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List of Deep-Sea Coral Taxa in the U.S. Gulf of Mexico: Depth and Geographic Distribution (v. 2021)

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This annex to the U.S. Gulf of Mexico chapter in “The State of Deep-Sea Coral Ecosystems of the United States” provides a revised and updated list of deep-sea coral taxa in the Phylum Cnidaria, Classes Anthozoa and Hydrozoa, known to occur in the waters of the Gulf of Mexico (Figure 1). Deep-sea corals are defined here as azooxanthellate, heterotrophic coral species occurring in waters 50 meters deep or more. Details are provided on the vertical and geographic extent of each species (Table 1). This list is an update of the peer-reviewed 2017 list by Etnoyer & Cairns (2017) and includes new taxa recognized through 2021. Depth ranges were revised based upon a review of literature and an assessment of data maintained by NOAA (2021) and the Department of Invertebrate Zoology Collections at the Smithsonian National Museum of Natural History (2021).

Taxonomic names are generally those currently accepted in the World Register of Marine Species ([WoRMS](https://www.marinespecies.org/)), and are arranged by order, and alphabetically within order by family, genus, and species. Data sources (references) listed are those principally used to establish geographic and depth distribution. Only those species found within the U.S. Gulf of Mexico Exclusive Economic Zone are presented here. Information from recent studies that have expanded the known range of species into the U.S. Gulf of Mexico have been included.

The total number of species of deep-sea corals documented for the U.S. Gulf of Mexico is 243. Since the 2017 list, three new species were described – *Acanella aurelia* Saucier & France, 2017, *Distichopathes hickersonae* Opresko & Brugler, 2020, and *Bathypathes pseudoalternata* Molodtsova, Opresko & Wagner, 2022; and three new genera were observed – *Heteropathes*, *Metallogorgia*, and *Pseudoanthomastus*, since the previous list in 2017. Octocorals have the highest species richness with 129 species. Hexacorals have the next highest richness, with 105 species including 73 stony corals and 32 black corals. The Stylasteridae number nine species and are nearly exclusively recorded in the southeast region. Only two species of lace corals are documented from the northeast Gulf of Mexico.

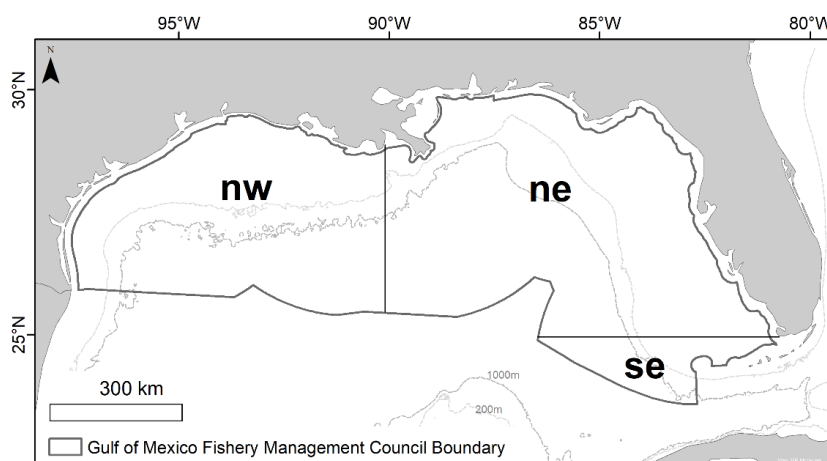


Figure 1. The U.S. Gulf of Mexico region as considered in this work. The Gulf of Mexico is divided into northwest (nw) and northeast (ne) sections as proposed in “Biodiversity of the Gulf of Mexico” (Felder & Camp 2009), along with a small section of the southeast (se; west of approximately 82.5° W longitude in U.S. waters).

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Cover Photo: A new species of black coral, *Distichopathes hickersonae*, observed on Elvers Bank at 172 m depth. Photo: NOAA/UNCW-UVP deep-sea reef

Table 1. List of known deep-sea coral taxa and their reported distributions in U.S. Gulf of Mexico waters. Blue background indicates newly described species since the 2017 list. Bold text indicates changes to the list found in Etnoyer & Cairns (2017). Additions or range extensions are denoted with an asterisk (*). Changes in taxonomy since 2017 are denoted with a cross (†) (e.g., species that were listed in 2017, but have since been given a new name or alternative spelling). References are numbered to correspond with citations following the table. Distribution: nw = northwest; ne = northeast; se = southeast; entire = throughout the U.S. Gulf of Mexico region. “NR” indicates ‘not reported’.

