Catalog of the Type Specimens of Stony Corals (Milleporidae, Stylasteridae, Scleractinia) in the National Museum of Natural History, Smithsonian Institution

STEPHEN D. CAIRNS

SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY · NUMBER 514

SERIES PUBLICATIONS OF THE SMITHSONIAN INSTITUTION

Emphasis upon publication as a means of "diffusing knowledge" was expressed by the first Secretary of the Smithsonian. In his formal plan for the Institution, Joseph Henry outlined a program that included the following statement: "It is proposed to publish a series of reports, giving an account of the new discoveries in science, and of the changes made from year to year in all branches of knowledge." This theme of basic research has been adhered to through the years by thousands of titles issued in series publications under the Smithsonian imprint, commencing with *Smithsonian Contributions to Knowledge* in 1848 and continuing with the following active series:

> Smithsonian Contributions to Anthropology Smithsonian Contributions to Astrophysics Smithsonian Contributions to Botany Smithsonian Contributions to the Earth Sciences Smithsonian Contributions to the Marine Sciences Smithsonian Contributions to Paleobiology Smithsonian Contributions to Zoology Smithsonian Contributions to Zoology Smithsonian Folklife Studies Smithsonian Studies in Air and Space Smithsonian Studies in History and Technology

In these series, the Institution publishes small papers and full-scale monographs that report the research and collections of its various museums and bureaux or of professional colleagues in the world of science and scholarship. The publications are distributed by mailing lists to libraries, universities, and similar institutions throughout the world.

Papers or monographs submitted for series publication are received by the Smithsonian Institution Press, subject to its own review for format and style, only through departments of the various Smithsonian museums or bureaux, where the manuscripts are given substantive review. Press requirements for manuscript and art preparation are outlined on the inside back cover.

> Robert McC. Adams Secretary Smithsonian Institution

Catalog of the Type Specimens of Stony Corals (Milleporidae, Stylasteridae, Scleractinia) in the National Museum of Natural History, Smithsonian Institution

Stephen D. Cairns



SMITHSONIAN INSTITUTION PRESS Washington, D.C. 1991

ABSTRACT

Cairns, Stephen D. Catalog of the Type Specimens of Stony Corals (Milleporidae, Stylasteridae, Scleractinia) in the National Museum of Natural History, Smithsonian Institution. Smithsonian Contributions to Zoology, number 514, 59 pages, 1 table, 1991.- A taxonomic and cross-referenced alphabetic catalog is presented of all stony coral type specimens deposited in the National Museum of Natural History (NMNH) as of 1990. The following categories of types are included: holotype, paratype, lectotype, paralectotype, neotype, and syntype. The type specimens of 1107 nominal taxa are cataloged, including 156 calcified hydrozoans (Milleporidae, Stylasteridae) and 951 taxa of Scleractinia. Five data categories are included for each taxon in the alphabetic list: kind of type; catalog number; locality reference; number and nature of specimens; and geologic age. Optional remarks include references to senior synonyms, new generic combinations, authorships of neo- and lectotype designations, and other pertinent nomenclatural data. Special problems concerning the interpretation of the type status of species described by J.D. Dana and T.W. Vaughan are discussed; a table is presented listing new species subsequently derived from Dana's (1846) monograph. A separate bibliography is given of the 185 publications wherein stony coral types are designated that are deposited at the NMNH. Visitation to the NMNH for the purpose of examining the coral collection, and loans, gifts, and exchanges of scientifically valuable corals are encouraged. One taxonomic action is contained herein; Flabellum floridanum is proposed for Flabellum fragile Cairns, a junior primary homonym of Flabellum cuneiforme var. fragile Vaughan.

OFFICIAL PUBLICATION DATE is handstamped in a limited number of initial copies and is recorded in the Institution's annual report, *Smithsonian Year*. SERIES COVER DESIGN: The coral *Montastrea cavernosa* (Linnaeus).

Library of Congress Cataloging-in-Publication Data Caims, Stephen D. Catalog of the type specimens of stony corals (Milleporidae, Stylasteridae, Scleractinia) in the National Museum of Natural History, Smithsonian Institution / Stephen D. Caims. p. cm. - (Smithsonian contributions to zoology; no. 514) Includes bibliographic references (p. Supt of Docs. no.: SI 1.27:514 1. Scleractinia-Type Specimens-Catalogs and collections-Washington (D.C.) 2. National Museum of Natural History (U.S.)-Catalogs. I. Title, II. Series. QL1.S54 no. 514 [QL377.C7] 591 s-dc20 [593.6] 90-10384

^(e) The paper used in this publication meets the minimum requirements of the American National Standard for Permanence of Paper for Printed Library Materials Z39.48—1984.

Contents

Pag									
Introduction									
Organization of the Catalog									
Special Problems									
Loan and Exchange Policy									
List of Abbreviations									
Acknowledgments									
Taxonomic List of Stony Coral Types Deposited in the National Museum									
of Natural History									
Annotated Alphabetic List of Stony Coral Types Deposited in the National									
Museum of Natural History									
Part 1. Hydrozoa (Milleporidae, Stylasteridae)									
Part 2. Anthozoa (Scleractinia)									
Literature Cited									
Publications Wherein Stony Coral Types are Designated that are Deposited at									
the National Museum of Natural History									
Other Literature Cited									

Epigraph

"Every institution in which name-bearing types are deposited should ... (4) publish lists of name-bearing types in its possession or custody; and (5) so far as possible, communicate information concerning name-bearing types when requested." (International Code of Zoological Nomenclature, 1985: Recommendation 72G).

Catalog of the Type Specimens of Stony Corals (Milleporidae, Stylasteridae, Scleractinia) in the National Museum of Natural History, Smithsonian Institution

Stephen D. Cairns

Introduction

In the spirit of Recommendation 72G of the International Code of Zoological Nomenclature (see Epigraph), an annotated listing of all type specimens of stony corals deposited at the National Museum of Natural History (NMNH) is presented. The following kinds of types are included: holotypes, paratypes, lectotypes, paralectotypes, neotypes, and syntypes. Categories of taxa included are: species, subspecies, variety, form, and subform. A total of 2069 specimen type lots representing 1107 nominal taxa are included: 156 taxa of calcified hydrozoans (4 milleporids and 152 stylasterids) and 951 taxa of Scleractinia. This is the first comprehensive, published list of all stony coral types in the NMNH, although partial listings of USNM types were compiled previously: a list of types of Madrepora (= Acropora) by Rathbun (1887); a list of types of Porites and Synaraea (Rathbun, 1888); a list of scleractinian types (Wells, 1952, unpublished); a list of NMNH Dana types (Carpenter, 1973, unpublished); and a listing of the types and hypotypes of 111 selected Tertiary species of Scleractinia (Budd, 1990). Furthermore, both Cairns (1978d) and Zlatarski (1988) published lists of publications wherein types were designated that were deposited at the NMNH. In many cases-especially in the publications of Dana, Vaughan, Verrill, Weisbord, and Wells-this list constitutes the first published record of the catalog number for their type specimens. All types were personally verified as present in 1990.

ORGANIZATION OF THE CATALOG.—The catalog is organized as two lists—taxonomic and alphabetic—which are easily cross-referenced. The taxonomic list is arranged by family, beginning with the Hydrozoa, and, in general, the scleractinian families are arranged in the order proposed by Wells (1956). Within families, the taxa are arranged alphabetically by genus and then species. Currently accepted generic combinations are used in this list, to the best of my ability to ascertain them through the literature and prepublication review. In cases on controversy concerning the generic placement of species, the most recent revisionary work is used; it is not my intent to decide on taxonomic issues of this nature. The names of Recent species are unprefaced; Tertiary species are prefaced with a "†"; Mesozoic species with a "‡".

The alphabetic list is divided into two parts: part 1 includes the two calcified hydrozoan families; part 2, the anthozoan, or scleractinian, families. The taxa are listed in their original combination and alphabetized by their lowest taxonomic component. Each entry has at least five standard categories of information: kind of type; USNM catalog number; station number or brief locality designation; number and kind of specimens; geologic age; and remarks, if any. The kind of type is always abbreviated (see list of abbreviations) and followed by a colon. Catalog numbers for the stony corals historically derive from three number series. Unprefaced numbers pertain to the current number series in the Department of Invertebrate Zoology. Numbers prefaced with an "M" derived from the Division of Mollusks series, discontinued for corals in approximately 1963. Numbers prefaced with an "I" derived from the Invertebrate Paleontology series and pertain almost exclusively to Mesozoic Scleractinia, which were until recently curated in the Department of Paleobiology. Some "M" and "I" numbers were subsequently recataloged (these numbers are

Stephen D. Cairns, Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560.

This paper was reviewed by J.W. Wells, Cornell University; J.E.N. Veron, Australian Institute of Marine Sciences; A. Budd, University of Iowa; and H. Zibrowius, Station Marine d'Endoume, Marseille.

noted in parentheses) but, in general, all original numbers have been maintained. Catalog numbers are sometimes not assigned if the only material present at the NMNH is an SEM stub. Following the catalog number is a station number or brief locality description for that specimen lot (see abbreviations). This category is not meant to represent the type locality but only to serve as a discriminator among multiple type lots and a confirmation of its type status. Following the location is an indication of how many specimens are present in that lot, as well as an indication of the number of thin sections, histological serial sections, and/or SEM stubs (see abbreviations), if any. All specimens are stored dry, unless indicated otherwise. Specimens obtained by exchange with other institutions and their previous catalog numbers (if known) are also indicated in parentheses in this category, prefaced by an "ex". The last standard category of information lists the geologic age. The optional remarks category includes information such as a reference to the current generic combination, listing of the presumed senior subjective synonym, citations of lecto- and neotype designations, and other pertinent nomenclatural data.

Two lists of references are given following the species list. The first is a list of the 185 publications wherein stony coral types are designated that are deposited at the NMNH. The reader is advised, however, that a reference on this list does not imply that all or even most of its types are deposited at the NMNH, but only that at least one is. The shorter, second list includes references cited in the remarks and introductory section, usually pertaining to: documentation of synonyms, generic transfers, lecto- and neotype designations, and other historical matters.

SPECIAL PROBLEMS .- By far, the largest component of the NMNH coral type collection is the collection of types resulting from the United States Exploring Expedition (Dana, 1846), these specimens forming the nucleus of the coral collection and having the lowest catalog numbers (i.e., 1-700). Unfortunately, Dana did not clearly designate types or publish catalog numbers in his monograph. Furthermore, his descriptions were often inadequate to distinguish specimens (or species) and often were poorly illustrated, or such small portions of the corallum were illustrated that the illustrations are nonspecimen diagnostic. Finally, a large part of this collection was exchanged with the Harvard Museum of Comparative Zoology, Yale Peabody Museum, and the Philadelphia Academy of Sciences. The following approach was taken with the Dana collection. For any species, if it is clear that Dana had only a single specimen available to him and a specimen is found with this name and a label that matches the type locality, this specimen is considered to be the holotype. However, if the original description does not imply a unique specimen, it is assumed that a syntype series exists, even if only one specimen is present at the NMNH. An unpublished list of coelenterate types deposited at the Museum of Comparative Zoology (Opresko, 1982) was of value in confirming the existence of additional specimens in syntype series.

SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY

An added complication related to the Dana U.S. Exploring Expedition coral collection was that, as an appendix to Dana's (1872) Corals and Coral Islands, Verrill (1872) listed all the species treated by Dana (1846) and the names that subsequently came to be applied to them. For instance, in the intervening 26 years (1846 through 1872) many species had been reassigned to different genera and no less than 31 new species and one replacement name described in ten publications (Milne Edwards and Haime, 1850, 1851a, 1851b, 1857, 1860; Verrill, 1864, 1866a, 1869a, 1872; Dana, 1872) had been based on specimens reported by Dana (1846) under older names (Table 1). Many of these 32 species were given the name danae in honor of J.D. Dana. Twelve of the 32 species were established by Verrill (1872) in the appendix simply by placing a new name opposite the name that Dana originally used. Unfortunately, Verrill's (1872) list is confusing, since he does not give year of authorship for the new species and often misleadingly places his own name after new generic combinations. In an effort to indicate precisely which new species were subsequently based on Dana's (1846) monograph, Table 1 is presented, listing the names that Dana used, the 31 new species and one replacement name (with authorship), the current classification of the species, and the catalog number, if known. Much of this information can also be extracted from the annotated species list. At least one more new species was based on Dana's (1846) specimens: Madrepora secale Studer, 1878, which is also listed in Table 1.

The interpretation of T.W. Vaughan's type concept also requires some explanation. Vaughan often clearly designated his type specimens in publication or expressly excluded specimens from a type series (International Code of Zoological Nomenclature, 1985: Article 72(b)1), but he also frequently listed all material examined and designated one specimen as the "type" and perhaps another specimen as the "cotype". According to Article 72(b)6 (International Code of Zoological Nomenclature, 1985), the "type" is considered to be the holotype, the "cotypes" as paratypes, and the remaining specimens as non-type specimens. This rule is occasionaly overruled by the presence of museum labels in Vaughan's handwriting that clearly indicate his intentions regarding the types status of various specimens (International Code of Zoological Nomenclature, 1985: Recommendation 72B). The same reasoning is applied to the types designated by Hoffmeister.

LOAN AND EXCHANGE POLICY.—One of the primary purposes of a museum type collection is to serve as a reference tool for systematic revision, and, as such, should be made accessible to the scientific community. Visitors with legitimate scientific interests in the coral collection are welcome at the NMNH, but, if a visit cannot be arranged, both type and nontype specimens may be borrowed for six or twelve month periods, respectively. Furthermore, coral specimens of scientific value are welcomed as gifts to the NMNH collections and equivalent exchanges with other scientific institutions of both type and nontype specimens are highly encouraged. The

Dana's (1846) Original Citation	New Species or Nom. Nov. Proposed	Current Senior Synonym	Catalog Number
			C.95764
Astraea (Orbicella) micropthalma (Lamarck)	Cyphastraea danai Milne Edwards and Haime, 1857	Cyphastrea serailia (Forskal, 1775)	
Astraea (Fissicella) porcata (Esper)	Favia danai Milne Edwards and Haime, 1857	Favia danai Milne Edwards and Haime, 1857	H:31; P:32
Astraea (Fiseicella) magnifica (Blainvilla)	Deinantraan enemahilis Verrill 1872	Goniastrasa aspera Verrill 1865	61:H
Astrono (Eisnicallo)		Fault and (Dana 1846)	S:76
Asired (rissueild) versipord (Lamarck)	Astraea purnamu venuu, 1012	1. a Ma panima (1041)	
var. Irom Singapore			<i>m</i> .n
Astraea (Fissicella) denticulata (Ellis and Solander)	Astraea cellulosa Verrill, 1872	Favia pallida (Dana, 1846)	1n
Astraea (Fissicella) reticularis (Lamarck)	Prionastraea agassizi Milne Edwards and Haime, 1857	? Favites agassizi (Verrill, 1872)	1
Astraea (Fissicella) favistella Dana	Astraea pacifica Verrill. 1872	? Favia pacifica (Verrill, 1872)	S:MCZ
var. from Wake's Id			
Astrono (Fissicallo) intersente (Econo)	Discipation area (1872)	Favia stelliosra (Dana 1846)	H:65
Actes (Finish) before a		9 Douiton volting (Visarill 1979)	2
nairueu (r. issuentu) neitupora (Lamarck)	Frionasiraea Valuad Velilli, 1012	1 1. GAMES VIRIAN (TEILIN, 101 2)	
var. Irom Wake's Id.			c
Meandrina phyrgia (Ellis)	Meandrina rudis Verrill, 1872	2	
Fungia echinata (Esper)	Fungia danae Milne Edwards and Haime, 1851a	Fungia horrida Dana, 1846 and F. lacera Verrill, 1866a	L:MNHNP 484 and PL:L
Fungia echinata (Esper)	Funeia lacera Vemill, 1866a	Fungia lacera Verrill, 1866a	H:124
var from Fill			
	1701 II	T	S-MC7 5396
rungia aeniigera (Leuckan)	Lobacits danae Vemul, 1804	rungua sciuaria Lamarck, 1301	
Halomura pileus (Linnacus)	Halomitra clypeus Verrill, 1864	Halomitra pileus (Linnaeus, 1758)	ACT:S
Pavonia boletiformis (Lamarck)	Lophoseris danai Milne Edwards and Haime, 1860	Pavona danai (Milne Edwards and Haime, 1860)	H:136
Aparicia (Undaria) ruoasa (I amarck)	Pachyseris valenciensi Milne Edwards and Haime, 1851a	Pachyseris rugosa (Lamarck, 1801)	2
	D. L	Danimaria Tunana (1901)	S:218. 219
Aguricia (Unuaria) rugosa (Lamarck)	rachyseris monucutosa veitui, 1000	r uchyseris rugosu (Lamach, 1001)	VDV
Agaricia (Mycedium) cristata (Lamarck)	Agaricia danai Milne Edwards and Haime, 1800		
Psammocora plicata (Lamarck)	Psammocora frondosa Verrill, 1872	Psammocora contigua (Esper, 1797)	H:21/
Dendrophyllia coccinea (Ehrenberg)	Dendrophyllia danae Vernill, 1872	Dendrophyllia danae Verrill, 1872	H:182
Astraeopora pulvinaria (1 amarck)	Astraeopora profunda Verrill, 1872	Astreopora myriopthalma (Lamarck, 1816)	H:208
Madrenora deformie Dane 1846	Wednesday Amai Milne Edwards and Haime. 1860 (nom. nov.)	Acrowing danai (Milne Edwards and Haime, 1860)	H:303
Internet porte de journes Dalla, 1040			S-330
Manopora cristagalli (Ehrenberg)	Montipora aspera vernu, 1012		
Manopora foliosa (Pallas)	Montipora ehrenbergi Verrill, 1872		
Manopora tuberculosa (Lamarck)	Montipora danae Milne Edwards and Haime, 1851b	Montipora danae Milne Edwards and Haime, 1851b	L:30/
Alveopora daedalea (Forskal)	Alveopora verrilliana Dana, 1872	Alveopora verrilliana Dana, 1872	S:327
Sideropora palmata (Blainville)	Stylophora danae Milne Edwards and Haime, 1850	2	S:85756
Pocillopora favosa (Ehrenberg)	Pocillopora danae Vernill, 1864	Pocillopora verrucosa (Ellis and Solander, 1786)	H:696
var. from Fili			
Pocillopora favosa (Ehrenberg)	Pocillopora aspera Verrill, 1869a	7	S:698
var. from Sandwich Ids.			
Pocillopora verrucosa (Lamarck)	Pocillopora nobilis Verrill, 1864	Pocillopora meandrina Dana, 1846	S:658
var. from Sandwich Ids.			
Pocillopora plicata Dana	Pocillopora aspera lata Verrill, 1869a	7	7MCZ
var. from Sandwich Ids.			
Porites continua (Hener)	Porites dance Milne Edwards and Haime. 1851b	Psammocora contigua (Esner. 1797)	S:684
rutes contigues (cospect)	1 Offics tartate truther 1878	Arenary sandle (Studer 1878)	MdA·H
maarepora piumaginea (Lamarck)	Muarepora secure onuver, 1010	number accuse formans and	

reported by Dana (1846), and a revision of Verrill (1872). Table arranged by page number (not shown) of Dana (1846). - -----1 Į TABLE 1.--New species based

Taxonomic List of Stony Coral Types Deposited in the National Museum of Natural History

Class HYDROZOA Order HYDROIDA Family MILLEPORIDAE †Milleaster incrustans Ulrich, 1904 *†Milleaster interglacialis* Richards, 1933 †Milleaster ? subramosa Ulrich, 1904 Millepora tortuosa Dana, 1846 Family STYLASTERIDAE Adelopora pseudothyron Caims, 1982b †Astya nielseni Wells, 1977 †Axopora cleithridium (Squires, 1958) Calyptopora reticulata Boschma, 1968a Cheiloporidion pulvinatum Cairns, 1983a Conopora adeta Cairns, 1987 Conopora major Hickson and England, 1905 Conopora tenuis Moseley, 1879 Crypthelia affinis Moseley, 1881 Crypthelia balia Hickson and England, 1905 Crypthelia clausa Broch, 1947 Crypthelia cryptotrema Zibrowius, 1981 Crypthelia cymas Cairns, 1986b Crypthelia dactylopoma Cairns, 1986b Crypthelia eueides Cairns, 1986b Crypthelia floridana Cairns, 1986a Crypthelia formosa Cairns, 1983a Crypthelia fragilis Cairns, 1983a Crypthelia gigantea Fisher, 1938 Crypthelia glebulenta Cairns, 1986b Crypthelia glossopoma Cairns, 1986a Crypthelia insolita Cairns, 1986a Crypthelia lacunosa Cairns, 1986b Crypthelia micropoma Cairns, 1985 Crypthelia papillosa Cairns, 1986a Crypthelia peircei Pourtalès, 1867 Crypthelia platypoma Hickson and England, 1905 Crypthelia ramosa Hickson and England, 1905 Crypthelia stenopoma Hickson and England, 1905 Crypthelia tenuiseptata Cairns, 1986a Crypthelia trophostega Fisher, 1938 Crypthelia vetusta Wells, 1977 Distichopora anceps Cairns, 1978c Distichopora anomala Cairns, 1986a Distichopora barbadensis Pourtalès, 1874 Distichopora borealis Fisher, 1938 Distichopora borealis japonica Broch, 1942 Distichopora cervina Pourtalès, 1871 Distichopora contorta Pourtalès, 1878 Distichopora foliacea Pourtalès, 1868 Distichopora laevigranulosa Cairns, 1986b Distichopora nitida Verrill, 1864

Distichopora rosalindae Cairns, 1986a Distichopora sulcata Pourtalès, 1867 Distichopora uniserialis Cairns, 1986a Distichopora yucatanensis Cairns, 1986a Errina altispina Cairns, 1986a Errina amoena Boschma, 1956 Errina aspera mascarina Boschma, 1965a Errina atlantica Hickson, 1912b Errina boschmai Cairns, 1983a Errina carnea Boschma, 1965b Errina cheilopora Cairns, 1983a Errina cochleata (Pourtalès, 1867) Errina cruenta Boschma, 1968b Errina cyclopora Cairns, 1983a Errina dabneyi (Pourtalès, 1871) Errina gracilis Marenzeller, 1903 Errina macrogastra Marenzeller, 1904 Errina novaezelandiae facies dendyi Hickson, 1912a Errinopora cestoporina Cairns, 1983a Errinopora intervacans Naumov, 1960 Errinopora latifundata Naumov, 1960 Errinopora nanneca Fisher, 1938 Errinopora pourtalesi (Dall, 1884) Errinopora zarhyncha Fisher, 1938 Errinopsis fenestrata Cairns, 1983a Inferiolabiata lowei (Cairns, 1983a) Lepidopora acrolophos Cairns, 1983a Lepidopora biserialis Cairns, 1986a Lepidopora carinata (Pourtalès, 1867) Lepidopora clavigera Cairns, 1986a Lepidopora cryptocymas Cairns, 1985 Lepidopora decipiens (Boschma, 1964a) Lepidopora diffusa (Boschma, 1963) Lepidopora glabra (Pourtalès, 1867) Lepidopora granulosa (Cairns, 1983a) Lepidopora polystichopora Cairns, 1985 Lepidotheca brochi Cairns, 1986a Lepidotheca cervicornis (Broch, 1842) Lepidotheca fascicularis (Cairns, 1983a) Lepidotheca horrida (Hickson and England, 1905) Lepidotheca macropora Cairns, 1986b Lepidotheca pourtalesi Cairns, 1986a Lepidotheca ramosa (Hickson and England, 1905) Lepidotheca tenuistylus (Broch, 1942) Paraerrina decipiens Broch, 1942 Phalangopora regularis Kirkpatrick, 1887 Phalangopora seriatus (Broch, 1942) Pliobothrus echinatus Cairns, 1986a Pseudocrypthelia pachypoma (Hickson and England, 1905)

Sporadopora providentiae Hickson and England, 1909 †Stenohelia boschmai Wells, 1977 Stenohelia concinna Boschma, 1964b Stenohelia pauciseptata Cairns, 1986a Stenohelia robusta Boschma, 1964b Stenohelia tiliatus (Hickson and England, 1905) Stenohelia umbonatus (Hickson and England, 1905) Stylantheca papillosa (Fisher, 1938) Stylantheca petrograpta (Fisher, 1938) Stylantheca porphyra Fisher, 1931 Stylaster amphelioides Kent, 1871 Stylaster antillarum Zibrowius and Cairns, 1982 Stylaster aurantiacus Cairns, 1986a Stylaster bellus Dana, 1846 Stylaster bilobatus Hickson and England, 1905 Stylaster brochi (Fisher, 1938) Stylaster brunneus Boschma, 1970 Stylaster californicus (Verrill, 1866a) Stylaster campylecus (Fisher, 1938) Stylaster campylecus parageus (Fisher, 1938) Stylaster campylecus trachystomus (Fisher, 1938) Stylaster campylecus tylotus (Fisher, 1938) Stylaster cancellatus Fisher, 1938 Stylaster complanatus Pourtalès, 1867 Stylaster corallium Cairns, 1986a Stylaster divergens Marenzeller, 1904 Stylaster duchassaingi Pourtalès, 1867 Stylaster elassotomus Fisher, 1938 Stylaster elegans Verrill, 1864 Stylaster erubescens Pourtalès, 1868 Stylaster eximius forma alta Hickson and England, 1905 Stylaster eximius forma atlantica Broch, 1936 Stylaster eximius forma dentatus Hickson and England, 1905 Stylaster eximius forma irregularis Hickson and England, 1905 Stylaster eximius forma minor Hickson and England. 1905 Stylaster filogranus Pourtalès, 1871 Stylaster galapagensis Cairns, 1986b Stylaster gemmascens alaskanus Fisher, 1938 Stylaster inornatus Cairns, 1986a Stylaster laevigatus Cairns, 1986a Stylaster lonchitis Broch, 1947 Stylaster marenzelleri Cairns, 1986b Stylaster marshae Cairns, 1988b †Stylaster milleri Durham, 1942 Stylaster miniatus (Pourtalès, 1868) Stylaster moseleyanus (Fisher, 1938) Stylaster moseleyanus forma leptostylus (Fisher, 1938) Stylaster moseleyi (Dall, 1884) Stylaster multiplex Hickson and England, 1905 Stylaster papuensis Zibrowius, 1981 Stylaster polyorchis (Fisher, 1938)

Stylaster profunda (Moseley, 1879) Stylaster pulcher Quelch, 1884 Stylaster robustus (Cairns, 1983a) Stylaster rosaceus (Greeff, 1886) Stylaster spatula Cairns, 1986a Stylaster stejnegeri (Fisher, 1938) Stylaster stellulatus Stewart, 1878 Stylaster tenisonwoodsi Cairns, 1988b Stylaster tenuis Verrill, 1864 Stylaster verrillii (Dall, 1884) Class ANTHOZOA Order SCLERACTINIA Family ASTROCOENIIDAE ‡Astrocoenia barranguinensis Wells, 1944a ‡Astrocoenia bellensis Wells, 1933 †Astrocoenia decaturensis Vaughan, 1919 ‡Astrocoenia dietzi Hamilton, 1956 †Astrocoenia guantanamensis Vaughan, 1919 †Astrocoenia jamaicaensis Wells, 1934 †Astrocoenia jukesbrowni Wells, 1945 ‡Astrocoenia maloniana Vaughan, 1905 ‡Astrocoenia martini Smith, 1927 †Astrocoenia meinzeri Vaughan, 1919 ‡Astrocoenia pattoni Wells, 1933 †Astrocoenia portoricensis Vaughan, 1919 ‡Astrocoenia revellei Hamilton, 1956 ‡Astrocoenia shastensis Smith, 1927 †Astrocoenia trechmanni Wells, 1945 †Atopocoenia kugleri Wells, 1974a ‡Epiphaxum labyrinthicum Wells, 1932 †Platycoenia jacksonensis Vaughan, 1900a Stephanocoenia goodei (Verrill, 1900) \$Stephanocoenia guadelupae Wells, 1932 \$Stephanocoenia wintoni Wells, 1933 *†Stylocoenia pumpellyi* (Vaughan, 1900a) *‡Texastrea catenata* Wells, 1973b Family THAMNASTERIIDAE Psammocora brighami (Vaughan, 1907a) Psammocora contigua var. tutuilensis Hoffmeister, 1925 Psammocora danae (Milne Edwards and Haime, 1851b) Psammocora frondosa Verrill, 1872 *Psammocora* gasparillensis Vaughan in Vaughan and Hoffmeister, 1926 Psammocora samoaensis Hoffmeister, 1925 Psammocora stellata (Verrill, 1866b) †Psammocora trinitatis Vaughan in Vaughan and Hoffmeister, 1926 Psammocora verrilli Vaughan, 1907a *†Psammocora wyckoffi* Hoffmeister in Vaughan and Hoffmeister, 1926 *‡Thamnasteria borealis* (Smith, 1927)

†Thamnasteria duncani (Vaughan, 1900a) Family POCILLOPORIDAE ‡Distichophyllia melnikovae Montanaro Gallitelli in Montanaro Gallitelli, Russo, and Ferrari, 1979 †Madracis duncani Wells, 1945 Madracis formosa Wells, 1973a †Madracis ganei Vaughan, 1900a †Madracis gregorioi Vaughan, 1900a †Madracis johnsoni Vaughan, 1900a Madracis kauaiensis Vaughan, 1907a Madracis kauaiensis var. macrocalyx Vaughan, 1907a Madracis senaria Wells, 1974b †Pocillopora arnoldi Vaughan, 1919 Pocillopora aspera Verrill, 1869a *†Pocillopora baracoaensis* Vaughan, 1919 Pocillopora cespitosa Dana, 1846 Pocillopora cespitosa var. lavsanensis Vaughan, 1907a Pocillopora cespitosa var. stylophoroides Vaughan, 1907a Pocillopora cespitosa var. tumida Vaughan, 1907a Pocillopora danae Verrill, 1864 Pocillopora diomedeae Vaughan, 1906a Pocillopora elegans Dana, 1846 Pocillopora frondosa Verrill, 1869a Pocillopora grandis Dana, 1846 †Pocillopora guantanamensis Vaughan, 1919 Pocillopora informis Dana, 1846 Pocillopora modumanensis Vaughan, 1907a Pocillopora molokensis Vaughan, 1907a Pocillopora nobilis Verrill, 1864 Pocillopora nobilis var. tuberosa Verrill, 1869a Pocillopora plicata Dana, 1846 Pocillopora porosa Verrill, 1869a Pocillopora setchelli Hoffmeister, 1929a Pocillopora squarrosa Dana, 1846 †Pocillopora vitiensis Hoffmeister, 1945 Pocillopora woodjonesi Vaughan, 1918 Seriatopora caliendrum gracilis Dana, 1846 Seriatopora hystrix Dana, 1846 †Stylophora cambridgensis Wells, 1934 †Stylophora canalis Vaughan, 1919 Stylophora danae Milne Edwards and Haime, 1850 Stylophora digitata var. coalescens (Dana, 1846) †Stylophora gigas Hoffmeister, 1945 †Stylophora goethalsi Vaughan, 1919 †Stylophora imperatoris Vaughan, 1919 †Stylophora macdonaldi Vaughan, 1919 †Stylophora minutissima Vaughan, 1900a †Stylophora monticulosa Hoffmeister in Vaughan and Hoffmeister, 1925 Stylophora mordax (Dana, 1846) †Stylophora panamensis Vaughan, 1919 †Stylophora ponderosa Vaughan, 1900a †Stylophora portobellensis Vaughan, 1919 †Stylophora willoughbyi Wells, 1945

Family ACROPORIDAE Acropora acervata (Dana, 1846) Acropora aculeus (Dana, 1846) Acropora alces (Dana, 1846) Acropora arbuscula (Dana, 1846 Acropora aspera (Dana, 1846) Acropora brachiata (Dana, 1846) Acropora cardenae Wells, 1985 Acropora carduus (Dana, 1846) Acropora cerealis (Dana, 1846) Acropora conigera (Dana, 1846) Acropora convexa (Dana, 1846) Acropora cribripora (Dana, 1846) Acropora cuneata (Dana, 1846) Acropora cuspidata (Dana, 1846) Acropora cyclopea (Dana, 1846) Acropora cytherea (Dana, 1846) Acropora danai (Milne Edwards and Haime, 1860) Acropora deformis (Dana, 1846) Acropora diomedeae Vaughan, 1906a Acropora divaricata (Dana, 1846) Acropora echinata (Dana, 1846) Acropora exigua (Dana, 1846) Acropora florida (Dana, 1846) Acropora formosa (Dana, 1846) Acropora globiceps (Dana, 1846) Acropora gracilis (Dana, 1846) Acropora hebes (Dana, 1846) Acropora horrida (Dana, 1846) Acropora humilis (Dana, 1846) Acropora hyacinthus (Dana, 1846) Acropora hystrix (Dana, 1846) Acropora implicata (Dana, 1846) Acropora labrosa (Dana, 1846) Acropora mangarevensis Vaughan, 1906a Acropora murrayensis Vaughan, 1918 Acropora nasuta (Dana, 1846) Acropora nobilis (Dana, 1846) Acropora pagoensis Hoffmeister, 1925 Acropora palifera forma beta Wells, 1954 Acropora palmerae Wells, 1954 +Acropora panamensis Vaughan, 1919 Acropora paxilligera (Dana, 1846) Acropora pinguis Wells, 1950 Acropora prolixa (Verrill, 1866a) Acropora prostrata (Dana, 1846) Acropora pumila (Verrill, 1866a) Acropora ramiculosa (Dana, 1846) Acropora retusa (Dana, 1846) Acropora robusta (Dana, 1846) Acropora rosaria (Dana, 1846) †Acropora saludensis Vaughan, 1919 Acropora schmitti Wells, 1950 Acropora secunda (Dana, 1846) Acropora securis (Dana, 1846)

8

Acropora spicifera (Dana, 1846) Acropora spicifera var. abbreviata (Dana, 1846) Acropora striata (Verrill, 1866a) Acropora subulata (Dana, 1846) Acropora surculosa (Dana, 1846) †Acropora tampaensis Weisbord, 1973 Acropora tenuis (Dana, 1846) Acropora teres (Verrill, 1866a) Acropora teres var. distans Wells, 1954 Acropora tortuosa (Dana, 1846) Acropora tubicinaria (Dana, 1846) Acropora tumida (Verrill, 1866a) Acropora turgida (Verrill, 1866a) Acropora tutuilensis Hoffmeister, 1925 Acropora valida (Dana, 1846) Acropora vanderhorsti Hoffmeister, 1925 Acropora vaughani Wells, 1954 Acropora virgata (Dana, 1846) †Astreopora antiguensis Vaughan, 1919 Astreopora goethalsi Vaughan, 1919 †Astreopora ndukeluensis Hoffmeister, 1945 †Astreopora portoricensis Vaughan, 1919 Astreopora profunda Verrill, 1872 Astreopora suggesta Wells, 1954 Astreopora tabulata Wells, 1954 †Astreopora tongensis Hoffmeister, 1932 †Astreopora tuvuthaensis Hoffmeister, 1945 †Astreopora walli Wells, 1934 †Dendracis pacificus Wells, 1964b Montipora aspera Verrill, 1872 Montipora bernardi Vaughan, 1907a Montipora bernardi var. subglabra Vaughan, 1907a Montipora berryi Hoffmeister, 1925 Montipora caliculata (Dana, 1846) Montipora capitata (Dana, 1846) Montipora cocosensis Vaughan, 1918 Montipora colei Wells, 1954 Montipora conicula Wells, 1954 Montipora danae Milne Edwards and Haime, 1851b Montipora digitata (Dana, 1846) Montipora effusa (Dana, 1846) Montipora elschneri Vaughan, 1918 Montipora erosa (Dana, 1846) Montipora expansa (Dana, 1846) Montipora floweri Wells, 1954 Montipora grandifolia (Dana, 1846) Montipora hispida (Dana, 1846) Montipora hoffmeisteri Wells, 1954 Montipora incrassata (Dana, 1846) Montipora lichen (Dana, 1846) Montipora marshallensis Wells, 1954 Montipora nodosa (Dana, 1846) Montipora palmata (Dana, 1846) Montipora patula Verrill, 1869a

