crabs, with eyes not especially reduced and usually square body.... 58

58. (57) Last pair of pereopods dorsally placed and weaker than others; interantennuluar
    septum very thin; no distinct epistome; exopod of third maxilliped not hidden......
    ................................................................................. Palicidae (page 718)

    Last pair of pereopods not dorsally placed or markedly weaker than others;
    interantennular septum not very thin ........................................ 59

59. (58) Gap of greater or less size between third maxillipeds; front very or moderately
    broad ................................................................. 60

    Third maxillipeds almost or quite close to mouth; front moderately or very narrow.
    ................................................................................. Ocyopodidae (page 707)

60. (59) Sides of body either straight or very slightly arched; shape squarish; front broad..
    ..................................................................................... Grapsidae (page 665)

    Sides of body strongly arched; shape transversely oval; front narrow............... 61
    ..................................................................................... Gecarcinidae (page 661)
Keys to Species of Florida Decapods

Suborder Dendrobranchiata

Family Aristeidae

Key to genera and species
[Based on Roberts and Pequegnat, 1970]

Hepatic spine absent (epipod on fourth pereopod large; podobranch on third pereopod large; rostrum tridentate)........................

..............................Plesiopenaeus edwardsianus

Hepatic spine present (podobranch on third pereopod and epipod on fourth pereopod well developed).......Aristaeomorpha foliacea

Family Benthesicymidae

Genus Betheogennema Burkenroad, 1936
[based on Roberts and Pequegnat, 1970]

Podobranchs present on first maxilliped through third pereopod; telson with more than single pair of movable lateral spinules but without posteriomedian point.......................B. intermedia
Aristaeomorpha foliacea
a. adult male lateral view
(after Pérez Farfante, 1978)

Plesiopenaeus edwardsianus
b. lateral view
c. male petasma
(after Crosnier and Forest, 1973)

Bentheogennema intermedia
female:
d. anterior region, lateral view
e. telson, dorsal view
(after Crosnier and Forest, 1973)
Family Penaeidae

Key to genera and species
[Adapted from Pérez Farfante, 1978]

1. Rostrum toothed on dorsal margin, usually also on ventral margin; pleurobranch present on last thoracic somite ................................................................. 2
   Rostrum toothed on dorsal margin only; no pleurobranch on last thoracic somite... 3

2. (1) Carapace hairy.................................................. Funchalia villosa
   Carapace smooth...................................................... Peneaus

3. (1) Telson tridentate, with fixed spine on each side of tip; mesial border of first segment of antennular peduncle bearing spine (parapenaeid spine) .................. 4
   Telson usually without fixed spines; no spine on mesial border of first segment of antennular peduncle ................................................................. 6

4. (3) Carapace with longitudinal and transverse sutures. .................. Parapenaeus
   Carapace without longitudinal or transverse sutures.............................. 5

5. (4) Male with symmetrical petasma; single arthrobranch on last thoracic somite, no trace of second arthrobranch ................................ Penaeopsis serrata
   Male with asymmetrical petasma; 2 arthrobranches present on last thoracic somite, one of them well developed, other vestigial ............... Metapenaeopsis

6. (3) Dactyli of fourth and fifth pairs of pereopods elongate and subdivided........
   ........................................................................................................ Xiphopenaeus kroyeri
   Dactyli of fourth and fifth pairs of pereopods of normal shape and undivided..... 7

7. (6) Carapace without longitudinal sutures............ Trachypenaeopsis mobilispinis
   Carapace with longitudinal sutures (upper antennular flagella shorter than carapace and not much longer than lower flagella; fourth and fifth pairs of pereopods about as heavy as 3 anterior pairs; exopod of fifth pair of pereopods well developed)......
   .......................................................................................... Trachypenaeus
Genus *Metapenaeopsis* Bouvier, 1905

Key to species
[Adapted from Pérez Farfante, 1971]

1. Thelycum with median plate bearing horseshoe-shaped marginal strip and coiled lateral strips; petasma with distoventral projection cleft by deep sinus into 2 long, subequal lobes ........................................... *M. smithi*

   Thelycum with median plate lacking marginal and coiled strips; petasma with distoventral projection simple, forming one single lobe or cleft by shallow sinus into 2 short, subequal, or into 2 unequal lobes ........................................... 2

2. (1) Thelycum with anterior part of median plate convex, bearing 2 large pits; petasma with distoventral projection mittenlike in outline, large left lobe extending distally far beyond small right lobule ........................................... *M. gerardoii*

   Thelycum with anterior part of median plate long, half or more as long as median plate; petasma with distoventral projection cleft into 2 unequal lobes, right lobe noticeably larger than left ........................................... *M. goodei*

Genus *Parapenaeus* Smith, 1886

Key to species
[Adapted from Roberts and Pequegnat, 1970]

Branchiostegal spine present behind anterior margin of carapace; rostral teeth usually seven; epigastric tooth and hepatic spine not as far behind orbital margin as in *P. americanus* ......................................................... *P. politus*

Branchiostegal spine on anterior margin of carapace; rostral teeth usually six; epigastric tooth and hepatic spine farther behind orbital margin than in *P. politus* .... ........................................... *P. americanus*
Family Penaeidae

**Genus Penaeus** Fabricius, 1798

Key to species of adults and subadults
[Adapted from Williams, 1984]

1. Lateral rostral grooves reaching only slightly beyond posterior rostral tooth (nongrooved shrimps) .................................................. *P. setiferus*

   Lateral rostral grooves reaching nearly to posterior margin of carapace (grooved shrimps) .......................................................... 2

2. (1) Petasma with distomesial projection long; distal fold expanded mesially forming large spined lobe; ventral costa with apex free; thelycum with anteromesial corners of lateral plates extended to cover posterior process of median protuberance .................. *P. brasiliensis*

   Petasma with distomesial projection relatively short; distal fold not forming lobe; ventral costa with apex attached to adjacent membranous part; thelycum with anteromesial corners not extended, exposing posterior process of median protuberance .......................................................... 3

3. (2) Petasma armed with minute spines on ventral costa along terminal part of free border; thelycum with anteromesial corners of lateral plates slightly divergent, posterior process of median protuberance with undivided median carina ................................. *P. duorarum*

   Petasma unarmed on ventral costa along terminal part of free border; thelycum with anteromesial corners of lateral plates widely divergent, posterior process of median carina bifurcate anteriorly ........................................ *P. aztecus*

Key to species of juveniles between 17 and 47 mm total length
[Adapted from Williams, 1984]

1. Lateral rostral grooves reaching only slightly beyond posterior rostral tooth; rostrum long and slightly upturned at tip in individuals exceeding 22 mm total length; ground color light gray, sometimes with greenish cast in shrimp taken from beds of vegetation; chromatophores (widely spaced except on spines, ridges, and uropods) colored slate-blue and brown; uropods with reddish-brown to brown areas distally .................................. *P. setiferus*

   Lateral rostral grooves reaching almost to posterior margin of carapace (shallow in 17-mm individuals); rostrum relatively short; color gray to light brown, sometimes with greenish cast in shrimp taken from beds of vegetation; chromatophores numerous and closely spaced, often in bands or patches .............................. 2

2. (1) Rostrum with toothed dorsal margin straight; tip attenuate and straight .......................................................... *P. brasiliensis*

   Rostrum with toothed dorsal margin slightly arched over eye; tip short or attenuate and slightly upturned ........................................ 3
3. (2) Rostrum usually not upturned at tip and not extremely attenuate; chromatophores slate-blue and brown; usually with conspicuously pigmented lateral spot at juncture of third and fourth abdominal somites; uropods with uniform sprinkling of chromatophores, degree of transparency uniform throughout (color more dense in older individuals) .................................................. \textit{P. duorarum}

Rostrum usually slightly upturned and attenuate at tip; chromatophores brown and olive-green; usually lacking lateral spot at juncture of third and fourth abdominal somites; uropods with reddish-brown to brown areas distally ........ \textit{P. aztecus}

\textbf{Genus \textit{Trachypenaeus}} Alcock, 1901

Key to species
[Adapted from Chace, 1972]

Thelycum pubescent, lips of transverse groove strongly biconvex; male with sternal elevation between coxae of fifth pereopods goblet-shaped, constricted posteriorly ......................... \textit{T. constrictus}

Thelycum naked, lips of transverse groove subhorizontal; male with sternal elevation between coxae of fifth pereopods triangular, sloping regularly to posterior apex .................................................. \textit{T. similis}
**Metapenaeopsis smithi**

a. petasma, ventral view (male)
b. thelycum (female)

(after Pérez Farfante, 1971)

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**Metapenaeopsis gerardoi**

c. petasma, ventral view (allotype male)
d. thelycum (holotype female)

(after Pérez Farfante, 1971)

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**Metapenaeopsis goodei**

e. lateral view (female)
f. petasma, ventral view (male)
g. thelycum (female)

(after Pérez Farfante, 1971)
Parapenaeus politus
a. anterior region, lateral view
(after Williams, 1965a)

Parapenaeus americanus
b. lateral view (female)
(after Rathbun, 1901)
**Penaeus setiferus**

a. lateral view (female)
b. petasma (male)
c. thelycum (female)

(after Pérez Farfante, 1978)

**Penaeus brasiliensis**

d. lateral view (male)
e. thelycum (female)
f. petasma (male)

(after Pérez Farfante, 1978)

**Penaeus duorarum**

g. anterior region, lateral view (female)
h. thelycum (female)
i. petasma (male)

(after Pérez Farfante, 1978)

**Penaeus aztecus**

j. lateral view (female)
k. petasma (male)
l. thelycum (female)

(after Pérez Farfante, 1978)
Trachypenaeus constrictus

a. lateral view (female)
b. thoracic sternites between fourth pereopods and fifth pereopods
c. petasma (male)

(after Pérez Farfante, 1978)

Trachypenaeus similis

d. thelycum (female)
e. thoracic sternites between fourth pereopods and fifth pereopods (male)

(after Burkenroad, 1934)
**Funchalia villosa**

a. lateral view  
b. thelycum (female)  
c. petasma (male)  
(after Burukovskii, 1983)

**Penaeopsis serrata**

d. anterior region, lateral view (female)  
e. petasma, ventral view (male)  
(after Pérez Farfante, 1980b)

**Trachypeneopsis mobilispinis**

f. rostrum  
g. telson  
h. petasma (male)  
(after Rathbun, 1920)

**Xiphopenaeus kroyeri**

i. lateral view (female)  
j. petasma, posterior view (male)  
(after Chace and Hobbs, 1969)
Family Solenoceridae

Key to genera and species
[Adapted from Pérez Farfante, 1977]

1. Upper and lower antennular flagella lamellate; exopod of uropod lacking distolateral spine ........................................................................................................... Solenocera
Upper antennular flagellum subcylindrical, lower subcylindrical or flattened; exopod of uropod armed with distolateral spine .............................................. 2

2. (1) Lower antennular flagellum conspicuously depressed, orbital spine present........
.................................................................................................................. Mesopenaeus tropicalis
Lower antennular flagellum subcylindrical, occasionally depressed; if so, orbital spine lacking ................................................................. 3

3. (2) Epigastric and first rostral teeth separated from remaining teeth by long interval; suprahepatic spine absent ................................................................. Hymenopenaeus
Epigastric tooth separated from first rostral tooth by interval not conspicuously greater or smaller than that between first and second rostral teeth ................. 4

4. (3) Rostrum low, with ventral margin straight or concave; submarginal carina present... ................................................................. Pleoticus robustus
Rostrum deep, with ventral margin pronouneedly convex; submarginal carina absent ................................................................. Hadropenaeus
Genus *Hadropenaeus* Pérez Farfante, 1977

Key to species
[Adapted from Pérez Farfante, 1977]

Scaphocerite reaching distal end of antennular peduncle or overreaching it by not more than 0.1 of its own length; prosartema extending only to distomesial extremity of first antennular segment; thelycum with median protuberance on sternite between fifth pereopods projecting ventrally, and tooth of median keel of sternite between fourth pereopods directed anteriorly; petasma with distomesial projection of ventromedian lobule directed mesially ........................................... *H. affinis*

Scaphocerite overreaching antennular peduncle by about 0.25 of its own length; prosartema conspicuously overreaching distomesial margin of first antennular segment; thelycum with median protuberance on sternite between fifth pereopods projecting anteriorly, and tooth of median keel of sternite between fourth pereopods directed ventrally or posteriorly; petasma with distomesial projection of ventromedian lobule directed distally ........................................... *H. modestus*

Genus *Hymenopenaeus* Smith, 1882

Key to species
[Adapted from Pérez Farfante, 1977]

Eye with cornea hemispherical and disposed such that imaginary line extending from mesial tubercle parallel to basal margin of ocular peduncle intersects lateral border of latter far proximal to proximolateral extremity of cornea ................................................................. *H. aphoticus*

Eye with cornea subreniform and disposed such that imaginary line extending from mesial tubercle parallel to basal margin of ocular peduncle intersects posterolateral extremity of cornea ................................................................. *H. debilis*
Genus Solenocera Lucas, 1849

Key to species
[Adapted from Williams, 1984]

1. Rostral + epigastric teeth 8-II; postrostral carina high and sharp, extending almost to posterior margin of carapace ........................................ S. vioscai

   Rostral + epigastric teeth 4-8; postrostral carina low or absent posterior to cervical sulcus ................................................................. 2

2. (1) Anterior part of carapace glossy; scaphocerite exceeding distal end of antennular peduncle by 10% of its own length .................................. S. necopina

   Anterior part of carapace setose; scaphocerite never exceeding distal end of antennular peduncle by 10% of its own length, usually less ........ S. atlantidis
**Hadropenaeus affinis**

a. lateral view (female)
b. thelycum, ventral view (female)
c. petasma, dorsal view of right half (male)

(after Pérez Farfante, 1977)

**Hadropenaeus modestus**

d. anterior region, lateral view
e. thelycum, ventral view (holotype female)
f. petasma, dorsal view of right half (male)

(after Pérez Farfante, 1977)
Hymenopenaeus aphonoticus

female:
  a. anterior region, lateral view
  b. eye

(after Pérez Farfante, 1977)

Hymenopenaeus debilis

male:
  c. lateral view
  d. eye

(after Pérez Farfante, 1977)
**Solenocera vioscai**

a. carapace and rostrum, lateral view (larger paratype female)

(after Burkenroad, 1934)

**Solenocera necopina**

b. anterior region, lateral view (female)

(after Pérez Farfante and Bullis, 1973)

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**Solenocera atlantidis**

c. anterior region, lateral view (female)

(after Pérez Farfante and Bullis, 1973)
Mesopenaeus tropicalis
a. lateral view (female)
(after Pérez Farfante, 1977)

Pleoticus robustus
male:
b. lateral view
c. petasma, dorsolateral view of left half
(after Pérez Farfante, 1977)
Family Sicyoniiidae

Genus Sicyonia H. Milne Edwards, 1830

Key to species
[Adapted from Williams, 1984]

1. First pereopod with basis and ischium armed with spine; abdominal somite 2 with dorsal carina notched at junction of transverse sulci .................................................. 2
   First pereopod with basis and ischium unarmed; abdominal somite 2 with dorsal carina unnotched .......................................................... 3

2. (1) Rostrum (excluding tip) with 2 dorsal teeth anterior to posterior orbital margin; carina of carapace with 3 teeth, first tooth smallest .................. S. laevigata
   Rostrum (excluding tip) with 3 dorsal teeth; carina of carapace with 3 evenly spaced, subequal teeth ...................................................... S. parri

