

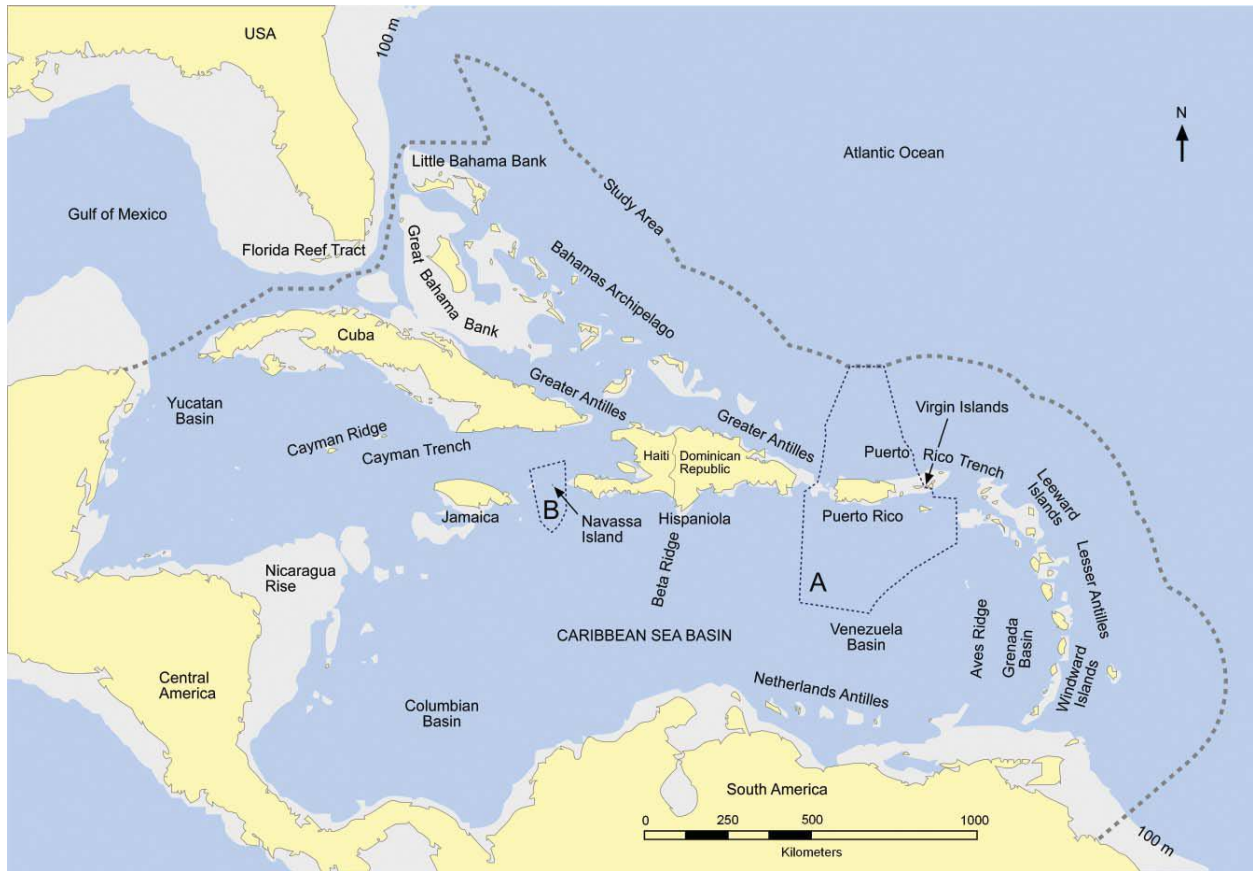
# Deep-Sea Coral Taxa in the U. S. Caribbean Region: Depth and Geographical Distribution

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An update of the status of the azooxanthellate, heterotrophic coral species that occur predominantly deeper than 50 m in the U. S. Caribbean territories is not given in this volume because of lack of significant additional data. However, an updated list of deep-sea coral species in Phylum Cnidaria, Classes Anthozoa and Hydrozoa, from the Caribbean region (Figure 1) is presented below. Details are provided on depth ranges and known geographic distributions within the region (Table 1). This list is adapted from Lutz & Ginsburg (2007, Appendix 8.1) in that it is restricted to the U. S. territories in the Caribbean, i.e., Puerto Rico, U. S. Virgin Islands, and Navassa Island, not the entire Caribbean and Bahamian region. Thus, this list is significantly shorter. The list has also been reordered alphabetically by family, rather than species, to be consistent with other regional lists in this volume, and authorship and publication dates have been added. Also, *Antipathes americana* is now properly assigned to the genus *Stylopathes*, and *Stylaster profundus* to the genus *Stenohelia*. Furthermore, many of the geographic ranges have been clarified and validated. Since 2007 there have been 20 species additions to the U.S. territories list (indicated with an asterisk in the list), mostly due to unpublished specimens from NMNH collections. As a result of this update, there are now known to be: 13 species of Antipatharia, 45 species of Scleractinia, 36 species of Octocorallia, and 14 species of Stylasteridae, for a total of 108 species found in the relatively small geographic region of U. S. Caribbean territories.

