NOAA TECHNICAL REPORTS

National Marine Fisheries Service, Special Scientific Report—Fisheries

The major responsibilities of the National Marine Fisheries Service (NMFS) are to monitor and assess the abundance and geographic distribution of fishery resources, to understand and predict fluctuations in the quantity and distribution of these resources, and to establish levels for optimum use of the resources. NMFS is also charged with the development and implementation of policies for managing national fishing grounds, development and enforcement of domestic fisheries regulations, surveillance of foreign fishing off United States coastal waters, and the development and enforcement of international fishery agreements and policies. NMFS also assists the fishing industry through marketing service and economic analysis programs, and mortgage insurance and vessel construction subsidies. It collects, analyzes, and publishes statistics on various phases of the industry.

The Special Scientific Report—Fisheries series was established in 1949. The series carries reports on scientific investigations that document long-term continuing programs of NMFS, or intensive scientific reports on studies of restricted scope. The reports may deal with applied fishery problems. The series is also used as a medium for the publication of bibliographies of a specialized scientific nature.

NOAA Technical Reports NMFS SSRF are available free in limited numbers to governmental agencies, both Federal and State. They are also available in exchange for other scientific and technical publications in the marine sciences. Individual copies may be obtained from DB22, User Services Branch, Environmental Science Information Center, NOAA, Rockville, MD 20852. Recent SSRF's are:


The National Marine Fisheries Service (NMFS) does not approve, recommend or endorse any proprietary product or proprietary material mentioned in this publication. No reference shall be made to NMFS, or to this publication furnished by NMFS, in any advertising or sales promotion which would indicate or imply that NMFS approves, recommends or endorses any proprietary product or proprietary material mentioned herein, or which has as its purpose an intent to cause directly or indirectly the advertised product to be used or purchased because of this NMFS publication.
## CONTENTS

**Introduction** ................................................................. 1
**Geography and physiography** ........................................ 1
**Literature review** ......................................................... 1
**Collection and identification of fishes** ............................ 2
**Samoa names** ............................................................... 2
**Format** ......................................................................... 2
**Summary of contents** .................................................... 3
**List of fishes** ............................................................... 3
  - Hexanchidae (Bulldog sharks) ......................................... 3
  - Orectolobidae (Nurse sharks) .......................................... 3
  - Lamnidae (Mackerel sharks) ........................................... 3
  - Alopidae (Thresher sharks) ............................................ 3
  - Carcharhinidae (Requiem sharks) .................................. 3
  - Sphyridae (Hammerhead sharks) .................................... 3
  - Squalidae (Dogfish sharks) ........................................... 4
  - Rhyngobatidae (Narrow-snouted shovel-nose rays) ............ 4
  - Dasyatidae (Sting rays) ............................................... 4
  - Mobulidae (Mantas) ..................................................... 4
  - Myliobatidae (Eagle rays) ............................................ 4
  - Elopidae (Ladyfishes) .................................................. 4
  - Megalopidae (Tarpons) ................................................. 4
  - Albulidae (Bonefishes) ................................................ 4
  - Anguillidae (Freshwater eels) ...................................... 4
  - Moringuidae (Worm eels) ............................................. 4
  - Xenosciadidae (False morays) ...................................... 4
  - Muraenidae (Morays) ................................................... 5
  - Congridae (Conger and garden eels) .............................. 6
  - Ophichthidae (Snake eels) .......................................... 6
  - Clupeidae (Herrings) .................................................. 6
  - Engraulidae (Anchovies) ............................................. 7
  - Synodontidae (Lizardfishes) ........................................ 7
  - Chondridae (Milkfishes) .............................................. 7
  - Plotosidae (Eel catfishes) ............................................ 7
  - Gobiesocidae (Clingfishes) ......................................... 7
  - Antennariidae (Frogfishes) .......................................... 7
  - Ophidiidae (Brotulas and cusk eels) .............................. 7
  - Bythitidae .................................................................. 7
  - Carapidae (Pearlfishes) .............................................. 7
  - Exocoetidae (Flyingfishes) .......................................... 8
  - Hemiramphidae (Halfbeaks) ........................................ 8
  - Belonidae (Needlefishes) ............................................ 8
  - Poeciliidae (Mollies) .................................................. 8
  - Atherinidae (Silverfishes) .......................................... 8
  - Isonidae (Surf-fishes) ................................................ 9
  - Anomalopidae (Lantern-eyes) ...................................... 9
  - Holocentridae (Squirrelfishes) .................................... 9
  - Lampridae (Moonfish family) ...................................... 10
  - Aulostomidae (Trumpetfishes) .................................... 10
  - Fistulariidae (Cornetfishes) ....................................... 10
  - Macrourhampusidae (Snipefishes) ............................... 10
  - Sygnathidae (Pipefishes and sea horses) ....................... 10
  - Scorpaenidae (Scorpionfishes) .................................... 10
  - Caracanthidae (Dwarf rockfishes) ............................... 11
  - Platyccephaliidae (Flatheads) .................................... 11
  - Dactylopteridae (Flying gurnards) ............................... 11
  - Centropomidae (Perchlets) ........................................ 11
  - Percichthyidae (Temperate basses) .............................. 11
  - Serranidae (Groupers and sea basses) ......................... 12
  - Grammistesidae (Soapfishes) ...................................... 12
  - Pseudochromidae (Basslets) ....................................... 12
Plesiopidae (Prettyfins) ......................................................... 12
Pseudogrammatidae (Reef basslets) ........................................ 13
Teraponidae (Terapon perches) .................................................. 13
Kuhliidae (Mountain basses) .................................................... 13
Prionotidae (Big-eyes) .............................................................. 13
Apogonidae (Cardinalfishes) .................................................... 13
Malacanthidae (Tilefishes) ....................................................... 14
Echeneididae (Remoras) .......................................................... 14
Carangidae (Jacks) ................................................................. 14
Coryphaenidae (Dolphins) ....................................................... 15
Leiognathidae (Ponyfishes) ....................................................... 15
Bramidae (Pomfrets) ............................................................... 15
Caesionidae (Fusiliers) ............................................................. 15
Lutjanidae (Snappers) ............................................................. 15
Nemipteridae (Monocle brems) ............................................... 16
Gerreidae (Mojarras) ............................................................. 16
Haemulidae (Grunts and sweetlips) .......................................... 17
Lethrinidae (Emperors) ........................................................... 17
Mullidae (Goatfishes) ............................................................. 17
Monodactylidae (Silver batfishes) ........................................... 17
Pempherididae (Sweepers) ....................................................... 17
Kyphosidae (Rudderfishes) ..................................................... 18
Ephippidae (Spadefishes) ......................................................... 18
Chaetodontidae (Butterflyfishes) ............................................. 18
Pomacentridae (Anglefishes) ................................................... 18
Cichlidae (Tilapia) ................................................................. 19
Pomacentridae (Damselfishes) ............................................... 19
Cirrhidae (Hawkfishes) .......................................................... 20
Mugilidae (Mullets) ............................................................... 20
Sphyraenidae (Barracudas) ..................................................... 20
Polynemidae (Threadfins) ....................................................... 21
Labridae (Wrasse) ............................................................... 21
Scaridae (Parrotfishes) ........................................................... 23
Opistognathidae (Jawfishes) .................................................... 24
Mugiloididae (Sandperches) .................................................... 24
Creedidae (Sand burrowers) .................................................... 24
Uranoscopidae (Stargazers) .................................................... 24
Blenniidae (Blennies) ............................................................ 24
Triptrygidae (Triperes) ........................................................... 25
Callionymidae (Dagonettes) .................................................... 26
Gobiidae (Gobies) ............................................................... 26
Eleotrididae (Sleepers) .......................................................... 29
Kraemeridae (Sand lances) ..................................................... 30
Microdesmidae (Wormfishes) ............................................... 30
Zanclidae (Moorish idol family) .............................................. 30
Acanthuridae (Surgeonfishes and unicornfishes) ..................... 30
Siganidae (Rabbitfishes) ........................................................ 31
Gempylidae (Snake mackerels) ................................................. 31
Scombridae (Mackerels and tunas) ......................................... 31
Xiphiidae (Swordfish family) .................................................. 31
Istiophoridae (Billfishes) ......................................................... 31
Nomeidae (Man-of-war fishes) ............................................... 31
Bothidae (Lefteye flounders) .................................................. 31
Pleuronectidae (Righteye flounders) ....................................... 31
Soleidae (Soles) ................................................................. 31
Balistidae (Triggerfishes) ....................................................... 32
Monacanthidae (Filefishes) ..................................................... 32
Ostracionidae (Trunkfishes) .................................................... 32
Tetraodontidae (Puffers) ........................................................ 32
Triodontidae (Three-toothed puffers) ...................................... 33
Diodonidae (Porcupinefishes) ............................................... 33
Acknowledgments ................................................................. 33
An Annotated Checklist of the Fishes of Samoa

RICHARD C. WASS

ABSTRACT

All fishes currently known from the Samoa Islands are listed by their scientific and Samoan names. Species entries are annotated to include the initial Samoan distributional record, synonyms used in earlier publications dealing with Samoan fishes, and comments relating to taxonomy, ecology, and distribution. New species records resulting from recent collections by the author and others are included. Brief diagnoses are provided for undescribed and unidentified species. The list totals 991 species representing 113 families; 284 of the species are previously unrecorded from Samoa and 38 of the entries are unconfirmed records derived mostly from 19th century publications.

INTRODUCTION

The need to update and consolidate existing lists and records of Samoan fishes as a basis for biological study and resource management became evident while the author was engaged in extensive collection efforts during 1974-79. The present list of all known inshore and pelagic surface species is an attempt to meet this need.

GEOGRAPHY AND PHYSIOGRAPHY

The Samoa Islands consist of a chain of 10 islands located at lat. 14°S and ranging from long. 168° to 173°W. From east to west the islands are generally of increasing size and more recent geological origin. Rose Island, at the easternmost end of the chain, is a low coral atoll. The islands to the west are high and of basaltic composition. They are divided politically into Western Samoa, comprised principally of the two largest and westernmost islands of Savai'i and Upolu, and American Samoa comprised of Tutuila, Aunu'u, Ofu, Olosega, Ta'u, and Rose Islands.2

The collections upon which the present paper is based were made primarily around Tutuila at the midpoint of the Samoan archipelago. Fishes were also collected at Rose and Upolu where effort was concentrated in habitats not well developed around Tutuila.

The southern coast of Tutuila is bordered by a more or less continuous fringing reef flat which is partially exposed at low tide. Four prominent bays indent the coastline. Pago Pago Bay is the largest and is bordered by the most populous and developed area of the island. Port facilities, canny and domestic wastes, and shoreline runoff contribute toward a considerable decline in water quality within the bay (U.S. Army Corps of Engineers)3. Pala Lagoon is a shallow, mangrove-fringed bay with limited circulation. Its waters are turbid and polluted with human and agricultural wastes (Helfrich et al. 1975). Larsen and Fagatele Bays are deep and exposed to wind and swell. Their water quality is high and their marine habitats are relatively pristine. A submarine ridge 2-3 km offshore and shoaling to 15 m parallels much of the southern coast. Reef flats are a less conspicuous feature of the northern coast of Tutuila and are limited primarily to the inner margins of bays and coves. Steeply sloping basaltic terrain characterizes the exposed shoreline and the bottom drops rapidly to depths of 30 m or more.

The fish fauna of Tutuila is characteristic of the entire archipelago though physiographic differences do result in minor variation. Upolu has greater freshwater runoff, more extensive mangrove estuaries, wider reef flats, and deep sandy lagoons inside the reef. Rose Atoll has no basaltic substrate or freshwater runoff.

LITERATURE REVIEW

Samoan fishes have been collected and studied since 1840 when Hombron and Jacquinot (1853) described Diagramma gibbosus from Apia, Western Samoa. The Museum Godeffroy Catalogs (Schmelz 1865-79) and Günther’s (1873-1910) Fische der Südpazifik include many early references to Samoan fishes. Other significant 19th century studies are summarized by Jordan and Seale (1906) who noted that 164 fishes were recorded from Samoa by 1902. Their Fishes of Samoa lists 475 species for the archipelago and is the first comprehensive survey of Samoan ichthyofauna. It is based on a collection of fishes made in 1902 by David S. Jordan and Vernon L. Kellogg under the sponsorship of the U.S. Bureau of Fisheries. Steindacher (1906), Fowler and Silvester (1922), Fowler (1925, 1932, 1940), Jordan (1927), and Seale (1935) recorded additional fishes from Samoa.

A second extensive listing of Samoan fishes is found in Fishes of the Phoenix and Samoan Islands by Leonard P. Schultz (1943). While most of Jordan and Kellogg’s fishes were collected around Upolu, the 270 species that Schultz collected were taken from Tutuila, Ta’u, and Rose. He listed 171 additional species deposited at the U.S. National Museum by earlier collectors including the Wilkes Exploring Expedition and Jordan and Kellogg for a total of 441. Schultz included keys for the identification of Samoan fishes though most are superseded by the more recent and comprehensive keys in his Fishes of the Marshall and Marianas Islands (Schultz et al. 1953, 1960, 1966).

A complete listing of the taxonomic literature pertaining to Samoan fishes through 1945 is given by Fowler (1928, 1931a, 1934, 1949). Additional fishes have subsequently been recorded from Samoa in species descriptions and generic revisions, but tax-
onomic lists are lacking excepting that of Helfrich et al. (1975) which records the fishes of Pala Lagoon, and a list of freshwater fishes from Tutuila by the U.S. Army Corps of Engineers.

COLLECTION AND IDENTIFICATION OF FISHES

Collections were made in a wide range of marine, brackish, and freshwater habitats during the present study. Smaller fishes were taken primarily with an ichthyocide (rotenone) while large ones were usually speared. Specimens were also obtained through the use of nets and hook-and-line as well as by purchase from local markets and donation from fishermen. Because the efforts of Jordan, Kellogg, Schultz, and other early collectors were confined largely to tidepools, streams, and shallow inshore areas, collecting efforts for the present study were concentrated in deeper water at depths of 10 to 75 m using scuba and to 500 m with hook-and-line.

Care was taken to obtain accurate and current identification for each species. The assistance of individuals specializing in the taxonomy of certain families or genera was sought at every opportunity. Taxonomic specialists were also asked to review species lists, update synonymies, and provide additional species records for Samoa. Their participation is an essential part of this study because the taxonomy of Indo-Pacific fishes is fragmentary and under constant revision as evidenced by the number of recent species descriptions and generic revisions cited at the end of this paper.

The list recorded herein is still preliminary and subject to nomenclatural change resulting from future taxonomic research. It is also incomplete in that numerous species are identified only to genus and because many fishes, particularly those inhabiting deeper water and restricted habitats, probably remain uncollected.

Most of the specimens upon which this study is based are housed in the Jean P. Haydon Museum of American Samoa. Undescribed and rare species, as well as those of questionable identity, were donated to the taxonomists who assisted with their identification. Subsequently, these and other specimens have been deposited within the collections of larger museums where they are accessible for wider study.

Several species recorded from Samoa by earlier authors were not collected or observed during the present study. The records of Jordan and Seale (1906) and Schultz (1943) were confirmed through examination of specimens deposited at the U.S. National Museum. The records of Seale (1935) were verified at the California Academy of Sciences. Samoan specimens were also examined at the B. P. Bishop Museum. Unfortunately, it was not possible to examine the specimens upon which the unconfirmed records of Schmeltz (1865-79), Kner and Steindachner (1866), Kner (1868), Steindachner (1870, 1901, 1906), Günther (1871-1910), and Pöhl (1884) are based. Correspondence with taxonomic specialists has resulted in the synonymy and invalidation of many of these records and most of those remaining probably deserve a similar fate.

SAMOAN NAMES

Existing lists of Samoan fish names are incomplete and out-of-dated. Jordan and Seale's (1906) list is the most widely used but many of their names were deemed incorrect or were not recognized by the committee formed by the author to obtain Samoan names. Jordan and Seale's volume includes a "Glossary of the Principle Words Composing Native Names of Samoan Fishes" by W. E. Safford which is still very useful, however. The best reference for Samoan names is that of Demandt (1913). He included an alphabetical listing of Samoan names and their application plus a phylogenetic listing of the scientific names and corresponding Samoan names for different size categories. Krämer (1903) also listed Samoan names.

The Samoan fish names listed herein were obtained primarily from a committee of four older fishermen from Tutuila, Ta'u, and Savai'i who are known for their fishing expertise. The group was chaired by a younger fisherman who also acted as translator. Fishes were identified from original and published photographs in conjunction with an examination of preserved specimens.

Comments on size, habitat, distribution, color, and behavior were provided by the author. A short discussion generally resulted in agreement on the proper name or names. Names listed by Demandt (1913), Jordan and Seale (1906), and others were also discussed and are included if not rejected by the committee.

There is seldom a one-to-one relationship between fish species and Samoan names. Except for distinctive and common species, a single Samoan name generally applies to a group of related species with similar shapes and color patterns. Names which apply to smaller species groups or to individual species may vary between islands or even from village to village. The more general names applicable to larger species complexes and families, however, tend to be uniform. Many species possess two or more names related to size or color pattern. Again, the names are often shared with closely related species of similar size and color. All names are included in the present list with comments relative to geographic usage and their application to color variations and size ranges.

FORMAT

Species composing the checklist are listed under their respective families which are arranged in approximate phylogenetic order according to the system of Greenwood et al. (1966). The common English name for the family is listed in association with its scientific name. Samoan names which apply to the family as a whole and taxonomic comments and assistance are included and acknowledged under the family heading.

Genera and species are listed alphabetically within their respective families and in association with the species author and date of description. An asterisk (*) in the left margin indicates the present author's inability to confirm the validity of the published record. Samoan names are listed in boldface type immediately following the scientific name. If previously recorded from Samoa, the species name is followed by a reference to the first record including the name listed in the publication even if it was a misidentification. Synonyms used by Jordan and Seale (1906) and Schultz (1943) are noted for easy reference to these important studies. Additional synonyms are also listed for some entries but the reader is referred to Jordan and Seale (1906), Fowler (1928, 1931a, 1934, 1949), and the recent literature listed in the Literature Cited of this report for comprehensive synonymies.

Recent taxonomic opinions and changes are also noted under the species headings. Many have not been published but are included in an attempt to make the list as current as possible. For species with color patterns that vary with age and sex, synonyms...
are linked with color if appropriate. Comments relative to the ecology and distribution of a species may also be included.

Though every effort was made, species identification was not always possible because the species may be undescribed, because types have been damaged or lost, or simply because additional study of related material is necessary. In these cases the fishes are listed as sp. or spp. under the proper genus. Collection data including number collected, range of standard lengths, and depth of capture are noted. A short diagnosis of key characteristics, including life colors, is given to facilitate subsequent identification.

Museum catalog numbers are listed for most of the unidentified and for some of the uncommon species. The following abbreviations are used:

AMS—The Australian Museum, Sydney, Australia
ANSP—Academy of Natural Sciences, Philadelphia, Penn.
BPBM—Bernice P. Bishop Museum, Honolulu, Hawaii
CAS—California Academy of Sciences, San Francisco, Calif.
GMBL—Grice Marine Biological Laboratory, Charleston, S.C.
M—Macquarie University, North Ryde, Australia
NMB—Naturhistorisches Museum, Braunschweig, Federal Republic of Germany
WAM—Western Australian Museum, Perth, Australia

SUMMARY OF CONTENTS

The checklist includes 566 species collected by the author, 225 species collected by the author and identified by a recognized authority for the species complex, 27 species recorded from Samoa in the literature with the identifications confirmed by the author through examination of museum specimens, 36 species recorded from Samoa in the literature since 1957, and 7 species recognized from the older literature are also listed with their uncertainty denoted by an asterisk. They are listed by the name currently accepted as valid for the name under which they were originally recorded.

Including the 78 species identified only to family or genus, the list totals 991 species; 113 families are represented and 284 species are listed which have not been previously recorded from Samoa. Of the total, 890 are considered shallow-water or reef-inhabiting species (generally found at depths <60 m); 56 are considered deeper bottom fishes (associated with the bottom at depths of 60-500 m); and 45 are considered pelagic surface species (frequenting the offshore waters above the thermocline at depths <200 m). None of the listed species are true deepwater fishes.

About 40 fishes are presently known only from Samoa and most are undescribed. The majority of these will probably be found in neighboring archipelagos as more extensive collections are made. Excepting the relatively isolated Hawaiian fauna in which about 29% of the species are endemic (Randall 1976), most of the marine fishes of Oceania are rather widely distributed and species composing the Samoan fauna are no exception.

LIST OF FISHES

Hexanchidae (Bulldog Sharks)

*Hexanchus griseus* (Bonnaterre, 1788).

This deepwater species is occasionally caught by handline fishermen.

Orectolobidae (Nurse Sharks)

*Nebrius ferrugineus* (Lesson, 1830). *Moemoeao.*

*Ginglymostoma mulleri*—Schmelz, 1877.

*Stegostoma fasciatum* (Hermann, 1783). *Tu'ineva, moemoeao.*

Lamnidae (Mackerel Sharks)

*Isurus oxyrinchus* Rafinesque, 1810. *Aso-polota.*

Alopiidae (Thrasher Sharks)

Thrashers are occasionally caught in Samoan waters by tuna longline vessels though no specimens were available for examination.

Carcharhinidae (Requiem Sharks)

The general name for sharks in Samoa is *mali*.

*Carcharhinus albimarginatus* (Ruppell, 1837). *Aso.*

*Carcharhinus amblyrhynchos* (Bleeker, 1856). *Mali-alalao.*

Garrick has found that *menisorrah,* as used by Schultz (in Schultz et al. 1953) and subsequent authors, is a misidentification.

*Carcharhinus falciformis* (Bibron in Müller and Henle, 1841).

*Carcharhinus galapagensis* (Snodgrass and Heller, 1905).

*Carcharhinus leucas* (Valenciennes in Müller and Henle, 1841).

*Carcharhinus limbatis* (Valenciennes in Müller and Henle, 1841).

*Eulamia limbatis*—Steindachner, 1906.

*Carcharhinus longimanus* (Poey, 1861). *Apoapo.*

*Carcharhinus melanopterus* (Quoy and Gaimard, 1824). *Apespe, mali-alamata.*

*Carcharias melanopterus*—Jordan and Evermann, 1905.

*Galeocerdo cuvier* (Peron and LeSueur in LeSueur, 1822). *Nialui.*

*Negaprion acutidens* (Ruppell, 1837).

*Prionace glauca* (Linnaeus, 1758). *Aso-polota.*

This record is based on an observation by Patrick Bryan and Roger Pflum of a shark caught near the surface on a line about 12 km offshore.

*Triakodon obesus* (Ruppell, 1837). *Mala.*


Sphyrniidae (Hammerhead Sharks)

*Sphyra lewini* Griffith and Smith in Cuvier, Griffith, and Smith, 1834. *Mata'italiga.*

The young of this species are commonly captured by gillnet in Pago Pago Bay.

*Sphyra zygaena* (Linnaeus, 1758). *Mata'italiga.*

*Sphyra zygaena*—Jordan and Seale, 1906.

The two specimens upon which this record is based were not cataloged and could not be found within the collection of the U.S. National Museum. This species may occur in Samoa but Jordan and Seale probably confused it with *lewini* which is certainly the more abundant of the two.
**Squalidae (Dogfish Sharks)**

Bottom handline fishermen have reported catches of spiny dogfish (*Squalus*) at depths of 100 m or more though no specimens were available for examination. Likewise, *Isistius brasiliensis* was not seen by the author though its presence offshore is indicated by characteristic feeding scars (“plugs” of flesh removed) on tunas and other pelagic fishes.

**Rhinobatidae (Narrow-Snouted Shovelnose Rays)**

*Rhinobatus djiddensis* (Forskal, 1775).

This record is based on photographs taken by Stanley N. Swerdloff in Fagala Bay at a depth of 30 m.

**Dasyatidae (Sting Rays)**

The Samoan name for rays is *fai*.

*Dasyatis kuhlii* (Müller and Henle, 1841). *Fai-tala, fai-malle*.

*Trygon kuhlii*—Günther, 1910.

*Himantura fai* Jordan and Seale, 1906.

*Himantura fai*—Jordan and Seale, 1906.

This species is synonymized under *Dasyatis gerrardi* by some authors.

**Mobulidae (Mantas)**

Some Samoans refer to mantas as *fai-malle*. No specimens were obtained.

**Myliobatidae (Eagle Rays)**

*Aetobatis narinari* (Euphrasen, 1790). *Fai-pe’a, fai-manu*.

*Aetobatis narinari*—Günther, 1910.

**Elopidae (Ladyfishes)**

*Elops hawaiiensis* Regan, 1909.

*Elops saurus*—Jordan and Seale, 1906.

**Megalopidae (Tarpons)**

*Megalops cyprinoides* (Broussonet, 1782). *Ana’anālagi, fa*.

*Megalops cyprinoides*—Jordan and Seale, 1906.

**Albulidae (Bonefishes)**

*Albula* sp. *Avu*.

*Albula conorhynchus*—Schmeltz, 1877.

Recent authors have treated this genus as monotypic and have identified all specimens as *vulpes*. Based on his biochemical studies, James B. Shaklee believes there may be as many as six species in the genus. Further research is necessary before Samoan specimens can be identified with assurance.

**Anguillidae (Freshwater Eels)**

Members of this family, which are usually found in fresh or brackish water, are known as *tuna* in Samoa.

**Moringuidae (Worm Eels)**

Worm eels are called *fāfā* in Samoa. Peter H. J. Castle considers “the nomenclature of the Indo-Pacific species of *Moringua* to be in a state of complete flux” and is unable to identify Samoan specimens at present. He concludes that moringuids are sexually dimorphic and that there may be distinctive vertebral numbers for males and females in some species. Samoan eels were collected which key (Schultz’s key to the genus *Moringua*, in Schultz et al. 1953) to each of the species listed below. However, counts of lateral line pores (which correlate with vertebral numbers) in combination with measurements of relative head length and body depth reveal only three groupings for Samoan moringuids. The following list should be considered in the light of these comments.

*Moringua abbreviata* (Bleeker, 1863).

*Moringua abbreviata*—Schultz, 1943.

*Moringua bicolour* Kaup, 1856

*Moringua bicolour*—Schultz, 1943.

Castle believes that *bicolor* may be the male of *javanica*.

*Moringua javanica* (Kaup, 1856).

*Moringua javanica*—Günther, 1910.

*Moringua macrocephala* (Bleeker, 1863).

*Moringua macrocephala*—Schultz, 1943.

*Moringua macrochir* Bleeker, 1853.

*Moringua macrochir*—Schultz, 1943.

*Moringua microchir* Bleeker, 1853.

*Moringua macrocephala*—Jordan and Seale, 1906.

**Xenocongridae (False Morays)**

John E. McCosker assisted with the identifications of *Kaupichthys*. This genus seems to be unusually well represented in Samoa though its presence was not recorded until 1943.

*Kaupichthys atronasus* Schultz in Schultz et al., 1953.

*Kaupichthys brachychirus* Schultz in Schultz et al., 1953.