3. (1) Carapace with 3 large dorsal teeth behind hepatic spine .......... S. brevirostris
   Carapace with 1 or 2 large dorsal teeth behind hepatic spine ............... 4

4. (3) Two teeth on dorsal carina behind hepatic spine ..................... S. typica
   One tooth on dorsal carina behind hepatic spine .................................. 5

5. (4) Pleura of abdominal somite 4 with both antero- and posterovertral margins spined or angular
   ........................................................................................................ S. dorsalis
   Pleura of abdominal somite 4 with posterovertral margin rounded ........ 6

6. (5) Antennal spine long, acute, buttressed; pleura of abdominal somites 1-4 with ventral spines laterally recurved ....................................... S. burkenroadi
   Antennal spine short, often minute, not buttressed; pleura of abdominal somite 1 rounded, 2-4 angulate, but without laterally recurved marginal spines ..................................................................................... S. stimpsoni
**Sicyonia laevigata**

a. carapace and first two abdominal somites, lateral view

(after Burkenroad, 1934)

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**Sicyonia parri**

b. carapace and abdomen, lateral view

(after Burkenroad, 1934)

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**Sicyonia brevirostris**

c. lateral view (male)

(after Cobb et al., 1973)

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**Sicyonia typica**

d. carapace and first abdominal somite, lateral view

(after Williams, 1984)
**Sicyonia dorsalis**

- a. carapace and first abdominal somite, lateral view

  (after Williams, 1984)

**Sicyonia burkenroadi**

- b. lateral view (female)
- c. third and fourth abdominal somites (female)

  (b, after Cobb, 1971; c, after Huff and Cobb, 1979)

**Sicyonia stimpsoni**

- d. carapace and part of first abdominal somite, lateral view
- e. abdominal somites (male)

  (d, after Williams, 1984; e, after Huff and Cobb, 1979)
Family Sicyoniidae
**Family Sergestidae**

Key to genera and species

1. Fourth and fifth pereopods absent .................. *Acetes americanus caroliniae*
   Fourth and fifth pereopods present ........................................ 2

2. (i) Specialized luminescent modifications of gastrohepatic gland (organs of Pesta) present; dermal photophores absent; supraorbital and hepatic spines present or absent .......................... *Sergestes*

   Specialized luminescent modifications of gastrohepatic gland (organs of Pesta) absent; dermal photophores present or absent; if present, with or without cuticular lenses; supraorbital and hepatic spines absent ................................ *Sergia*
Genus *Sergestes* H. Milne Edwards, 1830

Key to species
[based on Crosnier and Forest, 1973]

1. Third maxillipeds at most as long as third pereopods .................................. 2
   Third maxillipeds much longer than third pereopods ..................................... 4

2. (1) Two distal segments of fifth pereopod setose on only one margin (third segment of antennular peduncle equal to or longer than first; petasma lobes short, stumpy) ............ .......................... *S. atlanticus*
   Two distal segments of fifth pereopod setose on both margins .......................... 3

3. (2) Supraorbital spines always present, acute and easily visible ............. *S. henseni*
   Supraorbital spines nearly always absent or, when present, miniscule ............ .................................................. *S. paraseminudus*

4. (1) Two distal segments of fifth pereopod setose on both margins .................. 5
   Two distal segments of fifth pereopod setose on only one margin .................... 6

5. (4) Dactylus and distal half of propodus of third maxilliped with numerous spines forming comb-like structure; processus ventralis of petasma unarmed .................. .......................... *S. pectinatus*
   Dactylus and distal half of propodus of third maxilliped armed with spines but not forming comb-like structure; processus ventralis of petasma armed distally with numerous spines ........................................... *S. sargassii*

6. (4) Dactylus of third maxilliped subdivided into 6 segments and with 2 terminal spines; external margin of exopod of uropod entirely fringed ...................... *S. edwardsii*
   Dactylus of third maxilliped subdivided into 4 segments and with single terminal spine; small proximal portion of external margin of exopod of uropod naked ............ 7

7. (6) About 1/3 or a little more of external margin of exopod of uropod naked; first segment of antennular peduncle much shorter than third ................ *S. armatus*
   About 1/6 or 1/7 of external margin of exopod of uropod naked; first segment of antennular peduncle a little longer than third ........................................ *S. vigilax*
Genus *Sergia* Stimpson, 1860

Key to species
[Based on Crosnier and Forest, 1973]

Third maxillipeds with propodus and dactylus entire………………...*S. splendens*

Third maxillipeds with propodus and dactylus subdivided, last into 5 to 7 segments.
--------------------------------------------------------------------------*S. extenuatus*
**Sergestes atlanticus**

a. carapace, lateral view  
b. petasma (male)  
c. fifth percopod (male)

(a, b, after Kensley, 1971; c, after Hansen, 1922)

**Sergestes henseni**

d. rostral region  
e. petasma (male)

(after Crosnier and Forest, 1973)

**Sergestes paraseminudus**

f. rostral region  
g. petasma (male)

(after Crosnier and Forest, 1973)

**Sergestes pectinatus**

h. carapace, lateral view  
i. dactylus and distal end of propodus of third maxilliped  
j. petasma (male)

(after Kensley, 1971)
**Sergestes sargassi**
- a. carapace, lateral view
- b. dactylus and distal end of propodus of third maxilliped
- c. petasma (male)
  (after Kensley, 1971)

**Sergestes edwardsii**
- d. anterior region, lateral view
- e. petasma (male)
- f. third maxilliped
  (after Crosnier and Forest, 1973)

**Sergestes armatus**
- g. anterior region, dorsal view
- h. uropodal exopod
- i. third maxilliped
  (after Hansen, 1922)

**Sergestes vigilax**
- j. anterior region, dorsal view
- k. uropodal exopod
  (after Hansen, 1922)
Sergia splendens

a. anterior region, dorsal view
b. dactylus and propodus of third maxilliped
   (after Hansen, 1922, as Sergestes crassus)

Sergia extenuatus

c. anterior region, lateral view
d. petasma (male)
   (after Crosnier and Forest, 1973)

Acetes americanus carolinae

e. lateral view (female)
   (after Williams, 1965a)
Family Sergestidae
Family Luciferidae

Genus Lucifer Thompson, 1829

Key to species
[Adapted from Hansen, 1919]

Distance between labrum and insertion of eye-stalks somewhat or only a little
greater than length of eye-stalks with eyes (basal short joint of stalks included);
posterior ventral process on sixth abdominal somite in male with its distal part
swollen .................................................. \textit{L. typus}

Distance between labrum and insertion of eye-stalks almost or more than twice
length of eye-stalks with eyes; posterior ventral process on sixth abdominal somite
tapering to narrow, obtuse end .................................. \textit{L. faxoni}
**Lucifer typus**

a. anterior end, lateral view  
b. male sixth abdominal somite, lateral view  
   (after Bowman and McCain, 1967)

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**Lucifer faxoni**

c. lateral view (male)  
   (after Williams, 1965a)
Suborder Pleocyemata
Infraorder Caridea
Family Atyidae

Genus Potimirim Holthuis, 1954

Pereopods without exopods; orbital margin unarmed. ............... *P. potimirim*
Potimirim potimirim

a. lateral view

(from Abele's personal drawing)
Family Atyidae
Family Ophalororidae

Key to genera and species
[Adapted from Chace, 1940a]

1. Exopods of at least third maxillipeds and first pair of pereopods foliaceous and often rigid; outer margin of scaphocerite usually armed with series of spines; telson not truncate at tip, but ending in sharp point; eyes large and well pigmented ........ 2

None of exopods of pereopods foliaceous or rigid.......................... 3

2. (I) Abdomen with second somite armed with long, carinate posteromesial spines; fifth somite unarmed .................................. Janicella spinicauda

Abdomen with second somite unarmed; fifth somite with posteromesial tooth, sometimes small ................................................. Oplophorus

3. (I) Last four abdominal somites, at least, dorsally carinate (usually no straight ridge or carina running entire length of lateral surface of carapace along median lateral line; hind margin of hepatic furrow not usually cut off abruptly by oblique ridge or carina; incisor process of mandible toothed for entire length of cutting edge) ........

.............................................. Acanthephyra purpurea

Sixth abdominal somite not dorsally carinate (eyes very large and well pigmented; anterior margin of first abdominal somite armed with distinct lobe or tooth overlapping hind margin of carapace; telson terminating in sharp-pointed end-piece laterally armed with spines) .......................... Sysiellaspis debilis

Genus Oplophorus H. Milne Edwards, 1837

Key to species

End of scaphocerite barbed on inner margin; posterolateral angle of carapace with no tooth or spine .................................................... O. spinosus

No barb on end of scaphocerite; posterolateral angle of carapace with prominent spine ......................................................... O. gracilirostris
Oplophorus spinosus

a. lateral view (male)

(after Chace, 1940a)

Oplophorus gracilirostris

b. lateral view

(after Kensley, 1972)
Acanthephyra purpurea
a. lateral view (male)
(after Chace, 1940a)

Janicella spinicauda
b. lateral view (young male)
(after Chace, 1940a)

Systellaspis debilis
c. lateral view (male)
(after Chace, 1940a)
Family Ophrophoridae
Family Pasiphaeidae

Genus *Leptochelea* Stimpson, 1860

Key to species
[Adapted from Williams, 1984]

1. Sixth abdominal somite bearing movable lappet near anterior end of dorsal surface; third pereopod with exopod reaching nearly or quite to end of ischium .......................................................................................... *L. carinata*

   Sixth abdominal somite lacking dorsal lappet; third pereopod with exopod not nearly reaching distal end of ischium ........................................................................................................ 2

2. (1) Suborbital angle dentate; orbital margin serrate dorsilaterally...... *L. serratorbita*

   Suborbital angle rounded, unarmed; orbital margin usually entire dorsilaterally.... 3

3. (2) Fifth abdominal somite with 1-3 low prominences on dorsal margin... *L. papulata*

   Fifth abdominal somite regularly convex or nearly straight in lateral view.............

....................................................................................................................... *L. bermudensis*
Leptochela carinata

a. left third pereopod (male)

b. anterior region, lateral view (ovigerous female)

c. abdomen (ovigerous female)

(after Chace, 1976)

Leptochela serratorbita

ovigerous female:

d. right third pereopod

e. anterior region, lateral view

f. anterior part of carapace and eyes, dorsal view

(after Chace, 1976)

Leptochela papulata

g. anterior region, lateral view (holotype ovigerous female)

h. abdomen (holotype ovigerous female)

i. fifth abdominal somite, lateral view (paratype ovigerous female)

(after Chace, 1976)

Leptochela bermudensis

ovigerous female:

j. anterior region, lateral view

k. abdomen

l. posterior end of sixth abdominal somite

(after Chace, 1976)
Family Pasiphaeidae
Family Bresiliidae

Key to genera and species
[Adapted from Chace and Brown, 1978]

Rostrum armed ventrally with at least 1 small tooth; third maxilliped with terminal segment slender, not flattened; first pereopod no longer than second, with elongate fingers .............................................. *Pseudocheles chacei*

Rostrum unarmed ventrally; third maxilliped with terminal segment broad, flattened; first pereopod longer than second, fingers short and stout ...................... *Discias*

Genus *Discias* Rathbun, 1902

Key to species
[Adapted from Wilson and Gore, 1979]

Second abdominal somite with posterior dorsal spine.......... *D. serratirostris*

Abdominal somites without dorsal spines (rostrum narrow with subparallel margins) .................................................. *D. atlanticus*
Discias serratirostris

ovigerous female:

a. anterior region, dorsal view
b. first three abdominal somites, lateral view

(after Wilson and Gore, 1979)

Discias atlanticus

female:
c. lateral view
d. anterior carapace, dorsal view

(after Gore and Wilson, 1978)

Pseudocheles chacei

e. lateral view

(after Kensley, 1983)
Family Eugonatonotidae

Genus *Eugonatonotus* Schmitt, 1926

A well-developed toothed rostrum immovable; exopods present on pereopods (first two pairs of pereopods chelate, with dark fingertips; ultimate segment of second maxilliped applied as strip along side of penultimate segment; exopod of first maxilliped with distinct flagellum; first chela more robust than second; carpus of second chela entire) ........................................... *Eugonatonotus crassus*

Family Rhynchocinetidae

Genus *Rhynchocinetes* H. Milne Edwards, 1837

Rostrum movable; no exopods on pereopods (first two pairs of pereopods chelate, with dark fingertips; ultimate segment of second maxilliped applied as strip along side of penultimate segment; exopod of first maxilliped with distinct flagellum; first chela more robust than second; carpus of second chela entire) ........................................... *Rhynchocinetes rigens*
Eugonatonotus crassus

a. lateral view

(after Boone, 1927)

Rhynchocinetes rigens

b. lateral view

(after Gordon, 1936)

Rhynchocinetes rigens

c. rostrum (juvenile 2.5 mm)

d. same (ovigerous female, carapace length, excluding rostrum, 3.9 mm)

e. same (juvenile, carapace length, excluding rostrum, 3.4 mm)

f. same (male, carapace length, excluding rostrum, 6.8 mm)

(after Manning, 1961a)
Familles Eugonotonotidae/Rhynchoicentidae
Family Gnathophyllidae

Key to genera and species
[Adapted from Chace, 1972]

Anterolateral angle of carapace not reaching beyond level of antennal spine; spines on distal margin of telson not very unequal; third maxilliped with exopod considerably overreaching endopod; second pereopod with carpus broader than long; 3 posterior pereopods with dactyli nearly as broad as long, not bifid .......... Gnathophylloides mineri

Anterolateral angle of carapace reaching distinctly beyond level of antennal spine; intermediate spines on distal margin of telson nearly twice, or more than twice, as long as median pair; third maxilliped with exopod not overreaching endopod; second pereopod with carpus distinctly longer than broad; 3 posterior pereopods with dactyli distinctly longer than broad and bifid .......... Gnathophyllum

Genus Gnathophyllum Latreille, 1819

Key to species
[Adapted from Chace, 1972]

1. Posterior tooth of dorsal rostral series situated on rostrum anterior to level of orbital margin; color pattern composed of transverse stripes .......... G. americanum

Posterior tooth of rostral series situated on carapace posterior to level of orbital margin; color pattern composed of spots .............................................. 2

2. (i) Pereopods slender, propodus of third and fourth pairs 12-15 times as long as wide; color pattern composed of dark rings on slightly lighter background ..................... G. circellum

Pereopods not usually slender, propodus of third and fourth pairs 7-8 times as long as wide; color pattern composed of innumerable light dots on dark background (posterior pair of lateral telson spines separated by distinct gap from series of posterior spines; stylocerite falling short of level of articulation between first and second segments of antennular peduncle) ...................... G. modestum
**Gnathophyllum americanum**

a. lateral view  
b. rostrum  
(after Manning, 1963)

**Gnathophyllum circeillum**

c. outline of body, lateral view  
d. third pereopod  
(after Manning, 1963)

**Gnathophyllum modestum**

e. anterior portion of carapace, lateral view  
f. third pereopod  
g. telson and left uropods  
(after Manning, 1963)

**Gnathophylloides mineri**

h. carapace, lateral view  
i. telson and left uropods  
j. third maxilliped  
k. first pereopod  
l. major chela  
(after Schmitt, 1935a)
Family Palaemonidae

