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AN ANNOTATED CHECK LIST OF THE CORALS OF AMERICAN SAMOA

BY

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by Austin E. Lamberts\*

## SUMMARY

Reef coral collections from American Samoa are in the National Museum of Natural History, Smithsonian Institution, Washington, D.C., and in the Hessisches Landesmuseum, Darmstadt, W. Germany. The author has a collection of 790 coral specimens for a total of 1547 items known to be from American Samoa.

A total of 177 species (including 3 species of non-scleractinian corals) belonging to 48 genera and subgenera (including the genera Millepora and Heliopora) known to date are listed with data as of frequency of occurrence and habitat.

## INTRODUCTION

The territory of American Samoa comprises the six eastern islands of the Samoan archipelago. It is located in the tropical central south Pacific ( $14^{\circ}\text{S}$  latitude,  $170^{\circ}\text{W}$  longitude) about 2300 nautical miles (4420 km) southwest of Hawaii and 80 miles (130 km) southeast of Western Samoa. Five of the islands are volcanic in origin and are aligned along the crest of a discontinuous submarine ridge which extends over 300 miles (480 km) and tends roughly northwest by southeast. My collecting was done on the five major inhabited islands of American Samoa which are the largest, Tutuila, Aunu'u (a small island located 1 mi (1.6 km) off the southeast coast of Tutuila), Ofu, Olesega, and Ta'u. The latter three islands are collectively referred to as the Manu'a group and lie about 66 miles (106 km) east of Tutuila. An uninhabited coral atoll, Rose Island is located 100 mi (161 km) east of Tutuila. One other island, Swains Atoll, is considered part of the Samoan group but is geographically a part of the Tokelau Island group and is not included in this study.

The first scientist to reach the Samoan (Navigator) Islands was probably Dr. Charles Pickering, a physician naturalist who explored Rose Atoll when ships of the United States Exploring Expedition under Capt. Wilkes met

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there in October 1839. Specimens he collected were added to those of James D. Dana who visited Tutuila for only four hours and made no coral collection in Samoa. In 1918 Dr. Alfred Mayor headed an expedition to American Samoa under the auspices of the Carnegie Institution of Washington. During three visits he collected 354 coral specimens which were donated to the National Museum of Natural History (NMNH), Smithsonian Institution and were described by Hoffmeister in 1925. In 1941 the NMNH received a collection of 380 corals from Mrs. Thompson. They were acquired while her husband served with the U.S. Navy. These specimens were accompanied with no data although it was indicated that all were collected about Tutuila. In 1967 Dr. D.K. Hofman obtained 23 coral specimens from Tutuila. These are now at the Hessisches Landesmuseum in Darmstadt, W. Germany and were reported by Pillai and Scheer in 1973. This study incorporates these data with material I gathered in American Samoa.

#### MATERIAL AND METHODS

My collections of 690 specimens were made during four trips to Samoa between 1973-79. Specimens were taken from reef flats but mostly from deeper waters using mask and snorkel. Friends participated when SCUBA was used. All specimens were numbered at time of collection and data was recorded in a permanent record. Many photographs were taken of live specimens. All were cleaned, dried and transported to my home in Michigan for further study. They will eventually be placed in the collections of the Bernice P. Bishop Museum, Honolulu, Hawaii.

A typical coral reef as herein described may start in shallow inshore waters or a lagoon which might be 2 m deep, ascends to a shallow fore-reef, then to a reef crest usually out of water at low tide, a surge zone with spur and groove formation on windward (SW, Samoa), a sharp reef front dropping 5 - 10 m to a reef terrace and gradually descending to deep water. Most of the reefs have passes (Samoan:ava) of variable width and depth. The maximum width of reefs in American Samoa is about 500 m and most are much narrower. Taema Bank is a drowned barrier reef some three miles off the entrance of Pago Pago harbor. Also mentioned is the Airport lagoon which was dredged in stages from 1942 to 1973 during construction of Pago Pago International Airport complex. This lagoon lies between the runway and the Nu'uuli fore-reef. The dredgings contained some recent fossil coral (Goniopora, Acrhelia) species not found live in Samoa along with mollusc shells of the genus Cypraea with nacre virtually unblemished.