*Kaupichthys hyoproroides* (Strömann, 1896).

*Kaupichthys diodon*—Schultz, 1943.

*Kaupichthys sp.*

Two specimens collected at Fagaga Bay at 13 m. Pectoral long, about five eye diameters in length; distance from snout to anus about 3.5 in total length. Body of larger specimen gray brown, smaller specimen pale; both overlaid with tiny brown specks.

(CAS 40907.)

*Kaupichthys sp.*

Two specimens, 104 and 110 mm TL; collected at Upolu Island at 6 m. Pectoral short, its length about five times in eye diameter; eye large, its diameter about six in head; mouth short with rictus under hind margin of eye; posterior nasal flap lack-
Muraenidae (Morays)

The general name for moray eels in Samoa is pusi. Small individuals are sometimes termed to'e, large ones are called maoa'e, and very large specimens are referred to as atapanoa. Small brown eels may also be labeled u'aulu and small pale eels may be called apeape. John E. McCosker assisted with the identifications of Gymnothorax and Uropterygius. He also provided confirmation of published synonymies and revealed several that are unpublished. James E. Böhlke is considering the retention of the generic name Gymnothorax for only those species with serrated tooth margins. The species listed below under Gymnothorax without serrated teeth would then possess the generic name Lycodontis.

Anarchias allardicii Jordan and Starks, 1906.
   Anarchias allardicii—Jordan and Seale, 1906.
   As Uropterygius allardicii, Schultz, 1943.
Anarchias leucurus (Snyder, 1904).
   Uropterygius leucurus—Schultz, 1943.
Randall and McCosker (1975) discussed the confusion between this species and seychellensis. The present identification is, therefore, provisional.
Anarchias spp.
   Anarchias needs revision. Samoan specimens belonging to possibly three additional species have been collected. One form is tan with pale rectangular specks over most of the body; another is a uniform fawn color with the dorsal originating only slightly behind the anus and the third is pale with irregular brown bars and saddles on the body and brown bars on the lower lip. (CAS 47044-47047.)

Echidna delicatula (Kaup, 1856).
   Echidna delicatula and E. trossula—Jordan and Seale, 1906.
Echidna leucotaenia Schultz, 1943. Mutupu'u.
   Echidna leucotaenia—Schultz, 1943.
Echidna nebulosa (Ahl, 1789). A'alaga.
   Echidna nebulosa—Fowler, 1900.
Echidna polyzona (Richards, 1844).
   Poeciliopos polyzous—Schmelz, 1865.
Echidna unicolor Schultz in Schultz et al., 1953.
Echidna xanthospila (Bleeker, 1859).
   Echidna xanthospila—Steindachner, 1906.
McCosker questions the validity of this species.
Echidna zebra (Shaw, 1797). To'etapu.
   Echidna zebra—Schmelz, 1866.
Enchelycore bayeri (Schultz in Schultz et al., 1953.)
   Auvaeloloa-auli.
   Gymnothorax schismatorhynchus (part)—Schultz, 1943.
Enchelycore schismatorhynchus (Bleeker, 1853). Auvaeloloa.
   Gymnothorax schismatorhynchus (part)—Schultz, 1943.
Enchelycore canina (Quoy and Gaimard, 1824) Auvaeloloa-sina.
   Enchelynassa blekeri—Jordan and Snyder, 1904.
   As E. canina and Rhinamuraena eritima, Jordan and Seale, 1906.
Gymnothorax buenoensis (Bleeker, 1857).
   Gymnothorax buenoensis—Jordan and Seale, 1906.
Gymnothorax chilofolius (Bleeker, 1865).
   Gymnothorax detectus—Jordan and Seale, 1906.
Gymnothorax elegans Bliss, 1883.
   (CAS 44192.)
Gymnothorax reticulatus—Schmelz, 1866.
   As G. ruppelli, Schultz, 1943. McCosker and Randall (1982) noted that this species is listed as ruppelli by most authors.
Gymnothorax fimbriatus (Bennett, 1831). Pusi-pulepule, papatapulepule.
   Gymnothorax stellatus—Jordan and Seale, 1906.
Gymnothorax flavimarginatus (Rüppell, 1828). Tafi-laotalo, pusi-gatala.
   Gymnothorax favagineus—Schmelz, 1869.
   As G. flavomarginatus, Jordan and Seale, 1906.
Gymnothorax fuscomaculatus (Schultz in Schultz et al., 1953).
Gymnothorax gracilicaudus (Jenkins, 1903).
Gymnothorax gracilicauda—Schultz, 1943.
Gymnothorax hepaticus (Rüppell, 1828).
   Muraena hepatica—Schmelz, 1879.
Gymnothorax javanucus (Bleeker, 1859). Pusi-gatala, maoa'e.
   Gymnothorax javanicus—Jordan and Seale, 1906.
Gymnothorax margaritopilus Bleeker, 1864. Pusi-a'au.
   Gymnothorax talofo—Jordan and Seale, 1906.
Gymnothorax melatremus Schultz in Schultz et al., 1953.
Gymnothorax meleagris (Shaw and Dodder, 1795). Pualii, alai'ivi.
   Gymnothorax meleagris—Jordan and Seale, 1906.
   As G. leucostictus, Schultz, 1943.
Gymnothorax monostigma (Regan, 1909).
   Gymnothorax monostigma—Schultz, 1943.
Gymnothorax pictus (Ahl, 1789). Onea.
   Echidna varegata—Schmelz, 1866.
Gymnothorax petelli Smith, 1962.
   This species is incorrectly identified as moluccensis by some recent authors.
   *Gymnothorax reevesii (Richardson, 1844).
   Thysioidea reevesii—Schmelz, 1865.
Gymnothorax richardsoni (Bleeker, 1852).
   Muraena richardsonii—Steindachner, 1906.
   As Gymnothorax lineatus, Jordan and Seale, 1906.
Gymnothorax ruppeelliae (McClelland, 1845). Paputa-tusitusi.
   Gymnothorax petelli—Jordan and Evermann, 1905.
   As G. petelli, Jordan and Seale, 1906 and Schultz, 1943.
Randall (1973) examined the lectotype of this species and found it to be the species most recent authors have identified as petelli.
Gymnothorax thyrsoides (Richardson, 1844).
   Thysioidea areata—Schmelz, 1865.
Gymnothorax undulatus (Lacepède, 1803). Pusi-pulepule.
   Thysioidea cancelata—Schmelz, 1865.
Gymnothorax zonipictus Seale, 1906. Puleni'n'i.
   *Muraena pardinis Schlegel, 1846.
   Muraena pardinis—Günther, 1910.
   Rhinamuraena quaesita Garman, 1888.
   Rhinechidina eritima—Jordan, 1927.
Strophidon brummeri (Bleeker, 1859). Asula.
   Muraena taenioides—Günther, 1871.
   As Gymnothorax taenioides, Jordan and Seale, 1906.
Uropterygius bennettii (Günther, 1870).
McCosker has determined that sealei is a junior synonym.
Uropterygius concolor Rüppell, 1837.
Uropterygius concolor—Jordan and Seale, 1906.
Uropterygius fuscoguttatus Schultz in Schultz et al., 1953.
* Lamnostoma polyophthalma (Lacepède, 1803).
* Uroterygius marmoratus—Jordan and Seale, 1906.
* Uroterygius micropterus (Bleeker, 1852). Pusi-sulalulu.
* Uroterygius macrocephalus—Jordan and Seale, 1906.
* Uroterygius necturus (Jordan and Gilbert, 1882).

As Uroterygius reidi, Schultz, 1943. McCosker has found that kniati is a junior synonym.

* Uroterygius polyspilus (Regan, 1909).
* Uroterygius polyspis—Schultz, 1943.
U. dentatus is a junior synonym.

Gymnomuraena tigrina—Schmeltz, 1869.
As Scuticaria tigrina, Jordan and Seale, 1906.

* Uroterygius xanthopterus—Bleeker, 1859.
* Uroterygius xanthopterus—Schultz, 1943.

Congridae (Conger and Garden Eels)

Ariosoma scheelei (Strömman, 1896).
(CAS 44193.)

Conger cinereus Rüppell, 1828. I'au, pusi-sulalulu.
Leptocephalus margaratus—Jordan and Evermann, 1905.
As Congrellus guttulatus and Leptocephalus marginatus, Jordan and Seale, 1906 and as Conger noordzeike, Schultz, 1943.

Conger sp.
One specimen, 839 mm TL; caught at 440 m. Pectoral fin 19; 36 lateral line pores anterior to anus. Dorsal origin slightly anterior to pectoral tip; pupil centered over rictus. Measurements expressed in thousands of TL: head 168, tip of snout to origin of dorsal 232, tip of snout to anus 393, snout 42, diameter of eye 23, length of pectoral 62. David G. Smith examined the specimen but was unable to identify it. (ANSP 146127.)

Gorgasia naeopeae (Böhlke, 1951).
(Heteroconger hassi (Klauswitz and Eibl-Eibesfeldt, 1959).
(BPBM 17456.)

Ophichthidae (Snake Eels)

Again, John E. McCosker provided identifications and unpublished synonyms for several of the species listed below.

* Bascanichthys filaria (Günther, 1872).
Ophichthys filaria—Schultz, 1940.
* Brachysomophis crocodilinus (Bennett, 1833).
Ophichthys crocodilinus—Günther, 1910.
Brachysomophis saurophis Schultz, 1943. Ati 'ati, i 'au.
Brachysomophis saurophis—Schultz, 1943.

Calcehelys marmorata (Bleeker, 1853).
Calcehelys marmorat—Schultz, 1943.

Ichthyapus vulgaris (Weber and de Beaufort, 1916).
(CAS 47048, 47049.)

* Lamnostoma polyorthalma (Bleeker, 1853).
Ophichthys punctatus—Günther, 1910.
Leiuranus semicinctus (Lay and Bennett, 1839). Gatauli.
Sphagebranchus longipinnis—Schmeltz, 1866.
As Dalophys longipinnis and Leiuranus semicinctus, Jordan and Seale, 1906.

Muraenichthys gymnatus Bleeker, 1864.
Muraenichthys fowleri—Schultz, 1943.
Muraenichthys laticeps (Gölbl, 1897).
Muraenichthys laticeps—Schultz, 1943.
Muraenichthys macropterus Bleeker, 1857.
Muraenichthys macropterus—Seale, 1935.
Muraenichthys macrostomus Bleeker, 1864.
Muraenichthys schultzei Bleeker, 1857.
Muraenichthys schultzei—Helfrich et al. 1975.
Muraenichthys sibogae Weber and de Beaufort, 1916.
Muraenichthys cookei—Helfrich et al. 1975.

Myrichthys colubrinus (Boddaert, 1781). Gataaula.
Leiuranus colubrinus—Schmeltz, 1866.
As Chevastes colubrinus and C. fasciatus, Jordan and Seale, 1906.

Myrichthys maculosus (Cuvier, 1817).
Myrichthys maculosus—Schultz, 1943.

Myrophis uropterus (Temminck and Schlegel, 1842).
(CAS 38565.)

Ophichthus melanochir Bleeker, 1864.
Collected from Aunu 'u Island by John E. Randall. (BPBM 16794.)

Phyllophichthus xenodochus Gosline 1951.
* Pisorodonops cancrivorus (Richardson, 1844).
Ophichthys cancrivorus—Günther, 1910.

Schismorhynchus labialis (Seale, 1917).
Schultzizia johnstonensis (Schultz and Woods, 1949).
Yirraka sp.
McCosker plans to describe the single Samoan specimen of this striped species as new. (CAS 46677.)

Clupeidae (Herrings)

Members of this family are known generally as pelupelu. Peter J. Whitehead provided synonyms and confirmed identifications. He indicates that the four species listed with an asterisk may all be valid records.

* Dussumieria acuta Valenciennes in Cuvier and Valenciennes, 1847.

Dussumieria acuta—Seale, 1935.
Seale's specimens of acuta were never cataloged so the author was unable to confirm this record.

Herklotsichthys quadriramusculus (Rüppell, 1837).
Herklotsichthys punctatus—Fowler, 1932.

Whitehead writes that his student, Thosaporn Wongratana, has found punctatus to be restricted to the Red Sea and that the widespread species hitherto called by this name (Whitehead 1972) is quadriramusculus.

* Sardinella albella (Valenciennes in Cuvier and Valenciennes, 1847).

Clupea zuni—Schmeltz, 1879.

* Sardinella fimbriata (Valenciennes in Cuvier and Valenciennes, 1847).

Sprotella fimbriata—Schmeltz, 1865.

* Sardinella gibbosa (Bleeker, 1849).
Clupea gibbosa—Günther, 1909.

Sardinella melanura (Cuvier in Cuvier and Valenciennes, 1829).

Salala, pua.
Clupeonia commersoni—Schmeltz, 1865.
As Harengula commersoni, Jordan and Seale, 1906.
Sardinella sirm (Walbaum, 1792).
Sardinella sirm—Jordan and Seale, 1906.
Spratelloides delicatulus (Bennett, 1831). Pol, nefu.
Spratelloides alburnus—Schmeltz, 1874.
As Stolephorus delicatulus, Jordan and Seale, 1906.
Spratelloides gracilis (Schlegel, 1846). Pol, nefu.
Spratelloides retrofaciatus—Schultz, 1943.

Engraulididae (Anchovies)

Anchovies are called nefu or file in Samoa. Peter J. Whitehead has provided identifications and synonymies.

Stolephorus buccaneeri Strasburg, 1960.
Stolephorus devisi (Whitley, 1940).
This is the most common anchovy in Pago Pago Bay. It is sometimes confused with heterolobus from which it is distinguished by a lower gill raker count and longer head.
Stolephorus indicus (Van Hasselt, 1823).

Thrissina baemla (Forsskål, 1775).

Aspasmagaster scolops—Cuvier, 1817.

The single Samoan specimen was collected from Larsen Bay at 60 m.

Antennariidae (Frogfishes)

Members of this family are known by the same general names as the scorpaeids in Samoa. Individuals < 8 cm TL are called la‘otale; larger fish are nofu. Theodore W. Pietsch confirmed the identifications and provided most of the synonymies.

Abantennarius analis Gosline, 1957.

Antennarius coccineus (Lesson, 1831).
Antennarius commersonii (Shaw, 1804).
Antennarius commersonii—Günther, 1877.
Antennarius drombus Jordan and Evermann, 1903.
Antennarius drombus—Jordan and Seale, 1906.
Antennarius nummifer Cuvier, 1817.
Antennarius nummifer—Günther, 1876.
Antennarius rosaceus (Smith and Radcliffe, 1912).

This species was found within the body cavities of the sea cucumbers Stichopus chloronatus and Bohadschia argus.
Cheilopogon atrisignis (Jenkins, 1904).
Cheilopogon nigricans (Bennett, 1840).

The Samoan name for flyingfishes is mālolo. Only four species were collected by the author. However, N.V. Parin, who has been engaged in revisional studies of the family for the past 20 yr, has kindly listed the following as occurring in the vicinity of Samoa.

Cheilopogon spilopterus
Cheilopogon spilonopterus
Cheilopogon alrisignis
Cheilopogon unieolor
Cheilopogon suttoni
Cheilopogon unieolor-Jordan, 1906.

Euleptorhamphus viridis
Hemiramphus archipelagieus
Hemiramphus pacificus—Jordan and Seale, 1906.

As Hemiramphus pacificus, Schultz, 1943.

Hemiramphus affinis (Gunther, 1866).

Most of the published records of this species are misidentifications of Hemiramphus dussumieri. Collette has seen only one specimen (USNM 152263) from Samoa.

Hemiramphus dussumieri (Valenciennes in Cuvier and Valenciennes, 1846).

Zenarchopterus dispar (Valenciennes in Cuvier and Valenciennes, 1846).

Zenarchopterus vissiganis—Jordan and Seale, 1906.

Belonidae (Needlefishes)

Needlefishes with a total length of less than about 40 cm are called ise. Larger ones are known as a'u. Again, Bruce B. Collette provided synonyms.

Ablennes hians (Valenciennes in Cuvier and Valenciennes, 1846).
Platybelone argalus platyura (Bennett, 1832).
Belone platyura—Jordan and Evermann, 1905.

As Belone platyura, Jordan and Seale, 1906 and Schultz, 1943.
Strongyliura incisa (Valenciennes in Cuvier and Valenciennes, 1846).
Tylosurus leuroides—Jordan and Seale, 1906.

As Tylosurus incisa, Schultz, 1943.
Tylosurus crocodilus crocodilus (Peron and LeSueur, 1821).

Belone crocodilus—Schmeltz, 1866.
As Tylosurus giganteus, Jordan and Seale, 1906, and as T. indica, Schultz, 1943.

Poeciliidae (Mollies)

Poecilia mexicana Steindachner, 1866. Fi-val.

This species was introduced into the freshwaters of American Samoa many years ago by the Department of Public Health to control mosquitoes.
Poecilia reticulata Peters, 1859.

Lebistes reticulatus—Fowler, 1932.

Atherinidae (Silversides)

The Samoan name for members of this family is safl. Walter Ivantschoff is credited with the synonyms.

Atherinomorus lacunosus (Schneider, 1801).

Atherina punguis—Schmeltz, 1866.

As Hepsetia punguis, Schultz, 1943.
Atherion elymus Jordan and Starks, 1901.
Hypoatherina ovalaa (Herre, 1935).
Allaneta ovalaa—Helfrich et al., 1975.
Hypoatherina temperimacii (Bleeker, 1835). Safl, usiela.

Atherina usila—Jordan and Seale, 1906.

As Atherina usila, Schultz, 1943.
**Isonidae (Surf-Fishes)**

Iso sp.

Thirty-one specimens; 18-27 mm SL; collected at Fagasa and Sailele. Dorsal V-VI+1,14-16; anal I,21-22; pectoral 12-13. Teeth present but not externally on maxilla. Silvery lateral band continuous and terminating on anterior portion of caudal peduncle just behind axil of dorsal fin. This species occurs at the surface amidst turbulence and bubbles near wave-washed rocks. It will probably be described as new by Walter Ivantsoff. (MU I-181.)

**Anomalopidae (Lantern-Eyes)**

Anomalops katoptron Bleeker, 1856.

This species is occasionally caught by handline fishermen at depths >300 m. Its identity was confirmed by John E. McCosker. (CAS 44373.)

**Holocentridae (Squirrelfishes)**

Squirrelfishes are known as *malau* in Samoa. Matsuura and Shimizu (1982) have recently found that *Sargocentron* must replace the generic name *Adioryx* as used by most recent authors. John E. Randall provided several of the identifications and assisted with the synonymies.

Flammeo argenteus (Valenciennes in Cuvier and Valenciennes, 1831).

Holocentrum laeve—Günther, 1875.

As Holocentrus laevis, Jordan and Seale, 1906 and Schultz, 1943.

Flammeo aurolineatus (Liénard, 1839). Malau-va'a.

Randall writes that scyrophis is a common synonym.


Holocentrum operculare—Günther, 1875.

As Holocentrus opercularis, Jordan and Seale, 1906 and Schultz, 1943.

Flammeo sammara (Forsskål, 1775). Malau-tui, malau-pe'ape'a.

Holocentrum sammara—Schmeltz, 1865.

As Holocentrus sammara, Jordan and Seale, 1906 and Schultz, 1943.

Myripristis adustus Bleeker, 1853. Malau-tuavela, malau-'u'o.

Myripristis adustus—Schmeltz, 1866.

Myripristis amaenus (Castelnau, 1873).

Myripristis argyromus—Schultz, 1943.

Myripristis berndti Jordan and Evermann, 1903. Malau-ugatele, malau-va'ava'a.

Myripristis murdjan—Jordan and Evermann, 1905.

As *M. intermedius* (part) and *M. murdjan* (part), Jordan and Seale, 1906 and as *M. berndti* and *M. murdjan* (part), Schultz, 1943.

Myripristis chryseres Jordan and Evermann, 1903.

Randall confirmed the identification of this species which generally frequents depths >30 m.

Myripristis hexagonus (Lacépède, 1802).

Myripristis hexagonus—Schmeltz, 1865.

Myripristis kuntee Cuvier in Cuvier and Valenciennes, 1831.

Malau-pu'u.

Myripristis multiradiatus—Jordan and Seale, 1906.

As *M. multiradiatus*, Schultz, 1943.

Myripristis murdjan (Forsskål, 1775).


Randall and Guézé (1981) have just completed an examination of this species complex.

Myripristis prasinus Cuvier in Cuvier and Valenciennes, 1829.

Malau-va'ava'a, malau-mamó.

Myripristis prasinus and *M. sanguineus*—Jordan and Seale, 1906.

As *M. sanguineus*, Schultz, 1943.

Myripristis randallii Greenfield, 1974.

David W. Greenfield confirmed the identification. This species was previously known only from the Austral Islands and Pitcairn Island.

Myripristis violacea Bleeker, 1851. Malau-tauaui.

Myripristis microphthalmus—Jordan and Seale, 1906.

As *M. microphthalmus*, Schultz, 1943.

Myripristis vitatus Cuvier in Cuvier and Valenciennes, 1831.

Greenfield also identified this species.

Myripristis woodsi Greenfield, 1974.

Myripristis intermedius (part) and *M. murdjan* (part)—Jordan and Seale, 1906.

As *M. murdjan* (part), Schultz, 1943.


Ostichthys delta—Randall, Shimizu and Yamakawa, 1982. (BPBM 28107.)

Ostichthys kaianus (Günther, 1880).

This identification was confirmed by John E. Randall. (BPBM 28906.)

Plectrypops lima (Valenciennes in Cuvier and Valenciennes, 1831.) Malau-mutu.

Myripristis humilis—Kner and Steindachner, 1866.

As Holotrichus lima, Jordan and Seale, 1906 and Schultz, 1943.


Holocentrum caudimaculatum—Schmeltz, 1865.

As Holocentrus caudimaculatus, Jordan and Seale, 1906 and Schultz, 1943.

Sargocentron diadema (Lacepède, 1801). Malau-tui, malautalapu'u, malau-tusitusi, malau-pu'uli.

Holocentrum diadema—Schmeltz, 1865.

As Holocentrus diadema, Jordan and Seale, 1906 and Schultz, 1943.

Sargocentron ensiferum (Jordan and Evermann, 1903).

This species is handlined from deep water.

Sargocentron lacteoguttatum (Cuvier in Cuvier and Valenciennes, 1829). Malau-faiumu.

Holocentrum punctatissimum—Schmeltz, 1865.

As Holocentrus punctatissimus, Jordan and Seale, 1906 and as *H. lacteoguttatus*, Schultz, 1943.

Sargocentron melanospilos (Bleeker, 1858).

A specimen was handlined from 90 m. The identity was confirmed by Randall who reports that cornutum, the name often applied to this species, has an Indo-Malayan distribution. (BPBM 27764.)

Sargocentron microstomus (Günther, 1859). Malau-tiauia.

Holocentrum microstomus—Schmeltz, 1874.

As Holocentrus microstomus, Jordan and Seale, 1906 and Schultz, 1943.

Sargocentron rubrum (Forsskål, 1775).

Holocentrum rubrum—Günther, 1874.

As Holocentrus prasinus, Jordan and Seale, 1906 and as *H. ruber*, Schultz, 1943.
Records and assisted with the synonymies. Fistularia commersonii Choeroichthys sculptus Choeroichthys cinctus Macrorhamphosus scolopax Aulostomus chinensis Cosmocampus Corythoichthys intestinalis Lampris guttatus Sargocentron violaceum Sargocentron tereoides Sargocentron pontinus Sargocentron spiniferum As A1wyne Wheeler. Additional synonyms are C. E. Dawson has A Samoan specimen taken from a fish stomach was identified As Macrorhamphosus brevispinus, Jordan and Seale, 1906 and as H. erythraeus, Schultz, 1943. This species is occasionally caught by fishermen at depths around 200 m. This species is usually found in brackish or freshwater. Those > 8 cm TL are called la'otale. Those > 8 cm TL are referred to as nofu or i'atala. William N. Eschmeyer has confirmed the identifications of the new Samoan records and provided synonyms.

**Lampridae (Moonfish Family)**

* Lampris guttatus (Brunnich, 1788). Koko. This is a pelagic species commonly caught by tuna longline vessels.

**Aulostomidae (Trumpetfishes)**


**Fistulariidae (Cornetfishes)**


**Macrorhamphosidae (Snipefishes)**

* Macrorhamphosus scolopax (Linnaeus, 1758). Centriscus brevispinus—Kner and Steindachner, 1866. As Macrorhamphosus brevispinus, Jordan and Seale, 1906. This species is occasionally caught by fishermen at depths around 200 m. This species is usually found in brackish or freshwater. Those > 8 cm TL are called la'otale. Those > 8 cm TL are referred to as nofu or i'atala. William N. Eschmeyer has confirmed the identifications of the new Samoan records and provided synonyms.

**Syngnathidae (Pipefishes and Seahorses)**

C. E. Dawson has confirmed the identifications and Samoan records and assisted with the synonymies.


**Scorpaenidae (Scorpionfishes)**

Scorpionfishes <8 cm TL are called la'otale. Those >8 cm TL are referred to as nofu or i'atala. William N. Eschmeyer has confirmed the identifications of the new Samoan records and provided synonyms.

Scorpaenopsis diabolus Cuvier in Cuvier and Valenciennes, 1829. 
Scorpaenopsis gibbosa—Jordan and Seale, 1906. 
As S. gibbosa (part), Schultz, 1943. 
Scorpaenopsis fowleri (Pietzschmann, 1934). 
Scorpaenopsis fowleri—Eschmeyer and Randall, 1975. 
Scorpaenopsis macrochir Ogilby, 1910. 
Scorpaenopsis gibbosa (part)—Schultz, 1943. 
Scorpaenopsis novae-guineae (Cuvier in Cuvier and Valenciennes, 1829). 
Scorpaenopsis novae-guineae—Jordan and Seale, 1906. 
Scorpaenopsis sp. 
One specimen, 35 mm SL. Dorsal XII,9; anal III,5; pectoral 18; about 40 vertical scale rows. Suborbital ridge with three spines. A dark blotch on soft anal. (CAS 44530.) 
Synanceia verrucosa Bloch and Schneider, 1801. 
Synanceia verrucosa—Schultz, 1943. 
As Synanceia verrucosa, Jordan and Seale, 1906 and Schultz, 1943. 
Caracanthus maculatus (Gray, 1831). Tapua. 
Caracanthus maculatus—Jordan and Seale, 1906. 
Caracanthus unipinna (Gray, 1831). Tapua. 
Caracanthus unipinna—Schultz, 1943. 

Caracanthidae (Dwarf Rockfishes) 

Caracanthus maculatus (Gray, 1831). Tapua. 
Caracanthus maculatus—Jordan and Seale, 1906. 
Caracanthus unipinna (Gray, 1831). Tapua. 
Caracanthus unipinna—Schultz, 1943. 

Platycephalidae (Flatheads) 
The flatheads, which are called tolo in Samoa, were identified by Leslie W. Knapp who plans to revise the family. 

