

A CHECKLIST OF STONY CORALS FROM THE
MALITBOG AREA OF WESTERN SOGOD BAY,
SOUTHERN LEYTE, PHILIPPINES

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ABSTRACT

The coral reefs of the Philippines are some of the most biodiverse in the world. This study consisted of a rapid diversity assessment of the coral communities in Sogod Bay, southern Leyte. A total of 276 species and 72 genera of stony corals were found across 7 dive sites, averaging 110 species per site. This number represents approximately 59% of all coral species reported for the Philippines. Four species were found that are considered to be uncommon to rare, and a total of 5 species found have not been reported to occur in the Philippines in previous published literature. The high coral diversity of Sogod Bay suggests that the reefs of the area are of high conservation importance.

Introduction

Coral species of the Philippines have been studied by several scientists beginning with Faustino (1927). Francisco Nemenzo spent a lifetime studying Philippine corals (Nemenzo, 1986), and described a plethora of new species. Gregor Hodgson studied corals with Nemenzo (Nemenzo & Hodgson, 1983), and described several new species from the Philippines (Hodgson & Ross, 1981; Hodgson, 1985). J. E. N. Veron and Hodgson reviewed all new species described by Nemenzo and presented a checklist of 411 species of Philippine corals based on the locations they had studied (Veron & Hodgson, 1989). Veron and Fenner (2000) presented a checklist of 305 species that they found in the Calamian Islands of northern Palawan, and concluded that 462 species were known from the Philippines. They also concluded that the Philippines appeared to have the world's richest coral fauna at that time, although the fauna of Indonesia was not

well enough known. Recent papers by Licuanan and Capili (2003, in press) have further added to the number of coral species known from the Philippines.

This study is a rapid diversity assessment of the coral communities and coral species found in a small segment of western Sogod Bay, southern Leyte, Philippines. The study was part of a much broader reef survey program by Coral Cay Conservation, the United Kingdom based non-government organization (NGO), in support of coral reef conservation and sustainable reef use (Doyle *et al.*, 2003).

Methods

Coral species checklists were taken at seven sites in Sogod Bay, Leyte in 2003 (Table 1), across approximately 8 km of fringing reef. The location of study areas is shown in Figure 1. Situated near the project base, the sites were surveyed by the Coral Cay program at the time. A rapid assessment method was used. Corals were surveyed in about 12 hours of diving in 14 scuba dives and one snorkel by D. Fenner to a maximum depth of 27.5 m. Most dives were to a maximum depth of 17 meters, and the area was searched for coral species in a roving fashion generally going from deep to shallow. Corals were recorded on each dive for presence/absence, not for abundance or for live cover. Such a technique searches a larger area than transects, and is thus more likely to find rare species (McClanahan & Muthiga, 1992). Identifications were based primarily on Veron (2000; 2002), Wallace (1999a; 1999b), Hoeksema (1987), Cairns and Zibrowius (1997), Randall and Cheng (1984), and references therein. Identification was done visually and collections were not made due to the conservation nature of the Coral Cay Conservation program. The stony corals recorded included the zooxanthellate scleractinian corals, a small number of zooxanthellate non-scleractinian corals (e.g., *Millepora*, *Heliopora*, and *Tubipora*: fire coral, blue coral, organ-pipe coral, respectively), and a small number of azooxanthellate scleractinian corals (*Tubastrea*, *Dendrophyllia*, *Rhizopsammia*, and

Balanophyllia). All produce calcium carbonate skeletons that contribute to reef building to some degree.

