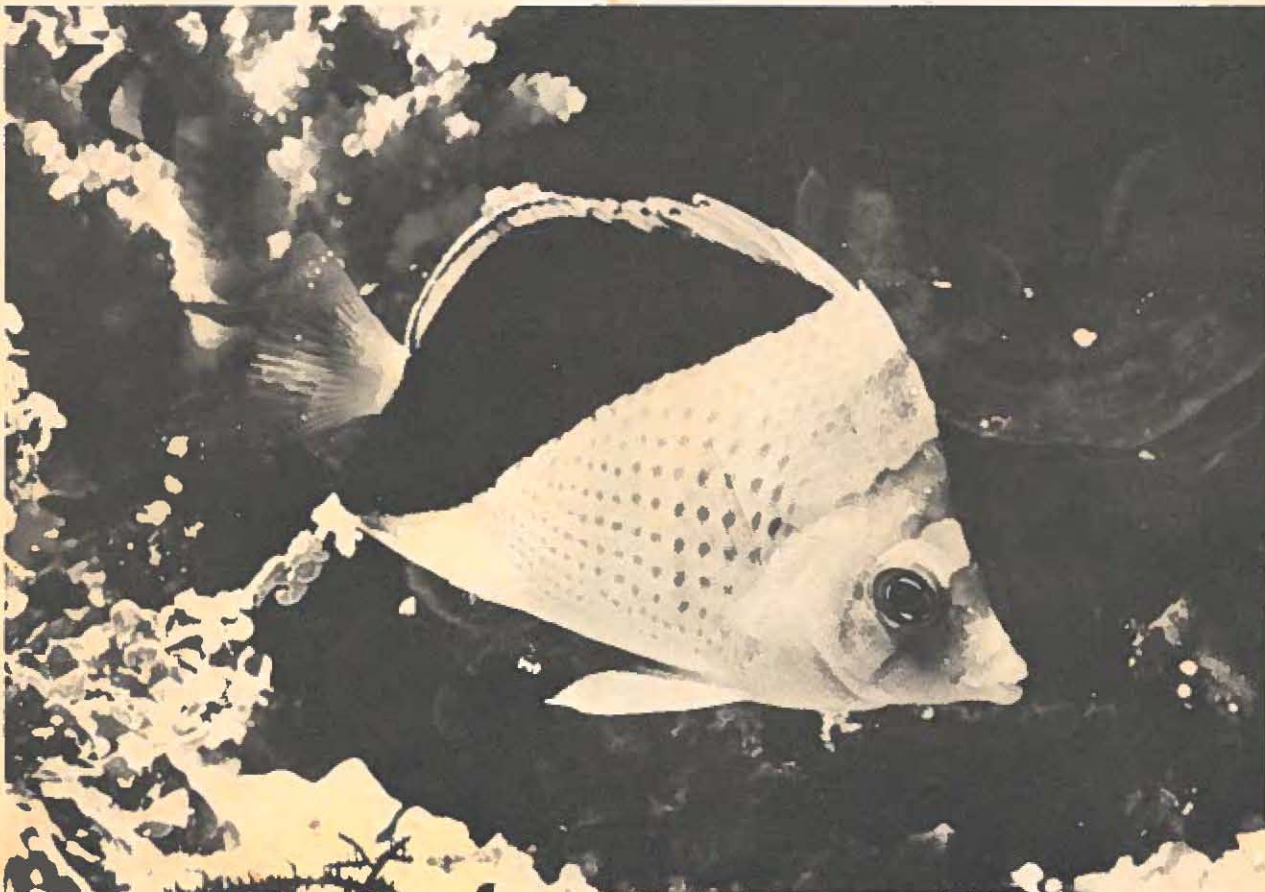


Fish Collection

**A WORKING LIST OF** Inventory  
**MARINE ORGANISMS FROM GUAM**



**UNIVERSITY OF GUAM MARINE LABORATORY**

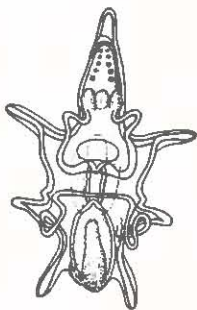
**Technical Report No. 70**

**April 1981**

Cover photograph: The first specimen of Chaetodon flavocoronatus, a species known only from Guam, in deep water (36 m) off Orote Peninsula. Photograph by Robert F. Myers.

A WORKING LIST OF  
MARINE ORGANISMS FROM GUAM

FIRST EDITION



University of Guam Marine Laboratory

Technical Report No. 70

April 1981



## PREFACE

A working list of marine organisms from Guam has been needed to serve a number of purposes. Much of the correspondence to the Marine Laboratory has been in the form of requests for information as to which species of corals, urchins, seastars, damselfishes, etc., are found on Guam. This information has been needed to evaluate Guam as a potential study site for a particular project or as a place to take a sabbatical. Others have simply wished the information for biogeographical studies or to obtain the potential species pool in analysis of community structure. In all these cases, it would be convenient to be able to send a working list to answer these questions.

The only taxa included in this first edition are those for which a serious study has been made by a recognized authority and in which a substantial portion of the species have been identified. Except for a few very large fish that have certainly been seen by knowledgeable people on several occasions (e.g., Manta), all species listed are represented by specimens in the UOG Marine Laboratory Reference Collection and/or in the published scientific literature. This is a list of species, not of names; in cases of synonymy, only the most recent valid name is listed.

Certain major groups are not listed because an organized effort still needs to be made in eliminating multiple names and establishing a relatively complete reference collection. For example, the anomurans are the only crustaceans that have been substantially sampled at Guam. It is planned to have this working list updated and to have a new edition printed every two or three years as new specimens are added to the Reference Collection for the lists printed here and as additional taxa become more thoroughly studied at Guam.

This is called a "working list" and is printed in the full-sized technical report format because we hope the space beside the names can be used for notes as to sites around Guam, habitats, depth range, diet or trophic position, literature citations, or whatever kind of study is being undertaken by the user of this list.

THE MANAGEMENT



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Preliminary Checklist of Marine Benthic  
Diatoms of Guam

William J. Zolan

The following 83 diatom species were found to colonize or attach to glass slides placed in the shallow reef flat waters of Pago Bay (Zolan, 1980). Van Landingham (1967-1979), Schmidt et al. (1874-1959), and Simonsen (1979) were the principal references used in identification of taxa and the preparation of this species list. Slides of diatom material used in identification of the taxa are located in the University of Guam Herbarium.

Literature Cited

- Schmidt, A., M. Schmidt, F. Fricke, H. Heiden, O. Muller and F. Hustedt. 1874-1959. Atlas der diatomacean kunde. R. Reisland, Aschersleben, Leipzig.
- Simonsen, R. 1979. The diatom systems: Ideas on phylogeny. *Bacillaria* 2:9-71.
- Van Landingham, S. L. 1967-1979. Catalogue of the fossil and recent genera and species of diatoms and their synonyms. Vol. I-VIII. J. Cramer, Lehre, 4654 p.
- Zolan, W. J. 1980. Periphytic diatom assemblages on a windward fringing reef flat in Guam. Univ. Guam, M. S. Thesis Biology. 86 p.

Division CHRYSOPHYTA

Class Bacillariophyceae

Order Centrales

THALASSIOSIRACEAE

Cyclotella striata (Kütz.) Grunow

MELOSIRACEAE

Melosira nummuloides (Dill.) Agardh

COSCINODISCACEAE

Coscinodiscus excentricus Ehrenberg

RHIZOLENIACEAE

Rhizolenia setigera Brightwell

LITHODESMIACEAE

Ditylum brightwelli (West) Grunow

Order Pennales

DIATOMACEAE

Asterionella japonica Cleve

Climacosphenia moniligera Ehrenberg

Fragilaria crotonensis Kitton

Grammatophora marina (Lyng.) Kützing

Licomorpha flabellata Agardh

Licomorpha abbreviata Agardh

Plagiogramma decussatum Greville

Rhabdonema adriacum Kützing

Striatella delicatula (Kütz.) Grunow

Striatella hyalina (Jan. & Raben.) Rabenhorst

Synedra gallioni (Bory) Ehrenberg

Synedra pulchella (Ralfs & Kütz.) Kützing

Synedra tabulata (Ag.) Kützing

ACHNANTHACEAE

Achnanthes brevipes Agardh

Achnanthes delicatula (Kütz.) Grunow

Achnanthes hauckiana Grunow

Achnanthes longipes Agardh

Cocconeis heteroidea Hantzsch

Cocconeis scutellum var. parva (Grun.) Cleve



## NAVICULACEAE

Amphiprora paludosa Smith  
Amphora alata Peragallo  
Amphora bigibba Grunow  
Amphora exigua Gregory  
Amphora granulata Gregory  
Amphora hyalina Kützing  
Amphora laevis Gregory  
Amphora lineolata Ehrenberg  
Amphora sublaevis Hustedt  
Amphora tenuissima Hustedt  
Amphora turgida Gregory  
Amphora veneta Kützing  
Cymbella pusilla Grunow  
Diploneis bomboides (Sch.) Cleve  
Diploneis chersonensis (Grun.) Cleve  
Diploneis crabro (Ehr.) Ehrenberg  
Diploneis papula (Sch.) Cleve  
Gomphonema olivaceum Kützing  
Gyrosigma balticum (Ehr.) Rabenhorst  
Gyrosigma eximium (Twait.) Boyer  
Gyrosigma tenuissimum (Smith) Griffth & Henfrey  
Mastogloia apiculata Smith  
Mastogloia exigua Lewis  
Mastogloia javanica Cleve  
Mastogloia mauritania Brun  
Navicula abunda Hustedt  
Navicula agnita Hustedt  
Navicula brasiliensis Grunow  
Navicula cancellata Donkin  
Navicula complanata (Grun.) Grunow  
Navicula cryptocephala Kützing  
Navicula curiosa Hustedt  
Navicula grevillei (Ag.) Heiberg  
Navicula lyra Ehrenberg  
Navicula maculosa Donkin  
Navicula marina Ralfs  
Navicula menisculus Schumann  
Navicula restituta Cleve  
Navicula spectabilis Gregory  
Pleurosigma angulatum (Quek.) Smith  
Pleurosigma decorum Smith

## AURICULACEAE

Auricula complexa (Greg.) Cleve  
Undatella lineata (Grev.) Paddock & Sims  
Undatella quadrata (Breb. & Kütz.) Paddock & Sims

## EPITHEMIACEAE

Rhopalodia gibba (Kütz.) Müller  
Rhopalodia gibberula (Ehr.) Müller

NITZSCHIACEAE

Bacillaria paradoxa Gmelin  
Cylindrotheca closterium (Ehr.) Reimann & Lewin  
Hantzschia amphioxys (Ehr.) Grunow  
Nitzschia angularis Smith  
Nitzschia biobata Smith  
Nitzschia constricta (Kütz) Ralfs  
Nitzschia lanceolata Smith  
Nitzschia longissima (Breb.) Grunow  
Nitzschia palea (Kütz.) Smith  
Nitzschia sigma (Kütz.) Smith

SURIRELLACEAE

Surirella fastuosa Ehrenberg  
Surirella gemma Ehrenberg  
Surirella nervata (Grun.) Mereschowsky

Preliminary Checklist of Marine Benthic Algae  
and Seagrasses of Guam

Roy T. Tsuda

The following listing of the 220 species of marine benthic algae and 3 species of seagrasses is based on published records (see Tsuda and Wray 1977, Tsuda et al. 1977, Tsuda 1981), unpublished records based on specimens deposited in the Marine Laboratory Herbarium of the University of Guam, and positive identification of specimens which, somehow, never were deposited in the Herbarium. A few species attributed to Guam in published papers are not incorporated in this listing since they have not reappeared in our collections during the past 14 years.

The 220 species of marine benthic algae consist of 13 Cyanophyta, 69 Chlorophyta, 27 Phaeophyta and 111 Rhodophyta. The listing probably includes about 90 percent of the species actually present in Guam waters. Four of the species, i.e., Avrainvillea obscura J. Ag., Rhipilia sinuosa Gilbert, Padina jonesii Tsuda, and Titanophora marianensis Itono & Tsuda, were described as new from the island of Guam.

The species are listed under their respective families and orders to provide students with further information on the phylogenetic affinities of the species. Those species which lack a voucher specimen in the Herbarium are preceded by an asterisk.

Literature Cited

- Tsuda, R. T. 1981. Bibliography of marine benthic algae of Micronesia: Addendum. *Micronesica* 17(2).
- Tsuda, R. T., F. R. Fosberg and M.-H. Sacht. 1977. Distribution of seagrasses in Micronesia. *Micronesica* 13(2):191-198.
- Tsuda, R. T., and F. O. Wray. 1977. Bibliography of marine benthic algae of Micronesia. *Micronesica* 13(1):85-120



Division CYANOPHYTA (blue-green algae)

Class Cyanophyceae

Order Chroococcales

CHAMAESIPHONACEAE

Entophysalis deusta (Menegh.) Drouet & Daily

CHROOCOCCACEAE

- \*Agmenellum thermale (Kütz.) Drouet & Daily
- \*Anacystis aeruginosa (Zanard.) Drouet & Daily
- \*Anacystis dimidiata (Kütz.) Drouet & Daily
- \*Coccochloris elabens (Ereb.) Drouet & Daily
- \*Gomphosphaeria aponina Kütz.

Order Oscillatoriales

NOSTOCACEAE

Calothrix crustacea Schousboe & Thuret

Hormothamnion enteromorphoides Bornet & Thuret

OSCILLATORIACEAE

- Microcoleus lyngbyaceus (Kütz.) Crouan
- \*Microcoleus vaginatus (Vauch.) Gomont
- Schizothrix calcicola (Ag.) Gomont
- Schizothrix mexicana Gomont
- \*Spirulina subsalsa Oersted

Division CHLOROPHYTA (green algae)

Class Chlorophyceae

Order Ulotrichales

ULVACEAE

Enteromorpha clathrata (Roth) J. Ag.

Monostroma oxyspermum (Kütz.) Doty

Ulva lactuca L.

Order Siphonales

BRYOPSIDACEAE

- \* Bryopsis hypnoides Lamx.
- Bryopsis pennata Lamx.

CAULERPACEAE

Caulerpa ambigua Okam.  
Caulerpa antoensis Yamada  
Caulerpa brachypus Harv.  
Caulerpa cupressoides (West) C. Ag.  
Caulerpa filicoides Yamada  
\*Caulerpa lentillifera J. Ag.  
Caulerpa racemosa (Forsk.) J. Ag.  
Caulerpa serrulata (Forsk.) J. Ag.  
Caulerpa sertularioides (Gmel.) Howe  
Caulerpa taxifolia (Vahl) C. Ag.  
Caulerpa urvilliana Montagne  
Caulerpa verticillata J. Ag.  
Caulerpa webbiana Montagne

CODIACEAE

Avrainvillea lacerata Harv.  
Avrainvillea longicaulis (Kütz.)  
Avrainvillea nigricans Decaisne  
Avrainvillea obscura J. Ag.  
Chlorodesmis caespitosa J. Ag.  
Chlorodesmis fastigiata (C. Ag.) Ducker  
\*Chlorodesmis hildebrandii A. & E. S. Gepp  
\*Codium arabicum Kütz.  
Codium geppii O. C. Schmidt  
Halimeda copiosa Goreau & Graham  
Halimeda discoidea Decaisne  
Halimeda gigas Taylor  
Halimeda gracilis Harv.  
Halimeda incrassata (Ellis) Lamx.  
Halimeda macroloba Decaisne  
Halimeda micronesica Yamada  
Halimeda opuntia (L.) Lamx.  
Halimeda stuposa Taylor  
Halimeda velasquezii Taylor  
\*Pseudochlorodesmis furcellata (Zanard.) Boerg.  
Rhipilia sinuosa Gilbert  
Tydemanina expeditionis W. v. Bosse  
Udotea argentea Zanard.  
Udotea geppii Yamada

DERBESACEAE

\*Derbesia attenuata Dawson

Order Siphonocladales

BOODLEACEAE

Boodlea composita (Harv.) Brand

SIPHONOCLADACEAE

Chamaedoris orientalis Okamura & Higashi  
\*Cladophoropsis gracillima Dawson  
Cladophoropsis membranacea (Ag.) Boerg.  
Cladophoropsis sundanensis Reinbold  
Siphonocladus tropicus (Crouan) J. Ag.

VALONIACEAE

Boergesenia forbesii (Harv.) Feldmann  
Dictyosphaeria cavernosa (Forsk.) Boerg.  
Dictyosphaeria versluysii W. v. Bosse  
Valonia fastigiata Har.  
Valonia ventricosa J. Ag.  
Valoniopsis pachynema (Martens) Boerg.

Order Dasycladales

DASYCLADACEAE

\*Acetabularia exigua Solms-Laubach  
Acetabularia moebii Solms-Laubach  
\*Bornetella nitida (Harv.) Munier-Chalmas  
\*Bornetella sphaerica (Zanard.) Solms-Laubach  
Neomeris annulata Dickie  
Neomeris vanbosseae Howe

Order Cladophorales

ANADYOMENACEAE

Anadyomene wrightii Gray  
Microdictyon okamurai Setch.

CLADOPHORACEAE

Chaetomorpha antenna (Bory) Kütz.  
Chaetomorpha crassa (C.Ag.)  
\*Chaetomorpha indica Kütz.  
Cladophora fascicularis (Mertens) Kütz.  
\*Cladophora socialis Kütz.  
\*Rhizoclonium samoense Setch.



Division PHAEOPHYTA (brown algae)

Class Phaeophyceae

Order Ectocarpales

ECTOCARPACEAE

Ectocarpus breviararticulatus J. Ag.  
Feldmannia indica (Sonder) Womersley & Bailey  
Feldmannia irregularis (Kütz.) Hamel

RALFSIACEAE

Ralfsia pangoensis Setch.

Order Ectocarpales

SPHACELARIACEAE

Sphacelaria furcigera Kütz.  
Sphacelaria novaehollandiae Sonder  
Sphacelaria tribuloides Menegh.

Order Dictyotales

DICTYOTACEAE

Dictyopteris repens (Okam.) Boerg.  
Dictyota bartayresii Lamx.  
Dictyota cervicornis Kütz.  
Dictyota divaricata Lamx.  
Dictyota friabilis Setch.  
Dictyota patens J. Ag.  
Homoeostrichus flabellatus Okam.  
Lobophora variegata (Lamx.) Womersley  
Padina minor Yamada  
Padina jonesii Tsuda  
Padina tenuis Bory

Order Scytosiphonales

SCYTOSIPHONACEAE

Colpomenia sinuosa (Roth) Derbes & Solier  
Hydroclathrus clathratus (Bory) Howe  
Rosenvingea intricata (J. Ag.) Boerg.