Corals are listed systematically by genera and alphabetically by species. Relative abundances are listed as: abundant when they are readily found in large numbers on most reef complexes; the 41 species listed as common are found on most reefs; the 45 species termed sporadic may be common but are noted in my own collection data a few times; those listed as rare were found only once or twice. In such instances the collection location is given with place names of Samoan villages which fronted the reef. Depths at which specimens were found are listed in meters. The Aua line mentioned is that of Mayor's study in 1918.

This paper lists all corals by specific names given in the literature as coming from American Samoa. Studer's (1901) specimens probably did not come from there and have not been included. Specific names which have been changed are listed within brackets with their synonyms. Behind each entry (H) appears if it was described by Hoffmeister (1925) and P&S if it was described by Pillai and Scheer (1973).

#### ANNOTATED LIST

Class	ANTHOZOA	
Subclass	HEXACORALLIA	Haeckel, 1896
Order	SCLERACTINIA	Bourne, 1900
Suborder	ASTROCOENIINA	Vaughan & Wells, 1943
Family	ASTROCOENIIDAE	Koby, 1890
Subfamily	ASTROCOENIINAE	Yabe & Sugiyama, 1935
Genus	STYLOCOENIELLA	Yabe & Sugiyama, 1935

Stylocoeniella armata (Ehrenberg, 1834).

Sporadic, lagoons, under rocks or coral growth,  
(1-2m)

Family	THAMNASTERIIDAE	Vaughan & Wells, 1943
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Genus	PSAMMOCORA	Dana, 1846
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Psammocora contigua (Esper, 1795) (H)

Abundance, Inner reef flats, lagoons (0-3m)

Psammocora folium Umbgrove, 1947

Rare, Reef face; Fagasa (3m)

Psammocora nierstraszi van der Horst, 1921

Rare, Reef flats (0-1m)

[Psammocora samoensis Hoffmeister, 1925] (H)

Synonym P. nierstraszi

Psammocora superficialis Gardiner, 1898

Locally common. Reef edge, reef slopes (0-3m)

Psammocora contigua var. tutuilensis Hoffmeister 1925  
(H)

Rare, Reef flats (1-2m)

Family POCILLOPORIDAE Gray, 1842

Genus STYLOPHORA Schweigger, 1819

Stylophora mordax Dana, 1846

Sporadic, Passes, reef fronts & terraces (3-10m)

Genus SERIATOPORA Lamarck, 1816

Seriatopora hystrix var. gracilis Dana, 1846

Rare, Masefau & Fagatele Bays (2-5m)

Genus POCILLOPORA Lamarck, 1816

Pocillopora ankeli Scheer, 1975

Rare, Fagasa reef front (3m)

Pocillopora brevicornis Lamarck, 1816 (H)

Common, Back reefs (1-2m)

Pocillopora cf. bulbosa Ehrenberg, 1834

Sporadic, Lagoons (1-3m)

Pocillopora damicornis (Linnaeus, 1758) (H & P&S)

Abundant, Inshore lagoons, reef flats (0-5m)

Pocillopora danae Verrill, 1864

Rare, Masefau Bay (1m)

Pocillopora eydouxi Edwards & Haime, 1816 (H)

Common, Reef fronts, surge zones (1-5m)

Pocillopora cf. setchelli Hoffmeister, 1929

Rare, Reef flat near surge zone (0-1m)

Pocillopora verrucosa (Ellis & Solander, 1786)

Abundant, Reef flats, lagoons, reef fronts (1-10m)

Pocillopora woodjonesi Vaughan, 1918

Common, one area in Masefau Bay only (2-3m)

Family ACROPORIDAE Verrill, 1902

Genus ACROPORA Oken, 1815

Acropora abratanooides (Lamarck, 1816)

Rare, Fagasa (2m)

Acropora africana (Brook, 1893) (H)

Rose Atoll, Dr. Mayor.

