

Marine gastropods of American Samoa

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Abstract—Collected for food for over 3,000 years by the indigenous Samoan people, marine gastropods in American Samoa have never been collected and cataloged for science. This study documents 385 marine gastropods from 50 families occurring in the U.S. territory of American Samoa. Ten of these are listed by genus only and one by family. The number of gastropods currently reported is likely significantly underestimated and a conservative estimate of the richness yet to be discovered.

Introduction

Molluscs have been collected in Samoa since the earliest inhabitants arrived some 3,000 years ago (Craig et al 2008, Kramer 1994, Kirch and Hunt, 1993, Nagaoka 1993). Much of this reef gleaning was directed at the cephalopods, the large and colorful giant clams (*Tridacna* spp.) and the larger marine snails such as *Trochus* spp, *Lambis* spp., *Cassis* spp., *Turbo* spp., and *Tutufa* spp., although any marine mollusc was likely taken if found (Munro 1999). While the limited archeological evidence provides an initial species list, this long history of the use of marine molluscs provided a very limited understanding of the marine gastropods of the archipelago. Even after European contact, few serious or amateur shell collectors made the long voyage to the S. Pacific to catalog the gastropoda. Until very recently, and before the advent of SCUBA, much of the gastropod knowledge in the area came from the shallow depths available to free-divers, what could be dredged off the bottom, and what washed onto the shore. The first organized scientific investigations into the Samoan gastropods weren't carried out until the 18th century by the La Perouse expedition. This was followed by expeditions led by Freycinet (1817–1820), Kotzebue (1823–1826), Dumont D'Urville (1837–1840), and Wilkes (1838–1842). Later, between 1960-1980, amateur shell collectors in American Samoa started making extensive collections and cataloging what they found. Most of these collections were made from washed ashore specimens, shoreline dredge operations, and some limited scuba dives (McCuddin pers. comm.). It was during this time that a relatively complete list of the conidae and cypraeidae (Barclay, unpublished data) was completed, though the remaining families were still unexamined.

Since 2006 an exhaustive search has been underway to collect and catalog all extant species of marine gastropods in the territory. These specimens have been deposited in the natural history collection of the National Park of American Samoa. In addition to the collection of new specimens, all known public and private shell

collections were photographed, inventoried and identified to provide the first comprehensive list of marine gastropods from American Samoa.

Material and Methods

Gastropod shells were collected on scuba at depths from 0- 80 m around the island of Tutuila, American Samoa ($14^{\circ} 17' S$, $170^{\circ} 42' W$) from April 2006 until July 2008 (Figure 1). Only empty shells containing no living organisms were collected. If live specimens were located a photographic record was taken and subsequently identified, though not included in the list of species until a collectable voucher specimen could be located. Specimens were also collected that had washed ashore. Additionally, public and private gastropod collections were sought out and photographed for specimens that had not been collected by the author. Only species collected from American Samoa were reviewed. Species reported in technical reports and checklists are only included if the specimens in question could be inspected and the identifications verified. Only gastropods with a hard shell are included, thus most of the approximately 40 nudibranch species (Madrigal 1999) are excluded. Furthermore exclusively freshwater and terrestrial species are also excluded from this list because it has been examined elsewhere (Cowie and Robinson 2003, Cowie 2002, Cowie 1998).



Figure 1. Tutuila, American Samoa. Inset map shows location of American Samoa in the South Pacific Ocean.

Results and Discussion

The gastropod fauna of American Samoa is comprised of 385 species identified to date (Table 1). Of this total 77.6% are represented by collections undertaken by the author, 6.2% (24 specimens) are in public institutions (National Park of American Samoa), and the remaining 16.2% (63 specimens) are in private collections. The majority of the list consists of epibenthic species found within coral reef