Montipora planiuscula (Dana, 1846) Montipora poritiformis Verrill, 1866a Montipora rigida Verrill, 1866a Montipora scabricula (Dana, 1846) Montipora studeri Vaughan, 1907a Montipora tenuicaulis Vaughan, 1907a Montipora tortuosa (Dana, 1846) Montipora vaughani Hoffmeister, 1925 Montipora verrilli Vaughan, 1907a Montipora verrilli var. auaensis Hoffmeister, 1925 Family STYLINIDAE ‡Cyathophora hedbergi Wells, 1944a ‡Enallhelia occidentalis Wells, 1944a †Haimesiastraea conferta Vaughan, 1900a *‡Heterocoenia ? washitaensis* Wells, 1933 *‡Myriophyllia borrachensis* Wells, 1944a \$Stylangia laddi Wells, 1944a †Stylangia panamensis Vaughan, 1919 \$Stylina columbaris Scott and Aleman, 1984 \$Stylina sucrensis Wells, 1944a \$Stylosmilia gregorii Wells, 1944a Family CALAMOPHYLLIIDAE *‡Brachyseris montemarina* Hamilton, 1956 *‡Brachyseris wellsi* Hamilton, 1956 ‡Epistreptophyllum boesei (Wells, 1933) ‡Epistreptophyllum shumardi (Wells, 1933) ‡Isastrea parva Smith, 1927 ‡Latomeandra alaskana (Smith, 1927) [‡]Ovalastrea fredericksburgensis (Wells, 1933) *‡Ovalastrea fredericksburgensis* var. alta (Wells, 1933) *‡Ovalastrea pecosensis* (Wells, 1932) Family AGARICIIDAE †Agaricia anguillensis Vaughan, 1919 †Agaricia dominicensis Vaughan, 1919 Agaricia fragilis forma contracta Wells, 1973a Agaricia grahamae Wells, 1973a Agaricia lamarcki Milne Edwards and Haime, 1851a ‡Centrastrea hilli Wells, 1934 Coeloseris mayeri Vaughan, 1918 †Coeloseris stockwelli Hoffmeister, 1945 ‡Favioseris anomalos Wells, 1934 Leptoseris digitata Vaughan, 1907a Leptoseris foliosa Dinesen, 1980 Leptoseris glabra Dinesen, 1980 Leptoseris hawaiiensis Vaughan, 1907a Leptoseris? mycetoseroides Wells, 1954 Leptoseris papyracea (Dana, 1846) Leptoseris paschalensis Wells, 1972 +Leptoseris portoricensis Vaughan, 1919 Leptoseris scabra Vaughan, 1907a Leptoseris tubulifera Vaughan, 1907a †Leptoseris walli Vaughan in Vaughan and Hoffmeister, 1926 Pachyseris levicollis (Dana, 1846)

Pachyseris monticulosa (Verrill, 1866a) Pachyseris speciosa (Dana, 1846) Pachyseris torresiana Vaughan, 1918 Pavona clavus (Dana, 1846) Pavona clivosa (Verrill, 1969b) Pavona complanata (Verrill, 1866a) Pavona crassa var. ascia (Dana, 1846) Pavona crassa var. loculata (Dana, 1846) Pavona crassa var. obtusa (Dana, 1846) Pavona danai (Milne Edwards and Haime, 1860) Pavona decussata (Dana, 1846) Pavona duerdeni Vaughan, 1907a Pavona foliosa (Verrill, 1866a) Pavona formosa (Dana, 1846) Pavona gigantea (Verrill, 1869b) Pavona lata (Dana, 1846) †Pavona machapooriensis Vaughan in Vaughan and Hoffmeister, 1926 Pavona minuta Wells, 1954 *†Pavona ostergaardi* Hoffmeister, 1932 †Pavona panamensis Vaughan, 1919 †Pavona pennyi Vaughan in Vaughan and Hoffmeister, 1926 Pavona pollicata Wells, 1954 Pavona praetorta (Dana, 1846) *†Pavona trinitatis* Vaughan in Vaughan and Hoffmeister, 1926 Pavona venusta (Dana, 1846) †Trochoseris meinzeri Vaughan, 1919 *‡Vaughanoseris catadupensis* Wells, 1934 Family SIDERASTREIDAE Coscinaraea columna (Dana, 1846) Coscinaraea exesa (Dana, 1846) Coscinaraea fossata (Dana, 1846) Coscinaraea marshae Wells, 1962 Coscinaraea mcneilli Wells, 1962 Coscinaraea wellsi Veron and Pichon, 1980 †Pironastrea anguillensis Vaughan, 1919 †Pironastrea antiguensis Vaughan, 1919 †Siderastrea californica Vaughan, 1917b †Siderastrea dalli Vaughan, 1919 *†Siderastrea hexagonalis* Vaughan, 1900a †Siderastrea hillsboroensis Vaughan, 1919 †Siderastrea mendenhalli Vaughan, 1917b †Siderastrea mendenhalli var. minor Vaughan, 1917b +Siderastrea monticuliformis (Vaughan, 1900a) †Siderastrea pliocenica Vaughan, 1919 †Siderastrea scotica Wells, 1945 Siderastrea siderea var. dominicensis Vaughan, 1919 †Siderastrea silecensis Vaughan, 1919 †Siderastrea vancouverensis Vaughan, 1923 †Sideroseris durhami Wells, 1945

Family SYNASTREIDAE \$\$ynastrea ? adkinsi Wells, 1934 Family CYCLOLITIDAE ‡Cyclolites jamaicaensis Wells, 1934 *‡Paracycloseris elizabethae* Wells, 1934 Family HAPLAREIDAE ‡Diplaraea ? boltonae Wells, 1934 Family FUNGIIDAE Ctenactis crassa (Dana, 1846) Ctenactis ehrenbergii gigantea (Dana, 1846) †Discotrochus vaughanianus Wells, 1945 Fungia confertifolia Dana, 1846 Fungia danae Milne Edwards and Haime, 1851a Fungia dentata Dana, 1846 Fungia discus Dana, 1846 Fungia horrida Dana, 1846 †Fungia japonica Vaughan, 1906b Fungia lacera Verrill, 1866a Fungia madagascarensis Vaughan, 1906b Fungia mexicana (Durham, 1947) Fungia papillosa Verrill, 1866a Fungia pulchella (Verrill, 1866a) Fungia repanda Dana, 1846 Fungia samboangensis Vaughan, 1906b Fungia tenuis Dana, 1846 Fungia vaughani Boschma, 1923 Halomitra clypeus Verrill, 1864 #Halomitra triadica Smith, 1927 Herpolitha crassa (Dana, 1846) Herpolitha stricta (Dana, 1846) Lithactinia novaehiberniae Lesson, 1831 Polyphyllia galeriformis Dana, 1846 Polyphyllia pileiformis Dana, 1846 Zoopilus echinatus Dana, 1846 Family FUNGIACYATHIDAE Fungiacyathus dennanti Cairns and Parker, in press *†Fungiacyathus euaensis* Wells, 1977 Fungiacyathus fissilis Cairns, 1984 Fungiacyathus granulosus Cairns, 1989 Fungiacyathus hawaiiensis (Vaughan, 1907a) Fungiacyathus hydra Zibrowius and Gili, 1990 Fungiacyathus marenzelleri (Vaughan, 1906a) Fungiacyathus turbinolioides Cairns, 1989 Fungiacyathus variegatus Cairns, 1989 Family MICRABACIIDAE Leptopenus antarcticus Cairns, 1989 *Micrabacia americana* Meek, 1876 #Micrabacia americana var. multicostata Stephenson, 1917 *Micrabacia arkansasensis* Wells, 1933 #Micrabacia cribraria Stephenson, 1917 *Micrabacia hilgardi* Stephenson, 1917 #Micrabacia hilgardi var. occidentalis Wells, 1933 *Micrabacia marylandica* Stephenson, 1916

Micrabacia mineolensis Stephenson, 1917 *‡Micrabacia mississippiensis* Stephenson, 1917 #Micrabacia navarroensis Wells, 1933 #Micrabacia rotatilis Stephenson, 1916 #Micrabacia rotatilis var. georgiana Stephenson, 1917 *‡Micrabacia stephensoni* Wells, 1933 *‡Micrabacia taylorensis* Wells, 1933 Rhombopsammia niphada Owens, 1986 Rhombopsammia squiresi Owens, 1986 Family MICROSOLENIDAE #Meandrophyllia cariacoensis Wells, 1944a *‡Microsolena simondsi* (Wells, 1932) #Microsolena williamsonensis Wells, 1944b Family ACTINACIDIDAE †Actinacis barretti Wells, 1934 †Actinacis sawkinsi Wells, 1934 ‡Actinacis valverdensis Wells, 1933 ‡Dendraraea anzoateguensis Wells, 1944a Family PORITIDAE Alveopora allingi Hoffmeister, 1925 Alveopora catalai Wells, 1968 Alveopora explanata Hoffmeister, 1945 Alveopora fijiensis Hoffmeister, 1932 Alveopora ocellata Wells, 1954 Alveopora spongiosa Dana, 1846 †Alveopora tampae Weisbord, 1973 Alveopora verrilliana Dana, 1872 †Goniopora aldrichi Vaughan, 1941 †Goniopora canalis Vaughan, 1919 *†Goniopora christianiaensis* (Wells, 1934) Goniopora columna Dana, 1846 †Goniopora decaturensis Vaughan, 1919 [†]Goniopora decaturensis var. bainbridgensis Vaughan, 1919 [†]Goniopora decaturensis var. silicensis Vaughan, 1919 Goniopora djiboutiensis Vaughan, 1907b †Goniopora hedbergi Wells, 1945 †Goniopora hilli Vaughan, 1919 †Goniopora imperatoris Vaughan, 1919 †Goniopora jacobiana Vaughan, 1919 Goniopora muscosa Wells, 1954 †Goniopora panamensis Vaughan, 1919 Goniopora pulvinula Wells, 1954 Goniopora somaliensis Vaughan, 1907b Goniopora stutchburyi Wells, 1955 †Goniopora tampaensis Weisbord, 1973 Goniopora traceyi Wells, 1954 ‡Goniopora trechmanni Wells, 1934 Porites andrewsi Vaughan, 1918 Porites australiensis Vaughan, 1918 Porites ballistensis (Weisbord, 1973) †Porites baracoaensis Vaughan, 1919 *†Porites baracoaensis* var. matanzasensis Vaughan, 1919

Porites bernardi Vaughan, 1907a Porites branneri Rathbun, 1888 Porites brighami Vaughan, 1907a †Porites carrizensis Vaughan, 1917b *Porites cascadensis* (Vaughan, 1919) †Porites clevei (Vaughan, 1919) Porites cocosensis Wells, 1950 Porites colonensis Zlatarski, 1990 Porites compressa Dana, 1846 Porites compressa forma abacus Vaughan, 1907a Porites compressa forma angustisepta Vaughan, 1907a Porites compressa forma angustisepta subforma delicatula Vaughan, 1907a Porites compressa forma angustisepta subforma paucispina Vaughan, 1907a Porites compressa forma breviramosa Vaughan, 1907a Porites compressa forma clavus Vaughan, 1907a Porites compressa forma compacta Vaughan, 1907a Porites compressa forma conjungens Vaughan, 1907a Porites compressa forma densimurata Vaughan, 1907a Porites compressa forma divaricans Vaughan, 1907a Porites compressa forma fragilis Vaughan, 1907a Porites compressa forma granimurata Vaughan, 1907a Porites compressa forma pilosa Vaughan, 1907a Porites compressa forma profundacalyx Vaughan, 1907a Porites compressa forma profundorum Vaughan, 1907a Porites compressa forma tumida Vaugahn, 1907a Porites cribripora Dana, 1846 Porites cylindrica Dana, 1846 Porites densa Vaughan, 1918 †Porites douvillei Vaughan, 1919 Porites duerdeni Vaughan, 1907a Porites erosa Dana, 1846 Porites evermanni Vaughan, 1907a Porites faustinoi Hoffmeister, 1925 Porites favosa Dana, 1846 *Porites floridaeprima* Weisbord, 1973 Porites fragosa Dana, 1846 Porites gibsonhilli Wells, 1950 Porites haddoni Vaughan, 1918 Porites hawaiiensis Vaughan, 1907a Porites horizontalata Hoffmeister, 1925 *†Porites howei* Vaughan, 1919 Porites lichen Dana, 1846 Porites limosa Dana, 1846 Porites lobata Dana, 1846 Porites lobata forma aperta Vaughan, 1907a Porites lobata forma centralis subforma alpha Vaughan, 1907a Porites lobata forma centralis subforma beta Vaughan, 1907a Porites lobata forma centralis subforma gamma Vaughan, 1907a

10

Porites lobata forma centralis subforma delta Vaughan, 1907a Porites lobata forma centralis subforma epsilon Vaughan, 1907a Porites lobata forma infundibulum Vaughan, 1907a Porites lobata forma lacera Vaughan, 1907a Porites lobata forma nodulosa Hoffmeister, 1925 Porites lobata forma parvicalyx Vaughan, 1907a †Porites macdonaldi Vaughan, 1919 *†Porites matsoni* (Weisbord, 1973) Porites mayeri Vaughan, 1918 Porites monticulosa Dana, 1846 Porites mordax Dana, 1846 Porites mordax var. elongata Dana, 1846 Porites murrayensis Vaughan, 1918 Porites nigrescens Dana, 1846 Porites nigrescens var, mucronata Dana, 1846 Porites palmata Dana, 1846 †Porites panamensis Vaughan, 1919 Porites paschalensis Vaughan, 1906a *†Porites portoricensis* (Vaughan, 1919) Porites pukoensis Vaughan, 1907a Porites reticulosa Dana, 1846 Porites studeri Vaughan, 1907a Porites sverdrupi Durham, 1947 Porites tenuis Verrill, 1866a *†Porites toulai* Vaughan, 1919 *†Porites trinitatis* Vaughan in Vaughan and Hoffmeister, 1926 †Porites waylandi Foster, 1986 Family AMPHIASTREIDAE ‡Budaia felixi Wells, 1944a Family MONTLIVAULTIIDAE [‡]Complexastrea borealis (Smith, 1927) ‡Dimorphastrea stantoni Wells, 1933 ‡Margarastraea pulchra Montanaro Gallitelli in Montanaro Gallitelli, Russo, and Ferrari, 1979 **‡Montlivaultia martini Smith**, 1927 *‡Thecosmilia cumanensis* Wells, 1944a *‡Thecosmilia wrangelliana* Russo in Montanaro Gallitelli, Russo, and Ferrari, 1979 Family FAVIIDAE †Agathiphyllia belli (Vaughan, 1919) †Agathiphyllia browni (Vaughan, 1919) †Agathiphyllia hilli (Vaughan, 1919) †Agathiphyllia splendens (Vaughan, 1919) [†]Antiguastrea cellulosa var. silicensis Vaughan, 1919 †Antillophyllia sawkinsi (Vaughan in Vaughan and Hoffmeister, 1926) ‡Axosmilia craginiana (Wells, 1933) †Barbadiastrea favioides Wells, 1945 \$Blothrocyathus harrisi Wells, 1932 Caulastraea distorta Dana, 1846 Caulastraea furcata Dana, 1846

‡Cladophyllia stewartae Wells, 1944a †Cladocora johnsoni Gane, 1895 Cladocora pacifica Cairns, 1991 *†Colpophyllia willoughbiensis* (Vaughan, 1919) Cyphastrea agassizi (Vaughan, 1907a) Cyphastrea danai Milne Edwards and Haime, 1857 *Cyphastrea vaughani* Hoffmeister, 1932 Diploastrea glaucopsis (Dana, 1846) Diploastrea patula (Dana, 1846) Diploastrea polygonalis var. lauensis Hoffmeister, 1945 ‡Diploastrea ? vaughani Wells, 1933 †Diploria antiguensis (Vaughan, 1919) †Diploria bowersi (Vaughan, 1917b) †Diploria dumblei (Vaughan, 1919) †Diploria euaensis (Hoffmeister, 1932) Diploria mammosa (Dana, 1846) †Diploria portoricensis (Vaughan, 1919) Diploria strigosa (Dana, 1846) Echinopora horrida Dana, 1846 Echinopora reflexa Dana, 1846 Echinopora undulata Dana, 1846 Erythrastrea flabellata Scheer and Pillai, 1983 Favia armata (Verrill, 1872) Favia cellulosa (Verrill, 1872) Favia danai Milne Edwards and Haime, 1857 Favia fragilis (Dana, 1846) Favia helianthoides Wells, 1954 Favia hombroni (Rousseau, 1854) Favia laddi (Wells, 1954) †Favia macdonaldi Vaughan, 1919 Favia matthaii Vaughan, 1918 Favia pallida (Dana, 1846) Favia pandanus (Dana, 1846) *†Favia pseudostelligera* Hoffmeister, 1932 Favia puteolina Dana, 1846 Favia putnami (Verrill, 1872) Favia speciosa (Dana, 1846) Favia stelligera (Dana, 1846) Favia stelligera var. fanningensis Vaughan, 1918 Favites filicosa (Dana, 1846) Favites flexuosa (Dana, 1846) *†Favites magna* Hoffmeister, 1932 *†Favites mexicana* Vaughan, 1919 Favites robusta (Dana, 1846) Favites russelli (Wells, 1954) Favites virens (Dana, 1846) †Favites yborensis Weisbord, 1973 Goniastrea aspera Verrill, 1866a Goniastrea benhami Vaughan, 1917a +Goniastrea canalis Vaughan, 1919 Goniastrea cerium (Dana, 1846) Goniastrea eximia (Dana, 1846) Goniastrea favistella (Dana, 1846)

12

Goniastrea favulus (Dana, 1846) Goniastrea parvistella (Dana, 1846) Goniastrea sinuosa (Dana, 1846) Goniastrea spectabilis (Verrill, 1872) [†]Goniastrea trinitatis Vaughan in Vaughan and Hoffmeister, 1926 Hydnophora mayori Hoffmeister, 1925 Hydnophora rigida (Dana, 1846) Leptastrea hawaiiensis Vaughan, 1907a Leptastrea hawaiiensis (Vaughan, 1907a) Leptastrea pulchra (Dana, 1846) Leptastrea purpurea (Dana, 1846) Leptoria gracilis (Dana, 1846) †Leptoria setchelli Hoffmeister, 1932 †Leptoria spenceri Vaughan, 1919 Leptoria tenuis (Dana, 1846) †Montastraea antilliana Wells, 1945 †Montastraea bainbridgensis (Vaughan, 1919) †Montastraea canalis (Vaughan, 1919) Montastraea cavernosa var. hirta (Verrill, 1901) Montastraea coronata (Dana, 1846) †Montastraea cumutensis (Hoffmeister in Vaughan and Hoffmeister, 1926) Montastraea curta (Dana, 1846) #Montastraea edwardsensis (Wells, 1933) †Montastraea fijiensis (Hoffmeister, 1945) Montastraea hispidula (Verrill, 1901) †Montastraea imperatoris (Vaughan, 1919) †Montastraea laddi (Hoffmeister, 1932) †Montastraea lauensis (Hoffmeister, 1945) †Montastraea limbata var. pennyi (Vaughan in Vaughan and Hoffmeister, 1926) †Montastraea mansfieldi (Hoffmeister, 1932) #Montastraea menardi Hamilton, 1956 †Montastraea parksi (Hoffmeister, 1932) †Montastraea pecosensis (Wells, 1933) †Montastraea ramea (Duncan, 1864) †Montastraea roxboroughi (Vaughan, 1919) #Montastraea schindewolfi (Wells, 1934) †Montastraea sculpta var. tegula (Duncan, 1863) †Montastraea sukunai (Hoffmeister, 1945) †Montastraea tampaensis (Vaughan, 1919) †Montastraea tampaensis var. silecensis (Vaughan, 1919) †Montastraea texana (Vaughan, 1903b) †Montastraea tongensis (Hoffmeister, 1932) +Montastraea travisensis (Wells, 1932) †Montastraea trinitatis (Vaughan in Vaughan and Hoffmeister, 1926) ‡Ogilviastraea ? richardsi (Wells, 1933) Platygyra rustica (Dana, 1846) Plesiastrea gravieri (Vaughan, 1918) Plesiastrea lilli Wells, 1954 ‡Rhabdophyllia quaylei Wells, 1934

†Solenastrea fairbanksi (Vaughan, 1900a) †Solenastrea fairbanksi var. minor Vaughan, 1917b †Solenastrea fairbanksi var. normalis Vaughan, 1917b †Solenastrea globosa (Duncan, 1864) †Solenastrea tampae (Weisbord, 1973) †Thysanus hayesi Vaughan, 1919 Trachyphyllia amarantum (Dana, 1846) †Trachyphyllia bullbrooki (Hoffmeister in Vaughan and Hoffmeister, 1926) Family RHIZANGIIDAE Astrangia atrata (Dennant, 1906) Astrangia braziliensis Vaughan, 1906c †Astrangia coaligensis Vaughan, 1909 †Astrangia expansa Vaughan, 1900a †Astrangia floridana (Gane, 1895) †Astrangia harrisi Vaughan, 1900a ‡Astrangia lamarensis Wells, 1947 †Astrangia ludoviciana Vaughan, 1900a Astrangia michelinii Milne Edwards and Haime, 1848b Astrangia poculata (Ellis and Solander, 1786) Astrangia rathbuni Vaughan, 1906c Astrangia solitaria var. portoricensis Vaughan, 1901a †Astrangia wilcoxensis Vaughan, 1900a Culicia hoffmeisteri Squires, 1966 Culicia stellata Dana, 1846 Culicia tenella Dana, 1846 Culicia truncata Dana, 1846 #Hindeastraea collinensis Hoffmesiter, 1929b #Hindeastraea discoidea White, 1888 †Phyllangia blakei Wells, 1947 +Septastrea ? kerioides Vaughan and Popence, 1935 †Septastrea matsoni Vaughan, 1919 Family OCULINIDAE Acrhelia horrescens (Dana, 1846) †Archohelia barbadiana Wells, 1945 ‡Archohelia dartoni Wells, 1933 †Archohelia gardnerae Vaughan, 1941 †Archohelia limonensis Vaughan, 1919 Archohelia rediviva Wells and Alderslade, 1979 †Archohelia vernonensis Vaughan, 1941 †Astrohelia burnsi (Vaughan, 1900a) †Astrohelia neglecta Vaughan, 1900a Galaxea clavus (Dana, 1846) Galaxea hystrix (Dana, 1846) Galaxea lauensis Hoffmeister, 1945 Madrepora galapagensis Vaughan, 1906a Madrepora kauaiensis Vaughan, 1907a †Madrepora natchitochensis (Vaughan, 1900a) †Oculina alabamensis Vaughan, 1900a *†Oculina aldrichi* Vaughan, 1900a †Oculina harrisi Vaughan, 1900a ‡Oculina hobleyi Thomas, 1948 Oculina pallens Ehrenberg, 1834 Oculina profunda Cairns, 1991

†Oculina singleyi Vaughan, 1900a †Oculina smithi Vaughan, 1900a Family MEANDRINIDAE †Dichocoenia alabamensis Vaughan, 1900a †Dichocoenia caloosahatcheensis Weisbord, 1974 †Dichocoenia eminens Weisbord, 1974 †Dichocoenia merriami (Vaughan, 1900a) †Dichocoenia merriami var. crassisepta Vaughan, 1917b Dichocoenia trechmanni Wells, 1934 †Dichocoenia tuberosa Duncan, 1863 Meandrina memorialis (Wells, 1974b) Meandrina spinulosa (Dana, 1846) Family MERULINIDAE Merulina crispa Dana, 1846 Merulina laxa Dana, 1846 Merulina regalis Dana, 1846 Merulina scabricula Dana, 1846 Merulina speciosa Dana, 1846 Family MUSSIDAE Acanthastraea echinata (Dana, 1846) Blastomussa merleti (Wells, 1961) Lobophyllia costata (Dana, 1846) Lobophyllia cytherea (Dana, 1846) Lobophyllia multilobata (Dana, 1846) Mussa cactus Dana, 1846 Mussa cerebrifomis Dana, 1846 Mycetophyllia aliciae Wells, 1973a †Mycetophyllia bullbrooki Vaughan in Vaughan and Hoffmeister, 1926 Mycetophyllia ferox Wells, 1973a Mycetophyllia reesi Wells, 1973a Symphyllia recta (Dana, 1846) *†Syzygophyllia hayesi* Vaughan, 1919 †Syzygophyllia tampae Weisbord, 1973 ‡Trochosmilia moorei Wells, 1933 ‡Trochosmilia stainbrooki Wells, 1933 Family PECTINIIDAE Pectinia paeonia (Dana, 1846) Mycedium tubifex (Dana, 1846) Family ANTHEMIPHYLLIIDAE †Anthemiphyllia catinata Wells, 1977 Anthemiphyllia pacifica Vaughan, 1907a Family CARYOPHYLLIIDAE Anomocora carinata Cairns, 1991 †Anomocora exilis Wells, 1977 †Antillocyathus alatus Cairns and Wells, 1987 †Antillocyathus cristatus (Vaughan in Vaughan and Hoffmeister, 1925) †Antillocyathus maoensis (Vaughan in Vaughan and Hoffmeister, 1925) †Antillocyathus trinitatis Vaughan in Vaughan and Hoffmeister, 1926) †Asterosmilia hilli Vaughan, 1919

†Asterosmilia machapooriensis Hoffmeister in Vaughan and Hoffmeister, 1926 †Asterosmilia trinitatis Vaughan in Vaughan and Hoffmeister, 1926 Australocyathus vincentinus (Dennant, 1906) #Bathycyathus ? leithensis Vaughan, 1920 \$Bathycyathus ? manorensis (Wells, 1933) †Bathycyathus ? pulchra (Vaughan, 1900a) Bourneotrochus stellulatus (Cairns, 1984) Bourneotrochus veroni Wells, 1984 Caryophyllia alaskensis Vaughan, 1941 Caryophyllia alcocki Vaughan, 1907a Carvophyllia ambrosia caribbeana Cairns, 1979 †Caryophyllia arnoldi Vaughan, 1900b Caryophyllia balaenacea Zibrowius and Gili, 1990 *†Caryophyllia californica* Vaughan, 1903a †Caryophyllia colei Wells, 1945 *†Caryophyllia constricta* Vaughan and Popenoe, 1935 Caryophyllia corrugata Cairns, 1979 +Carvophyllia dalli Vaughan, 1900a *†Caryophyllia denaria* Wells, 1977 Caryophyllia diomedeae Marenzeller, 1904 *†Caryophyllia dumblei* Vaughan and Popenoe, 1935 [‡]Carvophyllia egeria White, 1879 Caryophyllia eltaninae Cairns, 1982a Caryophyllia hawaiiensis Vaughan, 1907a Carvophyllia horologium Cairns, 1977c ‡Caryophyllia johannis White, 1879 Caryophyllia mabahithi Gardiner and Waugh, 1938 Caryophyllia marmorea Cairns, 1984 †Caryophyllia mediavia Vaughan and Popenoe, 1935 ‡Caryophyllia mississippiensis Wells, 1933 Caryophyllia octopali Vaughan, 1907a Carvophyllia octopali var. incerta Vaughan, 1907a Caryophyllia parvula Cairns, 1979 †Caryophyllia pedroensis Vaughan, 1903a Caryophyllia perculta Cairns, 1991 Caryophyllia planilamellata Dennant, 1906 Caryophyllia solida Cairns, 1991 Caryophyllia squiresi Cairns, 1982a ‡Caryophyllia stephensoni Wells, 1933 †Caryophyllia texana Vaughan, 1900a Caryophyllia valdiviae Zibrowius and Gili, 1990 Caryophyllia zopyros Cairns, 1979 Ceratotrochus laxus Vaughan, 1907a †Ceratotrochus putillus Wells, 1945 Coenocyathus bowersi Vaughan, 1906c Coenosmilia inordinata Cairns, 1984 Concentrotheca vaughani Cairns, 1991 Crispatotrochus diomedeae (Vaughan, 1907a) Crispatotrochus galapagensis Cairns, 1991 Crispatotrochus irregularis (Caims, 1982a) *Crispatotrochus periallus* (Squires, 1962) Crispatotrochus squiresi (Cairns, 1979)

14

†Crispatotrochus tenisonwoodsi Wells, 1977 Crispatotrochus woodsi (Wells, 1964a) ±Dasmosmilia reesidei Wells, 1933 Deltocyathus eccentricus Cairns, 1979 †Deltocyathus heteroclitus Wells, 1984 Deltocyathus moseleyi Caims, 1979 Deltocyathus orientalis (Vaughan, 1900b) Deltocyathus pourtalesi Cairns, 1979 †Desmophyllum coulsoni Wells, 1977 †Desmophyllum decuplum Wells, 1977 †Desmophyllum lirioides Wells, 1977 Desmophyllum striatum Cairns, 1979 Euphyllia meandrina Dana, 1846 Euphyllia rugosa Dana, 1846 †Eusmilia carrizensis Vaughan, 1917b Eusmilia fastigiata forma flabellata Wells, 1973a †Goniocorella eguchii Wells, 1977 Labyrinthocyathus facetus Cairns, 1979 †Labyrinthocyathus kondoi (Wells, 1977) Labyrinthocyathus langae Cairns, 1979 Labyrinthocyathus limatulus (Squires, 1964) *†Lochmaeotrochus micrommatus* Squires, 1962 Labyrinthocyathus quaylei (Durham, 1947) \$Lophosmilia fundimaritima Hamilton, 1956 Oxysmilia portoricensis (Vaughan, 1901a) Paraconotrochus zeidleri Cairns and Parker, in press †Paracyathus alternatus Vaughan, 1900a †Paracyathus bastropensis Vaughan and Popence, 1935 †Paracyathus bellus Vaughan, 1900a †Paracyathus cylindricus Vaughan, 1900a †Paracyathus granulosus Vaughan, 1900a ‡Paracyathus kayserensis Vaughan, 1920 ‡Paracyathus lloydi Vaughan, 1920 †Paracyathus marylandicus Vaughan, 1901b Paracyathus molokensis Vaughan, 1907a †Paracyathus pedroensis Vaughan, 1903a †Paracyathus rugosus Vaughan, 1900a †Paracyathus sinuosus Cairns and Wells, 1987 ‡Paracyathus thomi Vaughan, 1920 †Paracyathus vaughani Gane, 1895 ‡Parasmilia graysonensis Wells, 1933 †Parasmilia ludoviciana Vaughan, 1900a ‡Parasmilia texana Vaughan, 1903b Physogyra gravieri Vaughan, 1907b Physogyra somaliensis Vaughan, 1907b ‡Platycyathus scottianus Wells, 1933

Platycyathus scottianus Wells, 1933 Polycyathus isabela Wells, 1982 Pourtalosmilia conferta Cairns, 1978a Premocyathus burchae Cairns, 1984 Rhizosmilia bartschi (Wells, 1947) Rhizosmilia gerdae Cairns, 1978b Stephanocyathus laevifundus Cairns, 1977b Stephanocyathus paliferus Cairns, 1977b

\$Smilotrochus palmerae (Wells, 1933)

Tethocyathus variabilis Cairns, 1979 Thalamophyllia gombergi Cairns, 1979 Trochocyathus aithoseptatum Cairns, 1984 †Trochocyathus californianus Verrill, 1900a †Trochocyathus chevalieri Cairns and Wells, 1987 *†Trochocyathus cingulatus* Vaughan, 1900a †Trochocyathus coloradoensis Vaughan and Popenoe, 1935 *Trochocyathus dakotaensis* Vaughan, 1920 †Trochocyathus depressus Vaughan, 1900a †Trochocyathus duncani Cairns and Wells, 1987 Trochocyathus fasciatus Cairns, 1979 Trochocyathus fossulus Cairns, 1979 Trochocyathus gardineri (Vaughan, 1907a) ‡Trochocyathus gardnerae Wells, 1933 †Trochocyathus hyatti Vaughan, 1900a +Trochocyathus lunulitiformis var. montgomeriensis Vaughan, 1900a *‡Trochocyathus matleyi* Wells, 1934 Trochocyathus maujensis (Vaughan, 1907a) *‡Trochocyathus mississippiensis* Wells, 1933 *‡Trochocyathus ? neumani* Vaughan, 1920 Trochocyathus oahensis Vaughan, 1907a *†Trochocyathus powelli* Squires, 1962 **‡Trochocyathus sellardsi Wells**, 1933 \$Trochocyathus sellardsi var. graysonensis Wells, 1933 †Trochocyathus stantoni Vaughan, 1900a ‡Trochocyathus taylorensis Wells, 1933 Trochocyathus tenuicalyx (Vaughan, 1907a) †Trochocyathus uber Vaughan and Popence, 1935 ‡Trochocyathus vaughani Stephenson, 1916 **‡Trochocyathus wintoni Wells**, 1933 Family TURBINOLIIDAE Cryptotrochus carolinensis Cairns, 1988a Endocyathopora laticostata Cairns, 1989 Idiotrochus emarciatus var. perexigua (Dennant, 1906) *†Koilotrochus elegans* (Vaughan, 1900a) Oryzotrochus stephensoni Wells, 1959 Platytrochus laevigatus Cairns and Parker, in press Platytrochus parseptatus Cairns and Parker, in press †Platytrochus primaevus Vaughan and Popenoe, 1935 †Sphenotrochus brassensis Vaughan in Vaughan and Hoffmeister, 1926 †Sphenotrochus claibornensis Vaughan, 1900a †Sphenotrochus fragarioides Wells, 1945 Sphenotrochus ralphae Squires, 1964 †Sphenotrochus senni Wells, 1945 †Sphenotrochus trinitatis Vaughan in Vaughan and Hoffmeister, 1926 Thrypticotrochus multilobatus Cairns, 1989 Trematotrochus alternans Cairns and Parker, in press †Turbinolia acuticostata Vaughan, 1895 *†Turbinolia barbadensis* Wells, 1945 †Turbinolia barbadensis var. crassicostata Wells, 1945