Higher Taxon	Species	Distribution	Depth Range (m)	References
Class Anthozoa				
Subclass Hexacorallia				
Order Antipatharia				
Family Antipathidae	*<i>Allopathes</i> sp. cf. of <i>A. denhartogi</i> Opresko, 2003	se	700	1
	<i>Allopathes desbonni</i> (Duchassaing & Michelotti, 1864)	nw	129-144	1,2
	<i>Antipathes atlantica</i> Gray, 1857 ^a	nw,ne,se	20-119	1,3,4
	<i>Antipathes furcata</i> Gray, 1857	nw,ne,se	62-134	1,3,4
	<i>Antipathes gracilis</i> Gray, 1860 ^a	nw,ne,se	31-99	3
	<i>Antipathes lenta</i> Pourtalès, 1871	ne,se	42-92	5,6
	<i>Stichopathes luetkeni</i> Brook, 1889 (= <i>Stichopathes lutkeni</i> , alternative spelling)	nw,ne,se	50-91	3,4
	†<i>Stichopathes occidentalis</i> (Gray, 1860)^b	nw,ne	70-110	1,7
	<i>Stichopathes pourtalesi</i> Brook, 1889	nw,ne,se	64-232	1,4,7,8
Family Aphanipathidae	<i>Acanthopathes humilis</i> (Pourtalès, 1867)	nw,se	129-494	3,5,9
	<i>Acanthopathes thyoidea</i> (Pourtalès, 1880)	nw,se	104-207	4,5
	<i>Aphanipathes pedata</i> (Gray, 1857) (= <i>Antipathes pedata</i>)	nw,ne	76-292	3,4
	<i>Aphanipathes salix</i> (Pourtalès, 1880) (= <i>Antipathes salix</i>)	nw,ne,se	106-263	3
	<i>Distichopathes filix</i> (Pourtalès, 1867)	nw,se	51-490	3,9
	<i>Distichopathes hickersonae</i> Opresko & Brugler, 2020	nw	172	1,10
	<i>Elatopathes abietina</i> (Pourtalès, 1874) (= <i>Aphanipathes abietina</i>)	nw,ne,se	62-263	3,4,7
	<i>Phanopathes expansa</i> (Opresko & Cairns, 1992)	nw	82-144	4,11
	<i>Phanopathes rigida</i> (Pourtalès, 1880) (= <i>Antipathes rigida</i>)	nw,se	64-419	3,5,7
Family Cladopathidae	*<i>Heteropathes americana</i> (Opresko, 2003)	nw	401	1
	<i>Sibopathes macrospina</i> Opresko, 1993	ne	448-538	12
Family Leiopathidae	<i>Leiopathes glaberrima</i> (Esper, 1972)	entire	150-800	3,7
Family Myriopathidae	<i>Plumapathes pennacea</i> (Pallas, 1766)	nw,se	29-91	4,7
	<i>Tanacetipathes barbadensis</i> (Brook, 1889)	nw	60-346	3,4
	<i>Tanacetipathes hirta</i> (Gray, 1857)	nw,se	51-179	3,4
	<i>Tanacetipathes tanacetum</i> (Pourtalès, 1880) (= <i>Antipathes tanacetum</i>)	nw,ne,se	60-117	3,4,7

Higher Taxon	Species	Distribution	Depth Range (m)	References
Family Myriopathidae cont.	<i>Tanacetipathes thamnea</i> (Warner, 1981)	nw,ne,se	70-106	1,4
Family Schizopathidae	<i>Bathypathes patula</i> Brook, 1889	se	348	1,7
	<i>Bathypathes pseudoalternata</i> Molodtsova, Opresko & Wagner, 2022^c	ne,se	452-2558	13
	<i>Parantipathes tetrasticha</i> (Pourtalès, 1868)	nw,se	173-428	3,5
Family Stylopathidae	<i>Stylopathes americana</i> (Duchassaing & Michelotti, 1860) (= <i>Antipathes americana</i>)	nw	55-159	5,14
	<i>Stylopathes columnaris</i> (Duchassaing, 1870) (= <i>Arachnopathes columnaris</i> , <i>Antipathes columnaris</i>)	nw,ne,se	62-346	3,14
	<i>Stylopathes litocrada</i> Opresko, 2006	nw,ne,se	91-274	14
Order Scleractinia				
Family Caryophylliidae	<i>Anomocora fecunda</i> (Pourtalès, 1871)	ne,se	37-640	15,16,17
	<i>Anomocora marchadi</i> (Chevalier, 1966)	ne	35-229	3,18
	<i>Anomocora prolifera</i> (Pourtalès, 1871) (= <i>Asterosmilia prolifera</i>)	ne	30-329	15
	<i>Caryophyllia</i> (<i>Caryophyllia</i>) <i>ambrosia caribbeana</i> Cairns, 1979	entire	183-2360	15
	*<i>Caryophyllia</i> (C.) <i>antillarum</i> Portalès, 1874	nw	639	1
	<i>Caryophyllia</i> (C.) <i>barbadensis</i> Cairns, 1979	nw	109-249	18
	<i>Caryophyllia</i> (C.) <i>berteriana</i> Duchassaing, 1850	nw,ne,se	99-1033	15,17
	<i>Caryophyllia</i> (C.) <i>horologium</i> Cairns, 1977	nw,ne,se	55-175	1,18,19
	<i>Caryophyllia</i> (C.) <i>polygona</i> Portalès, 1878	ne,se	310-1817	15
	<i>Cladocora debilis</i> Milne Edwards & Haime, 1849 ^d	ne,se	11-400	3,18
	?<i>Coenocyathus caribbeana</i> Cairns, 2000^e	nw	5-100	18
	<i>Coenocyathus parvulus</i> (Cairns, 1979) (= <i>Caryophyllia</i> (<i>Caryophyllia</i>) <i>parvula</i>)	nw,ne,se	97-399	3,15,20
	<i>Coenosmilia arbuscula</i> Portalès, 1874	nw,ne,se	74-622	15,20
	<i>Concentrotheca laevigata</i> (Pourtalès, 1871) (= <i>Thecocyathus laevigatus</i>)	ne,se	183-576	15
	<i>Dasmosmilia lymani</i> (Pourtalès, 1871)	ne,se	37-366	15,19
	<i>Dasmosmilia variegata</i> (Pourtalès, 1871)	ne,se	110-421	15
	<i>Desmophyllum dianthus</i> (Esper, 1794)	nw,ne,se	183-2250	1,15
	<i>Labyrinthocyathus facetus</i> Cairns, 1979	nw	385-402	1,15
	<i>Labyrinthocyathus langae</i> Cairns, 1979	nw	506-810	15
	<i>Lophelia pertusa</i> (Linnaeus, 1758) †[= <i>Desmophyllum pertusum</i> (Linnaeus, 1758)] ^f	nw,ne,se	270-900	3,15,21
<i>Oxysmilia rotundifolia</i> (Milne Edwards & Haime, 1849)	nw,ne,se	46-640	3,15,20	
<i>Paracyathus pulchellus</i> (Philippi, 1842)	entire	17-250	15,19,20	
<i>Phacelocyathus flos</i> (Pourtalès, 1878)	ne,se	20-560	15	