Order Dictyosiphonales

CHNOOSPORACEAE

Chnoospora implexa (Hering) J. Ag.  
Chnoospora minima (Hering) Papenfuss

Order Fucales

SARGASSACEAE

- Sargassum cristaefolium C. Ag.  
Sargassum polycystum C. Ag.  
Sargassum tenerrimum J. Ag.  
Turbinaria ornata (Turner) J. Ag.

Division RHODOPHYTA (red algae)

Class Florideophyceae

Order Nemaliales

ACROCHAETIACEAE

- Acrochaetium sp.

BONNEMAISONIACEAE

- Asparagopsis taxiformis (Delile) Collins & Hervey

CHAETANGIACEAE

- Actinotrichia fragilis Boerg.  
\*Actinotrichia robusta Itono  
Galaxaura fasciculata Kjellm.  
Galaxaura marginata Lamx.  
Galaxaura oblongata (E. & S.) Lamx.  
Galaxaura pacifica Tanaka  
Galaxaura rugosa (E. & S.) Lamx.  
Galaxaura ventricosa Kjellm.

GELIDIACEAE

- Gelidiella acerosa (Forsk.) Feldmann & Hamel  
\*Gelidium crinale (Turn.) Lamx.  
Gelidium divaricatum Martens  
Gelidium pusillum (Stackh.) LeJolis  
Pterocladia parva Dawson  
Wurdemannia miniata (Duby) Feldmann & Hamel

HELMINTHOCLADIACEAE

- Liagora sp.  
\*Trichogloea requienii (Montagne) Kütz.

Order Cryptonemiales

CORALLINACEAE

- \*Amphiroa foliacea Lamx.  
Amphiroa fragilissima Lamx.  
Cheilosporum maximum Yendo  
Cheilosporum multifidum (Kütz.) Manza  
\*Corallina sp.  
Fosliella farinosa (Lamx.) Howe  
Hydrolithon reinboldii (W. v. Bosse & Foslie) Foslie  
Jania capillacea Harvey  
\*Jania decussato-dichotoma (Yendo) Yendo  
Jania tenella Kütz.  
Lithophyllum kotschyanum (Unger) Foslie  
Lithophyllum moluccense Foslie  
Lithoporella melobesioides (Foslie) Foslie  
Lithoporella pacifica (Heydr.) Foslie  
Lithothamnion asperulum Foslie  
Mastophora rosea (C. Ag.) Setch.  
Mesophyllum erubescens (Foslie) Lemoine  
Mesophyllum mesomorphum (Foslie) Adey  
Metagoniolithon charoides (Lamx.) W. v. Bosse  
Metagoniolithon graniferum (Harv.) W. v. Bosse  
Neogoniolithon conicum (Dawson) Gordon, Masaki and Akioka  
Neogoniolithon fosliei (Heydrich) Setch. & Mason  
Neogoniolithon frutescens (Foslie) Setch. & Mason  
Neogoniolithon pacificum (Foslie) Setch. & Mason  
Porolithon onkodes (Heydrich) Foslie  
Sporolithon schmidtii (Foslie) Gordon, Masaki and Akioka

CRYPTONEMIACEAE

- Grateloupia filicina (Wulfen) C. Ag.  
Halymenia durvillaei Bory  
Halymenia floresia (Clem.) C. Ag.

DUMONTIACEAE

- \*Gibsmithia hawaiiensis Doty

PEYSSONELIACEAE

- Peyssonelia rubra (Grev.) J. Ag.

POLYIDEACEAE

- Rhodopeltis gracilis Yamada & Tanaka

RHIZOPHYLLIDACEAE

- Desmia hornemanni Lyngb.



Order Gigartinales

GRACILARIACEAE

Gelidiopsis intricata (Ag.) Vickers  
Gracilaria arcuata Zanard.  
Gracilaria crassa Harv.  
Gracilaria edulis (Gmel.) Silva  
Gracilaria salicornia (C. Ag.) Dawson  
Gracilaria sp.

HYPNEACEAE

\*Hypnea cervicornis J. Ag.  
Hypnea esperi Bory  
Hypnea pannosa J. Ag.  
Hypnea valentiae (Turn.) Montagne

NEMASTOMATACEAE

Titanophora marianensis Itono & Tsuda

SOLIERIACEAE

Eucheuma cottonii W. v. Bosse  
Predaea weldii Kraft & Abbott  
Predaea sp.

Order Rhodymeniales

CHAMPIACEAE

Champia compressa Harv. J. Ag.  
\*Champia parvula (Ag.) J. Ag.

RHODYMENIACEAE

Botryocladia skottsbergii (Boerg.) Levring  
Rhodymenia divaricata Dawson

Order Ceramiales

CERAMIACEAE

Acanthophora spicifera (Vahl) Boerg.  
Amansia glomerata C. Ag.  
Antithamnion antillanum Boerg.  
Antithamnionella breviramosa (Dawson) Wollaston  
Callithamnion marshallensis Dawson  
Centroceras clavulatum (C. Ag.) Montagne

CERAMIACEAE (Continued)

Centroceras minutum Yanada  
Ceramium clarionense Setch. & Gard.  
Ceramium gracillimum Griff. & Harv.  
Ceramium huysmanssi W. v. Bosse  
Ceramium maryae W. v. Bosse  
Ceramium mazatlanense Dawson  
Ceramium sympodiale Dawson  
Dasyphila plumarioides Yendo  
Griffithsia metacalfii Tseng  
Griffithsia ovalis Harv.  
Griffithsia tenuis C. Ag.  
Herposiphonia pacifica Hollenberg  
Herposiphonia parca Setch.  
\*Herposiphonia secunda (C. Ag.) Ambronn.  
Herposiphonia tenella (C. Ag.) Naegeli  
Herposiphonia trichia Hollenberg  
Herposiphonia wurdenmanni Boerg.  
Leveillea jungermannioides (Her. & Mart.) Harv.  
Murrayella pericladus (C. Ag.) Schmitz  
Polysiphonia scopulorum Harv.  
Polysiphonia upolensis (Grun.) Hollenberg  
Spyridia filamentosa (Wulfen) Harv.  
Tiffaniella saccorhiza (Setch. & Gard.) Doty & Menez  
Tolypiocladia glomerulata (Ag.) Schmitz  
Wrangelia penicillata C. Ag.

DASYACEAE

Dasya sp.

DELESSERIAACEAE

Caloglossa leprieurii (Montagne) J. Ag.  
Hypoglossum attenuatum Gardner  
Martensia fragilis Harv.

RHODOMELACEAE

Bostrychia binderi Harv.  
Bostrychia kelanensis Grunow  
Bostrychia tenella (Vahl) J. Ag.  
Chondria polyrhiza Collins & Hervey  
Laurencia obtusa (Huds.) Lamx.  
Laurencia papillosa (Forsk.) Grev.  
Laurencia tropica Yamada

Division ANTHOPHYTA (seagrasses)

Class Angiospermae (Subclass Monocotyledoneae)

Order Helobiae

HYDROCHARITACEAE

Enhalus acoroides (L.f.) Royle

Halophila minor (Zoll.) den Hartog

POTAMOGETONACEAE

Halodule uninervis (Forsk.) Ascherson



## Preliminary Checklist of Living Foraminifera from Guam

Russell N. Clayshulte

More than 150 living foraminiferal species representing 3 suborders and 28 families have been recorded from shallow reef systems of Guam. This checklist of benthonic, sedentary and planktonic foraminiferans includes only species collected on reef flats and upper reef slopes (<60m), and in lagoonal and channel sediments. Species records are taken from Brady (1884), Clayshulte (1981), Cole (1963), Cushman and Todd (1966) and Todd (1966). The generic and family classification is based on Loeblich and Tappan (1964; 1974). The families are presented in phylogenetic order. All foraminiferans listed are benthonic except the Acervulinidae and Homotrematidae (sedentary) and the Globigerinidae (planktonic).

### Literature Cited

- Brady, H. B. 1884. Report on the foraminifera dredged by H. M. S. Challenger during the years 1873-76. Rept. Voy. Challenger, Zool., 9:1-814. 115 pls.
- Clayshulte, R. N. 1981. Distribution and recruitment of foraminifera in the families Acervulinidae and Homotrematidae in shallow coral reef environments on Guam. Univ. Guam, M.S. Thesis Biology. 79 p.
- Cole, W. S. 1963. Tertiary larger foraminifera from Guam. U.S. Geol. Survey Prof. Paper 403-E:28 p.
- Cushman, J. A., and R. Todd. 1972. The foraminifera of the tropical Pacific collections of the "Albatross", 1899-1900. Part 4: Rutiliform families and planktonic families. Antiquariaat Junk, Netherlands. 139 p.
- Loeblich, A. R., and H. Tappan. 1964. Part C, Protista 2. p. 55-900. In R. C. Moore (ed.), Treatise on Invertebrate Paleontology. Geo. Soc. Amer. Univ. Kansas Press.
- Loeblich, A. R., and H. Tappan. 1974. Recent advances in the classification of the foraminiferida. p. 1-53. In R. H. Hedley and C. G. Adams (eds.), Foraminifera I. Academic Press, London.
- Todd, R. 1966. Smaller foraminifera from Guam. U.S. Geol. Survey Prof. Paper 403-I:41 p.

Order Foraminiferida

Suborder Textulariina

SACCAMMINIDAE

Sagenina frondescens (Brady)

LITUOLIDAE

Bdelloidina aggregata Carter  
Haddonina torresiensis Chapman

TEXTULARIIDAE

Textularia agglutinans d'Orbigny  
Textularia alveata Todd  
Textularia conica d'Orbigny  
Textularia dupla Todd  
Textularia foliacea Heron-Allen & Earland  
Textularia kerimbaensis Said  
Textularia semialata Cushman

TROCHAMMINIDAE

Rotaliammina mayori Cushman

ATAXOPHRAGMIIDAE

Gaudryina triangularis var. angulata Cushman  
Gaudryina trullissata Todd  
Gaudryina (Siphogaudryina) rugulosa Cushman  
Gaudryina siphonifera (Brady)  
Clavulina difformis Brady  
Valvulina davidiana Chapman

Suborder Miliolina

NUBECULARIIDAE

Cornuspira planorbis Schultze  
Vertebralina striata d'Orbigny  
Planispirinella exigua (Brady)  
Parrina bradyi (Millett)

MILLIOLIDAE

Quinqueloculina agglutinans d'Orbigny  
Quinqueloculina anquina var. arenata Said  
Quinqueloculina apicula Cushman  
Quinqueloculina berthelotiana d'Orbigny  
Quinqueloculina bidentata d'Orbigny



Quinqueloculina bosci d'Orbigny  
Quinqueloculina distorta Cushman  
Quinqueloculina ferussaci d'Orbigny  
Quinqueloculina lamarckiana d'Orbigny  
Quinqueloculina neostriatula Thalmann  
Quinqueloculina parkeri (Brady)  
Quinqueloculina poeyana d'Orbigny  
Quinqueloculina polygona d'Orbigny  
Quinqueloculina cf. Q. seminulum (Linné)  
Quinqueloculina subarenaria Cushman  
Quinqueloculina subcuneata Cushman  
Quinqueloculina sulcata d'Orbigny  
Quinqueloculina tubus Todd  
Miliolinella australis (Parr)  
Miliolinella labiosa (d'Orbigny)  
Miliolinella oceanica (Cushman)  
Miliolinella oceanica var. flintiana (Cushman)  
Massilina durrandi (Millett)  
Spiroloculina angulata Cushman  
Spiroloculina caduca Cushman  
Spiroloculina communis Cushman & Todd  
Spiroloculina eximia Cushman  
Spiroloculina foveolata Egger  
Spiroloculina hadai Thalmann  
Spiroloculina rugosa Cushman & Todd  
Articulina pacifica Cushman  
Hauerina diversa Cushman  
Hauerina involuta Cushman  
Hauerina milletti Cushman  
Hauerina pacifica Cushman  
Schlumbergerina alveoliniformis (Brady)  
Ammomassilina alveoliniformis (Millett)  
Triloculina cf. Triloculina bicarinata d'Orbigny  
Triloculina earlandi Cushman  
Triloculina incisura Todd  
Triloculina irregularis (d'Orbigny)  
Triloculina kerimbatica (Heron-Allen & Earland)  
Triloculina marshallana Todd  
Triloculina oblonga (Montagu)  
Triloculina subgranulata Cushman  
Triloculina subplanciana Cushman  
Triloculina terquemiana (Brady)  
Triloculina transversistriata (Brady)  
Triloculina tricarinata d'Orbigny  
Triloculina trigonula (Lamarck)  
Flintina bradyana Cushman  
Pyrgo denticulata (Brady)



SORITIDAE

Peneroplis ellipticus d'Orbigny  
Spirolina acicularis (Batsch)  
Spirolina arietina (Batsch)  
Sorites marginalis (Lamarck)  
Marginopora vertebralis Blainville

ALVEOLINIDAE

Borelis pulchrus (d'Orbigny)

Suborder Rotaliina

NODOSARIIDAE

Bolivinella folium (Parker & Jones)

SPIRILLINIDAE

Spirillina denticulogranulata Chapman  
Spirillina vivipara Ehrenberg  
Spirillina vivipara var. revertens Rhumbler

ROBERTINIDAE

Alliatina translucens (Cushman)

BULIMINIDAE

Buliminella milletti Cushman  
Buliminoides williamsoniana (Brady)  
Bolivina compacta Sidebottom  
Bolivina hantkeniana Brady  
Bolivina pseudopygmaea Cushman  
Bolivina rhomboidalis (Millett)  
Bolivina robusta Brady  
Bolivina striatula Cushman  
Bolivina tortuosa Brady  
Bolivina zanzibarica Cushman  
Bolivina (Loxostomum) limbata Brady  
Reussella simplex (Cushman)  
Siphogenerian raphana (Parker & Jones)

DISCORBIDAE

Rosalina floridana (Cushman)  
Rosalina rugosa d'Orbigny

Neoconorbina fulva (Todd)  
Neoconorbina patelliformis (Brady)  
Neoconorbina terquemi (Rzehak)

PEGIDIIDAE

Pegidia dubia (d'Orbigny)  
Sphaeridia papillata Heron-Allen & Earland

AMPHISTEGINIDAE

Amphistegina lessonii d'Orbigny  
Amphistegina radiata (Fichtel & Moll)

CIBICIDIDAE

Cibicides cicatricosus (Schwager)  
Cibicides lobatulus (Walker & Jacob)  
Cibicides mayori (Cushman)  
Cibicidella variabilis (d'Orbigny)

CYMBALOPORIDAE

Cymbaloporetta bradyi (Cushman)  
Cymbaloporetta squamosa (d'Orbigny)  
Cymbaloporella tabellaeformis (Brady)  
Tretomphalus concinnus (Brady)  
Tretomphalus planus Cushman

PLANORBULINIDAE

Planorbulinoides retinaculatus (Parker & Jones)  
Planorbulina acervalis Brady  
Planorbulinella larvata (Parker & Jones)

ACERVULINIDAE (sedentary)

Acervulina inhaerens Schultze  
Gypsina vesicularis (Parker & Jones)

Planogypsina squamiformis (Chapman)  
Sphaerogypsina globulus (Reuss)

HOMOTREMATIDAE (sedentary)

Homotrema rubrum (Lamarck)  
Miniacina miniaceae (Pallas)  
Sporadotrema cylindricum (Carter)  
Sporadotrema rubrum (d'Orbigny)

Carpenteria utricularis (Carter)  
Carpenteria monticularis (Carter)  
Carpenteria proteiformis Goes

GLOBIGERINIDAE (planktonic)

Globigerinoides conglobatus (Brady)  
Globigerinoides ruber (d'Orbigny)  
Globigerinoides sacculifer (Brady)  
Globigerinita glutinata (Egger)  
Orbulina universa d'Orbigny

ROTALIIDAE

Rotorbinella? mira (Cushman)  
Eponides repandus (Fichtel & Moll)  
Cancris sagra (d'Orbigny)  
Siphoninoides echinatus (Brady)  
Epistomaroides polystomelloides (Parker & Jones)  
Streblus beccarii (Linne)  
Streblus beccarii tepida (Cushman)  
Streblus beccarii var. of Todd (1957)  
Epistominella tubulifera (Heron-Allen & Earland)

CALCARINIDAE

Calcarina spengleri (Gmelin)  
Baculogypsina sphaerulata (Parker & Jones)

ELPHIDIIDAE

Elphidium advenum (Cushman)  
Elphidium crispum (Linne)  
Elphidium hyalocostatum Todd  
Elphidium jenseni (Cushman)  
Elphidium simplex Cushman  
Elphidium striatopunctatum (Fichtel & Moll)

NUMMULITIDAE

Operculina ammonoides (Gronovius)  
Heterostegina suborbicularis d'Orbigny

NONIONIDAE

Nonion boueanum (d'Orbigny)  
Nonion japonicum Asano



ANOMALINIDAE

Anomalina glabrata Cushman  
Amaomalina maculosa Todd

Preliminary Checklist of the Hydrocorals of Guam

Richard H. Randall

All species listed here are represented by specimens in the University of Guam Marine Laboratory Reference Collection.

Class Hydrozoa Owen, 1843

Order Milleporina Hickson, 1901

MILLEPORIDAE Fleming, 1828

Millepora dichotoma Forskål, 1775

Millepora latifolia Boschma, 1948

Millepora platyphylla Hemprich & Ehrenberg, 1834

Millepora sp.1

Order Stylasterina Hickson & England, 1905

STYLASTERIDAE Gray, 1847

Stylaster gracilis Milne Edwards & Haime, 1850

Stylaster profundiporus Broch, 1936

Conopora sp.1

Distichopora gracilis Dana, 1846

Distichopora sp.1

Preliminary Checklist of the Octocorallia of Guam

Richard H. Randall and Michael J. Gawel

All species listed here are represented by specimens in the University of Guam Marine Laboratory Reference Collection and/or are documented in:

Gawel, M. J. 1977. The common shallow-water soft corals (Alcyonacea) of Guam. Univ. Guam, M.S. Thesis Biology. 201 p.

