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## Hydroids (Cnidaria: Hydrozoa) of the Gulf of Mexico

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Hydrozoans are an important component of both the benthos and the plankton in all oceans. Their ranges extend from polar to tropical waters, and from the intertidal zone to ocean trenches. Some penetrate into estuaries, but only a small percentage of known species occur in fresh waters. Most are free living, although a few are parasitic. Approximately 3400 species are currently recognized worldwide. Life cycles may include a polyp or hydroid stage only, a medusa stage only, or an alternation between the two. Hydroids are generally sessile, colonial, and epifaunal; hydromedusae are typically free swimming, solitary, and planktonic; siphonophores are colonial and largely planktonic.

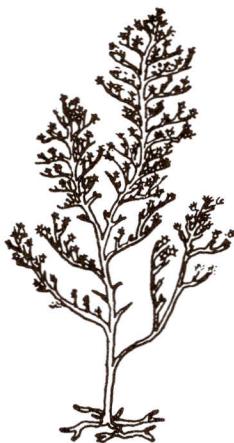
The taxonomy of hydrozoans is still in a primitive state. Nomenclature and classification of the group have been encumbered from the time of Linnaeus (1758) to the present by essentially separate systems for hydroids and hydromedusae. In many taxa having metagenetic life cycles, polypoid and medusoid stages of a given species have frequently been given different scientific names and even assigned to different classifications. Advances have been made over the past century toward eliminating the dual systems of nomenclature and classification through life-cycle studies. Stability, universality, and uniqueness of names can be promoted once a link between different life stages has been established by following provisions of the International Code of Zoological Nomenclature. Vestiges of these problems remain, particularly in taxa for which life-cycle information is lacking or in groups where morphologically dissimilar medusae have virtually indistin-



Hydrida. After Pratt 1916.

guishable hydroids, or vice versa. Questions also arise concerning the classification of groups in which certain taxa liberate free medusae while others produce fixed gonophores. Moreover, there is simply a lack of knowledge concerning the biology of these cnidarians, and a shortage of people working on them. This shortage is particularly acute at present in North America.

In addition to classification and nomenclatural problems in the Hydrozoa, basic identification of taxa in the group is inherently difficult. Hydrozoan taxonomy is confounded by the limited number of useful morphological characters in these anatomically simple animals, together with the wide variations in form exhibited by many species. Moreover, some hydroids can be identified only if



Hydrida. After Pratt 1916.

gonophores are present, or if their medusa stage can be examined—if one exists. In turn, some medusae cannot reliably be identified in the absence of their hydroids. Establishing limits of variation within certain taxa can be difficult, based on morphology alone. Hydrozoan taxonomists over the last half of the 20th century tended to be “taxonomic lumpers,” but there is evidence now from both life-cycle studies and molecular investigations that traditional methods may sometimes have been inadequate in discrimination of similar species.

The purpose of this report is to revise the list of hydroids known from the Gulf of Mexico compiled by Deevey (1954) a half-century ago. Updated information in the accompanying checklist is based mostly on published records, with a few records based on unpublished data. As with the earlier report by Deevey, only the hydroid stages of hydrozoans are included in the list that follows; medusae and siphonophores are not considered. The “hydrocoral” families Styelasteridae and Milleporidae, excluded by Deevey, have been included in this report. Also listed are the pleustonic porpitids *Velella velella* and *Porpita porpita*. Treated as “chondrophores” at the time of Deevey’s account, they are now known to be anthoathecate hydroids. One or more citations in the “References/Endnotes” column of the checklist are given to document the occurrence of each species in the study area, and in some cases to provide a reference concerning its synonymy. However, such records are not intended to be exhaustive.

The primary reference on hydroids of the Gulf of Mexico, and indeed of the entire western North Atlantic, remains *Hydroids of the Atlantic coast of North America*, by Fraser (1944), a book now more than a half-century old.

Although the classification and nomenclature in Fraser’s synopsis are out of date, the work remains indispensable in the identification of hydroids of the region. When preliminary identifications are made using this reference, the taxonomy of neritic species (occurring at depths of 0–200 m) can be updated by referring to the hydroid sections in Cairns et al. (2002). Other important taxonomic accounts of species occurring in the Gulf include works on hydroids of the Caribbean region by Vervoort (1968), of the Galveston Bay area, Texas, by Defenbaugh and Hopkins (1973), and of Bermuda by Calder (1988, 1991, 1997). An overview of the Styelasteridae of the region is given in Cairns (1986).

A summary of literature on hydroids of the Gulf of Mexico through the mid-20th century was provided by Deevey (1954) and will not be repeated here. Much of this information was also incorporated in the guidebook of Fraser (1944). Deevey also included data on species he had identified from the region as part of fouling studies at the Woods Hole Oceanographic Institution during World War II. Nevertheless, he concluded that hydroids of the Gulf of Mexico were little known, and he described his inventory as “a catalog of ignorance.” Since then, a number of works have added to knowledge of the group in the area. A summary of research on hydroids of the northern Gulf, and a table of species reported from that region, were provided by Defenbaugh and Hopkins (1973). Again, that work should be consulted for details. Among the more comprehensive reports since Deevey’s (1950, 1954) publications on Gulf hydroids are (1) a checklist of the biota of Apalachee Bay, Florida (Menzel 1956); (2) a paper on hydroids of Mississippi Sound (Fincher 1955); (3) theses on hydroids of the Florida Gulf coast by Joyce (1961) and Shier (1965); (4) works on fouling organisms, including hydroids, by Gaille (1967) and Pequegnat and Pequegnat (1968); and (5) a checklist of some 184 nominal species reported from the region by Vervoort (1968). Notable works subsequent to the review of Defenbaugh and Hopkins (1973) include (1) a report on the fauna of the West Flower Garden Bank, Texas (Defenbaugh 1974); (2) a monographic thesis on aglaopheniids of the tropical western North Atlantic (Bogle 1975); (3) a book on hard bottoms and biota, including hydroids, of shelf waters in the northwestern Gulf (Rezak, Bright, and McGrail 1985); (4) a report on fishes and benthos of hard bottoms on the Louisiana shelf (Putt et al. 1986); and a paper on fouling organisms from petroleum platforms off Louisiana (Lewbel, Howard, and Gallaway 1987). Important references on hydrocorals, which were not included by Deevey

(1954), include Boschma (1948) for Milleporidae and Cairns (1986) for Styleridae. Although several faunal surveys have been undertaken in the region over the last 3 decades as part of offshore oil and gas exploration and exploitation, little information on hydroids has reached the primary literature.