Table 1. Marine Gastropods of American Samoa

Family name	Latin name
Acteonidae	<i>Pupa sulcata</i> Gmelin, 1791
Architectonicidae	<i>Architectonica perspectiva</i> Linnaeus, 1758
Architectonicidae	<i>Architectonica</i> sp. Grey, 1850
Architectonicidae	<i>Psilaxis radiatus</i> Röding, 1798
Buccinidae	<i>Cantharus wagneri</i> Anton, 1839
Buccinidae	<i>Colubraria castanea</i> Kuroda & Habe, 1952
Buccinidae	<i>Colubraria muricata</i> Lightfoot, 1786
Buccinidae	<i>Colubraria nitidula</i> Sowerby, 1833
Buccinidae	<i>Colubraria tortuosa</i> Reeve, 1844
Buccinidae	<i>Engina alveolata</i> Kiener, 1836
Buccinidae	<i>Engina incarnata</i> Deshayes, in Laborde & Linant, 1834
Buccinidae	<i>Engina lanceolata</i> Kuroda & Habe in Kuroda, 1971
Buccinidae	<i>Engina lineata</i> Reeve, L.A., 1846
Buccinidae	<i>Engina mendicaria</i> Linnaeus, 1758
Buccinidae	<i>Engina zonalis</i> Lamarck, 1822
Buccinidae	<i>Pisania ignea</i> Gmelin, 1791
Buccinidae	<i>Pollia undosa</i> Linnaeus, 1758
Bullidae	<i>Bulla ampulla</i> Linnaeus, 1758
Bullidae	<i>Bulla vernicosa</i> Gould, 1859
Bullinidae	<i>Bullina lineata</i> Gray, 1825
Bursidae	<i>Bursa b. bufonia</i> Gmelin, 1791
Bursidae	<i>Bursa condita</i> Gmelin, 1791
Bursidae	<i>Bursa cruentata</i> Sowerby, 1835
Bursidae	<i>Bursa g. granularis</i> Röding, 1798
Bursidae	<i>Tutufa bubo</i> Linnaeus, 1758
Capulidae	<i>Capulus</i> sp. Fleming, 1822
Cassidae	<i>Casmaria e. erinacea</i> Linnaeus, 1758
Cassidae	<i>Casmaria p. ponderosa</i> Gmelin, 1791
Cassidae	<i>Cassis cornuta</i> Linnaeus, 1758

Table 1. Continued

Family name	Latin name
Cassidae	<i>Semicassis canaliculata</i> Bruguière, 1792
Cerithiidae	<i>Cerithium balteatum</i> Philippi, 1848
Cerithiidae	<i>Cerithium columna</i> Sowerby, 1834
Cerithiidae	<i>Cerithium lifuensis</i> Melvill, Standen, 1895
Cerithiidae	<i>Cerithium nesioticum</i> Pilsbry & Vanatta, 1906
Cerithiidae	<i>Cerithium nodulosum</i> Bruguière, 1792
Cerithiidae	<i>Cerithium salebrosum</i> Sowerby, 1855
Cerithiidae	<i>Cerithium suturale</i> Philippi, 1849
Cerithiidae	<i>Cerithium torresi</i> Smith, 1884
Cerithiidae	<i>Cerithium zonatus</i> Wood, 1828
Cerithiidae	<i>Rhinoclavis articulata</i> Adams & Reeve, 1850
Cerithiidae	<i>Rhinoclavis aspera</i> Linnaeus, 1758
Cerithiidae	<i>Rhinoclavis fasciata</i> Bruguière, 1792
Cerithiidae	<i>Rhinoclavis sinensis</i> Sowerby, 1855
Columbellidae	<i>Aesopus clausiliformis</i> Kiener, 1834
Columbellidae	<i>Euplica scripta</i> Lamarck, 1822
Columbellidae	<i>Pyrene flava</i> Bruguière, 1789
Conidae	<i>Conus a. ammiralis</i> Linnaeus, 1758
Conidae	<i>Conus arenatus</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus aulicus</i> Linnaeus, 1758
Conidae	<i>Conus australis</i> Holten, 1802
Conidae	<i>Conus b. boeticus</i> Reeve, 1844
Conidae	<i>Conus balteatus</i> Sowerby, 1833
Conidae	<i>Conus bullatus</i> Linnaeus, 1758
Conidae	<i>Conus canonicus</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus catus</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus chaldaeus</i> Röding, 1798
Conidae	<i>Conus coffeae scabriusculus</i> Dillwyn, 1817
Conidae	<i>Conus coronatus</i> Gmelin, 1791
Conidae	<i>Conus distans</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus ebraeus</i> Linnaeus, 1758
Conidae	<i>Conus eburneus</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus emaciatus</i> Reeve, 1849
Conidae	<i>Conus episcopatus</i> Motta, 1982
Conidae	<i>Conus floccatus</i> Sowerby, 1841

