Deep-Sea Coral Taxa in the U.S. Gulf of Mexico: Depth and Geographical Distribution (v. 2020)

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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 2020. Depth ranges were revised based upon a review of literature and an assessment of data maintained by NOAA (2020) and the Department of Invertebrate Zoology Collections at the Smithsonian National Museum of Natural History (2020).

Taxonomic names are generally those currently accepted in the World Register of Marine Species (WoRMS), 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. Octocorals have the highest species richness with a total of 129 species. One new species was described – *Acanella aurelia* Saucier & France, 2017, and one new genus was observed – *Metallogorgia*, since the previous list in 2017. Hexacorals have the next highest richness, with a total of 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 region of the Gulf of Mexico.

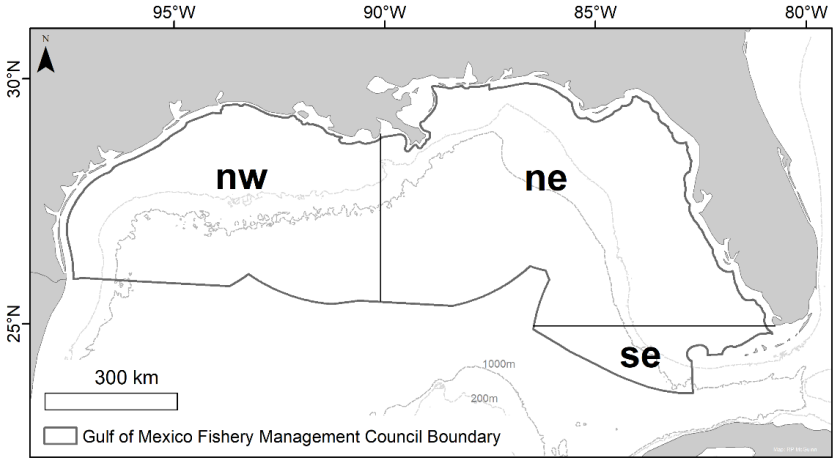

Figure 1. The U.S. Gulf of Mexico region as considered in this work. The Gulf of Mexico is divided into northwest (nw) and northeast (ne) sections as proposed in "Biodiversity of the Gulf of Mexico" (Felder & Camp 2009), along with a small section of the southeast (se; west of approximately 82.5° W longitude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

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Table 1. List of known deep-sea coral taxa and their reported distributions in U.S. Gulf of Mexico waters. Blue background indicates (one) newly described species since 2017. 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	***Allopathes* sp. *cf.* of *A. denhartogi* Opresko, 2003**	se	700	1
	Allopathes desbonni (Duchassaing & Michelotti, 1864)	nw	129-144	1,2
	Antipathes atlantica Gray, 1857 [a]	nw,ne,se	20-119	1,3,4
	Antipathes furcata Gray, 1857	nw,ne,se	62-134	1,3,4
	Antipathes gracilis Gray, 1860 [a]	nw,ne,se	31-99	3
	Antipathes lenta Pourtalès, 1871	ne,se	42-92	5,6
	Stichopathes luetkeni Brook, 1889 (= *Stichopathes lutkeni*, alternative spelling)	nw,ne,se	50-91	3,4
	†*Stichopathes occidentalis* (Gray, 1857) [b]	nw,ne	70-110	1,7
	Stichopathes pourtalesi Brook, 1889	nw,se	64-232	1,4,7
Family Aphanipathidae	*Acanthopathes humilis* (Pourtalès, 1867)	nw,se	129-494	3,5,8
	Acanthopathes thyoides (Pourtalès, 1880)	nw,se	104-207	4,5
	Aphanipathes pedata (Gray, 1857) *(= Antipathes pedata)*	nw,ne	76-292	3,4
	Aphanipathes salix (Pourtalès, 1880) *(= Antipathes salix)*	nw,ne,se	106-263	3
	Distichopathes filix (Pourtalès, 1867)	nw,se	51-490	3,8
	***Distichopathes hickersonae* Opresko & Brugler, 2020**	nw	172	1,9
	Elatopathes abietina (Pourtalès, 1874) *(= Aphanipathes abietina)*	nw,ne,se	62-263	3,4,7
	Phanopathes expansa (Opresko & Cairns, 1992)	nw	82-144	4,10
	Phanopathes rigida (Pourtalès, 1880) (= *Antipathes rigida)*	nw,se	64-419	3,5,7
Family Cladopathidae	***Heteropathes americana* (Opresko, 2003)**	nw	401	1
	Sibopathes macrospina Opresko, 1993	ne	448-538	11
Family Leiopathidae	*Leiopathes glaberrima* (Esper, 1972)	entire	150-800	3,7
Family Myriopathidae	*Plumapathes pennacea* (Pallas, 1766)	nw,se	29-91	4,7
	Tanacetipathes barbadensis (Brook, 1889)	nw	60-346	3,4
	Tanacetipathes hirta (Gray, 1857)	nw,se	51-179	3,4
	Tanacetipathes tanacetum (Pourtalès, 1880) (= *Antipathes tanacetum)*	nw,ne,se	60-117	3,4,7
	Tanacetipathes thamnea (Warner, 1981)	nw,ne,se	70-106	1,4