Key to genera
[Based on Chace, 1972]

1. Third maxilliped with well-developed exopod………………………………. 2
   Third maxilliped without exopod………………………………………………. 12

2. (1) Rostrum armed dorsally with series of prominent teeth……………………. 3
   Rostrum usually unarmed dorsally, at most with 1 or 2 subapical denticles……. 10

3. (2) Carapace with hepatic spine on lateral surface far posterior to anterior margin…… 4
   Carapace without hepatic spine…………………………………………………. 7

4. (3) Telson bearing 2 pairs of terminal spines and usually 1 or 2 pairs of setae………… 5
   Telson bearing 3 pairs of terminal spines………………………………………… 6

5. (4) Three posterior pereopods with biunguiculate dactyls……………………………...  Brachycarpus biunguiculatus
   Three posterior pereopods with dactyls simple, without accessory tooth on inferior margin …………………………………………. Macrobrachium

6. (4) Rostrum without lateral flange; carapace with antennal spine on anterior margin; 3
t     posterior pereopods 7-segmented, ischium and merus distinct …… Periclimenes
   Rostrum with lateral flange; carapace without antennal spine on anterior margin; 3
t     posterior pereopods 6-segmented, ischium and merus indistinguishably fused ……
     Tuleariocaris neglecta

7. (3) Carapace with antennal but without branchiostegal spine on or near anterior margin;
t   telson with 3 pairs of terminal spines; second pereopods massive, unequal ………
     Periclimenaeus
   Carapace with both antennal and branchiostegal spines on or near anterior margin;
t   telson with 2 pairs of terminal spines and 1 or 2 pairs of setae; second pereopods
t   elongate, subequal ……………………………………………………. 8

8. (7) Carapace without branchiostegal groove ventral to antennal spine; endopod of first
   pereopod of male with accessory appendix ……………………………. Leander
   Carapace with branchiostegal groove; endopod of first pereopod of male entire,
   without accessory appendix ………………………………………………. 9

9. (8) Mandible with palp………………………………………………….. Palaemon
   Mandible without palp………………………………………………… Palaemonetes
10. (2) Scaphocerite rudimentary .................................................... *Typton*

Scaphocerite well developed .................................................. Il

11. (10) Telson elongate with no dorsal spines; outer margin of uropodal exopod ending in two spines, inner spine movable ........................................ *Pontoniopsis paulae*

Telson rather broad, generally with large dorsal spines; one tooth at distal end of outer margin of uropodal exopod ........................................ *Pontonia*

12. (1) Rostrum not expanded laterally in basal portion; strongly dentate both dorsally and ventrally .................................................... *Anchistioides antiquensis*

Rostrum with eavelike expansions over orbits; unarmed ventrally .................. 13

13. (12) Second maxilliped with well-developed exopod ...... *Veleroniopsis kimallynæ*

Second maxilliped without exopod ............................................. 14

14. (13) Carapace with hepatic spine on lateral surface far posterior to anterior margin....... .................................................. *Lipkebe holthuisi*

Carapace without hepatic spine ................................................ 15

15. (14) Basal expansions of rostrum anteriorly acuminate; carapace with longitudinal groove extending almost entire length near lateral margin; abdomen with pleura of at least fourth and fifth somites posterolaterally acuminate ........................................ *Pseudocoutierea antillensis*

Basal expansions of rostrum evenly convex, not acuminate; carapace without longitudinal groove near lateral margin; abdomen with pleura of all 5 anterior somites rounded ........................................ *Neopontonides beaufortensis*
**Genus Leander** E. Desmarest, 1849

Key to species

Lateral extension of anterior margin of basal antennular segment convex; stylocerite short, barely reaching to middle of basal antennular segment; scaphocerite slender in both sexes; rostrum shallow in both sexes; fingers of second pereopod armed ........................................... *L. paulensis*

Lateral extension of anterior margin of basal antennular segment concave or straight; stylocerite may reach to distal third of basal antennular segment; scaphocerite slender in male, but broader and tapering less rapidly to apex in female; rostrum shallow in mature male, but very deep in mature female; fingers of second pereopod unarmed ........................................... *L. tenuicornis*

**Genus Macrobrachium** Bate, 1888

Key to species

[Based on Williams, 1984]

1. Carpi of second pereopods with maximum length as great or greater than meri .... 2
   Carpi of second pereopods distinctly shorter than meri ........................................ 4

2. (1) Palms of chelae on second pair of pereopods greatly swollen; prehensile surfaces of gaping fingers thickly set with long, stiff setae .................. *M. ofersii*
   Palms of chelae on second pair of pereopods cylindrical, not greatly swollen; fingers not noticeably gaping but may be hairy .............................................. 3

3. (2) Fingers of chelae on second pair of pereopods thickly pubescent throughout length; rostrum with teeth extending to tip ................................. *M. acanthurus*
   Fingers of chelae on second pair of pereopods with scattered hairs, except thicker on fingers along cutting edges; rostrum with toothless daggerlike tip .................. *M. ohione*

4. (1) Adult male with chelae of second pereopods equal in shape ............ *M. carcinus*
   Adult male with chelae of second pereopods very unequal in shape and size; smaller pereopods with fingers gaping, gap being filled by stiff hairs, implanted on cutting edges ............................................. *M. crenulatum*
Genus *Palaemon* Weber, 1795

Key to species
[Adapted from Holthuis, 1952]

Rostrum high, ventral margin with 3 or 4 teeth; fingers of second pereopods 2/3 length of palm or shorter .......................... *P. northropi*

Rostrum slender, ventral margin with 5 to 7 teeth; fingers of second pereopods more than 2/3 length of palm .......................... *P. floridanus*

Genus *Palaemonetes* Heller, 1869

Key to species
[Adapted from Holthuis, 1952, and Williams, 1984]

1. Fused part of two rami of upper antennular flagellum distinctly longer than free part (branchiostegal spine situated on anterior margin of carapace, just below branchiostegal groove; posterior pair of dorsal spines of telson placed midway between anterior pair and posterior margin of telson) ............... *P. paludosus*

Fused part of two rami of upper antennular flagellum shorter than or as long as free part ........................................................................................................................................................................ 2

2. (1) Rostrum with 2 teeth of dorsal series behind posterior margin of orbit, teeth reaching to tip, 3 to 5 ventral teeth; carpus of second pereopod in adult female shorter than palm, in male slightly longer (1.1 times) or shorter; dactylus of second pereopod with 2 teeth, immovable finger with 1 tooth on cutting edge ........................................... *P. vulgaris*

Rostrum with only 1 tooth of dorsal series behind posterior margin of orbit; carpus of second pereopod in adult female much longer than palm (1.3-1.5 times), in male almost as long as whole chela; dactylus of second pereopod with or without single tooth, fixed finger without tooth on cutting edge .............................................................................. 3

3. (2) Rostrum with dorsal teeth reaching to often bifurcate tip, 4 or 5, seldom 3, ventral teeth; dactylus of second pereopod with tiny and sometimes blunt tooth .......................... *P. intermedius*

Both margins of rostrum with unarmed stretch before dagger-shaped tip, 2 to 5, generally 3, ventral teeth; fingers of second pereopod without teeth on cutting edge ........................................ *P. pugio*
Genus *Periclimenaeus* Boraidaile 1915

Key to species

[Adapted from Chace, 1972]

1. Telson with anterior pair of dorsal spines arising from anterior fourth of segment... 2

   Telson with anterior pair of dorsal spines arising at end of anterior third of segment
   or posterior thereto ......................................................... 8

2. (1) Movable finger of major chela of second pereopod extending distinctly beyond tip
   of immovable finger ....................................................... *P. chacei*

   Movable finger of major chela of second pereopod extending very slightly beyond
   or reaching to tip of immovable finger .................................. 3

3. (2) Telson with 3 pairs of distal spines inserted in continuous line................... 4

   Telson with lateral pair of distal spines inserted distinctly anterior to intermediate
   and mesial pairs ................................................................... 6

4. (3) Rostrum with ventral tooth; carapace with small denticle or sharp tubercle posterior
   to orbit; scaphocerite with anterolateral tooth distinctly overreaching blade ...........
   ............................................................................................ *P. caraibicus*

   Rostrum unarmed ventrally; carapace without postorbital denticle; scaphocerite with
   anterolateral tooth not overreaching blade .................................. 5

5. (4) Third maxilliped with 2 distal segments broad, penultimate about two and one-half
   times as long as broad; first pereopod with movable finger tapering to tip, not
   strongly convex, carpus about one and one-third times as long as chela; minor
   second pereopod with movable finger elongate, not semicircular ... *P. ascidiarum*

   Third maxilliped with 2 distal segments unusually slender, penultimate about five
   times as long as broad; first pereopod with movable finger strongly convex, carpus
   about one and one half times as long as chela; minor second pereopod with movable
   finger short and broad, nearly semicircular ................................. *P. pearsei*

6. (3) Major second pereopod with large tooth on opposable margin of immovable finger
   fitting into cavity in movable finger; minor second pereopod with fingers longer
   than palm ................................................................. *P. bermudensis*

   Major second pereopod with large tooth on opposable margin of movable finger
   fitting into cavity in immovable finger; minor second pereopod with fingers much
   shorter than palm ................................................................... 7

7. (6) First pereopod unusually long and slender, carpus nearly twice as long as chela......
   .................................................................................................. *P. perlatus*

   First pereopod not abnormally long or slender, carpus less than one and one-half
   times as long as chela (rostrum with 10-12 dorsal teeth; telson with posterior pair of
   dorsal spines arising from posterior half of segment) ..................... *P. wilsoni*
8. (1) Scaphocerite without anterolateral tooth; third pereopod with dactylus bifid..............

Scaphocerite with anterolateral tooth; third pereopod without distinct accessory tooth on inferior margin of dactylus .............................................................. P. schmitti

9. (8) Rostrum with 4 dorsal teeth; scaphocerite with large anterolateral tooth reaching about to level of distal margin of blade ......................................................... P. atlanticus

Rostrum with 1 or 2 dorsal teeth; scaphocerite with small anterolateral tooth falling far short of level of distal margin of blade ................................. P. maxillulidens
Genus *Periclimenes* Costa, 1844

Key to species
[Adapted from Chace, 1972]

1. Antennular peduncle with only 1 spine at distolateral angle of basal segment (in addition to stylocerite) .................................................. 2

   Antennular peduncle with 2 or more spines at distolateral angle of basal segment (in addition to stylocerite) .................................................. 9

2. (1) Carapace with anterior margin unarmed (antennal spine absent; third pereopod with distinctly biunguiculate dactylus) ........................................... *P. longicaudatus*

   Carapace armed with antennal spine below suborbital lobe ........................................... 3

3. (2) Fifth abdominal pleuron with posterolateral angle pointed; telson with anterior pair of dorsal spines arising about one-third of length from base of segment; scaphocerite with distal spine overreaching distal margin of blade; *P. americanus*

   Fifth abdominal pleuron with posterolateral angle rounded; telson with anterior pair of dorsal spines arising at, or posterior to, midlength of segment; scaphocerite with distal spine rarely reaching as far as distal margin of blade, usually falling far short ........................................... 4

4. (3) Third abdominal somite strongly produced posteromesially into laterally compressed hump ................................................................. 5

   Third abdominal somite sometimes moderately produced posteromesially but never forming laterally compressed hump ................................................................. 6

5. (4) Third pereopod with dactylus simple and considerably more than one-third as long as propodus ................................................................. *P. magnus*

   Third pereopod with dactylus distinctly biunguiculate and not more than one-fourth as long as propodus (carapace with hepatic spine usually arising at, or posterior to, level of posterior tooth of rostral series; carpus of major second pereopod usually more than half as long as chela) ................................................................. *P. pedersoni*

6. (4) Rostrum elongate, more than four times as long as maximum height, one or more of ventral teeth prominent (first pereopod with carpus not noticeably longer than chela; sixth abdominal somite less than twice as long as fifth and shorter than telson; scaphocerite with blade far overreaching distal spine; second pereopod with fingers slightly more than half as long as palm, carpus about one-fifth as long as chela) ................................................................. *P. pandionis*

   Rostrum subtriangular in lateral view, less than four times as long as maximum height, ventral teeth inconspicuous or absent ................................................................. 7
7. (6) Telson with dorsal spines rather large and distinct; major second pereopod with fingers no more than one-fourth as long as palm. ........................................... *P. harringtoni*

Telson with dorsal spines minute and inconspicuous; major second pereopod with fingers more than half as long as palm ......................................................... 8

8. (7) Sixth abdominal somite about twice as long as fifth and longer than telson; telson with anterior pair of dorsal spines arising at about midlength of segment; major second pereopod with movable finger not perceptibly stouter than immovable finger .......................................................... *P. iridescens*

Sixth abdominal somite slightly more than half again as long as fifth and shorter than telson; telson with anterior pair of dorsal spines arising at least two-thirds of length from base of segment; major second pereopod with movable finger usually stout, nearly twice as high as immovable finger .......................... *P. rathbunae*

9. (1) Posterior tooth of rostral series far removed from second tooth and from posterior margin of orbit; third pereopod with dactylus deeply biunguicate .................................................. *P. yucatanicus*

Posterior tooth of rostral series not widely separated from second tooth, situated slightly posterior or anterior to level of orbital margin; third pereopod with dactylus simple or very obscurely biunguicate (scaphocerite less than twice as long as broad; major second pereopod with fingers less than one-fourth as long as palm) ... .................................................. *P. perryae*
Genus *Pontonia* Latreille, 1829

Key to species
[Adapted from Chace, 1972]

1. Carapace pubescent, cervical groove well marked; major second pereopod with large rounded tooth on movable finger fitting into completely enclosed socket in immovable finger .......................................................... *P. unidens*

   Carapace not pubescent, without cervical groove; enlarged tooth on movable finger of major second pereopod, if present, triangular and fitting into shallow, partially open socket in immovable finger ........................................... 2

2. (1) Telson with dorsal spines minute, inconspicuous .................. *P. domestica*

   Telson with dorsal spines well developed (three posterior pereopods with dactyli stout, inferior margin convex) ......................................................... *P. margarita*
Genus *Typton* Costa, 1844

Key to species
[Adapted from Chace, 1972]

1. Telson with posterior pair of dorsal spines arising anterior to midpoint of segment; exopod of uropod with outer margin serrate in distal portion .......... *T. prionurus*

Telson with posterior pair of dorsal spines arising at, or posterior to, midpoint of segment; exopod of uropod with outer margin entire, not serrate distally .......... 2

2. (1) Antennal spine broad, toothlike in lateral view, not spiniform; both second pereopods with movable fingers highly arched, nearly semicircular; major second pereopod with carpus crenulate on proximal portion of angulate margin ................