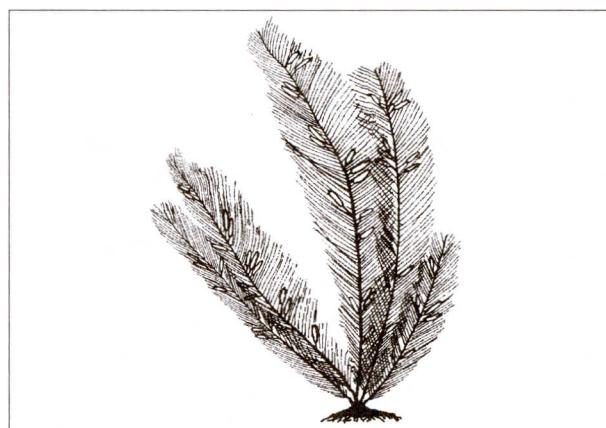
Some of the species included here are of questionable status, or their presence in the Gulf needs verification. They have been included, however, because the fauna is so poorly known. For example, several nominal species of *Eudendrium* described from the Straits of Florida by Allman (1877), and listed here, may eventually have to be abandoned as *nomena dubia* because his specimens lacked hydranths and gonophores. These characters, as well as information on nematocyst complement, are now considered essential for distinguishing species in the genus. As well, certain records from the Tortugas area by Wallace (1909) are suspect, especially of species that are usually restricted to boreal waters. Records needing confirmation and not incorporated in the accompanying table included: (1) *Campanularia gelatinosa* (Pallas, 1766) (= *Hartlaubella gelatinosa*) by Cary and Spaulding (1909); (2) *Campanularia verticillata* (Linnaeus, 1758) (= *Rhizocaulus verticillatus*) by Fraser (1945); (3) *Campanularia flexuosa* (Alder, 1857) (= *Laomedea flexuosa*) by Joyce (1961); and (4) *Clava* sp., *Bimeria gracilis* Clark, 1876, *Bougainvillia longicirra*, Steehow, 1914, *Eudendrium rameum* (Pallas, 1766), *Tubularia crassa* Fraser, 1941, *T. larynx* Ellis and Solander, 1786 (and its synonym *T. tenella* (L. Agassiz, 1862)), *Campanularia angulata* (Hincks, 1861), and *Obeelia flabellata* (Hincks, 1866) by Pequegnat and Pequegnat (1968).

The earlier inventory of Gulf hydroids by Deevey (1954) recorded 183 species from the region. Deevey considered it unlikely that this represented more than half of the number of species actually present. The current list includes 214 species (comprising 66 anthoathecates and 148 leptothecates). Excluding the 24 species of hydrocorals and the two porpitids added here, this constitutes an increase of only 3% in the total over the last 50 years. Clearly, these cnidarians remain inadequately studied and poorly known in the Gulf. Accordingly, it is premature to estimate either the degree of endemism or the number of boreal relicts in the area (see Deevey 1950, 1954). Data on taxonomic composition and supposed origins of the fauna are summarized in the taxonomic summary.

Numbers of species varied from one quadrant of the Gulf to another, with 68 reported from the NW, 109 from the NE, 175 from the SE, and 6 from the SW. These

unequal numbers partly reflect differences in collection effort and study among the 4 sectors, with more work having been done on hydroids in the NW, NE, and SE than in the virtually unstudied SW. Nevertheless, the hydroid fauna is certainly not uniform in character throughout the region. Species richness in the essentially tropical SE is high, as might be expected given its diversity of habitats and warmer and more uniform water temperatures. By contrast, lower diversity is apparent along the estuarine-influenced and predominantly sandy northern Gulf coast, with its wide annual ranges of water temperature. The hydroid assemblage found along the northern coast is considered here to be a warm-temperate one, while that of the southeast is tropical. This conforms with an earlier biogeographic analysis of western North Atlantic hydroids (Calder 1992). The hydroids of Texas were shown in that study to have an affinity with the fauna of the Carolinian region, while those of the Tortugas area were allied to assemblages elsewhere in the West Atlantic Tropical region (Briggs 1974). Deevey (1954) had concluded earlier that the Gulf of Mexico was not truly tropical, and he noted that low winter temperatures were limiting to a predominantly warm-water biota.

Bathymetrically, hydroids have been shown to be most diverse and abundant in the neritic zone (Calder 1998). Of 214 species reported here from the Gulf of Mexico, 92 (43%) are known exclusively from depths shallower than 200 m, while 32 (15%) have been found only in waters deeper than 200 m. The hydroid fauna of abyssal bottoms in the study area is inadequately studied but probably depauperate. Only 2 species listed here (*Eucuspidella pedunculata*, *Acryptolarella longitheca*) have been reported from depths exceeding 3000 m in the western North Atlantic.



Hydrida. After Brusca 1980, modified by F. Moretzsohn.

Over half of the species in the following list have been reported from the Caribbean Sea and from the southeastern United States and the Bahamas, with 126 species shared with each of these two regions. Smaller numbers have been recorded from Bermuda (68), northeastern North America (71), the Atlantic coast of South America (63), the eastern Atlantic (90), the Indian Ocean (62), the western Pacific (69), and the eastern Pacific (77). Thirty species have been reported to date only from the Gulf of Mexico. While some of those currently known exclusively from the Gulf may indeed be endemic, it seems probable that additional collecting and taxonomic study will reveal that many of them have ranges extending beyond the region of study.

The classification and nomenclature adopted here generally follows that in Cairns et al. (2002). Orders and families are arranged phylogenetically, although no existing classification of the Hydrozoa can be considered a satisfactory reflection of relationships. Genera and species are listed alphabetically. Synonymies mostly follow those in works by Calder (1988, 1991, 1997), Cairns (1986), and Cairns et al. (2002), although some names regarded as synonyms in those works are listed pending further study in the Gulf and elsewhere.

Depth data in italics indicate the known bathymetric range of a given species in the western North Atlantic region. Such numbers in roman type indicate records based only on collections from the Gulf of Mexico. Major references consulted for depth information include Fraser (1944, 1946), Vervoort (1968, 1972), Defenbaugh and Hopkins (1973), Bogle (1975), and Calder (1988, 1991, 1997, unpublished). Unfortunately, collection depths were not provided in some important works on Gulf hydroids (e.g., Deevey 1950, 1954) and were available only for certain species or collection records in others (e.g., Fraser 1944, 1946).