Table 1. Continued

Family name	Latin name
Conidae	<i>Conus frigidus</i> Reeve, 1848
Conidae	<i>Conus geographus</i> Linnaeus, 1758
Conidae	<i>Conus glans</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus imperialis</i> Linnaeus, 1758
Conidae	<i>Conus leopardus</i> Röding, 1798
Conidae	<i>Conus literatus</i> Linnaeus, 1758
Conidae	<i>Conus litoglyphus</i> "Meuschen" Hwass, in Bruguière, 1792
Conidae	<i>Conus lividus</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus m. miliaris</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus marmoreus</i> Linnaeus, 1758
Conidae	<i>Conus miles</i> Linnaeus, 1758
Conidae	<i>Conus mitratus</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus moreleti</i> Crosse, 1858
Conidae	<i>Conus muriculatus</i> Sowerby, 1833
Conidae	<i>Conus mustelinus</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus nucleus</i> Reeve, 1848
Conidae	<i>Conus nussatella</i> Linnaeus, 1758
Conidae	<i>Conus omaria</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus p. planorbis</i> Born, 1778
Conidae	<i>Conus p. pulicarius</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus quercinus</i> Lightfoot, 1786
Conidae	<i>Conus rattus</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus retifer</i> Menke, 1829
Conidae	<i>Conus sanguinolentus</i> Quoy & Gaimard, 1834
Conidae	<i>Conus sponsalis</i> Hwass, in Bruguière, 1792
Conidae	<i>Conus striatus</i> Linnaeus, 1758
Conidae	<i>Conus t. terebra</i> Born, 1778
Conidae	<i>Conus t. textile</i> Linnaeus, 1758
Conidae	<i>Conus tessulatus</i> Born, 1778
Conidae	<i>Conus tulipa</i> Linnaeus, 1758
Conidae	<i>Conus vexillum</i> Gmelin, 1791
Conidae	<i>Conus virgo</i> Linnaeus, 1758
Conidae	<i>Lienardia rubida</i> Hinds, 1843
Costellariidae	<i>Vexillum amabile</i> Reeve, 1845
Costellariidae	<i>Vexillum cancellarioides</i> Anton, 1839

Table 1. Continued

Family name	Latin name
Costellariidae	<i>Vexillum cavea</i> Reeve, 1844
Costellariidae	<i>Vexillum exasperatum</i> Gmelin, 1791
Costellariidae	<i>Vexillum lucidum</i> Reeve, 1845
Costellariidae	<i>Vexillum lyratum</i> Lamarck, 1811
Costellariidae	<i>Vexillum pardalis</i> Küster, 1841
Costellariidae	<i>Vexillum rusticum</i> Reeve, 1845
Costellariidae	<i>Vexillum sanguisugum granosa</i> Gmelin, 1791
Costellariidae	<i>Vexillum sanguisugum</i> Linnaeus, 1758
Costellariidae	<i>Vexillum tuberosum</i> Reeve, 1845
Costellariidae	<i>Vexillum unifasciale</i> Lamarck, 1811
Cypraeidae	<i>Annepona mariae</i> Schilder, 1927
Cypraeidae	<i>Bistolida h. hirundo</i> Linnaeus, 1758
Cypraeidae	<i>Bistolida k. kieneri</i> Hidalgo, 1906
Cypraeidae	<i>Bistolida s. stolidula</i> Linnaeus, 1758
Cypraeidae	<i>Bistolida ursellus</i> Gmelin, 1791
Cypraeidae	<i>Blasicrura g. goodallii</i> Sowerby, 1832
Cypraeidae	<i>Blasicrura p. pallidula</i> Gaskoin, 1849
Cypraeidae	<i>Blasicrura subteres</i> Weinkauff, in Martini & Chemnitz, 1881
Cypraeidae	<i>Blasicrura t. teres</i> Gmelin, 1791
Cypraeidae	<i>Blasicrura teres pellucens</i> Melvill, 1888
Cypraeidae	<i>Chelycypraea testudinaria</i> Linnaeus, 1758
Cypraeidae	<i>Cribrarula c. cribraria</i> Linnaeus, 1758
Cypraeidae	<i>Cribrarula c. cumingii</i> Sowerby, 1832
Cypraeidae	<i>Cypraea tigris</i> Linnaeus, 1758
Cypraeidae	<i>Erosaria annulus</i> Linnaeus, 1758
Cypraeidae	<i>Erosaria c. caputserpentis</i> Schilder, 1927
Cypraeidae	<i>Erosaria c. cernica</i> Sowerby, 1870
Cypraeidae	<i>Erosaria caputserpentis caputophidii</i> Schilder, 1927
Cypraeidae	<i>Erosaria e. erosa</i> Linnaeus, 1758
Cypraeidae	<i>Erosaria erosa "chlorizans"</i> Melvill, 1888
Cypraeidae	<i>Erosaria h. helvola</i> Linnaeus, 1758
Cypraeidae	<i>Erosaria labrolineata</i> Gaskoin, 1849
Cypraeidae	<i>Erosaria moneta</i> Linnaeus, 1758
Cypraeidae	<i>Erosaria obvelata</i> Sullioti, 1924
Cypraeidae	<i>Erosaria poraria</i> Linnaeus, 1758