Subclass Octocorallia Haeckel, 1866

Order Stolonifera Hickson, 1883

TUBIPORIDAE Ehrenberg, 1828

Tubipora musica Linnaeus, 1758

Order Coenothecalia Bourne, 1895

HELIOPORIDAE Moseley, 1876

Heliopora coerulea (Pallas, 1766)

Order Alcyonacea Lamouroux, 1816

ASTEROSPICULARIIDAE Utinomi, 1951

Asterospicularia randalli Gawel, 1976



ALCYONIIDAE Lamouroux, 1812

- Alcyonium utinomii Verseveldt, 1971  
Cladiella pachyclados (Klunzinger, 1877)  
Cladiella sp. 1  
Cladiella sp. 2  
Lobophytum crebriplacatum Von Marenzeller, 1886  
Lobophytum pauciflorum (Ehrenberg, 1834)  
Sarcophyton glaucum (Quoy & Gaimard, 1833)  
Sarcophyton trocheliophorum (Von Marenzeller, 1886)  
Sinularia arborea Verseveldt, 1971  
Sinularia densa (Whitelegge, 1897)  
Sinularia maxima Verseveldt, 1971  
Sinularia polydactyla (Ehrenberg, 1834)  
(Sinularia spp. 1-9 [unnamed] are described in Gawel [1977]. Collection sites and specimens are documented.)

NEPHTHEIDAE Gray, 1862

- Nephthea gracillima Thomson & Dean, 1931  
Stereonephthya ulicoides Thomson & Dean, 1931  
Stereonephthya unicolor (Gray, 1862)  
Stereonephthya sp. 1  
Dendronephthya (Roxasia) mirabilis Henderson, 1909  
Dendronephthya (Roxasia) dichotoma Henderson, 1909

XENIIDAE Ehrenberg, 1828

- Anthelia glauca Lamarck, 1816  
Sympodium coeruleum Ehrenberg, 1834

NIDALIIDAE Gray, 1869

- Siphonogorgia variabilis (Hickson, 1903)

Preliminary Checklist of Actiniaria of Guam

Daphne F. Dunn

This list of anemones of Guam is from:

Dunn, D. F. 1981. The clownfish sea anemones: Stichodactylidae (Coelenterata: Actiniaria) and other sea anemones symbiotic with pomacentrid fishes. Trans. Amer. Philosoph. Soc. 7(1): 1-115.

THALASSIANTHIDAE

Cryptodendrum adhaesivum Klunzinger, 1877

ACTINIIDAE

Entacmaea quadricolor (Rueppell & Leuckart, 1828)

STICHODACTYLIDAE

Heteractis magnifica (Quoy & Gaimard, 1833)

Heteractis crispa (Ehrenberg, 1834)

Heteractis aurora (Quoy & Gaimard, 1833)

Stichodactyla mertensii Brandt, 1835

Preliminary Checklist of the Scleractinia of Guam

Richard H. Randall

All species listed here, whether identified to species or not, are represented by specimens in the University of Guam Marine Laboratory Reference Collection. This checklist includes both hermatypic and ahermatypic corals, but the list of the latter group is far from complete. The system of classification follows that given in:

Moore, R. C. (ed.). 1967. Treatise on Invertebrate Paleontology, Part F, Coelenterata. Geol. Soc. Amer., Univ. Kansas Press. 498 p.

Order Scleractinia Bourne, 1900

Suborder Astrocoeniina Vaughan & Wells, 1943

ASTROCOENIIDAE Koby, 1890

Stylocoeniella armada (Ehrenberg, 1834)

Stylocoeniella guentheri (Bassett-Smith, 1890)

THAMNASTERIIDAE Vaughan & Wells, 1943

Psammocora contigua (Esper, 1797)

Psammocora digitata Milne Edwards & Haime, 1851

Psammocora explanulata van der Horst, 1922

Psammocora haimeana Milne Edwards & Haime, 1851

Psammocora nierstraszi van der Horst, 1921

Psammocora obtusangulata (Lamarck, 1816)

Psammocora profundacella Gardiner, 1898

Psammocora stellata (Verrill, 1866)

Psammocora superficialis Gardiner, 1898

Psammocora sp. 1

Psammocora sp. 2

POCILLOPORIDAE Gray, 1842

Stylophora mordax (Dana, 1846)



Seriatopora aculeata Quelch, 1886  
Seriatopora caliendrum Ehrenberg, 1834  
Seriatopora hystrix (Dana, 1846)  
Pocillopora ankeli Scheer and Pillai, 1974  
Pocillopora brevicornis Lamarck, 1816  
Pocillopora damicornis (Linnaeus, 1758)  
Pocillopora danae Verrill, 1864  
Pocillopora elegans Dana, 1846  
Pocillopora eydouxi Milne Edwards & Haime, 1860  
Pocillopora ligulata Dana, 1846  
Pocillopora meandrina Dana, 1846  
Pocillopora setchelli Hoffmeister, 1929  
Pocillopora verrucosa (Ellis & Solander, 1786)  
Pocillopora woodjonesi Vaughan, 1918  
Madracis palaoensis Yabe & Sugiyama, 1936  
Madracis kirbyi Veron & Pichon, 1976

ACROPORIDAE Verrill, 1902

Acropora aculeus (Dana, 1846)  
Acropora acuminata Verrill, 1864  
Acropora arbuscula (Dana, 1846)  
Acropora aspera (Dana, 1846)  
Acropora brueggemanni (Brook, 1893)  
Acropora cerealis (Dana, 1846)  
Acropora delicatula (Brook, 1891)  
Acropora diversa (Brook, 1891)  
Acropora echinata (Dana, 1846)  
Acropora formosa (Dana, 1846)  
Acropora granulosa (Milne Edwards & Haime, 1860)  
Acropora hebes (Dana, 1846)  
Acropora humilis (Dana, 1846)  
Acropora irregularis (Brook, 1892)  
Acropora monticulosa (Brüggemann, 1879)  
Acropora multiacuta Nemenzo, 1967  
Acropora nasuta (Dana, 1846)  
Acropora ocellata (Klunzinger, 1879)  
Acropora palifera (Lamarck, 1816)  
Acropora pyramidalis (Klunzinger, 1879)  
Acropora quelchi (Brook, 1893)  
Acropora rambleri (Bassett-Smith, 1890)  
Acropora smithi (Brook, 1893)  
Acropora squarrosa (Ehrenberg, 1834)  
Acropora striata Verrill, 1866  
Acropora studeri (Brook, 1893)  
Acropora surculosa (Dana, 1846)  
Acropora tenuis (Dana, 1846)

Acropora teres (Verrill, 1866)  
Acropora valida (Dana, 1846)  
Acropora variabilis (Klunzinger, 1879)  
Acropora vaughani Wells, 1954  
Acropora wardi Verrill, 1901  
Acropora sp. 1  
Acropora sp. 2  
Acropora sp. 3  
Acropora sp. 4  
Astreopora eliptica Yabe & Sugiyama, 1941  
Astreopora gracilis Bernard, 1896  
Astreopora listeri Bernard, 1896  
Astreopora myriophthalma (Lamarck, 1816)  
Astreopora sp. 1  
Montipora acanthella Bernard, 1897  
Montipora berryi Hoffmeister, 1925  
Montipora cf. M. caliculata (Dana, 1846)  
Montipora colei Wells, 1954  
Montipora conicula Wells, 1954  
Montipora cf. M. danae Milne Edwards & Haime, 1851  
Montipora ehrenbergii Verrill, 1875  
Montipora elschneri Vaughan, 1918  
Montipora floweri Wells, 1954  
Montipora foliosa (Pallas, 1766)  
Montipora foveolata (Dana, 1846)  
Montipora granulosa Bernard, 1897  
Montipora hoffmeisteri Wells, 1954  
Montipora lobulata Bernard, 1897  
Montipora monasteriata (Forskål, 1775)  
Montipora planiuscula (Dana, 1846)  
Montipora pulcherrima Bernard, 1897  
Montipora socialis Bernard, 1897  
Montipora tuberculosa (Lamarck, 1816)  
Montipora verrilli Vaughan, 1907  
Montipora venosa (Ehrenberg, 1834)  
Montipora verrucosa (Lamarck, 1816)  
Montipora sp. 1 (tuberculate)  
Montipora sp. 2 (tuberculate)  
Montipora sp. 3 (tuberculate)  
Montipora sp. 4 (glabrous)  
Montipora sp. 5 (branching)  
Montipora sp. 6 (papillate)  
Montipora sp. 7 (papillate)  
Montipora sp. 8 (foveolate)

Suborder Fungiina Verrill, 1865

AGARICIIDAE Gray, 1847

- Pavona clavus (Dana, 1846)  
Pavona decussata (Dana, 1846)  
Pavona divaricata (Lamarck, 1816)  
Pavona explanulata Lamarck, 1816  
Pavona frondifera (Lamarck, 1816)  
Pavona maldivensis (Gardiner, 1905)  
Pavona minuta Wells, 1954  
Pavona praetorta (Dana, 1846)  
Pavona varians Verrill, 1864  
Pavona cf. P. diffluens (Lamarck, 1816)  
Pavona sp. 1  
Pavona sp. 2  
Pavona (Polyastra) obtusata (Quelch, 1884)  
Pavona (Polyastra) venosa (Ehrenberg, 1834)  
Pavona (Polyastra) sp. 1  
Pavona (Polyastra) sp. 2  
Pavona (Pseudocolumnastrea) pollicata Wells, 1954  
Gardineroseris ponderosa (Gardiner, 1905)  
Gardineroseris sp. 1  
Leptoseris explanata Yabe & Sugiyama, 1941  
Leptoseris gardineri van der Horst, 1921  
Leptoseris hawaiiensis Vaughan, 1907  
Leptoseris incrustans (Quelch, 1886)  
Leptoseris mycetoseroides Wells, 1954  
Leptoseris scabra Vaughan, 1907  
Leptoseris solida (Quelch, 1886)  
Leptoseris papyracea (Dana, 1846)  
Leptoseris sp. 1  
Leptoseris sp. 2  
Leptoseris sp. 3  
Pachyseris speciosa (Dana, 1846)

SIDERASTREIDAE Vaughan & Wells, 1943

- Coscinaraea columna (Dana, 1846)  
Coscinaraea sp. 1 (Massive)  
Coscinaraea sp. 2 (Ramosa)



FUNGIIDAE Dana, 1846

- Cycloseris distorta (Michelin, 1843)  
Cycloseris fragilis (Alcock, 1893)  
Cycloseris hexagonalis Milne Edwards & Haime, 1849  
Cycloseris patelliformis (Boschma, 1923)  
Cycloseris vaughani (Boschma, 1923)  
Fungia concinna Verrill, 1864  
Fungia danai Milne Edwards & Haime, 1860  
Fungia echinata (Pallas, 1766)  
Fungia fungites (Linnaeus, 1758)  
Fungia granulosa Klunzinger, 1902  
Fungia paumotuensis Stutchbury, 1833  
Fungia repanda Dana, 1846  
Fungia scutaria (Lamarck, 1816)  
Fungia sp. 1  
Herpolitha limax (Esper, 1797)  
Polyphyllia talpina (Lamarck, 1816)  
Halomitra philippinensis Studer, 1901  
Parahalomitra robusta (Quelch, 1886)  
Podabacia crustacea (Pallas, 1766)

MICRABACIIDAE Vaughan, 1905

- Micrabacia sp. 1  
Stephanophyllia formosissima Moseley, 1881

PORITIDAE Gray, 1842

- Goniopora arbuscula Umbgrove, 1939  
Goniopora columna Dana, 1816  
Goniopora cf. G. djiboutiensis Vaughan, 1907  
Goniopora lobata Milne Edwards & Haime, 1846  
Goniopora somaliensis Vaughan, 1907  
Goniopora tenuidens (Quelch, 1886)  
Goniopora sp. 1  
Porites andrewsi Vaughan, 1918  
Porites annae Crossland, 1952  
Porites australiensis Vaughan, 1918  
Porites lichen Dana, 1846  
Porites lobata Dana, 1846  
Porites lutea Milne Edwards & Haime, 1851

Porites murrayensis Vaughan, 1918  
Porites superfusa Gardiner, 1898  
Porites viridis Gardiner, 1898  
Porites sp. 1 (massive)  
Porites sp. 2 (massive)  
Porites sp. 3 (massive)  
Porites sp. 4 (columnar)  
Porites (Synaraea) convexa Verrill, 1864  
Porites (Synaraea) horizontalata Hoffmeister, 1925  
Porites (Synaraea) iwayamaensis Eguchi, 1938  
Porites (Synaraea) vaughani Crossland, 1952  
Porites (Synaraea) sp. 1  
Stylaraea punctata Klunzinger, 1879  
Alveopora japonica Eguchi, 1968  
Alveopora viridis Quoy & Gaimard, 1860  
Alveopora sp. 1

Suborder Faviina Vaughan and Wells, 1943

FAVIIDAE Gregory, 1900

Favia favus (Forskål, 1775)  
Favia matthai Vaughan, 1918  
Favia pallida (Dana, 1846)  
Favia rotulosa (Ellis & Solander, 1786)  
Favia rotumana (Gardiner, 1899)  
Favia speciosa (Dana, 1846)  
Favia stelligera (Dana, 1846)  
Favia sp. 1  
Favites abdita (Ellis & Solander, 1786)  
Favites flexuosa (Dana, 1816)  
Favites russelli (Wells, 1954)  
Oulophyllia crispa (Lamarck, 1816)  
Goniastrea edwardsi Chevalier, 1971  
Goniastrea pectinata (Ehrenberg, 1834)  
Goniastrea retiformis (Lamarck, 1816)  
Platygyra daedalea (Ellis & Solander, 1786)  
Platygyra pini Chevalier, 1975  
Leptoria phrygia (Ellis & Solander, 1786)  
Hydnophora exesa (Pallas, 1766)  
Hydnophora microconos (Lamarck, 1816)  
Hydnophora tenella Quelch, 1886

Montastrea curta (Dana, 1846)  
Montastrea magnistellata Chevalier, 1971  
Plesiastrea versipora (Lamarck, 1816)  
Diploastrea heliopora (Lamarck, 1816)  
Leptastrea bottae (Milne Edwards & Haime, 1849)  
Leptastrea immersa Klunzinger, 1879  
Leptastrea purpurea (Dana, 1846)  
Leptastrea transversa Klunzinger, 1879  
Cyphastrea chalcidicum (Forskål, 1775)  
Cyphastrea microphthalma (Lamarck, 1816)  
Cyphastrea serailia (Forskål, 1775)  
Echinopora lamellosa (Esper, 1797)

RHIZANGIIDAE d'Orbigny, 1851

Culicia cf. C. rubeola (Quoy & Gaimard, 1833)

OCULINIDAE Gray, 1847

Madrepora sp. 1  
Neohelia sp. 1  
Galaxea fascicularis (Linnaeus, 1767)  
Galaxea clavus (Dana, 1846)  
Acrhelia horrescens (Dana, 1846)

MERULINIDAE Verrill, 1866

Merulina ampliata (Ellis & Solander, 1786)  
Merulina vauhani van der Horst, 1921  
Scapophyllia cylindrica Milne Edwards & Haime, 1848

MUSSIDAE Ortmann, 1890

Parascolymia vitiensis (Brueggemann, 1877)  
Acanthastrea echinata (Dana, 1846)



Acanthastrea hillae Wells, 1955  
Lobophyllia corymbosa (Forskål, 1775)  
Lobophyllia costata (Dana, 1846)  
Lobophyllia hemprichii (Ehrenberg, 1834)  
Lobophyllia (Palauphyllia) hataii Yabe, Sugiyama &  
Eguchi, 1936  
Symphyllia valenciennesii Milne Edwards & Haime,  
1849

PECTINIIDAE Vaughan & Wells, 1943

Echinophyllia aspera (Ellis & Solander, 1786)  
Mycedium elephantotus (Pallas, 1766)  
Pectinia lactuca (Pallas, 1766)

ANTHEMIPHYLLIIDAE Vaughan, 1907

Anthemiphyllia sp. 1

Suborder Caryophylliina Vaughan & Wells, 1943

CARYOPHYLLIIDAE Gray, 1847

Caryophyllia sp. 1  
Caryophyllia sp. 2  
Caryophyllia sp. 3  
Caryophyllia sp. 4  
Deltocyathus sp. 1  
Paracyathus sp. 1  
Paracyathus sp. 2  
Polycyathus fulvus Wijsman-Best, 1969  
Heterocyathus aequicostatus Milne Edwards & Haime,  
1850  
Desmophyllum sp. 1  
Dactylotrachus cervicornis (Moseley, 1881)  
Euphyllia glabrescens (Chamisso & Eysenhardt, 1821)

Euphyllia cristata Chevalier, 1971  
Plerogyra sinuosa (Dana, 1846)

FLABELLIDAE Bourne, 1905

Flabellum sp. 1  
Flabellum sp. 2

DENDROPHYLLIIDAE Gray, 1847

Balanophyllia sp. 1  
Balanophyllia sp. 2  
Dendrophyllia cf. D. minuscula Bourne, 1905  
Dendrophyllia sp. 1  
Dendrophyllia sp. 2  
Dendrophyllia sp. 3  
Endopsammia sp. 1  
Tubastraea aurea (Quoy & Gaimard, 1833)  
Heteropsammia michelini Milne Edwards & Haime, 1848  
Turbinaria stellulata (Lamarck, 1816)  
Turbinaria sp. 1

Preliminary Checklist of the Sipunculans and Echiurans  
of Guam

S. J. Edmonds

All species reported here are documented in:

Edmonds, S. J. 1971. Some sipunculans and echiurans,  
chiefly from Guam (Sipuncula and Echiura). *Micronesica* 7(1-2):  
137-151.

Phylum SIPUNCULA

Sipunculus indicus Peters, 1850  
Siphonosoma novaepommeraniae Fischer, 1926  
Siphonosoma rotumanum (Shiple, 1898)  
Siphonosoma vastum vastum (Selenka, Bülow & deMan, 1883)  
Paraspidosiphon formosanum (Sato, 1939)  
Cloeosiphon aspergillum (Quatrefages, 1865)  
Phascolosoma pacificum Keferstein, 1867  
Phascolosoma nigrecens Keferstein, 1865

Phylum ECHIURA

Ochetostoma erythrogrammon Leuckart & Ruppell, 1828  
Thalassema sp.



Preliminary Checklist of Polychaete Annelids Known From  
Guam

Alan J. Kohn and Janet K. White

The species listed here are all documented in:

Emery, K. O. 1962. Marine geology of Guam. U.S.  
Geol. Survey Prof. Pap. 403-B: 1-76. (The species in this  
reference were identified by O. Hartman.)