Higher Taxon	Species	Distribution	Depth Range (m)	References
Family Schizopathidae	*Bathypathes* sp. [c] (= *Bathypathes* cf. *alternata* Brook, 1889)	ne	364-424	12
	Bathypathes patula Brook, 1889	ne,se	348	12
	Parantipathes tetrasticha (Pourtalès, 1868)	nw,se	173-428	3,5
Family Stylopathidae	*Stylopathes americana* (Duchassaing & Michelotti, 1860) (= *Antipathes americana*)	nw	55-159	5,13
	Stylopathes columnaris (Duchassaing, 1870) (= *Arachnopathes columnaris, Antipathes columnaris*)	nw,ne,se	62-346	3,13
	Stylopathes litocrada Opresko, 2006	nw,ne,se	91-274	13
Order Scleractinia				
Family Caryophylliidae	*Anomocora fecunda* (Pourtalès, 1871)	ne,se	37-640	14,15,16
	Anomocora marchadi (Chevalier, 1966)	ne	35-229	3,17
	Anomocora prolifera (Pourtalès, 1871) (= *Asterosmilia prolifera)*	ne	30-329	14
	Caryophyllia (Caryophyllia) ambrosia caribbeana Cairns, 1979	entire	183-2360	14
	***Caryophyllia (C.) antillarum* Pourtalès, 1874**	nw	639	1
	Caryophyllia (C.) barbadensis Cairns, 1979	nw	109-249	17
	Caryophyllia (C.) berteriana Duchassaing, 1850	nw,ne,se	99-1033	14,16
	Caryophyllia (C.) horologium Cairns, 1977	nw,ne,se	55-175	1,17,18
	Caryophyllia (C.) polygona Pourtalès, 1878	ne,se	310-1817	14
	Cladocora debilis Milne Edwards & Haime, 1849 [d]	ne,se	11-400	3,17
	?*Coenocyathus caribbeana* Cairns, 2000 [e]	nw	5-100	17
	Coenocyathus parvulus (Cairns, 1979) (= *Caryophyllia (Caryophyllia) parvula)*	nw,ne,se	97-399	3,14,19
	Coenosmilia arbuscula Pourtalès, 1874	nw,ne,se	74-622	14,19
	Concentrotheca laevigata (Pourtalès, 1871) (= *Thecocyathus laevigatus*)	ne,se	183-576	14
	Dasmosmilia lymani (Pourtalès, 1871)	ne,se	37-366	14,18
	Dasmosmilia variegata (Pourtalès, 1871)	ne,se	110-421	14
	Desmophyllum dianthus (Esper, 1794)	nw,ne,se	183-2250	1,14
	Labyrinthocyathus facetus Cairns, 1979	nw	385-402	1,14
	Labyrinthocyathus langae Cairns, 1979	nw	506-810	14
	Lophelia pertusa (Linnaeus, 1758) †[= ***Desmophyllum pertusum* (Linnaeus, 1758)**] [f]	nw,ne,se	270-900	3,14,20
	Oxysmilia rotundifolia (Milne Edwards & Haime, 1849)	nw,ne,se	46-640	3,14,19
	Paracyathus pulchellus (Philippi, 1842)	entire	17-250	14,18,19
	Phacelocyathus flos (Pourtalès, 1878)	ne,se	20-560	14
	Phyllangia americana americana Milne Edwards & Haime, 1849	nw,ne,se	0-53	17
	Phyllangia pequegnatae Cairns, 2000	nw,ne,se	48-112	17
	Polycyathus senegalensis Chevalier, 1966	ne	12-143	3,17