†Turbinolia claibornensis Vaughan, 1900a †Turbinolia clarki Quayle, 1932 †Turbinolia insignifica Vaughan, 1900a *‡Turbinolia texana* Conrad, 1857 †Turbinolia wautubbeensis Vaughan, 1900a Family FLABELLIDAE †Flabellum antillarum Wells, 1945 Flabellum aotearoa Squires, 1964 Flabellum areum Cairns, 1982a †Flabellum californicum Vaughan, 1900a †Flabellum conoideum Vaughan, 1900a †Flabellum conoideum var. matthewsense Vaughan, 1900a *†Flabellum cuneiforme* var. acutiforme Vaughan, 1900a †Flabellum cuneiforme var. fragile Vaughan, 1900a *Flabellum cuneiforme var. magnocostatum Vaughan,* 1900a Flabellum flexuosum Cairns, 1982a Flabellum fragile Cairns, 1977c Flabellum gardineri Cairns, 1982a Flabellum goodei Verrill, 1878 Flabellum hoffmeisteri Cairns and Parker, in press *Flabellum lerchi* Vaughan, 1900a Flabellum lowekeyesi Squires and Ralph, 1965 Flabellum marenzelleri Cairns, 1989 †Flabellum mortoni Vaughan, 1900a Flabellum pavoninum atlanticum Cairns, 1979 Flabellum politum Cairns, 1989 *Flabellum rhomboideum* Vaughan, 1900a Flabellum sexcostatum Cairns, 1989 *Flabellum texense* Vaughan and Popenoe, 1935 Flabellum tuthilli Hoffmeister, 1933 †Flabellum vanuatu Wells, 1984 Flabellum vaughani Cairns, 1984 Gardineria hawaiiensis Vaughan, 1907a Gardineria minor Wells, 1973a Gardineria philippinensis Cairns, 1989 †Javania duncani Wells, 1977 Javania galapagensis (Vaughan, 1906a) Javania nobile (Verrill, 1885) Placotrochides frusta Cairns, 1979 Placotrochus fuscus Vaughan, 1907a Polymyces montereyense (Durham, 1947) Polymyces wellsi Cairns, 1991 Truncatoflabellum candeanum (Milne Edwards and Haime, 1848a) Truncatoflabellum carinatum Cairns, 1989 Truncatoflabellum cumingii (Milne Edwards and Haime, 1848a) Truncatoflabellum formosum Cairns, 1989 Truncatoflabellum incrustatum Cairns, 1989 Truncatoflabellum pusillum Cairns, 1989 Truncatoflabellum spheniscus (Dana, 1846) Truncatoflabellum truncum (Cairns, 1982a)

Family GUYNIIDAE \$Stenocyathus alabamiensis Wells, 1947 †Stenocyathus hoffmeisteri Wells, 1977 Truncatoguynia irregularis Cairns, 1989 Family DENDROPHYLLIIDAE †Balanophyllia annularis Vaughan, 1900a +Balanophyllia augustinensis Vaughan, 1900a Balanophyllia bayeri Cairns, 1979 Balanophyllia caribbeana Cairns, 1977a †Balanophyllia caulifera var. multigranosa Vaughan, 1900a †Balanophyllia clarendonensis (Wells, 1934) †Balanophyllia cornu Sokolow, 1894 Balanophyllia desmophyllioides Vaughan, 1907a †Balanophyllia desmophyllum var. microcostata Vaughan, 1900a Balanophyllia dineta Cairns, 1977a Balanophyllia diomedeae Vaughan, 1907a Balanophyllia diomedeae var. mauiensis Vaughan, 1907a Balanophyllia eguchii Wells, 1982 †Balanophyllia elongata Vaughan, 1900a Balanophyllia galapagensis Vaughan, 1906a Balanophyllia grandis Cairns, 1977a Balanophyllia hadros Cairns, 1979 Balanophyllia hawaiiensis Vaughan, 1907a †Balanophyllia inauris Vaughan, 1900a †Balanophyllia irrorata var. coniformis Vaughan, 1900a Balanophyllia laysanensis Vaughan, 1907a †Balanophyllia pittieri Vaughan, 1919 †Balanophyllia ponderosa Vaughan, 1900a †Balanophyllia ponderosa var. texana Vaughan and Popence, 1935 Balanophyllia scabrosa (Dana, 1846) Balanophyllia wellsi Cairns, 1977a Cladopsammia echinata Cairns, 1984 Dendrophyllia alcocki (Wells, 1954) †Dendrophyllia araguensis Wells, 1944a Dendrophyllia danae Verrill, 1872 Dendrophyllia diaphana Dana, 1846 Dendrophyllia hannibali Nomland, 1916 Dendrophyllia johnsoni Cairns, 1991 Dendrophyllia laboreli Zibrowius and Brito, 1984 †Dendrophyllia lisbonensis Vaughan, 1900a Dendrophyllia nigrescens Dana, 1846 Dendrophyllia oahensis Vaughan, 1907a Dendrophyllia serpentina Vaughan, 1907a †Dendrophyllia striata Vaughan, 1900a Enallopsammia adminicularis (Rehberg, 1892) Enallopsammia amphelioides var. cucullata (Vaughan, 1907a) †Enallopsammia laddi Wells, 1977 †Endopachys claibornensis (Vaughan, 1900a) †Endopachys lonsdalei Vaughan, 1900a

SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY

†Endopachys maclurii (Lea, 1833)
†Endopachys minutum Vaughan, 1900a Endopachys oahense Vaughan, 1907a
†Endopachys tampae Wells, 1975 Heteropsammia gemminata Verrill, 1870 Heteropsammia moretonensis Wells, 1964a Leptopsammia trinitatis Hubbard and Wells, 1986 Notophyllia etheridgi Hoffmeister, 1933 Rhizopsammia chamissoi Wells, 1954 Rhizopsammia minuta yar, bikiniensis Wells, 1954 Rhizopsammia wellingtoni Wells, 1982 Tubastraea faulkneri Wells, 1982 Tubastraea floreana Wells, 1982 Tubastraea pedersenii (Verrill, 1869b) Tubastraea tagusensis Wells, 1982 †Turbinaria alabamensis Vaughan, 1900a Turbinaria brassica (Dana, 1846) Turbinaria frondens (Dana, 1846) Turbinaria heronensis Wells, 1959 Turbinaria sinensis Verrill, 1866a ‡Wadeopsammia nodosa (Wade, 1926)

Annotated Alphabetic List of Stony Coral Types Deposited in the National Museum of Natural History

Part 1. Hydrozoa (Milleporidae, Stylasteridae)

acrolo	phos.	Lepide	pora	Caims,	1983a
	p				

- H: 60189, *Eltanin*-1536, 1 col.; P: 60134, *Eltanin*-1536, 2 frag., SEM stub 43.—Recent.
- adeta, Conopora Cairns, 1987
 - P: 76299, Soela-25, 5 col. (3 in alcohol), SEM stub 433.—Recent.
- affinis, Crypthelia Moseley, 1881
- S: 85787, *Challenger*-3, 1 branch (ex BM 1880.11.25.188).—Recent.
- alaskanus, Stylaster gemmascens Fisher, 1938
- H: 43269, *Albatross*-3480, 1 male col.; P: 86006, *Albatross*-3480, 4 female branches.—Recent.
- altispina, Errina Cairns, 1986a
- H: 71777, *Pillsbury*-595, 1 female col., SEM stub 268; P: 71778, *Pillsbury*-595, 1 male col., 2 branches, SEM stub 225; P: 71780, *Gerda*-889, 5 female col., 6 branches, SEM stub 283; P: 71779, *Albatross*-2354, 1 col.—Recent.
- altus forma, Stylaster eximius Hickson and England, 1905 S: 76827, Siboga-303, 1 frag. (ex ZMA 7363); S: 76824, Siboga-303, 1 frag. (in alcohol), (ex ZMA 7363).—Recent.
- amoena, Errina Boschma, 1956
- H: 75605, China Sea, 1 branch (part of holotype, ex MNHNP), SEM stub 384.—Recent.
 - Remark: Junior synonym of *Errina dabneyi* Pourtalès, 1871 (see Cairns, 1983a).
- amphelioides, Stylaster Kent, 1871
- S: 85785, Cape of Good Hope, 1 col. (ex BM 1884.12.2.79).—Recent.
- anceps, Distichopora (Haplomerismos) Cairns, 1978c

H: 56338, Sango-8, 1 col.; P: 56339, Sango-8, 2 col. (in alcohol), SEM stubs 123, 150B, 151, 179, 6 HSS.—Recent. anomala, Distichopora Cairns, 1986a

- H: 71768, Blake-241, 1 male col.; P: 71813, Blake-241, 1 col., 1 branch, SEM stub 263; P: 71769, Blake-166, 11 branches, SEM stub 264; P: 71770, Blake-232, 2 frag.; P: 71771, Blake-246, 2 col., 5 frag., SEM stub 280.—Recent.
- antillarum, Stylaster Zibrowius and Cairns, 1982
- P: 60350, *Blake*-216, 3 branches, SEM stubs 101, 111-113; P: 60349, *Blake*-219, 1 col., 2 branches, SEM stub 114A.—Recent.
- atlantica, Errina Hickson, 1912b
 - S: 75609, Talisman-128, 1 branch (ex BM 1950.1.11.87).— Recent.
- atlantica forma, Stylaster eximius Broch, 1936
 - S: 71824, Culebra, 1 branch, SEM stub 300 (ex ZMC).--

Recent.

- Remark: Form elevated to species level by Cairns (1986a).
- aurantiacus, Stylaster Cairns, 1986a
 - H: 71794, Albatross-2320, 1 male col.; P: 16009, Albatross-2320, 16 col., 46 branches (30 in alcohol), SEM stubs 246, 296; P: 16005, Albatross-2159, 4 branches; P: 16006, Albatross-2160, 3 col. (in alcohol); P: 52211, Albatross-2160, 9 col., 15 branches, SEM stub 247A; P: 52213, Albatross-2323, 3 col.; P: 52212, Albatross-2325, 2 col.; P: 16008, Albatross-2326, 3 col. (1 in alcohol), SEM stub 247B; P: 10161, Albatross-2330, 1 col.; P: 52214, Albatross-2333, 1 col.; P: 16007, Albatross-2334, 3 col., 2 branches; P: 16057, Albatross station unknown, 13 col., 8 branches, SEM stub 245, 3 HSS; P: 16010, Albatross station unknown, 4 col. (in alcohol).—Recent.
- barbadensis, Distichopora Pourtalès, 1874
- balia, Crypthelia Hickson and England, 1905
- S: 76820, Siboga-177, 1 frag. (in alcohol), (ex ZMA 7396).—Recent.
- bellus, Stylaster Dana, 1846
- S: 564, Paumotu (USEE), 1 col.-Recent.
- bilobatus, Stylaster Hickson and England, 1905

S: 76862, Siboga-297, 1 frag. (ex ZMA).-Recent.

- biserialis, Lepidopora Cairns, 1986a
 - H: 15988, *Albatross*-2336, 1 female col., SEM stub 227; P: 15996, *Albatross*-2167, 1 female col.; P: 16035, *Albatross*-2332, 1 col.; P: 60511, *Albatross*-2333, 1 col., 1 branch, SEM stub 284; P: 71755, *Gerda*-713, 3 col.; P: 60549, *Eastward*-26549, 2 frag.; P: no number, *Blake*-76, 3 HSS.—Recent.
- borealis, Distichopora Fisher, 1938
 - H: 43274, Albatross-3480, 1 female col.; P: 76810, Albatross-3480, 5 col., 7 branches; P: 76375, Albatross-4781, 2 col., 2 branches.—Recent.
- boschmai, Errina Cairns, 1983a
 - H: 52626, Eltanin-993, 1 col.; P: 52690 and 52631, Eltanin-993, 17 col. and over 100 branches, SEM stub 26A; P: 52627, Eltanin-415, 1 col., 5 branches, SEM stub 26B; P: 52630, Eltanin-418, 1 col. and 8 branches, SEM stub 27; P: 52629, Eltanin-671, 11 branches; P: 59919, Eltanin-684, 7 branches; P: 52628, Eltanin-732, 1 col., 8 branches; P: 59918, Eltanin-1536, 2 branches; P: 59914, Islas Orcadas 575-11, 5 branches; P: 59920, Islas Orcadas 575-17, 3

branches (2 in alcohol); P: 59913, Islas Orcadas 575-34, 7 branches; P: 59915, Islas Orcadas 575-90, 1 col., 6 branches (in alcohol); P: 59916, Islas Orcadas 575-91, 8 branches (5 in alcohol); P: 59921, Islas Orcadas 575-102, 2 branches (1 in alcohol); P: 59911, Hero 731-1884, 23 branches; P: 59912, Hero 731-1940, 20 frags., SEM stub 28; P: 52625, Edisto 38-21, 4 branches; P: 52624, Eastwind 66-6, 10 branches.-Recent. boschmai, Stenohelia Wells, 1977 H: I208295, USGS 24686, 1 branch; P: I208296, USGS 24686, 2 frag.-Eocene. brochi, Allopora Fisher, 1938 H: 43264, Albatross-4777, 1 col.-Recent. Remark: Species subsequently transferred to Stylaster (see Cairns, 1983c) brochi, Lepidotheca Cairns, 1986a H: 71761, Pillsbury-954, 1 col., SEM stubs 260-261, 277; P: 71762, Blake-187, 1 col.; P: 71763, Blake-205, 1 col.-Recent. brunneus, Stylaster Boschma, 1970 P: 76880, Kuare Id., 1 frag. (ex RMNH Coel. 6597).---Recent. californica, Allopora Verrill, 1866a S: 43280, California, 1 col. (ex YPM 447).-Recent. Remark: Species subsequently transferred to Stylaster (see Cairns, 1983c). campyleca, Allopora Fisher, 1938 H: 42870, Albatross-3480, 1 col.; P: 52262, 52265, and 58099, Albatross-3480, 3 col., 20 branches; P: 43767, Albatross-3480, 15 branches (in alcohol); P: 76813, Albatross-2858, 3 branches; P: 76814, Albatross-3599, 2 branches; P: 76816, Albatross-4302, 2 branches; P: 76815, Albatross-4230, 1 col.-Recent. Remark: Species subsequently transferred to Stylaster by Cairns (1983c). cancellatus, Stylaster Fisher, 1938 H: 43267, Albatross-3480, 1 female col.; P: 86005, Albatross-3480, 1 male col., 8 branches.-Recent. carinata, Heliopora Pourtalès, 1867 N: 15991, Albatross-2319-50, 1 col., SEM stub 154.-Recent. Remarks: Species subsequently transferred to Lepidopora. Neotype designated by Cairns (1986a). carnea, Errina Boschma, 1965b PL: 76876, NZOI A455, 1 branch (ex RMNH Coel. 13761).-Recent. Remarks: Junior synonym of Errina laterorifa Eguchi, 1964. Paralectotype designated by Vervoort and Zibrowius (1981). cervicornis, Errina (Labiata) Broch, 1942 S: no number, N. Cape, SEM stub 161 (ex ZMC).-Recent. Remark: Species subsequently transferred to Lepidotheca (see Cairns, 1983c).

cervina, Distichopora Pourtalès, 1871

H: 71817, St. Thomas, frag. of holotype, SEM stub 262 (ex

MCZ).-Recent.

cestoporina, Errinopora Cairns, 1983a

H: 60188, Eltanin-1593, 1 col.; P: 60141, Eltanin-1593, 4 frag., SEM stubs 51-52, 84B; P: 52655, 52654, Eltanin-740, 2 col., SEM stub 97B.—Recent.

cheilopora, Errina Cairns, 1983a

H: 59906, Eltanin-1975, 1 col.; P: 60076, Eltanin-1975, 2 col., SEM stubs 38, 39B; P: 59907, Eltanin-1411, 7 col., 10 branches, SEM stub 39A; P: 59909, Eltanin-1414, 1 col.; P: 59910, Eltanin-1851, 5 col., 12 branches, SEM stub 40A.—Recent.

clausa, Crypthelia Broch, 1947

S: 76872, John Murray-152, 1 cyclosystem (ex BM).— Recent.

clavigera, Lepidopora Cairns, 1986a

H: 60362, Pelican Id., 1 col.; P: 60363, Pelican Island, 1 frag., SEM stubs 95A, 153A; P: 71753, *Blake*-282, 1 frag., 3 HSS; P: 71754, *Blake*-300, 2 col.—Recent.

cleithridium, Sporadopora Squires, 1958

P: 68446, NZGS 5170, 1 frag.—U. Miocene. Remark: Species transferred to Axoporella Boschma, 1954, by Squires (1962) and later to Axopora Milne Edwards and Haime, 1850, by Cairns (1983d).

cochleata, Lepidopora Pourtalès, 1867

S: 71820, Corwin-2, 1 col. (ex MCZ).—Recent. Remark: Species subsequently transferred to Errina (see Cairns, 1986a).

complanatus, Stylaster Pourtalès, 1867

S: 71826, Corwin-2, 1 frag. (ex MCZ 5516).-Recent.

concinna, Stenohelia Boschma, 1964b H: 60201, Albatross-4642, 1 male col.; P: 60202, Albatross-

4642, 4 male and 1 female col.—Recent.

contorta, Distichopora Pourtalès, 1878

H: 71816, *Blake* station unknown, frag. of holotype (ex MCZ).—Recent.

corallium, Stylaster Cairns, 1986a

H: 71827, *Pillsbury*-924, 1 female col.; P: 71828, *Pillsbury*-924, 6 branches, SEM stub 306; P: 71835, *Pillsbury*-926, 1 col., 10 branches; P: 71836, *Blake*-290, 1 branch; P: 71829, *B*-A 64, 4 col. (2 in alcohol), 2 branches, SEM stub 243; P: 71830, *B*-A 70, 5 col. (4 in alcohol), 3 branches; P: 71831, *Oregon*-5000, 1 col.; P: 71832, *Oregon*-5933, 2 col., 9 branches, SEM stub 242; P: 71834, *Oregon*-5949, 2 col., 3 frag., SEM stubs 241, 285; P: 71834, *Oregon*-24273, 3 col., 5 branches (3 in alcohol), 4 HSS.—Recent.

cruenta, Errina Boschma, 1968b

P: 76879, NZOI D156, 18 frag. (ex RMNH 13755).— Recent.

cryptocymas, Lepidopora Cairns, 1985

P: 72342, NZOI E305, 2 branches, SEM stubs 347, 352; P: 72343, NZOI P458, 2 branches, SEM stub 353A; P: 72345, NZOI P559, 2 branches, SEM stub 353B; P: 72346, NZOI P561, 2 branches.—Recent.

cryptotrema, Crypthelia Zibrowius, 1981

H: 60270, Vauban HSP27, part of holotype; P: 60271,

Vauban HSP27, 1 col.-Recent.

- cyclopora, Errina Cairns, 1983a
 - H: 60190, *Eltanin*-1592, 1 col.; P: 60139, *Eltanin*-1592, 4 col., 16 frag., SEM stubs 53-54; P: 60138, *Vema* 17-61, 2 col. and 6 frag.—Recent.
- cymas, Crypthelia Cairns, 1986b
 - H: 72106, *Albatross*-2818, 1 male col.; P: 72107, *Albatross*-2818, 19 col., 40 branches (2 in alcohol), SEM stubs 315-316, 343, 3HSS.—Recent.
- dabneyi, Lepidopora Pourtalès, 1871
 - S: 75608, Azores, 4 branches, SEM stubs 382-383 (ex MCZ).—Recent.
 - Remark: Species subsequently transferred to Errina.
- dactylopoma, Crypthelia Cairns, 1986b
 - H: 72108, *Albatross*-2818, 1 male col.; P: 72109, *Albatross*-2818, 10 col. and 54 branches, SEM stubs 317-318.— Recent.
- decipiens, Errina (Lepidopora) Boschma, 1964a

H: no number, *Blake*-164, SEM stub 120 (part of holotype, ex MCZ).—Recent.

- Remark: Species subsequently considered to belong to *Lepidopora*.
- decipiens, Paraerrina Broch, 1942
 - S: no number, Tombeau Bay, SEM stubs 149, 169, 9HSS (ex ZMC).—Recent.
- dendyi facies, Errina novaezelandiae Hickson, 1912a H: 85784, Milford Sound, frag. of holotype (ex BM 1964.9.17.1).—Recent.
- dentatus facies, Stylaster eximius Hickson and England, 1905 S: 76825, Siboga-144, 2 branches (in alcohol) (ex ZMA 7365).—Recent.
 - Remark: Not Stylaster dentatus Broch, 1936.
- diffusa, Errina (Lepidopora) Boschma, 1963
 - PL: no number, SCD 296M, SEM stub 121 (ex RMNH 13802).—Recent.
 - Remarks: Species subsequently considered to belong to *Lepidopora*. Paralectotype designated by Vervoort and Zibrowius (1981).
- divergens, Stylaster Marenzeller, 1904
- S: 21279, Albatross-3405, 2 male col.-Recent.
- duchassaingi, Stylaster Pourtalès, 1867
- N: 71823, Gerda-493, 1 col.-Recent.
- Remark: Neotype designated by Cairns (1986a).
- echinatus, Pliobothrus Cairns, 1986a
 - H: 71756, *Pillsbury*-881, 1 col; P: 71757, *Pillsbury*-881, 4 frag., SEM stubs 222, 276; P: 60364, *Albatross*-2753, 1 branch, SEM stub 223; P: 71758, *J*-S 43, 2 col., 2 branches (1 in alcohol); P: 71759, *J*-S 47, 1 col. (in alcohol), SEM stub 144, 4 HSS; P: no number, *Pillsbury*-907, SEM stub 275.—Recent.
- elassotomus, Stylaster Fisher, 1938
- H: 43268, *Albatross*-4781, 1 col.; P: 86007, *Albatross*-4781, 1 col.—Recent.
- elegans, Stylaster Verrill, 1864
 - S: 76882, Ebon Id., 1 col. (ex MCZ).-Recent.

- Remark: Probably a junior synonym of *Stylaster san*guineus Milne Edwards and Haime, 1850.
- erubescens, Stylaster Pourtalès, 1868
- S: 71822, *Bibb* station unknown, 1 male col. (ex MCZ 5543).—Recent.
- eueides, Crypthelia Cairns, 1986b
 - H: 72101, *Albatross*-2818, 1 male col.; P: 72102, *Albatross*-2818, 6 col. (3 in alcohol), 33 branches, SEM stubs 311-313, 6 HSS (female).—Recent.
- fascicularis, Errina (Inferiolabiata) Cairns, 1983a
 - H: 60149, Eltanin-1423, 1 col.; P: 60115, Eltanin-684, 4 frag., SEM stub 40B-C; P: 60146, Eltanin-1412, 1 frag.; P: 60113, Eltanin-1414, 3 col.; P: 60145, Eltanin-1416, 6 col., 3 branches (in alcohol), SEM stubs 85A, 181, 5 HSS; P: 60144, Eltanin-1422, 1 col.; P: 60112, Eltanin-1423, 13 frag., SEM stubs 7, 41A-B, 82; P: 60116, Eltanin-1536, 1 branch; P: 60117, Eltanin-1592, 1 col.; P: 60147, Eltanin-1851, 1 col.; P: 60119, Eltanin-1991, 4 frag., SEM stub 41C; P: 60118, Eltanin-2143, 1 branch; P: 60148, Vema 17-53, 1 branch; P: 60114, Vema 17-61, 10 branches; P: no number, Gazelle 66/44, SEM stub 157A (ex ZMB 7025).—Recent.
 - Remark: Species subsequently transferred to Lepidotheca.
- fenestrata, Errinopsis Cairns, 1983a
 - H: 52693, *Eltanin*-254, 1 col.; P: 52696, *Eltanin*-254, 22 frag., SEM stubs 57-58, 93A.—Recent.
- filogranus, Stylaster Pourtalès, 1871 S: 71825, Dry Tortugas, 2 branches, SEM stubs 269, 286 (ex
 - MCZ).—Recent.
- floridana, Crypthelia Cairns, 1986a
 - H: 71806, Gosnold-1630, 1 male col.; P: 71807, Gosnold-1630, 7 branches, SEM stub 250; P: no number, Bibb-22, SEM stub 257; P: 15982, Albatross-2662, 1 branch; P: 71808, Gosnold-1643, 2 branches; P: 71809, Gosnold-1644, 1 branch, SEM stub 132; P: 71810, Gosnold-1655, 1 branch; P: 71811, Silver Bay-451, 1 branch.—Recent.
- foliacea, Distichopora Pourtalès, 1868
 - S: 71819, *Bibb* station unknown, 1 branch (ex MCZ 5528).—Recent.
- formosa, Crypthelia Cairns, 1983a
 - H: 60207, *Eltanin*-1592, 1 female col.; P: 60084, *Eltanin*-1592, 3 col., SEM stubs 67, 68A, 83; P: 60086, *Eltanin*-1521, 10 frag., SEM stub 68B; P: 60085, *Eltanin*-1536, 1 male col.; P: 60088, *Vema* 17-54, 1 male branch; P: 60087, *Vema* 17-61, 2 female branches.—Recent.
- fragilis, Crypthelia Cairns, 1983a
 - H: 60206, Eltanin 17-5, 1 col.; P: 60089, Eltanin 17-5, 33 branches (3 in alcohol), SEM stubs 65-66, 99, 373; P: 60092, Eltanin-1412, 5 branches (2 in alcohol); P: 60091, Eltanin-1852, 1 col.; P: 60090, Eltanin-1991, 1 branch.— Recent.
- galapagensis, Stylaster Cairns, 1986b
 - H: 72098, Albatross-2818, 1 female col.; P: 72099, Albatross-2818, 5 col., 28 branches, SEM stubs 331-332, 348; P: 72100, Eltanin-4642, 3 male col., 2 branches.—

Recent.

- gigantea, Crypthelia Fisher, 1938
- H: 43273, Albatross-2818, 1 female col. in 2 pieces, SEM stubs 308-309; P: 86008, Albatross-2818, 1 male branch; P: no number, Albatross-2818, SEM stub 345.—Recent.
- glabra, Errina Pourtalès, 1867
 - S: 71814, Corwin-2, 1 branch (ex MCZ).—Recent. Remark: Species subsequently transferred to Lepidopora (see Caims, 1986a).
- glebulenta, Crypthelia Cairns, 1986b
- H: 72103, Albatross-2818, 1 male col.; P: 72104, Albatross-2818, 10 col., 44 branches, SEM stubs 320-321.—Recent. glossopoma, Crypthelia Cairns, 1986a
- H: 71801, *Pillsbury*-944, 1 male col., SEM stub 251A; P: 71802, *Gerda*-169, 1 col., SEM stub 251B; P: 71803, *Gerda*-785, 1 branch; P: 71804, *Gerda*-889, 2 branches; P: no number, *Pillsbury*-954, SEM stub 305.—Recent.
- gracilis, Errina Marenzeller, 1903
 - L: 76874, *Belgica*, 4 frag. of lectotype, SEM stub 100C (ex Institut de Sciences Naturelles, Brussels, 387).—Recent.
 - Remark: Lectotype designated by Cairns (1983a).
- grantmackiei, Pliobothrus Squires, 1965a P: 76870, Gee's Point, 4 frag.—Oligocene.
 - Remark: Subsequently reported to be a bryozoan (see Cairns, 1983c) and therefore does not appear on taxonomic list.

granulosa, Sporadopora Cairns, 1983a

H: 52697, Eltanin-740, 1 col.; P: 52698, Eltanin-740, 43 branches, SEM stub 48; P: 60126, Eltanin-1521, 2 branches (1 in alcohol), SEM stub 49A; P: 60125, Eltanin-1592, 12 frag.; P: 60127, Eltanin-1593, 1 branch; P: 60184, Islas Orcadas 575-102, 5 branches (2 in alcohol), SEM stub 49B; P: 60186, Vema 17-54, 2 frag.; P: 60185, Vema 17-57, 1 frag.; P: 60143, Vema 17-61, 2 branches; P: 60187, Vema 17-64, 1 branch.—Recent.

Remark: Species subsequently transferred to Lepidopora. horrida, Errina Hickson and England, 1905

S: 76863, Siboga-150, 1 frag. (ex ZMA).—Recent. Remark: Species subsequently transferred to Lepidotheca (see Cairns, 1983c).

- H: I54303, Plum Point, 1 col.; P: 76867, Cove Point, 1 col. in 2 pieces, SEM stub 116; P: 76866, St. Mary's, 1 col.—Miocene.
- inornatus, Stylaster Cairns, 1986a
 - H: 71784, *Albatross*-2354, 1 female col.; P: 50571, *Albatross*-2354, 9 col., 30 branches (10 in alcohol), SEM stubs 274, 295, 301, 4 HSS; P: 71785, *Gerda*-889, 2 col., 13 branches; P: 71786, *Pillsbury*-595, 2 branches.—Recent.

insolita, Crypthelia Cairns, 1986a

- P: 71798, *Rosaura*-34, 2 branches, SEM stubs 252-253; P: 71799, *Blake*-259, 2 col.; P: 71800, *Blake*-269, 4 col., 6 branches, SEM stub 254.—Recent.
- interglacialis, Milleaster Richards, 1933
 - H: M371911, Two Mile Beach, 1 col.; P: M371912, Two

Mile Beach, 1 col.; P: M371913, Holliday Beach, 1 col.—Pleistocene.

- intervacans, Errinopora Naumov, 1960
 - H: 76865, Moneron Id., frag. of holotype (ex Zoological Institute, Academy of Sciences, Leningrad, 1/9888).— Recent.
 - Remark: Junior synonym of *Errinopora stylifera* (Broch, 1935).
- irregularis forma, Stylaster eximius Hickson and England, 1905
 - S: 76828, Siboga-310, 2 frag. (1 in alcohol) (ex ZMA 7366).—Recent.
- japonica, Distichopora borealis Broch, 1942
- S: 76868, Okinose, 1 branch (ex RMNH 13955).—Recent. lacunosa, Crypthelia Cairns, 1986b
- H: 72105, Albatross-2818, 1 female col.; P: 45684, Albatross-2818, 28 col. (7 in alcohol), 62 branches, SEM stubs 182, 310, 314, 344, 9 HSS.—Recent.
- laevigranulosa, Distichopora Cairns, 1986b
- H: 72093, *Albatross*-2818, 1 female branch, SEM stub 326.—Recent.
- laevigatus, Stylaster Cairns, 1986a

H: 52215, Albatross-2337, 1 female col.; P: 10233, 44201, Albatross-2337, 11 col. (2 in alcohol), 10 branches, SEM stubs 290, 297, 244A, 8 HSS; P: 16002, Albatross-2159, 4 branches; P: 16003, Albatross-2167, 1 branch; P: 16061, Albatross-2321, 1 col.: P: 52223, Albatross-2327, 1 col.; P: 16030, Albatross-2334, 1 branch; P: 52203, Albatross-2338, 2 col.; P: 52217, Albatross-2346, 5 col.; P: 16032, Albatross-2347, 1 col.; P: 52216, Albatross-2353, 1 col.; P: 71787, Atlantis-3367, 2 col.; P: 71788, Vema 15-1, 2 col.; P: 71789, Gerda-533, 2 col., 2 branches, SEM stubs 221, 244B; P: 71790, Eastward-26549, 2 branches; P: 71791, Eastward-31281, 1 col.; P: 71792, Johnson-Sea-Link 1354, 2 col. and 20 branches (2 in alcohol); P: 71793, Johnson-Sea-Link 1362, 1 col.—Recent.

latifundata, Errinopora Naumov, 1960

H: 76864, *Vitjas*-1799, branch frag. of holotype (ex Zoological Institute, Academy of Sciences, Leningrad, 1/9889).—Recent.

leptostyla forma, Allopora moseleyana Fisher, 1938

- H: 43270, *Albatross*-3480, 1 male col.; P: 76817, *Albatross*-3480, 6 branches.—Recent.
- Remark: Species subsequently transferred to Stylaster. lonchitis, Stylaster Broch, 1947
- P: 85786, John Murray-112, 1 branch (ex BM 1950.5.22.6).—Recent.
- lowei, Errina (Inferiolabiata) Cairns, 1983a

H: 60140, Eltanin-1536, 1 female col.; P: 59939, Eltanin-1536, 7 col.; P: 52656-52657, Eltanin-254, over 50 branches, SEM stub 32B; P: 52622, Eltanin-678, 7 branches; P: 59938, Eltanin-684, 1 col., 14 frag., SEM stub 32A; P: 52664, Eltanin-740, 1 col. and over 10 frag.; P: 59942, Eltanin-1593, 19 frag.; P: 59940, Islas Orcadas 575-35, 10 frag.; P: 59943, Islas Orcadas 575-82, 1 col. (in

incrustans, Milleaster Ulrich, 1904

alcohol), 5 branches, SEM stub 31A; P: 59937, Islas Albatross-4777, 3 col.-Recent. Orcadas 575-91, 1 col. and 5 branches (in alcohol), SEM nielseni, Astya Wells, 1977 stub 31B; P: 59941, Hero 715-895, 12 frag. (1 in alcohol); H: I208299, USGS 24686, 1 cyclosystem; P: I208300, P: 52666, Vema 17-59, over 20 frag.-Recent. USGS 24686, 1 cyclosystem.-Eocene. Remarks: Species subsequently considered to belong to nitida, Distichopora Verrill, 1864 Inferiolabiata. S: 76883, Ebon Id., 1 col. (ex MCZ 5526).-Recent. macrogastra, Errina Marenzeller, 1904 pachypoma, Crypthelia Hickson and England, 1905 S: 21280, Albatross-3404, 2 col.; S: 21281, Albatross-3404, L: no number, Siboga-150, SEM stubs 194, 199 (ex 23 col. (19 in alcohol), SEM stubs 164, 324-325, 338, 6 ZMA).-Recent. HSS.-Recent. Remarks: Lectotype designated by Cairns (1983b). macropora, Lepidotheca Cairns, 1986b Species subsequently transferred to Pseudocrypthelia. H: 72090, Albatross-2818, 1 male col., SEM stub 322; P: papillosa, Allopora Fisher, 1938 72091, Albatross-2818, 6 frag., SEM stub 323; P: 72092, H: 6852, Coal Harbor, 1 col.-Recent. Albatross-4642, 1 male frag.-Recent. Remark: Species subsequently transferred to Stylantheca. major, Conopora Hickson and England, 1905 papillosa, Crypthelia Cairns, 1986a S: 76822, Siboga-119, 1 frag. (in alcohol), (ex ZMA).-H: 71805, Blake-154, 1 female col., SEM stub 304.-Recent. Recent. marenzelleri, Stylaster Cairns, 1986b papuensis, Stylaster Zibrowius, 1981 H: 72096, Albatross-4642, 1 female col.; P: 72097, H: 60269, Snake Pass, 1 col., over 50 frag.; P: 60274, Snake Albatross-4642, 10 col., 5 branches, SEM stubs 329-330, Pass, 1 branch (paratype #1); P: 60275, Snake Pass, 1 branch 341.—Recent. (paratype #2).-Recent. marshae, Stylaster Cairns, 1988b paragea, Allopora campyleca Fisher, 1938 P: 79518, Dirk Hartog Id., 1 female col., SEM stub 458; P: H: 42871, Tanakee Springs, 1 col.; P: 76812, Albatross-79519, Long Id., 1 female col.; P: 79520, Whitford's Beach, 4245, 1 col.-Recent. 1 col., SEM stub 457; P: no number, Green Id., SEM stub Remark: Species subsequently transferred to Stylaster. 459; P: no number, Rottnest Id., SEM stub 456.-Recent, pauciseptata, Stenohelia Cairns, 1986a mascarina, Errina aspera Boschma, 1965a H: 71795, Pillsbury-901, 1 female col.; P: 71796, Pillsbury-P: 76877, Mauritius, 1 frag (ex MNHNP).-Recent. 901, 36 branches, SEM stubs 249, 302; P: 71797, micropoma, Crypthelia Cairns, 1985 Albatross-2753, 6 col. and 13 branches (1 in alcohol).-H: 72353, Anton Bruun 8-420A, 1 female col., SEM stubs Recent. 346, 349C; P: 72354, Anton Bruun 8-420A, 2 col. and 3 peircei, Crypthelia Pourtalès, 1867 branches (in alcohol), SEM stub 349A-B, 10 HSS .--PL: no number, Corwin station unknown, SEM stub 131A Recent. (ex MCZ 5537).-Recent. milleri, Stylaster Durham, 1942 Remark: Lectotype designated by Cairns (1986a). S: 76873, A-1802, 3 col.-L. Oligocene. petrograpta, Allopora Fisher, 1938 miniata, Allopora Pourtalès, 1868 S: 43272, Kyack Id., 2 frag.-Recent. S: 71821, Bibb station unknown, 1 frag., SEM 303 (ex Remark: Species subsequently transferred to Stylantheca. MCZ).-Recent. platypoma, Crypthelia Hickson and England, 1905 Remark: Species subsequently transferred to Stylaster. S: 76818, Siboga-156, 1 frag. (ex ZMA 7395).-Recent. minor forma, Stylaster eximius Hickson and England, 1905 S: 76829, Siboga-80, 1 frag. (ex ZMA).-Recent. polyorchis, Allopora Fisher, 1938 moseleyana, Allopora Fisher, 1938 H: 43266, Albatross-3480, 1 large col. and 2 frag. of H: 42869, Albatross-4781, 1 male col. in 2 pieces; P: 86003, same.-Recent. Albatross-4781, 1 col., 10 branches.-Recent. Remark: Species subsequently transferred to Stylaster. Remarks: Species subsequently transferred to Stylaster. polystichopora, Lepidopora Cairns, 1985 moseleyi, Allopora Dall, 1884 H: 72347, NZOI E305, 1 frag. of holotype, SEM stub 350; H: 6851, Kyska Harbor, 1 col.-Recent. P: 72348, NZOI E305, 1 frag., SEM stub 307; P: 72352, Remark: Junior synonym of Stylaster verrillii (Dall, NZOI P566, 1 frag.-Recent. 1884). Remark: Paratype from NZOI P566 is Lepidopora multiplex, Stylaster Hickson and England, 1905 cryptocymas. S: 76823, Siboga-94, 1 branch (in alcohol) (ex ZMA Coel porphyra, Stylantheca Fisher, 1931 7376).--Recent. H: 43018, Pescadoro Point, 1 col.; P: 43019, Pescadoro Point, 1 col.; P: 43276, Pescadoro Point, 9 col. (5 in nanneca, Errinopora Fisher, 1938 alcohol), SEM sub 136; P: 43277, Pescadoro Point, 1 col. (in H: 42875, Albatross-3599, 1 col.; P: 52248, Albatross-3599, alcohol), SEM stub 190.-Recent. 1 col.; P: 52263, Albatross-3599, 7 col.; P: 52249,