Kohn, A. J., and J. K. White. 1977. Polychaete annelids  
of an intertidal reef limestone platform at Tanguisson, Guam.  
Micronesica 13 (2): 199-215.

Class Polychaeta

CHRYSOPETALIDAE

Chrysopetalum ehlersi Gravier

AMPHINOMIDAE

Eurythoe complanata (Pallas)  
Pseudeurythoe sp.

PHYLLODOCIDAE

Phyllodoce sp.

SYLLIDAE

Syllis (Haplosyllis) spongicola Grube  
Syllis (Syllis) gracilis Grube  
Syllis (Langerhansia) cornuta Rathke  
Syllis (Typosyllis) alternata Moore  
Syllis (Typosyllis) variegata Grube  
Syllis (Typosyllis) sp.

Optisthosyllis australis Augener  
Odontosyllis ctenostoma Claparède  
Pionosyllis sp.  
Brania rhopalophora Ehlers  
Exogone longicornis Westheide  
Sphaerosyllis ovigera Langerhans  
Sphaerosyllis sp.

SPHAERODORIDAE

Sphaerodoropsis sp.

NEREIDAE

Platynereis dumerilii (Audouin & Milne Edwards)  
Nereis (Nereis) persica Fauvel  
Perinereis nigropunctata (Horst)  
Perinereis obfuscata Grube  
Pseudonereis gallapagensis Kinberg

EUNICIDAE

Palola siciliensis (Grube)  
Lysidice collaris Grube  
Nematonereis unicornis (Grube)  
Eunice afra Peters

ARABELLIDAE

Arabella mutans (Chamberlin)

ORBINIIDAE

Naineris sp.

OPHELIIDAE

Armandia intermedia Fauvel  
Polyophthalmus pictus Dujardin

CAPITELLIDAE

Dasybranchus caducus (Grube)  
Notomastus sp.

TEREBELLIDAE

Terebella ehrenbergi Grube  
Terebella sp.  
Loimia medusa (Savigny)

SERPULIDAE

Spirorbis sp.



Preliminary Checklist of Anomuran Crustaceans from  
Guam

Roy K. Kropp, Daniel S. Wooster, and Lucius G. Eldredge

The procellanids reported here are all represented by specimens in the University of Guam Marine Laboratory Reference Collection (compiled by Roy K. Kropp). The lithodid crabs and hermit crabs are documented in the following references, respectively:

Eldredge, L. G. 1976. Two new species of lithodid (Anomura, Paguridae, Lithodidae) crabs from Guam. *Micronesica* 12(2): 309-315.

Wooster, D. S. 1979. The shallow-water hermit crabs of the Mariana Islands (Decapoda, Paguridea: Coenobitidae, Diogenidae, Paguridae). Univ. Guam, M. S. Thesis Biology. 180 p.

Order Decapoda

Section Anomura

PORCELLANIDAE

- Neopetrolisthes maculatus (H. Milne Edwards, 1837)  
Pachycheles garciaensis (Ward, 1942)  
Pachycheles pisoides (Heller, 1865)  
Pachycheles sp.1  
Pachycheles spinipes (A. Milne Edwards, 1873)  
Petrolisthes asiaticus (Leach, 1820)  
Petrolisthes bispinosus Borradaile, 1900  
Petrolisthes carinipes (Heller, 1861)  
Petrolisthes coccineus (Owen, 1839)  
Petrolisthes decacanthus Ortmann, 1897  
Petrolisthes n.sp.1 [Haig, ms]  
Petrolisthes n.sp.2 [Haig, ms]  
Petrolisthes n.sp.3 [Haig, ms]  
Petrolisthes lamarckii (Leach, 1820)  
Petrolisthes lamarckii var. rufescens Borradaile, 1898  
Petrolisthes masakii Miyake, 1943  
Petrolisthes pubescens Stimpson, 1858  
Petrolisthes n.sp.4 [Haig & Kropp, ms]

Petrolisthes sp.1  
Petrolisthes sp.2  
Petrolisthes n.sp.5 [Kropp,ms]  
Petrolisthes tomentosus (Dana, 1852)

#### COENOBITIDAE

Birgus latro (Linnaeus, 1776)  
Coenobita brevimana Dana, 1852  
Coenobita cavipes (Stimpson, 1858)  
Coenobita rugosa H. Milne Edwards, 1837  
Coenobita perlata H. Milne Edwards, 1837

#### DIOGENIDAE

Aniculus aniculus (Fabricius, 1787)  
Aniculus n. sp. [Wooster,ms]  
Trizopagurus strigatus (Herbst, 1804)  
Clibanarius eurysternus Hilgendorf, 1878  
Clibanarius striolatus Dana, 1852  
Clibanarius corallinus (H. Milne Edwards, 1848)  
Clibanarius humilis (Dana, 1851)  
Clibanarius virescens (Krauss, 1843)  
Calcinus elegans (H. Milne Edwards, 1836)  
Calcinus imperialis Whitelegge, 1901  
Calcinus gaimardi (H. Milne Edwards, 1848)  
Calcinus n. sp.1 [Wooster,ms]  
Calcinus laevimanus (Randall, 1839)  
Calcinus sp. 1 [aff. pulcher]  
Calcinus n. sp. 2 [Wooster,ms]  
Calcinus n. sp. 3 [Wooster,ms]  
Calcinus minutus Buitendijk, 1937  
Calcinus latens (Randall, 1839)  
Dardanus guttatus (Oliver, 1911)  
Dardanus crassimanus (H. Milne Edwards, 1836)  
Dardanus scutellatus (H. Milne Edwards, 1848)  
Dardanus megistos (Herbst, 1804)  
Dardanus lagopodes (Forskål, 1775)  
Dardanus deformis (H. Milne Edwards, 1836)  
Dardanus gemmatus (H. Milne Edwards, 1848)

PAGURIDAE

Paguritta harmsi (Gordon, 1935)  
Pylopaguropsis zebra (Henderson, 1893)

LITHODIDAE

Paralomis haigae Eldredge, 1976  
Paralomis seagranti Eldredge, 1976



## Preliminary Checklist of Shelled Gastropods from Guam

Lucius G. Eldredge, Barry Smith, and Roy K. Kropp

Only those families of gastropods that have been sampled reasonably thoroughly and are documented by specimens in the reference collection are included in this checklist. We hope that more families will be covered in future editions of this checklist. All of the species of the families Trochidae, Neritidae, Tonnidae, and Vasidae are represented by specimens in the Richard "E" Dickinson Memorial Mollusc Collection, except Umbonium vestiarium and Neritina squamipicta. A specimen of Umbonium vestiarium was collected in Cocos Lagoon by Phil Signor in 1979, and Neritina squamipicta from Guam has been identified by G. J. Vermeij. The list of littorinids is from Rosewater (1970, 1972), with the exception of Nodilittorina (Granulilittorina) millegrana which is in the collection. The cowries are documented in Cate (1969).

### Literature Cited

- Cate, C. N. 1969. The cowrie species living at Guam (Mollusca: Gastropoda). *Veliger* 12(1):120-131.
- Rosewater, J. 1970. The family Littorinidae in the Indo-Pacific. Part I. The subfamily Littorininae. *Indo-Pac. Moll.* 2(11):417-506.
- \_\_\_\_\_. 1972. The family Littorinidae in the Indo-Pacific. Part II. The subfamilies Tectariinae and Echininae. *Indo-Pac. Moll.* 2(12):507-528.

## TROCHIDAE

Trochus niloticus Linnaeus, 1758  
Trochus incrassatus (Lamarck, 1810)  
Trochus intextus Kiener, 1850  
Tectus pyramis (Born, 1778)  
Clanculus clanguloides (Wood, 1828)  
Calliostoma roseopictum  
Monilea philippiana Dunker, 1871  
Ethalia guamensis (Quoy & Gaimard, 1833)  
Umbonium vestiarius (Linnaeus, 1758)

## NERITIDAE

Clithon brevispina (Lamarck, 1822)  
Nerita albicilla Linnaeus, 1758  
Nerita guamensis Quoy & Gaimard, 1834  
Nerita helicinoides Reeve  
Nerita plicata Linnaeus, 1758  
Nerita picea Recluz, 1841  
Nerita polita Linnaeus, 1758  
Nerita reticulata Karsten, 1789  
Nerita turrita Chemnitz  
Neritina pulligera f. conglobata von Martens, 1879  
Neritina squamipicta Recluz  
Puperita oulanensis Lesson, 1831  
Septaria porcellana (Linnaeus, 1758)  
Smaragdia rangiana Recluz  
Smaragdia soverbiana (Monrouzier)

## LITTORINIDAE

Littorina (Littoraria) undulata Gray, 1839  
Littorina (Littoraria) coccinea (Gmelin, 1791)  
Littorina (Littoraria) pintado pintado (Wood, 1828)  
Littorina (Littorinopsis) scabra scabra (Linnaeus, 1758)  
Nodilittorina (Nodilittorina) pyramidalis pyramidalis (Quoy & Gaimard, 1833)  
Nodilittorina (Granulilittorina) millegrana (Philippi, 1848)  
Echininus cumingi spinulosus (Philippi, 1847)

## CYPRAEIDAE

Cypraea annulus Linnaeus, 1758  
Cypraea arabica Linnaeus, 1758  
Cypraea argus Linnaeus, 1758  
Cypraea asellus Linnaeus, 1758  
Cypraea aurantium Gmelin, 1791  
Cypraea beckii Gaskoin, 1836  
Cypraea bistrinotata Schilder & Schilder, 1937  
Cypraea caputserpentis Linnaeus, 1758  
Cypraea carneola Linnaeus, 1758  
Cypraea caurica Linnaeus, 1758



Cypraea childreni Gray, 1825  
Cypraea chinensis Gmelin, 1791  
Cypraea cicercula Linnaeus, 1758  
Cypraea clandestina Linnaeus, 1767  
Cypraea cribraria Linnaeus, 1758  
Cypraea cylindrica Born, 1778  
Cypraea depressa Gray, 1824  
Cypraea eglantina Duclos, 1833  
Cypraea erosa Linnaeus, 1758  
Cypraea erronea Linnaeus, 1758  
Cypraea felina Gmelin, 1791  
Cypraea fimbriata Gmelin, 1791  
Cypraea goodalli Sowerby, 1832  
Cypraea globulus Linnaeus, 1758  
Cypraea gracilis Gaskoin, 1849  
Cypraea helvola Linnaeus, 1758  
Cypraea hirundo Linnaeus, 1758  
Cypraea irrorata Gray, 1828  
Cypraea isabella Linnaeus, 1758  
Cypraea kieneri Hildalgo, 1906  
Cypraea labrolineata Gaskoin, 1849  
Cypraea leviathan Schilder & Schilder, 1937  
Cypraea limacina Lamarck, 1810  
Cypraea lutea Gmelin, 1791  
Cypraea lynx Linnaeus, 1758  
Cypraea maculifera Schilder, 1932  
Cypraea mappa Linnaeus, 1758  
Cypraea mariae Schilder, 1927  
Cypraea mauritiana Linnaeus, 1758  
Cypraea moneta Linnaeus, 1758  
Cypraea nucleus Linnaeus, 1758  
Cypraea onyx Linnaeus, 1758  
Cypraea ovum Gmelin, 1791  
Cypraea poraria Linnaeus, 1758  
Cypraea punctata Linnaeus, 1771  
Cypraea schildererorum (Iredale, 1939)  
Cypraea staphylaea Linnaeus, 1758  
Cypraea stolidia Linnaeus, 1758  
Cypraea scurra Gmelin, 1791  
Cypraea talpa Linnaeus, 1758  
Cypraea teres Gmelin, 1791  
Cypraea testudinaria Linnaeus, 1758  
Cypraea tigris Linnaeus, 1758  
Cypraea ventriculus Lamarck, 1810  
Cypraea vitellus Linnaeus, 1758  
Cypraea ziczac Linnaeus, 1758

TONNIDAE

Tonna perdix (Linnaeus, 1758)  
Malea pomum (Linnaeus, 1758)



VASIDAE

Vasum ceramicum (Linnaeus, 1758)

Vasum turbinellus (Linnaeus, 1758)

Preliminary Checklist of Opisthobranchia found on Guam

C. H. Carlson and P. J. Hoff

Three hundred and fifty-six species of opisthobranch mollusks have been found on Guam, of which 140 have been identified. The collection consists of 4 Soleolifera, 55 Cephalaspidea, 9 Anaspidea, 8 Notaspidea, 71 Sacoglossa, 196 Nudibranchia, 1 Rhodope and 1 Acochlidoidea. All species, with the exception of Chromodoris coi, are in the Carlson-Hoff collection, Merizo, Guam. Species which have been attributed to Guam in published papers but which have not also been collected by Carlson or Hoff over the past 12 years are not included in this listing.

Numbers in brackets are the total number of species in the collection within that classification, including those not yet identified but known to be distinct species. Asterisks preceding the name indicate that the species was first identified from Guam. The Selected Literature includes those publications which refer to collections of opisthobranchs made on Guam.

Selected Literature

- Carlson, C. H., and P. J. Hoff. 1971. Note of a bivalved gastropod from Guam. *Micronesica* 7(1/2):237-238.
- \_\_\_\_\_. 1972. The genus Chelidonura from the Marianas Islands. *The Veliger* 15(1):20.
- \_\_\_\_\_. 1973. External description of a living Aranucus bifidus. *The Veliger* 15(3):172-173.
- \_\_\_\_\_. 1974. The Gastropteridae of Guam, with descriptions of four new species (Opisthobranchia:Cephalaspidea). *Publ. Seto Mar. Biol. Lab.* 21(5-6):345-363.
- \_\_\_\_\_. 1978. The identifiable Elysia from Guam (Elysiidae, Sacoglossa, Opisthobranchia). *Micronesica* 14(1):89-113.
- Marcus, Ernst. 1965. Some Opisthobranchia from Micronesia. *Malacologia* 3(2):263-286.
- Quoy, Jean René Constantin, and J. P. Gaimard. *In* Freycinet, Louis de. Voyage autour du monde exécuté sur les corvettes de S. M. l'Uranie et la Physicienne pendant les années 1817-1820. Zool., pt. 2, Paris, Chapter 11, Description des Mollusques, pp. 410-516.

\_\_\_\_\_. 1832, 1833. Voyage de découvertes de l'Astrolabe etc.--  
pendant les années 1826-1829 sous le commandement de M. J. Dumont  
D'Urville, Zool. 2:1-686. Atlas, pls. 1-26.

Rudman, W. B. 1978. A new species and genus of the Aglajidae and the  
evolution of the philinacean opisthobranch molluscs. Zool. Journ.  
Linn. Soc. 62:89-107.



Phylum MOLLUSCA

Class Gastropoda

Subclass Opisthobranchia

Order Soleolifera

Suborder Onchidiacea [4]

ONCHIDIIDAE

Onchidella c.f. evelinae Marcus & Burch, 1965

Onchidia griseus Plate, 1893

Onchidia leopoldi Labbe, 1934

Peronia peronii (Cuvier, 1804)

Order Anaspidea [9]

APLYSIIDAE

Aplysia dactylomela Rang, 1828

Aplysia parvula Guilding in Morch, 1863

Dolabella auricularia (Solander, 1786)

Dolabrifera dolabrifera (Rang, 1828)

Petalifera petalifera (Rang, 1828)

Phyllaplysia taylori (Dall, 1900)

\*Stylocheilus longicauda (Quoy & Gaimard, 1824)

Order Notaspidea [8]

PLEUROBRANCHIDAE

Berthella griseus (Bergh, 1905)

Berthellina citrina (Ruppell & Leuckart, 1828)

Berthellina c.f. delicata (Pease, 1868)

Order Cephalaspidea [66]

Suborder Acteonacea

ACTEONIDAE

Pupa sulcata (Gmelin, 1791)

HYDATINIDAE

Hydatina amplustre (Linnaeus, 1758)

\*Micromelo guamensis (Quoy & Gaimard, 1824)

Suborder Retusacea

RETUSIDAE

Pyrrunculus concentrica (A. Adams, 1850)

Suborder Bullacea

BULLIDAE

Bulla vernicosa Gould, 1859

Suborder Philinacea

GASTROPTERIDAE

- \*Gastropteron brunneomarginatum Carlson & Hoff, 1974
- \*Gastropteron citrinum Carlson & Hoff, 1974
- Gastropteron flavum Tokioka & Baba, 1964
- \*Gastropteron ladrones Carlson & Hoff, 1974
- \*Sagaminopteron bilealbum Carlson & Hoff, 1973
- \*Sagaminopteron nigropunctatum Carlson & Hoff, 1973
- \*Sagaminopteron psychedelicum Carlson & Hoff, 1974

AGLAJIDAE

- Aglaja orientalis Baba, 1949
- Chelidonura fulvipunctata Baba, 1938
- Chelidonura hirundinina (Quoy & Gaimard, 1832)
- Chelidonura inornata Baba, 1949
- \*Odontoglaja guamensis Rudman, 1978
- Philinopsis gardineri (Eliot, 1903)
- Philinopsis pilsbryi (Eliot, 1899)

SMARAGDINELLIDAE

- Phanerophthalmus luteus (Quoy & Gaimard, 1832)
- Smaragdinella calyculata (Broderip & Sowerby, 1829)

SCAPHANDRIDAE

- \*Tornatina gaimardi (Finlay, 1927)

Suborder Atyacea

ATYIDAE

- Atys cylindrica (Helbling, 1779)
- \*Haminoea cymbalum (Quoy & Gaimard, 1832)

Suborder Runcinacea

RUNCINIDAE

Metaruncina setoensis Baba, 1954

Order Sacoglossa [71]

Suborder Juliacea

JULIIDAE

Julia exquisita (Gould, 1862)

Suborder Oxynoacea

VOLVATELLIDAE

Volvatella fragilis Pease, 1860

OXYNOIDAE

Lobiger souverbiei P. Fisher, 1856

Oxynoe kabirensis Hamatani, 1980

Oxynoe viridis (Pease, 1863)

CYLINDROBULLIDAE

Cylindrobulla c.f. japonica Hamatani, 1969

Suborder Elysiacea

ELYSIIDAE

\*Elysia arena Carlson & Hoff, 1977

Elysia bayeri Marcus, 1965

Elysia bennettae Thompson, 1973

Elysia caerulea Kelaart, 1859

Elysia gracilis Risbec, 1928

Elysia grandifolia Kelaart, 1859

Elysia halimeda Macnae, 1954

Elysia livida Baba, 1958

Elysia marginata (Pease, 1871)