................................................................. *T. tortugae*

Antennal spine strong, spiniform; second pereopods with movable fingers only moderately convex, not nearly semicircular; major second pereopod with carpus not crenulate on angulate margin ................................................................. 3

3. (2) Anterior margin of carapace produced anteriorly to level of tip of antennal spine; exopod of uropod with outer margin rather regularly convex throughout .......... 4

Anterior margin of carapace less produced, not nearly reaching level of tip of antennal spine; exopod of uropod with outer margin nearly straight in distal half .. 5

4. (3) Rostrum deepest near midlength, ventral margin forming obtuse angle in lateral view; mandible with well-developed incisor process; third pereopod with dactylus bearing small accessory tooth on inferior margin, not clearly symmetrically bifid .......... *T. carneus*

Rostrum not deepening near midlength, ventral margin straight or convex; mandible without incisor process; third pereopod with dactylus bearing large accessory tooth on inferior margin, nearly symmetrically bifid .......... *T. gnathophyloides*

5. (3) Mandible with incisor process well developed and distally crenulate, molar process tapering distally; major second pereopod with movable finger bluntly hammer-shaped, not noticeably twisted ............................ *T. vulcanus*

Mandible with incisor process reduced to low angulate unarmed lobe, molar process not tapering distally; major second pereopod with movable finger forming pointed hook twisted into plane nearly perpendicular to that of palm ................................................................. *T. distinctus*
**Leander paulensis**

mature female:

a. rostrum and anterior portion of carapace
b. second pereopod
c. scaphocerite
d. antennular peduncle

(after Manning, 1961b)

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**Leander tenuicornis**

e. rostrum and anterior portion of carapace (adult female)
f. second pereopod
g. scaphocerite (adult female)
h. antennular peduncle (adult female)

(e, g, h, after Manning, 1961b; f, after Holthuis, 1952)
Macrobrachium olfersii
a. lateral view
(after Holthuis, 1952)

Macrobrachium acanthurus
b. lateral view
(after Holthuis, 1952)

Macrobrachium ohione
c. lateral view
(after Holthuis, 1952)

Macrobrachium carcinus
d. lateral view
(after Holthuis, 1952)
Macrobrachium crenulatum

a. anterior region, lateral view
b. major second pericopod (adult male)
c. minor second pericopod (adult male)

(after Holthuis, 1952)
Palaemonetes paludosus

a. anterior region, lateral view
b. antennule
c. telson
(after Holthuis, 1952)

Palaemonetes vulgaris

d. anterior region, lateral view
e. second pereopod (female)
f. second pereopod (male)
g. fingers of second pereopod (female)
(after Holthuis, 1952)

Palaemonetes intermedius

h. anterior region, lateral view
i. fingers of second pereopod (female)
(after Holthuis, 1952)

Palaemonetes pugio

j. anterior region, lateral view
k. fingers of second pereopod (female)
(after Holthuis, 1952)
**Periclimenaeus chacei**

a. carapace, lateral view (male)
b. anterior portion of chela (male)
c. telson and left pair of uropods
d. second pereopod (male)

(after Abele, 1971)

**Periclimenaeus carabicus**

e. anterior region, lateral view
f. antenna
g. major second pereopod

(after Holthuis, 1951b)

**Periclimenaeus asciadiarum**

h. anterior region, lateral view
i. major second pereopod, outer view
j. minor second pereopod
k. third maxilliped

(after Holthuis, 1951b)

**Periclimenaeus pearsei**

l. carapace, lateral view
m. minor second pereopod
n. first pereopod

(after Holthuis, 1951b)
**Periclimenaeus bermudensis**

a. anterior region, lateral view  
b. fingers of major second pereopod  
c. minor second pereopod  
   (after Holthuis, 1951b)

**Periclimenaeus perlatus**

d. anterior region, lateral view  
e. chela of first pereopod  
f. first pereopod  
   (after Holthuis, 1951b)

**Periclimenaeus wilsoni**

g. anterior region, lateral view  
h. first pereopod  
i. telson  
   (after Holthuis, 1951b)

**Periclimenaeus schmitti**

j. anterior region, lateral view  
k. third pereopod  
l. antenna  
   (after Holthuis, 1951b)
*Periclimenaeus atlanticus*

a. rostrum  
b. scaphocerite  
c. third pereopod  
d. same, dactylus  
  (after Holthuis, 1951b)

*Periclimenaeus maxillulidens*

e. anterior region, lateral view  
f. dactylus of third pereopod  
g. antennule and antenna  
  (after Holthuis, 1951b)
**Periclimenes longicaudatus**

a. anterior region, lateral view
b. third pereopod
c. antennule

(after Holthuis, 1951b)

**Periclimenes americanus**

d. anterior region, lateral view
e. second pereopod
f. scaphocerite
g. antennule

(after Holthuis, 1951b)

**Periclimenes magnus**

h. anterior region, lateral view
i. second pereopod
j. third pereopod
k. antennule and scaphocerite

(after Holthuis, 1951b)

**Periclimenes pedersoni**

male:
l. dactylus of third pereopod
m. lateral view
n. anterior region, dorsal view

(after Chace, 1958)
**Periclimenes pandionis**

a. anterior region, lateral view  
b. first pereopod  
c. second pereopod  
d. scaphocerite  
e. antennule  

(after Holthuis, 1951b)

**Periclimenes harringtoni**

f. anterior region, lateral view  
g. first pereopod  
h. scaphocerite  
i. major second pereopod  

(after Holthuis, 1951b)

**Periclimenes iridescens**

j. dactylus of third pereopod  
k. anterior region, lateral view  
l. major second pereopod  

(after Holthuis, 1951b)

**Periclimenes rathbunae**

m. anterior region of carapace  
n. major second pereopod  
o. antenna  
p. telson  

(after Schmitt, 1924a)
*Periclimenes yucatanicus*

a. anterior region, lateral view
b. same, dorsal view

(after Holthuis, 1951b)

*Periclimenes perryae*

c. antennule
d. carapace, lateral view
e. scaphocerite

(after Chace, 1942a)
**Pontonia unidens**

a. fingers of major second pereopod, inner view  
b. chela of major second pereopod, outer view  
(after Kingsley, 1880)

**Pontonia domestica**

c. anterior region, dorsal view  
d. minor second pereopod  
e. telson  
(after Holthuis, 1951b)

**Pontonia margarita**

f. anterior region, dorsal view  
g. third pereopod  
h. telson  
(after Holthuis, 1951b)
Typton prionurus
a. anterior region, lateral view
b. major second pereopod
c. telson and left uropods
(after Holthuis, 1951b)

Typton tortugae
d. anterior region, lateral view
e. major second pereopod
(after Holthuis, 1951b)

Typton carneus
f. anterior region, lateral view
g. major second pereopod
h. dactylus of third pereopod
(after Holthuis, 1951b)

Typton gnathophyloides
i. anterior region, lateral view
j. dactylus of third pereopod
k. telson and right uropods
(after Holthuis, 1951b)
Typton vulcanus

a. anterior region, lateral view
b. telson and right uropods
c. major second pereopod

(after Holthuis, 1951b)

Typton distinctus

holotype ovigerous female:
d. anterior region, lateral view
e. major second pereopod
f. same, fingers
g. mandible

(after Chace, 1972)
Anchistioides antiquensis
a. anterior region, lateral view
b. third maxilliped
c. second pereopod
(after Holthuis, 1951b)

Brachycarpus biunguiculatus
d. carapace and rostrum, lateral view
e. third pereopod
f. same, dactyulus
g. antennule
h. telson
(after Schmitt, 1939)

Lipkebe holthuisi
ovigerous female:
i. anterior region, lateral view
j. same, dorsal view
k. telson and uropods
(after Chace, 1969)

Neopontonides beaufortensis
l. anterior region, dorsal view
m. same, lateral view
n. third maxilliped
(after Holthuis, 1951b)
**Pontoniopsis paulae**

a. lateral view  
b. anterior region, dorsal view  
c. telson and uropods  
(after Gore, 1981)

**Pseudocoutierea antillensis**

ovigerous female:  
d. anterior region, lateral view  
e. abdomen, posterior part  
f. right third maxilliped  
g. anterior region, dorsal view  
(after Chace, 1972)

**Tuleariocaris neglecta**

male:  
h. anterior region, dorsal view  
i. second pereopod  
j. same, chela  
k. rostrum and anterior region of carapace  
(after Chace, 1969)

**Veleroniopsis kimallynae**

male:  
l. dorsal view  
m. second maxilliped  
n. third maxilliped  
(after Gore, 1981)
Family Alpheidae

Key to genera and species
[Adapted from Chace, 1972]

1. Movable plate at posterolateral angle of sixth abdominal somite.............. 2
   No movable plate at posterolateral angle of sixth abdominal somite........... 3

2. (l) Rostrum lacking; antennular peduncle long and slender, stylocerite closely
   appressed to basal segment; exopod of uropod distally truncate (telson with convex
   distal margin; first chelipeds carried with chela flexed against merus, opposable
   margins of fingers of major chela dentate) .................................. *Leptalpheus forcipus*
   Rostral projection present; antennular peduncle short and stout, stylocerite well
   separated from basal segment; exopod of uropod distally rounded (first chelipeds
   carried extended) ............................................................................. *Alpheopsis*

3. (l) Eyes completely exposed dorsally; movable finger of major first chela without
   molar-like tooth fitting into socket in immovable finger ...................... *Automate*
   Eyes concealed from all but anteroventral view by deflexed frontal margin of
   carapace; movable finger of major first chela usually provided with large molar-like
   tooth fitting into socket in immovable finger ........................................ 4

4. (3) Posterior margin of carapace without "cardiac notch" at base of branchiostegite;
   exopod of uropod without transverse suture (rostral projection lacking, front
   unarmed; antepenultimate segment of third maxilliped normal, not unusually
   expanded; epipods present on at least 2 anterior pairs of pereopods) ..............
   ........................................................................... *Thunor simus*

5. (4) Pereopods without epipods; second pleopod of male without appendix masculina
   (front tridentate; antepenultimate segment of third maxilliped normal, not unusually
   expanded; dactyli of 3 posterior pereopods biunguiculate) .................... *Synalpheus*
   Epipods present on at least 2 anterior pairs of pereopods; second pleopod of male
   with appendix masculina ....................................................................... 6

6. (5) Labrum and mandible not unusually enlarged; antepenultimate segment of third
   maxilliped not unusually expanded; fourth pereopod with mastigobranch epipod;
   appendix masculina normal, not reaching distal end of either endopod or exopod of
   male second pleopod ................................................................. *Alpheus*
   Labrum greatly swollen and enveloped by expanded incisor process of mandible;
   antepenultimate segment of third maxilliped broadened to form partial operculum
   over anterior mouthparts; fourth pereopod without mastigobranch epipod; appendix
   masculina greatly enlarged and elongate, overreaching distal ends of both endopod
   and exopod of second pleopod .................................................. *Megalpheus rostralis*
Genus *Alpheopsis* Coutière, 1896

Key to species

Anterior region of carapace with rostrum and ocular teeth (chela with longitudinal as well as transverse groove) ...................................................... *A. trispinosus*

Anterior region of carapace without ocular teeth (carpus of second pereopod with first segment about as long as combined lengths of second and third segments) ...... ................................................................. *A. labis*
Genus Alpheus Fabricius, 1798

Key to species
[Adapted from Chace, 1972]

1. Frontal region evenly convex dorsally, adrostral depressions lacking; fingers of minor first chela strongly curved in vertical plane (rostrum short, subrectangular, not elevated in midline; ocular hoods subrectangular, frontal margin broadly tridentate; major first chela subcylindrical, without marginal notches on palm; proximal article of carpus of second pereopod longer than second segment; third and fourth pereopods with dactylus biunguiculate, merus without distal tooth on inferior margin, ischium without movable spine on lateral surface) ........................................................................ A. cylindricus

Ocular hoods mesially delimited by adrostal depressions or furrows; fingers of minor first chela not noticeably curved in vertical plane ................................. 2

2. (1) Rostrum dorsally flat, at least in distal portion; ocular hood armed with spine arising from surface of hood, not from margin, although appearing marginal in A. malleator because of receding ventral portion of hood (adrostral furrows sharply defined and partially delimited posteriorly; marginal lobe or projection between rostrum and ocular hood; proximal segment of carpus of second pereopod longer than second segment) .................................................................................. 3

Rostrum either rounded or carinate in dorsal midline, not flat; ocular spine, if present, arising from margin of hood ................................................................. 5

3. (2) Spine on ocular hood arising from mesial slope, overhanging adrostral furrow; meri of third and fourth pereopods armed with distal tooth on inferior margin (fingers of minor chela of male not "balaeniceps"-shaped; third and fourth pereopods with simple dactyls and movable spine on lateral surfaces of ischia. Small tooth or tubercle in midline of carapace in line with posterior limits of adrostral furrows; palm of major first chela with superior and inferior margins entire, not notched, immovable finger notched on opposable margin distal to socket; distalateral spine on exopod of uropod dark-colored in male) ........................................ A. armatus

Spine on ocular hood arising from anterior slope, overhanging frontal margin; meri of third and fourth pereopods unarmed at distal end of inferior margin (immovable finger of major first chela notched on opposable margin distal to socket; distalateral spine on exopod of uropod dark-colored in male) ........................................... 4
4. (3) Ventrolateral tooth on basal segment of antennal peduncle not overreaching stylocerite; scaphocerite lacking prominent tooth or lobe near proximal end of outer margin; merus of first pereopod with distal tooth on mesial inferior margin; palm of major first chela with both superior and inferior margins entire, not notched; movable finger of minor first chela laterally and mesially carinate, densely setose, "balaeniceps"-shaped in both males and females; third and fourth pereopods with dactyli simple, ischia with movable spines on lateral surfaces; distolateral spine on exopod of uropod dark-colored in both male and female .................................. *A. formosus*

Ventrolateral tooth on basal segment of antennal peduncle distinctly overreaching stylocerite; scaphocerite with prominent curved tooth or lobate projection near proximal end of outer margin; merus of first pereopod without distal tooth on inferior margin; palm of major first chela notched superiorly; minor first chela not "balaeniceps"-shaped in either male or female; third and fourth pereopods with dactyli biunguiculate, ischia unarmed; distolateral spine on exopod of uropod dark-colored in male only ........................................... *A. malleator*

5. (2) Ocular hoods spined (adrostral furrows not abruptly delimited posteriorly; scaphocerite without large tooth or lobe near proximal end of lateral margin) ...... 6

Ocular hoods not spined (third and fourth pereopods with simple dactyli) ........... 10

6. (5) Merus of first pereopod with sharp distal tooth on mesial inferior margin; third and fourth pereopods with dactyli not distinctly biunguiculate (meri of third and fourth pereopods without distal teeth on inferior margins) ........................................ 7

Merus of first pereopod without distinct sharp tooth at distal end of inferior margin; third and fourth pereopods with dactyli distinctly biunguiculate ..................... 9

7. (6) Third and fourth pereopods with inconspicuous denticles on inferior margins of dactyli, ischia without movable spines on lateral surfaces .................... *A. websteri*

Third and fourth pereopods without accessory denticle on inferior margins of dactyli, ischia with movable spines on lateral surfaces ................................. 8

8. (7) Major first chela twisted and bearing single distinct sharp teeth on distal ends of both lateral and mesial surfaces of palm ........................................... *A. amblyonyx*

Major first chela not twisted and not bearing sharp teeth on distal ends of both lateral and mesial surfaces of palm .............................................. *A. thomasi*

9. (6) Third and fourth pereopods without distal teeth on inferior margins of meri ..........

........................................................................................................... *A. candei*

Third and fourth pereopods with distal teeth on inferior margins of meri ..........