- pourtalesi, Lepidotheca Cairns, 1986a
- H: 15992, Albatross-2331, 1 col.; P: 15994, Albatross-2166, 1 col., 1 branch, SEM stub 159B; P: 15995, Albatross-2167, 1 col.; P: 71760, Albatross-2331, 4 branches, SEM stubs 155A, 159A; P: 15993, Albatross-2334, 1 col., 3 branches, SEM stub 159C.—Recent.

pourtalesii, Errina Dall, 1884

- S: 6853, Farallones, 1 col.—Recent.
- Remark: Species subsequently transferred to Errinopora. profunda, Allopora Moseley, 1879
 - L: no number, *Challenger*-306, SEM stub 96 (ex BM).— Recent.
 - Remarks: Lectotype chosen by Cairns (1983a). Species subsequently transferred to *Stylaster*.
- providentiae, Sporadopora Hickson and England, 1909 S: no number, D-8, SEM stub 156 (ex BM 1957.2.18.2).— Recent.
- pseudothyron, Adelopora Cairns, 1986b
 - H: 60198, Eltanin-254, 1 col.; P: 60128, Eltanin-254, 22 col., SEM stubs 4, 5A-B, 6A, 92B, 93B, 94; P: 60131, Eltanin-1343, 7 col., SEM stub 5C; P: 60132, Eltanin-1345, 1 col., 1 frag.; P: 60130, Eltanin-1521, 10 col. (4 in alcohol), SEM stubs 170, 176; P: 60129, Eltanin 25-325, 1 col.; P: 60133, Eltanin 25-326, 9 col. (2 in alcohol), SEM stubs 6B, 177, 7 HSS.—Recent.

pulcher, Stylaster Quelch, 1884

S: 85788, Enoshima Id., 1 frag. (ex BM 1883.8.17.4-5).— Recent.

pulvinatum, Cheiloporidion Cairns, 1983a

- H: 52649, Vema 17-14, 1 col., 12 frag.; P: 52648, Vema 17-14, 4 frag., SEM stub 59; P: 52650, Vema 15-10, 1 frag.—Recent.
- ramosa, Crypthelia Hickson and England, 1905
 - S: Siboga-122, 1 frag. (in alcohol) (ex ZMA 7393).— Recent.
- ramosa, Errina Hickson and England, 1905
 - S: no number, *Siboga*-297, SEM stub 137A (ex ZMA).— Recent.
 - Remark: Species subsequently transferred to Lepidotheca (see Cairns, 1983c).
- regularis, Phalangopora Kirkpatrick, 1887
- H: no number, Mauritius, part of holotype SEM stubs 119, 126 (ex BM 1891.12.12.1).—Recent.
- reticulata, Calyptopora Boschma, 1968a
- P: 76878, NZOI F132, 2 frag. (ex RMNH 13754).—Recent. robusta, Allopora Cairns, 1983a
 - H: 60200, *Eltanin*-1081, 1 branch; P: 52640, *Eltanin*-1081, 7 branches; P: 60095, *Eltanin*-684, 1 branch; P: 52637-52639, *Eltanin*-993, 32 col., over 50 branches, SEM stubs 73, 74A; P: 60246, *Eltanin*-1084, 3 frag.—Recent.
- Remark: Species subsequently transferred to Stylaster. robusta, Stenohelia Boschma, 1964b
 - H: 21282, *Albatross*-3404, 1 female col.; P: 21282, *Albatross*-3404, 1 col.—Recent.

Remark: Both holotype and paratype have the same catalog number.

- rosaceus, Allopora Greeff, 1886
 - S: no number, São Tome, SEM stub 442 (ex ZMB 4725).—Recent.
- Remark: Species subsequently transferred to Stylaster. rosalindae, Distichopora Cairns, 1986a
 - H: 71772, Oregon-4932, 1 male col.; P: 71773, Oregon-4932, over 30 branches, SEM stubs 236, 281-282; P: 71774, Oregon-1890, 11 frag.; P: 71775, Gerda-889, 7 branches.—Recent.
- seriatus, Pliobothrus Broch, 1942
 - S: no number, Tombeau Bay, 2 HSS (ex ZMC).—Recent. Remark: Junior synonym of *Phalanogopora regularis* Kirkpatrick, 1887 (see Cairns, 1983c).
- spatula, Stylaster Cairns, 1986a
- H: 71781, Oregon-24237, 1 female col.; P: 71782, Oregon-24237, 9 col. (1 in alcohol), 15 branches, SEM stubs 272-273, 294, 2 HSS; P: 71783, Oregon-24238, 1 col., 5 branches (2 in alcohol).—Recent.
- stejnegeri, Allopora Fisher, 1938
 - H: 43271, *Albatross*-4777, 1 col.—Recent. Remark: Species subsequently transferred to *Stylaster* (see Cairns, 1983c).
- stellulatus, Stylaster Stewart, 1878 H: 85783, Tahiti, frag. of holotype (ex BM 1878.2.2.81).— Recent.
- stenopoma, Crypthelia Hickson and England, 1905 S: 76819, Siboga-225, 1 male frag. (ex ZMA 7398).— Recent.
- subramosus, Milleaster Ulrich, 1904 H: I54304, Plum Point, 1 col.—Miocene.
- sulcata, Distichopora Pourtalès, 1867
- S: 71815, Corwin-2, 1 branch (ex MCZ).-Recent.
- tenisonwoodsi, Stylaster Caims, 1988b P: 77050, Alpha Helix 79-M35, 3 female col.: P: 77165,
 - Sting Ray 78-T7, 1 female col.; P: 79521, Ashmore Reef, 1 female col., SEM stub 460.—Recent.
- tenuis, Conopora Moseley, 1879
 - H: no number, *Challenger*-170, SEM stub 135B (ex BM 1880.11.25.184).—Recent.
 - Remark: Junior synonym of *Conopora laevis* (Studer, 1878).
- tenuis, Stylaster Verrill, 1864
 - S: 76881, Navigator Id., 2 female col. (ex MCZ 5501).— Recent.

Remark: Junior synonym of *Stylaster sanguineus* Milne Edwards and Haime, 1850.

tenuiseptata, Crypthelia Cairns, 1986a

H: 72315, *Blake*-264, SEM stub 258, 3 HSS; P: 71812, *Blake*-230, 1 col.—Recent.

tenuistylus, Errina Broch, 1942

S: 76869, Tombeau Bay, 1 frag., SEM stub 160 (ex ZMA).-Recent.

Remark: Species subsequently transferred to Lepidotheca. tiliatus, Stylaster Hickson and England, 1905 S: 77280, Siboga-105, 1 branch (ex ZMA 8205).--Recent. Remark: Species subsequently transferred to Stenohelia. tortuosa, Millepora Dana, 1846 S: 692, Fiji (USEE), 1 col.-Recent. trachystoma, Allopora campyleca Fisher, 1938 H: 43265, Albatross-4784, 1 col.; P: 76811, Albatross-4784, 5 col.-Recent. Remark: Species subsequently transferred to Stylaster. trophostega, Crypthelia Fisher, 1938 H: 42876, Albatross-3480, 1 male col.; P: 52264, Albatross-3480, 2 male col.-Recent. tylota, Allopora campyleca Fisher, 1938 H: 43263, Albatross-4781, 1 female col.; P: 86000, Albatross-4781, 15 branches.-Recent. Remark: Species subsequently transferred to Stylaster. umbonatus, Stylaster Hickson and England, 1905 S: 76875, Siboga-119, 1 branch (in alcohol) (ex ZMA 7389).-Recent. Remark: Species subsequently transferred to Stenohelia. uniserialis, Distichopora Cairns, 1986a H: 71776, Albatross-2346, 1 male branch; P: 15969, Albatross-2346, 5 col. (1 in alcohol), 5 frag., SEM stubs 234-235, 4 HSS; P: 15981, Albatross-2339, 1 branch; P: 15968, Albatross-2349, 2 col., SEM stub 219.-Recent. verrillii, Allopora Dall, 1884 S: 4193, Akutan Pass, 5 col.-Recent. Remark: Species subsequently transferred to Stylaster. vetusta, Crypthelia Wells, 1977 H: I208297, USGS 24686, 1 branch; P: I208298a-d, USGS 24686, 4 frag.-Eocene. yucatanensis, Distichopora Cairns, 1986a H: 10286, Albatross-2354, 1 male col.; P: 15973, 53423, Albatross-2354, 12 col. and over 50 branches (4 in alcohol), SEM stubs 278-279, 288; P: 71764, Gerda-889, 2 col. and 18 branches; P: 71765, Gerda-890, 3 branches; P: 71766, Pillsbury-592, 4 branches; P: 71767, Oregon-4932, 1 branch.-Recent. zarhyncha, Errinopora Fisher, 1938 H: 42874, Albatross-3480, 1 col.; P: 52247, Albatross-3480, 8 branch frag.-Recent. Part 2. Anthozoa (Scleractinia) abacus forma, Porites compressa Vaughan, 1907a H: 20932, Kaneohe, 1 col.-Recent. abbreviata var., Madrepora spicifera Dana, 1846

S: 235, 245, Singapore (USEE), 1 col. each.—Recent. Remark: Species subsequently transferred to Acropora.

acervata, Madrepora Dana, 1846

?S: 271, Singapore (USEE), 1 col.-Recent.

Remarks: Type status doubtful: original label reads: "M. plantaginea Lam. (Dana)", but later label reads "Acropora acervata Dana type, not M. plantaginea of Dana". Rathbun (1887) also lists it as a type of M. acervata. Junior synonym of Acropora humilis (Dana, 1846) (see Wells, 1954:425, but also Veron and Wallace, 1984:178). aculeus, Madrepora Dana, 1846 H: 257, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. acuticostata, Turbinolia Vaughan, 1895 S: M158131, Potomac Creek, 1 col.-Eocene. acutiforme var., Flabellum cuneiforme Vaughan, 1900a S: M157963, USGS 2005, 1 col.; S: M157964, USGS 2005, 1 col.—Eocene. adkinsi, Synastrea Wells, 1934 H: I74483, Catadupa, 1 col.-U. Cretaceous. adminicularis, Amphihelia Rehberg, 1892 H: 78556, Yeddo Bay, 2 corallites of holotype.-Recent. Remark: Species subsequently transferred to Enallopsammia (see Zibrowius, 1973). agassizi, Leptastrea Vaughan, 1907a S: 21634, Waikiki, 1 col.; S: 21633, Waikiki, 1 col.-Recent. Remark: Species subsequently transferred to Cyphastrea (see Veron and Hodgson, 1989). aithoseptatum, Trochocyathus Cairns, 1984 H: 60529, Sango 16-8, 1 corallum; P: 60532, Sango 16-1, 1 corallum; P: 60531, Sango 16-3, 2 frag.; P: 60530, Sango 16-5, 43 coralla .-- Recent. alabamensis, Dichocoenia Vaughan, 1900a H: M158300, Prairie Creek, 1 col., 1 TS (M158299).-Eocene. alabamensis, Oculina Vaughan, 1900a S: M155114, Gregg's Landing, 4 branches; S: M158249, Gregg's Landing, 3 branches; S: M158250, Gregg's Landing, 1 branch.-Eocene. alabamensis, Turbinaria Vaughan, 1900a S: M158481, Salt Mountain, 1 col., 5 frag. (M158479), and 2 TS (M158480); S: M158482, Salt Mountain, 1 large col.-Oligocene. alabamiensis, Stenocyathus Wells, 1947 H: I104177, Linden, 1 corallum; P: I104178, Linden, 2 coralla, 2 TS.-U. Cretaceous. alaskana, Latimaendra Smith, 1927 H: I74245, Threemile Cove, 1 col.-U. Triassic. Remark: Species subsequently transferred to Latomeandra. alaskensis, Caryophyllia Vaughan, 1941 S: M547317, Albatross-4231, 2 coralla; S: M547318, Albatross-4300, 1 corallum.-Recent. alatus, Antillocyathus Cairns and Wells, 1987 P: 65481, USGS 7776, 1 col.; P: 64274, 63063, USGS 8702,

8 col.; P: 63064, USGS 8544, 2 col.; P: 74683, USGS 8549,

2 col.; P: 63061, USGS 8726, 1 col.; P: 63062, USGS 8734,

23

1 col.-L. Miocene to early Pliocene. alces, Madrepora Dana, 1846 S: 237, East Indies (USEE), 1 branch.-Recent. Remark: Species subsequently transferred to Acropora. alcocki, Caryophyllia Vaughan, 1907a S: 20744, Albatross-3977, 1 corallum; S: 20745, Albatross-3977, 1 corallum.-Recent. Remark: Junior synonym of Caryophyllia atlantica (Duncan, 1873) (see Cairns, 1984). alcocki, Sclerhelia Wells, 1954 H: 45056, sta. 118, 1 col. in 5 pieces.-Recent. Remarks: Senior synonym of Dendrophyllia palita Squires and Keyes, 1967. Species correctly placed in Dendrophyllia (see Zibrowius, 1973). aldrichi, Goniopora Vaughan, 1941 H: M547345, Cave Branch, 1 col.-L. Eocene. aldrichi, Oculina Vaughan, 1900a H: M158253, Bryam's Ferry, 1 branch.-Eocene. aliciae, Mycetophyllia Wells, 1973a H: 53496, The Bull, 1 col.; P: 53497, W. Bull, 1 col.-Recent. allingi, Alveopora Hoffmeister, 1925 S: 85766,(specimen #1), 1 col.; S: 85767, (specimen #2), 1 col.; S: 62494, (specimen #3), 1 branch; S: 85765, (specimen #4), 6 col.-Recent. alpha subforma, Porites lobata forma centralis Vaughan, 1907a S: 22241, Kalihi, 1 col.; S: 22242, Kalihi, 1 col.-Recent. alta var., Favoidioseris fredericksburgensis Wells, 1933 H: I75135, Belton, 1 col.-L. Cretaceous. Remark: Species subsequently transferred to Ovalastrea. alternans, Trematotrochus Cairns and Parker, in press P: 85686, Beachport, 2 coralla, SEM stub 525A; P: 85688, Gulf of St. Vincent, SEM stub 525B; P: 85689, Beachport, 2 coralla. (all ex SAM)-Recent. alternatus, Paracyathus Vaughan, 1900a Recent. S: M158174, USGS 2033, 2 col. (var. a); S: M158189, Newton, 1 col. (var. b); S: M158191, Claiborne, 1 col.-Eocene. amarantum, Manicina Dana, 1846 S: 85, East Indies (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Trachyphyllia. americana, Micrabacia Meek, 1876 S: I456, Moreau River, 6 small rocks.-Cretaceous. andrewsi, Porites Vaughan, 1918 S: 85761, Murray Id. (400'), 4 col.; S: 45500, Murray Id. (600'), 2 col.; S: 85760, Murray Id. (650'), 2 col.; S: 47232, Murray Id. (800'), 5 col.; S: 47231, Murray Id. (1200'), 1 col.-Recent. Remark: Vaughan designated no types, thus all of his specimens are considered to be syntypes. anguillensis, Agaricia Vaughan, 1919

P: M324971, Anguilla, 1 col.—M. Miocene.

anguillensis, Pironastraea Vaughan, 1919 H: M325174, USGS 6894, 1 col; P: M325175, USGS 6893, 1 col.-M. Miocene. angustisepta forma, Porites compressa Vaughan, 1907a H: 20915, Molokai, 1 col.-Recent. annularis, Balanophyllia Vaughan, 1900a S: M158366, Peach Tree Landing, 1 col.; S: M158367, Peach Tree Landing, 1 col.-Eocene. anomalos, Favioseris Wells, 1934 H: I74484, Catadupa, 1 col.-U. Cretaceous. antarcticus, Leptopenus Cairns, 1989 H: 47483, Eltanin-2002, 1 corallum; P: 47480, Eltanin-598, 1 corallum (in alcohol); P: 47481, Eltanin-1545, 2 coralla (1 in alcohol); P: 47479, Eltanin-1926, 1 corallum (in alcohol); P: 81746, Eltanin-2002, 2 coralla (in alcohol); P: 47482, Eltanin-2108, 37 coralla (32 in alcohol).-Recent. antiguensis, Astreopora Vaughan, 1919 P: M325609, Antigua, 2 col.-Oligocene. antiguensis, Maeandra Vaughan, 1919 S: M325003, USGS 6881, 2 col.—Oligocene. Remark: Species transferred to Diploria. antiguensis, Pironastrea Vaughan, 1919 H: M325177, USGS 6854, 1 col.; P: M325179, USGS 7514, 1 col.-Oligocene. antilliana, Montastrea Wells, 1945 H: 68345, S152, 1 col.-Eocene. antillarum, Flabellum Wells, 1945 H: 68350, S360, 1 col.-Eocene. anzoateguensis, Dendraraea Wells, 1944a H: M547396, La Borracha Id., 13 frag., 2 TS.-L. Cretaceous. aotearoa, Flabellum Squires, 1964 P: 68261, Ikatare B-26, 1 corallum.-Recent. aperta forma, Porites lobata Vaughan, 1907a S: 20921, Molokai, 1 col.; S: 20924, Molokai, 1 col.araguensis, Dendrophyllia Wells, 1944a H: M547404, Aragua, 3 frag., 2 TS.-Oligocene to Miocene. arbuscula, Madrepora Dana, 1846 S: 296, Sulu Sea (USEE), 1 col.-Recent. Remark: Junior synonym of Acropora formosa (Dana, 1846) (see Veron and Wallace, 1984). areum, Flabellum Cairns, 1982a H: 47167, Eltanin-1592, 1 corallum; P: 47168, Eltanin-1592, 3 coralla; P: 45639, Eltanin-973, 12 coralla; P: 45616, Vema 15-132, 15 coralla; P: 45169, Vema 17-57, 7 coralla.-Recent. arkansasensis, Micrabacia Wells, 1933 H: I75228, USGS 16243, 1 corallum; P: I75200, USGS 16243, 1 corallum; P: I203607, USGS 16243, 1 corallum.--U. Cretaceous. armata, Plesiastraea Verrill, 1872 H: 65, East Indies (USEE), 1 col.-Recent.

Remarks: Species based on Dana's (1846) Astraea (Fissicella) intersepta (Esper). Junior synonym of Favia stelligera (Dana, 1846) (see Veron, Pichon, and Wijsman-Best, 1977). arnoldi, Caryophyllia Vaughan, 1900b H: M157509, San Pedro Hill, 1 col.-Pleistocene. arnoldi, Pocillopora Vaughan, 1919 H: M324782, USGS 6444, 1 col.-Miocene. ascia var., Pavonia crassa Dana, 1846 H: 222, Fiji (USEE), 1 col.-Recent. Remarks: Species subsequently transferred to Pavona. Variety asciais considered to be the typical subspecies of P. crassa. aspera, Goniastrea Verrill, 1866a S: 402, Loo Choo (NPEE), 1 col.; S: 403, Loo Choo (NPEE), 1 col.-Recent. aspera, Madrepora Dana, 1846 H: 285, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. aspera, Montipora Verrill, 1872 S: 339, Singapore (USEE), 1 col.-Recent. Remark: Based on Dana's (1846) Manopora cristagalli (Ehrenberg). aspera, Pocillopora Verrill, 1869a S: 698, Sandwich Ids. (Hawaiian Islands)(USEE), 1 col.-Recent. Remark: Based on Dana's (1846) specimen of Pocillopora favosa (Ehrenberg) from the Sandwich Islands. atlanticum, Flabellum pavoninum Cairns, 1979 H: 46895, Gerda-179, 1 corallum; P: 46896, Gerda-179, 41 coralla; P: 46897, Gerda-405, 1 corallum; P: 46898, Gerda-254, 1 corallum; P: 46899, Gerda-666, 1 corallum; P: 46900, Gerda-927, 1 corallum; P: 46901, Silver Bay-3514, 3 coralla.-Recent. Remark: Subspecies elevated to species rank by Cairns (1984). atrata, Dendrophyllia Dennant, 1906 P: 85673, Backstairs Passage, SEM stub 516.-Recent. Remark: Species subsequently transferred to Astrangia (see Cairns and Parker, in press). auaensis var., Montipora verrilli Hoffmeister, 1925 H: 68213, Pago Pago, 1 col.-Recent. augustinensis, Balanophyllia Vaughan, 1900a S: M158368, San Augustine, Texas, 6 coralla.-Eocene. australiensis, Porites Vaughan, 1918 H: 47233, Murray Id. (620'), 1 col.-Recent. bainbridgensis var., Goniopora decaturensis Vaughan, 1919 H: M325029, USGS 3381, 1 col.-L. Miocene. Remark: Junior synonym of Goniopora imperatoris Vaughan, 1919. bainbridgensis, Orbicella Vaughan, 1919 H: M324881, USGS 3383, 1 col. in 9 frag., 5 TS.-L. Miocene.

Remark: Junior synonym of Montastraea cavernosa

(Linnaeus, 1758) (see Budd, in press). balaenacea, Caryophyllia Zibrowius and Gili, 1990 P: 86877, BB-12, 5 coralla; P: 86878, BB-13, 5 coralla.-Recent. ballistensis, Goniopora Weisbord, 1973 P: 68314, USGS 3286, 1 col.-Miocene. Remarks: Based on G. ballistensis nom. nud. Vaughan, 1915. Junior synonym of Porites portoricensis (Vaughan, 1919) (see Foster, 1986). baracoaensis, Pocillopora Vaughan, 1919 H: M324783, USGS 3476, 1 col.-Miocene. baracoaensis, Porites Vaughan, 1919 H: M325069, USGS 3476, 1 col.-U. Pliocene. barbadiana, Archohelia Wells, 1945 H: 68343, S80, 1 col.; P: 68344, S80, 1 col.-Eocene. barbadiana, Turbinolia Wells, 1945 H: 68345, S80, 1 col.; P: 68346, S80, 1 col.; P: 68347, S80, 1 col.-Eocene. barranguinensis, Astrocoenia Wells, 1944a H: M547380, Cumaná, 1 col., 2 frag., 1 TS.-L. Cretaceous. barretti, Actinacis Wells, 1934 H: 44295, Jamaica, 1 col.-M. Eocene. bartschi, Coenocyathus Wells, 1947 H: M547397, Dry Tortugas, 1 col. of 3 corallites.-Recent. Remark: Junior synonym of Rhizosmilia maculata (Pourtalès, 1874) (see Cairns, 1978b). bastropensis, Paracyathus Vaughan and Popenoe, 1935 S: M371040, USGS 11696, 2 col.-Eocene. bayeri, Balanophyllia Cairns, 1979 H: 46909, Oregon-4940, 1 corallum; P: 46910, Oregon-4940, 18 coralla; P: 46912, Pillsbury-596, 16 coralla; P: 46911, Oregon-4939, 5 coralla.-Recent. bellensis, Astrocoenia Wells, 1933 H: I75146, Belton, 1 col.-L. Cretaceous. belli, Cyathomorpha Vaugahn, 1919 H: M325218, USGS 6854, 1 col.-Oligocene. Remark: Junior synonym of Agathiphyllia browni (Vaughan, 1919) (A. Budd, pers. comm.) bellus, Paracyathus Vaughan, 1900a S: M158193, Wautubbee, 3 col.; S: M158194, USGS 2622, 1 col.; S: M158196, Newton, 1 col.-Eocene. benhami, Goniastrea Vaughan, 1917a H: 52722, Meyer Id., 1 col.-Recent. Remark: Junior synonym of Goniastrea australiensis (Milne Edwards and Haime, 1857) (see Veron, Pichon, and Wijsman-Best, 1977:92). bernardi, Montipora Vaughan, 1907a S: 20812, Albatross-3847, 4 branches.--Recent. bernardi, Porites Vaughan, 1907a S: 20820, Albatross-3876, 3 col.-Recent. berryi, Montipora Hoffmeister, 1925 H: 85768, Pago Pago, 1 col.-Recent. beta forma, Acropora palifera Wells, 1954

H: 44648, sta. 38B, 1 col.—Recent.

SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY

Remark: This new form was named by Wells for Acropora palifera (Lamark, 1816). beta subforma, Porites lobata forma centralis Vaughan, 1907a H: 20927, Hawaiian Ids. (WTB 115), 1 col.-Recent. bikiniensis var., Rhizopsammia minuta Wells, 1954 H: 45106, sta. 106, 1 col.-Recent. blakei, Phyllangia Wells, 1947 H: M560156, Jackson Bluff, 1 col.; P: M560157, Jackson Bluff, 2 col.-U. Miocene. boesei, Frechia Wells, 1933 H: I312608, NW of Georgetown, 1 col.; P: I312609, NW of Georgetown, 3 col.-L. Cretaceous. Remark: Species subsequently transferred to Epistreptophyllum. boltonae, Diplaraea Wells, 1934 H: I74479, Catadupa, 1 col.-U. Cretaceous. borealis, Confusastrea Smith, 1927 H: 174246, Threemile Cove, 1 col.-U. Triassic. Remark: Species subsequently transferred to Complexastrea. borealis, Thamnastraea Smith, 1927 H: I74243, USGS 9537, 1 col.; P: I147652, USGS 9900, 1 col.-U. Triassic. Remark: Species subsequently transferred to Thamnasteria. borrachensis, Myriophyllia Wells, 1944 H: M547386, LaBorracha, 1 col.; P: M547402 (I348049), Cumaná, 1 col.-L. Cretaceous. bowersi, Coenocyathus Vaughan, 1906c H: 21138, San Miguel Id., 1 col.-Recent. bowersi, Maeandra Vaughan, 1917b H: 68289, USGS 3857, 1 col.—Pliocene. Remark: Species subsequently transferred to Diploria. brachiata, Madrepora Dana, 1846 S: 295, Sulu Sea (USEE), 1 col.-Recent. Remark: Junior synonym of Acropora nobilis (Dana, 1846) (see Veron and Wallace, 1984:215). branneri, Porites Rathbun, 1888 H: 10961, Parahyba do Norte, 1 col.; P: 10962, Pernambuco, 3 col.-Recent. brassensis, Sphenotrochus Vaughan in Vaughan and Hoffmeister, 1926 H: M353646, USGS 8302, 1 corallum.-M. Miocene. brassica, Gemmipora Dana, 1846 S: 210, Fiji (USEE), 1 large col. and 2-3 frag.-Recent. Remark: Species subsequently transferred to Turbinaria. braziliensis, Astrangia Vaughan, 1906c H: 10940, Periperi, 1 col. and seveal dozen isolated corallites.-Recent. Remark: Junior synonym of Astrangia solitaria (Lesucur, 1817). breviramosa forma, Porites compressa Vaughan, 1907a H: 21275, Albatross-4169, 1 col.-Recent. brighami, Porites Vaughan, 1907a H: 21624, Molokai, 1 col.-Recent.

brighami, Stephanaria Vaughan, 1907a H: 21629, Kahana, 1 col.-Recent. Remark: Species subsequently transferred to Psammocora. browni, Cyathomorpha Vaughan, 1919 H: M325211, USGS 6888, 1 col.-Oligocene. Remark: Species subsequently transferred to Agathiphyllia (A. Budd, pers. comm.). bullbrooki, Antillia Hoffmeister in Vaughan and Hoffmeister, 1926 H: M353675, USGS 9286, 1 col.; P: M353676, USGS 9286, 1 col.-M. Miocene. Remark: ?Junior synonym of Trachyphyllia bilobata (Duncan, 1863) (A. Budd, per. comm.). bullbrooki, Mycetophyllia Vaughan in Vaughan and Hoffmeister, 1926 H: M353663, USGS 8299, 1 large col.-Miocene. burchae, Premocyathus Cairns, 1984 H: 60512, B79065, 1 corallum; P: 60513, B79065, 10 coralla.-Recent. burnsi, Astrohelia Vaughan, 1900a S: M158229, Moody's Branch, 4 frag.-Eocene. cactus, Mussa Dana, 1846 ?H: 44, Fiji (USEE), 1 col.-Recent. Remark: Type status uncertain. caliculata, Manopora Dana, 1846 L: 335, Fiji (USEE), 1 col.-Recent. Remarks: Lectotype designated by Veron and Wallace (1984:72). Species subsequently transferred to Montipora. californianus, Trochocyathus Vaughan, 1900a S: M156934, Southern California, 2 col.-Eocene. californica, Caryophyllia Vaughan, 1903a H: M164737, San Pedro, 1 fragmented col.-Pliocene. californica, Siderastrea Vaughan, 1917b H: 68291, USGS 3857, 1 col.; P: 63031, USGS 7616, 3 col., 2 TS; P: 68292, USGS 7616, 1 col.—Pliocene. Remark: Junior synonym of Siderastrea mendenhalli Vaughan, 1917b (A. Budd, pers. comm.). californicum, Flabellum Vaughan, 1900a S: M158002, Contra Costa, 2 col.-Eocene. caloosahatcheensis, Dichocoenia Weisbord, 1974 H: M325299a, USGS 3206, 1 col.; P: M325299b, USGS 3206, 1 col.-Pleistocene. cambridgensis, Stylophora Wells, 1934 S: 44283, Jamaica, 3 col.-M. Eocene. canalis, Goniastrea Vaughan, 1919 H: M324996, USGS 6016, 5 frag. of 1 col.-M. Miocene. canalis, Goniopora Vaughan, 1919 L: 72891, USGS 6016, 1 col.; PL: M325052, USGS 6016, 2 col.-M. Miocene. Remark: Lectotype designated by Foster (1986). canalis, Orbicella Vaughan, 1919 H: M324862, USGS 6016, 1 col.; P: M324861, USGS 6444, 2 col.-M. Miocene.

Remark: Species subsequently transferred to Montastraea. canalis, Stylophora Vaughan, 1919 H: M324775, USGS 6016, 1 col.-Miocene. candeanum, Flabellum Milne Edwards and Haime, 1848a N: 81963, Albatross-5369, 1 corallum.-Recent. Remarks: Neotype designated by Cairns (1989). Species transferred to Truncatoflabellum by Cairns (1989). capitata, Manopora Dana, 1846 S: 305, Sandwich Ids. (USEE), 1 col.-Recent. Remarks: ?Junior synonym of Montipora monasteriata (Forskal, 1775) (see Veron and Wallace, 1984). Species subsequently transferred to Montipora. cardenae, Acropora Wells, 1985 H: 72370, Bowl Reef, 1 frag.; P: 72371, Bowl Reef, 3 frag., unnumbered SEM stub; P: 72372, Bowl Reef, 1 frag.-Recent. carduus, Madrepora Dana, 1846 S: 277, Fiji (USEE), 1 col.; S: 278, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. cariacoensis. Meandrophyllia Wells, 1944a H: M547939, Cumaná, 1 col. in 16 frag., 1 TS; P: M547394, Cumaná, 1 col.; P: M547402 (I372153), Cumaná, 1 col.-L. Cretaceous. caribbeana, Balanophyllia Cairns, 1977a H: 45842, Pillsbury-705, 1 corallum; P: 45843, Pillsbury-708, 1 corallum; P: 45844, Pillsbury-709, 2 coralla; P: 45845, Pillsbury-710, 1 corallum; P: 45846, Pillsbury-728, 2 coralla; P: 45849, Pillsbury-768, 1 corallum; P: 45847, Pillsbury-842, 2 coralla; P: 45848, Pillsbury-913, 1 corallum.-Recent. caribbeana, Caryophyllia ambrosia Cairns, 1979 H: 45972, Pillsbury-388, 1 corallum.-Recent. carinata, Anomocora Cairns, 1991 H: 84824, Johnson-Sea-Link 1938, 1 col.; P: 84825, Johnson-Sea-Link 1938, 12 frag.-Recent. carinatum, Truncatoflabellum Cairns, 1989 H: 81959, Albatross-5312, 1 corallum; P: 81960, Albatross-5312, 8 coralla; P: 81961, Albatross-5313, 21 coralla; P: 81962, Albatross-5314, 3 coralla.-Recent. carolinensis, Cryptotrochus Caims, 1988a H: 46914, Gosnold-1811, 1 corallum; P: 46915, Gosnold-1811, 8 coralla, SEM stub 462; P: 81082, Gosnold-1841, 1 corallum.-Recent. carrizensis, Eusmilia Vaughan, 1917b H: M325288, USGS 7616, 1 col.-Pliocene. carrizensis, Porites Vaughan, 1917b H: 68293, USGS 7616, 1 col.; P: 86840, USGS 7616, 1 col.-Pliocene. Remark: Types designated in plate caption only. cascadensis, Goniopora Vaughan, 1919 H: M325072, USGS 6020c, 1 col.; P: M325073 (not 325074 as stated in text), 3 col.-M. Miocene.