Elysia mercieri (Pruvot-fol, 1930)

Elysia obtusa Baba, 1938

Elysia ratna Marcus, 1965

Elysia vatae Risbec, 1928

Elysia yaeyamana Baba, 1936

PLACOBANCHIDAE

Placobranchus ocellatus vanHasselt, 1824



POLYBRANCHIIDAE

Branchophyllum orientale (Kelaart, 1859)

Cyerce c.f. elegans Bergh, 1888

Cyerce nigricans (Pease, 1866)

STILIGERIDAE

Hermaea cremoniana Trinchese, 1893

Order Nudibranchia

Suborder Dendronotacea [6]

TRITONIIDAE

Tritoniopsilla c.f. alba Baba, 1949

MARIANINIDAE

Marianina rosea (Pruvot-fol, 1930)

BORNELLIDAE

Bornella simplex (Eliot, 1904)

Suborder Doridacea [120]

GONIODORIDIDAE

Goniodoris felis Baba, 1949

Goniodoris joubini Risbec, 1928

NOTODORIDIDAE

Aegirus leuckarti Verany, 1853

POLYCERIDAE

Polycera japonica Baba, 1949

GYMNODORIDIDAE

Gymnodoris alba (Bergh, 1877)

Gymnodoris ceylonica (Kelaart, 1858)

Gymnodoris citrina (Bergh, 1877)

Gymnodoris okinawae Baba, 1936

Nembrotha luteolineata Baba, 1936

Nembrotha rubropapulosa (Bergh, 1905)

Nembrotha morosa Bergh, 1877

VAYSSIEREIDAE

Okadaia elegans Baba, 1931

HEXABRANCHIDAE

Hexabranhus sanguineus (Ruppell & Leuckart, 1831)

CHROMODORIDIDAE

Casella atromarginata (Cuvier, 1804)

Casella cincta Bergh, 1889

Chromodoris aureopurpurea Collingwood, 1881

Chromodoris australis Risbec, 1928

Chromodoris c.f. clitonota Bergh, 1905

Chromodoris coi (Risbec, 1956)

Chromodoris decora Pease, 1860

Chromodoris decorata Risbec, 1928

Chromodoris fidelis (Kelaart, 1858)

Chromodoris godeffroyana Bergh, 1879

Chromodoris lentiginosa Pease, 1871

Chromodoris lilacina (Gould, 1852)

Chromodoris c.f. multituberculata (Baba, 1953)

Chromodoris quadricolor (Ruppell & Leuckart, 1831)

Chromodoris c.f. varians Pease, 1871

Hypselodoris hilaris (Bergh, 1890)

Hypselodoris infucata (Ruppell & Leuckart, 1828)

Hypselodoris c.f. kulonba Burn, 1965

Hypselodoris tryoni (Garrett, 1873)

Miamira sinuata (vanHasselt, 1824)

DORIDIDAE

Doriopsis c.f. granulosa Pease, 1860

Doriopsis pecten (Collingwood, 1881)

Doriopsis viridis Pease, 1860

Doris aspera (Risbec, 1928)

ARCHIDORIDIDAE

Trippa echinata (Pease, 1860)

DISCODORIDIDAE

Carminodoris grandiflora (Pease, 1860)

Discodoris concinna (Alder & Hancock, 1864)

Discodoris dubia Bergh, 1904

KENTRODORIDIDAE

Kentrodoris funebris (Kelaart, 1859)

SPURILLIDAE

Baeolidia fusiformis Baba, 1949

TERGIPEDIDAE

Embletonia gracile Risbec, 1928

Phestilla sibogae Bergh, 1905



## Preliminary Checklist of Echinoderms from Guam

The crinoids listed here are documented in Meyer and Macurda (1980) and the asteroids are documented in Yamaguchi (1975), in Pope and Rowe (1977), and in Rowe and Nichols (1980). Most of the ophiuroids and echinoids are represented in the University of Guam Marine Laboratory Reference Collection. The ophiuroids in the reference collection were determined mostly by C. M. Clark in conference with A. M. Clark. Ophiomastix caryophyllata is documented in Devaney (1978), but is not yet in the collection. The holothurians are documented in Rowe and Doty (1977).

Clark (1954) listed specimens of Stephanometra spicata (Crinoidea), Protoreaster nodosus (Asteroidea), Ophiarthrum pictum and Ophiarachnella infernalis (Ophiuroidea), and Heterocentrotus trigonarius (Echinoidea) from Guam. Individuals of these species have not been found on Guam since 1945 and therefore they are not placed in the checklist.

### Literature Cited

- Clark, A. H. 1954. Records of Indo-Pacific echinoderms. *Pac. Sci.* 8:243-263.
- Devaney, D. M. 1978. A review of the genus Ophiomastix (Ophiuroidea: Ophiocomidae). *Micronesica* 14(2):273-359.
- Meyer, D. L., and D. B. Macurda, Jr. 1980. Ecology and distribution of the shallow-water crinoids of Palau and Guam. *Micronesica* 16(1):59-99.
- Pope, E. C., and F. W. E. Rowe. 1977. A new genus and two new species in the family Mithrodiidae (Echinodermata: Asteroidea) with comments on the status of the species of Mithrodia Gray (1840). *Aust. Zool.* 19(2):201-216.
- Rowe, F. W. E., and J. E. Doty. 1977. The shallow-water holothurians of Guam. *Micronesica* 13(2):217-250.
- Rowe, F. W. E., and D. Nichols. 1980. A new species of Podosphaeraster Clark & Wright, 1962 (Echinodermata: Asteroidea) from the Pacific. *Micronesica* 16(2):289-295.
- Yamaguchi, M. 1975. Coral-reef asteroids of Guam. *Biotropica* 7(1): 12-23.

Phylum ECHINODERMATA

Class Crinoidea

COMASTERIDAE

- Comanthina schlegeli (Carpenter, 1881)  
Comanthus bennetti (Müller, 1841)  
Comanthus parvicirrus (Müller, 1841)  
Comaster multifidus (Müller, 1841)  
Comatella maculata (Carpenter, 1888)

COLOBOMETRIDAE

- Cenometra bella (Hartlaub, 1890)

ISOCRINIDAE

- Metacrinus nobilis (Carpenter, 1884)

Class Asteroidea

ASTROPECTINIDAE

- Astropecten polyacanthus Müller & Troschel, 1842

OREASTERIDAE

- Choriaster granulatus Lütken, 1869  
Culcita novaeguineae Müller & Troschel, 1842

OPHIDIASTERIDAE

- Dactylosaster cylindricus (Lamarck, 1816)  
Fromia hemiopia Fisher, 1913  
Fromia sp.  
Gomophia egyptiaca Gray, 1840  
Leiaster leachi (Gray, 1840)  
Linckia guildingi Gray, 1840  
Linckia laevigata (Linnaeus, 1758)  
Linckia multifora (Lamarck, 1816)  
Linckia sp.  
Neoferdina cumingi (Gray, 1840)  
Ophidiaster granifer Lütken, 1872  
Ophidiaster robillardi de Loriol, 1885  
Ophidiaster squameus Fisher, 1906

ASTEROPIDAE

- Asteropsis carinifera (Lamarck, 1816)

ASTERINIDAE

Asterina anomala (H. L. Clark, 1921)  
Asterina sp.

ACANTHASTERIDAE

Acanthaster planci (Linnaeus, 1758)

MITHRODIIDAE

Mithrodia clavigera (Lamarck, 1816)  
Thromidia catalai Pope & Rowe, 1977

ECHINASTERIDAE

Cistina columbiae Gray, 1840  
Echinaster luzonicus (Gray, 1840)

SPHAERASTERIDAE

Podosphaeraster pulvinatus Rowe & Nichols, 1980

Class Ophiuroidea

AMPHIURIDAE

Amphiura sexradiata Koehler, 1930  
Amphipholis squamata (Delle Chiaje, 1829)

OPHIOTRICHIDAE

Macrophiothrix sp. aff. demessa (Lyman, 1861)  
Macrophiothrix longipeda (Lamarck, 1816)

OPHIOCOMIDAE

Ophiarthrum elegans Peters, 1851  
Ophiocoma dentata Müller & Troschel, 1842  
Ophiocoma doederleini de Loriol  
Ophiocoma erinaceus Müller & Troschel, 1842  
Ophiocoma pica Müller & Troschel, 1842  
Ophiocoma scolopendrina (Lamarck, 1816)  
Ophiocomella sexradiata (Duncan, 1887)  
Ophiomastix caryophyllata Lütken, 1869  
Ophiomastix mixta Lütken, 1869

OPHIONEREIDAE

Ophionereis fusca Brock, 1888  
Ophionereis porrecta Lyman, 1860



OPHIODERMATIDAE

Ophiarachnella gorgonia (Müller & Troschel, 1842)  
Ophiochaeta sp.

OPHIURIDAE

Ophiolepis cincta Müller & Troschel, 1842

Class Echinoidea

CIDARIDAE

Eucidaris metularia (Lamarck, 1816)

DIADEMATIDAE

Diadema savignyi Michelin, 1845  
Diadema setosum (Leske, 1778)  
Echinothrix diadema (Linnaeus, 1758)  
Echinothrix calamaris (Pallas, 1774)

TEMNOPLEURIDAE

Mespilia globulus (Linnaeus, 1758)

TOXOPNEUSTIDAE

Tripneustes gratilla (Linnaeus, 1758)  
Toxopneustes pileolus (Lamarck, 1816)

ECHINOMETRIDAE

Echinometra mathaei (de Blainville, 1825)  
Echinometra mathaei var. oblonga (de Blainville, 1825)  
Echinostrephus aciculatus Agassiz, 1863  
Colobocentrotus mertensi Brandt, 1835  
Heterocentrotus mammillatus (Linnaeus, 1758)

ECHINONEIDAE

Echinoneus cyclostomus Leske, 1778

CLYPEASTERIDAE

Clypeaster reticulatus (Linnaeus, 1758)

BRISSIDAE

Metalia spatagus (Linnaeus, 1758)  
Brissus latecarinatus (Leske, 1778)

Class Holothuroidea

STICHOPODIDAE

- Thelenota ananas (Jaeger, 1833)  
Thelenota anax H. L. Clark, 1921  
Stichopus chloronotus Brandt, 1835  
Stichopus horrens Selenka, 1867

HOLOTHURIIDAE

- Actinopyga echinites (Jaeger, 1833)  
Actinopyga mauritiana (Quoy & Gaimard, 1833)  
Bohadschia graeffei (Semper, 1868)  
Bohadschia argus Jaeger, 1833  
Bohadschia marmorata Jaeger, 1833  
Labidodemas semperianum Selenka, 1867  
Holothuria (Semperothuria) cinerascens (Brandt, 1835)  
Holothuria (Halodeima) atra Jaeger, 1833  
Holothuria (Halodeima) edulis Lesson, 1830  
Holothuria (Microthele) nobilis (Selenka, 1867)  
Holothuria (Platyperona) difficilis Semper, 1868  
Holothuria (Thymiosycia) arenicola Semper, 1868  
Holothuria (Thymiosycia) hilla Lesson, 1830  
Holothuria (Thymiosycia) impatiens (Forsk., 1775)  
Holothuria (Cystipus) rigida (Selenka, 1867)  
Holothuria (Lessonothuria) pardalis Selenka, 1867  
Holothuria (Mertensiothuria) leucospilota Brandt, 1867  
Holothuria (Mertensiothuria) pervicax Selenka, 1867

CHIRIDOTIDAE

- Chiridota rigida Semper, 1868

CUCUMARIIDAE

- Thyone okeni Bell, 1884

PHYLLOPHORIDAE

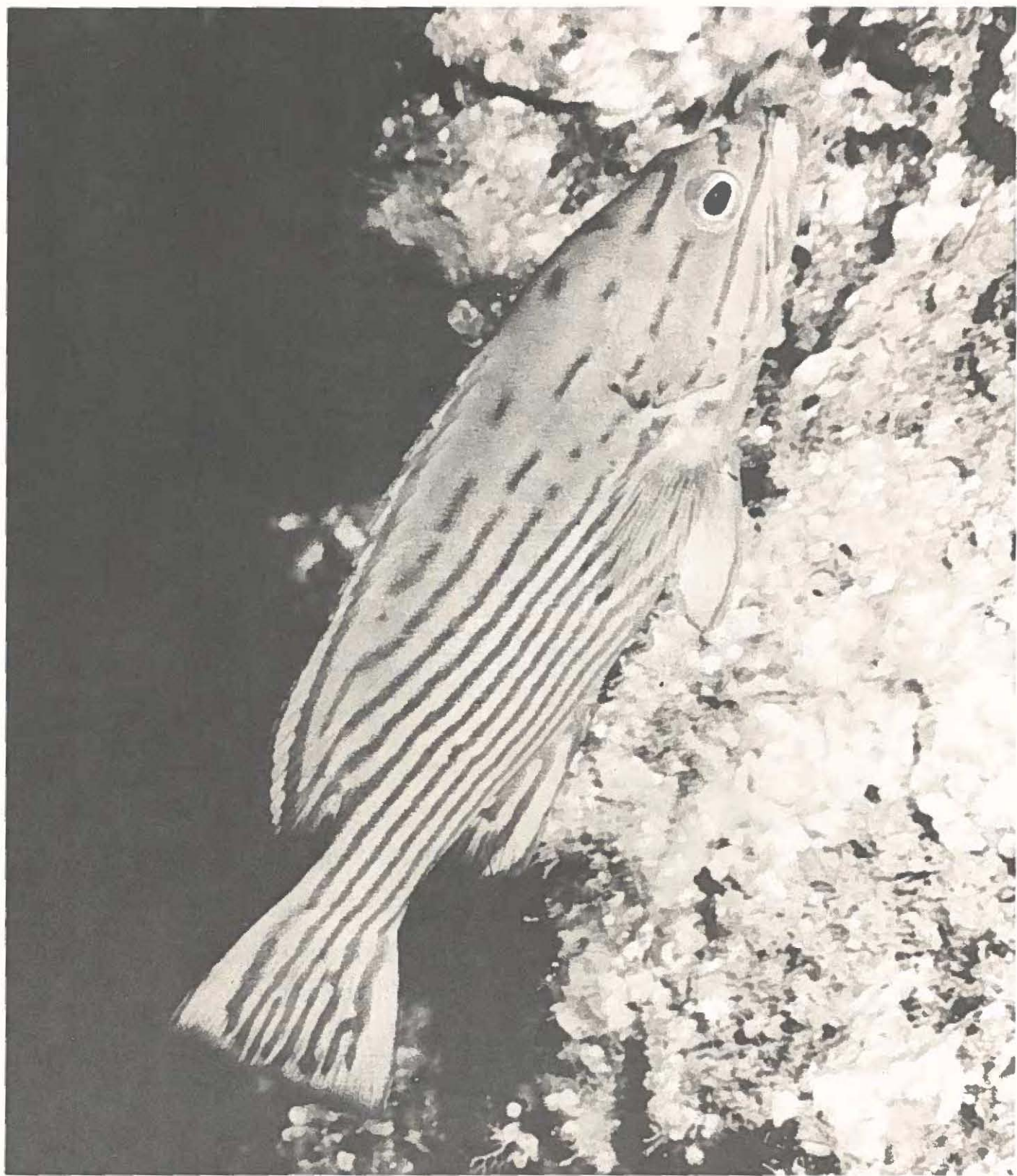
- Afroccumis africana (Semper, 1868)

SYNAPTIDAE

- Synapta maculata (Chamisso & Eysenhardt, 1821)  
Polypsectana kerfersteini (Selenka, 1867)  
Opheodesoma grisea (Semper, 1868)  
Eupta godeffroyi (Semper, 1868)

NOTES





Gracila polleni in a cave (35 m depth) off Orote Peninsula. Photograph by Robert F. Myers.

A Preliminary Checklist of the Fishes of Guam  
and the Southern Mariana Islands

John W. Shepard and Robert F. Myers

The checklist presented below is a response to the many requests the authors have received to provide a complete listing of the fishes of Guam and nearby islands under a single cover. In its present form it should be considered a "working list", as many problems remain to be resolved before a definitive, annotated checklist of the fishes of the southern Mariana Islands can be formulated. Many of the groups of fishes which occur in the islands are poorly known, and a considerable number of the species records remain unconfirmed. We continue to consult with numerous specialists and are indebted to those who have already advised us. In the interim, we hope that this checklist will prove useful to those who have an interest in the fishes of our region.

This work is primarily a compilation of studies by Seale (1901), Fowler (1925), Schultz et al. (1953,1960,1966), Kami et al. (1968), Kami (1971,1975), and Myers and Shepard (1981). An effort has been made to correct obvious misidentifications and inaccuracies such as multiple records of a single species under a variety of names. Myers and Shepard (1981) documented many of these changes and updated the nomenclature of many species in accordance with recent revisionary studies. Readers who require further details concerning the species records contained in this study are referred to the literature cited below.

A total of 801 species in 115 families are included in this checklist. All but four species (in three families) occur, or could be expected to occur in waters of less than 200 m in depth. Eight species occur almost exclusively in freshwater as adults. The remainder are inshore species or widely ranging pelagic species that may occasionally be found close to shore. Virtually nothing is known of the mesopelagic or benthic ichthyofauna at depths greater than 200 m in the Mariana Islands. Eighteen of the species records included in this report are based on sightings reported to us by knowledgeable



individuals; nineteen are based on photographic documentation, and fourteen are of species observed or collected at other islands in the southern Marianas but not yet known from Guam. Four of the species included are recorded from Guam for the first time. Nine species of freshwater exotics have apparently become established in Guams waters, and are listed separately.

In our effort to update this list and eventually produce a more detailed, annotated checklist of the fishes of the Marianas, we would appreciate feedback from other ichthyologists, fishermen and divers concerning additions and corrections. We are particularly interested in obtaining photographic documentation or specimens of species listed only as sight records, as well as of species not yet listed.

An alphabetical index to the fish families included in this report is provided following the end of the checklist.

#### ACKNOWLEDGMENTS

We would like to thank the University of Guam Mathematics Department, and Dr. Samuel E. Rhoads in particular, for the use of their Cromemco Word Processing System in the preparation of this report. Thanks are also due to Dr. Charles Birkeland for his encouragement to "finish up the fish list", and to Stan Weinberg for providing photographic documentation of Beryx decadactylus from Saipan.