## Abbreviations

The following abbreviations are used in the accompanying checklist under Habitat-Biology: ben = benthic; bns = bay and nearshore; bsl = beach and shoreline; crr = coral reef; dps = deep sea; end = endemic to the Gulf of Mexico; epi = epibiotic; est = estuarine; hsb = hard substrate; itd = intertidal; neu = neustonic; nid = nonindigenous to the Gulf of Mexico; ocs = outer continental shelf; osp = oceanic surface and epipelagic; ple = pleustonic; sft = soft substrates (mud, sands, clays); slp = continental slope; sym =

symbiotic. Abbreviations used under the heading Overall Geographic Range are as follows: SE = southeastern United States and the Bahamas; CA = Caribbean Sea; BE = Bermuda; NE = northeastern United States and Atlantic Canada; SA = Atlantic coast of South America; EA = eastern Atlantic; IO = Indian Ocean; WP = western Pacific; EP = eastern Pacific; BF = brackish or fresh waters (widespread); GO = known only from the Gulf of Mexico. Other abbreviations used in the checklist include: GMx = Gulf of Mexico; ROMIZ = Royal Ontario Museum (Invertebrate Zoology), Toronto, Canada; DRC = D. R. Calder; SDC = S. D. Cairns, USNM = United States National Museum, Smithsonian Institution, Washington, D.C.

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## Taxonomic summary for hydroids of the Gulf of Mexico.

Component taxa	Total species	Species known from GMx only	Cryptogenic species	Nonindigenous species
Anthoathecata				
Cordylophoridae	5	0	2	3
Hydractiniidae	4	1	0	3
Stylasteridae	21	5	0	0
Bougainvilliidae	6	1	0	5
Pandeidae	1	0	0	1
Eudendriidae	14	5	4	5
Moerisiidae	1	0	0	1
Zancleidae	1	0	1	0
Porpitidae	2	0	0	2
Tubulariidae	3	1	0	2
Corynidae	2	0	1	1
Cladonematidae	1	1	0	0
Milleporidae	3	0	0	3
Rosalindidae	1	0	0	1
Pennariidae	1	0	0	1
Leptothecata				
<i>Incertae Sedis</i>	5	0	2	3
Tiarannidae	1	0	0	1
Lovenellidae	2	0	0	2
Haleciidae	9	1	4	4
Kirchenpaueriidae	1	0	0	1
Plumulariidae	15	5	8	2
Halopterididae	11	2	5	4
Aglaopheniidae	32	3	21	8
Lafoeidae	19	0	8	11
Campanulariidae	25	1	10	14
Thyroscyphidae	2	0	2	0
Syntheciidae	4	0	3	1
Sertulariidae	22	4	7	11
Totals	214	30	78	90

**Checklist of hydroids (Cnidaria: Hydrozoa) from the Gulf of Mexico.**

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<b>Phylum: Cnidaria</b>					
<b>Subphylum: Medusozoa</b>					
<b>Class: Hydrozoa</b>					
<b>Order: Anthoathecata</b>					
<b>Family: Cordylophoridae</b>					
<i>Cordylophora caspia</i> (Pallas, 1771)	ben, est, hsb, nid	0–5	BF, SE, CA, NE, EA, IO, WP, EP	nw, ne	21, 22, 26, 28, 47
<i>Corydendrium parasiticum</i> (Linnaeus, 1767)	ben, hsb	1–127	SE, CA, BE, EA, IO, WP, EP	nw, ne	36
<i>Rhizogeton sterreri</i> (Calder, 1988)	ben, epi, hsb	0–1	SE, BE	ne	23, 34, 40 <sup>1</sup>
<i>Turritopsis fascicularis</i> Fraser, 1943	ben, hsb	1–329	SE, CA, BE	ne, se	21, 23, 27, 47
<i>Turritopsis nutricula</i> McCrady, 1857	ben, bns, hsb	0–128	SE, CA, BE, NE, SA, EA, IO, WP, EP	nw, ne, se	21, 23, 36, 47
<b>Family: Hydractiniidae</b>					
<i>Hydractinia echinata</i> (Fleming, 1828)	ben, bns, epi, sym	0–662	EA	nw, ne, se	20, 21, 23, 39, 47
<i>Podocoryna americana</i> Edwards, 1972	ben, bns, epi, sym	0–51	NE	nw, ne	20, 21, 23, 24, 47
<i>Podocoryna selena</i> Mills, 1976	ben, bns, epi, end	0–3	GO	ne	39
<i>Stylocartaria hooperii</i> Sigerfoos, 1899	ben, bns, epi, sym	1–2	CA, NE, SA	ne	34
<b>Family: Styleridae</b>					
<i>Cryptelia floridana</i> Cairns, 1986	ben, hsb, slp	593–823	SE	se	9
<i>Cryptelia peircei</i> Pourtalès, 1867	ben, hsb, slp	159–839	CA	se	9
<i>Distichopora contorta</i> Pourtalès, 1878	ben, hsb, slp, end	125–368	GO	se	9
<i>Distichopora foliacea</i> Pourtalès, 1868	ben, hsb, slp	183–527	SE	se	9
<i>Distichopora sulcata</i> Pourtalès, 1867	ben, hsb, slp, end	60–708	GO	se	9
<i>Distichopora uniserialis</i> Cairns, 1986	ben, hsb, slp, end	333–366	GO	se	9
<i>Errina coeruleata</i> Pourtalès, 1867	ben, hsb, slp	194–534	SE, CA	se	9
<i>Lepidopora biserialis</i> Cairns, 1986	ben, hsb, slp	196–370	SE	se	9
<i>Lepidopora carinata</i> (Pourtalès, 1867)	ben, hsb, slp, end	60–494	GO	se	9
<i>Lepidopora glabra</i> (Pourtalès, 1867)	ben, hsb, slp	267–1170	SE	se	9
<i>Lepidotheca pourtalesii</i> Cairns, 1986	ben, hsb, slp, end	123–368	GO	se	9
<i>Pliobothrus symmetricus</i> Pourtalès, 1868	ben, hsb, slp	150–400	SE, CA, EA	se	9
<i>Pliobothrus tubulatus</i> (Pourtalès, 1867)	ben, hsb, slp	419–708	CA	se	9
<i>Stylaster aurantiacus</i> Cairns, 1986	ben, hsb, slp	123–377	CA	se	9
<i>Stylaster complanatus</i> Pourtalès, 1867	ben, hsb, slp	183–707	SE, CA	se	9
<i>Stylaster duchassaingi</i> Pourtalès, 1867	ben, hsb, slp	42–692	SE, CA	ne, se	9
<i>Stylaster erubescens</i> Pourtalès, 1868	ben, hsb, slp	146–965	SE, CA, EA	ne, se	9
<i>Stylaster filogranus</i> Pourtalès, 1871	ben, hsb, slp	384–549	CA	se	9
<i>Stylaster laevigatus</i> Cairns, 1986	ben, hsb, slp	123–759	SE, CA	se	9
<i>Stylaster miniatus</i> (Pourtalès, 1869)	ben, hsb, slp	146–530	SE	se	9
<i>Stylaster roseus</i> (Pallas, 1766)	ben, hsb, crr	1–73	SE, CA, SA	se, sw	9, 32
<b>Family: Bougainvilliidae</b>					
<i>Bimeria humilis</i> Allman, 1877	ben, bns, hsb	0–18	SE, CA, BE, SA	nw, ne, se	1, 20, 21, 47
<i>Bougainvillia carolinensis</i> (McCrady, 1859)	ben, bns, hsb	0–5	SE, NE	nw, ne, se	21, 47
<i>Bougainvillia inaequalis</i> Fraser, 1944	ben, bns, hsb, end	0–36	GO	nw, ne	20, 21, 23, 28, 47
<i>Bougainvillia rugosa</i> Clarke, 1882	ben, bns, est, hsb	0–7	SE, CA, NE, SA	nw	21, 47
<i>Bougainvillia superciliaris</i> (L. Agassiz, 1849)	ben, bns, hsb	0–5	CA, NE, EA, EP	nw	23
<i>Garveia franciscana</i> (Torrey, 1902)	ben, est, hsb, nid	0–5	BF, SE, CA, NE, EA, IO, WP, EP	nw, ne	19, 20, 21, 23, 47