Remark: Junior synonym of Porites portoricensis (Vau-

ghan, 1919) (see Foster, 1986). catadupensis, Vaughanoseris Wells, 1934 H: I74485, Catadupa, 1 col.; P: I74486, railway cut, 1 col. in 6 pieces.-U. Cretaceous. catalai, Alveopora Wells, 1968 H: 53132, Banc Gail, 1 branch in 2 pieces; P: 53133, Banc Gail, 1 branch.-Recent. catenata, Texastrea Wells, 1973b H: I171265, Goldthwaite Reef, 1 col.-L. Cretaceous. catinata, Anthemiphyllia Wells, 1977 H: I208307, USGS 24686, 1 corallum; P: I208339, USGS 24686, 1 corallum.-Eocene. cellulosa, Astraea Verrill, 1872 H: 77, Fiji (USEE), 1 col.-Recent. Remarks: Based on Dana's (1846) Astraea (Fissicella) denticulata (Ellis). Junior synonym of Favia pallida (Dana, 1846) (see Veron, Pichon, and Wijsman-Best, 1977). cerealis, Madrepora Dana, 1846 S: 269, Sulu Sea (USEE), 1 col.; 270, East Indies (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. cerebriformis, Mussa Dana, 1846 S: 11, Fiji (USEE), 1 col.-Recent. cerium, Astraea (Fissicella) Dana, 1846 S: 64, Wake's Id. (USEE), 1 col.; S: 69, Wake's Id. (USEE), 1 col.-Recent. Remark: Junior synonym of Goniastrea pectinata (Ehrenberg, 1834) (see Veron, Pichon, and Wijsman-Best, 1977:87). cespitosa, Pocillopora Dana, 1846 S: 681, Sandwich Ids. (USEE), 1 col.; S: 722, Sandwich Ids. (USEE), 1 col.; S: 2186, Sandwich Ids. (USEE), 1 col.-Recent. chamissoi, Rhizopsammia Wells, 1954 H: 45104, sta. 38a, 1 col.; P: 45105, sta. 38a, 6 corallites.-Recent. chevalieri, Trochocyathus Cairns and Wells, 1987 P: 74682, NMB 15809, 5 coralla.-Late Miocene to Early Pliocene. christianiaensis, Goniaraea Wells, 1934 H: 44297, J146M, 1 col.-M. Eocene. Remark: Species subsequently transferred to Goniopora. cingulatus, Trochocyathus Vaughan, 1900a H: M158161, loc. #284, 1 col.-Eocene. claibornensis, Rhectopsammia Vaughan, 1900a S: M158401, loc. #263, 3 col.; S: M158402, USGS 2391, 1 col.-Eocene. Remark: Species subsequently transferred to Endopachys. claibornensis, Sphenotrochus Vaughan, 1900a S: M158089, USGS 2867, 2 col.; S: M158095, Claiborne, 1 col.-Eocene. claibornensis, Turbinolia Vaughan, 1900a

S: M158120, Claiborne, 1 col.; S: M158123, USGS 2391, 2

col.-Eocene. clarendonensis, Eupsammia Wells, 1934 H: 44290, J606M, 1 corallum; P: 44291, J608M, 1 corallum.-M. Eocene. Remark: Species subsequently transferred to Balanophyllia. clarki, Turbinolia Quayle, 1932 P: M371672, Fresno, 1 corallum; P: M371673, Fresno, 1 corallum.-Eocene. clavus, Anthophyllum Dana, 1846 S: 46, Fiji (USEE), 1 col.; S: 47, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Galaxea astreata (Lamarck, 1816) (see Veron and Pichon, 1980). clavus, Pavonia Dana, 1846 S: 221, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Pavona. clavus forma, Porites compressa Vaughan, 1907a H: 21271, Molokai, 1 col.-Recent. clevei, Goniopora Vaughan, 1919 P: M325111, USGS 6893, 3 col.; P: M325115, USGS 6966, 1 col.-M. Miocene. Remark: Junior synonym of Porites portoricensis (Vaughan, 1919) (see Foster, 1986). clivosa, Pavonia Verrill, 1869b S: 62699, Pearl Id., 1 col.(ex YPM 1678)-Recent. Remark: Species subsequently transferred to Pavona. clypeus, Halomitra Verrill, 1864 S: 159, Fiji (USEE), 1 col.-Recent. Remarks: Based on Dana's (1846) Halomitra pileus (Linnaeus, 1758) and a junior synonym of the same species, according to Veron and Pichon (1980). coaligensis, Astrangia Vaughan, 1909 S: M165666, USGS 4710, 2 col.-Miocene. coalescens var., Sideropora digitata Dana, 1846 S: 342, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Stylophora. cocosensis, Montipora Vaughan, 1918 S: 68297, Cocos-Keeling Id., 4 col.-Recent. Remark: Junior synonym of Montipora angulata (Lamarck, 1816) (see Veron and Wallace, 1984). cocosensis, Porites Wells, 1950 H: 44339, Cocos-Keeling Id., 1 col.; P: 44340, Cocos-Keeling Id., 1 col.-Recent. Remark: ?Junior synonym of Porites cylindrica Dana, 1846 (Veron, pers. comm.). colei, Caryophyllia Wells, 1945 H: 68338, S80, 1 corallum.-Eocene. colei, Montipora Wells, 1954 H: 44744, sta. 109, 4 frag. of same col.-Recent. Remark: Junior synonym of Montipora undata Bernard, 1897 (see Veron and Wallace, 1984). collinensis, Hindeastraea Hoffmeister, 1929b

H: I73698 (not 73608 as reported), USGS 13837, 1 col.; P:

173699 (not 73609 as reported), USGS 13837, 8 col.-Cretaceous. colonensis, Porites Zlatarski, 1990 H: 82020, Largo Remo, 1 col.; P: 82021-82054, Largo Remo, 34 col.-Recent. coloradoensis, Trochocyathus Vaughan and Popenoe, 1935 S: M371035, USGS 11913, 4 coralla.-Eocene. columbaris, Stylina Scott and Aleman, 1984 H: I366550, Perico Hills, 1 col., 2 frag., 1 TS.-L. Cretaceous. columna, Goniopora Dana, 1846 S: 5781, Fiji (USEE), 1 col.-Recent. columna, Psammocora Dana, 1846 H: 188, Fiji (USEE), 1 large col.-Recent. Remark: Species subsequently transferred to Coscinarea (see Veron and Pichon, 1980). compacta forma, Porites compressa Vaughan, 1907a H: 21270, Kahana, 1 col.-Recent. complanata, Pavonia Verrill, 1866a H: 373, Loo Choo (NPEE), 1 col.-Recent. Remark: Species subsequently transferred to Pavona. compressa, Porites Dana, 1846 S: 711, Sandwich Ids. (USEE), 1 col.; S: 653, Sandwich Ids. (USEE), 1 col.-Recent. Remark: Rathbun (1888) reported a syntype numbered 651, but this specimen cannot be found. conferta, Haimesiastraea Vaughan, 1900a S: 68263, Gregg's Landing, 1 col., 3 frag., 4 TS (M158303); S: M158311, Prairie Creek, 1 col.; S: M158305, loc. #284, 1 TS.-Eocene. conferta, Pourtalosmilia Cairns, 1978a H: 46851, Silver Bay-5660, 1 col.; P: 46852, Silver Bay-5660, 2 col., 5 frag.; P: 46853, Silver Bay-332, 6 frag.; P: 46854, Gerda-134, 6 frag.; P: 46855, off Florida, 1 col.; P: 46856, Albatross station unknown, 2 frag.; P: 46857, Chain 35-15, 18 frag.; P: 46858, Chain 35-16, 10 frag.-Recent. confertifolia, Fungia Dana, 1846 S: 121, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Fungia fungites (Linnaeus, 1758) (see Veron and Pichon, 1980). conicula, Montipora Wells, 1954 H: 44742, sta. 38a, 1 col.-Recent. coniformis var., Balanophyllia irrorata Vaughan, 1900a S: M158361, Smithville, 1 corallum.-Eocene. conigera, Madrepora Dana, 1846 S: 239, Singapore (USEE), 1 col.; S: 240, Singapore (USEE), 1 col.-Recent. Remark: Junior synonym of Acropora robusta (Dana, 1846) (see Veron and Wallace, 1984). conjugens forma, Porites compressa Vaughan, 1907a H: 21276, Molokai, 1 large col.-Recent. conoideum, Flabellum Vaughan, 1900a S: M157851, Prairie Creek, 3 coralla.-Eocene.

28

constricta, Caryophyllia Vaughan and Popenoe, 1935 S: M371033, USGS 10420, 2 coralla.—Eocene. contracta forma, Agaricia fragilis Wells, 1973a H: 53484, DBL 301, 1 col.-Recent. convexa, Madrepora Dana, 1846 S: 236, 262, 85753, 85754, 85755, Singapore (USEE), 1 col. each.-Recent. Remark: ?Junior synonym of Acropora millepora (Ehrenberg, 1834) (see Veron and Wallace, 1984). cornu, Balanophyllia Sokolow, 1894 S: M157523, Russia, 6 coralla.—Oligocene. Remark: Junior primary homonym of B. cornu Moseley, 1881. coronata, Astraea (Orbicella) Dana, 1846 S: 57, Tahiti (USEE), 1 col.; S: 58, Wake's Id., 1 col.-Recent. Remark: Junior synonym of Montastraea curta (Dana, 1846). corrugata, Caryophyllia Caims, 1979 P: 46859, Pillsbury-991, 1 corallum; P: 46860, Silver Bay-3494, 2 coralla.—Recent. costata, Mussa Dana, 1846 ?H: 43, Tahiti (USEE), 1 col. in 4 pieces.-Recent. Remark: Junior synonym of Lobophyllia hemprichii (Ehrenberg, 1834) (see Veron and Pichon, 1980). coulsoni, Desmophyllum Wells, 1977 H: I208327, USGS 24686, 1 corallum; P: I208342, USGS 24686, 1 col.-Eocene. craginiana, Pleurosmilia Wells, 1933 H: I75136, Benbrook Co., 1 col.; P: I75217, southeast of Weatherford, 4 col.-L. Cretaceous. Remark: Species subsequently transferred to Axosmilia. crassa, Fungia Dana, 1846 H: 139, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Ctenactis (see Hoeksema, 1989). crassicostata var., Turbinolia barbadiana Wells, 1945 H: 68353, S58, 1 corallum.-Eocene. crassisepta var., Dichocoenia merriami Vaughan, 1917b H: M325291, USGS 7616, 1 col.-Pliocene. crassus, Herpetolithus Dana, 1846 S: 160, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Herpolitha limax (Esper, 1797) (see Hoeksema, 1989). cribraria, Micrabacia Stephenson, 1917 H: I31996, USGS 5354, 1 corallum; P: I32013, USGS 5362, 1 corallum.-U. Cretaceous. cribripora, Madrepora Dana, 1846 S: 289, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Acropora aspera (Dana, 1846) (see Veron and Wallace, 1984). cribripora, Porites Dana, 1846 H: 670, Fiji (USEE), 1 col.-Recent.

H: 4484, Sulu Sea (USEE), 4 frag.—Recent. Remark: Junior synonym of *Merulina ampliata* (Ellis and Solander, 1786) (see Veron and Pichon, 1980).

cristatus, Placocyathus Vaughan in Vaughan and Hoffmeister, 1925

H: M353643, USGS 7785, 1 corallum.—Miocene. Remark: Species transferred to Antillocyathus by Cairns and Wells (1987).

cucullata var., Dendrophyllia amphelioides Vaughan, 1907a S: 20831, Albatross-3827, 1 col.; S: 20832, Albatross-3922, 2 branches; S: 20833, Albatross-3982, 2 branches.—Recent. Remarks: It is clear that Vaughan (1907a) meant to place this species in the genus Anisopsammia, but, regardless, it is a junior synonym of Enallopsammia rostrata (Pourtalès, 1878) (see Cairns, 1983a, 1984).

cumanensis, Thecosmilia Wells, 1944a

H: M547398 (I259302), Cumaná, 1 col., 1 TS; P: M547387 (I312020), Cumaná, 1 TS; P: M547390 (I312016), Cumaná, 1 TS; P: M547399, Cumaná, 1 col., 1 TS; P: M547402 (I259300), Cumaná, 1 col.—L. Cretaceous.

cumingii, Flabellum Milne Edwards and Haime, 1848a N: 81976, Te Vega 1-54, 1 corallum.—Recent. Remarks: Neotype designated by, and species subsequently transferred to Truncatoflabellum, Cairns (1989). cumutensis, Orbicella Hoffmeister in Vaughan and Hoffmeister, 1926

H: M353678, USGS 9217, 1 col.—U. Miocene.

Remark: Junior synonym of Montastraea annularis (Ellis and Solander, 1786) (A. Budd, pers. comm.) cuneata, Madrepora Dana, 1846

H: 334, Fiji (USEE), 1 col.—Recent.

Remark: Species subsequently transferred to Acropora. curta, Astraea (Orbicella) Dana, 1846

S: 14, Fiji (USEE), 1 col.; S: 22, Fiji (USEE), 1 col.—Recent.

- Remark: Species subsequently transferred to Montastraea (see Veron, Pichon, and Wijsman-Best, 1977).
- cuspidata, Madrepora Dana, 1846
 - S: 314, Tahiti (USEE), 1 col., 2 frag.; S: 3969, Tahiti (USEE), 1 col.—Recent.

Remark: Species subsequently transferred to Acropora. cuyleri, Siderastrea Wells, 1932

S: I75126, Cow Co., 1 col.-Cretaceous.

- cyclopea, Madrepora Dana, 1846
 - S: 231, Wake's Id. (USEE), 1 col.; S: 232, Wake's Id. (USEE), 1 col.; S: 233, Wake's Id. (USEE), 1 col.—Recent. Remark: ?Junior synonym of Acropora robusta (Dana, 1846) (see Veron and Wallace, 1984:201).

cylindrica, Porites Dana, 1846 S: 708, Fiji (USEE), 1 col.-Recent.

cylindricus, Paracyathus Vaughan, 1900a

- cytherea, Madrepora Dana, 1846
 - S: 226-229, 242, 359, 421-423, 3989, 3990, 4004, 4014, 4020, Tahiti (USEE), each catalog number with 1 col. each.—Recent.

Remark: Species transferred to Acropora.

- cytherea, Mussa Dana, 1846
- S: 87, Tahaiti (USEE), 1 col.—Recent. Remark: Junior synonym of *Lobophyllia hemprichii* (Ehrenberg, 1834) (see Veron and Pichon, 1980:266).
- dakotaensis, Trochocyathus Vaughan, 1920
- H: I32374, USGS 7962, 1 corallum.—?Cretaceous.
- dalli, Caryophyllia Vaughan, 1900a
- H: M158213, USGS 2003, 1 corallum.-Eocene.
- dalli, Siderastrea Vaughan, 1919
 - H: M325196, USGS 3300, 1 col.; P: M325195, USGS 2094, 3 col., 1 TS.—Pleistocene.
 - Remark: Junior synonym of Siderastrea hillsboroensis Vaughan, 1919 (A. Budd, pers. comm.).
- danae, Dendrophyllia Verrill, 1872
 - H: 182, Fiji (USEE), 1 col.—Recent. Remark: Based on Dana's (1846) Dendrophyllia coccinea (Ehrenberg).
- danae, Fungia Milne Edwards and Haime, 1851a
- PL: 125, East Indies (USEE), 1 col.-Recent.
 - Remarks: Based on Dana's (1846) typical specimen of *Fungia echinata* (Esper). Paralectotype (USNM 125) designated by Hoeksema (1989:109), which he reidentified as *Fungia scuposa* Klunzinger, 1879 (see Hoeksema, 1989:108). Another paralectotype (USNM 124) was designated by Hoeksema (1989:109), which is also the holotype of *Fungia lacera* Verrill, 1866a and thus the senior synonym of *F. scruposa* Klunzinger, 1879. The lectotype of *F. danae* (MNHNP 484) is a junior synonym of *Fungia horrida* (see Hoeksema, 1989:102).
- danae, Montipora Milne Edwards and Haime, 1851b
 - L: 307, Fiji (USEE), 1 col.-Recent.
 - Remarks: Based on Dana's (1846) Manopora tuberculosa (Lamarck). Lectotype designated by Veron and Wallace (1984).
- danae, Pocillopora Verrill, 1864
 - H: 696, Fiji (USEE), 1 col.-Recent.
 - Remarks: Based on Dana's (1846) Fijian specimen of *Pocillopora favosa* (Ehrenberg). Junior synonym of *Pocillopora verrucosa* (Ellis and Solander, 1786) (see Veron and Pichon, 1976).
- danae, Porites Milne Edwards and Haime, 1851b
 - S: 684, Fiji (USEE), 1 col.—Recent.
 - Remarks: Based on Dana's (1846) Porites contigua (Esper). Junior synonym of Psammocora contigua (Esper, 1797).
- danae, Stylophora Milne Edwards and Haime, 1850
 - S: 85756, Singapore (USEE), 1 col. and 14 frag.—Recent. Remark: Based on Dana's (1846) Sideropora palmata (Blainville).

danai, Cyphastraea Milne Edwards and Haime, 1857

- S: 85764, Fiji (USEE), 1 col.—Recent. Remarks: Based on Dana's (1846) Astraea (Orbicella) micropthalma (Lamarck). Junior synonym of Cyphastrea serailia (Forskal, 1775) (see Veron, Pichon, and Wijsman-Best, 1977).
- danai, Favia Milne Edwards and Haime, 1857
 - H: 32, Tongubatu (USEE), 1 col.; P: 31, Tongabatu, 1 col.—Recent.
 - Remarks: Based on Dana's (1846) Astraea (Fissicella) porcata (Esper). Most coral workers cite the authorship of this species as Verrill (1872), but Milne Edwards and Haime (1857) clearly have priority.
- danai, Lophoseris Milne Edwards and Haime, 1860
- H: 136, Sulu Sea (USEE), 1 col.-Recent.
 - Remarks: Based on Dana's (1846) Pavonia boletiformis (Lamarck). Species subsequently transferred to Pavona.
- danai, Madrepora Milne Edwards and Haime, 1860 H: 303, Tahiti (USEE), 1 col.—Recent.
 - Remarks: This is a replacement name for *Madrepora deformis* described by Dana (1846), Dana's name being a junior secondary homonym of *Madrepora deformis* (Michelin, 1851). Species subsequently transferred to *Acropora*.
- dartoni, Archohelia Wells, 1933
 - H: I75229, Laney, 1 col.; P: I192397-I192402, Laney, 6 col.-U. Cretaceous.
- decaturensis, Astrocoenia Vaughan, 1919
- H: M324789, USGS 3383, 1 col.; P: M324788, USGS 3383, 1 col.—L. Miocene.
 - Remark: Junior synonym of Astrocoenia guantanamensis Vaughan, 1919 (A. Budd, pers. comm.).
- decaturensis, Goniopora Vaughan, 1919

H: M325031, USGS 3383, 1 col.—L. Miocene. Remark: ?Junior synonym of *Goniopora imperatoris* Vaughan, 1919 (A. Budd, pers. comm.).

- deculpum, Desmophyllum Wells, 1977
 H: I208324, USGS 24686, 1 corallum; P: I208325, USGS 24686, 1 corallum.—Eocene.
- decussata, Pavonia Dana, 1846
 - S: 176, 200, 201, Fiji (USEE), 3 col.-Recent.
 - Remark: Species subsequently transferred to Pavona.
- deformis, Madrepora Dana, 1846
- H: 303, Tahaiti (USEE), 1 col.-Recent.
 - Remarks: Junior secondary homonym of Madrepora deformis Michelin (1841). Replacement name Madrepora danae suggested by Milne Edwards and Haime (1860). Species subsequently transferred to Acropora.
- delicatula subforma, Porites compressa forma angustisepta Vaughan, 1907a
 - H: 20929, Molokai, 1 col.-Recent.
- delta subforma, Porites lobata forma centralis Vaughan, 1907a H: 22244, Kaunakakai, 1 col.—Recent.

denaria, Caryophyllia Wells, 1977 H: I208308, USGS 24686, 1 corallum; P: I208309-208311 (last numbered paratype only mentioned in plate caption), USGS 24686, 3 coralla.-Eocene. dennanti, Fungiacyathus (Bathyactis) Cairns and Parker, in press P: 85676, Neptune Id., 8 frag., SEM stub 511.-Recent. densa, Porites Vaughan, 1918 H: 47234, Murray Id., 1 col.-Recent. densimurata forma, Porites compressa Vaughan, 1907a S: 20945-20947 (not 20949 as stated in text), Molokai, 3 col.-Recent. dentata, Fungia Dana, 1846 S: 105-108, East Indies (USEE), 4 col.-Recent. Remark: Junior synonym of Fungia fungites (Linnaeus, 1758) (see Veron and Pichon, 1980). depressus, Trochocyathus Vaughan, 1900a S: M158159, USGS 2626, 2 frag.; S: M158160, USGS 2626, 4 coralla.-Eocene. desmophyllioides, Balanophyllia Vaughan, 1907a H: 20824, Albatross-4061, 2 coralla.-Recent. diaphana, Dendrophyllia Dana, 1846 H: 180, Singapore (USEE), 1 col.-Recent. dietzi, Astrocoenia Hamilton, 1956 H: I189889, Cape Johnson Guyot, 1 col. now in 6 pieces .- Cretaceous. digitata, Leptoseris Vaughan, 1907a S: 20892, Albatross-3847, 2 col.; S: 20896, Albatross-3847, 2 col.-Recent. Remark: Junior synonym of Leptoseris papyracea (Dana, 1846) (see Veron and Pichon, 1980). digitata, Manopora Dana, 1846 H: 312, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Montipora. dineta, Balanophyllia Cairns, 1977a H: 45858, Pillsbury-718, 1 corallum; P: 45859, Pillsbury-718, 115 coralla; P: 45860, Pillsbury-694, 2 coralla; P: 45861, Pillsbury-705, 2 coralla; P: 45862, Pillsbury-709, 41 coralla; P: 45863, Pillsbury-717, 11 coralla; P: 45864, Pillsbury-721, 1 corallum; P: 45865, Pillsbury-722, 3 coralla; P: 45866, Pillsbury-734, 5 coralla; P: 45867, Pillsbury-737, 7 coralla; P: 45868, Pillsbury-757, 1 corallum; P: 45869, Pillsbury-769, 6 coralla; P: 45870, Pillsbury-775, 4 coralla.-Recent. diomedeae, Acropora Vaughan, 1906a H: 68307, Manga Reva, 1 col.-Recent. Remark: ?Junior synonym of Acropora nasuta (Dana, 1846) (see Veron and Wallace, 1984). diomedeae, Balanophyllia Vaughan, 1907a S: 20825, Albatross-4098, 2 coralla.-Recent. diomedeae, Caryophyllia Marenzeller, 1904 S: 22083, Albatross-3358, 1 corallum.-Recent. diomedeae, Cyathoceras Vaughan, 1907a H: 20735, Albatross-3835, 1 corallum; P: 20736, Albatross-3999, 2 coralla; P: 20737, Albatross-3835, 1 corallum; P:

20738, Albatross-3952, 1 corallum.-Recent. Remark: Junior synonym of Crispatotrochus rubescens (Moseley, 1881) (see Cairns, 1984, 1990). diomedeae, Pocillopora Vaughan, 1906a S: 68277, Easter Id., 2 branch frag.-Recent. discoidea, Hindeastraea White, 1888 S: I19166, Kaufman Co., 3 col.-U. Cretaceous. discus, Fungia Dana, 1846 L: 144, Tahiti (USEE), 1 corallum; PL: 143, ?Tahiti (USEE), 1 corallum; PL: 145, ?Tahiti (USEE), 1 corallum.-Recent. Remarks: Lectotype designated by Hoeksema (1989:92). Junior synonym of Fungia repanda Dana, 1846 (see Hoeksema, 1989). distans var., Acropora teres Wells, 1954 H: 44464, Albatross 18-I-1900, 1 col.; P: 44462, Albatross 18-I-1900, 4 branches.-Recent. distorta, Caulastraea Dana, 1846 S: 82, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Caulastraea furcata Dana, 1846 (see Veron, Pichon, and Wijsman-Best, 1977). divaricans var., Porites compressa Vaughan, 1907a H: 21269, Kahana, 1 col.-Recent. divaricata, Madrepora Dana, 1846 H: 299, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. djiboutiensis, Goniopora Vaughan, 1907b H: 21990, Djibouti, half of holotype.-Recent. dominicensis, Agaricia Vaughan, 1919 H: M324973, USGS 7778, 1 col.-Neogene. dominicensis var., Siderastrea siderea Vaughan, 1919 H: 36909, Haiti, 1 col.-Recent. douvillei, Porites Vaughan, 1919 L: M325106, USGS 6016, 1 col. (missing in 1990); PL: 85763, USGS 6016, 1 col.-Recent. Remark: Lectotype designated by Foster (1986:75). duerdeni, Pavona Vaughan, 1907a S: 21630, Molokai, 1 col.; S: 21631, Molokai, 1 col.-Recent. duerdeni, Porites Vaughan, 1907a H: 20954, Kaneohe, 1 col.-Recent. dumblei, Caryophyllia Vaughan and Popence, 1935 S: M371036, USGS 11948, 3 coralla.-Eocene. dumblei, Maeandra Vaughan, 1919 H: M325005, San Jose, 1 col.-Tertiary. Remark: Species subsequently transferred to Diploria. duncani, Javania Wells, 1977 H: I208332, USGS 24686, 1 corallum; P: I208333, USGS 24686, 1 corallum.-Eocene. duncani, Madracis Wells, 1945 H: 68327, S101, 1 col.; P: 68328, S101, 19 frag.-Eocene. duncani, Mesomorpha Vaughan, 1900a S: M158323, Prairie Creek, 3 col.-Eocene.

Remark: Species probably belongs to Thamnasteria.

duncani, Trochocyathus Cairns and Wells, 1987 H: 74684, TU1208, 1 corallum; P: 74685, TU1208, 4 coralla; P: 63042, USGS 8735, 1 corallum.-Early Pliocene. durhami, Sideroseris Wells, 1945 H: 68331, S80, 1 col.; P: 68332, S80, 1 col.-Eocene. eccentricus, Deltocyathus Cairns, 1979 H: 46986, Pillsbury-881, 1 col.; P: 46428, Pillsbury-881, 71 coralla.-Recent. echinata, Astraea (Fissicella) Dana, 1846 S: 25, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acanthastraea (see Veron and Pichon, 1980). echinata, Cladopsammia Cairns, 1984 H: 60518, Sango 2-4, 1 col., SEM stub 134; P: 60524, Sango 2-6, 4 col.; P: 60520, Sango 13-1C, 2 frag.; P: 60526, Sango Recent. 13-4, 1 col.; P: 60519, Sango 14-2B, 4 col.; P: 60525, Sango 16-1, 1 col.; P: 60521, Sango 16-3, 2 col.; P: 60522, Sango 16-5, 1 col.; P: 60523, Sango 16-8, 7 frag.-Recent. echinata, Madrepora Dana, 1846 S: 275, Fiji (USEE), 1 col.; S: 276, Sulu Sea (USEE), 1 1907a frag.-Recent. Remarks: According to Hoffmeister (1925:66), specimen 276 is Acropora prolixa Verrill, 1866. Specimen 275 Recent. would then be the logical choice for the lectotype for Acropora echinata (see Veron and Wallace, 1984:374). echinatus, Zoopilus Dana, 1846 S: 154, Fiji (USEE), 1 col. in 3 pieces .- Recent. edwardsensis, Orbicella Wells, 1933 H: I75115, Hiram Hill Ranch, 1 col. and 5 TS.-L. Cretaceous. Remark: Species subsequently transferred to Montastraea. effusa, Manopora Dana, 1846 L: 316, Tahiti (USEE), 1 col.-Recent. Eocene. Remarks: Lectotype designated by Veron and Wallace (1984:91): however, they undoubtedly meant to cite USNM 316, not 361, as stated. ?Senior synonym of Montipora efflorescens Bernard, 1897 (see Veron and Wallace, 1984). egeria, Caryophyllia White, 1879 S: I8083, Sage Creek, 2 coralla.-Cretaceous. eguchii, Balanophyllia Wells, 1982 H: 46966, Marchena, 1 col.-Recent. eguchii, Goniocorella Wells, 1977 H: I208330, USGS 24686, 1 col.; P: I208331, USGS 24686, 1 col.-Eocene. elegans, Aldrichia Vaughan, 1900a S: M158010, Dry Creek, 3 coralla; S: M158011, Jackson, 5 coralla.-Eocene. Remark: Species subsequently transferred to Koilotrochus. elegans, Pocillopora Dana, 1846 S: 720, Fiji (USEE), 1 col.-Recent. Remark: ?Junior synonym of Pocillopora verrucosa (Lamarck, 1816) (see Veron, Pichon, and Wijsman-Best, (Ellis and Solander, 1786) (see Veron and Pichon, 1976). 1977).

elizabethae, Paracycloseris Wells, 1934 H: I74489, Catadupa, 1 corallum; P: 85834, Catadupa, 1 corallum.-U. Cretaceous. elongata, Balanophyllia Vaughan, 1900a S: M158369, Red Bluff, 5 coralla.-Eocene. elongata var., Porites mordax Dana, 1846 H: 707, Sandwich Ids. (USEE), 1 col.-Recent. Remarks: Also referred to as forma beta by Dana and forma elongata by Vaughan (1907a). elschneri, Montipora Vaughan, 1918 H: 68299, Fanning Id., 1 col.-Recent. eltaninae, Caryophyllia Cairns, 1982a H: 47162, Eltanin-671, 1 corallum; P: 47163, Eltanin-671, 39 coralla; P: 47164, Islas Orcadas-575, 11 coralla.eminens, Dichocoenia Weisbord, 1974 P: M325293, USGS 4995, 1 col.; P: M325305, USGS 3206, 2 col.-Pleistocene. epsilon subforma, Porites lobata forma centralis Vaughan, H: 22238, WTB, 1 col.; P: 22239, Duerden, 1 col.; P: 22256 (not 22678, as originally reported), Duerden, 1 col.erosa, Manopora Dana, 1846 S: 308, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Montipora. erosa, Porites Dana, 1846 H: 668, Sulu Sea (USEE), 1 col.-Recent. etheridgi, Notophyllia Hoffmeister, 1933 P: 68229, E5537, 2 coralla.-Recent. euaensis, Fungiacyathus Wells, 1977 H: I208302, USGS 24686, 1 corallum; P: I208303, USGS 24686, 1 corallum; P: I208304, USGS 24686, 1 corallum.euaensis, Meandra Hoffmeister, 1932 H: 68226, Tonga, 1 large col.-?Eocene. Remark: A species of Diploria? evermanni, Porites Vaughan, 1907a H: 21627, Kaneohe, 1 col.-Recent. exesa, Psammocora Dana, 1846 H: 189, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Coscinaraea (see Veron and Pichon, 1980). exigua, Madrepora Dana, 1846 H: 288, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. exilis, Anomocora Wells, 1977 H: I208328, USGS 24686, 1 col.; P: I208329, USGS 24686, 1 col.-Eocene. eximia, Astraea (Fissicella) Dana, 1846 S: 36698, Wake's Id. (USEE), 2 col.-Recent. Remark: Junior synonym of Goniastrea retiformis

expansa, Astrangia Vaughan, 1900a filicosa, Astraea (Fissicella) Dana, 1846 S: M158281, Moody's Branch, 2 col.; S: M158285, H: 78, Wake's Id. (USEE), 1 col.-Recent. Remark: Junior synonym of Favites virens (Dana, 1846) Montgomery, 2 col.-Eocene. (see Wijsman-Best, 1972). expansa, Manopora Dana, 1846 H: 325, Singapore (USEE), 1 col.-Recent. fissilis, Fungiacyathus Cairns, 1984 Remark: Junior synonym of Montipora hispida (Dana, H: 60514, HON 3-0, 1 frag. (SEM stub 191); P: 62707, 1846) (see Veron and Wallace, 1984). HON 9-4C, 1 frag.; P: 60750, BB76076, 1 frag.-Recent. explanata, Alveopora Hoffmeister, 1945 flabellata, Erythrastrea Scheer and Pillai, 1983 H: 68245, sta. 110A, 1 col.-Neogene. P: 78094, Ghardaga, 1 frag.-Recent. facetus, Labyrinthocyathus Cairns, 1979 Remark: Scheer and Pillai (1983) cite Pichon, Scheer, H: 46879, Gilliss-16, 1 corallum; P: 46880, Oregon-11722, and Pillai (in press) as the authors of both the genus and species, but, to my knowledge, this paper has never been 1 corallum.-Recent. published. Both the generic and species descriptions of fairbanksi, Stephanocoenia Vaughan, 1900a Scheer and Pillai (1983) satisfy the requirements of the S: M157516, S. California, 1 col.; S: M157517, USGS 2867, Code and therefore should be considered as the original 1 col., 4 TS; S: M157518, S. California, 1 col.-Pliocene. descriptions. Remark: Species subsequently transferred to Solenastrea flabellata forma, Eusmilia fastigiata Wells, 1973a (see Vaughan, 1917b). H: 53501, DBL 1194, 1 col.; P: 53502, DBL 1187, 1 fanningensis var., Favia stelligera Vaughan, 1918 col.-Recent. S: 45559, Fanning Id., 1 col.-Recent. flexuosa, Astraea (Fissicella) Dana, 1846 fasciatus, Trochocyathus Cairns, 1979 S: 27, Fiji (USEE), 1 col.—Recent. H: 16116, Albatross-2354, 1 corallum; P: 46913, Albatross-Remark: Species subsequently transferred to Favites. 2354, 2 coralla (one attached to holotype).-Recent. flexuosum, Flabellum Cairns, 1982a faulkneri, Tubastraea Wells, 1982 H: 47170, Eltanin-1536, 1 corallum; P: 47171, Eltanin-H: 47145, Palau, 1 col.-Recent. 1536, 9 coralla; P: 47172, Eltanin-1933, 1 corallum; P: faustinoi, Porites Hoffmeister, 1925 47173, Islas Orcadas 575-93, 21 coralla.-Recent. S: 68198-68201, 85769, (Pago Pago Harbor), specimens floreana, Tubastraea Wells, 1982 numbered 1-5.-Recent. H: 46974, Floreana, 1 col.-Recent. favioides, Barbadiastrea Wells, 1945 florida, Madrepora Dana, 1846 H: 68333, S101, 1 col.-Eocene. H: 282, Fiji (USEE), 1 branch.-Recent. favistella, Astraea (Fissicella) Dana, 1846 Remark: Species subsequently transferred to Acropora. S: 73, Fiji (USEE), 1 col.—Recent. floridaeprima, Porites Weisbord, 1973 Remark: Junior synonym of Goniastrea pectinata S: 66159, USGS 3286, 2 col.-L. Miocene. (Ehrenberg, 1834) (see Veron, Pichon, and Wijsman-Remarks: Species same taxon as Porites floridae prima Best, 1977). of Barnard (1906) but considered invalid because favosa, Porites Dana, 1846 Bernard did not consistently use binomial nomenclature. H: 672, Fiji (USEE), 1 col.-Recent. Specimen same used for basis of Porites wilcoxi favulus, Astraea (Fissicella Dana, 1846 Vaughan, 1915 (nom. nud.). S: 66, Fiji (USEE), 1 col.-Recent. floridana, Phyllangia Gane, 1895 Remark: Junior synonym of Goniastrea pectinata H: 62700, Alligator Creek, 1 col.-Pliocene. (Ehrenberg, 1834) (see Chevalier, 1971). Remark: Species subsequently transferred to Astrangia felix, Budaia Wells, 1944a (see Wells, 1947). H: M547390 (I349434), Cumaná, 1 col., 1 TS; P: M547395 floweri, Montipora Wells, 1954 (I312009), Cumaná, 1 TS.-L. Cretaceous. H: 44746, sta. 110, 1 col.; P: 44747, sta. 110, 1 ferox, Mycetophyllia Wells, 1973a col.-Recent. H: 53494, DBL 2444, 1 col.; P: 53495, DBL 392, 1 Remark: Paratype mentioned only in plate caption. col.-Recent. foliosa, Leptoseris Dinesen, 1980 fijiensis, Alveopora Hoffmeister, 1932 H: 62493, Fiji, 1 col.-Recent. P: 54200, Esk Id., 1 col.-Recent. Remark: Junior synonym of Alveopora spongiosa Dana, foliosa, Pavonia Verrill, 1866a 1846 (see Veron and Pichon, 1982). H: 413, Ousima (NPEE), 1 col.-Recent. fijiensis, Orbicella Hoffmeister, 1945 Remark: Species subsequently transferred to Pavona. formosa, Madracis Wells, 1973a H: 68246, sta. 110A, 1 large col.-Neogene. Remark: Species subsequently transferred to Montas-H: 53479, DBL 747, 1 col.; P: 53480, DBL 795, 1 col.; P: 53481, DBL 734, 1 col.-Recent. traea.