Higher Taxon	Species	Distribution	Depth Range (m)	References
Family Caryophylliidae, cont.	*Pourtalosmilia conferta* Cairns, 1978	nw,ne	55-191	3,15,17,21
	Premocyathus cornuformis (Pourtalès, 1868) (= *Caryophyllia cornuformis)*	ne,se	137-931	14
	Rhizosmilia maculata (Pourtalès, 1874)	ne,se	1-508	17,18
	Solenosmilia variabilis Duncan, 1873	se	220-1383	14
	Stephanocyathus (Odontocyathus) coronatus (Pourtalès, 1867)	ne,se	543-1250	14,22
	Stephanocyathus (Stephanocyathus) diadema (Moseley, 1876)	ne,se	795-2553	14,22
	Stephanocyathus (S.) laevifundus Cairns, 1977	se	300-1158	14
	Stephanocyathus (S.) paliferus Cairns, 1977	ne,se	220-715	14,22
	Tethocyathus cylindraceus (Pourtalès, 1868)	nw,se	183-649	14
	Thalamophyllia riisei (Duchassaing & Michelotti, 1860)	nw,se	4-914	14,23,24
	Trochocyathus (Trochocyathus) rawsonii Pourtalès, 1874	ne,se	55-700	14
Family Deltocyathidae	*Deltocyathus calcar* Pourtalès, 1874	ne,se	81-675	14,16
	Deltocyathus eccentricus Cairns, 1979	nw,ne,se	183-910	14
	Deltocyathus italicus (Michelotti, 1838)	entire	403-2634	14,16
Family Dendrophylliidae	*Balanophyllia (Balanophyllia) floridana* Pourtalès, 1868	ne,se	13-220	17,18,25
	Balanophyllia (B.) palifera Pourtalès, 1878	nw,se	53-708	14,16,25
	Bathypsammia tintinnabulum (Pourtalès, 1868)	ne,se	210-1115	14
	Cladopsammia manuelensis (Chevalier, 1966) (= *Rhizopsammia manuelensis*)	nw,ne,se	70-366	14
	Dendrophyllia alternata Pourtalès, 1880	nw	276-900	14
	Eguchipsammia cornucopia (Pourtalès, 1871) (= *Dendrophyllia cornucopia*)	ne,se	91-300	14,16
	Eguchipsammia gaditana (Duncan, 1873)	se	97-505	17
	Enallopsammia profunda (Pourtalès, 1867)	ne,se	403-1748	14
	Enallopsammia rostrata (Pourtalès, 1878)	nw,se	300-1646	1,14
	Rhizopsammia goesi (Lindstrom, 1877)	ne,se	5-119	17,25
	Thecopsammia socialis Pourtalès, 1868	ne,se	214-878	1,14
	Trochopsammia infundibulum Pourtalès, 1878	se	532-1472	14
Family Flabellidae	*Flabellum (Flabellum) floridanum* Cairns, 1991 (= *Flabellum fragile* Cairns, 1977)	ne,se	80-366	14,18
	Flabellum (Ulocyathus) moseleyi Pourtalès, 1880	ne,se	216-1097	14
	Javania cailleti (Duchassaing & Michelotti, 1864)	nw,ne,se	30-1809	14,15,19
	Polymyces fragilis (Pourtalès, 1868) (= *Rhizotrochus fragilis*)	entire	75-822	14,24
Family Fungiacyathidae	*Fungiacyathus (Bathyactis) crispus* (Pourtalès, 1871)	ne	366-852	14
Family Guyniidae	*Guynia annulata* (Duncan, 1872)	entire	30-653	14,19