#### LITERATURE CITED

- Fowler, H. W. 1925. Fishes of Guam, Hawaii, Samoa and Tahiti. Bull. Bernice P. Bishop Mus. 22:1-38.
- Kami, H. T. 1971. Checklist of Guam fishes, supplement I. Micronesica 7(1/2):215-228.
- . 1975. Checklist of Guam fishes, supplement II. Micronesica 11(2):115-121.
- Kami, H. T., I. I. Ikehara, and F. P. DeLeon. 1968. Checklist of Guam fishes. Micronesica 4(1):95-131.
- Myers, R. F., and J. W. Shepard. 1981. New records of

fishes from Guam with notes on the ichthyofauna of  
the southern Marianas. Micronesica 16(2):305-347.

Seale, A. 1901. Report of a mission to Guam, Part II.  
Fishes. Occas. Pap. Bernice P. Bishop Mus. 1(3):61-  
128.

Schultz, L. P., and collaborators. 1953,1960,1966.  
Fishes of the Marshall and Marianas Islands. Vols.  
1-3. Bull. U. S. Nat. Mus. 202(1-3):1299 p.

Key to Symbols:

- \* : Sight record
- s : Photograph record
- f : New record
- † : Not known from Guam; S =Saipan, T =Tinian, R =Rota
- ? : Doubtful record or probable synonym
- FW: Occurs in freshwater as an adult



HEXANCHIDAE (Bulldog Sharks)

Hexanchus griseus (Bonnaterre, 1788)

ORECTOLOBIDAE (Nurse Sharks)

Nebrius ferrugineum (Lesson, 1830)

LAMNIDAE (Mackerel Sharks)

\* Isurus sp.

ALOPIIDAE (Thresher Sharks)

Alopias pelagicus Nakamura, 1935

CARCHARHINIDAE (Requiem Sharks)

Carcharhinus albimarginatus (Ruppell, 1835)

Carcharhinus amblyrhynchos (Bleeker, 1837)

Carcharhinus falciformes Muller & Henle, 1841

Carcharhinus galapagensis Snodgrass & Heller, 1905

\* Carcharhinus maou (Lesson, 1830)

Carcharhinus melanopterus (Quoy & Gaimard, 1824)

Galeocerdo cuvieri (Lesueur, 1822)

Triaenodon obesus (Ruppell, 1837) .

SPHYRNIDAE (Hammerhead Sharks)

Sphyrna lewini (Griffith & Smith, 1834)

SQUALIDAE (Spiny Dogfishes)

Etmopterus pusillus (Lowe, 1839) †

Squalus mitsukurii Jordan & Fowler, 1903

RHYNCHOBATIDAE (Guitarfishes)

§+s Rhynchobatus djeddensis (Forsskal, 1775)

DASYATIDAE (Sting Rays)

Dasyatis kuhlii (Muller & Henle, 1841)

\*+s Taeniura melanospilos Bleeker, 1853

MOBULIDAE (Manta Rays)

\* Manta sp. cf. alfredi (Kreffft, 1868)

MYLIOBATIDAE (Eagle Rays)

Aetobatus narinari (Euphrasen, 1790)

DUSSUMIERRIDAE (Round Herrings)

Spratelloides delicatulus (Bennett, 1831) ||||  
Spratelloides sp.

ENGRAULIDAE (Anchovies)

Stolephorus buccaneeri Strasburg, 1960 |  
Thrissina baelama (Forsskal, 1775) |||

MEGALOPIDAE (Tarpons)

Megalops cyprinoides (Broussonet, 1782)

ALBULIDAE (Bonfishes)

Albula vulpes (Linnaeus, 1758)

ANGUILLIDAE (Freshwater Eels)

FW Anguilla bicolor McClelland, 1844 |  
FW Anguilla marmorata Quoy & Gaimard, 1824 ||||

MORINGUIDAE (Worm Eels)

Moringua abbreviata (Bleeker, 1863) |||| |  
Moringua bicolor Kaup, 1856 ||  
Moringua macrocephala (Bleeker, 1863) ||  
Moringua macrochir Bleeker, 1855

XENOCONGRIDAE (False Moray Eels)

Kaupichthys hyoporoides (Stromann, 1896)

MURAENIDAE (Moray Eels)

Anarchias allardicei Jordan & Starks, 1906  
Anarchias seychellensis Smith, 1962 |  
Echidna leucotaenia Schultz, 1943 |  
Echidna nebulosa (Ahl, 1789) |||| |  
s Echidna polyzona (Richardson, 1844)  
Echidna unicolor Schultz, 1953 |  
Enchelycore bayeri (Schultz, 1953) |||| |  
f Enchelycore bikiniensis (Schultz, 1953)  
Enchelycore schismatorhynchus (Bleeker, 1853) ||  
Enchelynassa canina (Quoy & Gaimard, 1824) |  
Gymnomuraena zebra (Shaw, 1797)  
Gymnothorax fuscomaculatus (Schultz, 1953) |||| |  
+s Gymnothorax marshallensis (Schultz, 1953) ||  
Gymnothorax melatremus Schultz, 1953  
Gymnothorax pictus (Ahl, 1789) |||| |  
+s Gymnothorax pindae Smith, 1962 ||  
Gymnothorax sp. 1 |||



Gymnothorax sp.2 1

Lycodontis berndti (Snyder, 1904)  
Lycodontis buroensis (Bleeker, 1857)  
Lycodontis fimbriatus (Bennett, 1831)  
Lycodontis flavimarginatus (Ruppell, 1828)  
Lycodontis gracilicaudus (Jenkins, 1903)  
Lycodontis goldsboroughi (Jordan & Evermann, 1903)  
Lycodontis hepaticus (Ruppell, 1828)  
Lycodontis javanicus (Bleeker, 1859)  
Lycodontis margaritophorus (Bleeker, 1864)  
Lycodontis meleagris (Shaw & Nodder, 1795)  
Lycodontis monostigmus (Regan, 1909)  
Lycodontis nuttingi (Snyder, 1904)  
Lycodontis richardsoni (Bleeker, 1852)  
Lycodontis rueppelliae (McClelland, 1845)  
Lycodontis undulatus (Lacepede, 1803)  
Lycodontis zonipectis (Seale, 1906)  
Lycodontis sp.1

- \* Rhinomuraena quaesita Garman, 1888  
Strophiodon brummeri (Bleeker, 1859)  
Thyrsoidea macrurus (Bleeker, 1854)  
Uropterygius concolor Ruppell, 1835 |||  
Uropterygius marmoratus (Lacepede, 1803)  
Uropterygius micropterus (Bleeker, 1852) |||  
Uropterygius necturus (Jordan & Gilbert, 1882)  
Uropterygius supraforatus (Regan, 1909) |  
Uropterygius xanthopterus Bleeker, 1859 |||

SYNAPHOBRACHIDAE (Cutthroat Eels)

Synaphobranchus sp.

CONGRIDAE (White Eels, Conger Eels, Garden Eels)

Conger noordziekii Bleeker, 1857 ||  
Conger oligoporus Kanazawa, 1958  
Gorgasia sp.  
Heteroconger hassi (Klausewitz & Eibl-Eibesfeldt, 1959)

OPHICHTHIDAE (Snake Eels)

Brachysomophis sauropsis Schultz, 1943  
Caecula polyopthalmus (Bleeker, 1853)  
Callechelys marmoratus (Bleeker, 1853) |  
Callechelys melanotaenia Bleeker, 1864 |  
Leiuranus semicinctus (Lay & Bennett, 1839) |||  
Muraenichthys laticaudata (Ogilby, 1897)  
Muraenichthys macropterus Bleeker, 1857  
Myrichthys colubrinus (Boddaert, 1781) |  
Myrichthys elaps (Fowler, 1912) |||  
Myrichthys maculosus (Cuvier, 1817) ||  
Ophichthus cephalozona Bleeker 1864



CHANIDAE (Milkfishes)

Chanos chanos (Forsskal, 1775) ||

SYNODONTIDAE (Lizardfishes)

Saurida gracilis (Quoy & Gaimard, 1824) III

Synodus dermatogenys Fowler, 1912 |

Synodus englemani Schultz, 1953 |

Synodus ulae Schultz, 1953 |

Synodus variegatus (Lacepede, 1803) III |

PARALEPIDAE (Barracudinas)

Lestidium nudum Gilbert, 1905

POLYMIXIIDAE (Beardfishes)

Polymixia japonica Gunther, 1877

BREGMACEROTIDAE (Codlets)

Bregmaceros maclellandi Thompson, 1840 |

OPHIDIIDAE (Cusk Eels)

Brotula multibarбата Temminck & Schlegel, 1846

BYTHITIDAE

Brosmophyciops pautzkei Schultz, 1960

Dinematichthys iluocoeteoides Bleeker, 1855

CARAPIDAE (Pearlfishes)

Carapus homei (Richardson, 1844) III "

Carapus mourlani (Petit, 1934) III

Carapus parvipinnis (Kaup, 1856) III III III

Encheliophis vermicularis Muller, 1843 III

Jordanicus gracilis (Bleeker, 1856)

ANTENNARIIDAE (Anglerfishes)

Antennarius sp. cf. coccineus (Lesson, 1830)

Antennarius dorehensis Bleeker, 1859

Antennarius maculosus Bleeker

Antennarius pictus (Shaw)

Antennatus tuberosus (Cuvier, 1817)

Histrio histrio (Linnaeus, 1758)

EXOCOETIDAE (Flying Fishes)

Cheilopogon spilopterus (Bleeker, 1866)  
Cheilopogon spilopterus (Valenciennes, 1846)  
Cheilopogon unicolor (Valenciennes, 1846)  
Cypselurus antonichi Woods & Schultz, 1953  
Parexocoetus mento (Valenciennes, 1847)  
Prognichthys albimaculatus (Fowler, 1934)

BELONIDAE (Needlefishes)

\* Ablennes hians (Valenciennes, 1846)  
Belone platyura Bennett, 1831  
Rhaphiobelone robusta Schultz, 1953  
Strongylura gigantea (Temminck & Schlegel, 1846)  
Tylosurus annulatus Valenciennes, 1846

HEMIRAMPHIDAE (Halfbeaks)

Hemiramphus archipelagicus Collette & Parin, 1978  
Hemiramphus erythrorinchus Le Sueur, 1821  
Hemiramphus limbatus Cuvier & Valenciennes, 1846  
Hemiramphus dussumieri (Valenciennes, 1846)  
Hemiramphus laticeps (Gunther, 1866)  
Zenarchopterus dispar (Valenciennes, 1846)

ATHERINIDAE (Silversides)

Atherion elymus freyi Schultz, 1953  
Hypoatherina ovalaua (Herre, 1935)  
Pranesus insularum insularum (Jordan & Evermann, 1903)  
Pranesus pinguis (Lacepede, 1803)

BERYCIDAE (Alfonsinos)

Beryx decadactylus Cuvier, 1829

ANOMALOPIDAE (Lantern-Eye Fishes)

Anamalops katoptron Bleeker, 1856

HOLOCENTRIDAE (Squirrelfishes)

Adioryx caudimaculatus (Ruppell, 1835)  
Adioryx diadema (Lacepede, 1801)  
Adioryx lacteoguttatus (Cuvier, 1829)  
Adioryx microstomus (Gunther, 1859)  
Adioryx ruber (Forsskal, 1775)  
Adioryx spinifer (Forsskal, 1775)  
Adioryx tiere (Cuvier, 1829)  
Adioryx tiereoides (Bleeker, 1853)  
Flammeo argenteus (Valenciennes, 1831)  
Flammeo opercularis (Valenciennes, 1831)

Flammeo sammara (Forsskal, 1775) |  
Myripristis adustus Bleeker, 1853 ||||  
Myripristis amaenus (Castlenau, 1873) |  
Myripristis berndti Jordan & Evermann, 1903 ||||  
Myripristis borbonicus Cuvier, 1831 |  
Myripristis kuntee Cuvier, 1831  
Myripristis murdjan (Forsskal, 1775) ||  
Myripristis violaceus Bleeker, 1851  
s Myripristis vittatus Cuvier, 1831  
Plectrypops lima (Valenciennes, 1831)

AULOSTOMIDAE (Trumpetfishes)

Aulostomus chinensis (Linnaeus, 1766) ||/

FISTULARIIDAE (Cornetfishes)

Fistularia commersonii Ruppell, 1835

SOLENOSTOMIDAE (Ghost Pipefishes)

Solenostomus armatus Weber, 1913

SYNGNATHIDAE (Pipefishes, Seahorses)

Choeroichthys sculptus (Gunther, 1870) |  
Choeroichthys brachysoma (Bleeker, 1855)  
Corythoichthys flavofasciatus (Ruppell, 1838) |  
Corythoichthys intestinalis (Ramsey, 1881) ||||  
Corythoichthys nigripectus Herald, 1953  
Cosmocampus sp. cf. darrosanus (Dawson & Randall, 1975)  
Doryrhamphus melanopleura (Bleeker, 1858) |||  
Dunckerocampus dactyliophorus (Bleeker, 1853) |  
\* Hippocampus sp.  
Micrognathus brevirostris (Ruppell, 1840) ||  
Micrognathus brocki Herald, 1953 |  
Micrognathus mataafae (Jordan & Seale, 1906)  
Micrognathus myersi Herald & Randall, 1972  
Phoxocampus diacanthus (Schultz, 1943)  
Syngnathoides biaculeatus (Bloch, 1875)

SCORPAENIDAE (Scorpionfishes)

Dendrochirus biocellatus (Fowler, 1938)  
Dendrochirus brachypterus (Cuvier, 1829) |  
Dendrochirus zebra (Cuvier, 1829)  
Pontinus macrocephalus (Sauvage, 1882)  
Pterois antennata (Bloch, 1787) ||||  
Pterois radiata Cuvier, 1829 ||  
Pterois volitans (Linnaeus, 1758) ||||  
Scorpaena albobrunnea Gunther, 1874  
Scorpaena bynoensis Richardson, 1845)  
Scorpaena tristis (Klunzinger, 1870)



Scorpaena sp. cf. ballieui Sauvage, 1875  
+s Scorpaenodes brocki (Schultz, 1966)  
Scorpaenodes guamensis (Quoy & Gaimard, 1824)  
Scorpaenodes kellogi (Jenkins, 1903) ///  
Scorpaenodes parvipinnis (Garrett, 1863) ///  
Scorpaenopsis cirrhusa (Thunberg, 1793) ///  
Scorpaenopsis diabolus Cuvier, 1829  
Synanceia verrucosa Bloch & Schneider, 1801 ///  
Taenianotus triacanthus Lacepede, 1802 IN

CARACANTHIDAE (Velvetfishes)

Caracanthus maculatus (Gray, 1831) IN  
Caracanthus unipinnus (Gray, 1831) IN

PLATYCEPHALIDAE (Flatheads)

Suggrundus harrisii (McCulloch, 1914) ///  
Thysanophrys arenicola Schultz, 1966 //  
Thysanophrys crocodilus (Tilesius, 1812)

CEPHALACANTHIDAE (Flying Gurnards)

Dactyloptena orientalis (Cuvier, 1829)  
Diacocus petersoni (Nystrom)

PEGASIDAE (Dragonfishes)

Pegasus draconis Linnaeus, 1766

AMBASSIDAE (Snooks, Glassies)

FW Ambassis marianus Gunther, 1880

PERCICHTHYIDAE

Synagrops argyreus (Gilbert & Cramer, 1896)

SERRANIDAE (Groupers)

Aethaloperca rogaa (Forsskal, 1775)  
Anthias pascalus (Jordan & Tanaka, 1927)  
Anthias pleurotaenia (Bleeker, 1857)  
Anthias randalli Lubbock & Allen, 1978  
Anthias taeniatus Klunzinger, 1884  
Cephalopholis argus (Bloch & Schneider, 1801) //  
Cephalopholis aurantius (Cuvier, 1828)  
Cephalopholis igarashiensis Katayama, 1957 //  
Cephalopholis sexmaculatus (Ruppell, 1828)  
Cephalopholis urodelus (Bloch & Schneider, 1801) IN IN  
Cephalopholis sp. |  
Cromileptes altivelis (Valenciennes, 1828)  
Epinephelus corallicola (Cuvier, 1828)

Epinephelus fasciatus (Forsskal, 1775) |  
Epinephelus fuscoguttatus (Forsskal, 1775)  
Epinephelus hexagonatus (Bloch & Schneider, 1801) | | | |  
Epinephelus lanceolatus (Bloch, 1790)  
Epinephelus maculatus (Bloch, 1790)  
Epinephelus medurensis (Gunther, 1873)  
Epinephelus merra Bloch, 1793 | | | | | | | |  
Epinephelus microdon (Bleeker, 1856)  
†S Epinephelus spilotus Schultz, 1953 | | | |  
Epinephelus tauvina (Forsskal, 1775) |  
Gracila polleni (Day, 1888)  
Holanthias katayamai Randall, Mauge & Plessis, 1979  
Liopropoma lunulatum (Guichenot, 1863) |  
†T Liopropoma pallidum (Fowler, 1938) | | | |  
Plectranthias fourmanoiri Randall, 1980  
Plectranthias kamii Randall, 1980  
Plectranthias nanus Randall, 1980  
Plectropomus leopardus (Lacepede, 1802)  
Plectropomus melanoleucus (Lacepede, 1802)  
Plectropomus truncatus Fowler, 1930 |  
Saloptia powelli Smith  
Variola louti (Forsskal, 1775) | |

GRAMMISTIDAE (Soapfishes)

Belonoperca chabanaudi Fowler & Bean, 1930  
Grammistes sexlineatus (Thunberg, 1792)  
Grammistops ocellatus Schultz, 1953

PSEUDOCHROMIDAE (Dottybacks)

Pseudochromis tapeinosoma Bleeker, 1853 | | | | | | | |

PSEUDOGRAMMIDAE

Pseudogramma bilinearis (Schultz, 1943)  
Pseudogramma polyacantha (Bleeker, 1856)

PLESIOPIIDAE (Longfins)

Calloplesiops altivelis (Steindachner, 1903)  
Plesios coeruleolineatus Ruppell, 1835  
Plesios corallicola Bleeker, 1853

PSEUDOPLESIOPIIDAE

Pseudoplesiops typus Bleeker, 1858  
Pseudoplesiops revillei Schultz, 1953  
Pseudoplesiops rosae Schultz, 1943  
Pseudoplesiops sp. 1  
Pseudoplesiops sp. 2



KUHLIDAE (Flagtails)

- Kulia mugil (Forster, 1801)  
FW Kulia rupestris (Lacepede, 1802)

PRIACANTHIDAE (Bigeyes)

- Priacanthus cruentatus (Lacepede, 1801) III  
Priacanthus hamrur (Forsskal, 1775) I