33

- formosa, Madrepora Dana, 1846
 - S: 292, Sulu Sea (USEE), 1 col.; S: 294, 888, Fiji (USEE), 1 col. each.—Recent.
- Remark: Species subsequently transferred to Acropora. formosa, Pavonia Dana, 1846
- S: 95, 96, 135, Tahiti (USEE), 1 col. each.-Recent.
- Remark: Species subsequently transferred to Pavona. formosum, Truncatoflabellum Cairns, 1989
- H: 81953, *Albatross*-5249, 1 corallum; P: 81954, *Albatross*-5289, 1 corallum; P: 40778, *Albatross*-5265, 3 coralla; P: 40786, *Albatross*-5618, 1 col. (in alcohol).—Recent.
- fossata, Psammocora Dana, 1846
- H: 198, Fiji (USEE), 1 col.—Recent. Remark: Junior synonym of *Coscinaraea columna* (Dana, 1846).
- fossulus, Trochocyathus Cairns, 1979
 H: 46881, Pillsbury-991, 1 corallum; P: 46882, Columbus Iselin-6, 1 corallum.—Recent.
- fragarioides, Spehenotrochus Wells, 1945
- H: 68351, S101, 1 corallum.—Eocene. fragile var., Flabellum cuneiforme Vaughan, 1900a
- S: M157971, Baker's Bluff, 1 corallum.—Eocene.
- fragile, Flabellum Cairns, 1977c
 - H: 45764, Hernan Cortez sta. E, 1 corallum; P: 45766, Hernan Cortez sta. E, 1 corallum; P: 45767, Alligator Reef, 1 corallum; P: 45765, Egmont Key, 1 corallum.—Recent. Remark: Junior primary homonym of Flabellum cuneiforme var. fragile Vaughan, 1900a; replacement name Flabellum floridanum given here.

fragilis, Astraea (Fissicella) Dana, 1846

- S: 24, East Indies (USEE), 1 col.—Recent. Remark: Junior synonym of *Favia speciosa* (Dana, 1846) (see Vaughan, 1918).
- fragilis forma, Porites compressa Vaughan, 1907a H: 20928, Pearl Harbor, 1 col.—Recent.
- fragosa, Porites Dana, 1846
 - H: 643, Fiji (USEE), 1 large col.-Recent.
- fredericksburgensis, Favoidioseris Wells, 1933
 - H: I75134, Belton, 1 col.; P: I311586, Belton, specimens 4, 8-10; P: I75129, Belton, 1 col.; P: I313352, Belton, 1 col.—L. Cretaceous.
- Remark: Species subsequently transferred to Ovalastrea. frondens, Gemmipora Dana, 1846
- S: 214, Fiji (USEE), 1 col. in 2 pieces.-Recent.
- Remark: Species subsequently transferred to Turbinaria. frondosa, Pocillopora Verrill, 1869a
 - H: 62701, Hawaii, 2 frag. of holotype (ex YPM 1276).— Recent.
- frondosa, Psammocora Verrill, 1872
 - H: 217, Fiji (USEE), 1 col.—Recent. Remarks: Based on Dana's (1846) *Psammocora plicata* (Lamarck). Junior synonym of *Psammocora contigua* (Esper, 1797) (see Veron and Pichon, 1976:22).

frusta, Placotrochides Caims, 1979

H: 36451, Albatross-2750, 1 corallum; P: 36453, Albatross-

2750, 5 coralla.-Recent. fundimaritima, Lophosmilia Hamilton, 1956 H: I189892, Cape Johnson Guyot, 1 corallum.—Cretaceous. furcata, Caulastraea Dana, 1846 S: 80, Fiji (USEE), 1 col. broken into 3 pieces.-Recent. fuscus, Placotrochus Vaughan, 1907a S: 20732, Albatross-3886, 1 corallum; S: 20733, Albatross-3999, 1 corallum; S: 20734, Albatross-3999, 1 corallum.-Recent. galapagense, Desmophyllum Vaughan, 1906a H: 68275, Albatross-4642, 1 corallum.-Recent. Remark: Junior synonym of Javania cailleti (Duchassaing and Michelotti, 1864) (see Cairns, 1991). galapagensis, Balanophyllia Vaughan, 1906a H: 68278, Albatross-4642, 1 corallum.-Recent. galapagensis, Crispatotrochus Cairns, 1991 H: 84808, Johnson-Sea-Link 1931, 1 corallum; P: 84809, Johnson-Sea-Link 1913, 1 corallum; P: 84810, Johnson-Sea-Link 1929, 3 coralla; P: 84811, Johnson-Sea-Link 1935, 1 corallum; P: 85222, Johnson-Sea-Link 1911, 1 corallum.-Recent. galapagensis, Madrepora Vaughan, 1906a S: 68276, Albatross-4642, 2 col.-Recent. galeriformis, Polyphyllia Dana, 1846 S: 155, Fiji (USEE), 1 col.; S: 156, Fiji (USEE), 1 col. in 13 frag.-Recent. Remark: Junior synonym of Polyphyllia novaehiberniae (Lesson, 1831) (see Hoeksema, 1989). gamma subforma, Porites lobata forma centralis Vaughan, 1907a H: 21626, Molokai, 1 col.-Recent. ganei, Madracis Vaughan, 1900a S: M158265, Natchitoches, 4 branch frag.—Eocene. gardineri, Flabellum Cairns, 1982a P: 48300, Discovery-160 (ex BM), 2 coralla.-Recent. gardineri, Paracyathus Vaughan, 1907a S: 20754, Albatross, 2 coralla; S: 20753, Albatross, 1 corallum.-Recent. Remark: Species subsequently transferred to Trochocyathus (see Cairns, 1984). gardnerae, Archohelia Vaughan, 1941 S: M547325, USGS 14837, 2 col.; S: M547326, USGS 14837, 4 col.; S: M547327, USGS 14837, 1 col.; S: M547328, USGS 14837, 1 col.-M. Eocene. gardnerae, Trochocyathus Wells, 1933 H: I75143, Onim Creek, 1 corallum; P: I75157, Onim Creek, 3 coralla.-U. Cretaceous. gasparillensis, Psammocora Vaughan in Vaughan and Hoffmeister, 1926 H: M353673, USGS 8297, 1 col.-Miocene. gemminata, Heteropsammia Verrill, 1870 S: 38353, Burma, 1 corallum (ex YPM 3865).-Recent. georgiana var., Micrabacia rotatilis Stephenson, 1917

H: I31998, USGS 5417, 1 corallum; P: I31999, USGS 5417,

1 corallum; P: I32017, USGS 5417, 5 coralla.-U. Cretaceous. gerdae, Rhizosmilia Cairns, 1978b H: 46812, Gerda-725, 1 col.; P: 46813, Gerda-725, 36 corallites; P: 46814, Gerda-698, 1 col.; P: 46815, Gerda-701, 2 col.; P: 46816, Gerda-702, 4 corallites, 1 TS; P: 16138, Albatross-2332, 1 col.; P: 36364, Albatross-2334, 2 col. and 2 corallites; P: 10210, Albatross-2336, 1 corallite; P: 36418, Albatross, 1 col.-Recent. gibsonhilli, Porites Wells, 1950 H: 44337, Cocos-Keeling Id., 1 col. and 3 branch frag. (82617).-Recent. Remark: Junior synonym of Porites cylindrica Dana, 1846 (J. Veron, pers. comm.). gigantea, Fungia ehrenbergi Dana, 1846 S: 141, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Ctenactis echinata (Pallas, 1766) (see Veron and Pichon, 1980). gigantea, Pavonia Verrill, 1869b S: 62702, Pearl Id., 2 frag. (ex YPM 1679).-Recent. Remark: Species subsequently considered to be in Pavona. gigas, Stylophora Hoffmeister, 1945 H: 68236, sta. 110A, 1 col.; P: 68241, sta. L344A, 1 frag.; P: 68242, 68240, 68237, sta. 110A, 1 col. each; P: 67710, sta. 124, 2 col.-Neogene. glabra, Leptoseris Dinesen, 1980 P: 54198, Orpheus Id. (ZD 9487), 1 col.; P: 54199, Young Id. (ZD 9760), 1 col.-Recent. glaucopsis, Astraea (Fissicella) Dana, 1846 H: 3, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Diploastrea heliopora (Lamarck, 1816) (see Wijsman-Best, 1980). globiceps, Madrepora Dana, 1846 S: 261, Tahiti (USEE), 1 col.-Recent. Remark: Junior synonym of Acropora humilis (Dana, 1846) (see Wells, 1954:425). globosa, Plesiastrea Duncan, 1864 H: M155272, silt plain, half of col.-Miocene. Remarks: Junior synonym of Solenastrea bournoni Milne Edwards and Haime, 1850 (see Budd, in press). Other half of holotype at BM (R28871). goethalsi, Astreopora Vaughan, 1919 S: M325036, USGS 6016, 2 col.; S: M325034 (not 325043, as cited by Vaughan), USGS 6015, 4 col.-M. Miocene. goethalsi, Stylophora Vaughan, 1919 S: M324767, USGS 6016, 3 col.-Miocene. gombergi, Thalamophyllia Cairns, 1979 H: 46890, Gilliss-25, 1 corallum; P: 46891, Gilliss-25, 7 coralla; P: 46892, Gilliss-27, 13 coralla; P: 46893, Gilliss 71-6, 2 coralla; P: 46894, Gilliss 71-7, 1 corallum.-Recent. goodei, Flabellum Verrill, 1878 H: 68306, George's Bank, 1 corallum.-Recent. Remark: Junior synonym of Flabellum alabastrum Moseley, 1873

goodei, Plesiatrea Verrill, 1900

S: 36497, Bermuda, 2 frag.—Recent. Remarks: Junior synonym of Stephanocoenia intersepta (Lamarck, 1816) (see Foster, 1987:19-20). Species commonly, but incorrectly, known as Stephanocoenia michelinii (Milne Edwards and Haime, 1848).

gracilis, Madrepora Dana, 1846

S: 333, Fiji (USEE), 1 col.—Recent. Remark: ?Junior synonym of Acropora formosa (Dana, 1846) (see Veron and Wallace, 1984:230).

gracilis, Meandrina Dana, 1846

S: 18, Fiji (USEE), 1 col.—Recent. Remarks: Junior synonym of *Leptoria phrygia* (Ellis and Solander, 1786) (see Veron, Pichon, and Wijsman-Best, 1977). Originally labelled as USNM 16, but this number was preoccupied.

- gracilis, Seriatopora caliendrum Dana, 1846
 - S: 329, Sulu Sea (USEE), 1 col.-Recent.
- grahamae, Agaricia Wells, 1973a

H: 53487, DBL 1315, 1 col. in 2 pieces.-Recent.

grandifolia, Manopora Dana, 1846

S: 326, Singapore (USEE), 1 col.-Recent.

Remark: Species subsequently transferred to Montipora. grandis, Balanophyllia Cairns, 1977a

H: 45850, *Pillsbury*-627, 1 corallum; P: 45851, *Pillsbury*-324, 1 corallum; P: 45852, *Pillsbury*-403, 2 coralla; P: 45853, *Pillsbury*-425, 1 corallum; P: 45854, *Pillsbury*-1369, 1 corallum.—Recent.

grandis, Pocillopora Dana, 1846

S: 700, Fiji (USEE), 1 col.; S: 682, Wake's Id., 1 branch.—Recent.

Remarks: Dana (1846) stated that the specimens were from Fiji and the Society Islands, the latter perhaps a mistake for Wake's Island.

granimurata forma, Porites compressa Vaughan, 1907a S: 20936, Kaheohe, 1 col.; S: 20951, Kaneohe, 1 col.—

Recent.

granulosus, Fungiacyathus (Bathyactis) Cairns, 1989
H: 81751, Albatross-5590, 1 corallum; P: 81755, Albatross-5260, 1 corallum; P: M230047, Albatross-5282, 1 corallum;
P: 81752, Albatross-5283, 5 coralla; P: 81754, Albatross-5589, 4 coralla; P: 81753, Albatross-5592, 7 coralla, SEM stubs 493-494.—Recent.

granulosus, Paracyathus Vaughan, 1900a

H: M158192, Wood's Bluff, 1 corallum.—Eocene. gravieri, Orbicella Vaughan, 1918

H: 21966, Djibouti, 1 col. in 2 pieces.—Recent. Remarks: Based on specimen reported as Orbicella annuligera by Vaughan (1907b). Junior synonym of Plesiastrea versipora (Lamarck, 1816) (see Wijsman-Best, 1977).

gravieri, Physogyra Vaughan, 1907b

H: 21961, Somalia, frag. of holotype.-Recent.

graysonensis, Parasmilia Wells, 1933

H: I75141, Grayson Bluff, 1 col.—L. Cretaceous.

graysonensis var., Trochocyathus sellardsi Wells, 1933 H: I75145, Grayson Bluff, 1 col.; P: I147654, Grayson Bluff, 1 col.-L. Cretaceous. gregorii, Stylosmilia Wells, 1944a H: M547384, Cumaná, 1 col. in 3 pieces, 1 TS: P: M547383 (I372142), Cumaná, 1 col.; P: M547395 (I312008), 1 TS.-L. Cretaceous. gregorioi, Madracis Vaughan, 1900a S: M158271, Gregg's Landing, 1 col.; S: M158272, Gregg's Landing, 1 col.-Eocene. guadelupae, Stephanocoenia Wells, 1932 S: I75125, Comal Co., 1 col.—Cretaceous. guantanamensis, Astrocoenia Vaughan, 1919 H: M324794, USGS 7522, 1 col.-Miocene. guantanamensis, Pocillopora Vaughan, 1919 H: M324784, USGS 7514, 1 col.-Tertiary. haddoni, Porites Vaughan, 1918 H: 47235, Murray Id., 1 col.-Recent. Remark: Junior synonym of Porites lutea Milne Edwards and Haime, 1860 (see Veron and Pichon, 1982:25). hadros, Balanophyllia Cairns, 1979 H: 46906, Oregon-4834, 1 corallum; P: 46907, Oregon-4834, 15 coralla; P: 46908, Oregon-4832, 2 coralla.-Recent. hannibali, Dendrophyllia Nomland, 1916 H: M561475, NP15, small piece of holotype (remainder stated to be at Stanford University) .- M. Oligocene. harrisi, Astrangia Vaughan, 1900a S: M158289, Saline River, 1 col.-Eocene. harrisi, Blothrocyathus Wells, 1932 P: I75121, Blanco River, 1 col. in 5 pieces.—Cretaceous. harrisi, Oculina Vaughan, 1900a H: M158251, USGS 2632, 1 col.-Eocene. hawaiiensis, Balanophyllia Vaughan, 1907a S: 20823, Albatross-4059, 4 coralla.-Recent. Remark: Junior synonym of Balanophyllia cornu Moseley, 1881 (see Cairns, 1984). hawaiiensis, Bathyactis Vaughan, 1907a H: 20834, Albatross-4125, 1 corallum.-Recent. Remark: Junior synonym of Fungiacyathus fragilis (Sars, 1872). hawaiiensis, Caryophyllia Vaughan, 1907a S: 20749, Albatross-3838, 1 corallum; S: 20750, Albatross-3838, 3 coralla.-Recent. hawaiiensis, Favia Vaughan, 1907a H: 21635, WTB 41-42, 2 col.-Recent. Remarks: Junior synonym of Leptastrea purpurea (Dana, 1846) (see Vaughan, 1918). Junior secondary homonym of Leptastrea hawaiiensis Vaughan, 1907a. hawaiiensis, Gardineria Vaughan, 1907a H: 20731, Albatross-3991, 1 corallum.-Recent. hawaiiensis, Leptastrea Vaughan, 1907a H: 21632, Molokai, 1 col.-Recent. Remarks: Junior synonym of Leptastrea bottae (Milne

Edwards and Haime, 1849) (see Veron, Pichon, and Wijsman-Best, 1977). Senior secondary homonym of Favia (= Leptastrea) hawaiiensis Vaughan, 1907. Not USNM 61632, as reported by Wijsman-Best (1980:246). hawaiiensis, Leptoseris Vaughan, 1907a S: 20843, 20873, Albatross-3845, 4 col.; S: 20844, 20876, Albatross-3848, 4 col.; S: 20845, 20875, Albatross-3849, 3 col.; S: 20874, Albatross-4055, 2 col.-Recent. hawaiiensis, Porites (Synaraea) Vaughan, 1907a H: 21624, Kalihi, 1 col.-Recent. Remark: Junior synonym of Porites rus (Forskal, 1775) (see Veron and Pichon, 1982). hayesi, Syzygophyllia Vaughan, 1919 H: M325009, Nicaragua, 1 col.-Eocene. hayesi, Thysanus Vaughan, 1919 H: M324994, USGS 3461, 1 col.-Tertiary. hebes, Madrepora Dana, 1846 S: 286, Fiji (USEE), 1 col.; S: 287, Fiji (USEE), 1 col. in 2 pieces.-Recent. Remark: Junior synonym of Acropora aspera (Dana, 1846) (see Veron and Wallace, 1984). hedbergi, Cyathophora Wells, 1944a H: M547383, Cumaná, 1 col. in 4 pieces, 2 TS; P: M547393 (I372145), Cumaná, 1 col.; P: M547394 (I372149), Cumaná, 1 col.; P: M547400, Cumaná, 1 col.-L. Cretaceous. hedbergi, Goniopora Wells, 1945 H: 68337, S152, 1 col.-Eocene. helianthoides, Favia Wells, 1954 H: 44980, sta. 10C, 1 col.-Recent. heronensis, Turbinaria Wells, 1959 H: 45388, Heron Id., 1 col. in 2 pieces; P: 45389, Heron Id., 1 col.-Recent. heteroclitus, Deltocyathus Wells, 1984 H: 71849, USGS 24918, 1 corallum; P: 71850, USGS 24918, 1 corallum; P: 71851, USGS 24918, 1 corallum; P: 73965, USGS 24918, 3 coralla.-Pleistocene. hexagonalis, Siderastrea Vaughan, 1900a H: M158317, Prairie Creek, 1 col.-Eocene, hilgardi, Micrabacia Stephenson, 1917 H: I32001, USGS 6872, 1 corallum; P: I32000, USGS 5417, 1 corallum; P: I32012 (1 corallum), I32009 (8 coralla), USGS 6872; P: I32010, USGS 5417, 13 coralla; P: I32011, 854, 1 corallum.-U. Cretaceous. hilli, Asterosmilia Vaughan, 1919 S: M324815, USGS 2580, 7 coralla; S: M324816, USGS 2580, 3 coralla.-Pliocene. Remark: Junior synonym of Asterosmilia exarata Duncan, 1867 (see Cairns and Wells, 1987). hilli, Centrastrea Wells, 1934 H: I74492, Catadupa, 1 col.-U. Crtaceous. hilli, Cyathomorpha Vaughan, 1919 H: M325204, USGS 6881, 1 col.; P: M325205, USGS 6881, 2 col.—Oligocene.

Remark: Junior synonym of Agathiphyllia browni (Vaughan, 1919). hilli, Goniopora Vaughan, 1919 H: M325058, USGS 6016, 1 col.; P: M325057, USGS 6015, 2 col.-M. Miocene. hillsboroensis, Siderastrea Vaughan, 1919 H: M325183, USGS 4890, 3 frag., 1 TS; P: M325155, USGS 7076, 2 frag., 1 TS.-L. Miocene. hirta var., Orbicella cavernosa Verrill, 1901 H: 36669, Bermuda, 1 large col.-Recent. Remark: Junior synonym of Montastraea cavernosa (Linnaeus, 1767). hispida, Manopora Dana, 1846 L: 341, Singapore (USEE), 1 col.; PL: 340, East Indies (USEE), 1 col.-Recent. Remarks: Species transferred to Montipora. Lectotype designated by Veron and Pichon (1984:82). hispidula, Orbicella Verrill, 1901 H: 40476, Key West, 2 frag. of holotype (ex YPM 98).-Recent. Remark: Junior synonym of Monastraea annularis (Ellis and Solander, 1786). hobleyi, Oculina Thomas, 1948 H: I104913, Taylor's Hill Pit, part of holotype .--- L. Cretaceous. hoffmeisteri, Culicia Squires, 1966 P: 83003, Pope's Eye, 1 corallum; P: 53416, Pope's Eye, 3 coralla.-Recent. hoffmeisteri, Flabellum (Ulocyathus) Cairns and Parker, in press P: 85707, Soela-27, 4 coralla (ex SAM); P: 82012, Endeavour-5587, 1 corallum; P: 82727, Soela-77, 2 coralla (ex NMV) .- Recent. hoffmeisteri, Montipora Wells, 1954 H: 44730, sta. 44, 1 col.; P: 45176, sta. 44, 1 col.; P: 45615, sta. 44, 1 col.; P: 44731, sta. 44, 2 col.-Recent. Remark: Specimens of last two catalog numbers not listed in original publication but status clearly indicated on museum labels. hoffmeisteri, Stenocyathus Wells, 1977 H: I208318, USGS 24686, 1 corallum; P: I208319-I208320, USGS 24686, 1 corallum each (specimens a-c).-Eocene. hombroni, Parastraea Rousseau, 1854 S: 82828, "Oceania", 1 col.-Recent. Remark: Junior synonym of Favia stelligera (Dana, 1846) (see Veron, Pichon, and Wijsman-Best, 1977). horizontalata, Porites Hoffmeister, 1925 S: 68202-68204, Pago Pago Harbor, specimens 1-3.-Recent. horologium, Caryophyllia Caims, 1977c H: 45760, Hernan Cortez sta. E, 1 corallum; P: 45761, Cedar Keys, 1 corallum; P: 45762, Hernan Cortez sta. E, 2 coralla; P: 45763, "Florida", 1 corallum.-Recent.

horrescens, Oculina Dana, 1846 S: 13, Fiji (USEE), 1 col.-Recent. Remarks: Species subsequently transferred to Acrhelia (see Veron and Pichon, 1980). Not USNM 5 as stated by Vaughan (1918:81). horrida, Echinopora Dana, 1846 S: 162, Fiji (USEE), 1 col.-Recent. horrida, Fungia Dana, 1846 S: 120, Fiji (USEE), 1 col.-Recent, horrida, Madrepora Dana, 1846 H: 291, Fiji (USEE), 1 large branch.-Recent. Remark: Species subsequently transferred to Acropora. howei, Porites (Synaraea) Vaughan, 1919 L: 72890, USGS 6016, 1 col.; PL: M325113, USGS 6016, 2 col.-M. Miocene. Remarks: Junior synonym of Porites portoricensis (Vaughan, 1919). Lectotype designated by Foster (1986). humilis. Madrepora Dana, 1846 S: 332, Fiji (USEE), 1 col.-Recent. Remarks: Species subsequently transferred to Acropora. Specimen described by Rathbun (1887). hyacinthus, Madrepora Dana, 1846 S: 246, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. hyatti, Trochocyathus Vaughan, 1900a S: M158134, Black Bluff, 2 coralla.; S: M158135, Black Bluff, 2 TS.-Eocene. hydra, Fungiacyathus Zibrowius and Gili, 1990 P: 86869, BB-2, 3 coralla; P: 86867, BB-12, 6 coralla (2 in alcohol); P: 86868, BB-13, 6 coralla and frag. (frag. in alcohol).-Recent. hystrix, Anthophyllum Dana, 1846 H: 49, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Galaxea fascicularis (Linnaeus, 1767) (see Veron and Pichon, 1980:204). hystrix, Madrepora Dana, 1846 S: 298, Fiji (USEE), 1 col.-Recent, Remark: Junior synonym of Acropora cerealis (Dana, 1846) (see Veron and Wallace, 1984). hystrix, Seriatopora Dana, 1846 S: 346, Fiji (USEE), 1 col.; S: 5739, Fiji (USEE), 1 branch.-Recent. Remark: Label of USNM 5739 reads "lectotype", but I cannot find documentation in the literature for this designation. imperatoris, Goniopora Vaughan, 1919 H: M325049, USGS 6016, 1 col.-M. Miocene. imperatoris, Orbicella Vaughan, 1919 S: M324884, USGS 6015, 1 col.; S: M324902-M324903, USGS 6015, 1 col. each; S: M324878, USGS 3451, 1 col.-M. Miocene.

Remark: Species subsequently transferred to Montastraea.

SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY

imperatoris, Stylophora Vaughan, 1919 H: M324752, USGS 6016, 1 col.; P: M324753, USGS 6016, 2 col.: P: M324754, USGS 6894, 1 col.-M. Miocene. implicata, Madrepora Dana, 1846 S: 283, Fiji (USEE), 1 col. and 20 frag.-Recent. Remark: Species subsequently transferred to Acropora. inauris, Balanophyllia Vaughan, 1900a S: M158362, New Jersey, 1 col.-Eocene. incerta var., Caryophyllia octopali Vaughan, 1907a H: 20748, Albatross-3828, 11 contiguous coralla.-Recent. incrassata, Manopora Dana, 1846 L: 309, Fiji (USEE), 1 col.-Recent. Remarks: Species subsequently transferred to Montipora. Lectotype designated by Veron and Wallace (1984:62). incrustatum, Truncatoflabellum Caims, 1989 H: 40774, Albatross-5251, 1 corallum; P: 40772, Albatross-5249, 1 corallum; P: 40773, Albatross-5250, 2 coralla; P: 81974, Albatross-5251, 1 corallum; P: 40776, Albatross-5253, 2 coralla; P: 81973, Albatross-5265, 1 col.; P: 40779, Albatross-5289, 1 coralla.-Recent. informis, Pocillopora Dana, 1846 S: 441, Sandwich Ids. (USEE), 1 col.-Recent. infundibulum forma, Porites lobata Vaughan, 1907a H: 22243, Kalihi, 1 col.-Recent. inornata, Coenosmilia Cairns, 1984 H: 60527, Sango 13-13, 1 col.; P: 60528, Sango 13-13, 8 col. and 4 branches .- Recent. insignifica, Turbinolia Vaughan, 1900a S: M158130, Red Bluff, 2 coralla.-Eocene. irregularis, Cyathoceras Cairns, 1982a H: 47165, Eltanin-1346, 1 corallum; P: 47166, Eltanin-1346, 7 coralla.-Recent. Remark: Species subsequently transferred to Crispatotrochus. irregularis, Truncatoguynia Cairns, 1989 H: 81890, Albatross-5311, 1 corallum; P: 81891, Albatross-5311, 9 coralla, SEM stub 477.-Recent. isabela, Polycyathus Wells, 1982 H: 46964, Punta Albemarle, 1 col.-Recent. jacksonensis, Platycoenia Vaughan, 1900a H: M158316, Jackson, 1 col.-Eocene. jacobiana, Goniopora Vaughan, 1919 H: M325077, USGS 3446, 1 large col.-Tertiary. Remark: Junior synonym of Goniopora hilli Vaughan, 1919 (see Foster, 1986) jamaicaensis, Astrocoenia Wells, 1934 H: 44284, Spring Mount, 1 col.-M. Eocene. jamaicaensis, Cyclolites Wells, 1934 H: I74488, Providence, 1 col.; P: I147658, Providence, 2 col.-U. Cretaceous. japonica, Fungia Vaughan, 1906b H: M154426, USGS 2530, 1 col.; P: 68280, USGS 2530, 1 col.-Tertiary. Remark: Junior synonym of Fungia cyclolites Lamarck, 1816 (see Hoeksema, 1989).

johannis, Caryophyllia White, 1879 S: I8084, Cimarron, 2 coralla.-Cretaceous. johnsoni, Cladocora Gane, 1895 S: 68197, Waccamaw River, 5 corallites.-Pliocene. Remark: Junior synonym of Cladocora debilis Milne Edwards and Haime, 1849. johnsoni, Dendrophyllia Cairns, 1991 H: 84847, Johnson-Sea-Link 1911, 1 branch; P: 84848, Johnson-Sea-Link 1924, 5 branches.-Recent. johnsoni, Madracis Vaughan, 1900a S: M158269, San Augustine, 2 branches.-Eocene. jukesbrowni, Astrocoenia Wells, 1945 H: 68319, \$65, 1 col.; P: 68320, \$65, 2 col.-Eocene. kauaiensis, Madracis Vaughan, 1907a S: 20769, Albatross-3982, 3 col.-Recent. kauaiensis, Madrepora Vaughan, 1907a H: 20780, Albatross-4136, 1 col. now in 6 pieces.-Recent. Remark: Mussa? (Vaughan, 1907a) attached to holotype thought to be a neoplasm of M. kauaiensis by Squires (1965b). kayserensis, Paracyathus Vaughan, 1920 H: I32378, USGS 7965, 1 corallum.-?Cretaceous. kerioides, Septastrea Vaughan and Popence, 1935 H: I371042, USGS 11937, 1 col. now in 4 pieces.-Eocene, kondoi, Cyathoceras Wells, 1977 H: I208313, USGS 24686, 1 corallum; P: I208314, I208340, USGS 24686, 1 corallum each.-Eocene. Remark: Species subsequently transferred to Labyrinthocyathus by Cairns (1979). kugleri, Atopocoenia Wells, 1974a P: 46822, K7561, 11 frag., 2 TS.-Oligocene. laboreli, Dendrophyllia Zibrowius and Brito, 1984 P: 71867, Madeleine Id., 5 col.; P: 71868, Madeleine Id., 4 col.; P: 71869, Madeleine Id., 2 col.-Recent. labrosa, Madrepora Dana, 1846 H: 315, Sulu Sea (USEE), 1 col.-Recent. Remark: Junior synonym of Acropora prolifera (Lamarck, 1816) (see Veron and Wallace, 1984). labyrinthicum, Epiphaxum Wells, 1932 H: I75124, Blanco River, 1 col.; P: I311585, Blanco River, 1 col.-Cretaceous. lacera, Fungia Verrill, 1866a H: 124, Fiji (USEE), 1 col.-Recent. Remarks: Based on Dana's (1846) specimen of Fungia echinata (Esper) from Fiji. This specimen may also be interpreted as a syntype of Fungia danae Milne Edwards and Haime, 1851a, which Hoeksema (1989:109) further designated as a paralectotype of F. danae. It is also a senior subjective synonym of F. scruposa Klunzinger, 1879; however, the lectotype of F. danae is a junior synonym of F. horrida Dana, 1846 (Hoeksema, 1989:102). lacera forma, Porites lobata Vaughan, 1907a

laddi, Bikiniastrea Wells, 1954 H: 44942, sta. 30, 1 col.-Recent. Remark: Junior synonym within the Favia amicorum complex (see Veron, Pichon, and Wijsman-Best, 1977). laddi, Enallopsammia Wells, 1977 H: I208334, USGS 24686, 1 col.; P: I208335, USGS 24686, 6 col.; P: I208336-I208338, USGS 24686, 1 col. each.-Eocene. laddi, Orbicella Hoffmeister, 1932 H: 68222, sta. 166, 1 col.-Pliocene. Remark: Species subsequently transferred to Montastraea. laddi, Stylangia Wells, 1944a H: M547388, Cumaná, 1 col. in 3 pieces, 1 TS; P: M547389, Cumaná, 1 col. in 3 pieces; P: M547390 (I372144), Cumaná, 1 col.-L. Cretaceous. laevifundus, Stephanocyathus Cairns, 1977b H: 45751, Gerda-293, 1 corallum; P: 45752, Gerda-293, 19 coralla; P: 45754, Gerda-109, 27 coralla; P: 45753, Pillsbury-407, 1 corallum.--Recent. laevigatus, Platytrochus Cairns and Parker, in press P: 85693, Backstairs Passage, 1 corallum; P: 85694, St. Francis Id., 5 coralla; P: 85695, Gulf of St. Vincent, SEM stub 518.-Recent. lamarcki, Agaricia Milne Edwards and Haime, 1851a N: 53486, DBL 174, 1 plate now in 3 pieces.--Recent. Remark: Neotype designated by Wells (1973a). lamarensis, Astrangia (Coenangia) Wells, 1947 H: I104171, Old Slate Shoals, 1 col.-U. Cretaceous. langae, Labyrinthocyathus Cairns, 1979 H: 46871, Eastward-26017, 1 corallum; P: 46872, Eastward-14038, 2 coralla; P: 46873, Albatross-2354, 5 coralla.-Recent. lata, Pavonia Dana, 1846 S: 194, Fiji (USEE), 1 large col.-Recent. Remark: Junior synonym of Pavona decussata (Dana, 1846) (see Veron and Pichon, 1980). laticostata, Endocyathopora Cairns, 1989 H: 81894, Albatross-5134, 1 corallum (used as SEM stub 474); P: 81895, Albatross-5133, 2 coralla.-Recent. lauensis var., Diploastrea polygonalis Hoffmeister, 1945 H: 68244, sta. 110A, 1 col.-Neogene. lauensis, Galaxea Hoffmeister, 1945 H: 68232, sta. 110A, 1 col.-Neogene. lauensis, Orbicella Hoffmeister, 1945 H: 68234, sta. 110A, 1 col.; P: 63314, sta. 110A, 1 col.-Neogene. Remark: Species subsequently transferred to Montastraea. laxa, Merulina Dana, 1846 S: 127, Sulu Sea (USEE), 1 frag.; S: 4501, Sulu Sea (USEE), 12 frag.-Recent. laxus, Ceratotrochus Vaughan, 1907a 2008, 3 coralla.-Eocene. H: 20764, Albatross-3827, 1 corallum.-Recent.