Platycephalus chiltonia (Schultz in Schultz et al., 1966). 
Platycephalus mylayanus Bleeker, 1853. 
Platycephalus variolosus—Günter, 1876. 
As P. variolosus, Jordan and Seale, 1906. Knapp also places Thysanophrys papillolabium in synonymy. 

Platycephalus olsolopis Regan, 1908. 

Platycephalidae sp. 
Five specimens, 90-98 mm SL. Dorsal VIII + 11; anal 12; lateral line pores 51-52. Snout in SL 8.9-9.6. This species is similar to chiltonia but has a shorter snout. (BPBM 18722.) 
Wakiyus welanderi Schultz in Schultz et al., 1966. 
A single individual was collected at Larsen Bay on sandy bottom at 40 m. 

Dactylopteridae (Flying Gurnards) 

Dactyloptena orientalis (Cuvier in Cuvier and Valenciennes, 1829). 

Centropomidae (Perchlets) 
Ambassis mops Günther, 1871. Lafa. 
Ambassis lafa—Jordan and Seale, 1906. 
As A. lafa, Schultz, 1943. 
This species is usually found in freshwater. 
Ambassis safga (Forsskål, 1775). Lafa. 
Ambassis commersonii—Schmelz, 1869. 
As A. vaivasensis, Jordan and Seale, 1906 and Schultz, 1943. 
This species is recorded only from Western Samoa where its preferred habitat (bays, estuaries, and freshwater streams) is extensive. 

Percichthyidae (Temperate Basses) 

(BPBM 27767.) 

Serranidae (Groupers and Sea Basses) 

Groupers <30 cm TL are generally known as gatula. Those 30-90 cm TL are called 'ata'ata and very large individuals may be termed vaulo. John E. Randall assisted with the identifications. 

Anthias dispar—Randall and Lubbock, 1981. 
Anthias lori Lubbock and Randall in Fourmanoir and Laboute, 1976. 
Anthias lori—Randall and Lubbock, 1981. 
Anthias pascalus (Jordan and Tanaka, 1927). Segasegamoana. 
Anthias pascalus—Randall and Lubbock, 1981. 
Anthias pleurotaenia Bleeker, 1857. 
Anthias sp. 

Two specimens, 75 and 84 mm SL; collected at 47-50 m. Dorsal X,16-17; anal III,7; pectoral 17-18; lateral line pores 46-48. Four scale rows between lateral line and spinous mid-dorsal; third dorsal spine elongate. These and the following unidentified Anthias are deposited in the California Academy of Sciences. (CAS 44374-44377.) 

Anthias sp. (Subgenus Pseudanthias). 
One specimen, 67 mm SL. Dorsal X,16; anal III,7; pectoral 19; gill rakers 11 + 1 + 24 = 36; lateral line pores 51. Prominent serrations on preopercle. 

Anthias sp. (Subgenus Pseudanthias). 
One specimen, 24 mm SL. Dorsal X,16; anal III,7; pectoral 19; gill rakers 8 + 1 + 24 = 33; lateral line pores 47. Prominent spines at angle of preoperculum and angle of operculum. 

Anoprodoros leucogrammicus (Valenciennes in Cuvier and Valenciennes, 1828). Gatula-aleva. 

Anoprodoros leucogrammicus—Jordan and Seale, 1906. 

Cephalopholis argus Bloch and Schneider, 1801. Gatula-uli, lo. 
Serranus myriaster—Schmelz, 1865. 
Randall has found that guttatus is an older name for this species but he and Ben-Tuvia have petitioned the International Commission to retain argus. 

This species is occasionally handled from deep water. 

Cephalopholis indelibilis ( Fowler, 1904). Gatula-sega. 
Randall has recently determined this to be an older name for a species he (1964a) had identified as obtusaurus. (BPBM 27768.) 

Cephalopholis leopardus (Lacepède, 1801). Gatula-sina, mata'ele. 

Epinephelus leopards—Steindachner, 1906. 
*Cephalopholis minuati (Forskkål, 1775). 
Serranus minuati—Günther, 1873. 
Samoan records may be misidentifications as the species has been confused in the past with sexmaculatus which is herein recorded from Samoa for the first time. 

Cephalopholis sexmaculatus (Rüppell, 1828). Gatula-mumu. 

Cephalopholis sonnerati (Valenciennes in Cuvier and Valenciennes, 1828). Velo, mata'ele. 

Epinephelus sonnerati—Boulenger, 1895. 

Cephalopholis urodelus (Bloch and Schneider, 1801). Mata'ele. 
Serranus urodelus—Schmelz, 1866. 

Cephalopholis sp. 
Seven specimens, 48-126 mm SL. Dorsal IX,15; anal III,9; pec-
toral 18; vertical scale rows above lateral line 98-104. Head, body, and fins reddish orange; posterior edge of caudal pale with pale coloration broader dorsally and ventrally; four red spots on lower lip, two bordering the symphysis and the others midway between the symphysis and corners of mouth. This species is common in Samoa and Randall indicates it is widespread in Oceania and the western Pacific. (BPBM 17495.)

Epinephelus dictyophorus (Bleeker, 1856). Ata'ata-utu.
The single specimen collected was caught at a depth of about 100 m. (BPBM 22720.)

Epinephelus fuscoguttatus (Thunberg, 1792). Gatala-pule'ena.

Epinephelus fasciatus (Forsskål, 1775). Fausi.

Epinephelus fuscoguttatus (Forsskål, 1775). Gatala-aloalo.
Epinephelus fuscoguttatus (part)—Jordan and Seale, 1906. Randall (1964a) indicated horridus as a probable junior synonym of fuscoguttatus but Schultz (in Schultz et al. 1966) distinguished between the two species on the basis of pectoral ray and gill raker count. Samoan specimens agree with Schultz’s diagnosis of horridus.

Epinephelus hexagonatus (Bloch and Schneider, 1801). Gatala-a’au.
Serranus hexagonatus—Schmeltz, 1869. As Epinephelus stellans, Jordan and Seale, 1906.

Epinephelus maculatus (Bloch, 1790). Gatala-puleului.
Epinephelus maculatus—Jordan and Seale, 1906.
Epinephelus medurensis is a junior synonym.

Serranus merra—Schmeltz, 1866.

Epinephelus microdon (Bleeker, 1856). Gatala-nifoli’i, gatala-aloalo.

Epinephelus fuscoguttatus (part)—Jordan and Seale, 1906. Randall (1964a) discussed the confusion between this species and fuscoguttatus.

Epinephelus morrhua Valenciennes in Cuvier and Valenciennes, 1833. Ata’ata-tusitusi.
The species is common at depths of 100 m or more.

Epinephelus socialis (Günther, 1873).
Serranus socialis—Günther, 1873.

Epinephelus tavina (Forsskål, 1775). Gatala-tane.
Serranus tavina—Schmeltz, 1865.

Epinephelus elongatus Schultz is a recent synonym.

Epinephelus sp. Gatala-pulesama.
One specimen, 190 mm SL; taken by handline at 200 m. Dorsal XI,16; anal III,8; gill rakers 8 + 1 + 14 = 23. Head and body light brown; yellow spots on head and nape; five broad but indistinct darker bars on sides and peduncle. (BPBM 24329.)

Graclara albomarginata (Fowler and Bean, 1930). Susumii.


Chorististium susumi—Jordan and Seale, 1906.

Liopropoma sp.

John E. Randall and Leighton Taylor are describing this red-and-white striped species. (BPBM 18723.)

Plectranthias kamii Randall, 1980.
This species is occasionally handlined from deep water. (BPBM 22721.)

Plectranthias yamakurai Yoshino, 1972.
This identification was confirmed by John E. Randall. (BPBM 28902.)
Plectropomus leopardus (Lacepède, 1802). Ata’ata-utu.
Plectropomus melanoleucus (Lacepède, 1802).
The author has collected and observed this distinctive species only in Pago Pago Bay.
Plectropomus truncatus Fowler and Bean, 1930. Ata’ata-utu. (BPBM 22718.)

Promicrops lanceolatus (Bloch, 1790). Ata’ata-utu, vaolo.
Individuals weighing more than 100 kg have been observed.

Salapia powelli Smith, 1963.
This species was observed on only one occasion. It was handlined from an offshore bank at a depth of about 140 m. (BPBM 27858.)

Varioia louti (Forsskål, 1775). Papa-tuauli (juveniles), vei (subadults), papa (adults).
Plectranthias yamakawai—Boulenger, 1895.
As Varioia flavimarginata, Jordan and Seale, 1906.

Grammistidae (Soapfishes)

Belonopercan chabaraudi Fowler and Bean, 1930. Apou.
Randall et al. (1980) have shown this species to be a grammistid rather than a serranid as previously classified.

Grammistis sexlineatus (Thunberg, 1792). Tui, tusiloa.
Grammistis orientalis—Schmeltz, 1869.

Grammistis ocelatus Schultz in Schultz et al., 1953. Anaoso.

Pogonopercia punctata (Valenciennes in Cuvier and Valenciennes, 1830). Gutuono.
The single Samoan specimen was handlined from deep water.

Pseudochromidae (Basslets)

Members of this family are generally called tiva. None were known from Samoa prior to 1943. All are small and found subtidally.

Chidichthys sp.
Three specimens, 24-46 mm SL; collected at 43 and 66 m. Dorsal II,25; anal II,15; pectoral 17; pelvic 1,4; scales 62-63. Body dusky rose or orange; nape, snout, and lips bright rose. (BPBM 27858.)

Pseudochromis jamesi—Schultz, 1943.
The bright reddish orange coloration of mature males is not mentioned by Schultz in his species description.

Pseudochromis porphyreus Lubbock and Goldman, 1974.

Pseudochromis porphyreus—Lubbock and Goldman, 1974.

Pseudoplesiops rosea Schultz, 1943.
Pseudoplesiops rosea—Schultz, 1943.
Pseudoplesiops sp.
Three specimens, 25-27 mm SL; collected at 43 m. Dorsal II,25; anal II,15; pectoral 17; pelvic 1,4; scales 33-36. No lateral line. Head and body greenish yellow; underside of head red; alternate dorsal and anal rays dusky at base. (BPBM 21421.)

Plesiopidae (Prettyfins)

Prettyfins are generally termed aneanea or tafuti.
Plesiops coeruleolineatus Rüppell, 1835.  
Pharopteryx melas—Jordan and Seale, 1906.  
Plesiops coralicola Bleeker, 1853.  
Plesiops nigricans—Schmeltz, 1866.  
As Pharopteryx nigricans, Jordan and Seale, 1906 and as  
Plesiops nigricans, Schultz, 1943.  
Plesiops sp.  
Two specimens, 22 and 26 mm SL. Dorsal IX,9; anal III,7;  
pectoral ii,13-14,ii-iii = 18; pelvic 1,4; scales 23; gill rakers  
5 + 1 + 7 = 13. Lower pectoral rays with only two branches;  
pelvics extend beyond axil of anal in larger individuals. Head  
and body pale with brown bars; medial fins with dark brown  
bars and pale edges. (BPBM 17524, 20012, 24110.)

Pseudogrammitidae (Reef Basslets)  
Pseudogramma bilinearis (Schultz, 1943). Ateate.  
Aporops bilinearis—Schultz, 1943.  
Pseudogramma polyacantha (Bleeker, 1856).  
Gnathypops samoensis—Fowler and Silvester, 1922.  
Pseudogramma sp.  
One specimen, 80 mm SL; collected at 33 m. Dorsal VII,22;  
anal III,18; pectoral 14; pelvic 1,5; scales 49; lateral line pores  
22; gill rakers 5 + 1 + 11 = 17. No spine on rear margin of  
preopercle. Body brown with yellow-brown blotches; fins red- 
dish. (BPBM 24128.)

Teraponidae (Terapon Perches)  
Terapon jarbua (Forsskål, 1775). Ava‘ava.  
Terapon servus—Schmeltz, 1866.  

Kuhliidae (Mountain Basses)  
Kuhlia marginata (Cuvier in Cuvier and Valenciennes, 1829).  
Lulele.  
Dules malo—Schmeltz, 1866.  
Kuhlia mugil (Bloch and Schneider, 1801). Safele.  
Kuhlia taeniura—Jordan and Evermann, 1905.  
As K. taeniura, Jordan and Seale, 1906 and Schultz, 1943.  
Kuhlia rupestris (Lacepède, 1802). Sesele (<15 cm TL), limato  
(>15 cm TL).  
Dules rupestris—Schmeltz, 1866.  
This species is often found in freshwater.  
Kuhlia salelea Schultz, 1943. Salele.  
Kuhlia marginata—Evermann and Seale, 1923.  
This species is often found in freshwater.

Priacanthidae (Big-Eyes)  
All species of Priacanthus are known as matapula in Samoa.  
Wayne C. Starnes, who is revising the genus, made or confirmed  
the identifications.

Priacanthus blochii Bleeker, 1853.  
This species is fairly common in Pago Pago Bay. (BPBM 17485.)  

Priacanthus cruentatus (Lacepède, 1801).  
Priacanthus cruentatus—Jordan and Seale, 1906.  
Priacanthus hamrur (Forsskål, 1775).  
A specimen was handlined from 60 m. (BPBM 27765.)

Priacanthus sp.  
One specimen, 192 mm SL; handlined from 100 m. Dorsal  
X,14; anal III,15; lateral line pores 55 + 5 (left side) and 56 + 6  
(right side) = 60-62; gill rakers 5 + 1 + 15 = 21. Caudal slightly  
rounded. Central portion of pelvics and distal portions of soft  
dorsal and anal yellow; black spot at base of pelvics; membrane  
between dorsal spines I and III dusky. Starnes plans to describe  
this species which has a wide Indo-Pacific distribution. (USNM  
236936.)  

A specimen was handlined from 160 m. (BPBM 27766.)

Apogonidae (Cardinalfishes)  
The general name by which cardinalfishes are known in Samoa  
is fē. Many of the species groups in this family are poorly  
understood and will likely undergo changes in nomenclature when  
subjected to comprehensive review. At present, Lachner (in  
Schultz et al. 1953) is probably the best source for species names  
and descriptions and, unless otherwise noted, is followed in this  
checklist.

Apogon angustatus (Smith and Radcliffe, 1911). Fō-tusiloloa.  
*Apogon asaedae Seale, 1935.  
Apogon asaedae—Seale, 1935.  
Thomas H. Fraser writes that the types are in poor condition  
and their identity is uncertain.

Apogon bandanensis Bleeker, 1854.  
Apogon bandanensis—Steindachner, 1901.  
Apogon cocineus Rüppell, 1838. Fō-situmī.  
Apogon erythrina—Jordan and Evermann, 1905.  
As Amia erythrina, Jordan and Seale, 1906 and as Apogon  
doryssa (part), Schultz, 1943.  
Apogon dammermani Weber and deBeaufort, 1929. Fō-malau.  
Amia crassiceps and A. fusca—Jordan and Seale, 1906.  
As Apogon crassiceps (part), Schultz, 1943.  
Apogon edekataenio Bleeker, 1852.  
Apogon edekataenio—Fraser, 1972.  
Apogon exostigma (Jordan and Starks, 1906). Fō-loloa.  
Amia exostigma—Jordan and Seale, 1906.  
As Apogon frenatus (part), Schultz, 1943.  
Apogon fragilis Smith, 1961.  
This species was collected from the saltwater pond enclosed by  
runways at the Pago Pago International Airport.

Apogon frenatus Valenciennes in Cuvier and Valenciennes, 1832. Fō-loloa.  
Apogon frenatus (part)—Schultz, 1943.  
Apogon guamensis Valenciennes in Cuvier and Valenciennes, 1832.  
Amia savayensis (part)—Jordan and Seale, 1906.  
As Apogon bandanensis (part), Schultz, 1943.  
Apogon nubilis is a junior synonym.  
Apogon hypselonotus Bleeker, 1855. Fō-sīlumī.  
Amia doryssa—Jordan and Seale, 1906.  
As Apogon doryssa (part), Schultz, 1943.  
Apogon kallopeterus Bleeker, 1856. Fō-si‘aloa.  
Amia snyderi—Jordan and Seale, 1906.  
As Apogon frenatus (part), Schultz, 1943.  
Apogon lateralis Valenciennes in Cuvier and Valenciennes, 1832.  
Amia lateralis—Jordan and Seale, 1906.  
As Apogon ceramensis, Schultz, 1943.
Apogon leptacanthus Bleeker, 1856.
Apogon leptocanthis—Schmeltz, 1866.
As Micrurus graeffi, Jordan and Seale, 1906 and as Apogon graeffi, Schultz, 1943.
As Apogon arobiensis, Schultz, 1943.
Apogon novemjasciatus Cuvier in Cuvier and Valenciennes, 1828.
As Apogon novemfasciata (part), Jordan and Seale, 1906.
As Apogon novemfasciata (part), Schultz, 1943.
As Apogon novemfasciata (part), Schultz, 1943.
As Amia savayensis (part), Jordan and Seale, 1906 and as Apogon bandanensis (part), Schultz, 1943.
Apogon trimaculatus Cuvier in Cuvier and Valenciennes, 1828.
Amia koilomadon—Jordan and Seale, 1906.
Apogon sp. Fō-talamenea.
Lachner (in Schultz et al. 1953) referred to this species as novaeguineae. He has since determined to be undescribed, however, and plans to describe it with John E. Randall.

Apogon sp.
Two specimens, both 25 mm SL; collected at 37 m. Dorsal VII + 1,9; anal II,8; pectoral 14; lateral line pores 22. Head, body, and fins with rosy brown and pale mottling. (USNM 220060.)

Archamia biguttata Lachner, 1951.
Archamia fucata (Cantor, 1850). Fō-maniif. Apogon bleekeri—Schmeltz, 1866.
As Archamia lineolata, Jordan and Seale, 1906 and Schultz, 1943.
Chelodipterus macrodon (Lacepède, 1802). Fō-taoto, tuganini (Savai'ì).
Chelodipterus octovittatus—Schmeltz, 1866.
As Paramia macrodon, Jordan and Seale, 1906 and as Chelodipterus lineatus, Schultz, 1943.
As Paramia quinquelineata, Schultz, 1943.

As Apogon brachygramma (part), Schultz, 1943.
As Apogon brachygramma (part), Schultz, 1943.
Schultz (1943) placed this species in synonymy with foa.
• Fowleria aurita (Valenciennes in Cuvier and Valenciennes, 1831). Apogon auritus (part)—Schultz, 1943.
Considerable difference of opinion exists regarding the taxonomy of this genus. Schultz (1943) placed marmoratus and variegatus in the synonymy of auritus but retained isostigma as a valid species. Smith (1961) recognized only auritus. All four forms are given specific status by Lachner (in Schultz et al. 1953). The present author was readily able to identify isostigma, marmoratus, and variegated from recently collected material. Samoan specimens at the U.S. National Museum labeled aurita were examined but their faded condition made identification impossible.

Fowleria isostigma (Jordan and Seale, 1906). Fō-gatala.
Apogonichthys isostigma—Jordan and Seale, 1906.
As Apogon isostigma, Schultz, 1943.
Fowleria marmorata (Allyne and Macleay, 1876). Fō-mūmū.
Apogonichthys marmoratus—Jordan and Seale, 1906.
As Fowleria aurita (part), Schultz, 1943.
Fowleria variagata (Valenciennes in Cuvier and Valenciennes, 1832).
Apogonichthys variagatus—Jordan and Seale, 1906.
As Apogon auritus (part), Schultz, 1943.
Gymnapogon urospilotus Lachner in Schultz et al., 1953. Pseudamia polyistigma (Bleeker, 1859).
Pseudamia sp.
Two specimens, 46 and 47 mm SL; collected at Larsen Bay at 70 m. Dorsal VI + 1,8; anal II,8; pectoral 16; gill rakers 8 developed + 9 or 10 undeveloped; lateral line scales 5 + 18 = 23; a ventral row of 19 notched scales from below pectoral base to caudal peduncle. Scales cycloid and well developed; no flap on anterior nostrils; a few serrations on angle of preoperculum. Color in alcohol: body pale yellow, almost entirely overlaid with yellow-brown pigment; brown spots on preoperculum, lips, and chin; caudal dusky; all other fins pale. (BPBM 24116.)
Pseudaniops gracilicauda (Lachner in Schultz et al., 1953).
Rhabdamia sp.
Several specimens, largest is 33 mm SL; collected at depths of 20-33 m. Dorsal VI + 1,9; anal II,12-14; pectoral 10; gill rakers 14. One week suborbital spine at angle and 2-5 weak preopercular spines. Translucent with pale orange spots on head. Color in alcohol: pale yellow with dusky specks on preoperculum, lips, and chin. (BPBM 18724, USNM 220059.)

Malacanthidae (Tilefishes)
These fishes are generally known as mo'o or mo'otai.
Malacanthus brevirostris Guichenot, 1848.
Malacanthus latovittatus (Lacepède, 1801). Mo'o-moana.
Oceanops latovittatus—Jordan and Seale, 1906.

Echeneidae (Remoras)
Remoras are called talitaliuli in Samoa.
Echeneis naucrates Linnaeus, 1758.
Echeneis naucrates—Fowler, 1900.
As Leptecheneis naucrates, Jordan and Seale, 1906.
Phthisichthys lineatus (Menzies, 1791).
This fish was associated with a hawksbill turtle, Eretmochelys imbricata, when collected.
Remora remora (Linnaeus, 1758).
Echeneis remora—Schmeltz, 1865.
Remoropsis pallida (Schlegel, 1850).
A specimen was taken from the gills of a black marlin, Makaira indica.
Rhombobrama osteochir (Cuvier in Cuvier and Valenciennes, 1829).
This specimen was associated with a blue marlin, Makaira nigricans.

Carangidae (Jacks)
Many of the jacks are not known by specific Samoan names.
Alectis ciliaris (Bloch, 1787). *Noasani* (juvenile), *to‘uto‘u* (subadult).

Alectis ciliaris—Jordan and Seale, 1906.

Atule mate (Cuvier in Cuvier and Valenciennes, 1833).

Decapterus lundini—Jordan and Seale, 1906.

As Caranx lundini, Schultz, 1943.

Carangoides caeruleopinnatus (Rüppell, 1830). *Lalafutu, filu*.

Carangoides dinema (Bleeker, 1851).

A specimen was handlined from 80 m.

Carangoides jerdau (Forsskål, 1775).

Carangoides jerdau—Jordan and Seale, 1906.

As Caranx jerdau and C. gilberti, Jordan and Seale, 1906 and as C. jerdau, Schultz, 1943.

Carangoides hedlandensis (Whiteley, 1934).

Caranx plumbeus—Jordan and Seale, 1906.

As Caranx armatus, Schultz, 1943. This species has been referred to as ciliaris which is a nomen dubium (Williams et al. 1980).

Carangoides orthogrammuss Jordan and Gilbert, 1881.

Junior synonyms are jordani, nitidus, and the subspecies gymnostethoides evermanni. (ANSP 144898.)

Carangoides plagiotena (Bleeker, 1857).

Williams lists this as the "probable" identity for the Samoan specimen he examined. Junior synonyms include vomerinus, compressus, and brevicarinatus.

Caranx ignobilis (Forsskål, 1775). *Sapo‘anae*.

Caranx ignobilis (part) and C. marginatus—Jordan and Seale, 1906.

Caranx lugubris Poey, 1861. *Tafauli*.

Caranx adscensionis—Schultz, 1975.

Caranx melanopus Cuvier in Cuvier and Valenciennes, 1833.


Caranx papiensis Alleyne and Macleay, 1877. *Malauai-sinasana*.

Caranx ignobilis (part)—Jordan and Seale, 1906.

Caranx sexfasciatus Quoy and Gaimard, 1825. *Malauai-matalapo‘a*.

Caranx hippos—Günther, 1876.

As C. forsteri, Jordan and Seale, 1906.

Decapterus macarellus (Cuvier in Cuvier and Valenciennes, 1833).

Atuleau, *namauai*.

Decapterus macrocoma Bleeker, 1851. *Atuleau, namauai*.

Most recent authors have misapplied the name lajang to this species according to Smith-Vaniz.

Elegatis bipinnulatus (Quoy and Gaimard, 1825). *Sāmanī*.

Gnathanodon speciosus (Forsskål, 1775). *Lupoval* (juveniles).

Caranx speciosus—Jordan and Seale, 1906.

As Caranx speciosus, Schultz, 1943.

Megalaspis cordyla (Linnaeus, 1758). *Atuulo*.

Caranx rotleri—Günther, 1876.

Scomberoides liyan (Forsskål, 1775). *Lai*.

Chorinemus tolo—Schmeltz, 1866.

As Scomberoides sancti-petri, Jordan and Seale, 1906 and Schultz, 1943.
Large, deepwater species are known as palu. Sixteen of the 17 new records for this family were taken by local handline fishermen in relatively deep water (>100 m).

*Aphareus furcatus* (Lacepède, 1801). *Palu-aloulo.*
*Aphareus rutilans* Cuvier in Cuvier and Valenciennes, 1830.

**Lutjanus bohar***
*C. rutilans***
*A. argentimaculatus***
*A. kasmira***
*A. gibbus***
*A. argyrea***
*A. sanguineus***
*A. rivulatus***
*A. Ju/vus***
*A. sanguineus***
*A. argentimaculatus***
*A. kasmira***
*A. gibbus***
*A. argyrea***
*A. sanguineus***
*A. argentimaculatus***
*A. kasmira***
*A. gibbus***
*A. argyrea***
*A. sanguineus***

Etiels *carbunculus* Cuvier in Cuvier and Valenciennes, 1828.

**Palu-malau.**
Anderson (1981) concluded that *marshi* is a synonym.


Etiels *radiosus* Anderson, 1981.

This recently described species is caught less frequently in Samoa than the other two members of the genus. Its appearance is similar to *coruscans* though the caudal fin lobes are shorter and the gill rakers more numerous.

*Lutjanus argentimaculatus* (Forsskål, 1775). Mū-tāiva.
Mesoprinon gembra—Schmeltz, 1869.
As *Lutjanus argentimaculatus* and *L. lineatus*, Jordan and Seale, 1906 and as *L. argentimaculatus*, Schultz, 1943.

*Lutianus biguttatus* (Valenciennes in Cuvier and Valenciennes, 1830).
Mesoprinon bleckeri—Schmeltz, 1869.

*Lutianus bohar* (Forsskål, 1775). Mū, mū-a’a (dark phase), mū-mēa (red phase).

*Lutianus bohar*—Jordan and Seale, 1906.
As *Lutianus bohar*, Schultz, 1943.

*Lutianus fulviflamma* (Forsskål, 1775).
Mesoprinon fulviflamma—Schmeltz, 1874.

*Lutianus fulvus* (Bloch and Schneider, 1801). Tamala, tāiva.
Genyoreg a marginata—Schmeltz, 1865.
As *Lutianus marginatus*, Jordan and Seale, 1906 and as *L. vaigiensis*, Schultz, 1943.

*Lutianus gibbus* (Forsskål, 1775). Mala’ī.
Genyoreg a bottonensis—Schmeltz, 1869.
As *Lutianus gibbus*, Jordan and Seale, 1906 and Schultz, 1943.

*Lutianus kasmira* (Forsskål, 1775). Savane.
Diocepe octolineata—Schmeltz, 1865.
As *Lutianus kasmira*, Jordan and Seale, 1906 and Schultz, 1943.