**Checklist of hydroids (Cnidaria: Hydrozoa) from the Gulf of Mexico. (continued)**

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<b>Family: Pandeidae</b>					
<i>Leuckartiara octona</i> (Fleming, 1823)	ben, epi, hsb	0–84	NE, SA, EA, IO, WP, EP	nw	10, 23
<b>Family: Eudendriidae</b>					
<i>Eudendrium album</i> Nutting, 1896	ben, bns, hsb	0–132	SE, NE, EA	ne, se	21, 28, 47
<i>Eudendrium attenuatum</i> Allman, 1877	ben, ocs, hsb, end	110	GO	se	1, 21, 47
<i>Eudendrium carneum</i> Clarke, 1882	ben, bns, hsb	0–18	SE, CA, BE, NE, SA, EA, IO, EP	nw, ne, se	21, 34, 36, 38, 42, 47
<i>Eudendrium distichum</i> Clarke, 1879	ben, slp, hsb, end	620	GO	se	18, 21, 47
<i>Eudendrium exiguum</i> Allman, 1877	ben, ocs, hsb	31–278	CA, EP	nw, ne, se	1, 21, 23, 47
<i>Eudendrium eximium</i> Allman, 1877	ben, hsb	6–216	EP	nw, ne, se	1, 21, 23, 47
<i>Eudendrium fruticosum</i> Allman, 1877	ben, slp, hsb, end	247	GO	se	1, 21, 47
<i>Eudendrium gracile</i> Allman, 1877	ben, hsb, end	4–7	GO	se	1, 21, 47
<i>Eudendrium laxum</i> Allman, 1877	ben, hsb	38–256	CA, SA, WP	ne, se	1, 21, 34, 47, 48
<i>Eudendrium ramosum</i> (Linnaeus, 1758)	ben, hsb	0–787	SE, CA, NE, SA, EA, IO, WP, EP	nw	23
<i>Eudendrium speciosum</i> Fraser, 1945	ben, hsb, end	no data	GO	ne	21, 29, 47
<i>Eudendrium tenellum</i> Allman, 1877	ben, hsb	0–861	CA, NE, EA, WP, EP	ne, se	21, 47
<i>Eudendrium tenue</i> A. Agassiz, 1865	ben, hsb	0–137	CA, NE, EP	nw	20, 21, 23, 47
<i>Myrionema hargitti</i> (Congdon, 1906)	ben, bns, hsb	0–2	CA, BE, EA	se	21, 47
<b>Family: Moerisiidae</b>					
<i>Moerisia gangetica</i> Kramp, 1958	ben, est, hsb, nid	1–5	SE, NE, IO	ne	41 <sup>2</sup>
<b>Family: Zancleidae</b>					
<i>Zanclea alba</i> (Meyen, 1834)	ben, epi, osp, neu	0–274	SE, CA, BE, NE, EA	nw, ne, se	10, 12, 20, 22, 23, 47
<b>Family: Porpitidae</b>					
<i>Porpita porpita</i> (Linnaeus, 1758)	ple, osp	0	SE, CA, BE, NE, SA, EA, IO, WP, EP	entire	2
<i>Velella velella</i> (Linnaeus, 1758)	ple, osp	0	SE, CA, BE, NE, SA, EA, IO, WP, EP	entire	2
<b>Family: Tubulariidae</b>					
<i>Ectopleura crocea</i> (L. Agassiz, 1862)	ben, bns, hsb	0–60	SE, NE, SA, EA, IO, WP, EP	nw, ne	20, 21, 23, 40, 47
<i>Ectopleura dumortierii</i> (Van Beneden, 1844)	ben, bns, hsb	0–18	SE, CA, NE, SA, EA, WP	ne	34
<i>Ectopleura grandis</i> Fraser, 1944	ben, bns, est, hsb, end	0–48	GO	nw, ne, se	20, 21, 23, 31, 47
<b>Family: Corynidae</b>					
<i>Coryne eximia</i> Allman, 1859	ben, bns, hsb	0–37	SE, CA, SA, EA, WP	nw	20, 21, 23, 45, 47
<i>Coryne sargassicola</i> Calder, 1988	ben, neu, epi, osp	0–1	SE, CA, BE	ne, se	21, 23, 47 <sup>3</sup>
<b>Family: Cladonematidae</b>					
<i>Cladonema mayeri</i> Perkins, 1906	ben, epi, bns, end	0–3	GO	se	21, 47
<b>Family: Milleporidae</b>					
<i>Millepora alcicornis</i> Linnaeus, 1758	ben, hsb, crr	1–55	SE, CA, BE, SA	entire	3, 7, 43
<i>Millepora complanata</i> Lamarck, 1816	ben, hsb, crr	1–15	SE, CA, SA	se, sw	3, 33
<i>Millepora squarrosa</i> Lamarck, 1816	ben, hsb, crr	1	CA, SA	sw	3
<b>Family: Rosalindidae</b>					
<i>Rosalinda incrustans</i> (Kramp, 1947)	ben, epi, slp	310	EA	ne	4

(continued)