APOGONIDAE (Cardinalfishes)

- Apogon angustatus (Smith & Radcliffe, 1911) III  
Apogon bandanensis Bleeker, 1854 II  
Apogon coccineus Ruppell, 1835  
Apogon exostigma (Jordan & Starks, 1906) III  
Apogon fraenatus Valenciennes, 1832 I  
Apogon guamensis Valenciennes, 1832  
Apogon kallopterus Bleeker, 1878  
Apogon lateralis Valenciennes, 1832 II  
Apogon leptacanthus Bleeker, 1856  
Apogon menesemops Lachner, 1953 II  
Apogon mydrus (Jordan & Starks, 1905)  
Apogon nigrofasciatus Lachner, 1953 III  
Apogon novemfasciatus Cuvier, 1828 III  
Apogon robustus (Smith & Radcliffe, 1911) III  
Apogon savayensis Gunther, 1871 III  
Apogon trimaculatus Cuvier, 1828 III  
Apogon sp. III  
Apogonichthys ocellatus (Weber, 1913)  
Archamia biguttata Lachner, 1951 II  
Archamia fucata (Cantor, 1850) II  
Cheilodipterus lineatus (Linnaeus, 1758)  
Cheilodipterus macrodon (Lacepede, 1802) III II  
Cheilodipterus quinquelineatus (Cuvier, 1828)  
Fowleria aurita (Valenciennes, 1831)  
Fowleria isostigma (Jordan & Seale, 1906)  
Fowleria marmorata (Alleyne & Macleay, 1876)  
Fowleria variegata (Valenciennes, 1832)  
Pseudamiops gracilicauda (Lachner, 1953)  
Gymnapogon urospilotus Lachner, 1953 III  
Siphamia versicolor (Smith & Radcliffe, 1911)  
Siphamia fistulosa (Weber, 1909)  
Sphaeramia orbicularis (Cuvier, 1828)  
s Apogonid species (1)

BRANCHIOSTEGIDAE (Tilefishes)

- \* Hoplolatilus starcki Randall & Dooley, 1974



MALACANTHIDAE (False Whitings)

- \* Malacanthus brevirostris Guichenot, 1848 |  
Malacanthus latovittatus (Lacepede, 1802)

ECHENEIDAE (Diskfishes)

- Phtheirichthys lineatus (Menzies, 1791) |  
Remora remora (Linnaeus, 1758) |  
Rhombochirus osteochir (Cuvier, 1829)

CARANGIDAE (Pompanos, Jacks)

- Alectis ciliaris (Bloch, 1787)  
Carangoides malabaricus (Bloch & Schneider, 1801)  
Carangoides orthogrammus (Jordan & Gilbert, 1882)  
Caranx ignobilis (Forsskal, 1755)  
Caranx lugubris Poey, 1861 |  
Caranx melampygus Cuvier, 1833 |  
Caranx sexfasciatus Quoy & Gaimard, 1825 |  
Decapterus pinnulatus (Eydoux & Souleyet, 1841)  
Elagatis bipinnulatus (Quoy & Gaimard, 1824)  
Gnathanodon speciosus (Forsskal, 1775) |  
Naucates ductor (Linnaeus, 1758)  
Scomberoides lysan (Forsskal, 1775) |  
Selar crumenophthalmus (Bloch, 1793).  
Seriola songoro Smith, 1959  
Trachinotus bailloni (Lacepede, 1802)  
Trachinotus blochii (Lacepede, 1802)  
Uraspis helvolus (Forster, 1833)

CORYPHAENIDAE (Dolphinfishes, Mahi-Mahi)

- Coryphaena hippurus Linnaeus, 1758

LEIOGNATHIDAE (Ponyfishes)

- Leiognathus equulus (Forsskal, 1775) "  
Gazza achlamys Jordan & Evermann, 1917 "

BRAMIDAE (Pomfrets)

- Eumegistus illustris Jordan & Evermann

EMMELICHTHYIDAE (Bonnetmouths)

- Emmelichthys karnellai Heemstra & Randall, 1977

LUTJANIDAE (Snappers)

- Aphareus furcatus (Lacepede, 1802) |  
Aphareus rutilans (Cuvier, 1830) |  
Aprion virescens Valenciennes, 1830

Etelis carbunculus Cuvier, 1828  
Etelis marshi (Jenkins, 1908)  
Lutjanus argentimaculatus (Forsskal, 1775)  
Lutjanus bohar (Forsskal, 1775)  
Lutjanus fulvus (Bloch & Schneider, 1801)  
Lutjanus gibbus (Forsskal, 1775)  
Lutjanus kasmira (Forsskal, 1775) ///  
Lutjanus lineolatus (Ruppell, 1828)  
Lutjanus monostigmus (Cuvier, 1828)  
Macolor niger (Forsskal, 1775) |||  
Paracaesio sordidus Abe & Shinohara, 1962  
Paracaesio xanthurus (Bleeker, 1875)  
Pristipomoides auricilla (Jordan, Evermann & Tanaka, 1927) |  
Pristipomoides filamentosus (Valenciennes, 1830) /  
Pristipomoides flavipinnis Shinohara, 1963  
Pristipomoides sieboldii (Bleeker, 1857) |  
Randallichthys filamentosus (Fourmanoir, 1970)  
Symphysanodon typus (Bleeker, 1852)  
Tropidinius amoenus (Snyder, 1911)  
Tropidinius zonatus (Valenciennes, 1830)

CAESIONIDAE (Fusiliers)

Caesio caeruleus Lacepede, 1802  
s+s Caesio xanthonotus Bleeker, 1853  
| Pterocaesio chrysozona (Cuvier, 1830)  
Pterocaesio tile (Cuvier, 1830)

NEMIPTERIDAE (Monocle Breems)

Scolopsis cancellatus (Cuvier, 1830)

GERREIDAE (Mojarras)

Gerres argyreus (Bloch & Schneider, 1801)  
Gerres kappas Bleeker, 1851  
Gerres oblongus Cuvier, 1830 |  
Gerres oyena (Forsskal, 1775)

HAEMULIDAE (Sweetlips)

Plectorhynchus diagrammus Linnaeus, 1758  
Plectorhynchus lineatus (Linnaeus, 1758)  
Plectorhynchus nigrus (Cuvier, 1830)  
Plectorhynchus orientalis (Bloch, 1793)  
Plectorhynchus schotaf (Forsskal, 1775)

LETHRINIDAE (Emperors)

Gnathodentex aureolineatus (Lacepede, 1803)  
s Gymnocranius griseus (Schlegel, 1843)  
Lethrinus amboinensis Bleeker, 1854  
Lethrinus harak (Forsskal, 1775)



- § Lethrinus mahsena (Forsskal, 1775)  
Lethrinus miniatus (Bloch & Schneider, 1801)  
? Lethrinus ornatus Valenciennes, 1830  
Lethrinus ramak (Forsskal, 1775)  
Lethrinus rubrioperculatus Sato, 1978  
Lethrinus semicinctus Valenciennes, 1830  
Lethrinus xanthochilus Klunzinger, 1870  
Monotaxis grandoculis (Forsskal, 1775)

PENTAPODIDAE

- § Pentapodus macrurus (Bleeker, 1850)

MULLIDAE (Goatfishes)

- Mulloidichthys flavolineatus (Lacepede, 1802)  
Mulloidichthys pflugeri (Steindachner, 1900)  
Mulloidichthys vanicolensis (Valenciennes, 1831)  
Parupeneus barberinus (Lacepede, 1802) ||  
Parupeneus bifasciatus (Lacepede, 1802) |||  
Parupeneus chryserydros (Lacepede, 1802) |  
Parupeneus luteus (Cuvier & Valenciennes, 1831) ||  
Parupeneus pleurostigma (Bennett, 1831) ||  
Parupeneus pleurotaenia (Playfair, 1866) |||  
Parupeneus trifasciatus (Lacepede, 1802) |||  
Upeneus arge Jordan & Evermann, 1902  
Upeneus vittatus (Forsskal, 1775) |

MONODACTYLIDAE (Fingerfishes)

- Monodactylus argenteus (Linnaeus, 1758) |

PEMPHERIDAE (Sweepers)

- Pempheris oualensis Cuvier, 1831 ||| ||| ||

KYPHOSIDAE (Rudderfishes)

- Kyphosus cinerascens (Forsskal, 1775) |  
Kyphosus lembus (Cuvier, 1831) |

EPHIPPIDAE (Batfishes)

- Platax orbicularis (Forsskal, 1775)

CHAETODONTIDAE (Butterflyfishes)

- Chaetodon auriga Forsskal, 1775 ||| ||| ||  
Chaetodon bennetti Cuvier, 1831 |||  
Chaetodon citrinellus Cuvier, 1831 ||| ||| ||  
Chaetodon ephippium Cuvier, 1831 ||| |||  
Chaetodon flavocoronatus Myers, 1981  
Chaetodon kleinii Bloch, 1790 |||



Chaetodon lineolatus Cuvier, 1831  
Chaetodon lunula (Lacepede, 1803) ~~///~~ ~~///~~ ~~///~~  
Chaetodon melannotus Schneider, 1801 ~~///~~  
Chaetodon mertensii Cuvier, 1831 ~~///~~ ~~///~~  
Chaetodon modestus Schlegel, 1842 ~~///~~  
Chaetodon ornatissimus Cuvier, 1831 ~~///~~ ~~///~~ ~~///~~  
Chaetodon punctatofasciatus Cuvier, 1831 ~~///~~ ~~///~~ ~~///~~  
Chaetodon quadrimaculatus Gray, 1831 ~~///~~ ~~///~~ ~~///~~  
Chaetodon reticulatus Cuvier, 1831 ~~///~~ ~~///~~ ~~///~~  
Chaetodon trifasciatus Park, 1797 ~~///~~ ~~///~~ ~~///~~  
Chaetodon ulietensis Cuvier, 1831  
Chaetodon unimaculatus Bloch, 1787 ~~///~~ ~~///~~  
Chaetodon vagabundus Linnaeus, 1758  
Forcipiger flavissimus Jordan & McGregor, 1898 ~~///~~  
Forcipiger longirostris (Broussonet, 1782) ~~///~~ ~~///~~ ~~///~~  
Hemitaurichthys polylepis (Bleeker, 1857)  
Hemitaurichthys thompsoni Fowler, 1923 ~~///~~  
Heniochus acuminatus (Linnaeus, 1758)  
Heniochus chrysostomus Cuvier, 1831  
Heniochus monoceros Cuvier, 1831 ~~///~~  
Heniochus singularis Smith & Radcliffe, 1911  
Heniochus varius (Cuvier, 1829) ~~///~~  
Megaprotodon trifascialis (Quoy & Gaimard, 1825)

POMACANTHIDAE (Angelfishes)

Apolemichthys trimaculatus (Cuvier, 1831)  
 \* Centropyge bicolor Bloch, 1787 ~~///~~  
Centropyge bispinosus (Gunther, 1860) ~~///~~ ~~///~~  
Centropyge colini Smith-Vaniz & Randall, 1974  
Centropyge flavissimus (Cuvier, 1831) ~~///~~ ~~///~~ ~~///~~  
Centropyge heraldi Woods & Schultz, 1953 ~~///~~ ~~///~~  
Centropyge loriculus Gunther, 1874  
Centropyge multifasciatus (Smith & Radcliffe, 1911)  
 †T Centropyge nigriocellus Woods & Schultz, 1953  
Centropyge shepardi Randall & Yasuda, 1979  
Centropyge vrolikii (Bleeker, 1853)  
Genicanthus bellus Randall, 1975  
Genicanthus lamarck (Lacepede, 1802)  
Genicanthus watanabei (Yasuda & Tominaga, 1970)  
Pomacanthus imperator (Bloch, 1787) ~~///~~ ~~///~~ ~~///~~  
Pygloplites diacanthus (Boddaert, 1772) ~~///~~ ~~///~~ ~~///~~

POMACENTRIDAE (Damsel-fishes)

Abudefduf septemfasciatus (Cuvier, 1830) ~~///~~ ~~///~~ ~~///~~  
Abudefduf sexfasciatus (Lacepede, 1802)  
Abudefduf sordidus (Forsskal, 1775) ~~///~~  
Abudefduf vaigiensis (Quoy & Gaimard, 1825)  
Amblyglyphidodon aureus (Cuvier, 1830)  
Amblyglyphidodon curacao (Bloch, 1787) ~~///~~ ~~///~~ ~~///~~  
Amphiprion chrysopterus Cuvier, 1830 ~~///~~ ~~///~~ ~~///~~  
Amphiprion clarkii (Bennett, 1830)

- Amphiprion melanopus Bleeker, 1852 ~~///~~ ~~///~~  
Amphiprion perideraion Bleeker, 1855 ~~||~~  
Chromis acares Randall & Swerdloff, 1973  
Chromis agilis Smith, 1960 ~~|~~  
Chromis amboinensis (Bleeker, 1873)  
Chromis analis (Cuvier, 1830)  
Chromis atripectoralis Welander & Schultz, 1951  
Chromis caerulea (Cuvier, 1830) ~~///~~ ~~|~~  
Chromis elerae Fowler & Bean, 1928  
Chromis lepidolepis Bleeker, 1877 ~~|~~  
Chromis margaritifer Fowler, 1946  
Chromis vanderbilti (Fowler, 1941) ~~///~~  
Chromis xanthura (Bleeker, 1854)  
Chromis sp.1  
 § Chromis sp.2  
Chrysiptera biocellatus (Quoy & Gaimard, 1824)  
 § Chrysiptera caeruleolineatus (Allen, 1973)  
Chrysiptera glaucus (Cuvier, 1830)  
Chrysiptera leucopomus (Lesson, 1830)  
Chrysiptera traceyi (Woods & Schultz, 1960)  
Dascyllus aruanus (Linnaeus, 1758) ~~///~~ ~~///~~  
Dascyllus reticulatus (Richardson, 1846) ~~///~~ ~~///~~  
Dascyllus trimaculatus (Ruppell, 1828) ~~///~~ ~~///~~  
 ? Dischistodus perspicillatus (Cuvier, 1830)  
Plectroglyphidodon dickii (Lienard, 1839) ~~///~~ ~~||~~  
Plectroglyphidodon imparipennis (Vaillant & Sauvage, 1875) ~~///~~  
Plectroglyphidodon johnstonianus Fowler & Ball, 1924 ~~|~~  
Plectroglyphidodon lacrymatus (Quoy & Gaimard, 1825) ~~///~~ ~~|~~  
Plectroglyphidodon leucozonus (Bleeker, 1859) ~~|~~  
Plectroglyphidodon phoenixensis (Schultz, 1943) ~~///~~ ~~///~~  
Pomacentrus amboinensis Bleeker, 1868 ~~///~~  
Pomacentrus pavo (Bloch, 1787) ~~||~~  
Pomacentrus vaiuli Jordan & Seale, 1906 ~~///~~ ~~///~~  
Pomachromis guamensis Allen & Larson, 1975  
Stegastes albifasciatus (Schlegel & Muller, 1839-44)  
Stegastes fasciolatus (Ogilby, 1889)  
Stegastes lividus (Bloch & Schneider, 1801)  
Stegastes nigricans (Lacepede, 1803)

CIRRHITIDAE (Hawkfishes)

- Amblycirrhites bimacula (Jenkins, 1903) ~~||~~  
Cirrhitichthys falco Randall, 1963 ~~|~~  
Cirrhites pinnulatus (Bloch & Schneider, 1801) ~~///~~ ~~||~~  
Neocirrhites armatus Castelnau, 1873 ~~///~~ ~~///~~  
 \* Oxycirrhites typus Bleeker, 1857  
Paracirrhites arcatus (Cuvier, 1829) ~~||~~  
Paracirrhites forsteri (Bloch & Schneider, 1801) ~~///~~ ~~///~~ ~~///~~  
Paracirrhites hemistictus (Gunther, 1874) ~~///~~ ~~||~~



MUGILIDAE (Mulletts)

Chelon engeli (Bleeker, 1858) ||  
Crenimugil crenilabis (Forsskal, 1775) |||  
Liza vaigiensis (Quoy & Gaimard, 1824)  
Mugil cephalus Linnaeus, 1758 ||  
Neomyxus leuciscus (Gunther, 1871)  
Valamugil seheli (Forsskal, 1775)

SPHYRAENIDAE (Barracudas)

Sphyraena barracuda (Walbaum, 1792) |  
Sphyraena chinensis Lacepede, 1803 |  
Sphyraena forsteri (Cuvier, 1829)  
Sphyraena helleri Jenkins, 1901

POLYNEMIDAE (Threadfins)

Polynemus sexfilis Valenciennes, 1831

LABRIDAE (Wrasses)

Anampses caeruleopunctatus Ruppell, 1828 ||||  
Anampses meleagrides Valenciennes, 1839 |  
Anampses twistii (Bleeker, 1856) ||  
Bodianus axillaris (Bennett, 1831) ||| ||| ||  
\* Cheilinus bimaculatus Valenciennes, 1839  
Cheilinus celebicus Bleeker, 1853 |  
Cheilinus chlorourus (Bloch, 1791) |  
Cheilinus fasciatus (Bloch, 1791) |  
Cheilinus oxycephalus Bleeker, 1853  
Cheilinus rhodochrous Gunther, 1866 ||||  
Cheilinus trilobatus Lacepede, 1802 ||  
Cheilinus undulatus Ruppell, 1835 ||  
Cheilinus sp.  
Cheilio inermis (Forsskal, 1775) |||  
? Choerodon anchorago (Bloch, 1791)  
Cirrhilabrus katherinae Shepard & Randall  
Coris aygula Lacepede, 1802 ||||  
Coris gaimard (Quoy & Gaimard, 1824) ||| |  
Cymolutes praetextatus (Quoy & Gaimard, 1834)  
Epibulus insidiator (Pallas, 1770) ||| ||  
Gomphosus varius Lacepede, 1802 ||| |||  
Halichoeres biocellatus Schultz, 1960 ||  
Halichoeres hartzfeldi (Bleeker, 1852)  
Halichoeres hortulanus (Lacepede, 1802) ||| |||  
Halichoeres margaritaceus (Valenciennes, 1839) |||  
Halichoeres marginatus Ruppell, 1835 ||| ||| ||  
Halichoeres trimaculatus (Quoy & Gaimard, 1834) ||| ||  
Hemigymnus fasciatus (Bloch, 1792) |||  
Hemigymnus melapterus (Bloch, 1791) ||||  
Hologymnosus doliatus (Lacepede, 1802)  
Labrichthys unilineatus (Guichenot, 1847)



- Labroides bicolor Fowler & Bean, 1928  
Labroides dimidiatus (Valenciennes, 1839) ||  
Labropsis sp. 1  
Labropsis sp. 2  
Macropharyngodon meleagris (Valenciennes, 1839)  
 +s Novaculichthys macrolepidotus (Bloch, 1791)  
Novaculichthys taeniourus (Lacepede, 1802)  
Pseudocheilinus evanidus Jordan and Evermann, 1903  
Pseudocheilinus hexataenia (Bleeker, 1857)  
Pseudocheilinus octotaenia Jenkins, 1900  
Pseudocheilinus tetrataenia Schultz, 1960  
 \* Pseudojuloides cerasinus (Snyder, 1904)  
Pterogogus guttatus (Fowler & Bean, 1928)  
Stethojulis bandanensis (Bleeker, 1851)  
Stethojulis strigiventer (Bennett, 1832) ||  
Thalassoma amblycephalum (Bleeker, 1856) ||  
Thalassoma fuscum (Lacepede, 1802) ||  
Thalassoma hardwickei (Bennett, 1830) ||  
Thalassoma lutescens (Lay & Bennett, 1839) || || ||  
Thalassoma purpureum (Forsskal, 1775) ||  
Thalassoma quinquevittatum (Lay & Bennett, 1839) || || || ||  
Wetmorella philippina Fowler & Bean, 1928  
Xyrichtys pavo (Valenciennes, 1839)  
 \* Xyrichtys sp.