laysanensis, Balanophyllia Vaughan, 1907a H: 20901, Albatross-3937, 1 corallum.-Recent. laysanensis var., Pocillopora cespitosa Vaughan, 1907a S: 20871, Albatross-3955, 2 col.-Recent. leithensis, Steriphonotrochus Vaughan, 1920 H: I32379, USGS 7963, 1 col.-?Cretaceous. Remark: A member of the genus Bathycyathus? lerchi, Flabellum Vaughan, 1900a S: M157920, Liberty Hill, 1 corallum; S: M157921, Jackson Parrish, 1 corallum.-Eocene. levicollis, Agaricia (Undaria) Dana, 1846 S: 190, East Indies (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Pachyseris (see Hoffmeister, 1925). lichen, Manopora Dana, 1846 S: 336, ?Tahiti (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Montipora. lichen, Porites Dana, 1846 H: 666, Fiji (USEE), 1 col. in 2 pieces .- Recent. lilli, Plesiastrea Wells, 1954 H: 45002, sta. 10D, 1 col. in 3 pieces; P: 45003, sta. 10D, 1 col.-Recent. limatulus, Ceratotrochus Squires, 1964 P: 68260, Ikatare, 9 coralla .- Recent. Remark: Species subsequently transferred to Labyrinthocyathus by Cairns (1979). limonensis, Archohelia Vaughan, 1919 S: M324809, USGS 2692, 3 col.-Pliocene. limosa, Porites Dana, 1846 H: 673, Fiji (USEE), 1 col.-Recent. lirioides, Desmophyllum Wells, 1977 H: I208326, USGS 24686, 1 corallum; P: I208341, USGS 24686, 1 corallum.-Eocene. lisbonensis, Dendrophyllia Vaughan, 1900a H: M158468, Lisbon, 1 col.-Eocene. lloydi, Paracyathus Vaughan, 1920 H: I32376, USGS 7961, 1 corallum.-?Cretaceous. lobata, Porites Dana, 1846 S: 652, Sandwich Ids. (USEE), 1 col.; S: 646, Sandwich Ids. (USEE), 1 col.-Recent. loculata var., Pavonia crassa Dana, 1846 S: 224, Singapore (USEE), 1 col.; S: 85757, Singapore (USEE), 1 col. and 1 frag.-Recent. Remark: Species subsequently transferred to Pavona. lonsdalei, Endopachys Vaughan, 1900a S: M158460, Newton, 1 corallum; S: M158462, Newton, 2 coralla .--- Eocene. lowekeyesi, Flabellum Squires and Ralph, 1965 P: 45601, Cape Brett, 1 corallum.-Recent. ludoviciana, Astrangia Vaughan, 1900a S: M158288, Montgomery, 1 col. of 7 corallites.-Eocene. ludoviciana, Parasmilia Vaughan, 1900a S: M158217, Montgomery, 5 coralla; S: M158218, USGS

mabahithi, Caryophyllia Gardiner and Waugh, 1938 S: 48299, John Murray-34, 2 coralla (ex BM).-Recent. macdonaldi, Favia Vaughan, 1919 H: M324993, USGS 6587, 1 col.-M. Miocene. macdonaldi, Porites (Synaraea) Vaughan, 1919 L: 72376, USGS 6016, 1 col.; PL: M325046a, USGS 6016, 3 col.-M. Miocene. Remark: Lectotype designated by Foster (1986). macdonaldi, Stylophora Vaughan, 1919 S: M324769, USGS 6016, 4 col.; S: M324770, USGS 6016, 3 col.-Miocene. machapooriensis, Asterosmilia Hoffmeister in Vaughan and Hoffmeister, 1926 S: M353650, USGS 8301, 1 col. cut in half; S: M353651, USGS 8301, 1 col. cut in half .-- Miocene. machapooriensis, Pavona Vaughan in Vaughan and Hoffmeister, 1926 H: M353667, USGS 8301, 1 col.-Miocene. maclurii, Turbinolia Lea, 1833 S: M158411, Alabama, 29 coralla.-Eocene. Remark: Species subsequently transferred to Endopachys. macrocalyx var., Madracis kauaiensis Vaughan, 1907a H: 20777, Albatross-3833, 1 col.-Recent. madagascarensis, Fungia Vaughan, 1906b H: 21141, Madagascar, 1 col.-Recent. Remark: Junior synonym of Fungia scruposa Klunzinger, 1879 (see Hoeksema, 1989). magna, Favites Hoffmeister, 1932 H: 68224, 464, 1 col.-?Eocene. magnocostatum var., Flabellum cuneiforme Vaughan, 1900a S: M157990, Garland Creek, 1 corallum.-Eocene. maloniana, Astrocoenia Vaughan, 1905 H: I28970, Malone, 1 col.; P: I74242, Malone, 3 col., 2 TS (ex I28970) .- Jurassic. mammosa, Meandrina Dana, 1846 S: 220, locality unknown but undoubtedly from within the Caribbean or off Florida (USEE), 1 col.-Recent. Remark: Junior synonym of Diploria clivosa (Ellis and Solander, 1786). mangarevensis, Acropora Vaughan, 1906a H: 68308, Mangareva Id., 1 col.-Recent. Remark: Junior synonym of Acropora clathrata (Brook, 1891) (see Veron and Wallace, 1984). manorensis, Steriphonotrochus Wells, 1933 H: I75132, Manor, Texas, 1 col.-U. Cretaceous. Remark: A species of Bathycyathus? mansfieldi, Orbicella Hoffmeister, 1932 H: 68223, USGS 5016, 1 col.-Pliocene. Remark: Species subsequently transferred to Montastraea. maoensis, Placocyathus Vaughan in Vaughan and Hoffmeister, 1925

Remark: Species transferred to Antillocyathus (see Cairns and Wells, 1987). marenzelleri, Bathyactis, Vaughan, 1906a H: 47415, Albatross-4721, 1 corallum.-Recent. Remark: Species subsequently transferred to Fungiacyathus. marenzelleri, Flabellum (Ulocyathus) Cairns, 1989 H: 40686, Albatross-5289, 1 corallum; P: 40687, Albatross-5265, 3 coralla (1 in alcohol); P: 81887, Albatross-5268, 1 corallum; P: 81888, Albatross-5298, 2 coralla; P: 81889, Albatross-5289, 1 corallum.-Recent. marmorea, Caryophyllia Cairns, 1984 H: 60515, HON 9-3A, 1 corallum .-- Recent. marshae, Coscinaraea Wells, 1962 P: 68364, WAM 59-59, 2 frag., SEM stub 539; P: 68363, Rottnest, 2 col.-Recent. Remark: USNM 68364 is Coscinaraea mcneilli Wells, 1962 (see Veron and Marsh, 1988). marshallensis, Montipora Wells, 1954 H: 44771, sta. 43, 1 col.; P: 44772, 44454, 44810, sta. 43, 1 col. each (specimens a-d).-Recent. martini, Astrocoenia Smith, 1927 H: I28970, USGS 8830, 1 col.-U. Triassic. martini, Montlivaultia Smith, 1927 H: I74263, Iliamna Lake, 1 col.-U. Triassic. marylandica, Micrabacia Stephenson, 1916 H: I203612, Brightseat, 1 corallum; P: I203613, Brightseat, 1 corallum; P: I328692, west of Friendly, 3 coralla; P: 1335955, off Sheriff Road, 2 coralla.—Cretaceous. marylandicus, Paracyathus Vaughan, 1901b H: I121667, Piscataway, 1 corallum.-Eocene. matanzasensis var., Porites baracoaensis Vaughan, 1919 H: M325067a, USGS 3461, 2 col.; P: M325067b, USGS 3461, 2 col.-U. Pliocene. matleyi, Trochocyathus Wells, 1934 H: I74478, Blue Mountain Peak, 1 corallum; P: I74478, Blue Mountain Peak, 2 frag.-U. Cretaceous. Remark: Both holotype and paratype have the same number. matsoni, Goniopora Weisbord, 1973 H: 68315, USGS 6546, 1 col.; P: 68316, USGS 6546, 1 col.-Miocene. Remarks: Based on Goniopora matsoni Vaughan, 1915 (nom. nud.). Junior synonym of Porites portoricensis (Vaughan, 1919) (see Foster, 1986). matsoni, Septastrea Vaughan, 1919 H: M324956, USGS 7873, 1 col.-Tertiary. matthaii, Favia Vaughan, 1918 H: 38381 (not 38391, as Vaughan reported), "Indian Ocean", 1 col.-Recent. matthewsense var., Flabellum conoideum Vaughan, 1900a S: M157917, Matthews Landing, 4 coralla; S: M157853, Matthews Landing, 2 coralla.-Eocene.

40

H: M353644, USGS 7785, 1 corallum.-Miocene.

mauiensis var., Balanophyllia diomedeae Vaughan, 1907a H: 20826, Albatross-4101, 1 corallum.-Recent. mauiensis, Paracyathus Vaughan, 1907a H: 20756, Albatross-4098, 1 corallum.-Recent. Remark: Species subsequently transferred to Trochocyathus (see Cairns, 1984). mayeri, Coeloseris Vaughan, 1918 S: 45546, Murray Id. (600'), 4 TS (M546581); S: 45548, Murray Id. (650'), 1 col.; S: 45547, Murray Id. (800'), 1 col.; S: 85762, Murray Id. (1620-1670'), 2 col.; S: 68296, Murray Id. (600'), 1 col.-Recent. mayeri, Porites Vaughan, 1918 H: 47236, Murray Id. (800'), 1 col.-Recent. mayori, Hydnophora Hoffmeister, 1925 H: 52723, sta. 74F, 1 col.-Recent. mcneilli, Coscinaraea Wells, 1962 P: 68365, Port Jackson, 1 frag.-Recent. meandrina, Euphyllia Dana, 1846 S: 94, Singapore (USEE), 1 col.-Recent. Remark: Junior synonym of Euphyllia fimbriata Spengler, 1799 (see Verrill, 1872). mediavia, Carvophyllia Vaughan and Popenoe, 1935 H: M371041, USGS 10527, 1 corallum.-Eocene. meinzeri, Astrocoenia Vaughan, 1919 H: M324791, USGS 7522, 1 col.-Miocene. Remark: Junior synonym of Astrocoenia guantanamensis Vaughan, 1919. meinzeri, Trochoseris Vaughan, 1919 H: M325228, USGS 7522, 1 col.-Tertiary. melnokovae, Distichophyllia Montanaro Gallitelli in Montanaro Gallitelli, Russo, and Ferrari, 1979 H: I316966, loc. M1708, 1 col. in 2 pieces .--- U. Triassic. memorialis, Goreaugyra Wells, 1974b H: 45703, Andros Id., 1 col. in 2 pieces.-Recent. Remark: Junior synonym of Meandrina meandrites (Linnaeus, 1758) (see Zlatarski, 1982). menardi, Montastrea Hamilton, 1956 H: I189888, Hess Guyot, 2 pieces.-Cretaceous mendenhalli, Siderastrea Vaughan, 1917b S: 63032, USGS 7616, 1 col., 2 TS.-Pliocene. merleti, Bantamia Wells, 1961 H: 45390, Banc Gail, 1 col.-Recent. Remark: Species transferred to Blastomussa by Wells (1968). merriami, Favia Vaughan, 1900a S: M157519-M157521, M158295, California, 3 col., 2 TS.—Pliocene. Remark: Species transferred to Dichocoenia by Vaughan (1917b). mexicana, Cycloseris Durham, 1947 H: M547369, Albatross-2824, 1 col.; P: M547372, Agua Verde Bay, 28 frag.-Recent. Remark: Junior synonym of Fungia (Cycloseris) distorta Michelin, 1842 (see Hoeksema, 1989:37).

mexicana, Favites Vaughan, 1919 H: M324995, Mexico, 1 col.-Tertiary. michelinii, Astrangia Milne Edwards and Haime, 1848b N: 80350, off New Jersey, 1 col.-Recent. Remarks: Neotype designated by Peters et al. (1988). Junior objective synonym of Astrangia poculata (Ellis and Solander, 1786). microcostata var., Balanophyllia desmophyllum Vaughan, 1900a S: M158347, Nanafalia Bluff, 2 coralla; S: M158248, Nanafalia Bluff, 1 corallum.-Eocene. micrommatus, Lochmaeotrochus Squires, 1962 P: 68256, USGS 6551, 1 frag.-Eocene. mineolensis, Micrabacia Stephenson, 1917 H: I32006, USGS 9369, 1 corallum; P: I32007, USGS 9369, 1 corallum.-U. Creataceous. minor, Gardineria Wells, 1973a H: 53503, DBL 1212, 1 corallum; P: 53504, DBL 437, 6 coralla; P: 53505, DBL 5, 4 coralla; P: 53506, DBL 82, 1 corallum.-Recent. minor var., Siderastrea mendenhalli Vaughan, 1917b H: 68290, USGS 7616, 1 col.-Pliocene. minor var., Solenastrea fairbanksi Vaughan, 1917b H: 68284, USGS 3923, 1 col.-Pliocene. minuta, Pavona Wells, 1954 H: 44786, sta. 38B, 1 col.-Recent. minutissima, Stylophora Vaughan, 1900a H: M158273, USGS 2326, 1 col.-Eocene. minutum, Endopachys Vaughan, 1900a S: M158467, Jackson, 8 coralla.-Eocene. mississippiensis, Caryophyllia Wells, 1933 H: I75175, USGS 3186, 1 corallum; P: I221572, USGS 3186, 1 corallum.-U. Cretaceous. mississippiensis, Micrabacia Stephenson, 1917 H: I32008, USGS 6873, 1 corallum; P: I32008, USGS 6873, 1 corallum.-U. Cretaceous. Remark: Both holotype and paratype have the same number. mississippiensis, Trochocyathus Wells, 1933 H: I75184, West Point, 1 corallum; P: I147653, West Point, 5 coralla.-U. Cretaceous. modumanensis, Pocillopora Vaughan, 1907a H: 20984, Albatross-4169, 1 col.-Recent. Remark: ?Junior synonym of Pocillopora eydouxi Milne Edwards and Haime, 1860 (see Veron and Pichon, 1976). molokensis, Paracyathus Vaughan, 1907a H: 20757, Albatross-3833, 1 corallum.-Recent. Remark: Generic placement uncertain (Cairns, 1984). molokensis, Pocillopora Vaughan, 1907a S: 20894, Albatross-3847, 1 branch; S: 20996, Albatross-3847, over 10 frag.-Recent. montemarina, Brachyseris Hamilton, 1956

montereyense, Flabellum Durham, 1947 H: M547406, Albatross-4543, 1 corallum; P: M547407, Albatross-4551, 1 corallum.-Recent. Remark: Species transferred to Polymyces by Cairns (1979). montgomeriensis var., Trochocyathus lunulitiformis Vaughan, 1900a S: M158152, USGS 2003, 1 corallum in 4 pieces; S: M158154, Montgomery, 1 corallum.-Eocene. monticuliformis, Stephanomorpha Vaughan, 1900a S: M158318, Wilcox Co., 1 col.; S: M158319, Wilcox Co., 1 col.-Eocene. Remark: Species transferred to Siderastrea. monticulosa, Pachyseris Verrill, 1866a S: 218, 219, Fiji (USEE), 2 col.-Recent. Remarks: Based on Dana's (1846) Agaricia rugosa (Lamarck). Junior synonym of Pachyseris rugosa (Lamarck, 1801) (see Veron and Pichon. 1980). monticulosa, Porites Dana, 1846 ?H: 664, Fiji (USEE), 1 large col.-Recent. Remark: Type status doubtful despite corresponding label because measurements from text do not correspond to specimen. monticulosa, Stylophora Hoffmeister in Vaughan and Hoffmeister, 1925 S: M353642, USGS 8556, 4 col.-Miocene. moorei, Trochosmilia Wells, 1933 H: I75181, Garfield Co., 1 col.; P: I147657, Garfield Co., 3 col.-U. Cretaceous. mordax, Porites Dana, 1846 S: 710, Sandwich Ids. (USEE), 1 col., 2 frag.-Recent, mordax, Sideropora Dana, 1846 H: 344, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Stylophora pistillata Esper. 1797 (see Veron and Pichon, 1976). moretonensis, Heteropsammia Wells, 1964a H: 68382, Pearl Channel, 1 corallum; P: 68383, Pearl Channel, 1 corallum.-Recent. mortoni, Flabellum Vaughan, 1900a S: M157996-M157998, New Jersey, 3 coralla, 1 corallum, and 1 TS, respectively.-Eocene. moseleyi, Deltocyathus Cairns, 1979 H: 46984, Pillsbury-876, 1 corallum; P: 46985, Pillsbury-876, 1 corallum.-Recent. mucronata var., Porites nigrescens Dana, 1846 H: 650, Sulu Sea (USEE), 1 col.-Recent. Remark: According to Rathbun (1888), another syntype exists (USNM 689), but was not found in 1990. multicostata var., Micrabacia americana Stephenson, 1917 H: I31997, Montana, 1 corallum.-U. Cretaceous. multigranosa var., Balanophyllia caulifera Vaughan, 1900a S: M158382, Red Bluff, 2 coralla.-Eocene. multilobata, Mussa Dana, 1846

H: 41, Fiji (USEE), 1 col.-Recent.

Remark: Junior synonym of Lobophyllia hemprichii (Ehrenberg, 1834) (see Veron and Pichon, 1980). multilobatus, Thrypticotrochus Cairns, 1989 H: 81901, Albatross-5576, 1 corallum; P: 81902, Albatross-5217, 1 corallum, SEM stub 476B; P: 81903, Albatross-5301, 3 coralla, SEM stub 476B.-Recent. murrayensis, Acropora (Rhabdocyathus) Vaughan, 1918 H: 68295, Murray Id. (1630'), 1 col.-Recent. Remarks: Acropora rosaria of Dana (1846, pl. 36; fig. 3). Junior synonym of Acropora loripes (Brook, 1892) (see Veron and Wallace, 1984:397). murrayensis, Porites Vaughan, 1918 H: 47237, Murray Id. (600'), 1 col.-Recent. muscosa, Goniopora Wells, 1954 H: 44872, sta. 106, 1 col.; P: 44873, sta. 106, 1 col.-Recent. mycetoseroides, Leptoseris Wells, 1954 H: 44805, sta. 110, 1 col. in 3 pieces; P: 44806-44807, sta. 110, 1 col. each.-Recent. Remark: USNM 44807 not cited in text but labelled as such in collections. nasuta, Madrepora Dana, 1846 S: 250, Tahiti (USEE), 4 frag.; S: 260, Tahiti (USEE), 1 col.; S: 3140, Tahiti (USEE), 3 col.-Recent. Remark: Species subsequently transferred to Acropora. natchitochensis, Amphihelia Vaughan, 1900a S: M158260, Natchitoches, 6 frag.-Eocene. Remark: Species subsequently transferred to Madrepora. navarroensis, Micrabacia Wells, 1933 H: I75223, USGS 13777, 1 corallum; P: I203608, USGS 13777, 17 coralla; P: I75224, USGS 13777, 40 coralla.-U. Cretaceous. ndukeluensis, Astreopora Hoffmeister, 1945 H: 68247, sta. 110A, 1 col.-Neogene. neglecta, Astrohelia Vaughan, 1900a S: M158223, Red Bluff, 3 branches; S: M158224, Red Bluff, 3 branches.-Eocene. neumani, Trochocyathus Vaughan, 1920 H: I32375, USGS 7964, 1 col.—?Cretaceous. nigrescens, Dendrophyllia Dana, 1846 S: 216, Fiji (USEE), 3 frag.; S: 424, Fiji (USEE), 1 large col., 3 frag.-Recent. nigrescens, Porites Dana, 1846 S: 690, Fiji (USEE), 1 col.; S: 691, Fiji (USEE), 1 col., 1 frag.-Recent. niphada, Rhombopsammia Owens, 1986 H: 72802, Albatross-4911, 1 corallum; P: 72801, Albatross-4911, 3 coralla; P: 72803, Albatross-5348, 3 coralla; P: 72804, Albatross-5283, 4 coralla (1 embedded in epoxy), 1 TS; P: 72805, locality unknown, 2 coralla, SEM stubs 485-486.-Recent. nobile, Desmophyllum Verrill, 1885 H: 7964, Banquereau Bank, 1 corallum.-Recent. Remark: Junior synonym of Javania cailleti (Duchas-

saing and Michelotti, 1864) (see Cairns, 1979).

42

nobilis. Madrepora Dana, 1846

S: 427, Singapore (USEE), 1 large col., 1 frag.; S: 85752, Singapore (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. nobilis, Pocillopora Verrill, 1864 S: 658, Sandwich Ids. (USEE), 1 col.; S: 2182, Sandwich Ids. (USEE), 1 col.; S: 62703, Sandwich Ids. (USEE), 1 frag.-Recent. Remarks: Based on Dana's (1846) Hawaiian specimen of Pocillopora verrucosa (Lamarck). Junior synonym of Pocillopora meandrina Dana, 1846 (see Veron and Pichon, 1982:133). nodosa, Manopora Dana, 1846 L: 317, Fiji (USEE), 1 col.-Recent. Remarks: Lectotype designated by Veron and Wallace (1984:94). Species subsequently transferred to Montipora. nodosa, Trochosmilia Wade, 1926 H: I32703, Coon Creek, 1 col.-U. Cretaceous. Remark: Species subsequently transferred to and made type species of Wadeopsammia (see Wells, 1933). nodulosa forma, Porites lobata Hoffmeister, 1925 S: 85770, Pago Pago Harbor, specimens 1-5; S: 68212, Pago Pago Harbor, specimens 6-10.-Recent. normalis var., Solenastrea fairbanksi Vaughan, 1917b S: 68283, USGS 7616, 2 col.-Pliocene. novaehiberniae, Lithactinia Lesson, 1831 N: 71752, Sandfly Passage, 1 col.; N: 61072, Tonga, 1 col.-Recent. Remarks: Two neotypes designated by Lamberts (1984). According to Hoeksema (1989:180), neotypes invalidly designated. Furthermore, the holotype is present at the MNHNP. Species transferred to Polyphyllia (see Hoeksema, 1989). oahense, Endopachys Vaughan, 1907a H: 20822, Albatross-3810, 1 corallum.-Recent. Remark: Junior synonym of Endopachys gravi Milne Edwards and Haime, 1848 (see Umbgrove, 1950). oahensis, Dendrophyllia Vaughan, 1907a H: 20827, Albatross-4114, 1 col.-Recent. oahensis, Trochocyathus Vaughan, 1907a S: 20760, Albatross-4041, 2 coralla; S: 20761, Albatross-4041, 4 coralla.-Recent. Remark: Generic placement uncertain (see Cairns, 1984). obtusa var., Pavonia crassa Dana, 1846 S: 223, Fiji (USEE), 1 col.-Recent, Remark: Species now considered to be in Pavona. occidentalis, Enallhelia Wells, 1944a H: M547387, Cumaná, 1 col. in 5 pieces, 1 TS.-L. Cretaceous. occidentalis var., Micrabacia hilgardi Wells, 1933 H: I75151, Corsicana, 1 corallum; P: I203609, Corsicana, 5 coralla .--- U. Cretaceous. ocellata, Alveopora Wells, 1954

orientalis, Levipalifer Vaughan, 1900b H: 19391, Awa, Japan, 1 corallum .- Recent. Remark: Species subsequently transferred to Deltocyathus. ostergaardi, Pavona Hoffmeister, 1932 H: 68220, loc. #187, 1 col.-Pliocene. pacifica, Anthemiphyllia Vaughan, 1907a H: 20765, Albatross-3858, 1 corallum; P: 20768, Albatross-3856, 1 corallum.-Recent. pacifica, Cladocora Cairns, 1991 H: 84776, Albatross-3367, 1 branch; P: 22103, Albatross-3367, 10 branches; P: 22104, Albatross-3368, over 100 branches; P: 84777, Johnson-Sea-Link 1939, 1 col.; P: 46967 and 79106, "Galápagos", 3 branches.-Recent. pacificus, Dendracis Wells, 1964b H: M648101, sta. F1, 1 col.; P: M648102-M648104, sta. F1, 4, 2, and 4 col., respectively.-Miocene. paeonia, Tridacophyllia Dana, 1846 S: 132, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Pectinia. pagoensis, Acropora Hoffmeister, 1925 H: 68214, Pago Pago, 1 col.-Recent. paliferus, Stephanocyathus Cairns, 1977b H: 45755 (not 47755, as originally reported), Gerda-1017, 1 corallum; P: 45756, Gerda-1016, 13 coralla; P: 45757, Gerda-694, 2 coralla; P: 45758, Gerda-817, 3 coralla; P: 45759, Pillsbury-445, 1 corallum.-Recent. pallens, Oculina Ehrenberg, 1834 S: 36567, locality unknown, 1 branch.-Recent. Remark: Junior synonym of Oculina diffusa Lamarck, 1816 (J. W. Wells, pers. comm.). pallida, Astraea (Fissicella) Dana, 1846 S: 30, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Favia rotumana (Gardiner, 1899) (see Chevalier, 1971). palmata, Manopora Dana, 1846 S: 337, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Montipora. palmata, Porites Dana, 1846 H: 689, Sulu Sea (USEE), 1 col.-Recent. H: 44482, sta. 10B, 1 col.; P: 44480, sta. 10A, 1 col.; P: 44483, sta. 10B, 1 col.; P: 44510, sta. 10B, 1 col.-Recent. palmerae, Blagrovia Wells, 1933 H: I75139, Sycamore Creek, 1 col.; P: I221573, Sycamore Creek, 1 col.-Cretaceous. Remark: Species transferred to Smilotrochus? panamensis, Acropora Vaughan, 1919 H: M325042a, USGS 6024a, 1 col.; P: M325042b, USGS 6024a, 1 col.-M. Miocene, panamensis, Goniopora Vaughan, 1919

octopali, Carvophyllia Vaughan, 1907a

H: 20746, Albatross-3828, 1 corallum; P: 20747, Albatross-3827, 2 coralla.-Recent.

- palmerae, Acropora Wells, 1954
- - H: M325053, USGS 6016, 1 col.; P: M325054, USGS 6015,

H: 44941, sta. 110, 1 col.-Recent.

SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY

2 col.-M. Miocene, panamensis, Pavona Vaughan, 1919 S: M325232, USGS 6016, 1 col.; S: M325234, USGS 6016, 2 col.; S: M325235, USGS 6016, 1 col.-M. Miocene. panamensis, Porites Vaughan, 1919 H: M325063, USGS 6016, 1 col.; P: M325064, USGS 6016, 2 col.-M. Miocene. Remark: Junior primary homonym of Porites panamensis Verrill, 1866; Foster (1986) proposed the replacement name of Porites wavlandi to avoid the homonomy. panamensis, Stylangia Vaughan, 1919 H: M324955, USGS 6016, 1 col.-M. Miocene. panamensis, Stylophora Vaughan, 1919 H: M324763, USGS 6016, 1 col.-M. Miocene. pandanus, Astraea (Fissicella) Dana, 1846 H: 36, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Favia speciosa (Dana, 1846) (see Vaughan, 1918). papillosa, Fungia Verrill, 1866a H: 372, Loo Choo (NPEE), 1 col.-Recent. Remark: Junior synonym of Fungia fungites (Linnaeus, 1758) (see Hoeksema, 1989). papyracea, Pavonia Dana, 1846 S: 137, Sulu Sea (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Leptoseris. parksi, Orbicella Hoffmeister, 1932 H: 63312, sta. 90, 1 col.-Pliocene. Remark: Species subsequently transferred to Montastraea parseptatus, Platytrochus Cairns and Parker, in press P: 85691, Backstairs Passage, SEM stub 541,-Recent. parva, Isastrea Smith, 1927 H: I74327, Threemile Cove, 1 col.; P: I74238, Threemile Cove, 1 col.-U. Triassic. parvicalyx forma, Porites lobata Vaughan, 1907a H: 20923, Molokai, 1 col.-Recent. parvistella, Astraea (Fissicella) Dana, 1846 S: 67, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Goniastrea retiformis (Lamarck, 1816) (see Chevalier, 1971). parvula, Caryophyllia Caims, 1979 H: 46865, Pillsbury-1140, 1 corallum; P: 46868, Gerda-984, 1 corallum; P: 36359, Albatross-2319, 1 corallum; P: 10094, Albatross-2320, 2 coralla; P: 46867, Silver Bay-3496, 1 corallum; P: 46866, Silver Bay-3494, 2 coralla.-Recent. paschalensis, Leptoseris Wells, 1972 H: 53156, LaPerouse Bay, 1 large col. and 42 frag.; P: 53157, Horizon-76, juvenile specimens; P: 53158, Horizon-76, 2 frag.; P: 68384, Horizon-76, 10 frag.-Recent. paschalensis, Porites Vaughan, 1906a S: 68279, Easter Id., 6 col.-Recent. pattoni, Astrocoenia Wells, 1933 H: I75118, Hiram Hill Ranch, 1 col.-L. Cretaceous.

patula, Astraea (Orbicella) Dana, 1846 S: 16, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Diploastrea heliopora (Lamarck, 1816) (see Wijsman-Best, 1980). patula, Montipora Verrill, 1869a S: 45478, Hawaii, 2 frag. (ex YPM 1817).-Recent. Remark: Junior synonym of Montipora hispida (Dana, 1846) (see Veron and Wallace, 1984). paucispina subforma, Porites compressa forma angustisepta Vaughan, 1907a H: 20942, Molokai, 1 col.-Recent. paxilligera, Madrepora Dana, 1846 S: 247, 249, Tahiti (USEE), 1 large col. each.-Recent. Remark: Species subsequently transferred to Acropora. pecosensis, Favoidioseris Wells, 1933 H: I75208, Pecos Co., 1 col.; P: I75133, I311587, Pecos Co., 2 col.-L. Cretaceous. Remark: Species subsequently transferred to Ovalastrea. pecosensis, Orbicella Wells, 1933 H: I75116, University Mesa, 1 slice of holotype and 2 TS.-L. Cretaceous. Remark: Species subsequently transferred to Montastraea. pedersenii, Astropsammia Verrill, 1869b S: 38354, La Paz, frag. of a syntype (ex YPM 3962).-Recent. Remark: Junior synonym of Tubastraea coccinea Lesson, 1829. pedroensis, Caryophyllia Vaughan, 1903a H: M164736, San Pedro, 1 corallum.-Pleistocene. pedroensis, Paracyathus Vaughan, 1903a H: M164738, San Pedro, 1 corallum.-Pleistocene. pennyi var., Orbicella limbata Vaughan in Vaughan and Hoffmeister, 1926 H: M353654, USGS 8298, 1 col. in 2 pieces, 2 TS.-Miocene. Remark: Junior synonym of Montastraea limbata (Duncan. 1863). pennyi, Pavona Vaughan in Vaughan and Hoffmeister, 1926 H: M353664, USGS 8299, 1 col.-Miocene. perculta, Caryophyllia Cairns, 1991 H: 84798, Johnson-Sea-Link 1937, 1 corallum; P: 84799, Johnson-Sea-Link 1914, SEM stub 534; P: 84800, Johnson-Sea-Link 1932, 1 corallum; P: 84801, Johnson-Sea-Link 1939, 2 coralla.-Recent. perexigua var., Sphenotrochus emarciatus Dennant, 1906 S: 85701, Neptune Id., SEM stub 519 (ex SAM).-Recent. Remark: According to Cairns and Parker (in press), the variety perexigua is not different from the Miocene nominate species. periallus, Cyathoceras Squires, 1962

H: 68258, sta. 6389.1, 1 cast of holotype.—Oligocene. Remark: This is a cast of the holotype, the original of which is at Otago University, New Zealand.

44

- philippinensis, Gardineria Caims, 1989
 - H: 82002, *Albatross*-5217, 1 corallum; P: 82003, *Albatross*-5217, 1 corallum.—Recent.
- pileiformis, Polyphyllia Dana, 1846
 - S: 158, Fiji (USEE), 1 col.; S: 980, Fiji (USEE), 1 col.—Recent.
 - Remark: Junior synonym of *Polyphyllia novaehiberniae* (Lesson, 1831) (see Hoeksema, 1989).
- pilosa forma, Porites compressa Vaughan, 1907a
- S: 20911, Kahana, 1 col.; S: 20914, Kahana, 1 col.—Recent. pinguis, Acropora Wells, 1950
 - H: 44317, Pulo Tikus, 1 col.—Recent. Remarks: ?Junior synonym of Acropora robusta (Dana, 1846) (see Veron and Wallace, 1984).
- pittieri, Balanophyllia Vaughan, 1919
- S: M325014, loc. #618, 2 col.—Plio-Pleistocene.
- planilamellata, Caryophyllia Dennant, 1906
- P: 85678, Cape Jaffa, 3 coralla (ex SAM).—Recent. planiuscula, Manopora Dana, 1846
- S: 311, Fiji (USEE), 1 col.—Recent. Remark: Junior synonym of Montipora verrucosa (La
 - marck, 1816) (see Veron and Wallace, 1984).
- plicata, Pocillopora Dana, 1846
 - S: 699 (renumbered 36591), Fiji (USEE), 4 frag.—Recent. Remark: Typical *P. plicata* is represented by USNM 699 (36591); however, Verrill (1869a) designated Dana's specimen from the Sandwich Islands (deposited at the MCZ ?) as *Pocillopora aspera lata*.

pliocenica, Siderastrea Vaughan, 1919

H: M325184, USGS 2662, 1 col.; P: M325185, USGS 2662, 21 col.—Pleistocene.

- N: 80350, off New Jersey, 1 col.-Recent.
- Remarks: Neotype designated by Peters et al. (1988). Senior objective synonym of Astrangia michelinii Milne Edwards and Haime, 1848; senior subjective synonym of Astrangia danae Milne Edwards and Haime, 1849; and Astrangia danae Agassiz, 1850 (see Peters, et al., 1988). politum, Flabellum (Flabellum) Cairns, 1989
- H: 81945, Albatross-5391, 1 corallum; P: 81942, Albatross-5133, 5 coralla; P: 81943, Albatross-5136, 1 corallum; P: 40743, Albatross-5178, 12 coralla (2 in alcohol); P: 40725 and 40756, Albatross-5212, 7 coralla; P: 40749, Albatross-5217, 2 coralla; P: 40723 and 40755, Albatross-5311, 5 coralla; P: 40731, Albatross-5212, 4 coralla; P: 81944, Albatross-5313, 1 corallum; P: 40724, Albatross-5391, 32 coralla; P: 40733, Albatross-5392, approx. 1050 coralla; P: 81946, Albatross-5393, 12 coralla, SEM stub 480; P: 40726, Albatross-5527, 1 corallum; P: 81947, off Calapan, 1 corallum.—Recent.
- pollicata, Pavona (Pseudocolumnastrea) Wells, 1954 H: 44792, sta. 103, 1 col.—Recent.
 - Remark: Junior synonym of *Pavona maldivensis* (Gardiner, 1905) (see Veron and Pichon, 1980).

ponderosa, Balanophyllia Vaughan, 1900a S: M158364, Prairie Creek, 2 coralla.-Eocene. ponderosa, Stylophora Vaughan, 1900a S: M158274, Salt Mountain, 1 col.; S: M158275, Salt Mountain, 1 col., 1 TS (68264).-Oligocene. poritiformis, Montipora Verrill, 1866a H: 415, Loo Choo (NPEE), 1 col. in 7 pieces .- Recent. porosa var., Pocillopora capitata Verrill, 1869a L: 62704, La Paz, 3 frag. (ex YPM 3884)-Recent. Remarks: Variety raised to species rank and lectotype designated by Durham (1947:16). portobellensis, Stylophora Vaughan, 1919 H: M324762, Panama, 1 col.-Tertiary. portoricensis var., Astrangia solitaria Vaughan, 1901a S: 36485, Fish Hawk-134, 1 corallite; S: 22091, Fish Hawk station unknown, 3 corallites.-Recent. portoricensis, Astreopora Vaughan, 1919 H: M325306, USGS 3191, 1 col.-L. Miocene. portoricensis, Astrocoenia Vaughan, 1919 H: M324785, USGS 3191, 1 col.; P: M324786, USGS 6881, 1 col.-L. Miocene. Remark: Junior synonym of Astrocoenia guantanamensis Vaughan, 1919 (A. Budd, pers. comm.). portoricensis, Cyathoceras Vaughan, 1901a H: 19633, Fish Hawk-6051, 1 corallum.-Recent. Remark: ?Junior synonym of Oxysmilia rotundifolia (Milne Edwards and Haime, 1849) (see Cairns, 1979). portoricensis, Goniopora Vaughan, 1919 H: M325061, USGS 3191, 1 col.; P: M325060, USGS 3191, 1 col.-L. Miocene. Remark: Species subsequently transferred to Porites (see Foster, 1986). portoricensis, Leptoseris Vaughan, 1919 H: M325231, USGS 3191, 1 col.-L. Miocene. portoricensis, Maeandra Vaughan, 1919 H: M325004, USGS 3191, 1 col.-L. Miocene. Remark: Species subsequently transferred to Diploria. pourtalesi, Deltocyathus Cairns, 1979 H: 46883, Pillsbury-209, 1 corallum; P: 46884, Pillsbury-209, 1 corallum; P: 46885, Gerda-179, 8 coralla; P: 19197, Blake station unknown, 5 coralla.-Recent. powelli, Trochocyathus Squires, 1962 H: 68257, Muriwai Beach, 1 cast; P: 68259, Muriwai Beach, 2 casts.-Miocene. Remark: Specimens are casts only; original specimens at Otago University, New Zealand. praetorta, Pavonia Dana, 1846 S: 152, Tahiti (USEE), 1 large col.-Recent. Remark: Species now considered to be in Pavona. primaevus, Platytrochus Vaughan and Popenoe, 1935 H: M371031, USGS 11913, 1 corallum; P: M371030, USGS

- 11902, 1 corallum.-Eocene.
- profunda, Astraeopora Verrill, 1872 H: 208, Fiji (USEE), 1 col.-Recent.

poculata, Madrepora Ellis and Solander, 1786

(see Veron, Pichon, and Wijsman-Best, 1977).