Table 1. Continued

Family name	Latin name
Cypraeidae	<i>Erosaria sublitorea</i> Lorenz, 1998
Cypraeidae	<i>Erronea c. caurica</i> Linnaeus, 1758
Cypraeidae	<i>Erronea caurica samoensis</i> Lorenz, 2002
Cypraeidae	<i>Erronea e. erronea</i> “ <i>caerulescens</i> ” Schröter, 1804
Cypraeidae	<i>Erronea erronea azurea</i> Schilder, 1968
Cypraeidae	<i>Erronea listeri</i> Gray, 1824
Cypraeidae	<i>Ipsa childreni</i> Gray, 1825
Cypraeidae	<i>Leporicypraea m. mappa</i> Linnaeus, 1758
Cypraeidae	<i>Leporicypraea mappa viridis</i> Kenyon, 1902
Cypraeidae	<i>Luria i. isabella</i> Linnaeus, 1758
Cypraeidae	<i>Luria isabella controversa</i> Gray, 1824
Cypraeidae	<i>Lyncina a. argus</i> Linnaeus, 1758
Cypraeidae	<i>Lyncina carneola propinqua</i> Garrett, 1879
Cypraeidae	<i>Lyncina leviathon titan</i> Schilder & Schilder, 1962
Cypraeidae	<i>Lyncina lynx</i> Linnaeus, 1758
Cypraeidae	<i>Lyncina schilderorum</i> Iredale, 1939
Cypraeidae	<i>Lyncina ventriculus</i> Lamarck, 1810
Cypraeidae	<i>Lyncina vitellus</i> Linnaeus, 1758
Cypraeidae	<i>Mauritia a. arabica</i> Linnaeus, 1758
Cypraeidae	<i>Mauritia depressa</i> Gray, 1824
Cypraeidae	<i>Mauritia eglantina</i> Duclos, in Guérin-Méneville, 1833
Cypraeidae	<i>Mauritia m. maculifera</i> Schilder, 1932
Cypraeidae	<i>Mauritia mauritania</i> Linnaeus, 1758
Cypraeidae	<i>Mauritia s. scurra</i> Gmelin, 1791
Cypraeidae	<i>Naria irrorata</i> Gray, 1828
Cypraeidae	<i>Notadusta p. punctata</i> Linnaeus, 1771
Cypraeidae	<i>Notadusta rabaulensis</i> Schilder, 1964
Cypraeidae	<i>Palmadusta asellus</i> Linnaeus, 1758
Cypraeidae	<i>Palmadusta z. ziczac</i> Linnaeus, 1758
Cypraeidae	<i>Purpuradusta fimbriata unifasciata</i> Mighels, 1845
Cypraeidae	<i>Purpuradusta microdon</i> Gray, 1828
Cypraeidae	<i>Purpuradusta minoridens</i> Melvill, 1901
Cypraeidae	<i>Pustularia bistinotata sublaevis</i> Schilder & Schilder, 1938
Cypraeidae	<i>Pustularia c. cicercula</i> Linnaeus, 1758
Cypraeidae	<i>Pustularia globulus</i> “ <i>sphaeridium</i> ” Schilder & Schilder, 1938