Higher Taxon	Species	Distribution	Depth Range (m)	References
Family Caryophylliidae cont.	<i>Phyllangia americana americana</i> Milne Edwards & Haime, 1849	nw,ne,se	0-53	18
	<i>Phyllangia pequegnatae</i> Cairns, 2000	nw,ne,se	48-112	18
	<i>Polycyathus senegalensis</i> Chevalier, 1966	ne	12-143	3,18
	<i>Pourtalesmilia conferta</i> Cairns, 1978	nw,ne	55-191	3,16,18,22
	<i>Premocyathus cornuformis</i> (Pourtales, 1868) (= <i>Caryophyllia cornuformis</i>)	ne,se	137-931	15
	<i>Rhizosmilia maculata</i> (Pourtales, 1874)	ne,se	1-508	18,19
	<i>Solenosmilia variabilis</i> Duncan, 1873	se	220-1383	15
	<i>Stephanocyathus (Odontocyathus) coronatus</i> (Pourtales, 1867)	ne,se	543-1250	15,23
	<i>Stephanocyathus (Stephanocyathus) diadema</i> (Moseley, 1876)	ne,se	795-2553	15,23
	<i>Stephanocyathus (S.) laevifundus</i> Cairns, 1977	se	300-1158	15
	<i>Stephanocyathus (S.) paliferus</i> Cairns, 1977	ne,se	220-715	15,23
	<i>Tethocyathus cylindraceus</i> (Pourtales, 1868)	nw,se	183-649	15
	<i>Thalamophyllia riisei</i> (Duchassaing & Michelotti, 1860)	nw,se	4-914	15,24,25
	<i>Trochocyathus (Trochocyathus) rawsonii</i> Pourtales, 1874	ne,se	55-700	15
Family Deltocyathidae	<i>Deltocyathus calcar</i> Pourtales, 1874	ne,se	81-675	15,17
	<i>Deltocyathus eccentricus</i> Cairns, 1979	nw,ne,se	183-910	15
	<i>Deltocyathus italicus</i> (Michelotti, 1838)	entire	403-2634	15,17
Family Dendrophylliidae	<i>Balanophyllia (Balanophyllia) floridana</i> Pourtales, 1868	ne,se	13-220	18,19,26
	<i>Balanophyllia (B.) palifera</i> Pourtales, 1878	nw,se	53-708	15,17,26
	<i>Bathypsammia tintinnabulum</i> (Pourtales, 1868)	ne,se	210-1115	15
	<i>Cladopsammia manuelensis</i> (Chevalier, 1966) (= <i>Rhizopsammia manuelensis</i>)	nw,ne,se	70-366	15
	<i>Dendrophyllia alternata</i> Pourtales, 1880	nw	276-900	15
	<i>Eguchipsammia cornucopia</i> (Pourtales, 1871) (= <i>Dendrophyllia cornucopia</i>)	ne,se	91-300	15,17
	<i>Eguchipsammia gaditana</i> (Duncan, 1873)	se	97-505	18
	<i>Enallopsammia profunda</i> (Pourtales, 1867)	ne,se	403-1748	15
	<i>Enallopsammia rostrata</i> (Pourtales, 1878)	nw,se	300-1646	1,15
	<i>Rhizopsammia goesi</i> (Lindstrom, 1877)	ne,se	5-119	18,26
	<i>Thecopsammia socialis</i> Pourtales, 1868	ne,se	214-878	1,15
	<i>Trochopsammia infundibulum</i> Pourtales, 1878	se	532-1472	15
Family Flabellidae	<i>Flabellum (Flabellum) floridanum</i> Cairns, 1991 (= <i>Flabellum fragile</i> Cairns, 1977)	ne,se	80-366	15,19
	<i>Flabellum (Ulocyathus) moseleyi</i> Pourtales, 1880	ne,se	216-1097	15
	<i>Javania cailleti</i> (Duchassaing & Michelotti, 1864)	nw,ne,se	30-1809	15,16,20
	<i>Polymyces fragilis</i> (Pourtales, 1868) (= <i>Rhizotrochus fragilis</i>)	entire	75-822	15,25