*Lutianus monostigma* (Cuvier in Cuvier and Valenciennes, 1828).
Tāiva, feoi-tega.

*Lutianus monostigma*—Jordan and Seale, 1906.
As *Lutianus monostigma*, Schultz, 1943.

*Lutianus rivulatus* (Cuvier in Cuvier and Valenciennes, 1828).
Mū-mafalauguttu.
Genyoreg a rivulata—Schmeltz, 1877.
As *Lutianus rivulatus*, Jordan and Seale, 1906 and Schultz, 1943.

*Lutianus multifilis* (Valenciennes in Cuvier and Valenciennes, 1830). *Savane-Uasama.*

*Lutianus sanguinolentus* (Valenciennes in Cuvier and Valenciennes, 1828.)
Mala’ī-pa’epa’e.

*Macolor niger* (Forsskål, 1775). Mata’i-oa.
Mesoprinon macolor—Günther, 1873.
As *Lutianus niger*, Jordan and Seale, 1906.

This species was identified by William D. Anderson, Jr. (GMBL 76-418.)

*Paracaelio sordidus* Abe and Shinohara, 1962.
(GMBL 81-64.)

*Paracaelio xanthurus* Bleeker, 1875. *Palu-tusama, palu-tuvela.* (GMBL 77-258.)

*Paracaelio* sp. *Palu-mutu.*
One specimen, 440 mm SL; handlined from relatively deep water. Dorsal X,10; anal III,8; pectoral 16; gill rakers 10 + 1 = 17 = 28; lateral line pores 48. No scales on maxillary. Body pale with four triangular-shaped, olive-colored saddles on back, lateral line also olive-colored; head pale, darker dorsally; dorsal fin and ventral portion of caudal pale yellow, remaining fins pale with a dusky tinge. P. Fourmanoir believes this to be an undescribed species. He has also seen specimens from Fiji and Vanuatu (New Hebrides). (GMBL 81-65.)

*Pristipomoides amoenus* (Snyder, 1911). *Palu-tusimoana, palu-ula, palu-sega.* Harry T. Kami identified the specimen.

*Pristipomoides auricilla* (Jordan, Evermann and Tanaka, 1927).

*Pristipomoides filamentosus* (Valenciennes in Cuvier and Valenciennes, 1830). *Palu-enasena, palu-sina, palu-pa’epa’e.*


A specimen was identified by Harry T. Kami.

*Pristipomoides zonatus* (Valenciennes in Cuvier and Valenciennes, 1830). *Palu-sega, palu-ula.*

**Nemipteridae (Monocle Breams)**

*Pentapodus caninus* (Cuvier in Cuvier and Valenciennes, 1830). *Heterognathodon xanthopleura*—Schmeltz, 1865.

*Pentapodus* sp. *Tiva-o-ugale.*

Barry C. Russell believes Samoan specimens represent a new species. (BPBM 24120, WAM P26987-001.)

*Scoplos os cancellatus* (Cuvier in Cuvier and Valenciennes, 1830). *Scoplos cancellatus*—Schmeltz, 1869.
As *S. linea*, Jordan and Seale, 1906. Jordan and Seale based their record of this species on Günther’s (1874) record.

*Scoplos os trilineatus* Kner, 1868. *Tiva.*

*Scoplos os trilineatus*—Kner, 1868.

**Gerreidae (Mojarras)**

The general name for members of this family is *mutu.* The three species which were not collected during the present study are recorded only from Western Samoa where their preferred habitat (shallow brackish or freshwater) is much more extensive.

*Gerres kapas* Bleeker, 1851.

*Gerres kapas*—Fowler, 1929.

*Gerres macrosoma* Bleeker, 1854.

*Gerres macrosoma*—Steindachner, 1906.
As *Xystaema macrosoma*, Jordan and Seale, 1906. Jordan and Seale based their Samoan record on that of Kner (1868).

*Gerres oblongus* Cuvier in Cuvier and Valenciennes, 1830.

**Matu-ia**

*Gerres macrosoma*—Kner, 1868.

As *Xystaema gigas*, Jordan and Seale, 1906.

*Gerres oyena* (Forsskål, 1775).

*Gerres argyreus*—Schmeltz, 1865.
Haemulidae (Grunts and Sweetlips)

Plectorhynchus nigrus (Cuvier in Cuvier and Valenciennes, 1830).

Gerres lucidus—Borodin, 1932.

Lethrinidae (Emperors)

Juvenile emperors <15 cm TL are referred to as mata'ele'ele. Those 15-30 cm TL are ulamalosi, and individuals >30 cm TL are called filoa. Torao Sato, who has recently (1978) revised Lethrinus, assisted with the identification of members of this genus.

Gnathodentex aureolineatus (Lacepède, 1803). Mumu, toai.

Parupeneus auriflamma—Gunther, 1874.


Lethrinus nebulosus—Schmeltz, 1943.


Mullidae (Goatfishes)

Mulloidichthys flavolineatus (Lacepède, 1801). I'asina (<8 cm TL), vete, afulu, afolu. Mulloidichthys samoensis—Günther, 1874.


Monodactylidae (Silver Batfishes)


Pempherididae (Sweepers)

Pempheris oualensis Cuvier in Cuvier and Valenciennes, 1831.

Manifi.

Pempheris mangula—Günther, 1875.

As P. otaitensis, Schultz, 1943.

**Kypiosidae (Rudderfishes)**

*Kyphosus bigibbus* (Lacepède, 1802).

*Pimeleperus fuscus*—Kner, 1868.

The only Samoan record of this species is Kner’s from “Savai’i.”

*Kyphosus cinereascens* (Forsskål, 1775). *Nanue, matu-mutu* (Manu’a Islands), *mutumutu*.

*Kyphosus vaigiensis*—Jordan and Seale, 1906.

*Kyphosus vaigiensis* (Quoy and Gaimard, 1825).

*Pimeleperus vaigiensis*—Schmelz, 1874.

**Ephippidae (Spadefishes)**

*Drepane punctata* (Linnaeus, 1758).

*Drepane punctata*—Schmelz, 1869.

*Platax orbicularis* (Forsskål, 1775). *Pe’a-pe’a (<10 cm TL), pe’a-pe’a-uli (>10 cm TL).

*Platax orbicularis*—Schmelz, 1866.

**Chaetodontidae (Butterflyfishes)**

The general name for butterflyfishes in Samoa is *tifitifi*.

*Chaetodon auriga* Forsskål, 1775. *Si’u, i’usamasama*.

*Chaetodon setifer*—Schmelz, 1869.

As *C. setifer*, Jordan and Seale, 1906.

*Chaetodon bennetti* Cuvier in Cuvier and Valenciennes, 1831.

*Tifiti-tu’u*.

*Chaetodon citrinel/us* Cuvier in Cuvier and Valenciennes, 1831.


*Chaetodon citrinellus*—Schmelz, 1865.

Fowler’s (1928) Samoan record of *miliaris* probably belongs to this species as *miliaris* is known only from Hawaii.

*Chaetodon ephippium* Cuvier in Cuvier and Valenciennes, 1831.

*Tifiti-tu’u*.

*Chaetodon ephippium*—Schmelz, 1869.

*Chaetodon flavirostris* Günther, 1874.

A single specimen was speared at Rose Island and identified by John E. Randall. (BPBM 27779.)

*Chaetodon klenii* Bloch, 1790.

*Chaetodon kleinii*—Fowler and Bean, 1929.

*Chaetodon lineolatus* Cuvier in Cuvier and Valenciennes, 1831.

*Tifiti-lau’u*.

*Chaetodon lineolatus*—Günther, 1874.

*Chaetodon lunula* (Lacepède, 1802). *Tifiti-tauma*.

*Chaetodon lunula*—Schmelz, 1866.


*Chaetodon dorsalis*—Schmelz, 1865.

*Chaetodon mertenisi* Cuvier in Cuvier and Valenciennes, 1831.

*Tifiti-se’u*.

*Chaetodon mertenisi*—Jordan and Seale, 1906.

*Chaetodon ornatus* Cuvier in Cuvier and Valenciennes, 1831. *Tifiti-ta’avo’ava*.

*Chaetodon ornatus*—Schmelz, 1866.

*Chaetodon pelewensis* Kner, 1867. *Tifiti-tu’siloloa*.

*Chaetodon pelewensis*—Schmelz, 1869.

*Chaetodon quadrimaculatus* Gray, 1831. *Tifiti-se’agi*.

*Chaetodon quadrimaculatus*—Günther, 1874.

*Chaetodon rafflesi* Bennett, 1830. *Tifiti-pule*.

*Chaetodon rafflesi*—Jordan and Seale, 1906.

*Chaetodon reticulatus* Cuvier in Cuvier and Valenciennes, 1831.

*Tifiti-mau*.

*Chaetodon reticulatus*—Schmelz, 1866.

*Chaetodon seimeon* Bleeker, 1855. *Tifiti-si’o*.

*Chaetodon seimeon*—Schmelz, 1866.

*Chaetodon trifasciatus* (Quoy and Gaimard, 1825). *Tifiti-ta’aga*.

*As Megaprotodon trifasciatus, Jordan and Seale, 1906 and as M. strigangulus, Schultz, 1943.

*Chaetodon trifasciatus* Mungo Park, 1797. *Tifiti-maniti*.

*Chaetodon trifasciatus*—Jordan and Seale, 1906.

*Chaetodon ulcerensis* Cuvier in Cuvier and Valenciennes, 1831.

*Tifiti-gutu’a*.

*Chaetodon falcuca*—Schmelz, 1869.

As *C. falcuca*, Schultz, 1943.

*Chaetodon unimaculatus* Bloch, 1787. *Tifiti-pulesama*.

*Chaetodon unimaculatus*—Schmelz, 1865.

*Chaetodon vagabundus* Linnaeus, 1758. *Tifiti-matapu’a*.

*Chaetodon vagabundus*—Schmelz, 1866.

*Forcipiger flavissimus* Jordan and McGregor, 1898. *Gutumana*.


Both normal and dark color phases have been collected.

*Hemitarichthys polylepis* (Bleeke, 1857). *Alosinia*.

*Hemitarichthys thompsoni* Fowler, 1923.

This uncommon species was observed along the edge of the drop-off at Steps Point and on the outer edge of Nafanua Bank.


*Heniochus macrolepidotus*—Schmelz, 1866.

*Heniochus chrysostomus* Cuvier in Cuvier and Valenciennes, 1831. *Laulaufau-laumea*.

*Heniochus chrysostoma*—Schmelz, 1874.

As *H. permucatus, Jordan and Seale, 1906 and Schultz, 1943.*

*Heniochus monoceros* Cuvier in Cuvier and Valenciennes, 1831.

*Lauluapu’u*.

*Heniochus monoceros*—Schmelz, 1866.

*Heniochus singularis* Smith and Radcliffe, 1911.

*Heniochus varius* (Cuvier in Cuvier and Valenciennes, 1829).

*Lauluapu’u*.

*Heniochus varius*—Jordan and Seale, 1906.

**Pomacanthidae (Angelfishes)**

Members of this family are referred to as *tu’u’u* in Samoa which is the same general name used for damselfishes.


*Centropyge aurantius*—Randall and Wass, 1974.

*Centropyge bicolor* (Bloch, 1877). *Tu’u’u-matamalii*.

*Holacanthus bicolor*—Schmelz, 1866.

*Centropyge bispinosus* (Günther, 1860). *Tu’u’u-alo‘u*.

*Holacanthus bispinosus*—Jordan and Evermann, 1905.

As *Holacanthus bispinosus, Jordan and Seale, 1906.*
Centropyge flavicauda Fraser-Brunner, 1933. Tu'u'u-uluvela.
Centropyge flavissimus (Cuvier in Cuvier and Valenciennes, 1831).
Tu'u'u-sana, tu'u-u-lega.
Holacanthus cyanotus—Schmeltz, 1866.
As Holacanthus flavissimus, Jordan and Seale, 1906.
Centropyge heraldi Woods and Schultz in Schultz et al., 1953.
Tu'u'u-atuagaii.
Samoa specimens do not show the normal color pattern. The distal half of the soft dorsal is abruptly black instead of uniformly yellow.
Centropyge korelia (Günther, 1874). Tu'u'u-tusiihi.
Centropyge multifasciatus (Smith and Radeliffe, 1911).
Tu'u'u-maniini.

Chromis acares (Peters, 1852). Tu'u'u-moana.
Chromis acares (Peters, 1852). Tu'u'u-alamu.
Chromis xanthura—Bleeker, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
Chromis caeruleus—Seale, 1935.
**Amblycirrhitus unimacula** (Vaillant and Sauvage, 1875). 
**Amblycirrhitus bimacula**—Schultz, 1943. 
This species was collected only at Rose Island.

**Plectroglyphidodon johnstonianus** Fowler and Ball, 1924.

**Tu'u'u-o'iili.**

**Plectroglyphidodon lacrymatus** (Quoy and Gaimard, 1825).

**Tu'u'u-lau, l'u'amasaama.**

**Glyphidodon lacrymatus**—Schmeltz, 1866. 
As **Abudejduj lacrymatus**, Jordan and Seale, 1906 and Schultz, 1943.

**Plectroglyphidodon phoenicen sis** (Schultz, 1943). 
**Tu'u'u-popouli.**

**Abudejduj phoenicen sis**—Schultz, 1943.

**Pomacentrus brachialis** Cuvier in Cuvier and Valenciennes, 1830.

**Tu'u'u-faga.**

**Pomacentrus melanopterus**—Jordan and Seale, 1906 and Schultz, 1943.

**Pomacentrus coelestis** Jordan and Starks, 1901. 
**Tu'u'u-segasega.**

**Pomacentrus pacato** (Bloch, 1877). 
**Tu'u'u-segasega, teatea.**

**Pomacentrus pacato**—Schmeltz, 1869. 
**Pomacentrus vaiuli** Jordan and Seale, 1906. 
**Tu'u'u-vaiuli.**

**Pomacentrus vaiuli**—Jordan and Seale, 1906.

**Pomachromis richardsoni** (Snyder, 1909). 
**Tu'u'u-malaumataputa.**

**Pomachromis richardsoni**—Allen, 1977.

**Stegastes jaoco** (Bloch and Schneider, 1801). 
**Tu'u'u-i'au.**

**Paracirrhites punctatus**—Kner, 1868. 
As **Amblycirrhitus punctatus**, Schultz, 1943.

**Paracirrhites forsteri** (Bloch and Schneider, 1801). 
**Tu'u'u-segasega.**

**Cirrhitus pinnulatus** (Bloch and Schneider, 1801). 
**Ululu'i.**

**Cirrhitus pinnulatus**—Kner, 1868. 
As **Cirrhitus marmoratus** and **Paracirrhites punctatus**, Jordan and Seale, 1906.

**Neocirrhites armatus** Castelnau, 1873. 
This fish commonly occurs within coral (Porites porites) heads at shallow depths along exposed portions of the Tutuila coastline.

**Paracirrhites arcurus** (Cuvier in Cuvier and Valenciennes, 1829). 
**Lausiva.**

**Cirrhitus arcurus**—Kner, 1868. 
As **Amblycirrhitus arcurus**, Schultz, 1943.

**Paracirrhites forsteri** (Bloch and Schneider, 1801). 
**Lausiva.**

**Cirrhitus forsteri**—Kner, 1868. 
**Paracirrhites hemistictus** (Günther, 1874). 
**Lausiva, a'a.**

**Amblycirrhitus hemistictus** and **A. polyistictus**—Schultz, 1943.

**Mugilidae (Mullets)**

The general name for mullet in Samoa is 'anae and it is usually applied to fishes measuring 20-40 cm TL. Other names are mo‘i (< 5 cm TL), poi (5-8 cm TL), iua (8-12 cm TL), faupua (12-15 cm TL), popoto or manase (15-20 cm TL), and afo'ama (20-40 cm TL). J. M. Thomson confirmed some of the identifications and furnished most of the synonyms.

**Chaenomugil leuciscus** (Günther, 1871).

**Neomyxus chaptali**—Fowler and Sylvester, 1922.

Thomson writes that the type of *chaptali* is a juvenile *Mugil cephas* so the species generally referred to as *chaptali* is correctly known as *leuciscus*.

**Crenimugil crenilabis** (Forsskål, 1775). 
**Mugil crenilabis**—Schultz, 1943.

**Liza macrolepis** (Smith, 1849). 
**Mugil compressus**—Günther, 1881.

As **Liza troscheli** Jordan and Seale, 1906 and as **Mugil troscheli**, Schultz, 1943. Schultz (1943) also synonymized *Agonostomus dorsalis*, which was described from Samoa, with this species.

**Liza subviridis** (Valenciennes in Cuvier and Valenciennes, 1836). 
**Mugil argenteus**—Schmeltz, 1869. 
As **Mugil argenteus**, Jordan and Seale, 1906.

**Liza vaigiensis** (Quoy and Gaimard, 1824). 
**Futogoge (<10 cm TL)**. 
**'afa (<10-25 cm TL)**, and **'anae (<25 cm TL)**.

**Mugil vaigiensis**—Steindachner, 1906.

As **Liza melinoptera**, Jordan and Seale, 1906 and as **Mugil vaigiensis**, Schultz, 1943.

**Valamugil engeli** (Bleeker, 1858). 
**Mugil kellartii**—Steindachner, 1906.

As **Mugil kellartii**, Jordan and Seale, 1906 and as **M. engeli**, Schultz, 1943. **Mugil rechingeri**, which was described from Samoa, is also a synonym.

**Valamugil sehel** (Forsskål, 1775). 
**Mugil axillaris**—Günther, 1877.

As **Liza caeruleomaculata**, Jordan and Seale, 1906 and as **Mugil sehel**, Schultz, 1943.

**Sphyraenidae (Barracudas)**

Barracudas are known as *sapa* in Samoa. Donald P. de Sylva confirmed the identifications.

**Sphyraena barracuda** (Walbaum, 1792). 
**Suosao** (large individuals).

**Sphyraena nemurus**—Schultz, 1943.

**Sphyraena flavicauda** Rüppell, 1835.

**Sphyraena obtusata**—Jordan and Seale, 1906.

**Sphyraena forsteri** (Cuvier in Cuvier and Valenciennes, 1829). 
**Sphyraena forsteri**—Jordan and Seale, 1906.
and as *Coris gaimard* and *C. greenovi*, Schultz, 1943. *Coris greenovi* has long been applied to the juvenile color phase.


Epibulus insidiator—Schmeltz, 1886.

*Gomphosus varius* Lacepède, 1801. *Gutusio*, *gutu’uni*, *sagulape*.

*Gomphosus cepedianus*—Schmeltz, 1865. As *G. varius* and *G. tricolor*, Jordan and Seale, 1906 and Schultz, 1943. *Gomphosus tricolor* has been applied to the terminal male color phase.


Halichoeres hortifeldii (Bleeker, 1852). *Sugale-iatau*.

Halichoeres hortulanus (Lacepède, 1801). *Sugale-i’au*, *sagulapogota*, *Iifigi*.

Halichoeres centrignathus—Steindachner, 1906. As *Halichoeres centrignathus* and *H. notoptalmus*, Jordan and Seale, 1906 and as *H. centrignathus* and *H. notoptalmus*, Schultz, 1943.

Halichoeres margaritaceus (Valenciennes in Cuvier and Valenciennes, 1839). *Sugale-ululela*.

Halichoeres pseumomus—Schmeltz, 1865. As *Ha. daealma* and *H. opercularis*, Jordan and Seale, 1906.


Platyglossus marginatus—Schmeltz, 1866. As *Platyglossus marginatus* and *P. notopsus*, Jordan and Seale, 1906 and as *Halichoeres marginatus* and *H. notopsus*, Schultz, 1943.

Halichoeres melanurus (Bleeker, 1851). *Platyglossus kalochoroma*—Schmeltz, 1869. As *Platyglossus flos-coralis* and *P. hoenoeii*, Jordan and Seale, 1906 and as *Halichoeres hoenoeii* and *H. kalochoroma*, Schultz, 1943. The initial phase is sometimes referred to as *hoenoeii* and the terminal male as *kalochoroma* (Randall 1980b).


Halichoeres prospeon (Bleeker, 1853).

Halichoeres prospeon—Randall, 1980b.

Halichoeres trimaculatus (Quoy and Gaimard, 1834). *Lape, sugale-pogota*.

Guntheria trimaculata—Schmeltz, 1865.

Hemigymnus fasciatus (Bloch, 1792). *Sugale-gutumafia*.

Hemigymnus fuliginosus—Jordan and Seale, 1906.

Hemigynmus melapterus (Bloch, 1791). *Sugale-laugutu*, *sugale-alu*, *sugale-lupe*.

Hemigynmus melanopomus—Schmeltz, 1869.

Hologymnus doliatus (Lacepède, 1802). *Sugale-lape*.

Labrichthys unilineatus (Guichenot, 1847). *Sugale-tafuli, atamamaua*.

Thysanocheilus ornatus—Kner, 1864. As *Labrichthys cyanotaenia*, Jordan and Seale, 1906 and Schultz, 1943. The terminal male phase has been referred to as *cyanotaenia*.

Labroides bicolor Fowler and Bean, 1928. *Sugale-i’usina*.

Labroides dimidiatus (Valenciennes in Cuvier and Valenciennes, 1839). *Sugale-mo’otai*.

Labroides dimidiatus—Günther, 1881. Mature Samoan specimens exhibit two color phases. At shallow depths they show the normal pattern with a thin dark stripe beginning at the lips and continuing through the eye to the caudal, gradually broadening posteriorly to include all but

the dorsal and ventral edges of the caudal. At depths greater than about 10 m, however, the dark band becomes bright yellow under the soft dorsal through the basal portion of the caudal.

Labroides rubrolabiatius Randall, 1958.


Labropsis xanthonota Randall, 1981.

Labropsis xanthonota—Randall, 1981.

Macrophyryngodon meleagris (Valenciennes in Cuvier and Valenciennes, 1839). *Sugale-puleatasi*.

Platyglossus geometricus—Schmeltz, 1866. As *Macrophyryngodon meleagris* and *Leptojulis pardalis*, Jordan and Seale, 1906 and as *Macrophyryngodon geometricus* and *Leptojulis pardalis*, Schultz, 1943. The initial color phase has been referred to as *pardalis*.

Macrophyryngodon negrosensis Herre, 1932.


Novaculichthys tenuiorous (Lacepède, 1801). *Sugale-i’o* (juvenile), *sugale-taili* (adult), *sugale-gasufi*.

Novacula vanicolensis—Schmeltz, 1866. As *Novacula tenuiorous* and *N. tenuiorous*, Jordan and Seale, 1906.


Pseudocheilinus hexataenia (Bleeker, 1858). *Sugale-tusutisi* (Am. Samoa), *sugale-manifi* (W. Samoa).

Pseudocheilinus pisitcula—Schmeltz, 1869.


Pseudocoris yamashiroi (Schmidt, 1930). *Pseudocoris awayer* is a junior synonym according to William F. Smith-Vaniz who is revising the genus with Randall. (ANSP 145970.)

Pseudodax moluccanus (Valenciennes in Cuvier and Valenciennes, 1839). *Sugale-siva*.

Pseudojuloides cerasinus (Snyder, 1904).

Pseudojuloides cerasinus—Randall and Randall, 1981. (BPBM 17541.)

Pteragogus sp.

One specimen, 37 mm SL. Dorsal X,10; anal III,9; pectoral 13; lateral line pores 16 + 2 + 8 + 6; gill rakers 3 + 1 + 5 = 9. Head and body orange with brown speckling dorsally; brown oval spot on operculum; dusky nostrils. This species will also be described by Randall (BPBM 24126.)

Stethojulis bandanensis (Bleeker, 1851). *Lape-i’au*.

Stethojulis axillaris—Schmeltz, 1866. As *S. axillaris*, Schultz, 1943. Randall and Kay (1974) have found that *axillaris* is a junior synonym of *bailata*, a species endemic to the Hawaiian Islands with an initial color phase similar to that of *bandanensis*.

Stethojulis interrupta (Bleeker, 1851). *Sugale-i’au*.

Stethojulis interrupta—Schmeltz, 1869.

Stethojulis strigiventer (Bennett, 1832). *Lape-i’au*.

Stethojulis strigiventer—Günther, 1881. As *S. renardi* and *S. strigiventer*, Schultz, 1943. Randall (1955) has found that *renardi* represents the terminal color phase.

Stethojulis trilineata (Bloch and Schneider, 1801). *Lape-i’au*.

Stethojulis casturi and *S. phekadopleura*—Jordan and Seale, 1906.

As *S. casturi*, *S. phekadopleura*, and *S. trilineata*, Schultz,
Sphyraena helleri Jenkins, 1901.
Sphyraena helleri—Schultz, 1943.
De Sylva believes this species may prove to be a synonym of acutipinnis.
Sphyraena genic Klunzinger, 1870.

Polynemidae (Threadfins)

In American Samoa these fishes are known as 'umia when less than about 15 cm TL and 'ausi when larger. The name 'umia is used for all sizes in Western Samoa.

Polynemus plebeius Broussonet, 1782.
Polynemus taeniatus—Schmeltz, 1866.
As Polydactylus plebeius, Jordan and Seale, 1906 and Schultz, 1943.

Labridae (Wrasses)

Wrasses are generally called sugale. John E. Randall identified or confirmed the author's identifications for most of the new records. He also examined the unidentified specimens.

As A. caeruleopunctatus and A. diadematus, Jordan and Seale, 1906. Anampses diadematus refers to the terminal male color phase (Randall 1972).
Anampses melanurus Bleeker, 1857.
Anampses melanurus—Günther, 1881.
A single specimen was collected at Rose Atoll. (BPBM 27986.) Bodianus axillaris (Bennett, 1831). Sugale-vaolo. Bodianus diana (Lacepède, 1801).
A single specimen was collected at 70 m and identified by Martin F. Gomon. (BPBM 24117.) Cheilinus oxycephalus Bleeker, 1853. Cheilinus triobatus Lacepède, 1801. Lalafi-matamūmū. Cheilinus triobatus—Schmeltz, 1869.
Cheilinus undulatus Rüppell, 1835. Lalafi (<30 cm TL), tagafa (30-75 cm TL), and malakes (75 cm TL). Cheilinus undulatus—Jordan and Seale, 1906.

This species has been misidentified as rhodochrous by most authors. Randall has found that rhodochrous is an Indian Ocean species different from the Pacific unifasciatus.


Cirrhitilabrus sp.

This is the color form mentioned by Randall and Shen (1978) which may be a geographic variant of their melanomarginatus. Samoan specimens have a reddish blotch laterally behind the pectoral fin, a spiny dorsal with a dark blue band marginally which slants to the dorsal axil posteriorly and a soft dorsal with a yellow-orange margin. In the largest specimen (104 mm SL), the blue dorsal band terminates at the second soft dorsal ray. The anal of this specimen is flesh colored with a dark blue blotch basally on the last four rays. The anal of smaller specimens is largely dark blue with a flesh colored base. (BPBM 17461, 24124.)

Cirrhitilabrus sp.