Table 1. Continued

Family name	Latin name
Cypraeidae	<i>Pustularia margarita</i> Dillwyn, 1817
Cypraeidae	<i>Staphylaea n. nucleus</i> Linnaeus, 1758
Cypraeidae	<i>Staphylaea staphylea consobrina</i> Garrett, 1879
Cypraeidae	<i>Talparia talpa</i> Linnaeus, 1758
Epitoniidae	<i>Epitonium s. stigmaticum</i> Pilsbry, 1911
Eulimidae	<i>Melanella cumingii</i> Adams, in Adams & Adams, 1854
Eulimidae	<i>Niso</i> sp. Risso, 1826
Eulimidae	UNIDENTIFIED SPECIES
Fascioliariidae	<i>Latirolagena smaragdula</i> Linnaeus, 1758
Fascioliariidae	<i>Latirus craticulatus</i> Linnaeus, 1758
Fascioliariidae	<i>Latirus nodatus</i> Gmelin, 1791
Fascioliariidae	<i>Latirus polygonus barclayi</i> Reeve, 1847
Fascioliariidae	<i>Latirus turritus</i> Gmelin, 1791
Fascioliariidae	<i>Peristernia u. ustulata</i> Reeve, 1847
Fascioliariidae	<i>Pleuroploca filamentosa</i> Röding, 1798
Haliotidae	<i>Haliotis clathrata</i> Reeve, 1846
Haliotidae	<i>Haliotis semiplicata</i> Menke, 1843
Haminoeidae	<i>Aliculastrum cylindricum</i> Helbling, 1779
Haminoeidae	<i>Atys naucum</i> Linnaeus, 1758
Haminoeidae	<i>Diniatys dentifer</i> Adams, 1850
Haminoeidae	<i>Lamprohaminoea cymbalum</i> Quoy & Gaimard, 1833
Harpidae	<i>Harpa amouretta</i> Röding, 1798
Harpidae	<i>Harpa harpa</i> Linnaeus, 1758
Hipponicidae	<i>Cheilea cicatricosa</i> Reeve, 1858
Hipponicidae	<i>Cheilea equestris</i> Linnaeus, 1758
Hydatinidae	<i>Hydatina amplustre</i> Linnaeus, 1758
Lottiidae	<i>Patelloida</i> sp. Quoy & Gaimard, 1834
Marginellidae	<i>Marginella</i> sp. Lamarck, 1799
Mitridae	<i>Domiporta filaris</i> Linnaeus, 1771
Mitridae	<i>Domiporta granatina</i> Lamarck, 1811
Mitridae	<i>Domiporta praestantissima</i> Röding, 1798
Mitridae	<i>Imbricaria conovula</i> Quoy & Gaimard, 1833
Mitridae	<i>Imbricaria conularis</i> Lamarck, 1811
Mitridae	<i>Imbricaria olivaeformis</i> Swainson, 1821
Mitridae	<i>Imbricaria punctata</i> Swainson, 1821

Table 1. Continued

Family name	Latin name
Mitridae	<i>Mitra cardinalis</i> Gmelin, 1791
Mitridae	<i>Mitra chrysostoma</i> Broderip, 1836
Mitridae	<i>Mitra coffea</i> Schubert & Wagner, 1829
Mitridae	<i>Mitra eremitarum</i> Röding, 1798
Mitridae	<i>Mitra ferruginea</i> Lamarck, 1811
Mitridae	<i>Mitra fulvescens</i> Broderip, 1836
Mitridae	<i>Mitra imperialis</i> Röding, 1798
Mitridae	<i>Mitra luctuosa</i> Adams, 1853
Mitridae	<i>Mitra mitra</i> Linnaeus, 1758
Mitridae	<i>Mitra nivea</i> Broderip, 1836
Mitridae	<i>Mitra papalis</i> Linnaeus, 1758
Mitridae	<i>Mitra paupercula</i> Linnaeus, 1758
Mitridae	<i>Mitra rubritincta</i> Reeve, 1844
Mitridae	<i>Mitra stictica</i> Link, 1807
Mitridae	<i>Neocancilla circula</i> Kiener, 1838
Mitridae	<i>Neocancilla p. papilio</i> Link, 1807
Mitridae	<i>Pterygia crenulata</i> Gmelin, 1791
Mitridae	<i>Pterygia dactylus</i> Linnaeus, 1767
Mitridae	<i>Ziba fulgetrum</i> Reeve, 1844
Modulidae	<i>Modulus tectum</i> Gmelin, 1791
Muricidae	<i>Babelomurex</i> sp. Coen, 1922
Muricidae	<i>Chicoreus capucinus</i> Lamarck, 1822
Muricidae	<i>Chicoreus microphyllus</i> Lamarck, 1822
Muricidae	<i>Chicoreus ramosus</i> Linnaeus, 1758
Muricidae	<i>Coralliophila bulbiformis</i> Conrad, 1837
Muricidae	<i>Coralliophila costularis</i> Lamarck, 1816
Muricidae	<i>Coralliophila neritoidea</i> Lamarck, 1816
Muricidae	<i>Drupa clathrata</i> Lamarck, 1816
Muricidae	<i>Drupa grossularia</i> Röding, 1798
Muricidae	<i>Drupa m. morum</i> Röding, 1798
Muricidae	<i>Drupa ricinus arachnoides</i> Linnaeus, 1758
Muricidae	<i>Drupa ricinus</i> Linnaeus, 1758
Muricidae	<i>Drupa rubusidaeus</i> Röding, 1798
Muricidae	<i>Drupella cornus</i> Röding, 1798
Muricidae	<i>Drupella rugosa</i> Born, 1778