........................................................................................................... *A. peasei*
10. (5) Meri of third and fourth pereopods with prominent acute teeth at distal ends of inferior margins (lobe on frontal margin between rostrum and ocular hood; major first chela subcylindrical, without superior or inferior notches; merus of first pereopod with tooth at distal end of mesial inferior margin; immovable finger of major first chela with notch in opposable margin distal to socket; proximal segment of carpus of second pereopod shorter than second segment; third and fourth pereopods with movable spines on lateral surfaces of ischia) .......... A. cristulifrons

Meri of third and fourth pereopods with distal ends of inferior margins rounded or rectangular, not produced into prominent teeth .................................................. II

11. (10) Major first chela notched superiorly .......................................................... 12

Major first chela with superior and inferior margins entire, not notched (major first cheliped with tooth at distal end of mesial inferior margin of merus; immovable finger of major chela with notch in opposable margin distal to socket; minor first chela of male not "balaeniceps"-shaped; third and fourth pereopods with movable spines on lateral surfaces of ischia) .................................................. 19

12. (1) Major first chela notched inferiorly (ocular hoods subtriangularly produced anteriorly; inferior margin of major first chela with shallow sinus at base of immovable finger) .................................................. A. normanni

Major first chela notched inferiorly .......................................................... 13

13. (12) Third and fourth pereopods with movable spines on lateral surfaces of ischia ...... 14

Third and fourth pereopods without spines on ischia .................................. 17

14. (13) Merus of first pereopod unarmed at distal end of mesial inferior margin; dactyli of third and fourth pereopods usually subspatulate .................................................. 15

Merus of first pereopod armed with sharp tooth at distal end of mesial inferior margin; dactyli of third and fourth pereopods not subspatulate .................................. 16

15. (14) Major chela with inferior margin of immovable finger distinctly truncate distally; minor first chela of male not "balaeniceps"-shaped ......................... A. estuariensis

Major chela with inferior margin of immovable finger more evenly rounded distally, not distinctly truncate; minor first chela of male "balaeniceps"-shaped ........................................... A. heterochaelis

16. (14) Adrostral furrows usually abruptly delimited posteriorly; immovable finger of major first chela without V-shaped notch in opposable margin distal to socket .............................................. A. armillatus

Adrostral furrows not abruptly delimited posteriorly; immovable finger of major first chela with sharply V-shaped notch in opposable margin distal to socket .............................................. A. viridari
17. (13) Minor first chela with fingers slightly, if at all, more than half as long as palm; proximal segment of carpus of second pereopod much shorter than second segment (fingers of minor first chela not "balaeniceps"-shaped in male) .................. *A. schmittii*

Minor first chela with fingers about as long as palm; proximal segment of carpus of second pereopod longer than second segment ........................................... 18

18. (17) Movable finger of major first chela regularly and highly arched throughout length of superior margin; fingers of minor first chela "balaeniceps"-shaped in male; second segment of carpus of second pereopod subequal to fifth segment in length ...........

.................................................. *A. bouvieri*

Movable finger of major first chela not strongly convex in proximal part of superior margin; fingers of minor first chela not "balaeniceps"-shaped in male; second segment of carpus of second pereopod distinctly longer than fifth segment ...........

.................................................. *A. nuttingi*

19. (II) Rostrum dorsally carinate or subcarinate; proximal segment of carpus of second pereopod shorter than second segment; dactyli of third and fourth pereopods subspatulate ........................................... *A. floridanus*

Rostrum dorsally convex, not subcarinate; proximal segment of carpus of second pereopod longer than second segment; dactyli of third and fourth pereopods not subspatulate ........................................... *A. paracrinus*
Genus Automate De Man, 1888

Key to species
[Adapted from Chace, 1972]

1. Median frontal projection broadly rounded or subtriangular; propodi of third and fourth pereopods armed with series of stout movable spines on inferior margin (first segment of carpus of second pereopod at least half as long as second segment; dactyli of third and fourth pereopods slender, not subspatulate) …… A. gardineri

Median frontal projection reduced to acute tooth or lacking; propodi of third and fourth pereopods setose, without stout spines ........................................ 2

2. (1) Median frontal projection a small acute tooth; first segment of carpus of second pereopod much less than half as long as second segment; dactyli of third and fourth pereopods broad, subspatulate ……………………………A. evermanni

Frontal margin transverse, without median projection; first segment of carpus of second pereopod at least half as long as second segment; dactyli of third and fourth pereopods slender, not subspatulate ……………………………A. rectifrons
Genus Synalpheus Bate, 1888

Key to species
[Adapted from Chace, 1972, and Dardeau, 1984]

1. Stylocerite not overreaching basal segment of antennular peduncle (except in S. macclendonii and S. paraneptunus); movable finger of minor first-chela with prominent fringe of long, distally curved hairs on superior surface (reduced to single longitudinal row in S. paraneptunus) ........................................... 2

Stylocerite distinctly overreaching basal segment of antennular peduncle; movable finger of minor first-chela with scattered tufts of straight hairs but without prominent fringe on superior surface (scaphocerite with well-developed blade, lateral spine considerably exceeding that of basicerite in length) .......................... 14

2. (1) Both pairs of dorsal spines of telson arising in posterior of segment (ocular hoods blunt, broader than long) ......................................................... S. heardi

Anterior or both pairs of dorsal spines of telson arising in anterior of segment .... 3

3. (2) Both pairs of dorsal spines of telson arising in anterior of segment (carapace not distinctly produced at anteroventral angle and not carinate in dorsal midline posterior to base of rostrum; cardiac notch not well marked; ocular teeth acute, as broad as long but not much broader than rostrum; basicerite not produced dorsally; major first chela twisted, immovable finger short, not reaching nearly as far distally as does movable finger; palm of major first chela armed with sharp distal spine; movable finger of minor first chela strongly tridentate in lateral view) .................................

........................................................................................................ S. pectiniger

Posterior pair of dorsal spines of telson arising in posterior of segment .......... 4

4. (3) Carpus of second pereopod composed of 4 segments ........................................ 5

Carpus of second pereopod composed of 5 segments ........................................ 6

5. (4) Basicerite with strong dorsal spine ......................................................... S. rathbuniae

Basicerite unarmed dorsally ................................................................. S. agelas

6. (4) Exopod of uropod with 1 fixed tooth on outer margin, sometimes at distolateral angle just lateral to movable spine, sometimes distinctly removed from distolateral angle (basicerite not produced dorsally) ..................................................... 7

Exopod of uropod with 2 or more fixed teeth on outer margin at, and proximal to, distolateral angle ............................ 10

7. (6) Scaphocerite with well-developed blade (fingers of minor first chela not bidentate distally) ................................................................. 8

Scaphocerite without blade (ocular teeth distinctly broader than rostrum; stylocerite not reaching as far as distal end of basal antennular segment) ........................................ 9
8. (7) Ocular teeth slender, not much broader than rostrum; first abdominal pleuron of male without hooklike tooth; styllocerite slightly overreaching distal end of basal antennal segment; major first chela not noticeably twisted, armed with stout spine at distal end of palm .............................................. S. mcclendonii

Ocular teeth stout, distinctly broader than rostrum; first abdominal pleuron of male armed with hooklike tooth; styllocerite not reaching as far as distal end of basal antennal segment; major first chela twisted, palm terminating distally in spine-tipped lobe .................................................. S. sanctithomae

9. (7) Lateral spine of basiscerite not reaching tip of scaphocerite (ocular teeth at least as long as broad; dorsal spines of telson arising from dorsal surface; major first chela not strongly twisted, palm sharply spinous distally; fingers of minor first chela subequally bidentate distally; third pereopod without flanges on merus and carpus) ....................................... S. brooksi

Lateral spine of basiscerite reaching nearly to, or beyond, tip of scaphocerite (fingers of minor first chela bidentate distally; ocular teeth with lateral margins straight or slightly concave; telson with lateral margins nearly straight; antennular peduncle stout, overreaching scaphocerite by about half of distal segment, styllocerite broad) ........................................ S. bousfieldi

10. (6) Lateral spine of basiscerite reaching nearly to, or beyond, tip of scaphocerite (fingers of minor first chela subequally bidentate distally) .................................................. II

Lateral spine of basiscerite falling considerably short of tip of scaphocerite (palm of major first chela terminating distally in tubercle armed distally or distoventrally with small, sharp tooth) .................................................. 12

11. (10) Ocular teeth subacute, only slightly broader than rostrum; palm of major first chela terminating distally in acute projection .............................................. S. herricki

Ocular teeth rounded, much broader than rostrum; palm of major first chela terminating distally in tubercle armed distoventrally with small, sharp tooth .................................................. S. pandionis

12. (10) Basiscerite rounded or obtuse dorsally (movable finger of major first chela barely overreaching normal immovable finger) ...................................... S. longicarpus

Basiscerite rectangular or acute dorsally .................................................. 13

13. (12) Movable finger of minor first chela broadly tridentate distally in extensor aspect; exopod of uropod armed with 3 or 4 fixed teeth and 1 or 2 movable spines at distal end of outer margin .............................................. S. paranaptinus

Movable finger of minor first chela simple or bidentate distally; exopod of uropod armed with 8-17 fixed teeth on outer margin (scaphocerite with blade; distal tubercle on palm of major first chela armed distally) ...................................... S. goodei
14. (1) Ocular teeth triangular, not much broader than rostrum, not tapering to slender, sharp tips ............................................................... 15

Ocular teeth elongate, much broader than rostrum, tapering to slender, sharp tips. 17

15. (14) Rostrum with well-developed ventral process preventing corneas of eyes from touching; palm of major first chela unarmed distally; merus of third pereopod short and broad, less than two and one half times as long as broad .... S. curacaoensis

Ventral process of rostrum vestigial or lacking, not preventing corneas of eyes from touching; palm of major first chela with distal tooth or spine; merus of third pereopod about four times as long as broad ........................................ 16

16. (15) Lateral surface of palm of major chela with 2 broad and sinuous lateral lobes, in addition to sharp superior tooth ............................................. S. minus

Lateral surface of palm of major chela with narrow, prominent unarmed projection between superior tooth and 2 broad lateral lobes ......................... S. brevicarpus

17. (14) Dactyli of 3 posterior pairs of pereopods with distal tooth on inferior margin distinctly divergent from axis of segment and much broader than superior tooth, inferior margin with prominence proximal to distal tooth (basicerite strongly spinous dorsally) ................................................................. 18

Dactyli of 3 posterior pairs of pereopods with terminal teeth subparallel, no prominence on inferior margin proximal to distal tooth ......................... 19

18. (17) Proximal prominence on inferior margin of dactyli of 3 posterior pairs of pereopods low and obtuse ................................................................. S. fritzmuelleri

Proximal prominence on inferior margin of dactyli of 3 posterior pairs of pereopods large and sharp ................................................................. S. hemphilli

19. (17) Basicerite unarmed dorsally; distal spine on palm of major first chela straight..........

........................................................................................................ S. townsendi

Basicerite armed dorsally with strong spine (palm of major first chela armed distally with curved spine; merus of third pereopod unarmed; dactyli of 3 posterior pairs of pereopods with distal tooth on inferior margin narrower than superior tooth) ........... S. apioceros
Alpheopsis trispinosus

male:
  a. anterior region, dorsal view
  b. left major chela, outer view
  c. telson and uropods, dorsal view

(after Gore, 1981)

Alpheopsis labis

female:
  d. anterior region, lateral view
  e. anterior part of carapace, dorsal view
  f. right first pereopod
  g. left second pereopod

(after Chace, 1972)
*Alpheus cylindricus*

male:

a. anterior region, dorsal view
b. major chela of first pereopod, outer view
c. minor chela of first pereopod, outer view

(after Crosnier and Forest, 1966)

*Alpheus armatus*

d. anterior region, dorsal view
e. major first pereopod, outer view
f. third pereopod

(after Hendrix, 1971)

*Alpheus formosus*

g. anterior region, dorsal view
h. major first pereopod, outer view

(after Williams, 1965a)

*Alpheus malleator*

ovigerous female:
i. anterior region, dorsal view
j. major chela of first pereopod, outer view

(after Crosnier and Forest, 1966)
**Alpheus websteri**

a. lateral view

(after Rankin, 1898, as *A. nigro-spinatus*)

**Alpheus amblyonyx**

ovigerous female:

b. anterior region, lateral view
c. major first pereopod
d. right third pereopod

(after Chace, 1972)

**Alpheus thomasi**

e. anterior region, dorsal view (female)

f. major chela of first pereopod, outer view (male)

(after Hendrix and Gore, 1973)

**Alpheus candei**

g. anterior region, dorsal view

h. major chela of first pereopod, inner view

i. merus of third pereopod

j. dactylus of fifth pereopod

(after Coutière, 1910)
**Alpheus peasei**

a. anterior region, dorsal view  
b. right third pereopod  
c. left major first pereopod  
(after Hendrix, 1971)

**Alpheus cristulifrons**

male:  
d. anterior region, dorsal view  
e. third pereopod  
(after Crosnier and Forest, 1966)

**Alpheus normanni**

f. anterior region, dorsal view  
g. major first pereopod, outer view  
(after Williams, 1965a)

**Alpheus estuariensis**

h. third pereopod (ovigerous female)  
i. anterior region, dorsal view (ovigerous female)  
j. major first pereopod, outer view (male)  
(after Christoffersen, 1984)
**Alpheus heterochaelis**

male:

a. anterior region, dorsal view  
b. minor chela of first pereopod  
c. major first pereopod, inner view  
(after Christoffersen, 1984)

**Alpheus armillatus**

d. anterior region, dorsal view  
e. major first pereopod, inner view  
f. minor first pereopod, inner view (male)  
(after Hendrix, 1971)

**Alpheus viridari**

g. anterior region, dorsal view  
h. minor first pereopod, outer view  
i. major first pereopod, outer view  
(after Armstrong, 1949)

**Alpheus schmitti**

male:

j. anterior region, dorsal view  
k. right third pereopod  
l. right second pereopod  
m. minor first pereopod, outer view  
(after Chace, 1972)
**Alpheus bouvieri**

a. anterior region, dorsal view (female)
b. second pereopod (female)
c. minor chela of first pereopod, outer view (male)
d. major chela of first pereopod, inner view (female)

(after Crosnier and Forest, 1966)

**Alpheus nuttingi**

e. anterior region, dorsal view
f. second pereopod
g. minor chela of first pereopod, inner view
h. major first pereopod, inner view

(after Hendrix, 1971)

**Alpheus floridanus**

i. anterior region, dorsal view
j. major first pereopod, outer view
k. second pereopod

(after Hendrix, 1971)

**Alpheus paracrinitus**

female:
l. anterior region, dorsal view
m. second pereopod
n. major first pereopod, inner view

(after Crosnier and Forest, 1966)
**Automate gardineri**

a. anterior region, dorsal view (female)
b. left first pereopod (ovigerous female)
c. left second pereopod (ovigerous female)
d. left third pereopod (ovigerous female)

(after Chace, 1972)

**Automate evermanni**

e. anterior region, dorsal view
f. first pereopod
g. third pereopod

(e, f, after Rathbun, 1901; g, after Holthuis, 1951a)

**Automate rectifrons**

female:

h. anterior region, dorsal view
i. right second pereopod
j. right third pereopod

(after Chace, 1972)
*Synalpheus heardi*
  
  male:
  a. anterior region, dorsal view
  b. right minor first pereopod
  c. telson and uropods
  d. major first pereopod, outer view
  (after Dardeau, 1984)

*Synalpheus pectiniger*
  
  e. anterior region, dorsal view (male)
  f. telson and left uropods
  g. fingers of minor first pereopod (male)
  (after Coutière, 1909)