Four specimens, 24-72 mm SL; collected at 12 m. Dorsal XI,9; anal III,9; pectoral 15; lateral line pores 15 or 16 or 7 = 21-23. Body and head dusky pink paling to yellow dorsally and to white ventrally; pectoral base dark brown and one or two dark brown specs on upper half of caudal peduncle; dorsal yellow orange, membrane between first three spines dark brown; anal pinkish orange; caudal yellow. Randall writes that the species "seems to be in the temminckii complex." It was observed only within the lagoon at Rose Atoll where it is abundant. (BPBM 27780.)

Cirrhitilabrus sp.

Three specimens, 36-46 mm SL; collected at 12 m. Dorsal XI,9; anal III,9; pectoral 15; lateral line pores 15 or 16 or 7 = 21-23. Body and head dusky pink paling to yellow dorsally and to white ventrally; pectoral base dark brown and one or two dark brown specs on upper half of caudal peduncle; dorsal yellow orange, membrane between first three spines dark brown; anal pinkish orange; caudal yellow. Randall writes that the species "seems to be in the temminckii complex." It was observed only within the lagoon at Rose Atoll where it is abundant. (BPBM 27780.)

Coris aygula Lacepède, 1801. Sugale-uluto'i (terminal male).
Coris cingulum—Schmeltz, 1874.
As C. angulata, Schultz, 1943.
Coris gaimard (Quoy and Gaimard, 1824). Sugale-mūmū, sugale-talu'ulu.
1943. *Stethojulis phekadopleura* has been applied to the initial color phase and *casturi* to the terminal phase (Randall and Kay, 1974).

*Thalassoma amblycephalum* (Bleeker, 1856). *Sugale-aloasama.* *Julis melanochirus*—Schmeltz, 1865. As *Thalassoma marnae* (juvenile color phase), Schultz, 1943. *Thalassoma melanochir* has been used for the adult phase.

*Thalassoma fuscum* (Lacepède, 1802). *Uloulo-gatala* (initial phase), *pata‘o‘tāo‘o* (terminal male). *Julis trilobata*—Schmeltz, 1866. As *Thalassoma fuscum* and *T. umbrostigma* (part), Jordan and Seale, 1906 and as *T. trilobata* and *T. umbrostigma* (part), Schultz, 1943. The initial color phase of this species is similar to that of *purpureum* and both have been labeled *umbrostigma.*


*Thalassoma latexcens* (Lay and Bennett, 1839). *Sugale-samasama.* *Julis aneitensis*—Gunther, 1909.


(BPBM 28132.)

*Wetmorella nigropinnata* (Seale, 1901). *La‘o‘ia.*

*Xyrichtys aneitensis* (Gunther, 1862). *Sugale-tatanu* (Am. Samoa), *ulumalo* (W. Samoa).

Randall believes that *niveilatus* is a junior synonym. (BPBM 17455, 22717.)


**Scardae (Parrotfishes)**

Fuga is the general name for small to medium sized parrotfishes. Reddish brown individuals are sometimes referred to as *fugamea* and greenish blue species are called fugausi. Larger individuals are termed *laea* (20-50 cm TL) or *galo* (> 50 cm TL). Because of the relative uniformity amongst the meristic and other characteristics (except live coloration) of parrotfishes, the taxonomy of this family has long been confused. Initial and terminal color phases were usually assigned different names and numerous synonyms have accumulated over the years for most species. Underwater observations of courtship and reproductive behavior, color photographs of live and fresh-dead specimens, and extensive collection efforts, however, have resulted in considerable synonymy and revision beginning with the work of Schultz (1958) and continuing through the present. For many species, further study is still required. The list which follows reflects the current opinion of John E. Randall who also assisted with the identifications. Included are the results of the study by Randall and Chat (1980) of central and South Pacific *Scarax* and the review by Randall and Bruce (in press) of Western Indian Ocean parrotfishes.

*Boilometopus muricatum* (Valenciennes in Cuvier and Valenciennes, 1839). *Uluutoi (< 20 cm TL), laea-ulutoi* (20-50 cm TL), *galo ulutoi* (> 50 cm TL).

Calotomus sandwicensis (Valenciennes in Cuvier and Valenciennes, 1839). *Fuga-valea.*

Callyodon molluccensis—Schmeltz, 1869.

Callyodon spinicudis is a junior synonym.


Chlorus bicolor—Schultz, 1958.

Hipposcarus longiceps (Valenciennes in Cuvier and Valenciennes, 1839). *Ulapokea (< 25 cm TL), laea-ulapokea (> 25 cm TL).*

Pseudoscarus hardi—Günther, 1909.

*Leptoscarus vaigensis* (Quoy and Gaimard, 1824). *Scarchydon coeruleopunctatus*—Schmeltz, 1874.

Scarus atroporalis Schultz, 1958. This species was observed only at Rose Atoll. Randall writes that Schultz (1969) incorrectly placed the species in synonymy with *caudafasciatus,* an Indian Ocean species.

Scarus brevifilis (Günther, 1909). *Laea-sina.*

Callyodon prasiognathus—Jordan and Seale, 1906. As *Scarus brevifilis* and *S. chlorodon,* Schultz, 1958. The initial color phase has been referred to as *brevifilis* and the terminal phase as *chlorodon.*

Scarus dimidiatus Bleeker, 1859. *Fuga-aloasama.*

Callyodon fumifrons (initial phase) and *C. zonularis* (terminal male)—Jordan and Seale, 1906. As *Scarus caudafasciatus* (terminal male) and *S. dimidiatus* (initial phase), Schultz, 1943.

Scarus festivus Valenciennes in Cuvier and Valenciennes, 1840. *Scarus lamula* is a synonym.


Callyodon upolensis—Jordan and Seale, 1906. Terminal males have been referred to as *frenatus* and *vermicularis,* and *sexvittatus* has been used for the initial color phase (Randall 1963b).


As *Scarus jonesii,* Schultz, 1943.

Scarus ghobban (Forskål, 1775). *Fuga-aloavā.*

Scarus maculosus—Schmeltz, 1865.


As *Callyodon ultramarinus,* Jordan and Seale, 1906 and as *Scarus microrhinos,* Schultz, 1943.


As *Callyodon spilonotus,* Jordan and Seale, 1906.

Scarus japonensis (Bloch, 1789). *Fuga-s‘umū* (initial phase), *laea-ulusama* (terminal phase).

Callyodon abacurus and *C. pyrrhums*—Jordan and Seale, 1906. *Scarus capistratoides* is a junior synonym (Randall and Chat 1980).


As *Callyodon maoricus,* Jordan and Seale, 1906 and as *Scarus nuchipunctatus,* Schultz, 1943.
Scaros oviceps Valenciennes in Cuvier and Valenciennes, 1839.
*Fuga-aloasia* (initial phase), *laea-tuavela* (terminal phase).
*Callyodon oviceps* (initial phase) and *C. lazulinus* (terminal male)—Jordan and Seale, 1906.
As *Scaros* oviceps and *S. pectoralis* (terminal male), Schultz, 1943.

*Scaros viridis*—Fowler, 1900.
As *Callyodon bataviensis* (terminal male), Jordan and Seale, 1906 and as *Scaros forsteri*, Schultz, 1943.

*Pseudoscarus rubroviolaceus*—Schmeltz, 1865. As *Callyodon jordani* (terminal male) and *C. ruberrimus* (initial phase), Jordan and Seale, 1906.

*Scaros schlegeli* (Bleeker, 1861). *Fuga-matapu'a* (initial phase), *laea-tusi* (terminal phase).
*Scaros venosus* is used by Schultz (1958) for the initial color phase (Randall and Choat 1980).

*Scaros sordidus* (Forsskål, 1775). *Fuga-gutumū* (initial phase), *fugausi-tuavela* or *laea-tuavela* (terminal phase).

*Pseudoscarus sumbavensis*—Schmeltz, 1865.
As *Callyodon cyanogrammus* (terminal male), *C. purpureus* (initial phase), and *C. bennetti* (initial phase), Jordan and Seale, 1906 and as *Scaros purpureus*, Schultz, 1943.

*Scaros spinus* (Kner, 1868). *Fuga-a-au*.
*Pseudoscarus spinus*—Schmeltz, 1869.
As *Callyodon kelloggi* (terminal male), Jordan and Seale, 1906. Randall and Choat (1980) concluded that *formosus* should be replaced by this name.

*Scaros tricolor* Bleeker, 1847. *Fuga-alomū* (initial phase).
*Pseudoscarus cyanognathus*—Schmeltz, 1879.

**Opistognathidae (Jawfishes)**

Previous to the collection of the specimens listed below, the easternmost record for this family in the central Pacific was New Caledonia. Both species will be described by William F. Smith-Vaniz in a forthcoming revision of Indo-Pacific jawfishes.

*Opistognathus* sp., "A".
Seventeen specimens, 16-26 mm SL; collected at 31, 34, and 62 m. Body dusky yellow; head lighter, a brown bar crossing preoperculum behind eye and another below eye to top of maxilla, opercular edge bright yellow; fins dusky yellow, a large black ocellus between dorsal spines I and V; and Smith-Vaniz writes that this species is known only from these specimens. (ANSP 133404, 133405.)

*Opistognathus* sp., "B".
Three specimens, one measured 29 mm SL; collected at 40 m. Body dusky yellow with two rows of pale roundish blotches, the upper row from nape to base of caudal and irregularly connected, the lower from pectoral axil to base of caudal and not connected; head of similar coloration with a brown blotch at postero-dorsal corner of eye more or less connected across the operculum with its fellow, another brown blotch at opposite corner of eye extending across premaxilla and under tip of lower jaw; dark brown ocellus between dorsal spines III and VII. The known distribution of this species includes only Samoa and Borneo. (ANSP 133406.)

**Mugiloididae (Sandperches)**

*Parapercis cephalopunctata* (Seale, 1901). *Ta'o*to.
*Parapercis clathrata* Ogilby, 1910. *Ta'o*to.
*Percis tetracanthus*—Kner and Steindachner, 1866. As *Parapercis tetracanthus* (part), Jordan and Seale, 1906.

*Parapercis* sp.
This species may be *schauinslandi* which is recorded only from the Hawaiian Islands. It is common on the sandy bottom seaward of Taema Bank at 35 m where it often shelters in dead and broken helmet shells, *Cassis cornuta*. (BPBM 24127.)

**Crepididae (Sand Burrowers)**

*Chalixodytes tauensis* Schultz, 1943. *I'atolo.*
*Chalixodytes tauensis*—Schultz, 1943.
*Crystalloides cookeri* Fowler, 1923. *I'atolo.*
*Crystalloides cookeri*—Schultz, 1943.
*Limnichthys donaldsoni* Schultz in Schultz et al., 1960. *I'atolo.*

**Uranoscopidae (Stargazers)**

*Uranoscopus sulphurus* Valenciennes in Cuvier and Valenciennes, 1831.
A single specimen of this rare species was collected at night on the reef flat at Nu'uuli. (BPBM 18729.)

**Blenniidae (Blennies)**

The general name for blennies in Samoa is *mano'o*. Bruce Carlson assisted with the identification and synonyms of species belonging to *Cirripectes*. Victor G. Springer assisted with the remaining species.

*Allicus saliens* (Lacepède, 1800). *Mano'o-papa.*
*Allicus saliens*—Jordan and Seale, 1906.
As *Rupiscartes saliens*, Schultz, 1943.
*Aspidontus dussumieri* (Valenciennes in Cuvier and Valenciennes, 1836).
*Aspidontus taeniatus* Quoy and Gaimard, 1834. *Mano'o-mo'o, mo'otai.*
*Perosciristes aureus*—Jordan and Seale, 1906.
The mimetic relationship between this species and *Labroides dimidiatus* is well known. It is of interest to note that specimens of *taeniatus* from deeper water have altered their color pattern to match that of the deeper water pattern of *L. dimidiatus* as described above.

*Cirripectes brevis*—Schultz, 1943.
*Cirripectes quaagga* (Fowler and Ball, 1924).
*Cirripectes variolosus* (part)—Schultz, 1943.
Some Samoan specimens have a bright yellow caudal peduncle.
*Cirripectes sebae* (Valenciennes in Cuvier and Valenciennes, 1836).
*Mano'o-la'o.*
*Salaria sebae*—Günther, 1877.
*Cirripectes stigmaticus* Strasburg and Schultz, 1953. *Mano'o-la'o.*
Ecsenius variolosus (Valenciennes in Cuvier and Valenciennes, 1836).
Salarias variolosus—Schmeltz, 1874.
As Allicus variolosus, Jordan and Seale, 1906.
(USNM 236063.)
Enchelyurus ater (Günther, 1877).
Enchelyurus ater—Jordan and Evermann, 1905.
As Hypleurochilus vaillanti, Jordan and Seale, 1906.
Entomacrodus caudofasciatus (Regan, 1909). Mano'o-fala.
Entomacrodus decussatus (Bleeker, 1858). Mano'o-fala.
Salarias atkinsoni—Jordan and Seale, 1906.
As Salarias anetensis, Schultz, 1943.
As Hypoleurochilus sp. (Valenciennes, 1836).
Entomacrodus striatus (Quoy and Gaimard in Cuvier and Valenciennes, 1836). Mano'o-fala, mano'o-a'au.
Allicus striatus—Jordan and Seale, 1906.
As Salarias marmoratus, Schultz, 1943. Entomacrodus plurifilis, which was described from Samoa, is a junior synonym.
Entomacrodus thalassinus (Jordan and Seale, 1906).
Mano'o-fala.
Allicus thalassiusus and A. musilae—Jordan and Seale, 1906.
As Salarias thalassiusus, Schultz, 1943.
Exallias brevis (Kner, 1868). Mano'o-lau, mano'o-gatala.
Salarias brevis—Kner, 1868.
As Cirrinospecies leoparous, Schultz, 1943.
Istiblennius bellus (Günther, 1861).
Specimens collected by Robert Snider are deposited at the B. P. Bishop Museum. (BPBM 12541.)
*Istiblennius biseriatus (Valenciennes in Cuvier and Valenciennes, 1836).
Salarias biseriatus—Steindachner, 1906.
Istiblennius coronatus (Günther, 1872). Mano'o-a'au.
Salarias nitidus—Günther, 1877.
As Allicus evermanni, Salarias bryanii, and S. coronatus, Jordan and Seale, 1906 and as S. nitidus, Schultz, 1943.
Istiblennius cyanostigma (Bleeker, 1849).
Salarias perioptalmus—Schmeltz, 1869.
As Allicus caudolineatus and A. perioptalmus, Jordan and Seale, 1906 and as Salarias caudolineatus and S. perioptalmus, Schultz, 1943.
*Istiblennius dussumieri (Valenciennes in Cuvier and Valenciennes, 1836).
Salarias dussumieri—Borodin, 1932.
Istiblennius edentulus (Bloch and Schneider, 1801).
Salarias edentulus—Schmeltz, 1874.
As Salarias edentulus, S. garmani, S. rivulatus, and S. sinodontis, Jordan and Seale, 1906.
*Istiblennius interruptus (Bleeker, 1857).
Salarias interruptus—Schmeltz, 1869.
Istiblennius lineatus (Valenciennes in Cuvier and Valenciennes, 1836).
Salarias lineatus—Steindachner, 1906.
As Salarias lineatus, Jordan and Seale, 1906 and Schultz, 1943.
Istiblennius paulus (Bryan and Herre, 1903).
Istiblennius sp.
Springer believes that kellersi (Fowler, 1932) may apply to these specimens but that at least one or two older names also exist.
(USNM 221475.)
Meiacanthus atro dorsalis (Günther, 1877). Mano'o-si'umaga.
Petroscirtes atrodorsalis—Steindachner, 1906.
As Petroscirtes atrodorsalis, Jordan and Seale, 1906.
This species is common in protected parts of Pago Pago Bay at 3-15 m.
Nannosalarias nativitatus (Regan, 1909).
Omobranchus rotundiceps (Macleay, 1881).
Parentchelyurus hepburni (Snyder, 1908).
Petroscirtes miratus Rüppell, 1830.
Petroscirtes longestis—Schmeltz, 1866.
As P. longifis, Jordan and Seale, 1906.
Petroscirtes xestus Jordan and Seale, 1906.
Petroscirtes xestus—Jordan and Seale, 1906.
Plagiotrema rhinorkynchos (Bleeker, 1852). Mano'o-o-ti'o'i.
Plagiotrema tapeinosoma (Bleeker, 1857). Mano'o-to'i'o'i.
Petroscirtes tapeinosoma—Günther, 1877.
As Petroscirtes tapeinosoma, Jordan and Seale, 1906.
Praealticus bilineatus (Peters, 1868). Mano'o-papa.
Salarias biseriatus—Jordan and Seale, 1906.
As Salarias margaritatus, Schultz, 1943. Springer terms this a tentative identification. This species is commonly found above the water line on lava rocks in the splash zone.
Rhabdoblennius rhabdo trachelus (Fowler and Ball, 1924). Blennias rhabdo trachelus—Schultz, 1943.
Salarias alboguttatus Kner, 1867.
Salarias alboguttatus—Kner, 1867.
As Allicus alboguttatus, Jordan and Seale, 1906.
Salarias fasciatus (Bloch, 1786). Mano'o-sofe.
Salaria semilineatus—Kner, 1867.
Salaria guttatus Valenciennes in Cuvier and Valenciennes, 1836.
Allicus guttatus—Jordan and Seale, 1906.
Stanulus seychellensis Smith, 1959.
Xiphasia matsu barai Okada and Suzuki, 1952.
Specimens were collected on the surface at night under a light while anchored at 40 m and from the stomachs of dolphins (Coryphaena hippurus) caught offshore. William F. Smith-Vaniz writes that Samoa specimens represent the easternmost distributional record for the species.

Tripterygiidae (Triplefins)

Triplefins are known as mano'o-taoto in Samoa. The systematics of the Samoan members of this family are confused and several species appear to be undescribed. Jordan and Seale (1906) listed seven species of Enneapterygius from Samoa including five described as new. Schultz (1943) placed four of Jordan and Seale's new species in synonymy and listed only three species for Samoa. The author collected 12 additional triplefins. Three of these were described in 1960. The others are unidentified at present.

Enneapterygius brachylopis (Schultz in Schultz et al., 1960).
Enneapterygius hemimelas (Kner and Steindacher, 1866).
Tripterygium hemimelas—Schmeltz, 1866.
As Enneapterygius cerasinus and E. hemimelas, Jordan and Seale, 1906.
Enneapterygius minutus (Günther, 1877).
Tripterygium minutus—Günther, 1877.
As Enneapterygius minutus, E. pardochir, E. tusitalae, and E. tutilae, Jordan and Seale, 1906.

**Enneapterygius sp.**
Eight specimens, 32 mm maximum SL; collected at 20 m. Dorsal III + XV + 9–10; anal II, 20–21; lateral line scales 17–18 + 22–24 = 40–42. One scale row between pored and notched rows of lateral line. About six wide dusky yellow bars on body; first dorsal dusky; caudal and pectorals yellow. (USNM 220065.)

**Enneapterygius sp.**
Twenty-four specimens, 28 mm maximum SL; collected at 3 m. Dorsal III + XIV–XV + 8–9; anal I, 17; lateral line scales 17–18 + 14–15 = 31–33. One scale row between pored and notched rows of lateral line. Body and fins reddish orange; central portion of caudal black; lower portion of head and pectoral base black; corner of jaws reddish orange. (USNM 220067.)

**Enneapterygius sp.**
Five specimens, 23 mm maximum SL; collected at 3 m. Dorsal III + XII + 9; anal I, 18–20; lateral line scales 15–17 + 18 = 33–35. One scale row between pored and notched rows of lateral line. Body red with posterior third black; head and chin red, throat dusky. (USNM 220068.)

**Enneapterygius sp.**
Five specimens, 27 mm maximum SL; collected at 3 m. Dorsal III–IV + XI + 9–10; anal I, 15–17; lateral line scales 17–18 + 16–17 = 33–34. One scale row between pored and notched rows of lateral line. Head and body pale with orange and white spotting; posterior third of body becoming greenish yellow; black spot on second dorsal.

**Enneapterygius sp.**
Three specimens, 17 mm maximum SL; collected at 33 m. Dorsal III + XI–XII + 9; anal I, 16; lateral line scales 11 + 21 = 32. One scale row between pored and notched rows of lateral line. Head and body pale with orange and white spotting; posterior third of body becoming greenish yellow; black spot on second dorsal.

**Enneapterygius sp.**
Eighteen specimens, 26 mm maximum SL; collected at 23 m. Dorsal III + XI–XV + 9–10; anal I, 19; lateral line scales 15–17 + 16–19 = 32–36. One scale row between pored and notched rows of lateral line. Body pale or dusky orange with five red bars on sides and back; dusky red spots on snout, operculum, and pectoral base; first and second dorsal, caudal, and anal may also be dusky. (USNM 220070.)

**Helcogramma capidata** Rosenblatt in Schultz et al., 1960.
**Helcogramma chiza** Rosenblatt in Schultz et al., 1960.
**Helcogramma chiza**—Rosenblatt in Schultz et al., 1960.
**Helcogramma hudsoni** (Jordan and Seale, 1906).
Enneapterygius hudsoni—Jordan and Seale, 1906.
As Enneapterygius hudsoni, Schultz, 1943.

**Helcogramma sp.**
Three specimens, 29–37 mm SL; collected at 43 m. Dorsal III + XIII + 12–14; anal I, 21–22; lateral line scales 10 + 29 = 39. Four or five scales between lateral line and third spine of second dorsal; 4–6 scales between lateral line and fifth ray of anal, tip of lower jaw projecting beyond upper jaw. Body pale with about 10 orange bars on sides continuous with oblique orange bands on second and third dorsals; distinct dark spot on middle of second dorsal; a few dusky spots on cheeks, chin, snout, and base of pelvics. (USNM 220062.)

**Lepidoblemnini sp.**
One specimen, 25 mm SL; collected at 10 m. Dorsal III + XIII + 11; anal I, 20; lateral line scales 38 (anterior 25 pored). Reddish orange bars on body. (USNM 220064.)

**Callionymidae (Dragonettes)**

Ronald Fricke identified the new record and provided synonymies.

**Callionymus xanthosemeion** Fowler, 1925.
(NMB 37010.)

**Diplogrammus goramensis** (Bloeker, 1858).

**Dermestia dorotheae**—Schultz, 1943.

**Synchiropus morrisoni** Schultz in Schultz et al., 1960.

**Synchiropus morrisoni**—Fricke, 1981.
(NMB 37009.)

**Synchiropus ocellatus** (Pallas, 1770). Mano’o-lele, mano’o-tolo.

**Synchiropus illi**—Jordan and Seale, 1906.

**Gobiidae (Gobies)**

Gobies are known as mano’o which is the same general name used for blennies. This is the best represented family in Samoa with 100 species listed herein. It is also the most poorly known as 26 species are unidentified either because they are undescribed or because their taxonomy is so confused that it is presently impossible to assign a name of assured validity. Members of the family are small and often show strong preferences for restricted habitats which account for their diversity and limited occurrence in collections. Douglass F. Hoese assisted with the identifications and provided synonymies for most of the species. Some of the names are uncertain but must suffice until genera are revised and their full complement of species is described. Diagnostic characteristics for unidentified species of Asterropteryx, Cabillus, Fusigobius, Isigobius, and Valenciennes were derived from his unpublished keys. Hoese’s numbering system is used for unidentified species since the numbers will be included as synonyms in his future publications. Susan J. Karnella confirmed the identifications of Eviola and supplied diagnostic characteristics for unidentified species. Ernest A. Lachner and she will describe some or all of the new species from Samoa in future publications. Helen K. Larson examined the Plesiostica and Tenacigobius specimens and provided diagnostic characteristics for unidentified species. James F. McKinney identified Calliobius.
Amblyeleotris fasciata (Herre, 1953). Mano'o-pōpō.
Amblyeleotris guttata (Fowler, 1938). Mano'o-pōpō.
Amblyeleotris peripherima (Bleeker, 1853). Mano'o-pōpō.
(AMS 1.21990-001.)

Amblyeleotris steinitzi (Klauswitz, 1974). Mano'o-pōpō.

Amblyeleotris sp. 17. Mano'o-pōpō.
Collected at 36 m. Dorsal VI + 1,13; anal 1,13; pectoral 19. Caudal pointed with central rays more than twice the length of outer rays. Body light tan with five major fawn-colored saddles and smaller, less distinct markings between; a pair of distinct black spots on chin; branchiostegals blue and orange; spiny dorsal pale with dark margin; anal, lower rays of caudal and pelvic with blue and orange lines. (AMS 1.21991-001.)

Amblyeleotris sp. 20. Mano'o-pōpō.
Two specimens, 43 and 51 mm SL; collected at 36 m. Dorsal VI + 1,13; anal 1,13; pectoral 20. Body pale with four pale orange bars on sides, yellow reticulations dorsally in interspaces; head with yellow reticulations, chin orange, branchiostegal membrane with dusky blue bar on edge; dorsal pale with blue and yellow lines and spots basally; anal pale, orange line marginated with dusky blue distally; perimeter of caudal with blue and yellow lines and spots basally; anal, lower rays of caudal and pelvics with blue and orange lines. (AMS 1.21994-001.)

Amblyeleotris nocturnus (Herre, 1945).
Hoese terms this identification "provisional."
A bathygobius phalaena (Vaillanciennes in Cuvier and Vaillanciennes, 1837). Mano'o-fugafugafuna.
Gobius phalaena—Gunther, 1877
Asterropteryx semipunctatus Rüppell, 1830. Mano'o-pūlea.
Asterropteryx semipunctatus—Jordan and Seale, 1906.
Asterropteryx sp. 3.
Six specimens, 14-22 mm SL; collected at 13 m. Four to six preopercular spines, two or three above mid-preopercular pore, lowermost spine thickened and longer than others; fourth dorsal spine thickened and usually prolonged. Head, body, and fins blotched with dusky orange; a dark transverse bar under eye; a small dark spot centered on caudal peduncle. (AMS 1.22000-001, 1.22004-001.)
Asterropteryx sp. 4.
Seven specimens, 14-23 mm SL; collected at 20-23 m. Two to six preopercular spines, one to three above mid-preopercular pore, lowermost spine about equal to or smaller than those above; head scales largely cycloid; fourth dorsal spine longest, generally not prolonged. A small dark spot centered on caudal peduncle; a narrow dark bar under eye. (AMS 1.22004-002.)
Asterropteryx sp. 7.
Six specimens, 23-28 mm SL; collected at 15-20 m. Two to six preopercular spines, one to three above mid-preopercular pore, lowermost spine about equal to or smaller than those above; head scales largely cycloid. Body and head pale with orange spotting; no bar under eye; a large dark spot on caudal peduncle. (AMS 1.21995-001.)
Awaus ocellaris (Broussonet, 1782). Mano'o-apofu.
A waus ocellaris—Jordan and Seale, 1906.
As Chonophorus ocellaris, Schultz, 1943. This species inhabits freshwater.

Bathygobius cocosensis (Bleeker, 1854).
Bathygobius cocosensis—Akihito and Meguro, 1980.
Bathygobius cotticeps (Steindachner, 1879). Mano'o-apofusami.
Bathygobius cotticeps—Schultz, 1943.