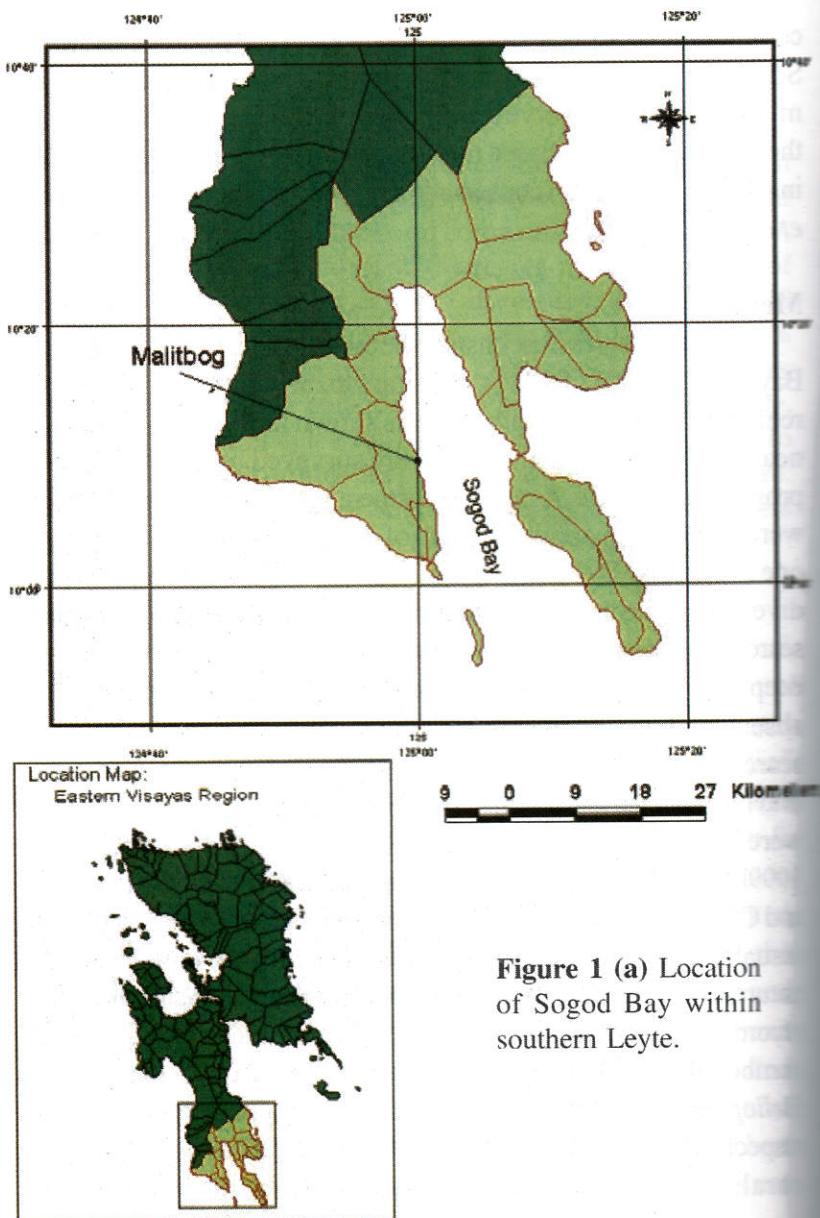


Figure 1 (a) Location of Sogod Bay within southern Leyte.

Figure 1 (b) Location of survey sites within Sogod Bay.

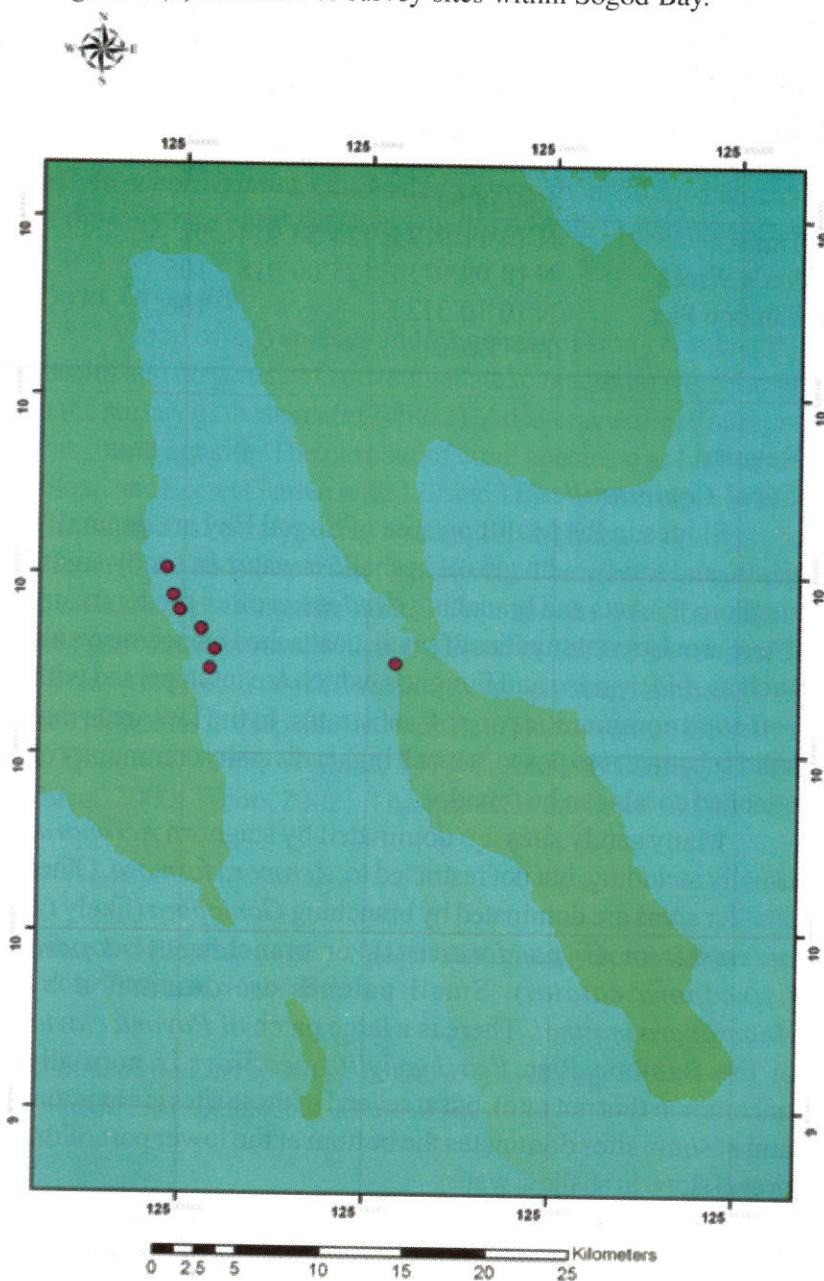


Table 1 Location and number of coral species found at each site

Site	Coordinates	Number of species
1. Secret Gardens	N 10°10'452 E 124°59'612	118
2. Logger's Eden	N 10°10'737 E 124°59'502	93
3. Sector 10	N 10°12'084 E 124°58'902	96
4. Timba	N 10°11'919 E 124°58'974	91
5. Jon's Wreck	N 10°09'973 E 125°00'018	105
6. Bamboo Pier	N 10°10'312 E 124°59'751	106