Acropora aculeus Dana, 1846)

Sporadic, Reef slopes, Bays (1-3m)

Acropora arbuscula (Dana, 1846)

Locally common, Faga'itua pass (2-3m)

Acropora aspera (Dana, 1846)

Abundant, Lagoons, back reefs (0-3m)

Acropora brueggemanni (Studer, 1878)

Rare, Reef slope, Aua line (3m)

- Acropora cerealis (Dana, 1846)  
Common, Back reefs, grooves in reef crest (0-2m)
- Acropora clathrata (Brook, 1893)  
Rare, Taema Bank (25m)
- Acropora corymbosa (Lamarck, 1816) (H, P&S)  
Sporadic, Masefau (1-3m)
- Acropora crateriformis (Gardiner, 1899) (H)  
Locally common, reef flats, passes (1-3m)
- Acropora cuspidata (Dana, 1846)  
Rare, Faga'itua, Masefau passes (1-2m)
- [Acropora symbicyathus (Brook, 1893)] (H)  
Synonym A. nasuta
- Acropora cytherea (Dana, 1846)  
Sporadic, Reef face, Bays (2-20m)
- Acropora delicatula (Brook, 1893)  
Rare, Fagasa (2m)
- Acropora diversa (Brook, 1893)  
Locally common, Aunu'u, Olesega (0-2m)
- [Acropora fruticosa (Brook, 1893)] (H)  
Synonym A. humilis
- Acropora exigua (Dana, 1846) (H)  
Sporadic, Lagoons, usually with A. formosa (2-5m)
- Acropora formosa (Dana, 1846) (H)  
Abundant, Huge thickets; lagoons (0-20)
- [Acropora hebes (Dana, 1846)] (H)  
Synonym A. aspera
- Acropora humilis (Dana, 1846)  
Abundant, Reef crests, surge zones, passes (0-2)
- Acropora horrida (Dana, 1846)  
Rare, Ofu lagoon (1m)
- Acropora hyacinthus (Dana, 1846) (H, P&S)  
Abundant, All reef fronts, passes (1-20m)
- Acropora intermedia (Brook, 1893)  
Locally common, Passes, lagoons (2-5m)
- Acropora latistella (Brook, 1893)  
Common, Reef crests (1-3m)
- [Acropora leptocyathus (Brook, 1893)] (H)  
Synonym A. humilis
- Acropora longicyathus (Edwards & Haime, 1860)  
Rare, Faga'itua pass (3m)
- Acropora massawensis (von Marenzeller, 1906) (H)  
Rare, Aua line, Dr. Mayor. Taema Bank (0-25m)
- Acropora millepora (Dana, 1846)  
Rare, Nu'uuli reef crest (0-1)
- Acropora granulosa (Edwards & Haime, 1860)  
Rare, Masefau (20m)
- Acropora nana (Studer, 1878)  
Common, Back reefs, grooves (102m)
- Acropora nasuta (Dana, 1846)  
Common, Reef crest, reef slopes, Bays (1-3m)
- Acropora nobilis (Dana, 1846) (H)  
Sporadic, passes, lagoons (3-5m)
- Acropora pagoensis Hoffmeister, 1925 (H)