Table 1. Continued

Family name	Latin name
Muricidae	<i>Galeropsis monodontus</i> Blainville, 1832
Muricidae	<i>Habromorula biconica</i> Blainville, 1832
Muricidae	<i>Habromorula striata</i> Pease, 1868
Muricidae	<i>Mancinella echinata</i> Blainville, 1833
Muricidae	<i>Mancinella tuberosa</i> Röding, 1798
Muricidae	<i>Mancinella virgatus</i> Dillwyn, 1817
Muricidae	<i>Morula granulata</i> Duclos, 1832
Muricidae	<i>Morula uva</i> Röding, 1798
Muricidae	<i>Murex t. tenuirostrum</i> Lamarck, 1822
Muricidae	<i>Naquetia c. cumingii</i> Adams, 1853
Muricidae	<i>Nassa francolina</i> Bruguière, 1789
Muricidae	<i>Nassa sarta</i> Bruguière, 1789
Muricidae	<i>Phyllocoma convoluta</i> Broderip, 1833
Muricidae	<i>Pteryarchia martinetana</i> Röding, 1798
Muricidae	<i>Vexilla vexillum</i> Gmelin, 1791
Nacellidae	<i>Cellana grata "sternsii"</i> Pilsbry, 1891
Nacellidae	<i>Cellana r. radiata</i> Born, 1778
Nacellidae	<i>Cellana talcosa</i> Gould, 1846
Nassariidae	<i>Hebra horrida</i> Dunker, 1847
Nassariidae	<i>Nassarius a. albescens</i> Dunker, 1846
Nassariidae	<i>Nassarius bimaculosus</i> Adams, 1852
Nassariidae	<i>Nassarius concinnus</i> Powys, 1835
Nassariidae	<i>Nassarius distortus</i> Adams, 1852
Nassariidae	<i>Nassarius echinatus</i> Adams, 1852
Nassariidae	<i>Nassarius g. glans</i> Linnaeus, 1758
Nassariidae	<i>Nassarius graniferus</i> Kiener, 1834
Nassariidae	<i>Nassarius luridus</i> Gould, 1850
Nassariidae	<i>Nassarius olivaceus</i> Bruguière, 1789
Nassariidae	<i>Nassarius quadrasi</i> Hidalgo, 1904
Naticidae	<i>Natica ochrostigmata</i> Rehder, 1980
Naticidae	<i>Polinices albumen</i> Linnaeus, 1758
Naticidae	<i>Polinices mammilla</i> Linnaeus, 1758
Naticidae	<i>Polinices melastomus</i> Swainson, 1821
Naticidae	<i>Tectonatica t. tigrina</i> Röding, 1798
Neritidae	<i>Nerita grossa</i> Linnaeus, 1758

Table 1. Continued

Family name	Latin name
Neritidae	<i>Nerita histrio</i> Linnaeus, 1758
Neritidae	<i>Nerita incerta</i> Busch, von dem in Philippi, 1851
Neritidae	<i>Nerita lirellata</i> Rehder, 1980
Neritidae	<i>Nerita litterata</i> Gmelin, 1791
Neritidae	<i>Nerita p. polita</i> Linnaeus, 1758
Neritidae	<i>Nerita plicata</i> Linnaeus, 1758
Neritopsidae	<i>Neritopsis radula</i> Linnaeus, 1758
Olividae	<i>Oliva amethystina</i> Röding, 1798
Olividae	<i>Oliva caerulea</i> Röding, 1798
Olividae	<i>Oliva elegans</i> Lamarck, 1811
Olividae	<i>Oliva irisans</i> Lamarck, 1811
Olividae	<i>Oliva lepida</i> Duclos, 1840
Olividae	<i>Oliva m. miniacea</i> "lamberti" Jousseau, 1884
Olividae	<i>Oliva miniacea</i> Röding, 1798
Olividae	<i>Oliva nitidula</i> "thomasi" Crosse, 1861
Olividae	<i>Oliva panniculata</i> "williamsi" Melvill & Standen, 1897
Olividae	<i>Oliva sericea</i> Röding, 1798
Ovulidae	<i>Ovula ovum</i> Linnaeus, 1758
Patellidae	<i>Patella f. flexuosa</i> Quoy & Gaimard, 1834
Patellidae	<i>Patella flexuosa</i> Pilsbry, 1927
Personidae	<i>Distorsio anus</i> Linnaeus, 1758
Pyramidellidae	<i>Pyramidella dolabrata</i> Linnaeus, 1758
Pyramidellidae	<i>Pyramidella s. sulcata</i> Adams, 1854
Ranellidae	<i>Charonia t. tritonis</i> Linnaeus, 1758
Ranellidae	<i>Cymatium aquatile</i> Reeve, 1844
Ranellidae	<i>Cymatium encausticum</i> Reeve, 1844
Ranellidae	<i>Cymatium hepaticum</i> Röding, 1798
Ranellidae	<i>Cymatium lotorium</i> Linnaeus, 1758
Ranellidae	<i>Cymatium nicobaricum</i> Röding, 1798
Ranellidae	<i>Cymatium occidentale</i> Mörch, 1877
Ranellidae	<i>Cymatium pyrum</i> Linnaeus, 1758
Ranellidae	<i>Cymatium rubeculum</i> Linnaeus, 1758
Ranellidae	<i>Cymatium succinctum</i> Linnaeus, 1771
Ranellidae	<i>Cymatium vespereum</i> Lamarck, 1822
Ranellidae	<i>Gyrineum g. gyrinum</i> Linnaeus, 1758