Results

Coral Communities

Slopes in the Malitbog area of Sogod Bay are generally gentle and sandy, with gravel in shallow water. In sandy areas, staghorn thickets and branching *Goniopora* often predominate. There are also communities of small, unattached branching corals such as *Anacropora* and Fungiids, which are interspersed with soft coral communities on soft substrates. In the few areas that solid substrate is exposed, a much higher diversity community of attached corals can be found.

Many sandy sites are dominated by staghorn *Acropora*, usually including, but not restricted to, *Acropora formosa*. Other smaller areas are dominated by branching *Goniopora* (likely *G. palmensis* or *G. pandoraensis*), or branching *Alveopora* (*Alveopora catalai*). Small patches are dominated by *Anacropora matthai*. There is a large patch of *Pavona clavus* at the Bamboo Pier. *Trachyphyllia geoffroyi* is normally uncommon (but not rare), but at several of these sites is common, and at some sites dominates the bottom at the lower part of the gravel slope in shallow water.

An unusual community is present in deeper water (about 15–25 m depth) at Timba. This is a community of deep foliose corals. It includes large fields of foliose *Mycedium elephantotis*,

Pachyseris foliosa, *Echinopora lamellosa*, *Montipora florida* and *Montipora mactanensis*, the latter two of which are uncommon to rare species in the Philippines and Southeast Asia. Also present are patches of an unidentified plating *Acropora* (possibly a new species), large fields of branching *Goniopora*, and *Alveopora catalai*. One healthy colony about 50 cm diameter of the very rare coral *Nemenzophyllum turbida* is also present.

Coral Diversity

A total of 276 species and 72 genera of stony corals (263 species and 66 genera of zooxanthellate scleractinia) were found in the survey of these reefs (Table 2). An average of 110 species was found per site. The number of coral species was highest at Liloan and Secret Garden with 120 and 118 species, respectively. The number of coral species was lowest at Timba and Logger's Eden with 91 and 93 species, respectively. The number of species at each site is presented in Table 2. Four species were found that are uncommon to rare, which are listed in Table 3. A total of 5 species were found which have not previously been reported from the Philippines in the published literature (Hoeksema, 1989; Veron & Hodgson, 1989; Wallace, 1999a; Veron & Fenner, 2000; Veron, 2000; Veron, 2002). These species are listed in Table 4.

Table 2 (following pages). Species list of stony corals identified across 7 sites in Sogod Bay.

* Unidentified *Acropora* sp or *Dendrophyllia* sp

**Confirmed sighting but unsure of site

	Species	Sites
Family Astrocoeniidae		
1.	<i>Palauastrea ramosa</i> (Yabe & Sugiyama, 1941)	3,6
2.	<i>Stylocoeniella armata</i> (Ehrenberg, 1834)	2
3.	<i>Stylocoeniella guentheri</i> (Bassett-Smith, 1890)	1,3
Family Pocilloporidae		
4.	<i>Pocillopora damicornis</i> (Linnaeus, 1758)	1,2,3,4,5,6
5.	<i>Pocillopora verrucosa</i> (Ellis & Solander, 1786)	1,2,4,6,8
6.	<i>Seriatopora caliendrum</i> (Ehrenberg, 1834)	1,2,6,7
7.	<i>Seriatopora hystrix</i> (Dana, 1846)	1,3,4,5,6
8.	<i>Stylophora subseriata</i> (Ehrenberg, 1834)	1,2,3,5,6,7
Family Acroporidae		
9.	<i>Acropora abrolhosensis</i> (Veron, 1985)	4,5,6,
10.	<i>Acropora aculeus</i> (Dana, 1846)	1,2,3,5
11.	<i>Acropora aspera</i> (Dana, 1846)	1
12.	<i>Acropora brueggemanni</i> (Brook, 1893)	1,2
13.	<i>Acropora carolineana</i> Nemenzo, 1976	1,4
14.	<i>Acropora cerealis</i> (Dana, 1846)	1,3,4,5,7
15.	<i>Acropora cytherea</i> (Dana, 1846)	3,4,6,7
16.	<i>Acropora digitifera</i> (Dana, 1846)	7
17.	<i>Acropora divaricata</i> (Dana, 1846)	1,2,3,4,5,6,7
18.	<i>Acropora echinata</i> (Dana, 1846)	1,3,7
19.	<i>Acropora elegans</i> (Milne Edwards and Haime, 1860)	4
20.	<i>Acropora exquisita</i> (Nemenzo, 1971)	2,5
21.	<i>Acropora fenneri</i> (Veron, 2000)	3
22.	<i>Acropora florida</i> (Dana, 1846)	1,2,3,4,5,6,7
23.	* <i>Acropora</i> sp. 1	1
24.	<i>Acropora formosa</i> (Dana, 1846)	1,2,3,5,6,7
25.	<i>Acropora grandis</i> (Brook, 1892)	4
26.	* <i>Acropora</i> sp. 2	1,2
27.	<i>Acropora granulosa</i> (Milne Edwards & Haime, 1860)	1,2,3,4,5,6
28.	<i>Acropora hoeksemai</i> (Wallace, 1997)	5
29.	<i>Acropora horrida</i> (Dana, 1846)	3,7
30.	<i>Acropora humilis</i> (Dana, 1846)	7
31.	<i>Acropora hyacinthus</i> (Dana, 1846)	5
32.	<i>Acropora insignis</i> (Nemenzo, 1967)	1,3,5
33.	<i>Acropora latistella</i> (Brook, 1891)	1,2,3,5,6,7
34.	<i>Acropora longicyathus</i> (Milne Edwards & Haime, 1860)	1,5,6
35.	<i>Acropora loripes</i> (Brook, 1892)	1,7
36.	<i>Acropora millepora</i> (Ehrenberg, 1834)	1,2,7
37.	<i>Acropora nasuta</i> (Dana, 1846)	3,5,7
38.	<i>Acropora palifera</i> (Lamarck, 1816)	1,2,4,
39.	<i>Acropora parilis</i> (Quelch, 1886)	1
40.	<i>Acropora plumosa</i> (Wallace & Wolstenholme, 1998)	1