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**Figure 1.** The greater Caribbean region (map from Lutz & Ginsberg, 2007). The current list covers deepwater corals recorded from U.S. waters around (A) Puerto Rico and the U.S. Virgin Islands and (B) Navassa Island. The deep-sea coral list from Lutz & Ginsberg (2007) covered the entire Caribbean (indicated by the dashed line “Study Area”).

**Table 1.** List of known deep-sea coral species in Phylum Cnidaria, Class Anthozoa and Class Hydrozoa, and their reported distributions in U.S. waters around Puerto Rico, the U.S. Virgin Islands, and Navassa Island. Bold text and blue-shaded fields indicate newly described species, new list additions, or range extensions since Lutz & Ginsberg (2007). No symbols before bold & blue-shaded species names indicate newly described species, asterisks (\*) denote new list additions, crosses (†) show name changes, and bold & blue-shaded depth and/or region fields represent range changes. “NR” indicates a lack of reported distribution or depth information. References are numbered to correspond with citations following the table.

Distribution: PR = Puerto Rico; VI = U.S. Virgin Islands; N = Navassa.

Higher Taxon	Species	Distribution	Depth range (m)	References
<b>Class Anthozoa</b>				
<b>Subclass Hexacorallia</b>				
<b>Order Antipatharia</b>				
Family Antipathidae	<b>*Antipathes atlantica Gray, 1857</b>	PR	411	1
	<i>Antipathes caribbeana</i> Opresko, 1996	PR	11-100	2,3
	<b>*Antipathes gracilis Gray, 1860</b>	PR	219	1
	<i>Antipathes rhipidion</i> Pax, 1908	VI	?	4
	<b>*Stichopathes luetkeni Brooks, 1889</b>	N	14-115	1
	<b>*Stichopathes pourtalesi Brook, 1889</b>	PR	229	1
Family Myriopathidae	<i>Plumapathes pennacea</i> (Pallas, 1766)	PR,VI	3-229	5,6
	<i>Tanacetipathes hirta</i> (Gray, 1857)	PR	13-357	5,7
	<i>Tanacetipathes tanacetum</i> (Pourtalès, 1880)	PR	46-915	5
Family Schizopathidae	<i>Bathypathes patula</i> Brook, 1889	PR	100-5000	5,6
	<i>Parantipathes tetrasticha</i> (Pourtalès, 1868)	PR	175-428	5,7
Family Stylopathidae	<b>†Stylopathes americana (Duchassaing &amp; Michelotti, 1860)</b> (= <i>Antipathes americana</i> Duchassaing & Michelotti, 1860)	VI	37-532	7,8,9,10
	<b>†Stylopathes columnaris (Duchassaing, 1870)</b> (= <i>Antipathes columnaris</i> )	VI	73-567	5,6
<b>Order Scleractinia</b>				
Family Caryophylliidae	<i>Anomocora fecunda</i> (Pourtalès, 1871)	VI	37-640	11
	<i>Caryophyllia</i> (C.) <i>ambrosia caribbeana</i> Cairns, 1979	N,PR	183-1646	11
	<i>Caryophyllia</i> (C.) <i>antillarum</i> Pourtalès, 1874	VI	150-730	11,12
	<i>Caryophyllia</i> (C.) <i>berteriana</i> Duchassaing, 1850	PR	99-1033	11,12
	<i>Caryophyllia</i> (C.) <i>corrugata</i> Cairns, 1979	VI	183-380	11
	<i>Caryophyllia</i> (C.) <i>crypta</i> Cairns, 2000	VI	12-183	12
	<i>Caryophyllia</i> (C.) <i>paucipalata</i> Mosely, 1881	VI	714-843	11
	<i>Cladocora debilis</i> Milne Edwards & Haime, 1849	PR	32-480	12
	<i>Coenocyathus parvulus</i> (Cairns, 1979)	VI	97-399	11,12
	<i>Coenosmilia arbuscula</i> Pourtalès, 1874	VI	74-622	11,12
	<i>Colangia immersa</i> Pourtalès, 1871	PR	1-347	12
	<i>Desmophyllum dianthus</i> (Esper, 1794)	VI	155-2200	11,12
	<i>Desmophyllum striatum</i> Cairns, 1979	VI	277-823	11,12