SCARIDAE (Parrotfishes)

- \* Bolbometapon muricatus (Valenciennes, 1839)  
Calotomus sandwicensis (Valenciennes, 1839)  
Cetoscarus bicolor (Ruppell, 1828)  
Hipposcarus harid (Forsskal, 1775)  
Leptoscarus vaigiensis (Quoy & Gaimard, 1824) |  
Scarus brevifilis (Gunther, 1909)  
 \* Scarus frenatus Lacepede, 1802  
Scarus ghobban Forsskal, 1775 |  
Scarus gibbus Ruppell, 1828  
 f Scarus globiceps Valenciennes, 1839 |  
Scarus jonesi (Streets, 1877)  
Scarus lepidus Jenyns, 1842  
 \* Scarus oviceps Valenciennes, 1839  
Scarus psittacus Forsskal, 1775  
Scarus rubroviolaceus (Bleeker, 1849)  
Scarus schlegelii (Bleeker, 1861)  
Scarus sordidus Forsskal, 1775 || ||  
Scarus sp. |

CHAMPSODONTIDAE (Gapers)

Champsodon vorax Gunther, 1880

MUGILOIDIDAE (Sand Perches)

Parapercis cephalopunctata (Seale, 1901) ~~FN~~ ||  
Parapercis clathrata Ogilby, 1910 ~~N~~ ||

TRICHONOTIDAE (Sand Divers)

Chalixodytes tauensis Schultz, 1943 ||  
Chrionema squamiceps Gilbert, 1905  
Trichonotus sp.  
Trichonotid species (1)

URANOSCOPIDAE (Stargazers)

†R Uranoscopus kaianus Gunther, 1880 |

TRIPTERIGIIDAE (Triplefins)

Enneapterygius hemimelas (Kner & Steindachner, 1866)  
Enneapterygius minutus (Gunther, 1877)  
Enneapterygius nanus (Schultz, 1960)  
Helcogramma capidata Rosenblatt, 1960  
Helcogramma chica Rosenblatt, 1960  
Helcogramma fusipectoris (Fowler)  
Norfolkia brachylepis (Schultz, 1960)

BLENNIIDAE (Blennies)

Alticus poptae (Fowler, 1925)  
Alticus saliens (Lacepede, 1800) ||||  
Aspidontus taeniatus Quoy & Gaimard, 1834 ||||  
Cirripectes fuscoguttatus Strasburg & Schultz, 1953 ||  
Cirripectes quagga (Fowler & Ball, 1924)  
Cirripectes sebae (Valenciennes, 1836) ||  
Cirripectes variolosus (Valenciennes, 1836) ~~FN~~ ~~FN~~ ||  
Ecsenius bicolor (Day, 1888) ||  
Ecsenius opisfrontalis Chapman & Schultz, 1952  
Enchelyurus kraussi (Klunzinger, 1871) |  
Entomacrodus decussatus (Bleeker, 1858) ~~FN~~  
Entomacrodus niuafoensis (Fowler, 1932) |  
Entomacrodus sealei Bryan & Herre, 1903 ||||  
Entomacrodus striatus (Quoy & Gaimard, 1836) ~~FN~~ ||||  
Entomacrodus thalassinus (Jordan & Seale, 1906) ||||  
Exallias brevis (Kner, 1868) ||||  
Istiblennius coronatus (Gunther, 1872) |  
Istiblennius cyanostigma (Bleeker, 1849) ~~FN~~  
Istiblennius edentulus (Bloch & Schneider, 1801) ~~FN~~ ||||  
Istiblennius lineatus (Valenciennes, 1836) ||||  
Istiblennius periophthalmus (Valenciennes, 1836) |  
Istiblennius paulus (Bryan & Herre, 1903) |  
Meiacanthus atrodorsalis (Gunther, 1877) ~~FN~~ ~~FN~~  
Omobranchus rotundiceps obliquus (Garman, 1903)  
Parenchelyurus hepburni (Snyder, 1908) |



Petroscirtes mitratus (Ruppell, 1830) |||  
Petroscirtes xestus Jordan & Seale, 1906  
Plagiotremus laudandus (Whitley, 1961) |  
Plagiotremus rhynorhynchus (Bleeker, 1852)  
Plagiotremus tapeinosoma (Bleeker, 1857)  
Praealticus amboinensis litteratus Schultz, 1960  
Praealticus natalis (Regan, 1909) ||||  
Rhabdoblennius nitidus (Gunther, 1861)  
Rhabdoblennius rhabdotrachelus (Fowler & Ball, 1924)  
Rhabdoblennius snowi (Fowler, 1928) |||  
Salarias fasciatus (Bloch, 1786) ||||  
Stanulus seychellensis Smith, 1959

ELEOTRIDAE (Sleepers)

FW Eleotris fusca (Bloch & Schneider, 1801) ||||  
 FW Eleotris miniatus Seale

GOBIIDAE (Gobies)

Acentrogobius belissimus Smith ||  
Amblyeleotris guttatus (Fowler, 1938)  
 § Amblyeleotris steinitzi (Klausewitz, 1974)  
 § Amblyeleotris sp.  
Amblygobius ablbimaculatus (Ruppell, 1828) |||  
Amblygobius decussatus (Bleeker, 1855)  
Asterropteryx semipunctatus Ruppell, 1828 ||||  
Austrolethops wardi Whitley, 1935 ||  
 FW Awaous guamensis (Valenciennes, 1837)  
Bathygobius cotticeps (Steindachner, 1879) ||||  
Bathygobius fuscus (Ruppell, 1828) ||||  
Callogobius sclateri (Steindachner, 1880) ||  
Calumia godeffroyi (Gunther, 1877)  
Cottogobius sp.1  
Cottogobius sp.2  
Cryptocentrus koumansii (Whitley, 1933)  
 § Ctenogobiops pomastictus Lubbock & Polunin, 1977  
Ctenogobiops tangaroai Lubbock & Polunin, 1977  
Drombus irrasus Smith, 1959 ||  
Drombus plumatus Smith, 1959 |  
Eviota afelei Jordan & Seale, 1906  
Eviota distigma Jordan & Seale, 1906 ||  
Eviota epiphanes Jenkins, 1903  
Eviota nebulosa Smith, 1958  
Eviota pellucidus Larson, 1976  
Eviota prasites Jordan & Seale, 1906  
Eviota smaragdus Jordan & Seale, 1906 ||||  
Eviota zonura Jordan & Seale, 1906 ||||  
Eviota sp. |||  
Fusigobius neophytus (Gunther, 1877) ||||  
Fusigobius sp.  
Glossogobius biocellatus (Valenciennes, 1837) |||  
Gnatholepis sp.1 cf. cauerensis (Bleeker, 1853)



- s Gnatholepis sp.2  
Gobiodon citrinus (Ruppell, 1835) |  
Gobiodon quinquestrigatus (Cuvier, 1837)  
+s Gobiodon rivulatus Ruppell, 1828  
+t Hazeus unisquamis Gosline, 1959 |  
Istigobius ornatus (Ruppell, 1828)  
Istigobius spence (Smith, 1947)  
Kellogella cardinalis Jordan & Seale, 1906 ~~FW~~ ~~FW~~ ||  
Lotilia graciliosa Klausewitz, 1960  
Microsicydium elegans (Steindachner, 1880) |||  
Nemateleotris helfrichi Randall & Allen, 1973  
Nemateleotris magnifica Fowler, 1938 ||  
Oplopomus oplopomus (Cuvier & Valenciennes, 1837)  
Oxyurichthys guibei Smith ||  
Oxyurichthys ophthalmonema (Bleeker, 1856) |  
Oxyurichthys papuensis (Valenciennes, 1837)  
Paragobiodon echinocephalus (Ruppell, 1828) ||  
Periophthalmus koelreuteri (Pallas, 1770) ||  
Pleurosicya bilobatus (Koumans, 1941)  
Pogonoculius zebra Fowler, 1928  
Priolepis semidoliatus (Valenciennes, 1837)  
Ptereleotris evides (Jordan & Hubbs, 1925)  
Ptereleotris heteropterus (Bleeker, 1855)  
Ptereleotris microlepis Bleeker, 1856) ||  
Quisquilius inhaca (Smith, 1949) |  
Redigobius sp.  
Rhinogobius decoratus Herre, 1927 ||| |  
FW Sicyopterus macrostetholepis (Bleeker) |  
Stigmatogobius versicolor Smith, 1959 |  
Taenaeoides gertrudae Fowler, 1925  
Taenioides limicola Smith, 1964  
Tamanka tagala Herre, 1927 |  
Trimma sp.1  
Trimma sp.2  
Vaimosa villa Herre, 1927  
Valenciennesia pullaris (Tomiya, 1955)  
Valenciennesia strigatus (Broussonet, 1872)  
Vanderhorstia ornatissima Smith, 1959 |

KRAEMERIIDAE (Sand Lances)

Kraemeria samoensis Steindachner, 1906

MICRODESMIDAE (Wormfishes)

- +s Gunnellichthys monostigma Smith, 1958  
Gunnellichthys pleurotaenia Bleeker, 1858

ACANTHURIDAE (Surgeonfishes)

Acanthurus achilles Shaw, 1803 | |  
Acanthurus glaucopareius Cuvier, 1829 ~~FW~~ ~~FW~~ ||  
Acanthurus guttatus Bloch & Schneider, 1801 ~~FW~~ ~~FW~~ ~~FW~~ ~~FW~~ |

Acanthurus leucopareius (Jenkins, 1903) #  
Acanthurus lineatus (Linnaeus, 1758) # # # # #  
Acanthurus mata (Cuvier, 1829)  
Acanthurus nigricaudus Dunker & Mohr, 1929  
Acanthurus nigrofuscus (Forsskal, 1775) # # # # #  
Acanthurus nigroris Valenciennes, 1835 #  
Acanthurus olivaceus Bloch & Schneider, 1801 # # #  
Acanthurus pyroferus Kittlitz, 1834 # # #  
Acanthurus thompsoni (Fowler, 1923) #  
Acanthurus triostegus (Linnaeus, 1835) # # # # #  
Acanthurus xanthopterus Valenciennes, 1835 #  
Ctenochaetus binotatus Randall, 1955 # # #  
Ctenochaetus hawaiiensis Randall, 1955 # # #  
Ctenochaetus striatus (Quoy & Gaimard, 1824) # # # # #  
Naso annulatus (Quoy & Gaimard, 1825) # # # # #  
\* Naso brevirostris (Valenciennes, 1835) # # # # #  
Naso brachycentron (Valenciennes, 1835) # # # # #  
Naso hexacanthus (Bleeker, 1855) # # # # #  
Naso lituratus (Bloch & Schneider, 1801) # # # # #  
Naso tuberosus (Lacepede, 1802) # # # # #  
Naso unicornis (Forsskal, 1775) # # # # #  
Naso vlamingi (Valenciennes, 1835) # # # # #  
Paracanthurus hepatus (Linnaeus, 1766) # # # # #  
Zebrasoma flavescens (Bennett, 1828) # # # # #  
Zebrasoma scopas (Cuvier, 1829) # # # # #  
Zebrasoma veliferum (Bloch, 1797) # # # # #

ZANCLIDAE (Moorish Idols)

Zanclus cornutus (Linnaeus, 1758) # # # # #

SIGANIDAE (Rabbitfishes)

Siganus argenteus (Quoy & Gaimard, 1825) # # # # #  
Siganus doliatus (Valenciennes, 1835) # # # # #  
Siganus fuscescens (Houttuyn, 1782) # # # # #  
Siganus punctatus (Bloch & Schneider, 1801) # # # # #  
Siganus spinus (Linnaeus, 1758) # # # # #  
Siganus vermiculatus (Valenciennes, 1835) # # # # #

GEMPYLIDAE (Oilfish or Snake Mackerels)

Prometheichthys prometheus (Cuvier, 1831) # # # # #  
Ruvettus pretiosus Cocco, 1829 # # # # #  
Thyrisitoides marleyi Fowler # # # # #

SCOMBRIDAE (Tunas)

Acanthocybium solandri (Cuvier, 1832) # # # # #  
Euthynnus affinis (Cantor, 1850) # # # # #  
Grammatorcynus bicarinatus (Quoy & Gaimard, 1824) # # # # #  
Gymnosarda unicolor (Ruppell, 1838) # # # # #  
Katsuwonus pelamis (Linnaeus, 1758) # # # # #



Thunnus albacares (Bonnaterre,1788)

XIPHIIDAE (Broadbill Swordfish)

Xiphias gladius Linnaeus,1758

ISTIOPHORIDAE (Sailfishes, Marlins)

Istiophorus orientalis (Schlegel,1842)

Makaira ampla (Poey,1860)

NOMEIDAE (Man-Of-War Fishes)

Psenes cyanophrys Cuvier,1833

GOBIESOCIDAE (Clingfishes)

Aspasma sp.

Lepadichthys minor Briggs,1957

†s Liobranchia stria Briggs,1955

CALLIONYMIDAE (Dragonets)

Callionymus calliste Jordan & Fowler,1903

Callionymus xanthosemeion (Fowler,1925)!!!

Diplogrammus goramensis (Bleeker,1858)!!

Synchiropus sp.1

Synchiropus sp.2

BOTHIDAE (Lefteye Flounders)

Bothus mancus (Broussonet,1782)!!!

Bothus pantherinus (Ruppell,1831)!!

SOLEIDAE (Soles)

Aesopia heterorhinos (Bleeker,1856)!!!

Aseraggodes melanostictus (Peters,1876)!

BALISTIDAE (Triggerfishes)

Balistapus undulatus (Park,1797)!!!!

Balistoides conspicillum (Bloch & Schneider,1801)

Balistoides viridescens (Bloch & Schneider,1801)

Canthidermis maculatus (Bloch,1786)

Melichthys niger (Bloch,1786)

Melichthys vidua (Solander,1844)!!!!

Odonus niger (Ruppell,1835)!!

Pseudobalistes flavomarginatus (Ruppell,1828)

Pseudobalistes fuscus (Bloch & Schneider,1801)

Rhinecanthus aculeatus (Linnaeus,1758)!!!!

Rhinecanthus echarpe (Lacepede,1798)

Sufflamen bursa (Bloch & Schneider,1801)



- Sufflamen chrysopterus (Bloch & Schneider, 1801) ~~||||~~ ~~|||~~  
Sufflamen fraenatus (Latreille, 1804)  
 § Xanthichthys auromarginatus (Bennett, 1831)  
Xanthichthys caeruleolineatus Randall, Matsuura & Zama, 1978

MONACANTHIDAE (Filefishes)

- Alutera scripta (Osbeck, 1765)  
Amanses scopas (Cuvier, 1829) |  
Cantherhines dumerilli (Hollard, 1854)  
Cantherhines pardalis (Ruppell, 1835)  
Oxymonacanthus longirostris (Bloch & Schneider, 1801) ~~||~~  
Paraluteres prionurus Bleeker, 1851 ~~|||~~  
Pervagor melanocephalus (Bleeker, 1853) ~~||||~~

OSTRACIONTIDAE (Boxfishes, Cowfishes)

- Lactoria cornuta (Linnaeus, 1758) ~~|||~~  
Ostracion cubicus Linnaeus, 1758 ~~|||~~  
Ostracion meleagris Shaw, 1796 ~~|||~~

TRIODONTIDAE (Tripletooth Puffers)

- Triodon bursarius Reinwardt, 1829

TETRAODONTIDAE (Smooth Puffers)

- Arothron hispidus (Linnaeus, 1758) ~~|||~~  
Arothron immaculatus (Bloch & Schneider, 1801) ~~|||~~  
Arothron meleagris Lacepede, 1798 ~~|||~~ |  
Arothron nigropunctatus (Bloch & Schneider, 1801) ~~|||~~ ~~|||~~ ||  
Arothron stellatus (Bloch & Schneider, 1801)  
Canthigaster amboinensis (Bleeker, 1865)  
Canthigaster bennetti (Bleeker, 1854)  
Canthigaster coronata (Vaillant & Sauvage, 1875)  
Canthigaster epilampra (Jenkins, 1903)  
Canthigaster janthinoptera (Bleeker, 1855)  
 § Canthigaster leoparda Lubbock & Allen, 1979  
Canthigaster solandri (Richardson, 1844)  
Canthigaster valentini (Bleeker, 1853)  
Lagocephalus lagocephalus (Linnaeus, 1758)

DIODONTIDAE (Porcupinefishes)

- Diodon hystrix Linnaeus, 1758 ||

The following list of introduced species which have apparently become established in Guam's freshwaters was provided by Clifford P. Neubauer.

ANABANTIDAE

Beta brederi Myers

CICHLIDAE

Astronotus ocellatus (Cuvier)  
Sarotherodon mossambica (Peters)  
Tilapia zilli (Geruais) |

CLARIIDAE

Clarius batrachus (Linnaeus) |

POECILIIDAE

Gambusia affinis (Baird & Girard) ||  
Poecilia latipinna (Le Sueur)  
Poecilia reticulatus (Peters)  
Xiphophorus helleri (Hekel)

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