Bathygobius cyclopterus (Vaillanciennes in Cuvier and Vaillanciennes, 1837). Mano'o-apofusami.
Mapo crassiceps—Jordan and Seale, 1906.
As Bathygobius crassiceps, Schultz, 1943.
Bathygobius fuscus (Rüppell, 1830). Mano'o-apofusami.
Mapo fuscus—Jordan and Seale, 1906.
Cabillus sp. 5.
Five specimens, 18-26 mm SL; collected at 30-33 m. Dorsal VI + 1,9; anal 1,8; pectoral 19-20; scales 26-28. Prepelvic area heavily scaled; a lateral canal tube over operculum; midline of nape with a single row of scales. Body white with four pale reddish brown saddles or bars with dusky margins; tiny orange specks on head and body. (AMS 1.21996-001.)

Callogobius maculipinnis (Fowler, 1918).

Callogobius sclateri (Steindachner, 1880).
Gobiomorphus sclateri and Drombus tutuilae—Jordan and Seale, 1906.
As Mugobius sclateri and Drombus tutuilae, Schultz, 1943.
McKinney has examined the holotype of tutuilae, a small and poorly preserved specimen, and considers it to be a synonym.

Cryptocentrus leucosistius (Gunther, 1871). Mano'o-pōpō.
Heteroleotris phaeena—Jordan and Seale, 1906.
As Heteroleotris phaeena, Schultz, 1943.

Cryptocentrus sp. 28.
One specimen, 36 mm SL. Dorsal VI + 1,10; anal 1,10; pectoral 17; gill rakers on lower limb of first arch 9. Color in alcohol: body pale with about nine vertical bars; head with pale spotting. Hoese writes this species may be leptoccephalus. (AMS 1987-004.)
Clengobiops aurocingulus (Herre, 1925). Mano'o-pōpō.

Clengobiops sp.
Twenty-six specimens, 22-39 mm SL; collected at 15 m. Dorsal VI + 1,11-12; anal 1,11; scales 45-48; gill rakers 11. Gill opening extends far forward to a point anterior of the vertical through the hind margin of the preopercle. This species is closely related to tangaroai. (AMS 1.22006-001.)
Evioa afele—Jordan and Seale, 1906.
Evioa disrupta—Karnella and Lachner, 1981.
(USNM 220996.)
Evioa distigma—Jordan and Seale, 1906.
Evioa herrei—Jordan and Seale, 1906.
Evioa prasites—Jordan and Seale, 1906.
Evioa sebreei—Jordan and Seale, 1906.
Evioa smaragdus—Jordan and Seale, 1906.
Exyrias puntang (Bleeker, 1852).

Fusigobius neophytus (Günther, 1877).

Rhinogobius neophytus—Jordan and Seale, 1906.

Fusigobius sp. 2.

Two specimens, 24-25 mm SL; collected at 33 m. Dorsal VI + I,9; anal 1,8; scales 25. Body pale with yellow spots containing tiny black specks; round dark spot above pectoral base and a dusky spot at caudal base; dusky orange bar under eye; anterior portion of first dorsal dusky; no dark spots on dorsal or dark streak on snout. (AMS I.221990-002.)

Glossogobius biocellatus (Valenciennes in Cuvier and Valenciennes, 1837).

Glossogobius vaisiganus—Jordan and Seale, 1906.

This is a freshwater species.

Gnatholepis anjerensis (Bleeker, 1850).

Gnatholepis deltoides—Jordan and Seale, 1906.

There is no type of anjerensis but Hoese suspects it is "close" to what Seale later described as deltoides. This genus needs revision.

Gnatholepis sp.

Five specimens, 25-37 mm SL; collected at 25 m. Dorsal VI + I,11; anal I,11. Body pale with orange lateral band extending from operculum through pectoral base to midbase of caudal, four fainter orange lines between this band and dorsals, diffuse dusky blotch above pectoral base; head with dusky bar extending through eye and orange lines on snout and operculum; dorsals and anal base with orange line near base. (AMS I.22003-001.)

Gobiodon cirrinus (Rüppell, 1838). Mano'o-ulut'u'i, moemimi.

Pseudogobiodon cirrus—Jordan and Seale, 1906.

Gobiodon rivulatus (Rüppell, 1830). Mano'o-ulut'u'i, moemimi.

Gobiodon ceramensis—Schmeltz, 1866.

Istigobius ornatus (Rüppell, 1830).

Gobius ornatus—Jordan and Seale, 1906.

As Gobius ornatus, Schultz, 1943.

Istigobius sp. 5. Mano'o-va'a.

Twelve specimens, 18-59 mm SL. This species is common in sandy reef areas at depths of 3-27 m and is similar in meristics and color pattern to ornatus which lives in mangrove areas. However, it lacks filamentous pectoral rays and has one or two laterally curved and enlarged teeth at each angle of the lower jaw. (AMS I.22205-001.)

Istigobius sp.

This species is similar to I. sp. 5 but differs in having a black spot between fifth and sixth dorsal spines and no spot between first two dorsal spines, and in having oval, rather than elongate spots on the midside. (AMS I.22005-002.)

Kelloggella cardinals Jordan and Seale, 1906.

Kelloggella cardinals—Jordan and Seale, 1906.

Macrodonotogobius wilburi Herre, 1936.

Mugilogobius fontinalis (Jordan and Seale, 1906).

Vaironosa fontinalis—Jordan and Seale, 1906.

As Vaironosa fontinalis, Schultz, 1943. This species inhabits freshwater.


Nematoletris magnifica Fowler, 1938. Mano'o-sugale.

Oplonopus oplonopus (Valenciennes in Cuvier and Valenciennes, 1837). Mano'o-lape.

This species is abundant in the saltwater ponds enclosed by runways at Pago Pago International Airport.

Oxyurichthys tentacularis (Valenciennes in Cuvier and Valenciennes, 1837).

Pselaphias ophthalmonemus—Jordan and Seale, 1906.

Palustris pruinosa (Jordan and Seale, 1906).

Eviota pruinosa—Jordan and Seale, 1906.

As Pandaka pruinosa, Schultz, 1943. Hoese provisionally assigns this species to Palustris.

Paragobiodon echinocephala (Rüppell, 1828). Mano'o-ulut'u'i.

Gobius amicicnnes—Kner and Steindachner, 1866.

Paragobiodon lacunicauda (Kendall and Goldsborough, 1911).

Mano'o-ulut'u'i.

Paragobiodon echinocephalus (part)—Jordan and Seale, 1906.

Paragobiodon xanthosoma (Bleeker, 1859). Mano'o-ulut'u'i.

Paragobiodon xanthosomus—Jordan and Seale, 1906.

Periophthalmus koelreuteri (Pallas, 1770). P'a'ofu, talse.

Periophthalmus argentilineatus—Schmeltz, 1866.

As P. barbarus, Jordan and Seale, 1906.

Pieuroscya muscarum (Jordan and Seale, 1906).

Rhinogobius muscarum—Jordan and Seale, 1906.

As Glossogobius biocellatus (part), Schultz, 1943.

Pogonoculius zebra Fowler, 1938. Tilolai.

Prioepis semidoliatus (Valenciennes in Cuvier and Valenciennes, 1837).

Gobius semifasciatus—Kner, 1868.

As Zonogobius semidoliatus, Jordan and Seale, 1906 and Schultz, 1943.

Ptereleotris evides (Jordan and Hubbs, 1925). Ma'ulu.

Ptereleotris heteropterus (Bleeker, 1855). Ma'ulu.

Ptereleotris microlepis (Bleeker, 1856). Ma'ulu.

Quisquillius cinctus (Regan, 1908).

Pleurogobius naraharae—Schultz, 1943.

Quisquillius sp.

Two specimens, collected at 33 m. Dorsal VI + I,11; anal 1,9. Body pale with 11 yellow brown bars extending onto dorsal and anal fins.

Redigobius pagoensis (Schultz, 1943).

Mahioli'a pagoensis—Schultz, 1943.

A freshwater species.

Sicydium pugnans (Ogilvie-Grant, 1884).

Sicydium pugnans—Ogilvie-Grant, 1884.

A freshwater species.

Sicydium taeniurus (Günther, 1877). Mano'o-val.

Sicydium macrosteholepis—Kner, 1868.
As *Sicyopterus tenuirius* and *S. tawae*, Jordan and Seale, 1906.
A freshwater species.

*Stenogobius genitivittatus* (Valenciennes in Cuvier and Valenciennes, 1837). *Mano'o-vai.*
*Gobius genitivittatus*—Gunther, 1877.

*Stiphodon elegans* (Steindachner, 1879). *Mano'o-vai.*
*Stiphodon elegans*—Schultz, 1943.
A freshwater species.

*Tenacigobius erythrps* (Jordan and Seale, 1906).
*Chaenogobius erythrps*—Jordan and Seale, 1906.
As *Chaenogobius erythrps*, Schultz, 1943. According to Larson, this species has a longer gill opening than other Samoan members of the genus. It extends anteriorly to a point beneath the eye. (AMS 1.20725-001.)

*Tenacigobius jongei* (Davis and Cohen, 1968).

*Tenacigobius sp.* 7.
One specimen, 20 mm SL; collected from a sea fan at 25 m. The gill opening extends to a point halfway between the preopercular border and the hind edge of the eye; pelves relatively small and inserted distinctly posterior to pectoral base. This species has a characteristic blotch on the lower half of the caudal base which varies in size and intensity but is always present. (AMS 1.21388-001.)

*Tenacigobius sp.* 9.
The gill opening of this species is restricted to the pectoral base; the maxillary extends only to a point below the anterior edge of the pupil and the largest known specimens are only 15 mm SL. (AMS 1.21992-001.)

*Tomiyamichthys* sp.
One specimen, 35 mm SL; collected at 36 m. Dorsal VI +1,9; anal 1,8; pectoral 17-18; scales 26-28; predorsal scales 0-3. Interorbital distance much less than pupil width; interorbital and postorbital grooves present but not well developed. Body pale purplish gray with large yellow spots dorsally; head and belly pale, caudal bright yellow. (AMS 1.21998-002.)

*Vailima stevensoni*—Jordan and Seale, 1906.
Schultz (1943) confused this species with *Stiphodon elegans.* This is a freshwater species.


*Valenciennia sexguttatus* (Valenciennes in Cuvier and Valenciennes, 1837). *Mano'o-sina.*

*Valenciennia violifera*—Jordan and Seale, 1906.
As *V. violifera*, Schultz, 1943.

*Valenciennia striigata* (Broussonet, 1782). *Mano'o-sina.*

*Eleotris striigata*—Schmelz, 1869.

*Valenciennia sp.* *Mano'o-sina.*
Seven specimens, 29-34 mm SL; collected at 15 m. Dorsal VI +1,12; anal 1,12; pectoral 19; scales 67-80. No black spot on first dorsal; two faint longitudinal stripes connected by narrow crossbars on sides of body.

*Vanderhorstia ambanoro* (Fourmanoir, 1957). *Mano'o-pu'opo.* (AMS 1.21989-001.)


*Vanderhorstia ornatisimma*—Helfrich et al., 1975.

*Waitea stomiias* Smith, 1941.

*Waitea mystacina*—Jordan and Seale, 1906.

*Yongeichthys nebulosus* (Forsskål, 1775). *Mano'o-pata*.

*Rhinogobius coralinus* and *R. nebulosus*—Jordan and Seale, 1906.

As *Rhinogobius coralinus* and *R. nebulosus*, Schultz, 1943.

*Eleotridae* (Sleepers)

Douglas F. Hoese assisted with identifications and is credited with most of the synonyms.

*Bostrychus sinensis* Lacepède, 1802.

*Eleotris sinensis*—Herre, 1927.

*Eleotris fusca* (Bloch and Schneider, 1801). *Mano'o-pula, pa'ofa, pa'ofu, apofu.*
Acanthurus auranticavus
Acanthurus bleekeri
E. Randall.
tenned ume; smaller individuals are called ‘illilla or umelei. Several of the identifications listed below were con finned by John Larger individuals are called
Zanclus cornutus
Gunnellichthys pleurotaenia
Kraemeria samoensis
Xenisthmus xanthopterus
Hypseleotris guentheri
Eleotris melanosoma
Acanthurus achilles—Schmeltz, 1866.
Acanthusus elongatus, Jordan and Seale, 1906 and as Acanthurus elongatus (part), Schultz, 1943.
Acanthusus nigricauda Duncker and Mohr, 1929. Pone-lusina.
Hapatus gahhm—Steindachner, 1906.
As Hepatus nigricans, Jordan and Seale, 1906 and as Acanthusus nigricans, Schultz, 1943. Randall has recently concluded that nigricans is a Red Sea endemic and that gahhm is a junior synonym of nigricans.
Acanthusus nigrofuscus (Forsskål, 1775). Ponepene.
As Hepatus elongatus, Jordan and Seale, 1906 and as Acanthusus elongatus (part), Schultz, 1943.
Acanthusus nigrofasciatus in Cuvier and Valenciennes, 1835. Ponepene.
Hepatus atra—Jordan and Seale, 1906.
As Acanthusus elongatus (part), Schultz, 1943.
Acanthusus olivaceus Bloch and Schneider, 1801. Pone-apasamoa, a'afanamo.
Acanthusus olivaceus Günther, 1875.
As Hepatus olivaceus, Jordan and Seale, 1906.
Acanthusus pyroferus Kittlitz, 1834. Pone-lusina.
Acanthusus thompsoni (Fowler, 1923). Pone-lusina.
Acanthusus triostegus (Linnaeus, 1758). Manini.
Acanthusus triostegus—Schmeltz, 1866.
As Hepatus triostegus, Jordan and Seale, 1906.
Acanthusus xanthurus Valenciennes in Cuvier and Valenciennes, 1835.
Acanthusus matoides—Schmeltz, 1866.
As Hepatus matoides and H. aquilinus, Jordan and Seale, 1906 and as Acanthusus fuliginosus, Schultz, 1943.
Ctenochaetus binotatus Randall, 1955.
Ctenochaetus hawaiensis Randall, 1955.
(BPBM 17553).
Ctenochaetus striatus (Quoy and Gaimard, 18: 5). Pone (adults), pala'ia or logoula (schooling juveniles).
Ctenochaetus striatus (part)—Jordan and Seale, 1906.
As C. strigosus (part), Schultz.
Ctenochaetus strigosus (Bennett, 1828).
Ctenochaetus strigosus (part)—Schultz, 1943.
*Naso annulatus (Quoy and Gaimard, 1825).
Naseus annulatus—Schmeltz, 1869.
Naso brevirostris (Valenciennes in Cuvier and Valenciennes, 1835).
Ume-ulutoa.
Naso brevirostris—Steindachner, 1906.
As Acanthusus incipiens, Jordan and Seale, 1906.
Naso hexacanthus (Bleeker, 1855).
Naso lituratus (Bloch and Schneider, 1801). Ilil'a (<15 cm TL), umelei (>15 cm TL).
Naseus lituratus—Schmeltz, 1866.
As Acanthusus lituratus and A. garreti, Jordan and Seale, 1906.
Naso thynnoides (Valenciennes in Cuvier and Valenciennes, 1835).
Naso thynnoides—Pöhl, 1884.
Naso tuberosus (Lacepède, 1801). Ume-uluto'i.
Naso unicorns (Forsskål, 1775). Ume-isu.
Naseus unicorns—Schmeltz, 1874.
As Acanthusus unicorns, Jordan and Seale, 1906.
Naso vlamingii (Valenciennes in Cuvier and Valenciennes, 1835).
Ume-masimasi.

Kraemeridae (Sand Lances)
Kraemeria samoensis Steindachner, 1906.
Kraemeria samoensis—Steindachner, 1906.
As Vitreola sagitta, Jordan and Seale, 1906.

Microdesmidae (Wormfishes)
Gunnellichthys pleurotaenia Bleeker, 1858. Mano'o-ul.
Gunnellichthys pleurotaenia—Helfrich et al., 1975.

Zanclidae (Moorish Idol Family)
Zanclus cornutus (Linnaeus, 1758). Pe'ape'a, laulaufau.
Zanclus cornutus—Schmeltz, 1865.
As Z. canescens, Jordan and Seale, 1906.

Acanthuridae (Surgeonfishes and Unicornfishes)
The general name for Acanthurus spp. <15 cm TL is pone. Larger individuals are called palagi. Naso spp. are generally termed ume; smaller individuals are called 'ilil'a or umelei. Several of the identifications listed below were confirmed by John E. Randall.

Acanthusus achilles Shaw, 1803. Maikolama, kolama, pone-lumumu.
Acanthusus achilles—Schmeltz, 1866.
As Hepatus achilles and H. aterrimus, Jordan and Seale, 1906.
Acanthusus auranticus Randall, 1956. This species is recorded only from the Philippine Islands and the East Indies by Randall (1956) in his review of the genus. Acanthusus bleekeri Günther, 1861. Palagi-silusina.
Acanthusus glaucopareus Cuvier in Cuvier and Valenciennes, 1829. Lusina (Am. Samoa), lauluma (W. Samoa), guitolama.
Acanthusus glaucopareus—Schmeltz, 1866.
As Hepatus ulula, Jordan and Seale, 1906.
Acanthusus guttatus Bloch and Schneider, 1801. Maogo.
Acanthusus guttatus—Schmeltz, 1866.
As Hepatus guttatus, Jordan and Seale, 1906.
Acanthusus lineatus (Linnaeus, 1758). Alogo.
Acanthusus striatus—Schmeltz, 1865.
As Hepatus lineatus, Jordan and Seale, 1906.
Paracanthun i8

Zebrasoma rostratum (Günther, 1873). This species was observed only at Rose Atoll. (BPBM 27987.)

Zebrasoma scopas (Cuvier in Cuvier and Valenciennes, 1829).

Pilotipo, pe'ape' a.
Acanthurus rhombes—Schmelz, 1886.
As Zebrasoma rhomboideum and Z. rostratum, Jordan and Seale, 1906 and as Z. flavescens, Schultz, 1943.

Zebrasoma veliferum (Bloch, 1797). III.
Acanthurus velifer—Schmelz, 1886.

Siganidae (Rabbitfishes)

The general name for rabbitfishes in Samoa is lā. This name also refers to a large school of juveniles. David J. Woodland confirmed the identifications of some Samoan specimens and provided synonymies and comments on the distribution and uncollected siganids with Samoan distributional records.

Siganus argenteus (Quoy and Gaimard, 1825). Lūnā (≤ 5 cm TL), ove'ove (5-10 cm TL), mālava (> 10 cm TL).
Teuthis argenteus—Schmelz, 1886.
As Siganus rostratus, Jordan and Seale, 1906 and Schultz, 1943.
*Siganus fuscescens (Houttuyn, 1782).
Teuthis albopunctatus—Steindachner, 1906.
Siganus punctatus (Bloch and Schneider, 1801). Tito, lōle'e.le.
Teuthis hexagonata—Günther, 1874.
Siganus spinus (Linnaeus, 1758). Anēf (< 5 cm TL), pa'ulu (> 5 cm TL).
Teuthis striolata—Günther, 1874.
As Siganus marmoratus, Jordan and Seale, 1906.

Gempylidae (Snake Mackeral)

These species are caught by handline fishermen in deep water.

Promethichthys prometheus (Cuvier in Cuvier and Valenciennes, 1831). Palu-kamuro, palu-tomalo.

Ruvettus pretiosus Cocco, 1829. Palu-talatala.

Scombridae (Mackerels and Tunas)

Acanthocybium solandri (Cuvier in Cuvier and Valenciennes, 1831). Pa'alu.
Acanthocybium solandri—Schultz, 1943.

Axius thazard (Lacepède, 1801). Atualo.
Euthynmus affinis (Cantor, 1849). Atualo, kava'alu.
Grammatoctonus lucinarus (Quoy and Gaimard, 1824).

Namauuli.
Gymnosarda unicolor (Rüppell, 1838). Tagī.
Katsuwonos pelamis (Linnaeus, 1758). Atu (< 40 cm TL), faolu (40-50 cm TL), ga'ogo (> 50 cm TL).

Rastrelliger brachysoma (Bleeker, 1851). Gil.
Samoan specimens were collected by John E. Randall. (BPBM 6214.)
Rastrelliger kanagurta (Cuvier in Cuvier and Valenciennes, 1829). Gil.

Scomber loo—Jordan and Seale, 1906.
Thunnus alalunga (Bonnaterre, 1788). Apakoa.

Thunnus albacares (Bonnaterre, 1788). Asiasi (< about 18 kg); to'uo (Am. Samoa), ta'uo (W. Samoa) (> about 18 kg).
Thunnus obesus (Lowe, 1839). Asiasi (< about 18 kg); to'uo (Am. Samoa), ta'uo (W. Samoa) (> about 18 kg).

Xiphidiidae (Swordfish Family)

Xiphias gladius Linnaeus, 1758.
Xiphias gladius—Jordan, 1927.

Istiophoridae (Billfishes)

The general name for billfishes is sa'ulii.

Istiophorus platypterus (Shaw and Nodder, 1792). Sa'uli'i-lele.
Makaira indica (Cuvier in Cuvier and Valenciennes, 1831). Sa'uli'i-osu.
Makaira nigricans Lacepède, 1803. Sa'uli'i-osu.
Tetrapturus angustirostris Tanaka, 1914.
Tetrapturus audax (Philippi, 1887).

Nomeidae (Man-of-War Fishes)

Psenes cyanophrys Valenciennes in Cuvier and Valenciennes, 1833.
A specimen was speared under a buoy anchored at 2,000 m about 3 mi off Pago Pago Bay.

Bothidae (Lefteye Flounders)

Ampoglossus sp.
One specimen, 39 mm SL; collected at 33 m. Dorsal 77; anal 65; lateral line pores, 64. Depth 2.05 in SL; interorbital 0.25 in eye diameter; first dorsal ray expanded and prolonged. (BPBM 24111.)

Bothus mancus (Brousseton, 1782). All.
Platophrys mancus—Jordan and Seale, 1906.
Bothus pantherinus (Rüppell, 1830). All.
Rhomboidichthys pantherina—Schmelz, 1865.

Pleuronectidae (Righteye Flounders)


Soleidae (Soles)

The Samoan name for all species of flathish is ali.

Aesopia heterorhinos (Bleeker, 1856).
Solea heterorhina—Schmelz, 1865.
As Sokeichthys heterorhinos, Jordan and Seale, 1906.
Aseraggodes melanostictus (Peters, 1876).
Aseraggodes sp.
One specimen, 48 mm SL; collected at 23 m. Dorsal 75; anal 51; scales 76. Right pelvic with three rays and shorter base than left pelvic with five rays. (BPBM 24113.)

Aseraggodes sp.
Two specimens, 26 and 27 mm SL; collected at 37 m. Dorsal 74; anal 52; scales 70. Five rays in both pelvics which are symmetrical. (BPBM 24130.)
Balistidae (Triggerfishes)

Triggerfishes are known as sumu.

Balistapus undulatus (Mungo Park, 1797). Sumu-a’imaunu.
Balistes lineatus—Schmeltz, 1865.
As Balistes undulatus, Schultz, 1943.
Balistoides conspicillum (Bloch and Schneider, 1801). Sumu-papa.
Balistoides viridescens (Bloch and Schneider, 1801).
Sumu-lauau (<20 cm TL), umu (>20 cm TL).
Balistes viridescens—Schmeltz, 1866.
Canthidermis maculatus (Bloch, 1786). Sumu-va’a.
Balistes semicolor—Günther, 1910.
This species frequents the epipelagic zone and often occurs around drifting objects.

Melichthys niger (Bloch, 1786). Sumu-u’ului.
Balistes armatus—Schmeltz, 1866.
Melichthys vidua (Solander, 1844). Sumu-‘apapapasa, sumu-s’umūmū.
Balistes vidua—Jordan and Seale, 1906.
As Balistes vidua, Schultz, 1943.
Odonus niger (Rüppell, 1837). Sumu-pe’a.
Pseudobalistes flavimarginatus (Rüppell, 1828). Sumu-lauau (<20 cm TL), umu (>20 cm TL).
Balistes flavimarginatus—Schmeltz, 1874.
As Balistes flavomarginatus, Jordan and Seale, 1906.
Pseudobalistes fuscus (Bloch and Schneider, 1801).
Sumu-lauau (<20 cm TL), umu (>20 cm TL).
Rhinecanthus aculeatus (Linnaeus, 1758). Sumu-uo’uo.
Balistes aculeatus—Schmeltz, 1866.
As Balistapus aculeatus, Jordan and Seale, 1906 and as Balistes aculeatus, Schultz, 1943.
Rhinecanthus rectangularis (Bloch and Schneider, 1801). Sumu-alolo.
Balistes erythrops—Schmeltz, 1869.
As Balistapus rectangularis, Jordan and Seale, 1906 and as Balistes rectangularis, Schultz, 1943.

Rhinecanthus sp. Sumu-alolo.

This species is similar to cinereus and can probably be separated from it only by color. It has a large black area ventrally on the body centered above the origin of the anal (lacking in cinereus) and a black crescent on the caudal (lacking in cinereus). John E. Randall plans to describe it. (BPBM 24458, 24459.)

Sufflamen bursa (Bloch and Schneider, 1801). Sumu-‘apapua’e.
Balistes bursa—Schmeltz, 1869.

Sufflamen chrysopera (Bloch and Schneider, 1801).

Sumu-gasemoana.
Balistes niger—Schmeltz, 1874.
As Balistes chrysopera, Jordan and Seale, 1906 and Schultz, 1943.

Sufflamen fraenatus (Latrielle, 1804). Sumu-gase’ele’ele.
Several juveniles of this recently described species were observed near Steps Point at depths of 40-60 m.

Monacanthidae (Filefishes)

Members of this family are known as pa’umalo.

Aluterus scriptus (Osbeck, 1765). Ume-aleva, fahala.
Aluterus laevis—Schmeltz, 1866.

Amanses scopas (Cuvier in Cuvier and Valenciennes, 1829). Pa’umalo, fahala.
Amanses scopas—Schmeltz, 1866.
Cantherhines dumerili (Hollard, 1854). Pa’umalo.
Cantherhines sandwicensis (part)—Schultz, 1943.
Cantherhines pardalis (Rüppell, 1835). Pa’umalo, fahala, aimeo.
Monacanthus sandwicensis—Steindacher, 1906.
As Cantherhines sandwicensis, Jordan and Seale, 1906 and as C. sandwicensis, Schultz, 1943. Randall (1964b) has found that sandwicensis is limited to the Hawaiian Islands.

*Monacanthus chinensis (Osbeck, 1765).
Monacanthus chinensis—Schmeltz, 1865.
Oxymonacanthus longirostris (Bloch and Schneider, 1801). Pa’umalo-gutaumu.
Monacanthus longirostris—Schmeltz, 1866.
Pervagorn melanocephalus (Bleeker, 1853). Pa’umalo, fahala.
Monacanthus melanocephalus—Schmeltz, 1869.
As Monacanthus melanocephalus, Jordan and Seale, 1906 and Schultz, 1943.