- Rare, Dredged, Taema Bank, Dr. Mayor  
Acropora palmerae Wells, 1954  
 Sporadic, Reef crest, surge zones (0-1m)
- Acropora palifera (Lamarck, 1816) (H)  
 Sporadic, Reef fronts in bays (1-3m)
- Acropora paniculata (Verrill, 1902)  
 Rare, Faga'itua pass (1-2m)
- Acropora pinguis Wells, 1950  
 Rare, Fagamalo and Fagatele Bays (1-2m)
- [Acropora prolixa (Verrill, 1866)] (H)  
 Synonym A. longicyathus
- Acropora pulchra (Brook, 1893) (H)  
 Common locally, Inner reef flat (1-2m)
- [Acropora quelchi (Brook, 1893)] (H)  
 Synonym A. cerealis
- Acropora rambleri (Bassett-Smith, 1890)  
 Rare, Masefau (20m)
- Acropora robusta (Dana, 1846)  
 Sporadic, Reef slopes, grooves (1-5m)
- Acropora rotumana (Gardiner, 1899) (H, P&S)  
 Common, Reef edge, surge zones (0-2m)
- [Acropora samoensis (Brook, 1893)] (H)  
 Synonym A. humilis
- Acropora schmitti Wells, 1950  
 Rare, Reef slope, Aua line (3m)
- Acropora splendida Nemenzo, 1967  
 Rare, Airport lagoon, Aasu Bay (2-3m)
- Acropora squarrosa (Ehrenberg, 1834)  
 Rare, Taema Bank (20m)
- Acropora surculosa (Dana, 1846)  
 Sporadic, Reef slope (2-5m)
- Acropora spicifera (Dana, 1846)  
 Sporadic, Passes, bays (1-3m)
- [Acropora syringodes (Brook, 1893)] (H)  
 Synonym A. nana (?)
- Acropora teres (Verrill, 1866) (H, P&S)  
 Rare, Reef flat (1-3m)
- [Acropora tutuilensis, Hoffmeister, 1925] (H)  
 Synonym A. clathrata, A. rotumana
- Acropora valida (Dana, 1846) (H)  
 Sporadic, Lagoons (1-2m)
- [Acropora vanderhorsti, Hoffmeister 1925] (H)  
 Synonym A. intermedia
- Acropora variabilis (Klunzinger, 1879)  
 Locally common, Lagoons, Olesega, Ofu
- Acropora sp. 1  
 Sporadic. Passes, Colonies of heavy stalks with  
 blunt tops, brilliant blue in situ (1-2m)
- Genus           ASTREOPORA de Blainville 1830
- Astreopora cucullata Lamberts, 1980  
 Sporadic, Faga'itua pass Pago Pago Bay (2-4m)
- Astreopora listeri Bernard, 1896

- Rare, Reef flats (0-1m)  
Astreopora myriophthalma (Lamarck, 1816)  
 Sporadic, Reef flats, lagoons, bays (0-3m)  
 [Astreopora profunda Verrill 1875] (H, P&S)  
 Synonym A. myriophthalma (usually when free  
 rolling)  
Astreopora scabra Lamberts, 1982  
 Sporadic, Reef flats, lagoons (0-3m)

Genus MONTIPORA de Blainville 1830

- Montipora berryi Hoffmeister 1925 (H)  
 Sporadic, Lagoons, reef flats (1-4m)  
Montipora bilamina Bernard 1897  
 Rare, Airport lagoon (3m)  
Montipora caliculata (Dana, 1846)  
 Sporadic, passes, back reefs (1-3m)  
Montipora composita Crossland 1952  
 Sporadic, Reef face in bays, passes (1-3m)  
Montipora elschneri Vaughan 1918 (H)  
 Sporadic, Reef flats (0-1m)  
Montipora foveolata (Dana, 1846)  
 Rare, Faga'itua pass (0-1m)  
Montipora marshallensis Wells, 1954  
 Rare, Faga'itua pass (1-3m)  
Montipora ehrenbergii Verrill, 1875  
 Common, Lagoons, back reefs (0.5-2m)  
Montipora cf. pulcherrima Bernard, 1897  
 Rare, Faga'itua fore reef (1-2m)  
Montipora acutata Bernard, 1897  
 Rare, Masefau (30m)  
Montipora socialis Bernard, 1897  
 Sporadic, Reef face (0-2m)  
Montipora spumosa (Lamarck, 1816) (H)  
 Sporadic, Reef flats (0-2m)  
Montipora trabeculata Bernard, 1897 (H)  
 Sporadic, Ta'u, Olesega reef flats (1-3m)  
Montipora tuberculosa (Lamarck, 1816) (H)  
 Common, Reef flats, lagoons (0-2m)  
 [Montipora vaughani Hoffmeister 1925] (H)  
 Synonym M. socialis  
Montipora venosa (Ehrenberg, 1834) (H)  
 Common, lagoons, back reefs (0-3m)  
Montipora verrilli Vaughan, 1970 (H)  
 Common, Reef flats, fore reefs (0-3m)