41.	<i>Acropora samoensis</i> (Brook, 1891)	1,3,6
42.	<i>Acropora selago</i> (Studer, 1878)	1,2,3,4,5,6,7
43.	<i>Acropora simplex</i> (Wallace and Wolstenholme, 1998)	1
44.	<i>Acropora solitaryensis</i> (Veron & Wallace, 1984)	1,2,4,6
45.	<i>Acropora speciosa</i> (Quelch, 1886) as in Veron, 2000	1,4
46.	<i>Acropora speciosa</i> as in Wallace 1999	1,2,3
47.	<i>Acropora subglabra</i> (Brook, 1891)	1,6
48.	<i>Acropora subulata</i> (Dana, 1846)	3,5
49.	<i>Acropora tenuis</i> (Dana, 1846)	3,5,7
50.	<i>Acropora valenciennesi</i> (Milne Edwards & Haime, 1860)	2,6,7
51.	<i>Acropora vaughani</i> (Wells, 1954)	1,3,5
52.	<i>Anacropora forebesi</i> (Ridley, 1884)	3,7
53.	<i>Anacropora matthai</i> (Pillai, 1973)	3,4, 5, 6,7
54.	<i>Anacropora puertogalerae</i> (Nemenzo, 1964)	7
55.	<i>Anacropora reticulata</i> (Veron and Wallace, 1984)	1,4
56.	<i>Anacropora spinosa</i> (Rehberg, 1892)	1,7
57.	<i>Astreopora gracilis</i> (Bernard, 1896)	1,3
58.	<i>Astreopora myriophthalma</i> (Lamarck, 1816)	1,2,4,6,7
59.	<i>Astreopora ocellata</i> (Bernard, 1896)	7
60.	<i>Astreopora randalli</i> (Lamberts, 1980)	1,4,6
61.	<i>Astreopora suggesta</i> (Wells, 1954)	5
62.	<i>Montipora aequituberculata</i> (Bernard, 1897)	1,6,7
63.	<i>Montipora altasepta</i> (Nemenzo, 1967)	1,7
64.	<i>Montipora cactus</i> (Bernard, 1897)	3
65.	<i>Montipora capitata</i> (Dana, 1846)	1,7
66.	<i>Montipora confusa</i> (Nemenzo, 1967)	1,5
67.	<i>Montipora corbettensis</i> (Veron & Wallace, 1984)	5
68.	<i>Montipora digitata</i> (Dana, 1846)	1,2,3,4,7
69.	<i>Montipora florida</i> (Nemenzo, 1967)	4
70.	<i>Montipora gaimardi</i> (Bernard, 1897)	1,6
71.	<i>Montipora hispida</i> (Dana, 1846)	1,4,5,7
72.	<i>Montipora incrassata</i> (Dana, 1846)	5,6
73.	<i>Montipora informis</i> (Bernard, 1897)	1
74.	<i>Montipora mactanensis</i> (Nemenzo, 1979)	4
75.	<i>Montipora malampaya</i> (Nemenzo, 1967)	1,4
76.	<i>Montipora mollis</i> (Bernard, 1897)	6
77.	<i>Montipora palawanensis</i> (Veron, 2000)	4
78.	<i>Montipora spongodes</i> (Bernard, 1897)	1,3,7
79.	<i>Montipora stellata</i> (Bernard, 1897)	1,2,3,4,5,6,
80.	<i>Montipora tuberculosa</i> Lamarck, 1816)	1,2,3