*Synalpheus rathbunae*
  
  male:
  h. major chela of first pereopod
  i. second pereopod
  j. anterior region, dorsal view
  (after Coutière, 1909)

*Synalpheus agelas*
  
  male:
  k. anterior region, dorsal view
  l. telson and uropods
  m. left second pereopod
  (after Dardeau, 1984)
**Synalpheus mcclendoni**

male:

a. anterior region, dorsal view
b. abdomen
c. fingers of left first pereopod

(after Chace, 1972)

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**Synalpheus sanctithomae**

d. anterior region, dorsal view
e. major chela of first pereopod (male)

(after Coutière, 1909)

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**Synalpheus brooksi**

f. anterior region, dorsal view (male)
g. fingers of minor first pereopod

(after Coutière, 1909)

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**Synalpheus bousfieldi**

ovigerous female:

h. anterior region, dorsal view
i. telson and uropods
j. right first pereopod

(after Chace, 1972)
Synalpheus herricki
a. anterior region, dorsal view
b. left uropodal exopod
c. major first pereopod
(after Coutière, 1909)

Synalpheus pandionis
d. anterior region, dorsal view
e. major first pereopod
(after Coutière, 1909)

Synalpheus longicarpus
f. anterior region, dorsal view (male)
g. major first pereopod
(after Coutière, 1909)

Synalpheus paraneptunus
h. anterior region, dorsal view (male)
i. finger of minor first pereopod
j. right uropodal exopod (male)
(after Coutière, 1909)
**Synalpheus goodei**

a. anterior region, dorsal view (male)
b. left uropodal exopod (male)
c. major first pereopod

(after Coutière, 1909)

**Synalpheus curacaoensis**

d. anterior region, dorsal view
e. right third pereopod
f. chela of right first pereopod

(after Schmitt, 1924a)

**Synalpheus minus**

g. anterior region, dorsal view
h. major first pereopod
i. third pereopod

(after Coutière, 1909)

**Synalpheus brevicarpus**

j. anterior region, dorsal view
k. major first pereopod

(after Coutière, 1909)
Synalpheus fritzmuelleri
a. anterior region, dorsal view
b. dactylus of third pereopod
c. major chela of first pereopod
(after Coutière, 1909)

Synalpheus hemphilli
d. third pereopod
e. dactylus of third pereopod
(after Coutière, 1909)

Synalpheus townsendi
f. anterior region, dorsal view
g. major chela of first pereopod
h. dactylus of third pereopod
(after Coutière, 1909)

Synalpheus apioceros
i. anterior region, dorsal view
j. dactylus of third pereopod
k. major chela of first pereopod
(after Coutière, 1909)
**Leptalpheus forceps**

female:

a. anterior region, dorsal view
b. major first pereopod

(after Williams, 1965b)

**Metalpheus rostratipes**

male:

c. anterior region, dorsal view
d. major first pereopod, outer view
e. mandible, inner view
f. same, outer view

(after Crosnier and Forest, 1966)

**Thunor simus**

g. telson and uropods (male)
h. carapace, lateral view

(g, after Chace, 1972; h, after Armstrong, 1949)
Family Hippolytidae

Key to genera and species
[Adapted from Holthuis, 1955, and Chace, 1972]

1. Arthrobranchs present at bases of first four pairs of pereopods
   .................................................................................. Merhippolyte americana

   Bases of pereopods without arthrobranchs .................................................. 2

2. (1) Carpus of second pereopod subdivided into more than 7 segments, multiarticulate
   .............................................................................................................. 3

   Carpus of second pereopod subdivided into no more than 7 segments ........ 5

3. (2) Dactyli of third, fourth, and fifth pereopods simple, spines on inferior margin
   inconspicuous .................................................................................. Exhippolysmata oplophoroides

   Dactyli of third, fourth, and fifth pereopods appearing biungulate because of series
   of prominent spines on inferior margin .............................................. 4

4. (3) Supraorbital spines present on carapace ...................................... Bythocaris nana

   Supraorbital spines absent .................................................................... Lysmata

5. (2) Third segment of antennular peduncle bearing subtriangular movable plate
   overhanging base of flagellum dorsally; carpus of second pereopod composed of 6
   or 7 segments .................................................................................... Thor

   Antennular peduncle without movable plate overhanging base of flagellum; carpus
   of second pereopod composed of 2 or 3 segments ................................ 6

6. (5) Rostrum with deep ventral blade projecting posterovertrally at posterior end
   between bases of antennules ................................................................... 7

   Ventral lobe of rostrum, if present, not projecting posterovertrally near base ...... 8

7. (6) Lateral surface of carapace smooth, not spinose; mandible without palp; carpus of
   second pereopod composed of 3 segments .............................................. Latreutes

   Lateral surface of carapace bearing numerous appressed spines; mandible with 2-
   segmented palp; carpus of second pereopod composed of 2 segments .......... Trachycaris restrictus

8. (6) Supraorbital tooth present; third maxilliped with exopod .................. Hippolyte

   Supraorbital tooth absent; third maxilliped without exopod .................. Tozeuma
Genus *Hippolyte* Leach, 1814

Key to species
[Adapted from Chace, 1972]

1. Lateral spine on carapace branchiostegal, overreaching anterior margin; tergum of fifth abdominal somite armed with pair of strong posterior spines; telson with both pairs of dorsolateral spines situated in posterior third of segment; scaphocerite with blade and distolateral spine about equally advanced; dactyli of 3 posterior pairs of pereopods terminating in 2 strong distal spines (rostrum usually with single, inconspicuous tooth on dorsal and ventral margins; basal segment of antennular peduncle armed with prominent distolateral spine) .......... *H. coerulescens*

Lateral spine on carapace hepatic, not nearly reaching anterior margin in adults; tergum of fifth abdominal somite unarmed; telson with anterior pair of distolateral spines situated near midlength of segment; scaphocerite with blade reaching far beyond distolateral spine; dactyli of 3 posterior pairs of pereopods terminating in either 1 or 3 strong distal spines .................................................. 2

2. (1) Rostrum usually unarm ed dorsally (rarely with 1 or 2 prominent dorsal teeth); dactyli of 3 posterior pairs of pereopods terminating in single distal spine (basal segment of antennular peduncle unarmed distally) .......... *H. nicholsoni*

Rostrum usually armed with 2-4 strong teeth on dorsal margin; dactyli of 3 posterior pairs of pereopods terminating in 3 strong distal spines .................. 3

3. (2) Rostrum usually armed with 3 or 4 strong teeth on dorsal margin and with strong lateral carina in proximal third of length; basal segment of antennular peduncle armed with 1-3 strong distolateral spines ............... *H. curacaoensis*

Rostrum usually armed with 2 (rarely 1 or 3) strong teeth in proximal half of dorsal margin and without distinct lateral carina; basal segment of antennular peduncle unarmed distally ........................................ 4

4. (3) Rostrum not overreaching antennular peduncle in adult females, barely overreaching basal antennular segment in males .......... *H. pleuracanthus*

Rostrum distinctly overreaching antennular peduncle in adult females, extending nearly as far as distal margin of second antennular segment in males ........................................ *H. zostericola*
Genus *Latreutes* Stimpson, 1860

Key to species
[Adapted from Williams, 1984]

Carapace and rostrum unarmed dorsally except for single, small, median spine on gastric region; rostrum an elongate blade nearly as long as carapace … *L. fucorum*

Carapace strongly humped and armed dorsally with 5 or 6 spiniform teeth; rostrum deep ovoid blade, shorter than carapace ……………………………*L. parvulus*
Genus *Lysmata* Risso 1816

Key to species
[Adapted from Chace, 1972]

1. Scaphocerite overreaching antennular peduncle slightly, if at all (rostrum with 4-6 ventral teeth; antennal tooth distinct from depressed and obscure ventral angle of orbit; carapace with pterygostomian tooth on anteroventral margin; stylocerite falling far short of distal margin of basal antennular segment; distal tooth of scaphocerite distinctly overreaching distal margin of blade; exopod of third maxilliped reaching at least to midlength of antepenultimate segment; carpus of second pereopod composed of 17-23 segments) .................. *L. amboinensis*

   Scaphocerite distinctly overreaching antennular peduncle (exopod of third maxilliped reaching to, or beyond, midlength of antepenultimate segment) ............. 2

2. (1) Antennal tooth fused with ventral angle of orbit; stylocerite reaching beyond distal margin of basal segment of antennular peduncle; accessory branch of dorsolateral antennular flagellum well developed (2 to 4 teeth of dorsal rostral series situated on carapace posterior to level of orbital margin; carapace with pterygostomian tooth on anteroventral margin; scaphocerite more than four times as long as wide, distal tooth distinctly overreaching distal margin of blade; carpus of second pereopod composed of 28-30 segments) ............................................ *L. intermedia*

   Antennal tooth distinct from depressed and obscure ventral angle of orbit; stylocerite falling far short of distal margin of basal antennular segment; accessory branch of dorsolateral antennular flagellum vestigial or absent .................................. 3

3. (2) Rostrum usually reaching as far as, or beyond, distal end of antennular peduncle; scaphocerite five times as long as wide ............................................. *L. rathbunae*

   Rostrum reaching not much, if at all, beyond second segment of antennular peduncle; scaphocerite less than four times as long as wide ........ *L. wuredmanni*
Genus Thor Kingsley, 1878

Key to species
[Adapted from Chace, 1972]

1. No vestige of supraorbital tooth; anterolateral margin of carapace faintly angular, with microscopic branchiostegal tooth; distal margin of telson armed typically with 4 pairs of spines; endopod of first pleopod of functional males with mesial margin sparsely setose; appendix masculina (not including setae) of functional males falling short of distal end of endopod of second pleopod; associated with sea anemones (merus of first pereopod unarmed in distal half of inferior margin; eggs not very large, increasing in major diameter during development from 0.48 to 0.70 mm) ....

................................................................. T. amboinensis

Supraorbital tooth represented by obtuse prominence; anterolateral margin of carapace rounded, unarmed; distal margin of telson armed with 3 pairs of spines; endopod of first pleopod of functional males with mesial margin densely setose; appendix masculina (not including setae) of functional males reaching nearly to, or beyond, distal end of endopod of second pleopod; not usually associated with sea anemones ................................................................. 2

2. (1) Merus of first pereopod armed with 1 or 2 spines in distal half of inferior margin (dactyli of fourth and fifth pereopods commonly armed with 5—not usually 4 or 6—spinules on inferior margin proximal to distal pair of spines; eggs not very large, increasing in major diameter during development from 0.36 to 0.74 mm) ................................................................. T. dobkini

Merus of first pereopod unarmed in distal half of inferior margin ................. 3

3. (2) Dactyli of fourth and fifth pereopods commonly armed with 4 or 5 (rarely 3 or 6) spinules on inferior margin proximal to distal pair of spines; eggs large and few, increasing in major diameter during development from 0.66 to 1.40 mm ................................................................. T. floridanus

Dactyli of fourth and fifth pereopods commonly armed with 3 (sometimes 2 or 4) spinules on inferior margin proximal to distal pair of spines; eggs not very large, increasing in major diameter during development from 0.36 to 0.73 mm ................................................................. T. manningi
Genus *Tozeuma* Stimpson, 1960

Key to species
[Adapted from Chace, 1972]

1. Third abdominal somite bearing long rodlike dorsal projection recurved posteriorly and bidentate distally; third maxilliped with each of 2 distal segments short, slightly longer than broad, distal segment tapering throughout to narrow truncate tip; carpus of second pereopod with proximal segment subequal in length to combined lengths of 2 distal segments; dactyli of 3 posterior pereopods without accessory spinules on inferior margin (rostrum unarmed dorsally) .......................... *T. cornutum*

Third abdominal somite not surmounted by recurved projection in adults; third maxilliped with each of 2 distal segments elongate, at least twice as long as broad, distal segment with subparallel margins nearly to distal extremity; carpus of second pereopod with proximal segment slightly more than four-fifths as long as combined lengths of 2 distal segments; dactyli of 3 posterior pereopods with row of accessory spinules on inferior margin .............................................................. 2

2. (1) Rostrum unarmed dorsally........................................... *T. carolinense*

Rostrum armed with series of teeth both dorsally and ventrally........ *T. serratum*
**Hippolyte coerulescens**

female:
   a. anterior region, lateral view
   b. right antenna
   c. abdomen
   (after Chace, 1972)

**Hippolyte nicholsoni**

ovigerous female:
   d. anterior region, lateral view
   e. orbital region
   f. abdomen
   g. left third pereopod
   h. same, dactylus
   (after Chace, 1972)

**Hippolyte curacaoensis**

female:
   i. anterior region, lateral view
   j. right antennule
   k. abdomen
   (after Chace, 1972)

**Hippolyte pleuracanthus**

female:
   l. anterior region, lateral view
   m. rostrum
   n. right antennule
   o. abdomen
   (after Chace, 1972)
Hippolyte zostericola

ovigerous female:

a. anterior region, lateral view
b. right antennule
c. abdomen

(after Chace, 1972)
Latreutes fucorum
a. lateral view (ovigerous female)
(after Bate, 1888, as L. ensiferus)

Latreutes parvulus
ovigerous female:
b. lateral view
c. carapace, lateral view
(after Holthuis, 1951a)
**Lysmata amboinensis**

a. lateral view  
(after Limbaugh et al., 1961)

**Lysmata intermedia**

b. anterior region, dorsal view  
c. carapace, lateral view  
d. second pereopod  
(after Sivertsen, 1933)

**Lysmata rathbunae**

male:  
e. anterior region, lateral view  
f. orbital region  
g. right antenna  
(after Chace, 1970)

**Lysmata wurdemannii**

h. anterior region, lateral view  
i. antennal scale  
(after Williams, 1965a)
**Thor amboinensis**

male:

a. rostrum

b. anterior region, lateral view

c. telson and uropods

d. posterior end of telson

(after Chace, 1972)

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**Thor dobkini**

male:

c. anterior region, lateral view

f. rostrum

g. right first pereopod

(after Chace, 1972)

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**Thor floridanus**

male:

h. anterior region, lateral view

i. rostrum

j. right first pereopod

(after Chace, 1972)

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**Thor manningi**

male:

k. rostrum

l. anterior region, lateral view

m. fourth pereopod

n. same, dactylus

(after Chace, 1972)
Tozeuma cornutum
a. lateral view
(after A. Milne Edwards, 1881)

Tozeuma carolinense
b. lateral view (female)
(after Williams, 1965a)

Tozeuma serratum
c. lateral view (female)
(after Williams, 1984)
*Bythocaris nana*
  a. anterior region, dorsal view
  b. carapace, lateral view
  c. second pereopod
  d. third pereopod
  e. same, dactylus
  (from Abele’s personal drawing)

*Exhippolsmata oplophoroides*
  f. lateral view (ovigerous female)
  (after Pérez Farfante, 1978)

*Merhippolyte americana*
  g. anterior region, lateral view
  h. mandible
  i. posterior part of abdomen
  (after Holthuis, 1961)

*Trachycaris restrictus*
  j. lateral view
  k. mandible
  l. second pereopod
  (after Holthuis, 1949b)
Family Hippolytidae
Family Ogyrididae

Genus Ogyrides Stebbing, 1914

Key to species
[Adapted from Williams, 1984]

Single movable spine behind rostrum on middorsal line.......................... O. hayi

Postrostral crest with 3 to 14 small, fixed spines.............................. O. alphaerostris
**Ogyrides hayi**

a. carapace and anterior appendages, dorsal view  
(after Williams, 1984)