Suborder FUNGIINA Verrill 1865  
 Superfamily AGARICIICAE Gray 1847  
 Family AGARICIIDAE Gray 1847

Genus PAVONA Lamarck 1801

- Pavona clavus Dana, 1846  
 Sporadic, Reef slopes, passes (3-10m)



- Pavona decussata Dana, 1846 (H)  
Common, Lagoons, back reefs (1-3m)
- Pavona divaricata Lamarck, 1846 (H)  
Common, Reef flats, back reefs, passes (0-3m)
- Pavona duerdeni Vaughan, 1907  
Rare, Taema Bank (30m)
- Pavona fondifera Lamarck, 1816 (H)  
Abundant, Reef flats (0-1m)
- Pavona cf. gigantea Verrill, 1869  
Rare, Taema Bank (30m)
- Pavona maldivensis (Gardiner, 1905)  
Rare, Masefau (2m)  
Previously listed as P. (pseudocolumnastrea) pollicata Wells, 1954
- Pavona varians Verrill, 1864  
Common, Lagoons, reef edges, Taema Bank (2-30m)

Genus GARDINEROSERIS Scheer, 1975

- Gardineroseris planulata (Dana, 1846)  
Sporadic, Reef crests, surge zones (0-1m)

Genus LEPTOSERIS Edwards & Haime 1849

- Leptoseris gardineri van der Horst, 1921 (H)  
Dredged, Dr. Mayor, Pago Pago Harbor (25-50m)
- Leptoseris scabra Vaughan, 1907 (H)  
Dredged, Dr. Mayor, Pago Pago Harbor (15-30m)

Genus PACHYSERIS Edwards & Haime 1849

- Pachyseris carinata Brueggemann 1879 (H)  
Rare, Masefau (2m)
- Pachyseris levicollis (Dana, 1846) (H)  
Dredged, Dr. Mayor, Pago Pago Harbor; Airport dredgings.
- Pachyseris speciosa (Dana, 1846) (H)  
Dredged, Dr. Mayor, Pago Pago Harbor (15-30m)  
Locally common, Masefau (30m)

Genus COSCINARAEA Edwards & Haime 1848

- Coscinaraea columna (Dana, 1846) (H)  
Sporadic, Reef fronts, terraces (1-20m)

Superfamily FUNGIICAE Dana 1846  
Family FUNGIIDAE Dana 1846

Genus FUNGIA Lamarck 1801

- Fungia concinna Verrill, 1864 (P&S)  
Rare, Airport lagoon (1m)
- Fungia echinata (Pallas, 1766)  
Sporadic, Masefau (30m)

- Fungia fungites (Linnaeus, 1758) (H)  
Common, Reef terraces, Bays (2-5m)
- Fungia granulosa Klunzinger 1869  
Rare, Pago Pago Bay (30m)
- Fungia patelliformis Boschma, 1923 (H)  
Dredged, Dr. Mayor, Pago Pago Harbor (25-30m)
- Fungia paumotensis Stutchbury, 1833 (H)  
Rare, Airport lagoon (1m)
- Fungia repanda Dana, 1846  
Locally common, Masefau (3-5m)
- Fungia scutaria Lamarck, 1816  
Rare, Masefau reef (2m)

Genus HERPOLITHA Escholtz 1826

- Herpolitha limax (Houttyn, 1772)  
Locally common, Masefau (30m)
- Herpolitha crassa Dana, 1846  
Rare, Afono Bay (15m)

Genus LITHACTINIA Lesson 1831

- Lithactinia novaehiberniae Lesson 1831  
Thompson collection, no data

- Superfamily PORITICAE Gray 1842  
Family PORITIDAE Gray 1842

Genus GONIOPORA de Blainville 1830

- Goniopora parvastella Ortman, 1888  
Sporadic, Faga'itua Pass (3m)
- Goniopora samoa I Bernard, 1903  
Locally common, Airport dredgings
- Goniopora sp. 1 cf. somaliensis Vaughan, 1907  
Rare, Reef slopes, Aua line (2m)
- Goniopora sp. 2 cf. gracilis (Bassett-Smith, 1890)  
Rare, Utelei, Olesega (1-2m)
- Goniopora sp. 3 cf. traceyi Wells, 1954  
Rare, Olesega (1-2m)