Higher Taxon	Species	Distribution	Depth Range (m)	References
Family Fungiacyathidae	<i>Fungiacyathus (Bathyactis) crispus</i> (Pourtalès, 1871)	ne	366-852	15
Family Guyniidae	<i>Guynia annulata</i> (Duncan, 1872)	entire	30-653	15,20
Family Oculinidae	<i>Madrepora carolina</i> (Pourtalès, 1871)	nw,ne,se	53-220	7,15,16
	<i>Madrepora oculata</i> Linnaeus, 1758	nw,ne,se	308-1500	15
	<i>Oculina tenella</i> Poursalès, 1871 §	ne,se	25-159	18
	<i>Oculina varicosa</i> Lesueur, 1821 §	ne	5-80	24,27
Family Pocilloporidae	<i>Madracis asperula</i> Milne Edwards & Haime, 1849 §	nw,ne,se	24-159	16,18,20
	<i>Madracis brueggemanni</i> Ridley, 1881	nw,ne,se	51-150	1,18,20
	<i>Madracis myriaster</i> (Milne Edwards & Haime, 1849) §	nw,ne,se	48-544	15,20
	† <i>Madracis pharensis</i> (Heller, 1868) § [= <i>Madracis pharensis pharensis</i> (Heller, 1868) in part]	ne,se	6-333	3,18
Family Rhizangiidae	<i>Astrangia poculata</i> (Ellis & Solander, 1786) §	entire	0-263	18,28
	<i>Astrangia solitaria</i> (Lesueur, 1817)	ne,se	0-51	3,29
Family Schizocyathidae	<i>Pourtalocyathus hispidus</i> (Pourtalès, 1878)	ne,se	349-1006	1,15
	<i>Schizocyathus fissilis</i> Poursalès, 1874	nw,ne,se	88-640	19,30
Family Stenocyathidae	<i>Stenocyathus vermiformis</i> (Pourtalès, 1868)	nw,ne,se	165-835	15,25
Family Turbinoliidae	<i>Deltocyathoides stimpsonii</i> (Pourtalès, 1871) (= <i>Peponocyathus stimpsonii</i>)	ne,se	110-553	1,15
	<i>Peponocyathus folliculus</i> (Pourtalès, 1868)	se	284-457	15

Higher Taxon	Species	Distribution	Depth Range (m)	References
Subclass Octocorallia				
Order Helioporacea				
Family †Aulopsammiidae (=Lithotelestidae)	<i>Epiphaxum breve</i> Bayer, 1992 ^h	ne	76-107	1,31
Order Alcyonacea				
Family Acanthogorgiidae	* <i>Acanthogorgia armata</i> Verrill, 1878	ne,nw	527-973	1
	<i>Acanthogorgia aspera</i> Poursalès, 1867	nw,se	56-1370	32,33
	<i>Acanthogorgia schrammi</i> (Duchassaing & Michelotti, 1864)	ne	37-475	1,32,34
Family Alcyoniidae	† <i>Bathyalcyon robustum delta</i> (Bayer, 1993) (= <i>Anthomastus (Bathyalcyon) robustus delta</i> Bayer, 1993)	nw	68-423	32,35
	* <i>Pseudoanthomastus</i> sp.	nw	274	1
Family Anthothelidae	<i>Anthothela quatriniae</i> Moore, Alderslade & Miller, 2017	nw	522	1,36
	<i>Anthothela tropicalis</i> Bayer, 1961	nw,ne	165-828	36,37