Ostracionidae (Trunkfishes)

The Samoan name for trunkfishes is moamoa.

Lactoria cornuta (Linnaeus, 1758). Moamoa-ulu’ulo’ulo’u.
Ostracion cornutus—Schmeltz, 1866.
Ostracion cubicus Linnaeus, 1758. Moamoa-lega.
Ostracion argus—Schmeltz, 1869.
Ostracion meleagris Shaw, 1796. Moamoa-uli (initial phase), moamoa-sama (terminal phase).
Ostracion meleagris—Schmeltz, 1866.
As O. lentiginosus (initial phase) and O. sebae (terminal phase), Jordan and Seale, 1906 and Schultz, 1943.

Tetraodontidae (Puffers)

Puffers are referred to as sue.

Arothron hispidus (Linnaeus, 1758). Sue-va’alo.
Crayracion laterna—Schmeltz, 1869.
As Tetraodon hispidus, Jordan and Seale, 1906 and Schultz, 1943.
Arothron immaculatus (Bloch and Schneider, 1801). Sue-va’a.
Tetrodon virgatus—Schmeltz, 1865.
As Tetraodon immaculatus, Jordan and Seale, 1906 and Schultz, 1943.
Arothron mappa (Lesson, 1830). Tetraodon mappa—Schmeltz, 1874.
Arothron meleagris (Lacepède, 1798). Sue-puleuli (dark phase), sue-lega (yellow phase).
Tetraodon meleagris—Schmeltz, 1869.
Arothron nigropunctatus (Bloch and Schneider, 1801).
Sue-uli (dark phase), sue-lega (yellow phase).
Crayracion nigropunctatus—Schmeltz, 1865.
As Tetraodon nigropunctatus, Jordan and Seale, 1906 and Schultz, 1943.
Arothron stellatus (Bloch and Schneider, 1801). Sue-gatau, sue-va’a.
Crayracion lineatus—Schmeltz, 1869.
Arothron alboreticulatus may be a junior synonym.
ACKNOWLEDGMENTS

I am grateful for the generous assistance of 40 taxonomists cited above in association with the families and genera they have studied. John E. Randall deserves special thanks for his help with a wide range of taxonomic problems and for his guidance at every phase of this endeavor. Barry Goldman, Roger Lubbock, William D. Pedro, Henry S. Sesepasara, D. Iain Swan, Stanley N. Sweruloff, and Gordon S. Yamasaki are acknowledged for their diving assistance in collecting fishes. Peter Batty, Patrick G. Bryan, Fa'ataua'a L. Kaitona, Ronald Needham, Melvin Makiwi, Paul Pedro, William D. Pedro, Roger Pflum, and Wallace Thompson donated fishes. A. L. Phillipp provided equipment and support for collecting efforts in Western Samoa. Fanene Lualu, Ti'eti'e Leo, Ponapati Liloio, and Mamea U. Poti were members of the committee providing Samoan fish names. The committee was chaired by William D. Pedro. Tupuola Leuta and Lua'itaua F. Vii also provided Samoan names. Palauni Tulasosopo assisted with the spelling and punctuation of Samoan names. John E. Randall and Arnold Y. Suzumoto of the B. P. Bishop Museum, Victor G. Springer and staff of the U.S. National Museum, and William N. Eschmeyer and John E. Mc-Cosker of the California Academy of Sciences assisted my examination of fishes at their respective institutions. Mary-Melissa Hutchins, Fujasami A. Sa'umani, Titilia M. To'omata, and Caroline P. Umeyashita typed the manuscript. I would also like to thank my wife, Carol, for tolerating the deposition of fish specimens in the kitchen sink and family freezer. The project was funded by the Federal Aid in Fish Restoration Act (P. L. 81-681) Project No. F-2-R.

ADDENDUM

Three of the unidentified species listed above have been described or identified since the checklist went to press. Cephalopholis sp. on page 11 has been identified as C. analis (Valenciennes in Cuvier and Valenciennes, 1828) by John E. Randall; Paraceto sp. on page 16 has been described as P. stolzii Raj and Seeto, 1983; and Pteragogus sp. on page 22 has been described as P. cryptus Randall, 1981.

Eight new species distribution records have also been subsequently documented for Samoa. The alphonсин Beryx decastigma Cuvier in Cuvier and Valenciennes, 1829 was caught by a handline fisherman at 160 m. This species also represents a new family record (Berycidae) for Samoa. Three new serranids were handlined at 180-220 m. Their identities were confirmed by John E. Randall and include Epinephelus chlorostigma (Valenciennes in Cuvier and Valenciennes, 1828); Epinephelus truncatus Katayama, 1957; and Holanthias tapui Randall, Maugé, and Plessis, 1979. Two labrids can be added to the list. Cymolutes praetextatus (Quoy and Gaimard, 1834) (BPBM 28935) was swept at 1 m and Polyplecton russellii (Gomon and Randall, 1975) was handlined at 100 m. The gempylid Epinnula magistralis Poey, 1854 was handlined from 150 m. Finally, John E. Randall has written that the recently described holocentrid Sagrocentron legros (Allen and Cross, 1983) is represented by Samoan specimens (BPBM 17500) in the Bernice P. Bishop Museum collection which were collected at Fagatiale Bay at 30 m.

Including the above additions, the list now totals 999 species representing 114 families and 294 species previously unrecorded from Samoa.

LITERATURE CITED


INDEX TO SCIENTIFIC AND
COMMON NAMES OF FAMILIES

<table>
<thead>
<tr>
<th>Family</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acanthuridae</td>
<td>30</td>
</tr>
<tr>
<td>Albulidae</td>
<td>4</td>
</tr>
<tr>
<td>Alopidae</td>
<td>3</td>
</tr>
<tr>
<td>anchovies</td>
<td>7</td>
</tr>
<tr>
<td>angelfishes</td>
<td>18</td>
</tr>
<tr>
<td>Anguillidae</td>
<td>4</td>
</tr>
<tr>
<td>Anomalopidae</td>
<td>9</td>
</tr>
<tr>
<td>Antennariidae</td>
<td>7</td>
</tr>
<tr>
<td>Apogonidae</td>
<td>13</td>
</tr>
<tr>
<td>Atherinidae</td>
<td>8</td>
</tr>
<tr>
<td>Aulostomidae</td>
<td>10</td>
</tr>
<tr>
<td>Balistidae</td>
<td>32</td>
</tr>
<tr>
<td>barracudas</td>
<td>20</td>
</tr>
<tr>
<td>basslets</td>
<td>12</td>
</tr>
<tr>
<td>Belonidae</td>
<td>8</td>
</tr>
<tr>
<td>big-eyes</td>
<td>13</td>
</tr>
<tr>
<td>billfishes</td>
<td>31</td>
</tr>
<tr>
<td>blennies</td>
<td>24</td>
</tr>
<tr>
<td>Blennidae</td>
<td>24</td>
</tr>
<tr>
<td>bonefishes</td>
<td>4</td>
</tr>
<tr>
<td>Bothidae</td>
<td>31</td>
</tr>
<tr>
<td>Bramidae</td>
<td>15</td>
</tr>
<tr>
<td>brotulas</td>
<td>7</td>
</tr>
<tr>
<td>bulldog sharks</td>
<td>3</td>
</tr>
<tr>
<td>butterflyfishes</td>
<td>18</td>
</tr>
<tr>
<td>Bythitidae</td>
<td>7</td>
</tr>
<tr>
<td>Caesionidae</td>
<td>15</td>
</tr>
<tr>
<td>Callionymidae</td>
<td>26</td>
</tr>
<tr>
<td>Caracanthidae</td>
<td>11</td>
</tr>
<tr>
<td>Carangidae</td>
<td>14</td>
</tr>
<tr>
<td>Carapidae</td>
<td>7</td>
</tr>
<tr>
<td>Carcharhinidae</td>
<td>3</td>
</tr>
<tr>
<td>cardinalfishes</td>
<td>13</td>
</tr>
<tr>
<td>Centropomidae</td>
<td>11</td>
</tr>
<tr>
<td>Chaetodontidae</td>
<td>18</td>
</tr>
<tr>
<td>Chaenidae</td>
<td>7</td>
</tr>
<tr>
<td>Cichlidae</td>
<td>19</td>
</tr>
<tr>
<td>Cirrhitidae</td>
<td>20</td>
</tr>
<tr>
<td>clingfishes</td>
<td>7</td>
</tr>
<tr>
<td>Clupeidae</td>
<td>6</td>
</tr>
<tr>
<td>conger eels</td>
<td>6</td>
</tr>
<tr>
<td>Congridae</td>
<td>6</td>
</tr>
<tr>
<td>cornetfishes</td>
<td>10</td>
</tr>
<tr>
<td>Coryphaenidae</td>
<td>15</td>
</tr>
<tr>
<td>Creedidae</td>
<td>24</td>
</tr>
<tr>
<td>cusk eels</td>
<td>7</td>
</tr>
<tr>
<td>Dactylopteridae</td>
<td>11</td>
</tr>
<tr>
<td>damselfishes</td>
<td>19</td>
</tr>
<tr>
<td>Dasyatidae</td>
<td>4</td>
</tr>
<tr>
<td>Diodontidae</td>
<td>33</td>
</tr>
<tr>
<td>dogfish sharks</td>
<td>4</td>
</tr>
<tr>
<td>dolphins</td>
<td>15</td>
</tr>
<tr>
<td>dragonettes</td>
<td>26</td>
</tr>
<tr>
<td>dwarf rockfishes</td>
<td>11</td>
</tr>
<tr>
<td>eagle rays</td>
<td>4</td>
</tr>
<tr>
<td>Echeneididae</td>
<td>14</td>
</tr>
<tr>
<td>eel catfishes</td>
<td>7</td>
</tr>
<tr>
<td>Electrididae</td>
<td>29</td>
</tr>
<tr>
<td>Elopidae</td>
<td>4</td>
</tr>
<tr>
<td>emperors</td>
<td>17</td>
</tr>
<tr>
<td>Engraulidae</td>
<td>7</td>
</tr>
<tr>
<td>Ephippidae</td>
<td>18</td>
</tr>
<tr>
<td>Esococtidae</td>
<td>8</td>
</tr>
<tr>
<td>false morays</td>
<td>4</td>
</tr>
<tr>
<td>filefishes</td>
<td>32</td>
</tr>
<tr>
<td>Fistulariidae</td>
<td>10</td>
</tr>
<tr>
<td>flatheads</td>
<td>11</td>
</tr>
<tr>
<td>flyingfishes</td>
<td>8</td>
</tr>
<tr>
<td>flying gurnards</td>
<td>11</td>
</tr>
<tr>
<td>freshwater eels</td>
<td>4</td>
</tr>
<tr>
<td>frogfishes</td>
<td>7</td>
</tr>
<tr>
<td>fusiliers</td>
<td>15</td>
</tr>
<tr>
<td>garden eels</td>
<td>6</td>
</tr>
<tr>
<td>Gempylidae</td>
<td>31</td>
</tr>
<tr>
<td>Gerreidae</td>
<td>16</td>
</tr>
<tr>
<td>goatfishes</td>
<td>17</td>
</tr>
<tr>
<td>gobies</td>
<td>26</td>
</tr>
<tr>
<td>Gobiesocidae</td>
<td>7</td>
</tr>
<tr>
<td>Gobiidae</td>
<td>26</td>
</tr>
<tr>
<td>Grammidae</td>
<td>12</td>
</tr>
<tr>
<td>groupers</td>
<td>11</td>
</tr>
<tr>
<td>grunts</td>
<td>17</td>
</tr>
<tr>
<td>Haemulidae</td>
<td>17</td>
</tr>
<tr>
<td>halfbeaks</td>
<td>8</td>
</tr>
<tr>
<td>hammerhead sharks</td>
<td>3</td>
</tr>
<tr>
<td>hawfishes</td>
<td>20</td>
</tr>
<tr>
<td>Hemiramphidae</td>
<td>8</td>
</tr>
<tr>
<td>herrings</td>
<td>6</td>
</tr>
<tr>
<td>Hexanchidae</td>
<td>3</td>
</tr>
<tr>
<td>Holocentridae</td>
<td>9</td>
</tr>
<tr>
<td>Isonidae</td>
<td>9</td>
</tr>
<tr>
<td>Istiophoridae</td>
<td>31</td>
</tr>
<tr>
<td>jacks</td>
<td>14</td>
</tr>
<tr>
<td>jawfishes</td>
<td>24</td>
</tr>
<tr>
<td>Kraemeridae</td>
<td>30</td>
</tr>
<tr>
<td>Kuhliidae</td>
<td>13</td>
</tr>
<tr>
<td>Kyphosidae</td>
<td>18</td>
</tr>
<tr>
<td>Labridae</td>
<td>21</td>
</tr>
<tr>
<td>ladyfishes</td>
<td>4</td>
</tr>
<tr>
<td>Lamnidae</td>
<td>3</td>
</tr>
<tr>
<td>Lampridae</td>
<td>10</td>
</tr>
<tr>
<td>lantern-eyes</td>
<td>9</td>
</tr>
<tr>
<td>lefteye flounders</td>
<td>31</td>
</tr>
<tr>
<td>Leiognathidae</td>
<td>15</td>
</tr>
<tr>
<td>Lethrinidae</td>
<td>17</td>
</tr>
<tr>
<td>lizardfishes</td>
<td>7</td>
</tr>
<tr>
<td>Lutjanidae</td>
<td>15</td>
</tr>
<tr>
<td>mackerels</td>
<td>31</td>
</tr>
<tr>
<td>mackerel sharks</td>
<td>3</td>
</tr>
<tr>
<td>Family</td>
<td>Page</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Macrorhamphosidae</td>
<td>10</td>
</tr>
<tr>
<td>Malacanthidae</td>
<td>14</td>
</tr>
<tr>
<td>man-of-war fishes</td>
<td>31</td>
</tr>
<tr>
<td>manta</td>
<td>4</td>
</tr>
<tr>
<td>Megalopidae</td>
<td>4</td>
</tr>
<tr>
<td>Micromesididae</td>
<td>30</td>
</tr>
<tr>
<td>milkfishes</td>
<td>7</td>
</tr>
<tr>
<td>Mobulidae</td>
<td>4</td>
</tr>
<tr>
<td>mojarra</td>
<td>16</td>
</tr>
<tr>
<td>molly</td>
<td>8</td>
</tr>
<tr>
<td>Monacanthidae</td>
<td>32</td>
</tr>
<tr>
<td>monacle breams</td>
<td>16</td>
</tr>
<tr>
<td>Monodactylidae</td>
<td>17</td>
</tr>
<tr>
<td>moonfish</td>
<td>10</td>
</tr>
<tr>
<td>moonfish idol</td>
<td>30</td>
</tr>
<tr>
<td>moray</td>
<td>4</td>
</tr>
<tr>
<td>Moringuidae</td>
<td>13</td>
</tr>
<tr>
<td>mountain basses</td>
<td>20</td>
</tr>
<tr>
<td>Mugilidae</td>
<td>24</td>
</tr>
<tr>
<td>mullus</td>
<td>20</td>
</tr>
<tr>
<td>Mullidae</td>
<td>17</td>
</tr>
<tr>
<td>Muraenidae</td>
<td>5</td>
</tr>
<tr>
<td>Myliobatidae</td>
<td>4</td>
</tr>
<tr>
<td>narrow-snouted shovelnose rays</td>
<td>4</td>
</tr>
<tr>
<td>needlefishes</td>
<td>8</td>
</tr>
<tr>
<td>Nemipteriida</td>
<td>16</td>
</tr>
<tr>
<td>Nomeida</td>
<td>31</td>
</tr>
<tr>
<td>nurse shark</td>
<td>3</td>
</tr>
<tr>
<td>Ophichthidae</td>
<td>6</td>
</tr>
<tr>
<td>Ophidiidae</td>
<td>7</td>
</tr>
<tr>
<td>Opistognathidae</td>
<td>24</td>
</tr>
<tr>
<td>Orectolobidae</td>
<td>3</td>
</tr>
<tr>
<td>Ostracioida</td>
<td>32</td>
</tr>
<tr>
<td>parrotfishes</td>
<td>23</td>
</tr>
<tr>
<td>pearlfishes</td>
<td>7</td>
</tr>
<tr>
<td>Pempheridida</td>
<td>17</td>
</tr>
<tr>
<td>perchlet</td>
<td>11</td>
</tr>
<tr>
<td>Percichthyidae</td>
<td>11</td>
</tr>
<tr>
<td>pipefishes</td>
<td>10</td>
</tr>
<tr>
<td>Platycephaliida</td>
<td>11</td>
</tr>
<tr>
<td>Plepididae</td>
<td>12</td>
</tr>
<tr>
<td>Pleuroptidae</td>
<td>31</td>
</tr>
<tr>
<td>Plotosidae</td>
<td>7</td>
</tr>
<tr>
<td>Poeciliidae</td>
<td>8</td>
</tr>
<tr>
<td>Polyenidae</td>
<td>21</td>
</tr>
<tr>
<td>Pomacanthidae</td>
<td>18</td>
</tr>
<tr>
<td>Pomacentridae</td>
<td>19</td>
</tr>
<tr>
<td>pomfret</td>
<td>15</td>
</tr>
<tr>
<td>ponyfishes</td>
<td>15</td>
</tr>
<tr>
<td>porcupinefishes</td>
<td>33</td>
</tr>
<tr>
<td>prettyfins</td>
<td>12</td>
</tr>
<tr>
<td>Priacanthidae</td>
<td>13</td>
</tr>
<tr>
<td>Pseudochromidae</td>
<td>12</td>
</tr>
<tr>
<td>Pseudogrammidae</td>
<td>13</td>
</tr>
<tr>
<td>puffer</td>
<td>32</td>
</tr>
<tr>
<td>rabbitfishes</td>
<td>31</td>
</tr>
<tr>
<td>reef basslets</td>
<td>13</td>
</tr>
<tr>
<td>remoras</td>
<td>14</td>
</tr>
<tr>
<td>requiem sharks</td>
<td>3</td>
</tr>
<tr>
<td>Rhynchoptidae</td>
<td>4</td>
</tr>
<tr>
<td>righteye flounders</td>
<td>31</td>
</tr>
<tr>
<td>rudderfishes</td>
<td>18</td>
</tr>
<tr>
<td>sand burrowers</td>
<td>24</td>
</tr>
<tr>
<td>sand lances</td>
<td>30</td>
</tr>
<tr>
<td>sandperches</td>
<td>24</td>
</tr>
<tr>
<td>Scaridae</td>
<td>23</td>
</tr>
<tr>
<td>Scorpaenidae</td>
<td>10</td>
</tr>
<tr>
<td>seahorses</td>
<td>11</td>
</tr>
<tr>
<td>sea basses</td>
<td>31</td>
</tr>
<tr>
<td>Serranidae</td>
<td>11</td>
</tr>
<tr>
<td>Siganidae</td>
<td>31</td>
</tr>
<tr>
<td>silversides</td>
<td>8</td>
</tr>
<tr>
<td>silver batfishes</td>
<td>17</td>
</tr>
<tr>
<td>sleepers</td>
<td>29</td>
</tr>
<tr>
<td>snake eels</td>
<td>6</td>
</tr>
<tr>
<td>snake mackerels</td>
<td>31</td>
</tr>
<tr>
<td>snappers</td>
<td>15</td>
</tr>
<tr>
<td>snipefishes</td>
<td>10</td>
</tr>
<tr>
<td>soapfishes</td>
<td>12</td>
</tr>
<tr>
<td>Sphyraenidae</td>
<td>3</td>
</tr>
<tr>
<td>Squalidae</td>
<td>4</td>
</tr>
<tr>
<td>squirrelfishes</td>
<td>9</td>
</tr>
<tr>
<td>stargazers</td>
<td>24</td>
</tr>
<tr>
<td>sting rays</td>
<td>4</td>
</tr>
<tr>
<td>surf-fishes</td>
<td>9</td>
</tr>
<tr>
<td>surgeonfishes</td>
<td>30</td>
</tr>
<tr>
<td>sweepers</td>
<td>17</td>
</tr>
<tr>
<td>sweetlips</td>
<td>17</td>
</tr>
<tr>
<td>swordfish</td>
<td>31</td>
</tr>
<tr>
<td>Syngnathidae</td>
<td>10</td>
</tr>
<tr>
<td>Synodontidae</td>
<td>7</td>
</tr>
<tr>
<td>tarpons</td>
<td>4</td>
</tr>
<tr>
<td>temperate basses</td>
<td>11</td>
</tr>
<tr>
<td>Terapontidae</td>
<td>13</td>
</tr>
<tr>
<td>terapon perchers</td>
<td>13</td>
</tr>
<tr>
<td>Tetraodontidae</td>
<td>32</td>
</tr>
<tr>
<td>threadfins</td>
<td>21</td>
</tr>
<tr>
<td>three-toothed puffers</td>
<td>33</td>
</tr>
<tr>
<td>thresher sharks</td>
<td>3</td>
</tr>
<tr>
<td>tilapia</td>
<td>19</td>
</tr>
<tr>
<td>tilefishes</td>
<td>14</td>
</tr>
<tr>
<td>triggerfishes</td>
<td>32</td>
</tr>
<tr>
<td>Triodontidae</td>
<td>33</td>
</tr>
<tr>
<td>triplefins</td>
<td>25</td>
</tr>
<tr>
<td>Tripterygidae</td>
<td>25</td>
</tr>
<tr>
<td>trumpetfishes</td>
<td>10</td>
</tr>
<tr>
<td>trunkfishes</td>
<td>32</td>
</tr>
<tr>
<td>tunas</td>
<td>31</td>
</tr>
<tr>
<td>unicornfishes</td>
<td>30</td>
</tr>
<tr>
<td>Uranoscopidae</td>
<td>24</td>
</tr>
</tbody>
</table>
INDEX TO SAMOAN FISH NAMES

a'a ................................................. 20
afa .................................................. 20
afinamea ........................................ 30
afou ................................................ 17
afomatua ........................................ 20
afulu ............................................... 17
'ai'aivi .......................................... 5
'ai'aliuga ........................................ 5
aiamo ............................................. 32
aialafutu ....................................... 15
aii .................................................. 31
alogo ............................................. 30
alosina .......................................... 18
'ana'anālaga .................................... 4
'anae ............................................. 20
'anaeafa ........................................ 20
anaoso ........................................... 12
aneanea ......................................... 12
anefe ............................................ 31
apakoa .......................................... 31
apeape .......................................... 7,9
apo ............................................... 7
apoapo .......................................... 3
apofu .......................................... 12,30
apoua ........................................... 12
asiasi ............................................. 31
aso ................................................. 3
aso-lele ......................................... 3
asulu ............................................. 5
'ata'ata .......................................... 11
'ata'ata-tusi .................................. 12
'ata'ata'ali .................................... 12
'ata'ata'ulu .................................... 12
atamamala ..................................... 22
atapana ........................................ 5
ateate .......................................... 13
'ati'ati .......................................... 6
atu ............................................... 31
atualo .......................................... 15,31
atugaloaloa ................................... 15
atu ............................................... 15
atuleu .......................................... 15
atule-toto ..................................... 15
au ................................................. 12
au'au ............................................. 20
au'aulaui ....................................... 12
auvaeluoa ...................................... 5
auvaeluoa-sina ............................... 5
auvaeluoa-ulii ................................ 5
ava ................................................. 4
'ava'ava ......................................... 13
'ava'ava-moana ............................... 17
aval'i ............................................ 7
fa ................................................. 4
'afa .............................................. 4
'ai ............................................... 4
'ai-malae ...................................... 4
'ai-manu ........................................ 4
'ai-p'a .......................................... 4
'ai-tala ......................................... 4
'aiata ......................................... 32
faolu ............................................. 31
fausi ............................................ 12
feloitega ....................................... 16
filo .............................................. 7
filoa ............................................. 17
filoa-apamūmū ................................. 17
filoa-ava ....................................... 17
filoa-gutumūmū ............................... 17
filoa-gutupu'u ................................ 17
filoa-mū ........................................ 17
filoa-mutumutu ............................... 17
filoa-pa'o'omūmū ............................ 17
filoa-ulumato ................................ 17
filoa-ulutele .................................. 17
filoa-va'a ..................................... 17
filoa-val ........................................ 17
flu ................................................. 15
fo ................................................. 13
fo'aialo ......................................... 13
fo-gatala ....................................... 14
fo-loloa ........................................ 13
fo-malau ........................................ 13
fo-mani'i ....................................... 14
fo-mūmū ........................................ 14
fo-si'umū ....................................... 13
fo-tala .......................................... 12,14
fo-talaimenea ................................ 14

worm fishes .................................... 30
worm eels ...................................... 4
wrasses ........................................ 21