81.	<i>Montipora undata</i> (Bernard, 1897)	6,
82.	<i>Montipora venosa</i> (Ehrenberg, 1834)	1,2
83.	<i>Montipora vietnamensis</i> (Veron, 2000)	1,6
<u>Family Poritidae</u>		
84.	<i>Alveopora catalai</i> (Wells, 1968)	4,5,6
85.	<i>Alveopora gigas</i> (Veron, 1985)	4,6
86.	<i>Alveopora spongiosa</i> (Dana, 1846)	3,5
87.	<i>Goniopora columnata</i> (Dana, 1846)	5
88.	<i>Goniopora lobata</i> (Milne Edwards and Haime, 1860)	1,6
89.	<i>Goniopora pandoraensis</i> (Veron and Pichon, 1982)	4
90.	<i>Goniopora stutchburyi</i> (Wells, 1955)	3
91.	<i>Porites annae</i> (Crossland, 1952)	1,2,3,7
92.	<i>Porites attenuata</i> (Nemenzo, 1955)	1,3,4,5,6
93.	** <i>Porites cf Bernardi</i> (Vaughan 1907)	1
94.	<i>Porites cylindrica</i> (Dana, 1846)	1,2,6,7
95.	<i>Porites evermanni</i> (Vaughan, 1907)	6
96.	<i>Porites horizontalata</i> (Hoffmeister, 1925)	7
97.	<i>Porites lobata</i> (Dana, 1846)	1,6,7
98.	<i>Porites lutea</i> (Milne Edwards and Haime, 1851)	1,2,4,7
99.	<i>Porites monticulosa</i> (Dana, 1846)	4
100.	<i>Porites rus</i> (Forskål, 1775)	4,7
101.	<i>Porites solida</i> (Forskål, 1775)	2,7
102.	<i>Porites vaughani</i> (Crossland, 1952)	1,2,7
<u>Family Siderastreidae</u>		
103.	<i>Coscinaraea columnata</i> (Dana, 1846)	1
104.	<i>Psammocora contigua</i> (Esper, 1797)	4
105.	<i>Psammocora digitata</i> (Milne Edwards & Haime, 1851)	1
106.	<i>Psammocora explanulata</i> (van der Horst, 1922)	6
107.	<i>Psammocora nierstraszi</i> (van der Horst, 1921)	1,2,3
108.	<i>Psammocora profundacella</i> (Gardiner, 1898)	1,2,3,4,5,6
109.	<i>Psammocora superficialis</i> (Gardiner, 1898)	4,5
<u>Family Agariciidae</u>		
110.	<i>Coeloseris mayeri</i> (Vaughan, 1918)	1,2,4,7
111.	<i>Gardineroseris planulata</i> (Dana, 1846)	1,3,4,5,6
112.	<i>Leptoseris explanata</i> (Yabe & Sugiyama, 1941)	1,2,3,5
113.	<i>Leptoseris myctoseroidea</i> (Wells, 1954)	1,2,3,4,6
114.	<i>Leptoseris papyracea</i> (Dana, 1846)	1,3,4,5,6
115.	<i>Leptoseris scabra</i> (Vaughan, 1907)	2,3,4
116.	<i>Leptoseris striata</i> (Fenner & Veron, 2000)	4
117.	<i>Pachyseris foliosa</i> (Veron, 1990)	4,7
118.	<i>Pachyseris gemmae</i> (Nemenzo, 1955)	3,4,6
119.	<i>Pachyseris rugosa</i> (Lamarck, 1801)	1,2,3,4,7
120.	<i>Pachyseris speciosa</i> (Dana, 1846)	1,2,3,4,5,6

121.	<i>Pavona bipartita</i> (Nemenzo, 1980)	2,3,5,6,7
122.	<i>Pavona cactus</i> (Forskål, 1775)	2,4,6,7
123.	<i>Pavona clavus</i> (Dana, 1846)	6
124.	<i>Pavona decussata</i> (Dana, 1846)	3,5,7
125.	<i>Pavona explanulata</i> (Lamarck, 1816)	1,2,3,4,5,6,7
126.	<i>Pavona frondifera</i> (Lamarck, 1816)	1,3,7
127.	<i>Pavona varians</i> (Verrill, 1864)	1,2,3,4,5,6,7
128.	<i>Pavona venosa</i> (Ehrenberg, 1834)	7