Table 1. Continued

Family name	Latin name
Ranellidae	<i>Gyrineum roseum</i> Reeve, 1844
Seraphsidae	<i>Terebellum terebellum</i> Linnaeus, 1758
Strombidae	<i>Canarium m. mutabilis</i> Swainson, 1821
Strombidae	<i>Canarium microurceum</i> Kira, 1959
Strombidae	<i>Canarium urceus</i> Linnaeus, 1758
Strombidae	<i>Conomurex luhuanus</i> Linnaeus, 1758
Strombidae	<i>Dolomena v. variabilis</i> Swainson, 1820
Strombidae	<i>Euprotomus aurora</i> Kronenberg, 2002
Strombidae	<i>Gibberulus gibberulus gibbosus</i> Röding, 1798
Strombidae	<i>Lambis c. crocata</i> Link, 1807
Strombidae	<i>Lambis l. lambis</i> Linnaeus, 1758
Strombidae	<i>Lambis s. scorpius</i> Linnaeus, 1758
Strombidae	<i>Lambis truncata sebae</i> Kiener, 1843
Strombidae	<i>Lentigo lentiginosus</i> Linnaeus, 1758
Strombidae	<i>Terestrombus fragilis</i> Röding, 1798
Strombidae	<i>Tridentarius dentatus</i> Linnaeus, 1758
Terebridae	<i>Acus crenulata</i> Linnaeus, 1758
Terebridae	<i>Acus dimidiata</i> Linnaeus, 1758
Terebridae	<i>Acus felina</i> Dillwyn, 1817
Terebridae	<i>Acus maculata</i> Linnaeus, 1758
Terebridae	<i>Cinguloterebra jenningsi</i> Burch, 1965
Terebridae	<i>Duplicaria duplicata</i> Linnaeus, 1758
Terebridae	<i>Myurella cinctella</i> Deshayes, 1859
Terebridae	<i>Myurella columellaris</i> Hinds, 1844
Terebridae	<i>Myurella nebulosa</i> Sowerby, 1825
Terebridae	<i>Myuurella undulata</i> Gray, 1834
Terebridae	<i>Perirhoe cerithina</i> Lamarck, 1822
Terebridae	<i>Terebra areolata</i> Link, 1807
Terebridae	<i>Terebra argus</i> Hinds, 1844
Terebridae	<i>Terebra babylonia</i> Lamarck, 1822
Terebridae	<i>Terebra cingulifera</i> Lamarck, 1822
Terebridae	<i>Terebra guttata</i> Röding, 1798
Terebridae	<i>Terebra subulata</i> Linnaeus, 1758
Terebridae	<i>Terenolla pygmaea</i> Hinds, 1844
Tonnoidea	<i>Malea pomum</i> Linnaeus, 1758