**Checklist of hydroids (Cnidaria: Hydrozoa) from the Gulf of Mexico. (continued)**

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<b>Family: Pennariidae</b>					
<i>Pennaria disticha</i> Goldfuss, 1820	ben, bns, hsb	0–29	SE, CA, BE, NE, SA, EA, IO, WP, EP	ne, se	21, 34, 38, 47
<b>Order: Leptothecata</b>					
<b>Family: Incertae Sedis</b>					
<i>Cuspidella costata</i> Hincks, 1868	ben, bns, hsb	16–20	NE, EA, IO, WP	ne, se	21, 40, 47
<i>Cuspidella humilis</i> (Alder, 1862)	ben, bns, hsb	32–110	SE, NE, SA, EA, WP, EP	nw, ne	20, 21, 23, 47
<i>Eucuspidella pedunculata</i> (Allman, 1877)	ben, dps, slp	475–4798	CA	se	1, 21, 48
<i>Lafoeina tenuis</i> M. Sars, 1874	ben, hsb	no data	SE, EA	ne, se	21, 47
<i>Oplorhiza parvula</i> Allman, 1877	ben, hsb	51–542	BE	se	1, 21, 47
<b>Family: Tiarannidae</b>					
<i>Modeeria rotunda</i> (Quoy & Gaimard, 1827)	ben, hsb, ocs, slp	34–1239	SE, NE, SA, EA, IO, WP	ne, se	21, 25, 28, 35, 47
<b>Family: Lovenellidae</b>					
<i>Lovenella gracilis</i> Clarke, 1882	ben, bsl, hsb	1–30	SE, CA, NE	nw, ne	23, 34, 46, 47
<i>Lovenella grandis</i> Nutting, 1901	ben, bsl	13–30	SE, NE	nw, ne	23, 34, 46
<b>Family: Haleciidae</b>					
<i>Halecium bermudense</i> Congdon, 1907	ben, bns, hsb	0–30	SE, CA, BE, SA, EP	nw, ne, se	21, 23, 36, 47
<i>Halecium capillare</i> (de Pourtalès, 1869)	ben, ocs, end	165–183	GO	se	1, 47
<i>Halecium filicula</i> Allman, 1877	ben, slp, hsb	256–531	SE	se	1, 21, 47
<i>Halecium halecinum</i> (Linnaeus, 1758)	ben, hsb	7–370	NE, EA, IO, WP, EP	ne, se	21, 47
<i>Halecium macrocephalum</i> Allman, 1877	ben, slp	67–278	SE, NE	ne, se	1, 21, 47
<i>Halecium nanum</i> Alder, 1859	bns, neu, epi, osp	0–1	SE, CA, BE, NE, WP, EP	nw, ne, se	20, 21, 23, 47
<i>Halecium sessile</i> Norman, 1867	ben, hsb	22–81	NE, EA, IO, WP, EP	ne, se	47, 50
<i>Halecium tenellum</i> Hincks, 1861	ben, hsb	0–439	SE, CA, BE, NE, SA, EA, IO, WP, EP	ne, se	21, 47
<i>Sagamihydra dyssymetra</i> (Billard, 1929)	ben, hsb	2–73	SE, CA, BE, SA, IO, WP	ne, se	10, 21, 34, 46
<b>Family: Kirchenpaueriidae</b>					
<i>Ventromma halecioides</i> (Alder, 1859)	ben, bns, hsb	0–5	SE, CA, BE, SA, EA, IO, WP, EP	ne, se	10, 21, 46, 47
<b>Family: Plumulariidae</b>					
<i>Hippurella annulata</i> Allman, 1877	ben, slp	196–518	SE	se	1
<i>Monotheca margareta</i> Nutting, 1900	ben, epi, hsb	0–73	SE, CA, BE, NE, SA, EA, EP	nw, ne, se	21, 22, 34, 46, 47
<i>Nemertesia distans</i> (Nutting, 1900)	ben, slp, end	210	GO	se	21, 47
<i>Nemertesia hippuris</i> (Allman, 1877)	ben, slp	357–481	SE	se	1, 21, 47
<i>Nemertesia longicornue</i> (Nutting, 1900)	ben, slp, end	373	GO	se	21, 47
<i>Nemertesia nigra</i> (Nutting, 1900)	ben, slp, end	221	GO	se	21, 47
<i>Nemertesia simplex</i> (Allman, 1877)	ben	65–683	SE, NE	nw, ne, se	1, 21, 47
<i>Plumularia attenuata</i> Allman, 1877	ben, slp	192–1054	SE, CA, EA, EP	se	1, 21, 47
<i>Plumularia filicula</i> Allman, 1877	ben	146–805	SE, NE, EP	se	21, 47
<i>Plumularia floridana</i> Nutting, 1900	ben, bns, hsb	0–20	SE, CA, BE, NE, SA, EA, IO, WP, EP	nw, ne, se	21, 23, 47
<i>Plumularia macrotheca</i> Allman, 1877	ben, slp, sft, end	823	GO	se	1, 21, 47
<i>Plumularia megalcephala</i> Allman, 1877	ben	26–644	SE, CA, EP	se	1, 21, 47
<i>Plumularia paucinoda</i> Nutting, 1900	ben, slp, end	221	GO	se	21, 47
<i>Plumularia setacea</i> (Linnaeus, 1758)	ben, hsb	0–370	SE, CA, BE, NE, EA, IO, WP, EP	nw, ne, se	20, 21, 47
<i>Plumularia strictocarpa</i> Pictet, 1893	ben, hsb	0–13	SE, CA, BE, NE, SA, EA, IO, WP, EP	nw, se	10, 21, 22