Family Fungiidae

129.	<i>Ctenactis crassa</i> (Dana, 1846)	1,3,6,7
130.	<i>Ctenactis echinata</i> (Pallas, 1766)	1,3,5,7
131.	<i>Cycloseris colini</i> (Veron, 2000)	4
132.	<i>Cycloseris costulata</i> (Ortmann, 1889)	1,4
133.	<i>Cycloseris cyclolites</i> (Lamarck, 1801)	1,2,3,3,5
134.	<i>Cycloseris erosa</i> (Döderlein, 1901)	1,7
135.	<i>Cycloseris sinensis</i> (Milne Edwards and Haime, 1851)	3,6
136.	<i>Cycloseris tenuis</i> (Dana, 1846)	1,2
137.	<i>Cycloseris vaughani</i> (Boschma, 1923)	1,3,7
138.	<i>Diaseris distorta</i> (Michelin, 1843)	13,6
139.	<i>Diaseris fragilis</i> (Alcock, 1893)	4,6
140.	<i>Fungia concinna</i> (Verrill, 1864)	1,6,7
141.	<i>Fungia fungites</i> (Linneaus, 1758)	1
142.	<i>Fungia granulosa</i> (Klunzinger, 1879)	1,2,4,5
143.	<i>Fungia horrida</i> (Dana, 1846)	1,4,5,6
144.	<i>Fungia moluccensis</i> (Horst, 1919)	1,2,3,4,5,6,7
145.	<i>Fungia paumotensis</i> (Stutchbury, 1833)	2,4,5,6,7
146.	<i>Fungia scruposa</i> (Klunzinger, 1816)	1,3,4,5,6
147.	<i>Fungia spinifer</i> (Claereboudt & Hoeksema 1987)	7
148.	<i>Halomitra clavator</i> (Hoeksema, 1989)	6
149.	<i>Halomitra pileus</i> (Linnaeus, 1758)	1,4,5,6
150.	<i>Heliofungia actiniformis</i> (Quoy & Gaimard, 1837)	1,2,3,4,6,7
151.	<i>Herpolitha limax</i> (Houttuyn, 1772)	1,2,3,4,5,6,7
152.	<i>Herpolitha weberi</i> (Horst, 1921)	6
153.	<i>Lithophyllum mokai</i> (Hoeksema, 1989)	1,2,3,5,
154.	<i>Lithophyllum undulatum</i> (Rehberg, 1892)	1,2,3,5,7
155.	<i>Podabacia crustacea</i> (Pallas, 1766)	1,2,3,4,5,6,7
156.	<i>Podabacia motuporensis</i> (Veron, 1990)	3
157.	<i>Polyphyllia talpina</i> (Lamarck, 1801)	1,3,6,7
158.	<i>Sandalolitha dentata</i> (Quelch, 1884)	1
159.	<i>Sandalolitha robusta</i> (Quelch, 1886)	5,7

	Family Oculinidae	
160.	<i>Galaxea astreata</i> (Lamarck., 1816)	1,4,7
161.	<i>Galaxea fascicularis</i> (Linnaeus, 1767)	1,2,3,4,5, 6
162.	<i>Galaxea horrescens</i> (Dana, 1846)	7
	Family Pectinidae	
163.	<i>Echinophyllia aspera</i> (Ellis & Solander, 1788)	1,2,5,6
164.	<i>Echinophyllia echinoporoides</i> (Veron & Pichon, 1979)	7
165.	<i>Echinophyllia orpheensis</i> (Veron & Pichon, 1980)	1,7
166.	<i>Echinophyllia patula</i> (Hodgson & Ross, 1982)	3,5,6
167.	<i>Mycedium elephantotus</i> (Pallas, 1766)	1,2,3,4,5
168.	<i>Mycedium robokaki</i> (Moll & Borel-Best, 1984)	1,3,4,5,6
169.	<i>Oxypora crassispinosa</i> (Nemenzo, 1979)	4,6
170.	<i>Oxypora lacera</i> (Verrill, 1864)	1,2,3,4, 5,6
171.	<i>Oxypora</i> sp. 1	4
172.	<i>Pectinia alcicornis</i> (Saville-Kent, 1871)	3,5
173.	<i>Pectinia lactuca</i> (Pallas, 1766)	1,2,3,4, 5,6
174.	<i>Pectinia paeonia</i> (Dana, 1846)	1,2,3,4
175.	<i>Pectinia teres</i> (Nemenzo & Montecillo, 1981)	6,7
	Family Mussidae	
176.	<i>Acanthastrea echinata</i> (Dana, 1846)	1,3
177.	** <i>Acanthastrea faviaformis</i> (Veron, 2000)	1
178.	<i>Acanthastrea hemprichii</i> (Ehrenberg, 1834)	2
179.	<i>Acanthastrea lordhowensis</i> (Veron & Pichon, 1982)	1,3,5
180.	<i>Acanthastrea rotundoflora</i> (Chevalier, 1975)	6
181.	** <i>Australomussa rowleyensis</i> (Veron, 1985)	1
182.	<i>Cynarina lacrimalis</i> (Milne Edwards & Haime, 1848)	1,3,4
183.	<i>Micromussa amakusensis</i> (Veron, 2000)	1
184.	<i>Lobophyllia corymbosa</i> (Forskål, 1775)	1,2,4,5, 7
185.	<i>Lobophyllia flabelliformis</i> (Veron, 2000)	1,4,7
186.	<i>Lobophyllia hataii</i> (Yabe & Sugiyama, 1936)	1,3
187.	<i>Lobophyllia hemprichii</i> (Ehrenberg, 1834)	1,2,3,4, 5,6
188.	<i>Lobophyllia robusta</i> (Yabe & Sugiyama, 1936)	5,6
189.	<i>Lobophyllia</i> cf. <i>serratus</i> (Veron, 2000)	1,2,3,5, 6
190.	<i>Scolymia vitiensis</i> (Brüggemann, 1877)	1,3
191.	<i>Sympyllia agaricia</i> (Milne Edwards & Haime, 1849)	1,3,6, 7
192.	<i>Sympyllia hassi</i> (Pillai & Scheer, 1976)	3
193.	<i>Sympyllia radians</i> (Milne Edwards & Haime, 1849)	1,4,5, 7
194.	<i>Sympyllia recta</i> (Dana, 1846)	1,2,5, 6,7
195.	<i>Sympyllia valenciennesii</i> (Milne Edwards & Haime, 1849)	3
	Family Merulinidae	
196.	<i>Hydnophora exesa</i> (Pallas, 1766)	1,2,3, 5,6
197.	<i>Hydnophora grandis</i> (Gardiner, 1904)	1,2,3, 5,6
198.	<i>Hydnophora microconos</i> (Lamarck, 1816)	1,7
199.	<i>Hydnophora pilosa</i> (Veron, 1985)	3
200.	<i>Hydnophora rigida</i> (Dana, 1846)	1,3,6, 7