**Ogyrides alphaerostris**

b. carapace and anterior appendages, lateral view  
(after Williams, 1984)
Family Processidae

Key to genera and species
[Adapted from Chace, 1972]

1. First pereopods similar, both chelate (first pereopods without exopods; second pereopods equal) ........................................ Ambidexter symmetricus

First pereopods dissimilar, one (usually right) chelate, other with simple unopposed dactylus ........................................................................... 2

2. (l) First pereopod with exopod................................. Nikoides schmitti

First pereopod without exopod........................................... Processa
Genus Processa Leach, 1815

Key to species
[Adapted from Chace, 1972]

1. Pleuron of fifth abdominal somite with sharp tooth near posteroventral angle (antennal spine present) ......................................................... 2
   Pleuron of fifth abdominal somite with posteroventral margin entire, without projecting tooth ......................................................... 3

2. (1) Eye twice as wide as scaphocerite; third pereopod overreaching scaphocerite by length of dactylus and propodus only ........................................ P. fimbriata
   Eye less than one and one-half times as wide as scaphocerite; third pereopod overreaching scaphocerite by length of dactylus, propodus, and most of carpus .... P. riveroi

3. (1) Antennal spine lacking .......................................................... 4
   Antennal spine present .............................................................. 5

4. (3) Ventral margin of rostrum only slightly concave in distal half; second pereopods unequal, right with 19-29 carpal segments, left with 13-15 .......... P. bermudensis
   Ventral margin of rostrum markedly concave in distal half; second pereopods equal, with 10-14 carpal segments ............................................ P. vicina

5. (3) Second pereopods equal, with 10 carpal segments; merocarpal articulation of right not extending beyond scaphocerite .............................. P. hemphilli
   Second pereopods very unequal, merocarpal articulation of right extending considerably beyond scaphocerite ........................................ 6

6. (5) Posterior lobe of sixth abdominal somite, dorsal to uropodal articulation, armed with sharp tooth ..................................................... P. profunda
   Posterior lobe of sixth abdominal somite unarmed ................................ P. guyanae
**Processa fimbriata**

male:

a. anterior region, lateral view
b. margin of fifth abdominal pleuron
c. rostrum

(after Manning and Chace, 1971)

**Processa riveroi**

ovigerous female:

d. anterior region, lateral view
e. rostrum
f. right third pereopod

(after Manning and Chace, 1971)

**Processa bermudensis**

male:

g. anterior region, lateral view
h. rostrum
i. left second pereopod
j. right second pereopod

(after Manning and Chace, 1971)

**Processa vicina**

male:

k. anterior region, lateral view
l. rostrum
m. right second pereopod

(after Manning and Chace, 1971)
**Processa hemphilli**

female:

a. anterior region, lateral view
b. rostrum
c. right second pereopod

(after Manning and Chace, 1971)

**Processa profunda**

male:

d. anterior region, lateral view
e. abdomen

(after Manning and Chace, 1971)

**Processa guyanae**

ovigerous female:

f. distal portion of rostrum
g. anterior region, lateral view
h. right fifth pereopod
i. abdomen

(after Manning and Chace, 1971, as *P. tenuipes*)
Ambidexter symmetricus

male:
a. anterior region, lateral view
b. left first pereopod
c. right first pereopod
d. rostrum

(after Manning and Chace, 1971)

Nikoides schmitti

male:
e. anterior region, lateral view
f. right first pereopod
g. rostrum

(after Manning and Chace, 1971)
Family Pandalidae

Key to genera and species
[Based on Chace, 1985]

1. Rostrum movably connected with carapace.................. *Pantomus parvulus*
   Rostrum not movable.......................................................... 2

2. (1) Abdomen with third abdominal somite unarmed or with fixed postero-medial tooth; second maxilliped with terminal segment broader than long, applied as strip to distal margin of penultimate segment; appendix masculina on second pleopod of male rather broad and profusely spinose ....................... *Plesionika*

   Abdomen with third somite bearing slender, basally articulated postero-medial spine or stout seta (sometimes lost); second maxilliped with terminal segment longer than broad, not applied as strip to distal margin of penultimate segment; appendix masculina on second pleopod of male slender and sparsely spinose ....................... *Stylopandalus richardi*
Genus *Plesionika* Bate, 1888

Key to species

[Based on Pequegnat, 1970]

1. Epipods on at least first two pereopods .......................................... 2

   No epipods on any of pereopods .................................................. 6

2 (i). Rostrum toothed dorsally for entire length ..................................... 3

   Rostrum smooth dorsally for most of its length ..................................... 5

3. (2) Rostrum more than twice carapace length (rostrum with about 28 dorsal teeth, more widely spaced proximally than distally, and about 40 ventral teeth; carpi of last three pereopods less than twice length of propodi (epipods minute) ........... *P. edwardsii*

   Rostrum less than twice carapace length ........................................... 4

4. (3) Rostrum short, reaching no further than distal end of scaphocerite (rostrum with 13-17 dorsal teeth and 3-8 small ventral teeth) ............................... *P. acanthonotus*

   Rostrum longer, reaching past scaphocerite (rostrum about equal in length to carapace, with 8-10 dorsal teeth, 2-4 of which are movable spines behind orbit and separated from remaining rostral teeth) ....................................... *P. tenuipes*

5. (2) Third abdominal somite with dorsal spine; 4-6 dorsal rostral teeth (2 or 3 behind orbit) plus one subapical tooth ........................................... *P. ensis*

   Third abdominal somite not armed; 6-9 dorsal rostral teeth (3 or 4 behind orbit), no subapical tooth ............................................................ *P. maria*

6. (1) Ultimate segment of third maxilliped distinctly shorter than penultimate ..................

   Ultimate segment of third maxilliped subequal to penultimate .......... *P. longicauda*
Plesionika edwardsii
a. lateral view
(after Pérez Farfante, 1978)

Plesionika acanthonotus
b. anterior region, lateral view
(after Holthuis, 1951a)

Plesionika tenuipes
c. carapace and rostrum, lateral view
d. posterior part of abdomen
(after Thompson, 1963)

Plesionika ensis
e. anterior region, lateral view
(after Holthuis, 1951a)
**Plesionika martia**

a. anterior region, lateral view
b. posterior part of abdomen

(after Holthuis, 1951a)

**Plesionika escatilis**

c. anterior region, lateral view (female)

(after Crosnier and Forest, 1973, as *P. narval*)

**Plesionika longicauda**

d. rostrum

(after Rathbun, 1901)
**Pantomus parvulus**

a. lateral view

(after A. Milne Edwards, 1883)

**Stylopondalus richardi**

b. right second maxilliped (ovigerous female)

c. posteromesial spine on third abdominal somite (ovigerous female)

d. right appendix masculina and appendix interna, mesial aspect (male)

(after Chace, 1985)
Family Pandalidae
Family Crangonidae

Key to genera and species
[Based on Dardeau and Heard, 1983, and Chace, 1984]

1. Second pereopods subequal in length to other pereopods.......................... 2
   Second pereopods much shorter than other pereopods............................ 3

2. (1) Carapace with 1 dorsal median spine....................... Crangon septemspinosa
   Carapace with 2 to 4 dorsal median spines (sixth abdominal somite stout, expanded
   posterolaterally into prominent wing-like lobes or keels) ......................
   .............................................................................................................Metacrangon jacqueti agassizii

3. (1) Eight branchiae on each side of body; apices of branchiae directed anteriorly
   (rostrum simple, not cleft apically, with 3 pairs of lateral teeth; median carina on
   carapace armed with 4 teeth; abdominal sterna unarmed) ......................
   .............................................................................................................Parapontocaris caribbaea
   Six or seven branchiae on each side of body; apices of branchiae directed
   posteriorly ................................................................................................. 4

4. (3) Rostrum armed with 1 or 2 pairs of lateral teeth in posterior half of length; first
   pereopod with rudimentary exopod; hepatic spines present ......................
   .............................................................................................................Pontophilus brevirostris
   Rostrum without lateral teeth in posterior half; first pereopod without trace of
   exopod; hepatic spines absent .............................................................. Philocheras gorei
**Crangon septemspinosa**

a. dorsal view (ovigerous female)

(after Williams, 1965a)

**Metacran gon jacqueti agassizii**

female:

b. carapace, lateral view
c. dorsal view

(after Crosnier and Forest, 1973)

**Parapontocaris caribbaea**

d. lateral view (ovigerous female)

(after Dardeau and Heard, 1983)
**Pontophilus brevirostris**

a. lateral view (ovigerous female)

(after Dardeau and Heard, 1983)

**Philocheras gorei**

b. lateral view (ovigerous female)

(after Dardeau and Heard, 1983)
Family Crangonidae
Family Glyphocrangonidae

Genus *Glyphocrangon* A. Milne Edwards, 1881

Key to species
[Adapted from Holthuis, 1971]

1. Anterior antennal carina formed of a row of tubercles; first abdominal somite with two transverse rows of tubercles between intermediate carinae ....... *G. spinicauda*

   Anterior antennal carina absent; first abdominal somite usually with only single transverse row of tubercles, viz., along posterior margin .................................. 2

2. (1) Anterior intermediate carina not ending in spine; posterior antennal and posterior lateral carinae bearing several blunt tubercles or teeth; anterior of two teeth on anterior lateral carina behind pterygostomian spine reaching to or beyond orbital margin ................................................................. *G. longleyi*

   Anterior intermediate carina ending in sharp spine; posterior antennal and posterior lateral carinae straight, without tubercles or teeth; anterior tooth of anterior lateral carina not reaching level of posterior margin of orbit .......... *G. haematonotus*
*Glyphocrangon spinicauda*

a. anterior region, dorsal view  
b. sixth abdominal somite, lateral view  
(after Holthuis, 1971)

*Glyphocrangon longleyi*

c. anterior region, dorsal view  
d. sixth abdominal somite, lateral view  
(after Holthuis, 1971)

*Glyphocrangon haematonotus*

e. anterior region, dorsal view  
f. sixth abdominal somite, lateral view  
(after Holthuis, 1971)
Family Glyphocrangonidae
Infraorder Stenopodidea

Family Stenopodidae

Key to genera and species
[Adapted from Burukovskii, 1983]

1. Body depressed; telson broad and lanceolate or retangular, terminating in three or five spines of equal size (sometimes without terminal spine); endopod of uropod with one median dorsal crest ....................... *Microprostheca semilaeva*

   Body compressed; telson elongated, tip terminating in two strong spines, sometimes with small spine between them; endopod of uropod with two dorsal crests, median crest strong and inner one weaker with several dorsal hairs ........ 2

2. (1) Carapace and abdomen densely covered with uniformly distributed stout spines, sometimes arranged in longitudinal rows; spines hard and anteriorly directed; ischium of third maxilliped with outer spinules ...................... *Stenopus*

   Abdomen without dorsal spines, sometimes with spinules near lateral margins of pleura; carapace with spines along posterior margin of cervical groove, often in parallel rows; spines erect, anteriorly directed, and pressed to surface of carapace; ischium of third maxilliped without outer spinules ........... *Odontozona libertae*

Genus *Stenopus* Latreille, 1819

Key to species
[Adapted from Chace, 1972]

Rostrum unarmed ventrally; third abdominal somite without shield shaped boss; spines on terga of 3 posterior abdominal somites not arranged in transverse rows; scaphocerite unarmed laterally for considerable distance proximal to distolateral tooth and with 2 or 3 rows of spinules arising from dorsal surfaces .. *S. hispidus*

Rostrum armed ventrally with 6 to 8 spines; third abdominal somite bearing lobate, shield-shaped boss on posteromesial part; spines on 3 posterior abdominal terga arranged in transverse rows; scaphocerite armed throughout distal two-thirds of lateral margin and without spinules on dorsal surface ............... *S. scutellatus*
**Stenopus hispidus**  
a. lateral view  
(after Limbaugh et al., 1961)

**Stenopus scutellatus**  
b. lateral view  
(after Limbaugh et al., 1961)

**Microprosthema semilaeve**  
c. scaphocerite, dorsal view  
(after Holthuis, 1946)

**Odontozona libertae**  
d. dorsal view (male holotype)  
(after Gore, 1981)
Infraorder Astacidea
Family Nephropidae

Key to genera and species
[Based on Holthuis, 1974]

1. Eyes black, with pigment (carapace with longitudinal ridges behind cervical groove; series of lateral rostral spines extending backwards almost to cervical groove) ............... Metaneprrops binghamii

Eyes white, lacking pigment................................................................. 2

2. (l) Rostrum laterally compressed for larger part of its length, with dorsal and ventral but no lateral teeth; carapace with branchiostegal spine; body entirely covered by numerous closely placed and sharply pointed spinules; lateral margin of telson with 6 to 12 spines ................................................................. Acanthacaris caeca

Rostrum dorsoventrally depressed with lateral (and sometimes ventral) but without dorsal teeth; carapace without branchiostegal spine; body never uniformly covered with spinules, although granules may be present all over, or spinules may be placed on carapace; lateral margin of telson with at most 3 lateral spines; spines, if present, usually small and irregular ................................................. Nephropsis aculeata
Metanephrops binghami
  a. dorsal view
  (after Manning, 1978)

Acanthacaris caeca
  b. dorsal view
  (after Manning, 1978)

Nephropsis aculeata
  c. dorsal view
  (after Manning, 1978)
Family Nephropidae
Infraorder Thalassinidea

Family Axiidae

Key to species

First through third pereopods with no epipod and podobranch; dactyli of third through fifth pereopods biangulate; rostrum triangular, margins unarmed .................. ........................... Coralaxius abeiei

First through third pereopods with epipod and podobranch; dactyli of third through fifth pereopods simple; rostrum triangular, margins dentate ................. Axiopsis

Genus Axiopsis Borradaile, 1903

Key to genera and species

1. No middorsal keel at posterior border of carapace................. A. serratifrons

Middorsal keel at posterior border of carapace........................................... 2

2. (1) Short middorsal trench present, extending from cervical groove; telson bearing median spine on posterior margin ............................... A. hirsutimana

Short middorsal trench absent; telson without median spine on posterior margin..... .. .......................... A. oxyleura
**Axiopsis serratifrons**

a. anterior region of carapace, dorsal view (male)

b. major cheliped (female)

c. third and fourth abdominal pleura, lateral view (male)

(after De Man, 1925)

**Axiopsis hirsutimana**

d. anterior region, dorsal view

e. posterior margin of carapace and first three abdominal somites, lateral view

f. telson and uropods

(after Boesch and Smally, 1972)

**Axiopsis oxyleura**

male:

g. lateral view

h. anterior region, dorsal view

i. telson and uropods

(after Williams, 1974c)

**Coralaxius abelei**

j. dorsal view

(after Kensley and Gore, 1981)
Family Axillae
Family Callianassidae

Key to genera and species
[Adapted from de Saint Laurent and Le Loeff, 1979]

1. Dorsal surface of carapace with raised oval area; third maxilliped always lacking exopod or with exopod vestigial; uropodal exopod with antero-dorsal lobe; fifth pereopod chelate ................................................................. 2

   Dorsal surface of carapace without raised oval area; third maxilliped with or without exopod; fifth pereopod subchelate ................................. Gourretia latispina

2. (1) Propodus of fourth pereopod without disto-ventral prominence; pleopods 1 and 2 always reduced or absent in male; pleopods 3 to 5 with appendix interna projecting beyond mesial border of endopod; epipod of first maxilliped only slightly dilated ventrally ................................................................. Callianassa