**Checklist of hydroids (Cnidaria: Hydrozoa) from the Gulf of Mexico. (continued)**

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<b>Family: Halopterididae</b>					
<i>Antennella quadriaurita</i> Ritchie, 1909	ben, hsb	50–400	CA, BE, EA, IO, WP	se	21, 47
<i>Antennella secundaria</i> (Gmelin, 1791)	ben, hsb	0–458	SE, CA, BE, EA, IO, WP, EP	ne, se	1, 21, 34, 47
<i>Diplopteroides longipinna</i> (Nutting, 1900)	ben, slp, end	366	GO	se	21, 47
<i>Diplopteroides quadricorne</i> (Nutting, 1900)	ben	37–366	CA	se	21, 47
<i>Halopteris alternata</i> (Nutting, 1900)	ben, hsb	0–44	SE, CA, BE, SA, EA	nw, ne, se	21, 22, 23, 44, 47
<i>Halopteris carinata</i> Allman, 1877	ben, hsb	1–161	SE, CA, BE, SA, EA	se	1, 21, 47
<i>Halopteris clarkei</i> (Nutting, 1900)	ben, hsb	18–333	SE	nw, ne, se	21, 44, 47
<i>Halopteris geminata</i> (Allman, 1877)	ben, hsb	139–644	CA	se	1, 21, 44, 47
<i>Halopteris tenella</i> (Verrill, 1874)	ben, bns, hsb	0–32	SE, CA, NE, EP	nw	21, 23, 44, 47
<i>Monostaechas quadridentata</i> (McCrary, 1859)	ben, hsb	15–542	SE, CA, BE, SA, EA, IO, WP, EP	nw, ne, se	1, 20, 21, 23, 43, 47
<i>Schizotricha dichotoma</i> Nutting, 1900	ben, slp, end	366–439	GO	se	21, 47
<b>Family: Aglaopheniidae</b>					
<b>Subfamily: Gymnangiinae</b>					
<i>Gymnangium hians balei</i> Billard, 1913	ben, hsb, end	8	GO	se	47 <sup>5</sup>
<i>Gymnangium sinuosum</i> (Fraser, 1925)	ben, hsb	64–174	SE, BE, EA	ne, se	4, 21
<i>Gymnangium speciosum</i> (Allman, 1877)	ben, hsb	6–183	SE, CA, BE	ne, se	1, 4, 21, 47
<b>Subfamily: Aglaopheniinae</b>					
<i>Aglaophenia apocarpa</i> Allman, 1877	ben, hsb	44–531	SE, CA, SA, EA	nw, ne, se	1, 4, 20, 21, 47
<i>Aglaophenia bicornuta</i> Nutting, 1900	ben, hsb	137–458	SE	se	4, 21, 47
<i>Aglaophenia constricta</i> Allman, 1877	ben, hsb, end	55	GO	se	1, 4, 21, 47
<i>Aglaophenia dichotoma</i> Kirchenpauer, 1872	ben, hsb	15–18	EA	ne	4, 21, 47
<i>Aglaophenia dubia</i> Nutting, 1900	ben, hsb	11–275	SE, CA, BE, SA	nw, ne, se	1, 10, 21, 22, 42, 43, 47
<i>Aglaophenia latecarinata</i> Allman, 1877	ben, neu, epi, hsb	0–516	SE, CA, BE, NE, SA, EA, IO, WP	nw, ne, se	1, 4, 20, 21, 22, 23, 47
<i>Aglaophenia rhynchocarpa</i> Allman, 1877	ben, hsb	5–458	SE, CA, BE, SA, EA	ne, se	1, 4, 21
<i>Aglaophenia tridentata</i> Versluys, 1899	ben, hsb	4–11	CA, SA, EA	ne, se	21, 47
<i>Aglaophenia trifida</i> L. Agassiz, 1862	ben, hsb	0–54	SE, CA, EP	nw, se	10, 21, 47
<i>Aglaophenopsis hirsuta</i> Fewkes, 1881	ben, slp	413–805	SE	se	4, 21, 47
<i>Cladocarpoidea yucatanicus</i> Bogle, 1984	ben, sft	40–366	CA	ne, se	5 <sup>6</sup>
<i>Cladocarpus carinatus</i> Nutting, 1900	ben, slp, hsb	413–805	SE	se	4, 21, 47
<i>Cladocarpus delicatus</i> Bogle, 1990	ben, slp, sft	256–397	SE	ne	6
<i>Cladocarpus dolichotheca</i> Allman, 1877	ben, ocs, slp, sft	67–751	SE	ne, se	1, 4, 21, 47
<i>Cladocarpus flexilis</i> Verrill, 1885	ben, ocs, slp	106–285	NE	ne	21, 47
<i>Cladocarpus flexuosus</i> Nutting, 1900	ben, slp, sft, end	788–1829	GO	ne	11, 21, 47
<i>Cladocarpus longipinna</i> Fraser, 1945	ben, ocs	60	SE	ne	21, 29, 47
<i>Cladocarpus obliquus</i> Nutting, 1900	ben, ocs, slp	148–366	SE, CA, NE	se	4, 21, 47
<i>Cladocarpus paradiseus</i> Allman, 1877	ben, ocs, slp, hsb	183–805	SE	se	1, 4, 21, 47
<i>Cladocarpus sigma</i> (Allman, 1877)	ben, ocs, slp, hsb	40–1574	SE, NE	se	1, 4, 21, 47
<i>Cladocarpus tenuis</i> Clarke, 1879	ben, ocs, slp, sft	185–961	SE, CA	ne, se	4, 18, 21, 47
<i>Cladocarpus ventricosus</i> Allman, 1877	ben, ocs, slp	180–531	SE	se	1, 4, 21, 47
<i>Lytocarpia bispinosa</i> (Allman, 1877)	ben, dps, slp	201–805	SE	ne, se	1, 4, 21, 47
<i>Lytocarpia distans</i> (Allman, 1877)	ben, dps, slp	339–986	SE	ne, se	1, 4, 21, 47
<i>Macrorhynchia allmani</i> (Nutting, 1900)	ben, bns, ocs, hsb	0–210	SE, CA, BE, SA	ne, se	1, 21, 47
<i>Macrorhynchia clarkei</i> (Nutting, 1900)	ben, ocs, slp	24–368	SE, CA, EA	se	21, 47
<i>Macrorhynchia grandis</i> (Clarke, 1879)	ben, ocs, slp	80–620	SE, CA	se	21, 47
<i>Macrorhynchia mercatoris</i> (Leloup, 1937)	ben, bns	15–18	CA	ne	4, 21, 47

(continued)