Genus PORITES Link 1807

- Porites andrewsi Vaughan, 1918 (H, P&S)  
Abundant, Reef flats, back reefs (0-2m)
- Porites latistella Quelch 1886  
Locally common, Airport lagoon (0-2m)
- Porites matthaii Wells, 1954  
Sporadic, Reef flats, back reefs (0-1m)
- Porites pukoensis Vaughan, 1907 (H)  
Rare, Aua line (3m)
- Porites lobata Dana, 1846 (H, P&S)  
Sporadic, Back reefs, lagoons (0-5m)
- Porites lutea Edwards & Haimés, 1851 (H, P&S)

- Abundant, All collecting sites (0-30m)  
Porites lutea var. haddoni Vaughan, 1918 (H)  
 Common, Reef flats, lagoons (0-5m)  
Porites murrayensis Vaughan, 1918 (H)  
 Rare, Faga'itua lagoon (1m)  
Porites queenslandi septima Bernard, 1905  
 Rare, Taema Bank (30m)  
Porites lichen Dana, 1846  
 Sporadic, Surf zones, passes, Taema Bank (0-30m)

Genus PORITES (SYNARAEA) Verrill 1864

- Synaraea horizontalata Hoffmeister, 1925 (H)  
 Sporadic, Masefau, Pago Pago Bay (10-30m)  
Synaraea faustino Hoffmeister, 1925 (H)  
 Dredged by Dr. Mayor (7-12m)  
Synaraea undulata Klunzinger, 1879 (H)  
 Abundant, Reef flats, passes, lagoons (0-5m)

Genus ALVEOPORA de Blainville 1830

- Alveopora allingi Hoffmeister, 1925 (H)  
 Dredged, Dr. Mayor, Pago Pago Harbor (25-35m)  
Alveopora verrilliana Dana, 1872 (H)  
 Sporadic, Reef flats, lagoons, back reefs (0.5-5m)  
Alveopora viridis (Quoy & Gaimard, 1827)  
 Rare, Fagasa, Utelei (bright green) (1-2m)

- Suborder FAVIINA Vaughan & Wells 1943  
 Superfamily FAVIICAE Gregory 1900  
 Family FAVIIDAE Gregory 1900  
 Subfamily FAVIINAE Gregory 1900

Genus FAVIA Oken 1815

- Favia favius (Forskaal, 1775) (H)  
 Sporadic, Reef flats (0-3m)  
Favia laxa (Klunzinger, 1879)  
 Rare, Fagasa (15m)  
Favia pallida (Dana, 1846) (H, P&S)  
 Sporadic, Reef flats, reef terraces (0-5m)  
Favia rotumana (Gardiner, 1899) (H)  
 Common, Passes, bays (1-10m)  
Favia speciosa (Dana, 1846)  
 Rare, Faleosoa (on Ta'u) (0.5m)  
Favia stelligera (Dana, 1846) (H)  
 Sporadic, Reef flats, reef terrces (0-10m)

Genus FAVITES Link 1807

- Favites abdita (Ellis & Solander, 1786) (H)  
 Common, Reef flats (0-3m)  
Favites halicora (Ehrenberg, 1834) (H)  
 Common, Reef flats, Taema Bank (0-30m)

- Favites chinensis Verrill, 1866  
Rare, Masefau, Faga'itua reef flat (1m)  
Favites russelli Wells, 1954  
Rare, Taema Bank (30m)

## Genus GONIASTREA Edwards &amp; Haime 1848

- Goniastrea edwardsi Chevalier 1971  
Rare, Breaker's Point reef flat (0.5m)  
Goniastrea favulus (Dana, 1846)  
Sporadic, Faga'itua pass (0-2m)  
Goniastrea palauensis Yabe & Sugiyama 1934  
Rare, Taema Bank (30m)  
Goniastrea pectinata (Ehrenberg, 1834) (H)  
Rare, Poloa, Fagamalo (1-2m)  
Goniastrea retiformis (Lamarck, 1816) (H)  
Sporadic, Reef flats, passes (0-3m)