Table 1. Continued

Family name	Latin name
Tonnoidae	<i>Tonna perdux</i> Linnaeus, 1758
Triphoridae	<i>Mastonia rubra</i> Hinds, 1843
Triviidae	<i>Trivia insularum</i> Schilder, 1944
Trochidae	<i>Clanculus denticulatus</i> Gray, 1827
Trochidae	<i>Monodonta canalifera</i> Lamarck, 1816
Trochidae	<i>Notogibbula</i> sp. Iredale, 1924
Trochidae	<i>Pseudominolia</i> sp. Herbert, 1992
Trochidae	<i>Rossiteria nuclea</i> Philippi, 1849
Trochidae	<i>Stomatella impertusa</i> Burrows, 1815
Trochidae	<i>Tectus c. conus</i> Gmelin, 1791
Trochidae	<i>Tectus p. pyramis</i> Born, 1778
Trochidae	<i>Tectus triserialis</i> Lamarck, 1822
Trochidae	<i>Trochus chloromphalus</i> Adams, 1851
Trochidae	<i>Trochus concavus</i> Gmelin, 1791
Trochidae	<i>Trochus histrio</i> Reeve, 1848
Trochidae	<i>Trochus maculatus</i> Linnaeus, 1758
Trochidae	<i>Trochus stellatus</i> Gmelin, 1791
Turbinellidae	<i>Vasum ceramicum</i> Linnaeus, 1758
Turbinellidae	<i>Vasum turbinellum</i> Linnaeus, 1758
Turbinidae	<i>Angaria</i> sp. Röding, 1798
Turbinidae	<i>Astralium calcar</i> Linnaeus, 1758
Turbinidae	<i>Astralium haemotragum</i> Menke, 1829
Turbinidae	<i>Astralium plicatospinosum</i> Pilsbry, 1888
Turbinidae	<i>Astralium rhodostonum</i> Lamarck, 1822
Turbinidae	<i>Astrea s. stellare</i> Gmelin, 1791
Turbinidae	<i>Turbo argyrostomus</i> Linnaeus, 1758
Turbinidae	<i>Turbo cinereus</i> Born, 1778
Turbinidae	<i>Turbo crassus</i> Wood, 1828
Turbinidae	<i>Turbo petholatus</i> Linnaeus, 1758
Turbinidae	<i>Turbo setosus</i> Gmelin, 1791
Turridae	<i>Lophiotoma acuta</i> Perry, 1811
Turridae	<i>Turridrupa cerithina</i> Anton, 1839
Turridae	<i>Turridrupa prestoni</i> Powell, 1967
Turridae	<i>Turris garnonsii</i> Reeve, 1843
Vanikoridae	<i>Vanikoro helicoidea</i> Guillou, 1842

Table 1. Continued

Family name	Latin name
Velutinidae	<i>Chelynotus tonganus</i> Quoy & Gaimard, 1832
Vermetidae	<i>Dendropoma maxima</i>
Vermetidae	<i>Serpulorbis</i> sp. Sassi, 1827
Volutidae	<i>Cymbiola v. vespertilio</i> Linnaeus, 1758
Volutidae	<i>Melo</i> sp. Sowerby & Sowerby, 1826

and sand flat habitats, but some (private collection) specimens represented were collected from dredged materials. The vast majority of shells are greater than 20 mm in length though all shells collected, including several less than 3 mm, are included. It is understood and acknowledged that a large proportion of “microgastropods” are not represented in this list due to the collection methodologies.

All of the marine species reported here are thought to be indigenous but not endemic. While there are several introduced and invasive freshwater snails in American Samoa, it is believed that there are no introduced species in the marine environment (Coles et al 2003). Marine gastropod diversity in American Samoa seems to follow the commonly observed distribution pattern of other Pacific

Table 2. Most Speciose Families of Gastropods in American Samoa

Family	No. of Genera	No. of Species	% of Total
Cypraeidae	20	64	16.5%
Conidae	2	50	12.9%
Muricidae	15	30	7.7%
Mitridae	6	26	6.7%
Terebridae	7	18	4.6%
Trochidae	8	14	3.6%
Strombidae	9	14	3.6%
Buccinidae	5	14	3.6%
Ranellidae	3	13	3.3%
Cerithiidae	2	13	3.3%
Costellariidae	1	12	3.1%
Turbinidae	4	11	2.8%
Olividae	1	11	2.8%
Neritidae	3	11	2.8%
Nassariidae	2	11	2.8%
Fascioliariidae	4	7	1.8%

organisms (fish, mangroves, corals, etc.) with species diversity decreasing with increased eastern movement across the Pacific (Ellison 1999, Veron 1999, Pyle 1999, Munro 1999). This distribution pattern is clearly represented for the gastropoda with a total of 385 specimens here being reported for the territory of American Samoa compared to 895 reported from Guam (Smith 2003) and the thousands reported for New Caledonia (Bouchet et al 2002). With 50 families represented and 385 species, the species richness in American Samoa is clearly just a fraction of that reported in other regions. The species found most abundantly in American Samoa are also those that are typically the most on other tropical Pacific islands (Table 2).

The diversity reported by Bouchet et al (2002) for New Caledonia is hardly comparable to that found in American Samoa but that kind of massive collecting effort is yet to be reproduced in this territory. Future work, especially the inclusion of microgastropods will clearly mark a substantial increase in the number of gastropod species present. The number of marine gastropods currently reported for American Samoa is likely significantly underestimated and a conservative estimate of the total species richness.

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