Higher Taxon	Species	Distribution	Depth Range (m)	References
Family Oculinidae	*Madrepora carolina* (Pourtalès, 1871)	nw,ne,se	53-220	7,14,15
	Madrepora oculata Linnaeus, 1758	nw,ne,se	308-1500	14
	Oculina tenella Pourtalès, 1871 g	ne,se	25-159	17
	Oculina varicosa Lesueur, 1821 g	ne	5-80	23,26
Family Pocilloporidae	*Madracis asperula* Milne Edwards & Haime, 1849 g	nw,ne,se	24-159	15,17,19
	Madracis brueggemanni Ridley, 1881	nw,ne,se	51-150	1,17,19
	Madracis myriaster (Milne Edwards & Haime, 1849) g	nw,ne,se	48-544	14,19
	†***Madracis pharensis* (Heller, 1868)** g [= *Madracis pharensis pharensis* (Heller, 1868) in part]	ne,se	6-333	3,17
Family Rhizangiidae	*Astrangia poculata* (Ellis & Solander, 1786) g	entire	0-263	17,27
	Astrangia solitaria (Lesueur, 1817)	ne,se	0-51	3,28
Family Schizocyathidae	*Stenocyathus vermiformis* (Pourtalès, 1868)	nw,ne,se	165-835	14,24
Family Stenocyathidae	*Pourtalocyathus hispidus* (Pourtalès, 1878)	ne,se	349-1006	1,14
	Schizocyathus fissilis Pourtalès, 1874	nw,ne,se	88-640	18,29
Family Turbinoliidae	*Deltocyathoides stimpsonii* (Pourtalès, 1871) (= *Peponocyathus stimpsonii*)	ne,se	110-553	1,14
	Peponocyathus folliculus (Pourtalès, 1868)	se	284-457	14

Higher Taxon	Species	Distribution	Depth Range (m)	References
Subclass Octocorallia				
Order Helioporacea				
Family Lithotelestidae	*Epiphaxum breve* Bayer, 1992 [h]	ne	76–107	1,30
Order Alcyonacea				
Family Acanthogorgiidae	***Acanthogorgia armata* Verrill, 1878**	ne,nw	527-973	1
	Acanthogorgia aspera Pourtalès, 1867	nw,se	56-1370	31,32
	Acanthogorgia schrammi (Duchassaing & Michelotti, 1864)	ne	37-475	1,31,33
Family Alcyoniidae	†***Bathyalcyon robustum delta* (Bayer, 1993)** (= *Anthomastus (Bathyalcyon) robustus delta* Bayer, 1993)	nw	68-423	31,34
	***Pseudoanthomastus* sp.**	nw	274	1
Family Anthothelidae	*Anthothela quattriniae* Moore, Alderslade & Miller, 2017	nw	522	1,35
	Anthothela tropicalis Bayer, 1961	nw,ne	165-828	35,36
	Iciligorgia schrammi Duchassaing, 1870	se	11-366	36
	Lateothela grandiflora (Tixier-Durivault & d'Hondt, 1974)[i]	ne	50-550	1,35
Family Chrysogorgiidae	*Chrysogorgia averta* Pante & Watling, 2011	ne	2281-2383	1,37
	Chrysogorgia desbonni Duchassaing & Michelotti,1864	se	155-595	38
	Chrysogorgia elegans (Verrill, 1883)	entire	128-1716	31,38
	Chrysogorgia fewkesii Verrill, 1883	nw,se	430-1200	1,38
	Chrysogorgia multiflora Deichmann, 1936	se	1021-1200	38
	Chrysogorgia spiculosa (Verrill, 1883)	entire	914-2265	38
	Iridogorgia magnispiralis Watling, 2007	ne	2229	37
	***Iridogorgia pourtalesii* Verrill, 1883**	nw	1633	1
	Iridogorgia splendens Watling, 2007	ne	1422-2229	37
	***Metallogorgia* sp.**[j]	nw	1804-2081	39
	Trichogorgia viola Deichmann, 1936	se	79	32,33
Family Clavulariidae	*Carijoa operculata* (Bayer, 1961)	se	76–298	36
	Carijoa riisei (Duchassaing & Michelotti, 1860)	nw,ne,se	13-732	1,31,36
	Scleranthelia rugosa var. *rugosa* (Pourtalès, 1867)	ne,se	494	31,40
	Scleranthelia rugosa var. *musiva* Studer, 1878	ne,se	110–188	1
	Stereotelesto corallina (Duchassaing, 1870)	nw	8-183	31
	Telesto flavula Deichmann, 1936	ne,se	49-64	31,36
	Telesto fruticulosa Dana, 1846	nw	33-183	31
	Telesto sanguinea Deichmann, 1936	ne,se	24-110	31,36
	†***Trachythela rudis* Verrill, 1922** (= *Clavularia rudis* (Verrill, 1922))	nw,ne	1373-2207	37
Family Coralliidae	*Hemicorallium niobe* (Bayer, 1964) (= *Corallium niobe*)	nw	1426	1,41