201.	<i>Merulina ampliata</i> (Ellis & Solander, 1786)	1,2,3,4,5,6,7
202.	<i>Merulina scabridula</i> (Dana, 1846)	1,4,5,6,7
203.	<i>Scaphophyllia cylindrica</i> (Milne Edwards & Haime, 1848)	2,5,7
Family Faviidae		
204.	<i>Barabattoia amicorum</i> (Milne Edwards & Haime, 1850)	6,7
205.	<i>Caulastrea curvata</i> (Wijsman-Best, 1972)	1,3,5,5
206.	<i>Caulastrea echinulata</i> (Milne Edwards & Haime, 1849)	7
207.	<i>Cyphastrea decadia</i> (Moll and Borel-Best, 1984)	4,7
208.	<i>Diploastrea heliopora</i> (Lamarck, 1816)	1,2,3,4,5,6,7
209.	<i>Echinopora gemmacea</i> (Lamarck, 1816)	1,3,4,5,6,7
210.	<i>Echinopora hirsutissima</i> (Milne Edwards & Haime, 1849)	1,2,4,7
211.	<i>Echinopora horrida</i> (Dana, 1846)	7
212.	<i>Echinopora lamellosa</i> (Esper, 1795)	1,3,4,5,6,7
213.	<i>Echinopora mammiformis</i> (Nemenzo, 1959)	1
214.	<i>Echinopora pacificus</i> (Veron, 1990)	1,2,3,7
215.	<i>Favia matthai</i> (Vaughan, 1918)	3
216.	<i>Favia pallida</i> (Dana, 1846)	7
217.	<i>Favia rotundata</i> (Veron & Pichon, 1977)	1,7
218.	<i>Favia stelligera</i> (Dana, 1846)	1,3,5
219.	<i>Favia truncatus</i> (Veron, 2000)	1,2,7
220.	<i>Favia vietnamensis</i> (Veron 2000)	3
221.	<i>Favites abdita</i> (Ellis & Solander, 1786)	1,2,3,5,7
222.	<i>Favites acuticollis</i> (Ortmann, 1889)	3
223.	<i>Favites halicora</i> (Ehrenberg, 1834)	1,2,6,7
224.	<i>Favites paraflexuosa</i> (Veron, 2000)	1,5,6
225.	<i>Favites pentagona</i> (Esper, 1794)	1,5
226.	<i>Goniastrea aspera</i> (Verrill, 1905)	1,2,3,7
227.	<i>Goniastrea edwardsi</i> (Chevalier, 1971)	1,6,7
228.	<i>Goniastrea favulus</i> (Dana, 1846)	5,6
229.	<i>Goniastrea minuta</i> (Veron, 2000)	1,2,6,7
230.	<i>Goniastrea pectinata</i> (Ehrenberg, 1834)	1,2,3,4,5,7
231.	<i>Goniastrea retiformis</i> (Lamarck, 1816)	1,4,6
232.	<i>Leptastrea pruinosa</i> Crossland, 1952	5,7
233.	<i>Leptastrea purpurea</i> (Dana, 1846)	1,2,4,6,7
234.	<i>Leptastrea transversa</i> Klunzinger, 1879	1,2,3,4,6
235.	<i>Leptoria phrygia</i> (Ellis & Solander)	1,6,7
236.	<i>Montastrea colemani</i> Veron, 2000	1,2,7
237.	<i>Montastrea curta</i> (Dana, 1846)	1
238.	<i>Montastrea magnstellata</i> Chevalier, 1971	1,2,7
239.	<i>Montastrea salebrosa</i> (Nemenzo, 1959)	1