**Checklist of hydroids (Cnidaria: Hydrozoa) from the Gulf of Mexico. (continued)**

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Macrorhynchia philippina</i> Kirchenpauer, 1872	ben, bns, hsb	0–91	SE, CA, BE, SA, EA, IO, WP, EP	ne, se	21, 47
<b>Family: Lafoeidae</b>					
<b>Subfamily: Hebellinae</b>					
<i>Hebella venusta</i> (Allman, 1877)	ben, epi, hsb	7–457	SE, CA, BE, IO	ne, se	1, 21, 47
<i>Hebellopsis michaelsarsi</i> (Leloup, 1935)	ben, hsb	25–99	BE, EA, EP	se	47
<i>Hebellopsis scandens</i> (Bale, 1888)	ben, epi, hsb	0–82	SE, CA, BE, NE, SA, EA, IO, WP, EP	ne	21, 46
<i>Scandia mutabilis</i> (Ritchie, 1907)	ben, epi, hsb	0–102	SE, CA, BE, SA, EA, IO, WP, EP	ne, se	21, 47
<b>Subfamily: Lafoeinae</b>					
<i>Acryptolaria abies</i> (Allman, 1877)	ben, ocs, slp, hsb	161–929	CA	se	1, 21, 47
<i>Acryptolaria conferta</i> (Allman, 1877)	ben, ocs, slp, hsb	73–2395	SE, CA, BE, NE, EA, IO, WP, EP	ne, se	1, 21, 47
<i>Acryptolaria elegans</i> (Allman, 1877)	ben, slp	278	CA	se	1, 21, 47
<i>Acryptolaria longitheca</i> (Allman, 1877)	ben, ocs, slp, hsb	134–4681	SE, CA, BE	ne, se	1, 21, 47, 48
<i>Acryptolaria pulchella</i> (Allman, 1888)	ben, slp	229–801	SE, WP, EP	se	21, 47
<i>Acryptolaria rectangularis</i> (Jarvis, 1922)	ben, hsb	83–120	IO, WP	nw, ne	43 <sup>7</sup>
<i>Cryptolaria pectinata</i> (Allman, 1888)	ben, ocs, slp	161–421	CA, EA, IO, WP, EP	nw, ne, se	21, 43, 47, 49
<i>Cryptolaria rigida</i> (Fraser, 1940)	ben, slp	238	CA	se	21, 47
<i>Filellum serpens</i> (Hassall, 1848)	ben, epi, hsb	14–132	NE, SA, EA, WP, EP	nw, se	20, 21, 47
<i>Filellum serratum</i> (Clarke, 1879)	ben, epi, hsb	60–538	SE, CA, BE, SA, EA, IO, WP, EP	ne, se	21, 47
<i>Lafoea coalescens</i> Allman, 1877	ben, ocs, slp, hsb	60–256	BE	se	1, 21, 47
<i>Lafoea dumosa</i> (Fleming, 1820)	ben, hsb	7–823	CA, NE, EA, IO, WP, EP	se	21, 47
<i>Lafoea gracillima</i> (Alder, 1856)	ben, hsb	9–956	NE, EA, IO, WP, EP	se	21, 47
<i>Lafoea tenellula</i> Allman, 1877	ben, slp	218–329	CA, EA, WP	se	1, 21, 47
<i>Zygophylax convallarius</i> (Allman, 1877)	ben, ocs, slp, hsb	126–413	SE, CA, EP	nw, ne, se	1, 21, 43, 47, 48
<b>Family: Campanulariidae</b>					
<b>Subfamily: Campanularinae</b>					
<i>Campanularia brevicaulis</i> Nutting, 1915	ben, epi, slp, hsb, end	355	GO	se	21, 47
<i>Campanularia macroscypha</i> Allman, 1877	ben, ocs, slp, hsb	51–682	SE, BE	ne, se	1, 21, 35, 47
<b>Subfamily: Clytiinae</b>					
<i>Clytia coronata</i> (Clarke, 1879)	ben, hsb	0–46	SE, CA, NE, EP	nw, ne, se	20, 21, 23, 47
<i>Clytia gracilis</i> (M. Sars, 1850)	ben, hsb	0–73	SE, CA, BE, NE, SA, EA, IO, WP, EP	nw, ne, se	10, 20, 21, 22, 23, 36, 47
<i>Clytia hemisphaerica</i> (Linnaeus, 1767)	ben, hsb	0–1135	SE, CA, BE, NE, SA, EA, IO, WP, EP	ne, se	21, 23, 47
<i>Clytia hummelincki</i> (Leloup, 1935)	ben, hsb	0–56	CA, BE, SA, EA, EP	se	21, 47
<i>Clytia kincaidi</i> (Nutting, 1899)	ben, bns, hsb	0–5	SE, CA, NE, WP, EP	ne	40
<i>Clytia linearis</i> (Thornely, 1900)	ben, bns, hsb	0–73	SE, CA, BE, SA, EA, IO, WP, EP	nw, ne, se	20, 21, 22, 23, 28, 47
<i>Clytia longicyatha</i> (Allman, 1877)	ben, hsb	0–165	SE, CA, NE, EA, IO, WP, EP	nw, ne, se	21, 23, 40
<i>Clytia macrotheca</i> (Perkins, 1908)	ben, bns, hsb	1	CA, BE	nw, ne, se	21, 36, 47
<i>Clytia minuta</i> (Nutting, 1901)	ben, hsb	no data	NE, EP	se	21, 47
<i>Clytia noliformis</i> (McCrary, 1859)	ben, epi, hsb	0–40	SE, CA, BE, NE, SA, EA, IO, WP, EP	nw, ne, se	20, 21, 22, 23, 47
<i>Clytia paulensis</i> (Vanhöffen, 1910)	ben, hsb	3–127	SE, CA, BE, NE, SA, EA, IO, WP, EP	nw, ne	10, 23
<i>Clytia raridentata</i> (Alder, 1862)	ben, hsb	0–82	SE, CA, NE, EA, IO, WP, EP	se	21, 47