## Genus PLAYTGYRUS Ehrenberg 1834

- [Platygyrus daedalea (Ellis & Solander, 1786)]  
Name pre-occupied by a Forskaal species,  
Synonym P. rustica  
[Meandra esperi (Edwards & Haime, 1857)]  
Synonym P. rustica  
Platygyrus lamellina Ehrenberg, 1834 (H)  
Rare, Masefau, Taema Bank (1-20m)  
Platygyrus rustica (Dana, 1846)  
Common, Reef flats, lagoons (0-5m)

## Genus LEPTORIA Edwards &amp; Haime 1848

- Leptoria phrygia (Ellis & Solander, 1786) (H, P&S)  
Common, Reef flats to Taema Bank (0-30m)  
[Leptoria tenuis (Dana, 1846)] (H)  
Synonym L. phrygia

## Genus OULOPHYLLIA Edwards &amp; Haime 1848

- Oulophyllia crispa (Lamarck, 1816)  
Rare, Masefau (25m)

## Genus HYDNOPHORA Fisher de Waldheim 1807

- Hydnophora exesa (Pallas, 1766)  
Sporadic, Passes, bays, Taema Bank (2-30m)  
Hydnophora microconos (Lamarck, 1816) (H, P&S)  
Common, Reef flats to Taema Bank (0-30m)

## Subfamily MONTASTREINAE Vaughan &amp; Wells 1943

## Genus MONTASTREA de Blainville 1830

- Montastrea curta (Dana, 1846)

Common, Lagoons, reef flats, fore-reefs (0-5m)  
[Orbicella curta Dana, 1846]  
 Synonym M. curta

Genus PLESIASTREA Edwards & Haime 1848

Plesiastrea versipora (Lamarck, 1816) (P&S)  
 Rare, Falesao (1m)

Genus DIPLOASTREA Matthai 1914

Diploastrea heliopora (Lamarck, 1816) (P&S)  
 Sporadic, Reef slopes, Bay terraces (0.5-10m)

Genus LEPTASTREA Edwards & Haime 1848

Leptastrea purpurea (Dana, 1846) (H)  
 Abundant, Inshore waters, reef flats (0-1m)  
Leptastrea bottae Milne-Edwards & Haime 1848  
 Rare, Fagamalo (1m)

Genus CYPHASTREA Edwards & Haime 1848

Cyphastrea chalcidicum (Forskaal, 1775)  
 Rare, Taema Bank (30m)  
Cyphastrea cf. gardineri Matthai, 1914  
 Sporadic, Inshore waters, lagoons (0-1m)  
Cyphastrea microphthalma (Lamarck, 1816) (H)  
 Rare, Dredged by Dr. Mayor (35m)

Genus ECHINOPORA Lamarck 1816

Echinopora lamellosa (Esper, 1795)  
 Locally common, Faga'itua pass, Masefau (3-5m)

Family OCULINIDAE Gray 1847  
 Subfamily GALAXINAE Vaughan & Wells 1943

Genus GALAXEA Oken 1815

Galaxea clavus (Dana, 1846)  
 Sporadic, Reef terraces, Leone, Fagatele Bays  
 (3-5m)  
Galaxea fascicularis (Linnaeus, 1758) (H, P&S)  
 Common, Reef flats, terraces (0-25m)

Genus ACRHELIA Edwards & Haime 1849

Acrhelia horrescens (Dana, 1846)  
 Rare, Airport dredgings

Family MUSSIDAE Ortman 1890

Genus ACANTHASTREA Edwards & Haime 1848

Acanthastrea echinata (Dana, 1846)  
Rare, Poloa (1m)

Genus LOBOPHYLLIA de Blainville 1830

[Lobophyllia corymbosa (Forskaal, 1775)]  
Reported by Pillai & Scheer. No data. (P&S)  
Lobophyllia costata (Dana, 1846)  
Common, Passes, reef slopes, terraces (2-5m)  
[Mussa sinuosa (Lamarck, 1816)] (H)  
Synonym L. costata