240.	<i>Oulastrea crispata</i> (Lamarck, 1816)	4,5
241.	<i>Oulophyllia bennettiae</i> (Veron, Pichon, & Wijsman-Best, 1977)	1,3,6,7
242.	<i>Oulophyllia crispa</i> (Lamarck, 1816)	1,2,4,5
243.	<i>Platygyra daedalea</i> (Ellis & Solander, 1786)	1,2,5
244.	<i>Platygyra lamellina</i> (Ehrenberg, 1834)	1,6
245.	<i>Platygyra pini</i> (Chevalier, 1975)	7
246.	<i>Platygyra sinensis</i> (Milne Edwards & Haime, 1849)	7
247.	<i>Platygyra verweyi</i> (Wijsman-Best, 1976)	2
248.	<i>Plesiastrea versipora</i> (Lamarck, 1816)	1,3,5,7
	Family Trachyphylliidae	
249.	<i>Trachyphyllia geoffroyi</i> (Audouin, 1826)	1,2,3
	Family Euphylliidae	
250.	<i>Catalaphyllia jardinei</i> (Saville-Kent, 1893)	2,3
251.	<i>Euphyllia ancora</i> (Veron & Pichon, 1979)	1,2,3,6
252.	<i>Euphyllia cristata</i> (Chevalier, 1971)	1,2
253.	<i>Euphyllia divisa</i> (Veron & Pichon, 1979)	2
254.	<i>Euphyllia glabrescens</i> (Chamisso & Eysenhardt, 1821)	1,3,4,5
255.	<i>Nemenzophyllia turbida</i> (Hodgson & Ross, 1981)	4
256.	<i>Plerogyra sinuosa</i> (Dana, 1846)	1,2,3,4
	Family Dendrophylliidae	
257.	* <i>Balanophyllia</i> sp. 1	3
258.	<i>Dendrophyllia cf gracilis</i> (Milne Edwards & Haime, 1848)	2,3,5
259.	* <i>Dendrophyllia</i> sp. 1	1,2,5
260.	<i>Rhizopsammia verrilli</i> (van der Horst, 1922)	2
261.	<i>Tubastraea coccinea</i> (Lesson, 1829)	5
262.	<i>Tubastraea diaphana</i> (Dana, 1846)	6
263.	<i>Tubastraea micranthus</i> (Ehrenberg, 1834)	1,2,5
264.	<i>Turbinaria frondens</i> (Dana, 1846)	1,5,6,7
265.	<i>Turbinaria heronensis</i> (Wells, 1958)	1,3,4,5
266.	<i>Turbinaria irregularis</i> (Bernard, 1896)	2,3
267.	<i>Turbinaria mesenterina</i> (Lamarck, 1816)	1,2,3,5
268.	<i>Turbinaria peltata</i> (Esper, 1794)	1,2,3,4
269.	<i>Turbinaria reniformis</i> Bernard, 1896	1
270.	<i>Turbinaria stellulata</i> (Lamarck, 1816)	5
	Family Heliporidae	
271.	<i>Heliopora coerulea</i> (Pallas, 1776)	2
	Family Clavulariidae	
272.	<i>Tubipora musica</i> (Linnaeus, 1758)	2,3,
	Family Milleporidae	
273.	<i>Millepora dichotoma</i> (Forskål, 1775)	1,2,3,5,7
274.	<i>Millepora exaesa</i> (Forskål, 1775)	1,5,6
275.	<i>Millepora intricata</i> (Milne-Edwards & Haime, 1857)	1,2,5,6
276.	<i>Millepora platyphylla</i> (Hemprich and Ehrenberg, 1834)	1,2,5,7

Table 3. Rare corals recorded in Sogod bay.

Species	Status
<i>Nemenzophyllia turbida</i>	Known from only about 17 sites in the world
<i>Halomitra clavator</i>	Rarely reported
<i>Catalaphyllia jardinei</i>	Rare or uncommon in most places
<i>Micromussa amakusensis</i>	Rarely reported

Table 4. Coral species not previously reported from the Philippines in published literature.

Rare species
<i>Acropora plumosa</i> *#
<i>Favia truncatus</i> *
<i>Goniopora albiconus</i> +
<i>Lobophyllia flabelliformis</i> *#
<i>Montipora vietnamensis</i> *

*Also found by the DF in Tubbataha and Cagancillio

+Also found by the DF in Sierra Madre

#Also found by the DF at Mabini

Discussion

The total of 276 coral species found in the 7 dive sites in this study is about 59% of all the coral species reported from the Philippines. The total is slightly more than the mean number of coral species (270) found by the author (DF) in 12 different areas of the Philippines in other studies. However, the total number of species found in an area is strongly dependent on the area searched or amount of search effort and time, in this case the number of dive sites. The average number of coral species found per dive site in this study (110) was a little more than the average number of coral species found per dive site (102) in nine different areas of the Philippines where the author has recorded the number of coral species per dive site. Thus, the coral species diversity in the small area surveyed of Sogod Bay, Leyte, was typical for the Philippines. This was in spite of the fact that the area was sandy often with

gravel in shallow water, and thus perhaps not the best coral habitat. The Philippines has a coral species fauna that is among the most diverse in the world and the coral diversity at Sogod Bay is very high indeed compared to coral diversity on reefs around the world. The coral diversity at one dive site at Sogod Bay is equal to all the coral species known from the entire Hawaiian Island chain from the Big Island to Midway, plus the entire Caribbean and Gulf of Mexico combined. Such world-class diversity therefore deserves protection and sustainable use, as do many Philippine reefs.

Since the time of this survey, landslides in the area have had some impact. Landslides occurred in the area of Jon's Wreck in December 2003. Reef Check surveys carried out by Coral Cay Conservation volunteers in October 2003 and then repeated in February 2004 showed a decrease in *Acropora* cover by 5% and a decrease in non-*Acropora* cover by 10%, attributable to sediment from the landslides. Thus this event had a modest effect on this reef. Subsequently, in 2005, a Crown-of-Thorns seastar (*Acanthaster planci*) outbreak was reported to be having a major impact on reefs in this area, but this has yet to be quantified.

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