**Checklist of hydroids (Cnidaria: Hydrozoa) from the Gulf of Mexico. (continued)**

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<b>Subfamily: Obeliinae</b>					
<i>Laomedea amphora</i> L. Agassiz, 1862	ben, hsb	no data	NE	ne, se	21, 40, 47, 50
<i>Laomedea calceolifera</i> (Hincks, 1871)	ben, bns, hsb	0–1	NE, SA, EA, EP	se	47, 50
<i>Laomedea flexuosa</i> Alder, 1857	ben, bns, hsb	0–55	NE, EA	se	21, 47, 50
<i>Obelia bidentata</i> Clark, 1875	ben, bns, est, hsb	0–35	SE, CA, BE, NE, SA, EA, IO, WP, EP	nw, ne	20, 21, 23, 28, 47
<i>Obelia commissuralis</i> McCrady, 1859	ben, hsb	0–46	SE, CA, NE, EP	se	21, 47
<i>Obelia dichotoma</i> (Linnaeus, 1758)	ben, est, hsb	0–275	SE, CA, BE, NE, SA, EA, IO, WP, EP	nw, ne, se	20, 21, 22, 23, 36, 47
<i>Obelia equilateralis</i> Fraser, 1938	ben, hsb	0–22	CA, EP	nw	21, 23, 47
<i>Obelia geniculata</i> (Linnaeus, 1758)	ben, bns, est, hsb	0–82	SE, CA, NE, SA, EA, IO, WP, EP	nw, ne	20, 21, 22, 23, 47
<i>Obelia hyalina</i> Clarke, 1879	ben, hsb	0–2824	SE, CA, BE, NE, EA, IO, EP	nw, ne, se	21, 23
<i>Obelia longicyatha</i> Allman, 1877	ben, hsb	0–183	SE, CA, NE, EA, IO, WP, EP	ne, se	1, 47
<i>Obelia obtusidens</i> (Jäderholm, 1904)	ben, bsl, hsb	0	EP	nw	21, 23, 47
<b>Family: Thyscyphidae</b>					
<i>Cnidoscyphus marginatus</i> (Allman, 1877)	ben, hsb	1–805	SE, CA, BE, SA, EA	nw, ne, se	1, 21, 43, 47
<i>Thyscyphus ramosus</i> Allman, 1877	ben, hsb	0–457	SE, CA, SA, EA, IO	se	1, 21, 47
<b>Family: Syntheciidae</b>					
<i>Hincksella cylindrica</i> (Bale, 1888)	ben, bns, ocs, hsb	18–73	SE, CA, BE, EA, IO, WP, EP	nw, se	21, 47
<i>Hincksella formosa</i> (Fewkes, 1881)	ben, hsb	20–653	CA, SA, EP	se	21, 47
<i>Synthecium marginatum</i> (Allman, 1877)	ben, hsb	22–593	CA	se	1, 21, 47
<i>Synthecium tubithicum</i> (Allman, 1877)	ben, hsb	1–505	SE, CA, BE, EA	ne, se	1, 21, 47
<b>Family: Sertulariidae</b>					
<i>Diphasia digitalis</i> (Busk, 1852)	ben, hsb	1–390	CA, SA, EA, IO, WP	se	1, 21, 47
<i>Dynamena crisioides</i> Lamouroux, 1824	ben, bns, itd, hsb	0–37	SE, CA, BE, SA, EA, IO, WP, EP	se	21, 47
<i>Dynamena dalmasi</i> (Versluys, 1899)	ben, bns, ocs, hsb	8–366	SE, CA, BE, EA, WP, EP	nw, ne, se	1, 21, 22, 43, 47
<i>Dynamena disticha</i> (Bosc, 1802)	ben, epi, bns, hsb	0–66	SE, CA, BE, NE, SA, EA, IO, WP, EP	nw, ne, se	1, 10, 20, 21, 22, 23, 47
<i>Dynamena quadridentata</i> (Ellis & Solander, 1786)	ben, epi, hsb	0–256	SE, CA, BE, NE, SA, EA, IO, WP, EP	nw, se	21, 23, 47
<i>Dynamena tropica</i> Stechow, 1926	ben, end	no data	GO	se	21, 47
<i>Idiellana pristis</i> (Lamouroux, 1816)	ben, hsb	0–183	CA, SA, IO, WP	se	21, 47
<i>Sertularella areyi</i> Nutting, 1904	ben, ocs, slp, hsb	18–366	SE, BE, SA, IO, WP	se	21, 47
<i>Sertularella conica</i> Allman, 1877	ben, bns, ocs, hsb	1–110	SE, CA, BE, SA, EA, IO, EP	ne, se	1, 21, 23, 47
<i>Sertularella diaphana</i> (Allman, 1885)	ben, hsb	5–306	SE, CA, BE, IO, WP	nw, se	1, 21, 47
<i>Sertularella gayi</i> (Lamouroux, 1821)	ben, hsb	29–1453	SE, CA, BE, NE, SA, EA, WP	nw, ne, se	1, 20, 21, 23
<i>Sertularella humilis</i> Fraser, 1943	ben, slp, hsb, end	229	GO	se	21, 47
<i>Sertularella megastoma</i> Nutting, 1904	ben, slp, hsb	306	CA	se	21, 28
<i>Sertularella quadrata</i> Nutting, 1895	ben, ocs, slp, hsb	123–366	CA	se	21, 47
<i>Sertularella tenella</i> (Alder, 1856)	ben, hsb	46–2297	CA, NE, SA, EA, WP, EP	se	21, 47

(continued)

**Checklist of hydroids (Cnidaria: Hydrozoa) from the Gulf of Mexico. (continued)**

Taxon	Habitat-Biology	Depth (m)	Overall geographic range	GMx range	References/Endnotes
<i>Symplectoscyphus amphorifer</i> (Allman, 1877)	ben, ocs, slp, hsb	161–862	CA, EA	se	1, 21, 47
<i>Symplectoscyphus sieboldi</i> (Kirchenpauer, 1884)	ben, end	no depth data	GO	se	10, 21, 28
<i>Tridentata distans</i> (Lamouroux, 1816)	ben, hsb	0–54	SE, CA, BE, NE, SA, EA, IO, WP, EP	ne	10, 21, 34, 43, 46
<i>Tridentata flowersi</i> (Nutting, 1904)	ben, slp, hsb, end	275	GO	se	10, 21, 47
<i>Tridentata marginata</i> (Kirchenpauer, 1864)	ben, bns, hsb	0–55	SE, CA, BE, NE, SA, EA, IO, WP, EP	nw, ne, se	10, 21, 23, 47
<i>Tridentata tumida</i> (Allman, 1877)	ben, bns, hsb	1–2	BE, EA, IO, WP	se	1, 10, 21, 47
<i>Tridentata turbinata</i> (Lamouroux, 1816)	ben, bns, ocs, hsb	1–130	SE, CA, BE, SA, EA, IO, WP, EP	nw, ne, se	10, 21, 23, 36, 47

<sup>1</sup> Records of *Rhizogeton fusiformis* L. Agassiz, 1862 from the Gulf of Mexico (e.g., Joyce, 1961, Shier, 1965), and *Clava* sp. by Pequegnat and Pequegnat (1968), were likely based on hydroids of *R. sterreri* Calder, 1988.

<sup>2</sup> New record for GMx; ID: DRC; coll: 17/18 February 1976, aquaculture system, Marine Research Laboratory, St. Petersburg, FL, hydroid stages, W. C. Trimble, ROMIZ B1521.

<sup>3</sup> Records of *Syncoryne decipiens* Dujardin, 1845 and *S. mirabilis* (L. Agassiz, 1849) on *Sargassum* from the Gulf region are referred here to *Coryne sargassicola* Calder, 1988.

<sup>4</sup> New record for GMx; ID: DRC; coll: 12 July 2004, E of the Mississippi Delta, 29°06.373'N, 88°23.094'W, 310 m, S. D. Cairns, USNM 1072249; ROMIZ B3582.

<sup>5</sup> Bogle (1975) assigned the record of *Gymnangium hians* var. *balei* from the GMx to *G. sinuosum* (Fraser, 1925).

<sup>6</sup> New record for NE GMx; ID: DRC; coll: 5 May 1991, DeSoto Canyon rim, 29°56'N, 87°04'W, 73 m, Continental Shelf Associates, ROMIZ B1154.

<sup>7</sup> New record for NE GMx; ID: DRC; coll: 24 July 1981, SW Florida shelf, 26°16.72'N, 83°46.82'W, 83 m, Continental Shelf Associates, ROMIZ B1906.