Higher Taxon	Species	Distribution	Depth Range (m)	References
Family Ellisellidae	*Ellisella atlantica* (T oeplitz, 1929) (= *Ctenocella (Viminella) atlantica*)	nw,se	24-214	1,19,31,33
	Ellisella elongata (Pallas, 1766) (= *Ctenocella (Ellisella) elongata; Ellisella barbadensis; Ctenocella (Viminella) barbadensis*)	nw,ne,se	20-479	19,36
	Ellisella funiculina (Duchassaing & Michelotti, 1864)	nw,ne,se	49-481	19,31,33
	Ellisella schmitti (Bayer, 1961) (= *Ctenocella (Ellisella) schmitti)*	nw,se	27-92	19,42
	Nicella americana Toeplitz, 1919	nw,ne	62-100	43
	Nicella deichmannae Cairns, 2007	nw,ne,se	62-188	44
	Nicella flagellum (Studer, 1901)	nw	68–100	19,31
	Nicella guadalupensis (Duchassaing & Michelotti, 1860)	nw,ne,se	62-311	15,31
	Nicella goreaui Bayer, 1973	nw,ne	45-146	1
	Nicella hebes Cairns, 2007	nw,ne	70-188	1,15,19,31
	Nicella obesa Cairns, 2007	ne	48-274	1,44
	Nicella robusta Cairns, 2007	nw,ne	106-188	1,44
	****Nicella spicula* Cairns, 2007**	ne	69	1
	Nicella toeplitzae Viada & Cairns, 2007	nw,ne	69-188	1,44
	Riisea paniculata Duchassaing & Michelotti, 1860	nw,ne	93-188	15,19,31
Family Gorgoniidae	*Leptogorgia barbadensis* (Bayer, 1961)	se	27-76	1,36
	Leptogorgia cardinalis (Bayer, 1961)	ne,se	19-309	36,45
	Leptogorgia euryale (Bayer, 1952)	nw,ne	5-77	31,36
	Leptogorgia medusa (Bayer, 1952)	ne	13-77	31,36
	Leptogorgia stheno (Bayer, 1952)	nw,ne	26-183	31,36
	****Leptogorgia violacea* (Pallas, 1766)** [k]	ne	60-80	46
	Leptogorgia virgulata (Lamarck, 1815)	nw,ne	3-82	31,36
Family Isididae	*Acanella arbuscula* (Johnson, 1862) [1] [= *Acanella eburnea* (Pourtalès, 1868)]	nw,ne,se	309-2834	1,31,33,47
	***Acanella aurelia* Saucier & France, 2017**	ne	657–815	47
	Chelidonisis aurantiaca mexicana Bayer & Stefani, 1987	nw,ne	426-581	48
	Keratoisis flexibilis (Pourtalès, 1868)	ne,se	170-592	1,32
	Lepidisis caryophyllia Verrill, 1883	se	1003-1064	1
	Stenisis humilis (Deichmann, 1936)	ne	180-222	33,48
Family Keroeididae	*Thelogorgia studeri* Bayer, 1992	se	62	49
Family Nephtheidae	*Pseudodrifa nigra* (Pourtalès, 1868) (= *Capnella nigra; Eunephthya nigra*)	se	183-804	32
Family Nidaliidae	*Chironephthya agassizii* (Deichmann, 1936) (= *Siphonogorgia agassizi)*	nw,ne,se	14-185	15,19,31,32
	Chironephthya caribaea (Deichmann, 1936)	nw	16-183	31
	Nidalia deichmannae Utinomi, 1954	nw,se	201-421	50
	Nidalia dissidens Verseveldt & Bayer, 1988	nw	274-410	51