Higher Taxon	Species	Distribution	Depth range (m)	References
Family Caryophylliidae, cont.	<b>*<i>Labyrinthocyathus facetus</i> Cairns, 1979</b>	VI	549-860	1
	<i>Lophelia pertusa</i> (Linnaeus, 1758)	PR,VI	146-1200	11,12
	<i>Oxysmilia rotundifolia</i> (Milne Edwards & Haime, 1848)	PR,VI	46-640	11,12
	<i>Paracyathus pulchellus</i> (Philippi, 1842)	PR	17-250	11,12
	<i>Rhizosmilia gerdae</i> Cairns, 1978	PR,VI	123-549	11,12
	<i>Rhizosmilia maculata</i> (Pourtalès, 1874)	PR	1-508	12
	<i>Stephanocyathus</i> (O.) <i>coronatus</i> (Pourtalès, 1867)	N,PR,VI	543-1250	1,11
	<i>Stephanocyathus</i> (S.) <i>diadema</i> (Moseley, 1876)	PR,VI	795-2113	11
	<i>Stephanocyathus</i> (S.) <i>laevifundus</i> Cairns, 1977	N	300-1158	11
	<i>Tethocyathus variabilis</i> Cairns, 1979	PR	320-488	11
	<i>Thalamophyllia riisei</i> (Duchassaing & Michelotti, 1860)	VI	4-914	11,12
	<i>Trochocyathus fossulus</i> Cairns, 1979	VI	205-380	11
<i>Trochocyathus rawsonii</i> Pourtalès, 1874	PR	55-700	11,12	
Family Deltocyathidae	<i>Deltocyathus agassizii</i> Pourtalès, 1867	N	495-907	1
	<i>Deltocyathus calcar</i> Pourtalès, 1874	PR,VI	81-675	11,12
	<i>Deltocyathus eccentricus</i> Cairns, 1979	PR,VI	183-907	11
	<i>Deltocyathus italicus</i> (Michelotti, 1838)	PR,VI	403-2634	11
Family Dendrophylliidae	<i>Balanophyllia palifera</i> Pourtalès, 1878	PR	53-708	1,11,12
	<i>Enallopsammia rostrata</i> (Portalès, 1878)	N,VI	300-1646	11
	<i>Rhizopsammia goesi</i> (Lindström, 1877)	VI	5-119	12,13
Family Flabellidae	<i>Flabellum moseleyi</i> Pourtalès, 1880	VI	216-1097	12
	<i>Javania cailleti</i> (Duchassaing & Michelotti, 1864)	N	86-2165	11,12
Family Fungiacyathidae	<b>*<i>Fungiacyathus</i> (B.) <i>crispus</i> (Portalès, 1871)</b>	VI	310-1010	1
	<i>Fungiacyathus</i> (B.) <i>symmetricus</i> (Portalès, 1871)	PR,VI	183-1664	11
Family Oculinidae	<i>Madrepora carolina</i> (Portalès, 1871)	PR,VI	53-801	11,12
	<i>Madrepora oculata</i> Linnaeus, 1758	PR,VI,N	144-1391	11
Family Pocilloporidae	<i>Madracis asperula</i> Milne Edwards & Haime, 1849	PR,VI	24-311	12
	<i>Madracis myriaster</i> (Milne Edwards & Haime, 1849)	PR,VI,N	20-1220	11,12
Family Rhizangiidae	<i>Astrangia poculata</i> (Ellis & Solander, 1786)	PR	0-263	11,12
Family Schizocyathidae	<i>Portalocyathus hispidus</i> (Portalès, 1878)	PR	349-1200	11
	<i>Schizocyathus fissilis</i> Pourtalès, 1874	PR	88-640	11,12
Family Stenocyathidae	<i>Stenocyathus vermiformis</i> (Portalès, 1868)	VI	165-835	11,12