Higher Taxon	Species	Distribution	Depth Range (m)	References
Family Anthothelidae cont.	<i>Iciligorgia schrammi</i> Duchassaing, 1870	se	11-366	37
	<i>Lateothela grandiflora</i> (Tixier-Durivault & d'Hondt, 1974) ⁱ	ne	50-550	1,36
Family †Chelidonisididae ^j (=Isididae, in part)	<i>Chelidonisis aurantiaca mexicana</i> Bayer & Stefani, 1987	nw,ne	426-581	38
Family Chrysogorgiidae	<i>Chrysogorgia averta</i> Pante & Watling, 2011	ne	2281-2383	1,39
	<i>Chrysogorgia desbonni</i> Duchassaing & Michelotti, 1864	se	155-595	40
	<i>Chrysogorgia elegans</i> (Verrill, 1883)	entire	128-1716	32,40
	<i>Chrysogorgia fewkesii</i> Verrill, 1883	nw,se	430-1200	1,40
	<i>Chrysogorgia multiflora</i> Deichmann, 1936	se	1021-1200	40
	<i>Chrysogorgia spiculosa</i> (Verrill, 1883)	entire	914-2265	40
	<i>Iridogorgia magnispiralis</i> Watling, 2007	ne	2229	39
	*Iridogorgia pourtalesii Verrill, 1883	nw	1633	1
	<i>Iridogorgia splendens</i> Watling, 2007	ne	1422-2229	39
	*Metallogorgia sp.^k	nw	1804-2081	41
	<i>Trichogorgia viola</i> Deichmann, 1936	se	79	33,34
Family Clavulariidae	<i>Carijoa operculata</i> (Bayer, 1961)	se	76-298	37
	<i>Carijoa riisei</i> (Duchassaing & Michelotti, 1860)	nw,ne,se	13-732	1,32,37
	<i>Scleranthelia rugosa</i> var. <i>rugosa</i> (Pourtales, 1867)	ne,se	494	32,42
	<i>Scleranthelia rugosa</i> var. <i>musiva</i> Studer, 1878	ne,se	110-188	1
	<i>Stereotelesto corallina</i> (Duchassaing, 1870)	nw	8-183	32
	<i>Telesto flavula</i> Deichmann, 1936	ne,se	49-64	32,37
	<i>Telesto fruticulosa</i> Dana, 1846	nw	33-183	32
	<i>Telesto sanguinea</i> Deichmann, 1936	ne,se	24-110	32,37
	†Trachythela rudis Verrill, 1922 (= <i>Clavularia rudis</i> (Verrill, 1922))	nw,ne	1373-2207	39
Family Coralliidae	<i>Hemicorallium niobe</i> (Bayer, 1964) (= <i>Corallium niobe</i>)	nw	1426	1,43
Family Ellisellidae	<i>Ellisella atlantica</i> (Toeplitz, 1929) (= <i>Ctenocella (Viminella) atlantica</i>)	nw,se	24-214	1,20,32,34
	<i>Ellisella elongata</i> (Pallas, 1766) (= <i>Ctenocella (Ellisella) elongata</i> ; <i>Ellisella barbadensis</i> ; <i>Ctenocella (Viminella) barbadensis</i>)	nw,ne,se	20-479	20,37
	<i>Ellisella funiculina</i> (Duchassaing & Michelotti, 1864)	nw,ne,se	49-481	20,32,34
	<i>Ellisella schmitti</i> (Bayer, 1961) (= <i>Ctenocella (Ellisella) schmitti</i>)	nw,se	27-92	20,44
	<i>Nicella americana</i> Toeplitz, 1919	nw,ne	62-100	45
	<i>Nicella deichmannae</i> Cairns, 2007	nw,ne,se	62-188	46