Higher Taxon	Species	Distribution	Depth Range (m)	References
Family Nidaliidae, cont.	*Nidalia occidentalis* Gray, 1835	nw,ne,se	30-311	15,19,31,36, 50
Family Paragorgiidae	*Paragorgia johnsoni* Gray, 1862	nw	439-476	37,52
	Paragorgia regalis Nutting, 1912	ne	1369-1370	37
	Sibogagorgia cauliflora Herrera, Baco, Sanchez, 2010	ne	2206-2443	37,52,53
Family Plexauridae	*Bebryce cinerea* Deichmann, 1936	nw,ne	64-274	32,33,54
	Bebryce grandis Deichmann, 1936	nw,ne	58-100	33,54
	Bebryce parastellata Deichmann, 1936	ne,se	40-514	32
	Caliacis nutans (Duchassaing & Michelotti, 1864) (= *Thesea nutans* Duchassaing & Michelotti, 1864)	nw,ne,se	37-188	19,31
	Hypnogorgia pendula Duchassaing & Michelotti,1864	nw,ne	60 -109	32,46
	Lytreia plana (Deichmann, 1936)	nw,ne,se	18-77	32,33,55
	Muricea laxa Verrill, 1864 [m]	ne,se	18-128	36,45
	Muricea pendula Verrill, 1864 [m]	nw,ne	13-125	31,36
	Muriceides hirta (Pourtalès, 1868) (= *Trachymuricea hirta* Pourtalès, 1868)	nw,ne,se	53-595	31,32,33
	Muriceides kükenthali (Broch, 1912)	ne	53-1300	33
	Paramuricea biscaya Grasshoff, 1977	nw,ne	882-2441	37
	Paramuricea multispina Deichmann, 1936	nw,ne	278-527	1,43,56
	Paramuricea placomus (Linnaeus, 1758)	nw,ne	517-528	56
	Placogorgia mirabilis Deichmann, 1936	ne,se	53-185	33
	Placogorgia rudis Deichmann, 1936	nw,ne	64-127	19
	Placogorgia tenuis (Verrill, 1883)	ne,se	76-479	31,32,33
	Placogorgia tribuloides Bayer, 1959	se	51-373	57
	Scleracis guadalupensis (Duchassaing & Michelotti, 1860)	nw,ne,se	51-262	19,31,33
	Scleracis petrosa Deichmann, 1936	ne,se	62-1604	33
	Spinimuricea atlantica (Johnson, 1862) (= *Echinomuricea atlantica*)	nw,ne,se	183-530	40
	Swiftia casta (Verrill, 1883)	nw,se	53	58
	Swiftia exserta (Ellis & Solander, 1786)	nw,ne,se	21-494	19,31,33
	Swiftia koreni (Studer, 1889)	ne,se	221-985	1,32,51
	***Swiftia pallida* Madsen, 1970** [= *Swiftia dubia* (Thompson, 1929)] [n]	nw,ne	1371-1427	1,37
	Thesea citrina Deichmann, 1936	ne,se	71-159	1,46
	Thesea grandiflora Deichmann, 1936	nw,ne,se	101-260	19,31,33
	Thesea granulosa Deichmann, 1936	nw,ne	73-298	19,46
	Thesea guadalupensis Duchassaing & Michelotti, 1860	nw,ne	81-159	19,46
	Thesea sp. cf. *Thesea hebes* Deichmann, 1936	ne,se	78-377	33,46
	Thesea nivea Deichmann, 1936	nw,ne,se	63-120	31,46