Xenocongridae ...................................... 4
Xiphidiidae ..................................... 31
Zanclidae ....................................... 30
<table>
<thead>
<tr>
<th>Term</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>fō-taoto</td>
<td>14</td>
</tr>
<tr>
<td>fō-tuasui</td>
<td>14</td>
</tr>
<tr>
<td>fō-tusiloaloa</td>
<td>13, 14</td>
</tr>
<tr>
<td>fō-vai</td>
<td>8</td>
</tr>
<tr>
<td>fuafua</td>
<td>20</td>
</tr>
<tr>
<td>fuga</td>
<td>23</td>
</tr>
<tr>
<td>fuga-a'au</td>
<td>24</td>
</tr>
<tr>
<td>fuga-alomū</td>
<td>24</td>
</tr>
<tr>
<td>fuga-aloSama</td>
<td>23</td>
</tr>
<tr>
<td>fuga-alosina</td>
<td>24</td>
</tr>
<tr>
<td>fuga-aloVī</td>
<td>23</td>
</tr>
<tr>
<td>fuga-gutumū</td>
<td>24</td>
</tr>
<tr>
<td>fuga-matapua'a</td>
<td>24</td>
</tr>
<tr>
<td>fuga-nea</td>
<td>23</td>
</tr>
<tr>
<td>fuga-pala</td>
<td>23</td>
</tr>
<tr>
<td>fuga-sina</td>
<td>23</td>
</tr>
<tr>
<td>fuga-valea</td>
<td>23</td>
</tr>
<tr>
<td>fugausi</td>
<td>23</td>
</tr>
<tr>
<td>fugausi-matapua'a</td>
<td>24</td>
</tr>
<tr>
<td>fugausi-tuavela</td>
<td>24</td>
</tr>
<tr>
<td>fuitogo</td>
<td>20</td>
</tr>
<tr>
<td>gā</td>
<td>31</td>
</tr>
<tr>
<td>gaitolama</td>
<td>30</td>
</tr>
<tr>
<td>galo</td>
<td>23</td>
</tr>
<tr>
<td>galo-uluto'i</td>
<td>23</td>
</tr>
<tr>
<td>ga'o</td>
<td>31</td>
</tr>
<tr>
<td>gatala</td>
<td>11</td>
</tr>
<tr>
<td>gatala-a'au</td>
<td>12</td>
</tr>
<tr>
<td>gatala-avua</td>
<td>11</td>
</tr>
<tr>
<td>gatala-aloalo</td>
<td>12</td>
</tr>
<tr>
<td>gatala-mūmūi</td>
<td>11</td>
</tr>
<tr>
<td>gatala-nifoli'i</td>
<td>12</td>
</tr>
<tr>
<td>gatala-pule'e'ena</td>
<td>12</td>
</tr>
<tr>
<td>gatala-pulepule</td>
<td>12</td>
</tr>
<tr>
<td>gatala-pulesama</td>
<td>12</td>
</tr>
<tr>
<td>gatala-pulepalesu</td>
<td>12</td>
</tr>
<tr>
<td>gatala-pulepul</td>
<td>12</td>
</tr>
<tr>
<td>gatala-samoa</td>
<td>11</td>
</tr>
<tr>
<td>gatala-sega</td>
<td>12</td>
</tr>
<tr>
<td>gatala-sina</td>
<td>12</td>
</tr>
<tr>
<td>gatala-tane</td>
<td>12</td>
</tr>
<tr>
<td>gatalauli</td>
<td>11</td>
</tr>
<tr>
<td>gatamea</td>
<td>6</td>
</tr>
<tr>
<td>gatau</td>
<td>6</td>
</tr>
<tr>
<td>gutumanu</td>
<td>18</td>
</tr>
<tr>
<td>gutunofu</td>
<td>12</td>
</tr>
<tr>
<td>gutusio'o</td>
<td>22</td>
</tr>
<tr>
<td>gutu'umi</td>
<td>22</td>
</tr>
<tr>
<td>i'alanumoana</td>
<td>19</td>
</tr>
<tr>
<td>i'amai-moana</td>
<td>17</td>
</tr>
<tr>
<td>i'asina</td>
<td>17</td>
</tr>
<tr>
<td>i'atala</td>
<td>10</td>
</tr>
<tr>
<td>i'atolo</td>
<td>24</td>
</tr>
<tr>
<td>i'aiu</td>
<td>21</td>
</tr>
<tr>
<td>i'aiu</td>
<td>21</td>
</tr>
<tr>
<td>i'asui</td>
<td>6, 7</td>
</tr>
<tr>
<td>i'asui</td>
<td>21</td>
</tr>
<tr>
<td>i'asui</td>
<td>22</td>
</tr>
<tr>
<td>i'asui</td>
<td>30</td>
</tr>
<tr>
<td>i'asui</td>
<td>31</td>
</tr>
<tr>
<td>i'asui</td>
<td>13</td>
</tr>
<tr>
<td>ise</td>
<td>8</td>
</tr>
<tr>
<td>i'usasama</td>
<td>18, 20</td>
</tr>
<tr>
<td>i'usila</td>
<td>8</td>
</tr>
<tr>
<td>i'usi</td>
<td>30</td>
</tr>
<tr>
<td>kavalau</td>
<td>31</td>
</tr>
<tr>
<td>koko</td>
<td>10</td>
</tr>
<tr>
<td>kolama</td>
<td>30</td>
</tr>
<tr>
<td>lae</td>
<td>23</td>
</tr>
<tr>
<td>lae-malai</td>
<td>23</td>
</tr>
<tr>
<td>lae-mamanu</td>
<td>23</td>
</tr>
<tr>
<td>lae-matapua'a</td>
<td>24</td>
</tr>
<tr>
<td>lae-nea</td>
<td>23, 24</td>
</tr>
<tr>
<td>lae-pala</td>
<td>23</td>
</tr>
<tr>
<td>lae-sina</td>
<td>23</td>
</tr>
<tr>
<td>lae-si'umoana</td>
<td>23</td>
</tr>
<tr>
<td>lae-tuaqala</td>
<td>24</td>
</tr>
<tr>
<td>lae-tusi</td>
<td>24</td>
</tr>
<tr>
<td>lae-ulapokea</td>
<td>23</td>
</tr>
<tr>
<td>lae-ulusama</td>
<td>23</td>
</tr>
<tr>
<td>lae-uluto'i</td>
<td>23</td>
</tr>
<tr>
<td>lae-usi</td>
<td>23</td>
</tr>
<tr>
<td>latu</td>
<td>11</td>
</tr>
<tr>
<td>lai</td>
<td>15</td>
</tr>
<tr>
<td>lalafi</td>
<td>21</td>
</tr>
<tr>
<td>lalafi-gutu'umi</td>
<td>21</td>
</tr>
<tr>
<td>lalafi-matamūmūi</td>
<td>21</td>
</tr>
<tr>
<td>lalafi-matapua'a</td>
<td>21</td>
</tr>
<tr>
<td>lalafi-pulepule</td>
<td>21</td>
</tr>
<tr>
<td>lalafi-tuaqala</td>
<td>22</td>
</tr>
<tr>
<td>lalafutu</td>
<td>15</td>
</tr>
<tr>
<td>lae</td>
<td>13</td>
</tr>
<tr>
<td>la'o</td>
<td>20</td>
</tr>
<tr>
<td>la'ofia</td>
<td>23</td>
</tr>
<tr>
<td>la'o-gatala</td>
<td>23</td>
</tr>
<tr>
<td>la'o-tale</td>
<td>7, 10</td>
</tr>
<tr>
<td>lape</td>
<td>22</td>
</tr>
<tr>
<td>lape-a'au</td>
<td>22</td>
</tr>
<tr>
<td>lape-ele'ele</td>
<td>23</td>
</tr>
<tr>
<td>lapega</td>
<td>22</td>
</tr>
<tr>
<td>lape-moana</td>
<td>23</td>
</tr>
<tr>
<td>lauiama</td>
<td>30</td>
</tr>
<tr>
<td>laui Kaufa</td>
<td>30</td>
</tr>
<tr>
<td>laualaufau-laumea</td>
<td>18</td>
</tr>
<tr>
<td>lauloa</td>
<td>17</td>
</tr>
<tr>
<td>lausiva</td>
<td>20</td>
</tr>
<tr>
<td>tō</td>
<td>31</td>
</tr>
<tr>
<td>loa</td>
<td>17</td>
</tr>
<tr>
<td>lōe'e'ele</td>
<td>31</td>
</tr>
<tr>
<td>logouila</td>
<td>30</td>
</tr>
<tr>
<td>loki</td>
<td>11</td>
</tr>
<tr>
<td>lōloa</td>
<td>31</td>
</tr>
<tr>
<td>lufi</td>
<td>15</td>
</tr>
<tr>
<td>lupoto</td>
<td>15</td>
</tr>
<tr>
<td>lupovai</td>
<td>15</td>
</tr>
<tr>
<td>maikolama</td>
<td>30</td>
</tr>
<tr>
<td>mala'i</td>
<td>16</td>
</tr>
<tr>
<td>mala'i-pa'epa'e</td>
<td>16</td>
</tr>
<tr>
<td>malakea</td>
<td>21</td>
</tr>
<tr>
<td>malau</td>
<td>9</td>
</tr>
<tr>
<td>malau-faiumu</td>
<td>9</td>
</tr>
</tbody>
</table>
pa'ala .................................................. 31
pa'a'ia ............................................... 30
palagi ................................................ 20
palagi-si'usina ..................................... 30
palu .................................................. 16
palu-alonolo ........................................ 16
palu-atu ............................................. 16
palu-ave ............................................ 16
palu-mata'ena ...................................... 16
palu-gutsuliva ..................................... 16
palu-‘usama ......................................... 16
palu-kamuro ........................................ 31
palu-kata ............................................ 16
palu-loa ............................................. 16
palu-makomako ..................................... 16
palu-malau .......................................... 16
palu-muta ........................................... 16
palu-opa'e ......................................... 16
palu-sega .......................................... 16
palu-sina ........................................... 16
palu-sina-ugatele ................................ 16
palu-talatata ....................................... 31
palu-tomalo ........................................ 31
palu-tusama ....................................... 16
palu-tuualu ........................................ 16
palu-tuvela ........................................ 16
palu-tusimoana .................................. 16
palu-ulua .......................................... 16
pa'afa ............................................... 29,30
pa'ofu ............................................... 28,30
papa .................................................... 12
papata-pulepule .................................... 5
papata-tusitusi ..................................... 5
papa-tuualu ........................................ 12
patagaloa .......................................... 23
pata'ota'o .......................................... 23
pa'ulu ............................................... 31
pa'umalo ............................................ 32
pa'umalo-gutoosi .................................. 32
pe'ape'a ........................................... 18,30,31
pe'ape'a-uli ....................................... 18
pelupelu ............................................ 6
pipi .................................................... 19
pitopito ........................................... 31
poil .................................................... 7,20
pone ................................................... 30
pone-apasama ...................................... 30
ponepote ............................................. 30
pone-l'umumu ...................................... 30
pone-‘usama ........................................ 30
pone-l'usina ....................................... 30
poporta ............................................. 20
pua .................................................... 6
pualii ............................................... 5
pulinimiri .......................................... 5
pupu ................................................... 5
pupu-‘a‘u ............................................. 5
pupu-gatala ........................................ 5
pupu-le‘a ......................................... 6
pupu-pulepule ...................................... 5
pupu-solashulu .................................... 6
pupu-sualulu ....................................... 6
sa'ofole ............................................. 13
salala ............................................... 6
salele ............................................... 13
sali ................................................... 8
samani .............................................. 15
saosao .............................................. 20
sapatit ............................................. 20
sapa‘anae .......................................... 15
sa‘ula ............................................. 31
sa‘ula-lele ......................................... 31
sa‘ula-oso ......................................... 31
sauasau-lele ........................................ 10
sa‘ana .............................................. 16
sa‘ana-ulasama .................................... 16
segasega-moana .................................. 11
sesel ............................................... 13
si‘u .................................................... 18
si‘umutu .......................................... 22
sue ................................................... 32
sue-afa ............................................ 33
sue-gatala ......................................... 32
sue-lape ........................................... 33
sue-lega ............................................ 32
sue-mimi .......................................... 33
sue-moemimi ...................................... 33
sue-mo'o .......................................... 33
sue-mu ............................................. 33
sue-puleuli ....................................... 32
sue-sugale ........................................ 33
sue-ul .............................................. 32
sue-va'a ......................................... 32
sue-vaolo ......................................... 32
sugale .............................................. 21
sugale-a‘a ........................................ 21
sugale-a‘au ......................................... 22
sugale-aloa ........................................ 22
sugale-aloma ...................................... 23
sugale-gasu ........................................ 22
sugale-gutumafia ................................ 22
sugale-i‘usina ..................................... 22
sugale-lalafi ...................................... 22
sugale-la‘o ......................................... 22
sugale-lape ........................................ 22
sugale-laoguru ................................... 22
sugale-lupe ....................................... 22
sugale-mafalaugatu ................................ 21
sugale-manifi ..................................... 22
sugale-mo‘o ....................................... 21
sugale-motai ...................................... 22
sugale-mumū ...................................... 21
sugale-pagota ..................................... 22
sugale-puletasi ................................... 23
sugale-samasa .................................... 23
sugale-siwa ....................................... 22
sugale-tafuti ...................................... 22
sugale-tāli ........................................ 22
sugale-tala‘ula .................................... 21
sugale-taranu ..................................... 21
sugale-tusitusi .................................... 22
sugale-ul ........................................... 22
sugale-uluto'i .................................... 21
sugale-uluvela .................................... 22
sugale-vaolo ....................................... 21
<table>
<thead>
<tr>
<th>term</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>sumu</td>
<td>32</td>
</tr>
<tr>
<td>sumu-aimau</td>
<td>32</td>
</tr>
<tr>
<td>sumu-aloalo</td>
<td>32</td>
</tr>
<tr>
<td>sumu-'apa'apasia</td>
<td>32</td>
</tr>
<tr>
<td>sumu-gase 'ele 'ele</td>
<td>32</td>
</tr>
<tr>
<td>sumu-gasemoana</td>
<td>32</td>
</tr>
<tr>
<td>sumu-laulau</td>
<td>32</td>
</tr>
<tr>
<td>sumu-pa 'epa 'epa</td>
<td>32</td>
</tr>
<tr>
<td>sumu-palu</td>
<td>32</td>
</tr>
<tr>
<td>sumu-papa</td>
<td>32</td>
</tr>
<tr>
<td>sumu-pe 'a</td>
<td>32</td>
</tr>
<tr>
<td>sumu-si 'umumū</td>
<td>32</td>
</tr>
<tr>
<td>sumu-uli</td>
<td>32</td>
</tr>
<tr>
<td>sumu-uo 'u'o</td>
<td>32</td>
</tr>
<tr>
<td>sumu-va 'a</td>
<td>32</td>
</tr>
<tr>
<td>susumi</td>
<td>32</td>
</tr>
<tr>
<td>t'a 'aneva</td>
<td>3</td>
</tr>
<tr>
<td>tafala</td>
<td>15</td>
</tr>
<tr>
<td>tafoali</td>
<td>15</td>
</tr>
<tr>
<td>tafi-lotaio</td>
<td>5</td>
</tr>
<tr>
<td>tafuti</td>
<td>7,12</td>
</tr>
<tr>
<td>tagafa</td>
<td>21</td>
</tr>
<tr>
<td>tagi</td>
<td>31</td>
</tr>
<tr>
<td>taili</td>
<td>12</td>
</tr>
<tr>
<td>taiuli</td>
<td>7</td>
</tr>
<tr>
<td>tāiva</td>
<td>16</td>
</tr>
<tr>
<td>talae</td>
<td>28</td>
</tr>
<tr>
<td>talitalihi</td>
<td>14</td>
</tr>
<tr>
<td>tamala</td>
<td>16</td>
</tr>
<tr>
<td>tāmalau</td>
<td>10</td>
</tr>
<tr>
<td>tāmalau-mūmū</td>
<td>9</td>
</tr>
<tr>
<td>tameno-mūmū</td>
<td>9</td>
</tr>
<tr>
<td>taotao</td>
<td>10</td>
</tr>
<tr>
<td>taotito</td>
<td>10</td>
</tr>
<tr>
<td>ta'o 'otou</td>
<td>7,24</td>
</tr>
<tr>
<td>taoto-ama</td>
<td>10</td>
</tr>
<tr>
<td>taoto-ena</td>
<td>10</td>
</tr>
<tr>
<td>taoto-sama</td>
<td>10</td>
</tr>
<tr>
<td>tapotopoteto</td>
<td>7</td>
</tr>
<tr>
<td>tapua</td>
<td>11</td>
</tr>
<tr>
<td>ta'ulea</td>
<td>17</td>
</tr>
<tr>
<td>ta'u'o</td>
<td>31</td>
</tr>
<tr>
<td>taupapa</td>
<td>15</td>
</tr>
<tr>
<td>tauta</td>
<td>33</td>
</tr>
<tr>
<td>tautu</td>
<td>33</td>
</tr>
<tr>
<td>tāvai</td>
<td>15</td>
</tr>
<tr>
<td>teatea</td>
<td>20</td>
</tr>
<tr>
<td>tīfītī</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-ava 'ava</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-gutu 'uili</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-lau'i'a</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-laumea</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-laumoi</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-lega</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-manifi</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-maono</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-matapu 'a'a</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-moamanu</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-muamai</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-pa 'ipa 'i</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-pule</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-pule 'a'a</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-sae 'u</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-segasega</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-sega 'ula</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-si 'o</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-tuauli</td>
<td>18</td>
</tr>
<tr>
<td>tīfītī-tusikoloa</td>
<td>18</td>
</tr>
<tr>
<td>tītoto</td>
<td>28</td>
</tr>
<tr>
<td>tino</td>
<td>31</td>
</tr>
<tr>
<td>tīva</td>
<td>12</td>
</tr>
<tr>
<td>tivao</td>
<td>16</td>
</tr>
<tr>
<td>tivao-sagale</td>
<td>16</td>
</tr>
<tr>
<td>to 'e</td>
<td>5</td>
</tr>
<tr>
<td>to 'etapu</td>
<td>5</td>
</tr>
<tr>
<td>tolai</td>
<td>17</td>
</tr>
<tr>
<td>tolo</td>
<td>17</td>
</tr>
<tr>
<td>to 'uo</td>
<td>31</td>
</tr>
<tr>
<td>to 'utu</td>
<td>18,19</td>
</tr>
<tr>
<td>to 'utu-alamu</td>
<td>19</td>
</tr>
<tr>
<td>to 'utu-alomu</td>
<td>18</td>
</tr>
<tr>
<td>to 'utu-atuagahi</td>
<td>20</td>
</tr>
<tr>
<td>to 'utu-faga</td>
<td>19</td>
</tr>
<tr>
<td>to 'utu-fā</td>
<td>19</td>
</tr>
<tr>
<td>to 'utu-i 'usina</td>
<td>19</td>
</tr>
<tr>
<td>to 'utu-i 'uuli</td>
<td>20</td>
</tr>
<tr>
<td>to 'utu-koko</td>
<td>19</td>
</tr>
<tr>
<td>to 'utu-lau</td>
<td>20</td>
</tr>
<tr>
<td>to 'utu-lega</td>
<td>19</td>
</tr>
<tr>
<td>to 'utu-lumane</td>
<td>20</td>
</tr>
<tr>
<td>to 'utu-malaumaputapu</td>
<td>20</td>
</tr>
<tr>
<td>to 'utu-mamo</td>
<td>19</td>
</tr>
<tr>
<td>to 'utu-mamini</td>
<td>19</td>
</tr>
<tr>
<td>to 'utu-mata' amu</td>
<td>18</td>
</tr>
<tr>
<td>to 'utu-moana</td>
<td>18</td>
</tr>
<tr>
<td>to 'utu-moi</td>
<td>20</td>
</tr>
<tr>
<td>to 'utu-mo 'o</td>
<td>19</td>
</tr>
<tr>
<td>to 'utu-nuanua</td>
<td>19</td>
</tr>
<tr>
<td>to 'utu-pa</td>
<td>20</td>
</tr>
<tr>
<td>to 'utu-palea</td>
<td>20</td>
</tr>
<tr>
<td>to 'utu-palevai</td>
<td>19</td>
</tr>
<tr>
<td>to 'utu-popouli</td>
<td>20</td>
</tr>
<tr>
<td>to 'utu-pule' a</td>
<td>19</td>
</tr>
<tr>
<td>to 'utu-samam</td>
<td>19</td>
</tr>
<tr>
<td>to 'utu-segasega</td>
<td>19,20</td>
</tr>
<tr>
<td>to 'u 'u-segi</td>
<td>19</td>
</tr>
<tr>
<td>to 'u 'u-si 'ugutusina</td>
<td>20</td>
</tr>
<tr>
<td>to 'u 'u-tusikoloa</td>
<td>19</td>
</tr>
<tr>
<td>to 'u 'u-tusikoloa</td>
<td>19</td>
</tr>
<tr>
<td>to 'u 'u-ulavapua</td>
<td>19</td>
</tr>
<tr>
<td>to 'u 'u-uluvela</td>
<td>19</td>
</tr>
<tr>
<td>to 'u 'u-valiuli</td>
<td>20</td>
</tr>
<tr>
<td>to 'u 'u-vao</td>
<td>19</td>
</tr>
<tr>
<td>u'aihu</td>
<td>5</td>
</tr>
<tr>
<td>uisila</td>
<td>8</td>
</tr>
<tr>
<td>ulalaisi</td>
<td>17</td>
</tr>
<tr>
<td>ula 'o</td>
<td>17</td>
</tr>
<tr>
<td>ulapokea</td>
<td>23</td>
</tr>
<tr>
<td>Word</td>
<td>Number</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------</td>
</tr>
<tr>
<td>ulavapua</td>
<td>20</td>
</tr>
<tr>
<td>ulisega</td>
<td>15</td>
</tr>
<tr>
<td>ulouko-gatala</td>
<td>23</td>
</tr>
<tr>
<td>ulua</td>
<td>15</td>
</tr>
<tr>
<td>ulumalo</td>
<td>23</td>
</tr>
<tr>
<td>ulumato</td>
<td>23</td>
</tr>
<tr>
<td>ulusa'o</td>
<td>17</td>
</tr>
<tr>
<td>uluto'i</td>
<td>23</td>
</tr>
<tr>
<td>umu</td>
<td>23</td>
</tr>
<tr>
<td>ulu'a</td>
<td>17</td>
</tr>
<tr>
<td>ulu ' i</td>
<td>20</td>
</tr>
<tr>
<td>ume</td>
<td>30</td>
</tr>
<tr>
<td>ume-aleva</td>
<td>30</td>
</tr>
<tr>
<td>ume-isu</td>
<td>30</td>
</tr>
<tr>
<td>umelei</td>
<td>30</td>
</tr>
<tr>
<td>ume-masimasi</td>
<td>30</td>
</tr>
<tr>
<td>ume-ulutao</td>
<td>30</td>
</tr>
<tr>
<td>ume-uluto'i</td>
<td>30</td>
</tr>
<tr>
<td>'umi'umia</td>
<td>21</td>
</tr>
<tr>
<td>umu</td>
<td>32</td>
</tr>
<tr>
<td>utu</td>
<td>16</td>
</tr>
<tr>
<td>vaiuli-sama</td>
<td>19</td>
</tr>
<tr>
<td>valevale</td>
<td>17</td>
</tr>
<tr>
<td>vaolo</td>
<td>11,12</td>
</tr>
<tr>
<td>vavale</td>
<td>17</td>
</tr>
<tr>
<td>velo</td>
<td>12</td>
</tr>
<tr>
<td>vete</td>
<td>17</td>
</tr>
<tr>
<td>vete-mū</td>
<td>17</td>
</tr>
<tr>
<td>vaiuli-sama</td>
<td>19</td>
</tr>
<tr>
<td>valevale</td>
<td>17</td>
</tr>
<tr>
<td>vaolo</td>
<td>11,12</td>
</tr>
<tr>
<td>vavale</td>
<td>17</td>
</tr>
<tr>
<td>velo</td>
<td>12</td>
</tr>
<tr>
<td>vete</td>
<td>17</td>
</tr>
<tr>
<td>vete-mū</td>
<td>17</td>
</tr>
</tbody>
</table>
CONTENTS OF MANUSCRIPT

First page. Give the title (as concise as possible) of the paper and the author’s name, and footnote the author’s affiliation, mailing address, and ZIP code.

Contents. Contains the text headings and abbreviated figure legends and table headings. Dots should follow each entry and page numbers should be omitted.

Abstract. Not to exceed one double-spaced page. Footnotes and literature citations do not belong in the abstract.


Text footnotes. Type on a separate sheet from the text. For unpublished or some processed material, give author, year, title of manuscript, number of pages, and where it is filed—agency and its location.

Personal communications. Cite name in text and footnote. Cite in footnote: John J. Jones, Fishery Biologist, Scripps Institution of Oceanography, La Jolla, CA 92037, pers. commun. 21 May 1977.

Figures. Should be self-explanatory, not requiring reference to the text. All figures should be cited consecutively in the text and their placement, where first mentioned, indicated in the left-hand margin of the manuscript page. Photographs and line drawings should be of “professional” quality—clear and balanced, and can be reduced to 42 picas for page width or to 20 picas for a single-column width, but no more than 57 picas high. Photographs and line drawings should be printed on glossy paper—sharply focused, good contrast. Label each figure. DO NOT SEND original figures to the Scientific Editor; NMFS Scientific Publications Office will request these if they are needed.

Tables. Each table should start on a separate page and should be self-explanatory, not requiring reference to the text. Headings should be short but amply descriptive. Use only horizontal rules. Number table footnotes consecutively across the page from left to right in Arabic numerals; and to avoid confusion with powers, place them to the left of the numerals. If the original tables are typed in our format and are clean and legible, these tables will be reproduced as they are. In the text all tables should be cited consecutively and their placement, where first mentioned, indicated in the left-hand margin of the manuscript page.

Acknowledgments. Place at the end of text. Give credit only to those who gave exceptional contributions and not to those whose contributions are part of their normal duties.

Literature cited. In text as: Smith and Jones (1977) or (Smith and Jones 1977); if more than one author, list according to years (e.g., Smith 1936; Jones et al. 1975; Doe 1977). All papers referred to in the text should be listed alphabetically by the senior author’s surname under the heading “Literature Cited”; only the author’s surname and initials are required in the author line. The author is responsible for the accuracy of the literature citations. Abbreviations of names of periodicals and serials should conform to Biological Abstracts List of Serials with Title Abbreviations. Format, see recent SSRF or Circular.

Abbreviations and symbols. Common ones, such as mm, m, g, ml, mg, °C (for Celsius), %, °/o, etc., should be used. Abbreviate units of measures only when used with numerals; periods are rarely used in these abbreviations. But periods are used in et al., vs., e.g., i.e., Wash. (WA is used only with ZIP code), etc. Abbreviations are acceptable in tables and figures where there is lack of space.

Measurements. Should be given in metric units. Other equivalent units may be given in parentheses.

FORM OF THE MANUSCRIPT

Original of the manuscript should be typed double-spaced on white bond paper. Triple space above headings. Send good duplicated copies of manuscript rather than carbon copies. The sequence of the material should be:

FIRST PAGE
CONTENTS
ABSTRACT
TEXT
LITERATURE CITED
TEXT FOOTNOTES
APPENDIX
TABLES (provide headings, including “Table” and Arabic numeral, e.g., Table 1.—, Table 2.—, etc.)
LIST OF FIGURE LEGENDS (entire legend, including “Figure” and Arabic numeral, e.g., Figure 1.—, Figure 2.—, etc.)
FIGURES

ADDITIONAL INFORMATION

Send ribbon copy and two duplicated copies of the manuscript to:

Dr. William J. Richards, Scientific Editor
Southeast Fisheries Center Miami Laboratory
National Marine Fisheries Service, NOAA
75 Virginia Beach Drive
Miami, FL 33149

Copies. Fifty copies will be supplied to the senior author and 100 to his organization free of charge.
NOAA SCIENTIFIC AND TECHNICAL PUBLICATIONS

The National Oceanic and Atmospheric Administration was established as part of the Department of Commerce on October 3, 1970. The mission responsibilities of NOAA are to assess the socioeconomic impact of natural and technological changes in the environment and to monitor and predict the state of the solid Earth, the oceans and their living resources, the atmosphere, and the space environment of the Earth.

The major components of NOAA regularly produce various types of scientific and technical information in the following kinds of publications:

PROFESSIONAL PAPERS—Important definitive research results, major techniques, and special investigations.

CONTRACT AND GRANT REPORTS—Reports prepared by contractors or grantees under NOAA sponsorship.

ATLAS—Presentation of analyzed data generally in the form of maps showing distribution of rainfall, chemical and physical conditions of oceans and atmosphere, distribution of fishes and marine mammals, ionospheric conditions, etc.

TECHNICAL SERVICE PUBLICATIONS—Reports containing data, observations, instructions, etc. A partial listing includes data serials; prediction and outlook periodicals; technical manuals, training papers, planning reports, and information serials; and miscellaneous technical publications.

TECHNICAL REPORTS—Journal quality with extensive details, mathematical developments, or data listings.

TECHNICAL MEMORANDUMS—Reports of preliminary, partial, or negative research or technology results, interim instructions, and the like.

Information on availability of NOAA publications can be obtained from:

PUBLICATIONS SERVICES BRANCH (E/AI 13)
NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE
3300 Whitehaven St.
Washington, DC 20235