Higher Taxon	Species	Distribution	Depth Range (m)	References
Family Ellisellidae cont.	<i>Nicella flagellum</i> (Studer, 1901)	nw	68–100	20,32
	<i>Nicella goreau</i> Bayer, 1973	nw,ne	45-146	1
	<i>Nicella guadalupensis</i> (Duchassaing & Michelotti, 1860)	nw,ne,se	62-311	16,32
	<i>Nicella hebes</i> Cairns, 2007	nw,ne	70-188	1,16,20,32
	<i>Nicella obesa</i> Cairns, 2007	ne	48-274	1,46
	<i>Nicella robusta</i> Cairns, 2007	nw,ne	106-188	1,46
	*<i>Nicella spicula</i> Cairns, 2007	ne	69	1
	<i>Nicella toepplitz</i> Viada & Cairns, 2007	nw,ne	69-188	1,46
	<i>Riisea paniculata</i> Duchassaing & Michelotti, 1860	nw,ne	93-188	16,20,32
Family Gorgoniidae	<i>Leptogorgia barbadensis</i> (Bayer, 1961)	se	27-76	1,37
	<i>Leptogorgia cardinalis</i> (Bayer, 1961)	ne,se	19-309	37,47
	<i>Leptogorgia euryale</i> (Bayer, 1952)	nw,ne	5-77	32,37
	<i>Leptogorgia medusa</i> (Bayer, 1952)	ne	13-77	32,37
	<i>Leptogorgia stheno</i> (Bayer, 1952)	nw,ne	26-183	32,37
	*<i>Leptogorgia violacea</i> (Pallas, 1766)¹	ne	60-80	48
	<i>Leptogorgia virgulata</i> (Lamarck, 1815)	nw,ne	3-82	32,37
Family †Keratoisididae ^j (formerly Isididae, in part)	<i>Acanella arbuscula</i> (Johnson, 1862) ^m [= <i>Acanella eburnea</i> (Pourtalès, 1868)]	nw,ne,se	309-2834	1,32,34,49
	<i>Acanella aurelia</i> Saucier & France, 2017	ne	657–815	49
	<i>Keratois flexibilis</i> (Pourtalès, 1868)	ne,se	170-592	1,33
	<i>Lepidisis caryophyllia</i> Verrill, 1883	se	1003-1064	1
Family Keroeididae	<i>Thelogorgia studeri</i> Bayer, 1992	se	62	50
†Mopseidae (=Isididae, in part)	<i>Stenisis humilis</i> (Deichmann, 1936)	ne	180-222	34,38
Family Nephtheidae	<i>Pseudodrifa nigra</i> (Pourtalès, 1868) (= <i>Capnella nigra</i> ; <i>Eunephthya nigra</i>)	se	183-804	33
Family Nidaliidae	<i>Chironephthya agassizii</i> (Deichmann, 1936) (= <i>Siphonogorgia agassizi</i>)	nw,ne,se	14-185	16,20,32,33
	<i>Chironephthya caribaea</i> (Deichmann, 1936)	nw	16-183	32
	<i>Nidalia deichmannae</i> Utinomi, 1954	nw,se	201-421	51
	<i>Nidalia dissidens</i> Verseveldt & Bayer, 1988	nw	274-410	1,39
	<i>Nidalia occidentalis</i> Gray, 1835	nw,ne,se	30-311	16,20,32,37, 51
Family Paragorgiidae	<i>Paragorgia johnsoni</i> Gray, 1862	nw	439-476	39,52
	<i>Paragorgia regalis</i> Nutting, 1912	ne	1369-1942	1,39
	<i>Sibogagorgia cauliflora</i> Herrera, Baco, Sanchez, 2010	ne	2206-2443	39,52,53

Higher Taxon	Species	Distribution	Depth Range (m)	References
Family Plexauridae	<i>Bebryce cinerea</i> Deichmann, 1936	nw,ne	64-274	33,34,54
	<i>Bebryce grandis</i> Deichmann, 1936	nw,ne	58-100	34,54
	<i>Bebryce parastellata</i> Deichmann, 1936	ne,se	40-514	33
	<i>Caliacis nutans</i> (Duchassaing & Michelotti, 1864) (= <i>Thesea nutans</i> Duchassaing & Michelotti, 1864)	nw,ne,se	37-188	20,32
	<i>Hypnogorgia pendula</i> Duchassaing & Michelotti, 1864	nw,ne	60-109	33,48
	<i>Lytrea plana</i> (Deichmann, 1936)	nw,ne,se	18-77	33,34,55
	<i>Muricea laxa</i> Verrill, 1864 ⁿ	ne,se	18-128	37,47
	<i>Muricea pendula</i> Verrill, 1864 ⁿ	nw,ne	13-125	32,37
	<i>Muriceides hirta</i> (Pourtales, 1868) (= <i>Trachymuricea hirta</i> Pourtales, 1868)	nw,ne,se	53-595	32,33,34
	<i>Muriceides kuekenthali</i> (Broch, 1912)	ne	53-1300	34
	<i>Paramuricea biscaya</i> Grasshoff, 1977	nw,ne	882-2441	39
	<i>Paramuricea multispina</i> Deichmann, 1936	nw,ne	278-527	1,45,56
	<i>Paramuricea placomus</i> (Linnaeus, 1758)	nw,ne	517-528	56
	<i>Placogorgia mirabilis</i> Deichmann, 1936	ne,se	53-185	34
	<i>Placogorgia rudis</i> Deichmann, 1936	nw,ne	64-127	20
	<i>Placogorgia tenuis</i> (Verrill, 1883)	ne,se	76-479	32,33,34
	<i>Placogorgia tribuloides</i> Bayer, 1959	se	51-373	57
	<i>Scleracis guadalupensis</i> (Duchassaing & Michelotti, 1860)	nw,ne,se	51-262	20,32,34
	<i>Scleracis petrosa</i> Deichmann, 1936	ne,se	62-1604	34
	<i>Spinimuricea atlantica</i> (Johnson, 1862) (= <i>Echinomuricea atlantica</i>)	nw,ne,se	183-530	42
	<i>Swiftia casta</i> (Verrill, 1883)	nw,se	53	58
	<i>Swiftia exserta</i> (Ellis & Solander, 1786)	nw,ne,se	21-494	20,32,34
	<i>Swiftia koreni</i> (Studer, 1889)	ne,se	221-985	1,33,59
	<i>Swiftia pallida</i> Madsen, 1970 [= <i>Swiftia dubia</i> (Thompson, 1929)] ^o	nw,ne	1371-1427	1,39
	<i>Thesea citrina</i> Deichmann, 1936	ne,se	71-159	1,48
	<i>Thesea grandiflora</i> Deichmann, 1936	nw,ne,se	101-260	20,32,34
	<i>Thesea granulosa</i> Deichmann, 1936	nw,ne	73-298	20,48
	<i>Thesea guadalupensis</i> Duchassaing & Michelotti, 1860	nw,ne	81-159	20,48
	<i>Thesea</i> sp. cf. <i>Thesea hebes</i> Deichmann, 1936	ne,se	78-377	34,48
	<i>Thesea nivea</i> Deichmann, 1936	nw,ne,se	63-120	32,48
<i>Thesea parviflora</i> Deichmann, 1936	nw,se	62-216	32,34,48	
<i>Thesea rubra</i> Deichmann, 1936	nw,ne	64-837	16,48	
<i>Thesea rugosa</i> Deichmann, 1936	nw,ne,se	90-301	20,32,34	
<i>Thesea solitaria</i> (Pourtales, 1868)	ne,se	185-318	34	