Higher Taxon	Species	Distribution	Depth range (m)	References
<b>Class Anthozoa</b>				
<b>Subclass Octocorallia</b>				
<b>Order Alcyonacea</b>				
Family Acanthogorgiidae	<i>Acanthogorgia aspera</i> Pourtalès, 1867	PR	>183	14,15
Family Chrysogorgiidae	<i>Chrysogorgia desbonni</i> Duchassaing & Michelotti, 1864	PR	155-595	1,16
	<i>Chrysogorgia thrysiiformis</i> Deichmann, 1936	PR,VI	146-526	1,16
	<i>Iridogorgia</i> sp.	N	1187	1
Family Clavulariidae	<i>Stereotelesto corallina</i> (Duchassaing, 1870)	PR	23-188	14,17
	<i>Telestula</i> sp.	N	1033	1
Family Coralliidae	<i>Corallium</i> sp.	N	1033	1
Family Ellisellidae	<i>Ellisella elongata</i> (Pallas, 1766) (incl. <i>Ellisella barbadensis</i> (Duchassaing & Michelotti, 1864))	PR,VI	15-488	14,17,18
	<i>Nicella deichmannae</i> Cairns, 2007	PR	27-403	18
	<i>Nicella guadalupensis</i> (Duchassaing & Michelotti, 1860)	PR	27-395	18
	<i>Nicella obesa</i> Deichmann, 1936	N,PR,VI	174-819	1,18
	<i>Nicella toeplitzae</i> Viada & Cairns, 2007	PR	55-329	1
	<i>Rüsei paniculata</i> Duchassaing & Michelotti, 1860	PR	110-704	18
Family Isididae	<i>Acanella</i> sp.	N	1033	1
	<i>*Keratoisis flexibilis</i> (Portalès, 1868)	VI	170-878	19
Family Nephtheidae	<i>Stereonephthya portoricensis</i> Hargitt & Rogers, 1901	PR	>200	3
Family Nidaliidae	<i>*Nidalia occidentalis</i> Gray, 1835	PR	37-311	1
Family Plexauridae	<i>*Acanthacis austera</i> Deichmann, 1936	PR	>200	1
	<i>Bebryce cinerea</i> Deichmann, 1936	PR	>200	1
	<i>*Lytreaia plana</i> (Deichmann, 1936)	PR	104	1
	<i>*Placogorgia rudis</i> Deichmann, 1936	PR	104	1
	<i>Placogorgia tenuis</i> (Verrill, 1883)	PR	>200	1
	<i>*Pseudoplexaura porosa</i> (Houttuyn, 1772)	PR	3-283	1
	<i>Scleracis petrosa</i> Deichmann, 1936	PR	275-1607	1,20
	<i>Swiftia exserta</i> (Ellis & Solander, 1786)	PR	18-494	21
	<i>*†Thesea nutans</i> Duchassaing & Michelotti, 1864 (= <i>Caliacis nutans</i> (Duchassaing & Michelotti, 1864))	PR	183	1
	<i>*Villogorgia nigrescens</i> Duchassaing & Michelotti, 1860	N	176-275	1

Higher Taxon	Species	Distribution	Depth range (m)	References
Family Primnoidae	<i>Acanthoprimnoa goesi</i> (Aurivillius, 1931)	PR,VI	137-595	22
	<i>Acanthoprimnoa pectinata</i> Cairns & Bayer, 2004	PR	194-686	1,22
	† <i>Callogorgia americana</i> Cairns & Bayer, 2002 (= <i>Callogorgia americana americana</i> Cairns & Bayer, 2002)	PR	183-732	23
	<i>Narella bellissima</i> (Kükenthal, 1915)	PR	161-792	24
	<i>Narella pauciflora</i> Deichmann, 1936	PR	738-1473	24
	* <i>Primnoella polita</i> Deichmann, 1936	VI	922	25
Family Spongiodermatidae	<i>Diodogorgia nodulifera</i> (Hargitt & Rogers, 1901)	PR	14-183	14,17,26
<b>Order Pennatulacea</b>				
Family Anthoptilidae	* <i>Anthoptilum murrayi</i> Kölliker, 1880	PR	512	1
Family Protoptilidae	* <i>Protoptilum thomsoni</i> Kölliker, 1872	PR	329-512	1
Family Renillidae	<i>Renilla reniformis</i> (Pallas, 1766)	PR	0-108	14,27
Family Umbellulidae	* <i>Umbellula lindahli</i> Kölliker, 1875	VI	567	1

Higher Taxon	Species	Distribution	Depth range (m)	References
<b>Class Hydrozoa</b>				
<b>Subclass Hydroidolina</b>				
<b>Order Anthoathecata</b>				
Family Stylasteridae	<i>Crypthelia glossopoma</i> Cairns, 1986	VI	198-864	28
	<i>Crypthelia peircei</i> Pourtalès, 1867	VI	159-837	28
	<i>Crypthelia tenuiseptata</i> Cairns, 1986	VI	761-1061	28
	<i>Distichopora cervina</i> Pourtalès, 1867	PR	68-384	28
	<i>Pliobothrus echinatus</i> Cairns, 1986	PR	164-708	28
	<i>Pliobothrus symmetricus</i> Pourtalès, 1868	PR	150-400	28
	<i>Pliobothrus tubulatus</i> (Portalès, 1867)	PR	419-708	28
	† <i>Stenohelia profunda</i> Moseley, 1881 (= <i>Stylaster profundus</i> Moseley, 1881)	PR,VI	159-2012	28
	<i>Stylaster antillarum</i> Zibrowius & Cairns, 1982	PR	174-653	28
	<i>Stylaster atlanticus</i> Broch, 1936	PR	823	28
	<i>Stylaster complanatus</i> Pourtalès, 1867	VI	183-707	28
	<i>Stylaster duchassaingii</i> Pourtalès, 1867	VI	46-692	28
	<i>Stylaster roseus</i> (Pallas, 1766)	PR	1-373	28
	<i>Stylaster spatula</i> Cairns, 1986	PR	384-549	28

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