Higher Taxon	Species	Distribution	Depth Range (m)	References
Family Plexauridae, cont.	*Thesea parviflora* Deichmann, 1936	nw,se	62-216	31,33,46
	Thesea rubra Deichmann, 1936	nw,ne	64-837	15,46
	Thesea rugosa Deichmann, 1936	nw,ne,se	90-301	19,31,33
	Thesea solitaria (Pourtalès, 1868)	ne,se	185-318	33
	Villogorgia nigrescens Duchassaing & Michelotti, 1860	ne,se	58-478	15,33,46
Family Primnoidae	*Callogorgia americana* Cairns & Bayer, 2002 (= *Callogorgia americana americana*)	nw,se	103-848	51,59,60
	Callogorgia delta Cairns & Bayer, 2002 (= *Callogorgia americana delta*)	nw,ne	366-913	51,61
	Callogorgia gracilis (Milne Edwards & Haime, 1857)	nw	82-514	19,31,51,60
	Callogorgia linguimaris Cairns & Bayer, 2003	nw	506	1,18,30,60
	Candidella imbricata (Johnson, 1862)	ne,se	514-2063	62
	Narella pauciflora Deichmann, 1936	nw,se	738-1473	1,37
	***Narella spectabilis* Cairns & Bayer, 2003**	nw	2177	1
	Paracalyptrophora carinata Cairns & Bayer, 2004	nw	530-574	37,59
	Plumarella dichotoma Cairns & Bayer, 2004	ne,se	488-1065	1,37,62
	Plumarella pellucida Cairns & Bayer, 2004	se	439-587	1,37,62
	Plumarella pourtalesii (Verrill, 1983)	se	198-882	62
Family Spongiodermidae	*Callipodium rubens* (Verrill, 1872)	nw,ne	9-92	31,36
	Diodogorgia nodulifera (Hargitt, 1901)	ne,se	30-183	36,45
Order Pennatulacea				
Family Anthoptilidae	*Anthoptilum grandiflorum* (Verrill, 1879)	ne	2400	1
Family Funiculinidae	*Funiculina quadrangularis* (Pallas, 1766)	nw,ne	55-2866	31,58
Family Protoptilidae	*Protoptilum thomsoni* Kölliker, 1872	nw,ne	357-512	33
Family Umbellulidae	*Umbellula guentheri* Kölliker, 1880	ne	1342	58
	Umbellula lindahli Kölliker, 1874	se,sw	2067-2866	31,32
Family Virgulariidae	*Acanthoptilum agassizii* Kölliker, 1872	ne,se	64-183	33
	Acanthoptilum oligacis Bayer, 1958	ne	183	33
	Acanthoptilum pourtalesii Kölliker, 1870º	se	22-80	32
	Stylatula antillarum Kölliker, 1872	ne	100-183	33
	Stylatula elegans (Danielssen, 1860)	se	27-1005	33
	Virgularia mirabilis (Müller, 1776)	nw,ne	36-366	58
	Virgularia presbytes Bayer, 1955	nw,ne	9-110	31,36

Higher Taxon	Species	Distribution	Depth Range (m)	References
Class Hydrozoa Subclass Hydroidolina				
Order Anthoathecata				
Family Stylasteridae	*Crypthelia floridana* Cairns, 1986	se	593–823	63
	Distichopora foliacea Pourtalès, 1868	se	183–527	63
	Errina cochleata Pourtalès, 1867	se	194–534	63
	Pliobothrus symmetricus Pourtalès, 1868	se	150–400	63
	Stylaster aurantiacus Cairns, 1986	se	123–377	63
	Stylaster duchassaingi Pourtalès, 1867	ne,se	42–692	63
	Stylaster erubescens Pourtalès, 1868	ne,se	146–965	63
	Stylaster filogranus Pourtalès, 1871	se	384–549	63
	Stylaster miniatus (Pourtalès, 1869)	se	146–530	63

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. The species is similar to *S. 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.

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. Apozooxanthellate 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. 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).

k. Identified as *Leptogorgia* sp. in Etnoyer et al. 2016 (Ref. 45) – specimens subsequently confirmed as *L. violacea.*

l. Saucier et al. (2017) proposed that *Acanella eburnea* be synonymized with *A. arbuscula*.

m. 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.

n. 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.

o. Deichmann (1936) identified that a specimen of *Acanthoptilum pourtalesii* Kölliker, 1870 was collected off the Marquesas Keys by Pourtalès, but noted that she did not examine specimens of this species.

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