Higher Taxon	Species	Distribution	Depth Range (m)	References
Family Plexauridae, cont.	<i>Villogorgia nigrescens</i> Duchassaing & Michelotti, 1860	ne,se	58-478	16,34,48
Family Primnoidae	<i>Callogorgia americana</i> Cairns & Bayer, 2002 (= <i>Callogorgia americana americana</i>)	nw,se	103-848	59,60,61
	<i>Callogorgia delta</i> Cairns & Bayer, 2002 (= <i>Callogorgia americana delta</i>)	nw,ne	366-913	59,62
	<i>Callogorgia gracilis</i> (Milne Edwards & Haime, 1857)	nw	82-514	20,32,59,61
	<i>Callogorgia linguimaris</i> Cairns & Bayer, 2003	nw	438-549	1,31,61
	<i>Candidella imbricata</i> (Johnson, 1862)	ne,se	514-2063	63
	<i>Narella pauciflora</i> Deichmann, 1936	nw,se	738-1473	1,39
	*Narella spectabilis Cairns & Bayer, 2003	nw	2177	1
	<i>Paracalyptrophora carinata</i> Cairns & Bayer, 2004	nw	530-574	39,60
	<i>Plumarella dichotoma</i> Cairns & Bayer, 2004	ne,se	488-1065	1,39,63
	<i>Plumarella pellucida</i> Cairns & Bayer, 2004	se	439-587	1,39,63
<i>Plumarella pourtalesii</i> (Verrill, 1983)	se	198-882	63	
Family Spongiodermidae	<i>Callipodium rubens</i> (Verrill, 1872)	nw,ne	9-92	32,37
	<i>Diodogorgia nodulifera</i> (Hargitt, 1901)	nw,ne,se	30-183	1,37,47
Order Pennatulacea				
Family Anthoptilidae	<i>Anthoptilum grandiflorum</i> (Verrill, 1879)	ne	2400	1
Family Funiculinidae	<i>Funiculina quadrangularis</i> (Pallas, 1766)	nw,ne	55-2866	32,58
Family Protoptilidae	<i>Protoptilum thomsoni</i> Kölliker, 1872	nw,ne	357-512	34
Family Umbellulidae	<i>Umbellula guentheri</i> Kölliker, 1880	ne	1342	58
	<i>Umbellula lindahli</i> Kölliker, 1874	se,sw	2067-2866	32,33
Family Virgulariidae	<i>Acanthoptilum agassizii</i> Kölliker, 1872	ne,se	64-183	34
	<i>Acanthoptilum oligacis</i> Bayer, 1958	ne	183	34
	<i>Acanthoptilum pourtalesii</i> Kölliker, 1870 ^P	se	22-80	33
	<i>Stylatula antillarum</i> Kölliker, 1872	ne	100-183	34
	<i>Stylatula elegans</i> (Danielssen, 1860)	se	27-1005	34
	<i>Virgularia mirabilis</i> (Müller, 1776)	nw,ne	36-366	58
	<i>Virgularia presbytes</i> Bayer, 1955	nw,ne	9-110	32,37

Higher Taxon	Species	Distribution	Depth Range (m)	References
Class Hydrozoa				
Subclass Hydroidolina				
Order Anthoathecata				
Family Stylasteridae	<i>Crypthelia floridana</i> Cairns, 1986	se	593-823	64
	<i>Distichopora foliacea</i> Pourtalès, 1868	se	183-527	64

Family Stylasteridae cont.	<i>Errina cochleata</i> Pourtalès, 1867	se	194–534	64
	<i>Pliobothrus symmetricus</i> Pourtalès, 1868	se	150–400	64
	<i>Stylaster aurantiacus</i> Cairns, 1986	se	123–377	64
	<i>Stylaster duchassaingi</i> Pourtalès, 1867	ne,se	42–692	64
	<i>Stylaster erubescens</i> Pourtalès, 1868	ne,se	146–965	64
	<i>Stylaster filigranus</i> Pourtalès, 1871	se	384–549	64
	<i>Stylaster miniatus</i> (Portalès, 1869)	se	146–530	64