Genus SYMPHYLLIA Edwards & Haime 1848

Symphyllia nobilis (Dana, 1846) (H)  
Rare, Matu'u, Fagatele Bay (0-4m)

Family MERULINIDAE Verrill 1866

Genus MERULINA Ehrenberg 1834

Merulina ampliata (Ellis & Solander, 1786) (H)  
Rare, Fagatele Bay (3m)

Family PECTINIIDAE Vaughan & Wells 1943

Genus ECHINOPHYLLIA Klunzinger 1879

Echinophyllia aspera (Ellis & Solander, 1786)  
Rare, Utelei (30m)

Genus OXYPORA Saville-Kent 1871

Oxypora lacera (Verrill, 1864)  
Rare, Masefau (3m)

Suborder CARYOPHYLLIINA Vaughan & Wells 1943  
Superfamily CARYOPHYLLIICAE Gray 1847  
Family CARYOPHYLLIIDAE Gray 1847  
Subfamily EUSMILIINAE Edwards & Haime 1857

Genus EUPHYLLIA Dana 1846

Euphyllia glabrescens (Chamisso & Eysenhardt, 1821) (H)  
Sporadic, Masefau, Avatele passage (3m)

Genus PLEROGYRA Edwards & Haime 1848

Plerogyra simplex Rehberg, 1892  
Rare, Utelei reef front (1m)

Suborder DENDROPHYLLIIDA Gray 1847  
Family DENDROPHYLLIIDAE Gray 1847

## Genus TUBASTREA Lesson 1831

Tubastrea coccinea Lesson, 1831

Rare, Aua reef slope, Faga'itua pass (1-3m)  
 [Dendrophyllia diaphana Dana, 1846] (H)  
 Synonym Tubastrea aurea = T. coccinea

## Genus TURBINARIA Oken 1815

Turbinaria frondens Dana, 1846

Sporadic, Leone terrace, Masefau terrace (2-6m)

Turbinaria peltata (Esper, 1794)

Rare, Masefau (30m)

Subclass OCTOCORALLIA Haeckel 1896

Order COENOTHECALIA Bourne 1895

Family HELIOPORIDAE Moseley 1876

## Genus HELIOPORA de Blainville 1834

Heliopora coerulea (Pallas, 1766)

Common, Reefs of Ta'u, Ofu, and Olesega only (0-2m)

Class HYDROZOA Huxley 1856

Order MILLEPORINA Hickson 1901

Family MILLEPORIDAE Fleming 1828

## Genus MILLEPORA Linnaeus 1758

Millepora platyphylla Hemprich & Ehrenberg, 1834

Common, Reef flats, reef fronts (0-3m)

Millepora tenera Boschma 1949

Locally common, Ofu back reefs (1-2m)

[Millepora alcicornis Linnaeus, 1758] (H)

Synonym Probably M. tenera

[Millepora truncata Dana, 1846] (H)

Synonym M. platyphylla

## CONCLUSIONS

This check list is neither exhaustive nor final. No attempt was made to collect on every reef and most reef terraces remain relatively unexplored. In all, 174 species of scleractinian corals are presented. These represent 48 genera and subgenera. Also listed are 3 species, one a Heliopora and two of Millepora; though not scleractinian, they certainly are reef formers. In all there are 199 nominal listings of which I considered 22 invalid.

Because a coral species was reported from Samoa does not mean that it can be readily collected there. Frequently a coral listed as rare was the only specimen

of that kind seen in many hours of searching and may have been the only relict or new colony of its type in the Islands. The number of species found increases with the time spent searching, the astuteness of the collector, his purpose in collecting and where he happens to collect. I was primarily looking for certain genera and must certainly have overlooked species of other genera which were not my main concern.

I accept responsibility for all identifications listed. Coral taxonomy as based on skeletal differences is an imprecise science and an ongoing search for adjunctive methods to aid in classification is in progress. As long as this state continues, many species determinations must necessarily be considered tentative and this entire study can only be regarded as one in a series.

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