   Propodus of fourth pereopod almost always with disto-ventral prominence; pleopods 1 and 2 present in male; pleopods 3 to 5 with appendix interna recessed in endopod and not exceeding, or only slightly exceeding, mesial border; epipod of third maxilliped with acute anterior lobe; propodus of third maxilliped nearly always greatly dilated ventrally ......................................................... Callichirus
Family Callianassidae

Genus Callianassa Leach, 1814

Key to species
[Adapted from Biffar, 1971a, with modification]

1. Front with lateral spinous projections ........................................ 2
   Front lacking lateral spinous projections .................................. 5

2. (1) Third maxilliped lacking strong spinous crest on mesial surface of ischiium, series of small separate denticles; rostrum short, 0.25-0.33 times length of eyestalks (posterior margin of telson concave) ............................................. C. guassutina
   Strong spinous crest present on third maxilliped; rostrum usually more than 0.33 times length of eyestalks (occasionally shorter in C. rathbunae) .............................................. 3

3. (2) Endopod of uropod elongate oval, twice as long as wide; telson widest midlaterally, generally rounded in outline, posterior margin convex or straight (length of eyestalks only 1.2-1.7 times width) ....................................................... C. acanthochirus
   Endopod of uropod rhomboid or subtriangular; telson widest in anterior third, trapezoidal ........................................................................ 4

4. (3) Posterior margin of telson with triangular median projection (rostrum almost as long as eyestalks; endopod of uropod subtriangular) .................. C. longiventris
   Posterior margin of telson lacking median projection (pigmented area of eyestalk lateral, small, covering about 0.1 of exposed dorsal surface of eyestalk, mediiodistal projection acute or rounded, curving laterally; upper exopodal plate almost as long as lower) ....................................................... C. rathbunae

5. (1) Rostrum triangular, rounded or acute, extending less than 0.25 length of eyestalks.. ........................................................................................................... 6
   Rostrum elongate triangular, spinous or flattened dorsoventrally, acute, extending more than 0.25 length of eyestalks ......................................................... 10

6. (5) Antennular peduncle extending beyond tip of antennal peduncle .................. 7
   Antennular peduncle not extending beyond tip of antennal peduncle ................ 8

7. (6) Posterior border of telson straight, with acute median projection; distomedial projection of eyestalks elongate, slender, curving laterally; length of third antennular segment five times length of second segment ....................... C. atlantica
   Posterior border of telson concave; tip of eyestalks with short rounded projection; length of third antennular segment three times length of second segment .......... C. fragilis
8. (6) Propodus of third maxilliped less than two times width of dactylus. ........................................... C. quadriculata

Propodus of third maxilliped about four times width of dactylus........................................... 9

9. (8) Lateral margin of telson trilobed........................................... C. trilobata

Lateral margin of telson more or less smoothly rounded (posterior margin of telson inconspicuously convex or concave; distal margin of endopod of uropod quadrate; propodus of third pereopod short, extending posteriorly only as far as margin of carpus, length 1.5 times width) ........................................... C. branneri

10. (5) Antennular peduncle extending beyond tip of antennal peduncle... C. jamaicense

Antennular peduncle not extending beyond tip of antennal peduncle................. 11

11. (10) Ischium and merus of third maxilliped wide, combined length 1:1-1:4 times greatest width .............................. C. bifurcata

Ischium and merus of third maxilliped narrow, combined length more than 2.0 times greatest width ........................................... C. marginata

Genus Callichirus Stimpson, 1866

Key to species
[Adapted from Biffo, 1971a]

Eyestalks shorter than first segment of antennular peduncle, terminating in short, subtriangular distal projections; telson widest midlaterally ............ C. major

Eyestalks extending beyond first antennular segment, distomedial projection of eyestalks elongate, curving laterally; telson widest in posterior third ...........

........................................... C. islagrande

Key to large chelipeds of species of family Callianassidae (except for C. bifurcata)
[Adapted from Biffo, 1971a]

1. Superior and inferior margins of carpus ending distally in two acute prominences; superior margin of palm ending in acute prominence distally ...... C. quadriculata

Carpus otherwise, no second prominence on superior and inferior margins, distal margins usually rounded; margin of palm rounded distally ......................... 2

2. (1) Ischium with midinferior projection, remainder of margin denticulate............... 3

Ischium lacking midinferior projection, inferior margin serrate, denticulate, spinous, or entire ........................................... 4
3. (2) Projection on ischium denticulate, approximately as long as remainder of segment's width; inferior margin of merus inconspicuously serrate, without elongate projection ........................................... *Callichirus islagranda* (male)

Projection not denticulate, length approximately 0.2 times remainder of segment's width; merus with proximal inferior bifurcate projection, remainder of margin with several strong denticles ........................................... *C. jamaicense*

4. (2) Ischium with distinct inferior spines ................................................................. 5

Ischium lacking distinct inferior spines ................................................................. 8

5. (4) Merus and palm with two or three spines along superior margin ......................

................................................................. *C. acanthochirus*

Merus and palm lacking superior spines ............................................................... 6

6. (5) Inferior margin of merus entire ................................................................. *C. marginata*

Inferior margin of merus spinous or serrate .......................................................... 7

7. (6) Merus with 3-5 spines on proximal half of inferior margin, remainder of margin denticulate; ischium with numerous (7-9) spines on inferior margin; cutting edge of dactylus entire ........................................... *C. longiventris*

Merus with 7-12 spines plus acute serrations; ischium with 3-4 spines distally, acute serrations proximally; cutting edge of dactylus with median quadrate notch (male) or entire (female) ................................................................. *C. rathbunae*

8. (4) Inferior margin of merus entire ............................................................................. 9

Inferior margin of merus serrate, spinous, or with some sort of proximal inferior projection .......................................................................................................................... 10

9. (8) Propodal finger with acute triangular tooth proximally; carpus less than 1.7 times length of palm ................................................................. *Callichirus major* (female)

Propodal finger serrate but lacking well-developed tooth; carpus more than 1.7 times length of palm ................................................................. *Callichirus islagranda* (female)

10. (8) Proximal inferior corner of merus with spinous or robust spine like projection..... 11

Proximal inferior projection, if present, quadrate or forming hook, not spinelike. . 12

11. (10) Lateral surface of palm with 2-3 spines just proximal to base of propodal finger; projection on merus strong, bifurcate ........................................... *C. guassutinga*

Surface of palm lacking spines; distally curving spinous projection on merus, remainder of margin weakly serrate ........................................... *Gourretia laispina*
12. (10) Merus with broad, well-developed, proximal inferior hook, distal margin of hook concave, tip acute or subacute, remainder of margin weakly serrate .......... 13

Merus lacking hook, inferior margin serrate, spinous, or with quadrate proximal inferior projection ............................................. 15

13. (12) Propodal notch extending proximally into palm; cutting edge of dactylus with three strong teeth; length of carpus less than 0.75 times length of palm ........... .......................... C. fragilis (male)

Propodal notch extending little or not at all into palm; dactylus lacking strong dentition; length of carpus greater than 0.75 times length of palm ................. 14

14. (13) Proximal inferior margin of carpus broadly rounded, extending proximally beyond level of superior articulation with merus; cutting edge of propodal finger serrate; proximal superior margin of merus elevated, denticulate, margin more or less straight; total length of carpus, palm, and dactylus in adults less than 15 mm ........... .......................... C. fragilis (female)

Proximal inferior margin of carpus rounded, not extending proximally beyond level of articulation; propodal finger serrate in proximal third only; superior margin of merus rounded, highest centrally; total length of carpus, palm, and dactylus in adults more than 20 mm .................................................. C. atlantica

15. (12) Merus with proximal inferior quadrate (may appear triangular) projection, inferior margin including projection serrate (carpus much --more than 1.25--longer than palm; propodal notch extending proximally into palm; dactylus hooked, with single rounded bifid tooth; propodal finger heavy, short, blunt at tip) ................. .......................... Callichirus major (male)

Merus without distinct projection, inferior margin either convex and serrate or forming serrate keel ................................................................. 16

16. (15) Carpus 0.33-0.67 times length of palm; palm subquadrate; dactylus heavy, with 2-3 strong teeth on cutting edge, acute at tip .................. C. branneri

Carpus 0.65-0.95 times length of palm; palm distinctly longer than wide; dactylus with two truncate teeth medi ally (male) or lacking strong dentition (female) ............. C. trilobata
**Callianassa guassutinga**

a. anterior region, dorsal view  
b. third maxilliped  
c. telson and left uropods  

(after Biffar, 1971a)

**Callianassa acanthochirus**

d. anterior region, dorsal view  
e. third maxilliped  
f. telson and right uropods  

(after Biffar, 1971a)

**Callianassa longiventris**

g. anterior region, dorsal view  
h. telson and right uropods  
i. third maxilliped  

(after Biffar, 1971a)

**Callianassa rathbunae**

j. anterior region, dorsal view  
k. third maxilliped  
l. telson and left uropods  

(after Biffar, 1971a)
*Callianassa atlantica*

male:

a. anterior region, dorsal view

b. major (right) cheliped

c. telson and left uropods

(after Williams, 1984)

*Callianassa fragilis*

d. anterior region, dorsal view

e. major cheliped (male)

f. telson and right uropods

(after Biffar, 1971a)
**Callianassa quadracuta**

a. anterior region, dorsal view  
b. third maxilliped  
c. male second pleopod  

(after Biffar, 1971a)

**Callianassa trilobata**

d. anterior region, dorsal view  
e. third maxilliped  
f. telson and right uropods  

(after Biffar, 1971a)

**Callianassa branneri**

g. anterior region, dorsal view  
h. third maxilliped  
i. telson and right uropods  

(after Biffar, 1971a)

**Callianassa jamaicense**

male:  
j. anterior region, dorsal view  
k. major cheliped  
l. telson and uropods  

(after Schmitt, 1935b)
Callianassa biformis
a. anterior region, dorsal view
b. third maxilliped
c. major cheliped (male)
(after Biffar, 1971b)

Callianassa marginata
d. anterior region, dorsal view
e. telson and right uropods
f. third maxilliped
(after Biffar, 1971b)
Callichirus major
a. anterior region, dorsal view
b. telson and uropods
c. major (right) cheliped
(after Williams, 1984)

Callichirus islagrande
male:
d. anterior region, dorsal view
e. major cheliped
f. telson and uropods
(after Schmitt, 1935b)

Gourretia latispina

g. anterior region, dorsal view
h. third maxilliped
i. telson and right uropods
(after Bifar, 1971b)
Family Callianassidae
Family Upogebiidae

Genus *Upogebia* Leach, 1814

Key to species
[Adapted from Schmitt, 1935a]

Anterolateral border of carapace armed with small spine on level with eyes;
immovable finger of chela shorter than movable finger .................. *U. affinis*

Anterolateral border of carapace not armed with spine in line with eyestalks;
immovable finger of chela longer than movable finger .............. *U. operculata*
**Upogebia affinis**

female:

a. carapace, dorsal view
b. abdomen, lateral view
c. chela and carpus, right external view

(after Williams, 1984)

**Upogebia operculata**

d. anterior part of carapace, lateral view
e. chela and carpus, left external view

(after Schmitt, 1935a)
Family Upogebilidae
Infraorder Palinura

Family Palinuridae

Key to genera and species
[Adapted from Manning, 1978]

First pair of pereopods enlarged in males, ending in apparent (false) pincers, with wide, red cross bands; carapace ornamented with strong, scale-like sculpture; tail brick red, with 4 or 5 conspicuous transverse grooves on each segment and with yellowish spots and stripes ................................................. Justitia longimanus

First pair of pereopods not enlarged, with no trace of pincer, without cross bands; carapace without scale-like sculpture; tail variously colored, smooth or with at most 1 transverse groove (frontal horns over eyes very sharp; antennular flagella longer than peduncle) ................................................................. Panulirus

Genus Panulirus White, 1847

Key to species

1. Each abdominal somite smooth, without complete transverse groove (antennular plate bearing 2 pairs of strong spines) .................................................. P. laevicauda

Each abdominal somite with complete transverse groove ........................................ 2

2. (1) Antennular plate bearing 2 pairs of strong spines; tail with 4 conspicuous yellow spots ................................................................. P. argus

Antennular plate bearing one pair of strong spines; tail without 4 conspicuous yellow spots ................................................................. P. guttatus
Panulirus laevicauda
a. dorsal view
(after Manning, 1978)

Panulirus argus
b. lateral view
(after Williams, 1965a)

Panulirus guttatus
c. dorsal view
(after Manning, 1978)

Justitia longimanus
d. dorsal view
(after Manning, 1978)
Family Scyllaridae

Key to genera and species
[Adapted from Manning, 1978]

1. Carapace much broader than long, its sides very thin and cut into very large, flattened, triangular projections .................................. Parribacus antarcticus
   Carapace usually longer than broad, its sides not very thin, either smooth or denticulate ................................................. 2

2. (I) Front and usually lateral edges of antennae smooth or finely denticulate, not cut into large triangular projections; size large ................................ Scyllarides
   Front and lateral edges of antennae cut into distinct teeth; size small..... Scyllarus
Genus Scyllarides Gill, 1898

Key to species
[Adapted from Lyons, 1970]

Gastric, cardiac, and branchial regions of carapace elevated, distinct; pregastric and gastric teeth prominent in profile; second through fourth abdominal somites with median, node-like carina ........................................ S. nodifer

Gastric, cardiac, and branchial regions of carapace low, not strongly defined; pregastric and gastric teeth not obvious in profile; second through fourth abdominal somites low, rounded, without distinct carina .................. S. aequinoctialis

Genus Scyllarus Fabricius, 1775

Key to species
[Adapted from Lyons, 1970]

1. Gastric and all lateral prominences on carapace sharp; second segment of antennular peduncle cylindrical; pleura of fourth abdominal somite sharply rectangular or acute laterally .................................................. S. depressus

Prominences on carapace blunt; second segment of antennular peduncle flattened superiorly; pleura of fourth abdominal somite rounded laterally ....................... 2

2. (1) Pregastric tooth of carapace nearly always bilobed, incised; first to fourth abdominal somites with deep, narrow median notch in posterior margin ..............

.......................... S. americanus

Pregastric tooth of carapace rounded, entire; first to fourth abdominal somites with very shallow, broad median notch in posterior margin ............... S. chacei
Scyllarides nodifer

a. dorsal view
(based on Manning, 1978)

Scyllarides aequinocitialis

b. dorsal view
(after Manning, 1978)
**Scyllarus depressus**

a. dorsal view

(after Felder, 1973)

**Scyllarus americanus**

b. dorsal view

(after Williams, 1965a)

**Scyllarus chacei**

c. dorsal view

(after Felder, 1973)

**Parribacus antarcticus**

d. dorsal view

(after Manning, 1978)
Family Scyllaridae
Family Synaxiidae

Genus *Palinurellus* Von Martens, 1881

Carapace entirely covered with small, rounded nodules and short hairs, but without enlarged spines; small triangular rostrum present between eyes; antennae shorter than carapace, antennular flagella shorter than antennular peduncles; pereopods without true pincers, first pair not longer than, but at least twice as thick as, second [from Manning, 1978] .............................................. *P. gundlachi*
Family Synaxidae

Palinurellus gundlachi

a. dorsal view

(after Manning, 1978)