Notes

- a. *Antipathes atlantica* and *A. gracilis* show morphological and genetic similarity and may represent the same species.
- b. Opresko et al. (2016) identified a new *Stichopathes* sp. from the Flower Garden Banks National Marine Sanctuary (identified in the 2017 list as *S. cf. occidentalis*). A subsequent specimen collected from MacNeil Bank in 2017 (USNM 1517705) was identified by D. Opresko as *S. occidentalis*.
- c. Molodtsova & Opresko (2017) transferred *Bathypathes alternata* Brook, 1889 from the Pacific to the new genus *Alternatipathes*, but indicated that specimens reported as *Bathypathes alternata* from the western Atlantic, including the Gulf of Mexico represented a morphologically similar species, but which genetic data suggested was unrelated to *A. alternata*. They retained the Gulf of Mexico species in the genus *Bathypathes* pending further research. Molodtsova et al. (2022) have now described a new species, *Bathypathes pseudoalternata*, with records from both the Pacific and Atlantic, including the Gulf of Mexico.
- d. WoRMS lists the family for genus *Cladocora* as uncertain (*Scleractinia incertae sedis* – temporary name).
- e. Cairns (2000) lists *Coenocyathus caribbeana* as potentially occurring in the northwestern Gulf of Mexico based on a potential record of *Coenocyathus* n. sp. from the outer shelf edge banks of Texas at 100 m (Rezak et al. 1985), which was not accompanied by description or illustrations and the specimens were not available for examination. Cairns (2000) noted that Rezak's specimens could be *Phyllangia pequegnatae* Cairns, 2000.
- f. Transfer of *Lophelia pertusa* to the genus *Desmophyllum* has been proposed recently based on genetic similarity of mitochondrial genomes and microsatellites (Addamo et al. 2016), and this change has been accepted by WoRMS. However, because of the significant morphological difference between these two genera and a difference of opinion even among molecular scientists, we suggest delaying this transfer until additional molecular studies are done on more genes.
- g. Apozoanthellate scleractinian species - Species that has a facultative symbiotic relationship with unicellular photosynthetic dinoflagellates (*Symbiodinium* spp.).
- h. One National Museum of Natural History specimen from the Gulf of Mexico (USNM 1104847) is identified as *Epiphaxum micropora* (Bayer & Muzik, 1977). This specimen was from the same site and collection as the syntype of *E. breve* (USNM 91941) and was not referenced by Bayer (1992). This may be *E. breve* and therefore we have not included it in the current list pending further examination.
- i. Moore et al. (2017) used morphological characteristics and phylogenetic reconstructions using mitochondrial gene regions to describe a new genus, *Lateothela* n. gen., and a new combination: *Lateothela grandiflora* (Tixier-Durivault & d'Hondt, 1974) for a number of north Atlantic Ocean specimens previously identified as *Anthothela grandiflora*. These include several specimens from the Gulf of Mexico.
- j. Saucier et al. (2021) have revised the phylogeny of the bamboo corals (formerly Isididae), resulting in five families. The genus *Chelidonisis* has been moved to the new family, Chelidonisididae. The remaining bamboo corals described from the U.S. Gulf of Mexico all belong in the new family Keratoisididae.

- k. Records of *Metallogorgia* sp. are from video collected from recent surveys by NOAA Ship *Okeanos Explorer*, cruises EX1402L3 and EX1711. The morphology of this genus is distinctive, but may be shared among Chrysogorgiidae. Putative specimens of *Metallogorgia* sp. were collected in the Bahamas (USNM 55918) and Cuba (USNM 100892).
- l. Identified as *Leptogorgia* sp. in Etnoyer et al. 2016 (Ref. 45) – specimens subsequently confirmed as *L. violacea*.
- m. Saucier et al. (2017) proposed that *Acanella eburnea* be synonymized with *A. arbuscula*.
- n. Schubert et al. (2016) identified *Muricea laxa* and *M. pendula* as zooxanthellate octocorals, however, the depth range of these species in the Gulf of Mexico is significantly deeper than most other zooxanthellate octocorals. Sánchez et al. (2019) identifies the genus *Muricea* as aposymbiotic.
- o. Grasshoff (1985) proposed that *Swiftia pallida* was a junior synonym of the Mediterranean and E. Atlantic species *Swiftia dubia* (Thomson, 1929), based on specimens collected from North Atlantic seamounts off the Azores. However, based on western Atlantic records of *S. pallida* in museums and online databases, for the present we have retained *S. pallida* as a distinct species pending further genetic and morphological comparisons.
- p. Deichmann (1936) identified that a specimen of *Acanthoptilum pourtalesii* Kölliker, 1870 was collected off the Marquesas Keys by Pourtales, but noted that she did not examine specimens of this species.

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