Remarks: Based on Dana's (1846) Astraeopora pulvinaria (Lamarck). Junior synonym of Astreopora myriopthalma (Lamarck, 1816). profunda, Oculina Cairns, 1991 H: 84792, Albatross-3170, 1 branch; P: 36370, Albatross-3170, 23 branches; P: 36565, Albatross-3174, 1 branch; P: 36373, Albatross-3187, 10 branches; P: 36372, Albatross-3188, 14 branches, SEM stub 532; P: 22073, Albatross-3401, 1 branch.-Recent. profundacalyx forma, Porites compressa Vaughan, 1907a H: 21277, Molokai, 1 col.-Recent. profundorum forma, Porites compressa Vaughan, 1907a H: 21272, Albatross-3970, 1 col.-Recent. prolixa, Madrepora Verrill, 1866a S: 412, Ousima (NPEE), 1 col.; S: 414, Ousima (NPEE), 1 col.-Recent. Remark: Junior synonym of Acropora carduus (Dana, 1846) (see Veron and Wallace, 1984). prostrata, Madrepora Dana, 1846 S: 253, Sulu Sea (USEE), 1 col.-Recent. Remark: ?Junior synonym of Acropora millepora (Ehrenberg, 1834) (see Veron and Wallace, 1984). pseudostelligera, Favia Hoffmeister, 1932 H: 68221, loc. #155, 1 col.-?Eocene. pukoensis, Porites Vaughan, 1907a P: 22236, Molokai, 1 col.-Recent. pulchella, Diaseris Verrill, 1866a S: 74695, Ousima (NPEE), 3 col.-Recent. Remark: Junior synonym of Fungia distorta (Michelin, 1842) (see Hoeksema, 1989). pulcher, Steriphonotrochus Verrill, 1900a H: M158215, Red Bluff, 1 col.-Eocene. Remark: A species of Bathycyathus? pulchra, Astraea (Fissicella) Dana, 1846 S: 74, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Leptastrea purpurea (Dana, 1846) (see Vaughan, 1918:91). pulchra, Margarastraea Montanaro Gallitelli in Montanaro Gallitelli, Russo, and Ferrari, 1979 H: I316963, sta. M2672, 1 col.-U. Triassic. pulvinula, Goniopora Wells, 1954 H: 44871, sta. 114, 1 col.-Recent. Remark: ?Junior synonym of Goniopora djiboutiensis Vaughan, 1907b (see Veron and Pichon, 1982). pumila, Madrepora Verrill, 1866a H: 389, Bonin, 1 col. in 2 pieces.-Recent. Remark: Species subsequently transferred to Acropora. pumpellyi, Astrocoenia Verrill, 1900a S: M158315, USGS 2336, 1 col.—Oligocene. Remark: Species subsequently transferred to Stylocoenia (see Vaughan, 1919). purpurea, Astraea (Fissicella) Dana, 1846 S: 75, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Leptastrea

pusillum, Truncatoflabellum Cairns, 1989 H: 81978, Albatross-5178, 1 corallum; P: 81979, Albatross-5178, 2 coralla; P: 81980, Albatross-5162, 1 corallum; P: 81981, Albatross-5277, 1 corallum.-Recent. puteolina, Astraea (Fissicella) Dana, 1846 S: 33, East Indies (USEE), 1 col.-Recent. Remark: Junior synonym of Favia speciosa (Dana, 1846) (see Vaughan, 1918). putillus, Ceratotrochus Wells, 1945 H: 68357, sta. S34B, 1 col. in 3 pieces.-Eocene. putnami, Astraea Verrill, 1872 S: 76, Singapore (USEE), 1 col.-Recent. Remarks: Based on Dana's (1846) Astraea (Fissicella) versipora (Lamarck). Junior synonym of Favia pallida (Dana, 1846) (see Vaughan, 1918:105). quaylei, Cyathoceras Durham, 1947 P: M547417, Albatross-4551, 1 corallum.-Recent. Remark: Species subsequently transferred to Labyrinthocyathus by Cairns, 1991. quaylei, Rhabdophyllia Wells, 1934 H: I74481, Trappean Shale, 1 col. now in 5 pieces .-- U. Cretaceous. queenslandiae, Leptopsammia Wells, 1964a H: 68379, Jumpin Pin, 1 corallum; P: 68380, Jumpin Pin, 1 corallum.-Recent. ralphae. Sphenotrochus Squires, 1964 P: 68262, Ikatare A-4, 7 coralla.-Recent. ramea, Plesiastrea Duncan, 1864 S: M155273, USGS 12907, half of a col.-Miocene. Remark: Junior synonym of Montastraea limbata (Duncan, 1863) (see Budd, in press). ramiculosa, Madrepora Dana, 1846 S: 274, Fiji (USEE), 1 col., 10 frag.-Recent. Remark: Species subsequently transferred to Acropora. rathbuni, Astrangia Vaughan, 1906c H: 10974. Rio de Janeiro, 1 col.-Recent. recta, Mussa Dana, 1846 S: 9, Wake's Id. (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Symphyllia (see Veron and Pichon, 1982). rediviva, Archohelia Wells and Alderslade, 1979 P: 82696, Rat Id., 1 col.; P: 82697, Rat Id., 1 branch (ex AM G9835); P: 82698, Rat Id., 1 branch.-Recent. reesi, Mycetophyllia Wells, 1973a H: 53493, West Bull, 1 col. and 2 frag.-Recent. reesidei, Dasmosmilia Wells, 1933 H: I75156, Guadelupe River, 1 corallum; P: I311584, Guadelupe River, 1 corallum.-U. Cretaceous. reflexa, Echinopora Dana, 1846 S: 147, 164, Fiji (USEE), 1 col. each.-Recent. Remark: Junior synonym of Echinopora lamellosa (Esper, 1795) (see Veron, Pichon, and Wijsman-Best, 1977).

regalis, Merulina Dana, 1846 S: 115, Fiji (USEE), 1 large col., 8 frag.; S: 118, Fiji (USEE), 1 large col., 7 frag.-Recent. Remark: Junior synonym of Merulina ampliata (Ellis and Solander, 1786) (see Veron and Pichon, 1980). repanda, Fungia Dana, 1846 L: 122, Fiji (USEE), 1 col.; PL: 111, locality unknown (USEE), 1 col.; PL: 112, Sulu Sea (USEE), 1 col.; PL: 113, locality unknown (USEE), 1 col.; PL: 123, Fiji (USEE), 1 col.-Recent. Remarks: Lectotype and paralectotypes designated by Hoeksema (1989). According to him, paralectotype USNM 111 is Fungia scruposa Klunzinger, 1879; and paralectotypes USNM 112 and 123 are Fungia concinna Verrill, 1864. reticulosa, Porites Dana, 1846 S: 662, 663, Fiji (USEE), 2 and 1 col., respectively.-Recent. retusa, Madrepora Dana, 1846 H: 273, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. revellei, Astrocoenia Hamilton, 1956 H: I189890, Hess Guyot, 1 col.-Cretaceous. rhomboideum, Flabellum Vaughan, 1900a S: M158004-M158005, Red Bluff, 2 col. each.-Eocene. richardsi, Placohelia Wells, 1933 H: I75147, Belton, 1 col.; P: I147651, Belton, 3 col.; P: 175196, Kickapoo Springs, 1 col.-L. Cretaceous. Remark: Species now in Ogilviastraea. rigida, Merulina Dana, 1846 S: 148, Fiji (USEE), 1 col., 6 frag.-Recent. Remark: Species subsequently transferred to Hydnophora (see Veron, Pichon, and Wijsman-Best, 1977). rigida, Montipora Verrill, 1866a H: 386, Bonin Id. (NPEE), 1 frag.-Recent. robusta, Astraea (Fissicella) Dana, 1846 S: 63, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Favites abdita (Ellis and Solander, 1786) (see Veron, Pichon, and Wijsman-Best, 1977). robusta, Madrepora Dana, 1846 H: 297, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. rosaria Madrepora Dana, 1846 S: 281, Fiji (USEE), 1 col., 1 frag.; S: 933, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. rotatilis, Micrabacia Stephenson, 1916 H: I147659, Brightseat, 1 corallum; P: I203616, Brightseat, 2 coralla; P: I203615, McNeys Corners, 1 corallum; P: I203614, Seat Pleasant, 2 coralla.-U. Cretaceous. roxboroughi, Cyathomorpha Vaughan, 1919 H: M325220 (not 325250, as reported by Vaughan), USGS 6962, 1 col.; P: M325248, USGS 6894, 1 col.-M. Miocene.

Remark: Junior synonym of Montastraea endothecata (Duncan, 1863) (A. Budd, pers. comm.). rugosa, Euphyllia Dana, 1846 S: 88, 4009, Fiji (USEE), 1 col. each.-Recent. Remark: Junior synonym of Euphyllia glabrescens (Chamisso and Eysenhardt, 1821) (see Veron and Pichon, 1980). rugosus, Paracyathus Vaughan, 1900a H: M158210, Wood's Bluff, 1 corallum.-Eocene. russelli, Plesiastrea Wells, 1954 H: 45004, sta. 114, 1 col.-Recent. Remark: Species subsequently transferred to Favites (see Veron, Pichon and Wijsman-Best, 1977). rustica, Meandrina Dana, 1846 S: 17, Wake's Id. (USEE), 1 col. in 2 pieces; S: 353, Wake's Id. (USEE), 1 col.-Recent. Remark: Junior synonym of Platygyra daedalea (Ellis and Solander, 1786) (see Veron, Pichon, and Wijsman-Best, 1977). saludensis, Acropora Vaughan, 1919 S: M325043, USGS 6024b, 2 col.-M. Miocene. samboangensis, Fungia Vaughan, 1906b H: 21139, Samboanga, 1 col.-Recent. Remark: Junior synonym of Fungia repanda Dana, 1846 (see Hoeksema, 1989:92). samoaensis, Psammocora Hoffmeister, 1925 S: 68209-68210, Pago Pago Harbor, 1 col. each.-Recent. Remark: ?Junior synonym of Psammocora nierstraszi van der Horst, 1921 (see Veron and Pichon, 1976). sawkinsi, Actinacis Wells, 1934 H: 44294, Spring Mountain, 1 col.-M. Eocene. sawkinsi, Antillia Vaughan in Vaughan and Hoffmeister, 1926 H: M353652, USGS 8299, 1 col.; P: M353653, USGS 8299, 4 col.—U. Miocene. Remark: ?Junior synonym of Antillophyllia dubia (Duncan, 1863) (A. Budd, pers. comm.). scabra, Leptoseris Vaughan, 1907a S: 20885, Albatross-3876, 1 col.; S: 20886, Albatross-3823, 1 col.; S: 20848, Albatross-3876, 2 col.-Recent. scabricula, Manopora Dana, 1846 S: 318, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Montipora. scabricula, Merulina Dana, 1846 S: 165, 167, Fiji (USEE), 1 col. each.-Recent. Remark: Veron and Pichon (1980) place this species in Clavarina. scabrosa. Dendrophyllia Dana, 1846 H: 179, Singapore (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Balanophyllia (see Verrill, 1872). schindewolfi, Prodiploastrea Wells, 1934 H: I74476, Catadupa, 1 col.-U. Cretaceous. Remark: Species subsequently transferred to Montas-

traea.

schmitti, Acropora Wells, 1950 H: 44320, Pulo Tikus, 1 col.-Recent. scotica, Siderastrea Wells, 1945 H: 68330, sta. S360, 1 col.-Eocene. scottianus, Platycyathus Wells, 1933 H: 175140, Katy Lake Dam, 1 corallum.-L. Cretaceous. secunda, Madrepora Dana, 1846 S: 302, Singapore (USEE), 1 large col., 2 frag.; S: 323, Singapore (USEE), 2 frag.-Recent. Remark: Species subsequently transferred to Acropora. securis, Madrepora Dana, 1846 H: 304, East Indies (USEE), 1 col.-Recent. Remark: Junior synonym of Acropora cuneata (Dana, 1846) (see Veron and Wallace, 1984:158). sellardsi, Trochocyathus Wells, 1933 H: 175144, Sycamore Creek, 1 corallum.-L. Cretaceous. senaria, Madracis Wells, 1974b H: 45704, Pillsbury-1252, 1 col. in 2 pieces.-Recent. senni, Sphenotrochus (Eusthenotrochus) Wells, 1945 H: 68358, Martinique (loc. M-35), 1 corallum.-Miocene. serpentina, Dendrophyllia Vaughan, 1907a S: 20828, Albatross-4045, 4 col.-Recent. setchelli, Leptoria Hoffmeister, 1932 H: 68255, sta. 407, 1 large col.-?Eocene. setchelli, Pocillopora Hoffmeister, 1929a H: 85759, Tahiti (#6073), 1 col.; P: 85758, Albatross (3 October), 2 col.; P: 3979, USEE, 1 col.-Recent. sexcostatum, Flabellum (Ulocyathus) Cairns, 1989 H: 81934, Albatross-5284, 1 corallum; P: 81935, Albatross-5284, 6 coralla.-Recent. shastensis, Astrocoenia Smith, 1927 H: 174229, Brook Mountain, 1 frag., 2 TS.-U. Triassic. shumardi, Frechia Wells, 1933 H: I259303, northwest of Georgetown, 1 col. (cut in half); P: I259303, northwest of Georgetown, 1 col. (cut in half)-L. Cretaceous. Remarks: Both holotype and paratype have the same number. Species subsequently transferred to Epistreptophyllum. silecensis var., Orbicella tampaensis Vaughan, 1919 P: M324896, USGS 7754, 1 col.-L. Miocene. Remark: Junior synonym of Montastraea cavernosa (Linnaeus, 1767). silecensis, Siderastrea Vaughan, 1919 H: M325187, USGS 3694, 1 col.-L. Miocene. Remark: Junior synonym of Siderastrea hillsboroensis Vaughan, 1919 (see Budd, in press). silicensis var., Antiguastrea cellulosa Vaughan, 1919 H: M324936, USGS 3383, 1 col.—L. Miocene. silicensis var., Goniopora decaturensis Vaughan, 1919 H: M325026, USGS 3381, 1 col. in 2 frag.-L. Miocene. Remark: ?Junior synonym of Goniopora imperatoris Vaughan, 1919. simondsi, Polyphyllastrea Wells, 1932

S: I75122, Pleasant Valley, 1 col.—Cretaceous.

Remark: Species subsequently transferred to Microsolena. sinensis, Turbinaria Verrill, 1866a S: 173, Hong Kong (NPEE), 1 col.-Recent. singleyi, Oculina Vaughan, 1900a S: M157515, Smithville, 4 branch frag.; S: M158248, Trinity River, 2 branch frag.-Eocene. sinuosa, Astraea (Fissicella) Dana, 1846 S: 71, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Goniastrea pectinata (Ehrenberg, 1834) (see Veron, Pichon, and Wijsman-Best, 1977). sinuosus, Paracyathus Cairns and Wells, 1987 P: 74686, NMB 15833, 8 coralla.-L. Miocene to M. Pliocene. smithi, Oculina Vaughan, 1900a S: M158254, Prairie Creek, 2 frag.-Eocene, solida, Caryophyllia Cairns, 1991 H: 84804, Johnson-Sea-Link 1924, 1 corallum; P: 84805, Johnson-Sea-Link 1924, 8 coralla; P: 84806, Johnson-Sea-Link 1926, 1 corallum; P: 84807, Johnson-Sea-Link 1935, 1 corallum; P: 36429, Albatross-2808, 1 corallum.-Recent. somaliensis, Goniopora Vaughan, 1907b H: 21989, off Somalia, half of col.-Recent. somaliensis, Physogyra Vaughan, 1907b P: 31960, off Somalia, 1 col.-Recent. speciosa, Agaricia (Undaria) Dana, 1846 H: 199, East Indies (USEE), 1 frond.-Recent. Remark: Species subsequently transferred to Pachyseris. speciosa, Astraea (Fissicella) Dana, 1846 S: 37, East Indies (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Favia (see Veron and Pichon, 1982). speciosa, Merulina Dana, 1846 S: 149, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Merulina ampliata (Ellis and Solander, 1786) (see Veron and Pichon, 1980). spectabilis, Prionastraea Verrill, 1872 H: 79, Fiji (USEE), 1 col.-Recent. Remarks: Based on Dana's (1846) Astraea (Fissicella) magnifica (Blainville). Junior synonym of Goniastrea aspera Verrill, 1865 (see Veron, Pichon, and Wijsman-Best, 1977). spenceri, Leptoria Vaughan, 1919 H: M324968a, USGS 3473, 1 col.; P: M324968b, USGS 3473, 2 col.-Tertiary. spheniscus, Euphyllia Dana, 1846 S: 89, 90-93, Singapore (USEE), 1 col. each.-Recent. Remark: Species subsequently transferred to Truncatoflabellum (see Cairns, 1989). spicifera, Madrepora Dana, 1846 S: 234, 244, Singapore (USEE), 1 col. each.-Recent. Remark: Species subsequently transferred to Acropora. spinulosa, Euphyllia Dana, 1846

H: 90, Cape Frio (USEE), 1 col.-Recent.

Remark: Probably a species of Meandrina. splendens, Cyathomorpha Vaughan, 1919 H: M325219, USGS 6854, 1 col.-Oligocene. Remark: Species subsequently transferred to Agathiphyl lia. spongiosa, Alveopora Dana, 1846 H: 319, Fiji (USEE), 1 col.-Recent. squarrosa, Pocillopora Dana, 1846 S: 443, Tahiti (USEE), 1 col.-Recent. squiresi, Caryophyllia Cairns, 1982a H: 47160, Eltanin-558, 1 corallum; P: 47161, Eltanin-558, 22 coralla.-Recent. squiresi, Cyathoceras Cairns, 1979 H: 46874, Columbus Iselin-246, 1 corallum; P: 46877, Gerda-44, 10 coralla; P: 46876, Columbus Iselin-140, 5 coralla; P: 46875, Columbus Iselin-246, 4 coralla; P: 46878, Eastward-26004, 2 coralla.-Recent. Remark: Species subsequently transferred to Crispatotrochus (see Cairns, 1991). squiresi, Rhombopsammia Owens, 1986 H: 72797, Albatross-5423, 1 corallum; P: 72800, Albatross-5425, 3 frag., SEM 487-488; P: 72799, Albatross-5513, 1 corallum; P: 72798, Albatross-5429 (not 5427 as originally reported, see Cairns, 1989), half of corallum embedded in epoxy .--- Recent. stainbrooki, Trochsmilia Wells, 1933 H: 175226, Three Lakes, 1 col.-L. Cretaceous. stantoni, Dimorphastrea Wells, 1933 P: I75123, Slaughter Creek, 1 col.-L. Cretaceous. stantoni, Trochocyathus Vaughan, 1900a H: M158158, Contra Costa, 1 corallum.-Eocene. stellata, Culicia Dana, 1846 ?H: 185, Singapore (USEE), 1 col. in 2 pieces.-Recent. stellata, Stephanocora Verrill, 1866b S: 20849, Panama, 1 col.; S: 20897, Panama, 1 col. (ex YPM 2182).-Recent. Remark: Species subsequently transferred to Psammocora (Stephanaria). stelligera, Astraea (Orbicella) Dana, 1846 S: 55, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Favia (see Vaughan, 1918). stellulatus, Deltocyathus Cairns, 1984 H: 60516, HON 9-3, 1 corallum; P: 60517, HON 9-3, 2 coralla.-Recent. Remarks: Species subsequently transferred to Bourneotrochus; senior synonym of B. veroni Wells, 1984. stephensoni, Caryophyllia Wells, 1933 H: I75187, Mustang Creek, 1 corallum; P: I221571, Mustang Creek, 5 coralla.-U. Cretaceous. stephensoni, Micrabacia Wells, 1933 H: I75232, USGS 16145, 1 corallum; P: I203610, USGS 16145, 12 coralla .--- U. Cretaceous.

stephensoni, Oryzotrochus Wells, 1959 H: 45383, Murray Ids., 1 corallum; P: 45384, Murray Ids., 3 coralla; P: 45385, Murray Ids., 9 coralla.-Recent. stewartae, Cladophyllia Wells, 1944a H: M547398, Cumaná, 1 col. and 3 frag., 1 TS.-L. Cretaceous. stockwelli, Coeloseris Hoffmeister, 1945 H: 68248, sta. 110A, 1 col.; P: 68238, sta. 110A, 1 col.-Neogene. striata, Dendrophyllia Vaughan, 1900a H: M158472, Mt. Lebenon, 1 col.-Eocene. striata, Madrepora Verrill, 1866a S: 371, Ousima (NPEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. striatum, Desmophyllum Cairns, 1979 H: 46886, Columbus Iselin-6, 1 corallum; P: 46887, Pillsbury-1411, 1 corallum; P: 46888, Silver Bay-3494, 1 corallum; P: 46889, Bahia Cochinas, 1 corallum.-Recent. strictus, Herpetolithus Dana, 1846 S: 161, Tahiti (USEE), 1 col.-Recent. Remark: Junior synonym of Herpolitha limax Esper, 1795 (see Hoeksema, 1989). strigosa, Meandrina Dana, 1846 H: 5, West Indies, 1 col.-Recent. Remark: Species subsequently transferred to Diploria. studeri, Montipora Vaughan, 1907a S: 20817, Albatross-4024, 1 col.; S: 20809, Albatross-4024, 1 col.-Recent. studeri, Porites Vaughan, 1907a H: 21623, Albatross-3876, 1 col.-Recent. stutchburvi, Goniopora Wells, 1955 P: 82568, Myora Coral Patch, 1 col.; P: 82569, Flat Top Id., 1 col.; P: 82570, Coppersmith Rock, 1 col.-Recent. stylophoroides var., Pocillopora cespitosa Vaughan, 1907a S: 20852, Albatross-3959, 2 col.-Recent. subglabra var., Montipora bernardi Vaughan, 1907a H: 20813, Albatross-4054, 1 branch.-Recent. subulata, Madrepora Dana, 1846 L: 256, Fiji (USEE), 1 col., 2 frag.-Recent. Remarks: Lectotype designated by Veron and Wallace (1984:322). Species subsequently transferred to Acropora. sucrensis, Stylina Wells, 1944a H: M547385, Cumaná, 1 col. in 5 pieces, 1 TS.-L. Cretaceous. suggesta, Astreopora Wells, 1954 H: 44703, sta. 114, 1 col.; P: 44704, sta. 114, 1 col.-Recent. sukunai, Orbicella Hoffmeister, 1945 H: 68233, sta. 110A, 1 col.; P: 63315, sta. L344A, 1 col.-Neogene. Remark: Species subsequently transferred to Montastraea. surculosa, Madrepora Dana, 1846

S: 248, Fiji (USEE), 1 col.; S: 251, Tahiti (USEE), 1

col.-Recent. Remark: ?Junior synonym of Acropora hyacinthus (Dana, 1846) (see Veron and Wallace, 1984:310). sverdrupi, Porites Durham, 1947 H: M547362, Carmen Id., 1 col. in 4 pieces.-Recent. tabulata, Astreopora Wells, 1954 H: 44698, sta. 107, 1 col.; P: 44699, sta. 107, 2 col.-Recent. tagusensis, Tubastraea Wells, 1982 H: 46977, Tagus Cove, 1 col.; P: 46979, Tagus Cove, 1 col.-Recent. tampae, Alveopora Weisbord, 1973 H: 66160, USGS 2115, 1 col.-L. Miocene. Remark: Based on Alveopora tampae Vaughan, 1915 nom. nud. tampae, Cyphastrea Weisbord, 1973 H: 66161, Ballast Point, 1 col.-L. Miocene. Remarks: Based on Cyphastrea tampae Vaughan, 1915 nom. nud. Junior synonym of Solenastrea bournoni Milne Edwards and Haime, 1850 (see Budd, in press). tampae, Endopachys Wells, 1975 H: 1174388, Silex Beds, 1 corallum; P: 1174389, Silex Beds, 1 corallum.-Miocene. Remark: Based on Endopachys tampae Vaughan, 1915 nom. nud. tampae, Syzygophyllia Weisbord, 1973 H: 68312, Ballast Point, 1 corallum.-Miocene. Remark: Based on Syzygophyllia tampae Vaughan, 1915 nom. nud. tampaensis, Acropora Weisbord, 1973 H: 68313, USGS 4999, 1 col.-Miocene. Remark: Based on Acropora tampaensis Vaughan, 1915 nom. nud. tampaensis, Goniopora Weisbord, 1973 H: 68317, USGS 2084, 1 col.-Miocene. Remarks: Based on Goniopora tampaensis Vaughan, 1915 nom. nud. Junior synonym of Goniopora hilli Vaughan, 1919 (see Budd, in press). tampaensis, Orbicella Vaughan, 1919 H: M324900, USGS 2115, 1 col.; P: M324901, USGS 2115, 1 col.-L. Miocene. Remarks: ?Junior synonym of Montastraea cavernosa (Linnaeus, 1767) (see Budd, in press). Caption to original illustrations reverse holotype and paratypes. taylorensis, Micrabacia Wells, 1933 H: I75213, USGS 12894, 1 corallum; P: I203611, USGS 12894, 8 coralla; P: I75770, San Marcos, 2 coralla; P: 175149, Austin, 1 corallum.-U. Cretaceous. taylorensis, Trochocyathus Wells, 1933 H: 175131, Walnut Creek, 1 corallum.-U. Cretaceous. tegula var., Phyllocoenia sculpta Duncan, 1863 ?H: M155274, Nivaje Shale, 1 col.-Miocene. Remark: Species subsequently transferred to Montastraea.

tenella, Culicia Dana. 1846 H: 184, Port Jackson (USEE), 1 col.-Recent. tenisonwoodsi, Crispatotrochus Wells, 1977 H: I208316, USGS 24686, 1 corallum; P: I208317, USGS 24686, 1 corallum.-Eocene. tenuicalvx. Paracyathus Vaughan, 1907a H: 20755, Albatross-3895, 1 corallum.-Recent. Remark: Species subsequently transferred to Trochocyathus (see Cairns, 1984). tenuicaulis, Montipora Vaughan, 1907a S: 20811, Albatross-3847, 4 frag.-Recent. tenuis, Fungia Dana, 1846 H: 114, Paumoto Archipelago (USEE), 1 col.-Recent. tenuis, Madrepora Dana, 1846 S: 259, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. tenuis, Meandrina Dana, 1846 S: 62, Fiji (USEE), 1 col.-Recent. Remark: Junior synonym of Leptoria phrygia (Ellis and Solander, 1786) (see Veron, Pichon, and Wijsman-Best, 1977). tenuis, Porites Verrill, 1866a H: 407, Loo Choo (NPEE), 1 col.-Recent. teres, Madrepora Verrill, 1866a H: 377, Ousima (NPEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. texana var., Balanophyllia ponderosa Vaughan and Popenoe, 1935 S: M371043, USGS 10846, 5 coralla.-Eocene. texana, Caryophyllia Vaughan, 1900a S: M158214, San Augustine, 2 coralla.-Eocene. texana, Orbicella Vaugahn, 1903b S: M312611, Buda Limestone, 1 col. and 3 TS; S: M312013, Buda Limestone, 1 col. and 2 TS .- L. Cretaceous. Remark: Species subsequently transferred to Montastraea. texana, Parasmilia Vaughan, 1903b H: I312610, Shoal Creek, 1 corallum.-Cretaceous. texana, Turbinolia Conrad, 1857 S: 19836, Leon Springs, 2 coralla.—Cretaceous. Remark: According to Vaughan and Popenoe (1935) this species does not belong in the genus Turbinolia. texense, Flabellum Vaughan and Popence, 1935 H: M371034, USGS 11913, 1 corallum.-Eocene. thomi, Paracyathus Vaughan, 1920 H: I32377, USGS 7961, 1 corallum.-?Cretaceous. tongensis, Astreopora Hoffmeister, 1932 H: 68254, sta. 128, 1 col.-Pliocene. tongensis, Orbicella Hoffmeister, 1932 H: 68252, sta. 177, 1 col.-Pliocene. Remark: Species subsequently transferred to Montastraea. torresiana, Pachyseris Vaughan, 1918 H: 68298, Torres Strait, 1 col.-Recent.

Remark: Junior synonym of Pachyseris rugosa (Lamarck, 1801). tortuosa, Madrepora Dana, 1846 S: 284, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. tortuosa, Manopora Dana, 1846 S: 310, Singapore (USEE), 1 col.-Recent. Remark: Junior synonym of Montipora digitata (Dana, 1846) (see Veron and Wallace, 1984). toulai, Porites Vaughan, 1919 H: M325105a, USGS 6016, 1 col.; P: M325105b, USGS 6016, 3 col.-M. Miocene. Remark: Junior synonym of Porites baracoensis Vaughan, 1919 (see Foster, 1986). traceyi, Goniopora Wells, 1954 H: 44868, sta. 1, 1 col.-Recent. Remark: ?Junior synonym of Goniopora lobata Milne Edwards and Haime, 1860 (see Veron and Pichon, 1982). travisensis, Orbicella Wells, 1932 S: I75117, Cox's Crossing, 3 frag. and 5 TS.—Cretaceous. Remark: Species subsequently transferred to Montastraea. trechmanni, Astrocoenia Wells, 1945 H: 68321, sta. S101, 1 col.; P: 68322, sta. S101, 1 col.-Eocene. trechmanni, Dichocoenia Wells, 1934 H: I74480, Catadupa, 1 col.-U. Cretaceous. trechmanni, Goniopora Wells, 1934 H: I74482, Catadupa, 1 col.; P: I74493, Smithville, 1 col.-U. Cretaceous. triadica, Halomitra Smith, 1927 H: I74258, USGS 10097, 1 col.—U. Triassic. trinitatis, Asterosmilia Vaughan in Vaughan and Hoffmeister, 1926 H: M353648, USGS 8299, 1 corallum; P: M353649, USGS 8299, 1 corallum.-U. Miocene. trinitatis, Goniastrea Vaughan in Vaughan and Hoffmeister, 1926 H: M353661, USGS 8304, 1 col. cut in half and polished.-Tertiary. trinitatis, Leptopsammia Hubbard and Wells, 1986 H: 68478, Winn's Bay, 1 corallum; P: 68479, Winn's Bay, 1 corallum.-Recent. trinitatis, Orbicella Vaughan in Vaughan and Hoffmeister, 1926 H: M353657, USGS 8299, 1 col.—U. Miocene. Remark: Species subsequently transferred to Montastraea. trinitatis, Pavona Vaughan in Vaughan and Hoffmeister, 1926 H: M353665, USGS 8299, 1 col; P: M353666, USGS 8299, 1 col.-Miocene. trinitatis, Placocyathus Vaughan in Vaughan and Hoffmeister, 1926 S: M353647, USGS 8301, 2 col. (1 cut in 3 pieces).-

Miocene. Remark: Species subsequently transferred to Antillocyathus (see Wells, 1937). trinitatis, Porites Vaughan in Vaughan and Hoffmeister, 1926 H: M353674, USGS 8299, 1 col.-Miocene. trinitatis, Psammocora Vaughan in Vaughan and Hoffmeister, 1926 H: M353672, USGS 8299, 1 col.-Miocene. trinitatis, Sphenotrochus Vaughan in Vaughan and Hoffmeister, 1926 H: M353645, USGS 8301, 1 corallum.-Miocene. truncata, Culicia Dana, 1846 H: 183, Fiji (USEE), 1 col.-Recent. truncum, Flabellum Cairns, 1982a H: 47174, Eltanin 21-283, 1 corallum; P: 47175, Eltanin 21-283, 6 coralla; P: 47176, Anton Bruun 18-714, 19 coralla.-Recent. Remark: Species subsequently transferred to Truncatoflabellum (see Cairns, 1989). tuberosa, Dichocoenia Duncan, 1863 S: M155275, Nivaje Shale, half of col.-Miocene. tuberosa var., Pocillopora nobilis Verrill, 1869a H: 20993, Hawaii, frag. of holotype (ex YPM 1270) .--Recent. tubicinaria, Madrepora Dana, 1846 S: 258, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. tubifex. Phyllastraea Dana, 1846 S: 169, Fiji (USEE), 1 col. in 3 pieces.-Recent. Remark: Junior synonym of Mycedium elephantotus (Pallas, 1766) (see Veron and Pichon, 1980). tubulifera, Leptoseris Vaughan, 1907a S: 20891, Albatross-3876, 12 coralla; S: 20846, Albatross-3876, 3 coralla.-Recent, tuckerae, Siderastrea Wells, 1933 P: 85843, Denton, 3 col.-L. Cretaceous. tumida, Madrepora Verrill, 1866a S: 360, 393, 394, 419, Hong Kong (NPEE), 1 col. each.-Recent. Remark: Species subsequently transferred to Acropora. tumida var., Pocillopora cespitosa Vaughan, 1907a H: 20870, Molokai, 1 col.-Recent. tumida forma, Porites compressa Vaughan, 1907a H: 651, USEE, 1 col.-Recent. turbinolioides, Fungiacyathus (Bathyactis) Cairns, 1989 H: 81750, Albatross-5586, 1 corallum; P: 81748, Albatross-5586, 62 coralla; P: 81749, Albatross-5318, 3 coralla. Recent. turgida, Madrepora Verrill, 1866a H: 358, Loo Choo (NPEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. tuthilli, Flabellum Hoffmeister, 1933 P: 68231, (specimen #7), 1 corallum (ex AM G12282); P: 68230, (specimen #9) (E3733), 2 coralla.-Recent.

tutuilensis, Acropora Hoffmeister, 1925 S: 68208, Pago Pago Harbor (specimen #1), 1 col.; S: 68310, Pago Pago Harbor (specimen #2), 1 col.; S: 68206, Pago Pago Harbor (specimen #3), 1 col.; S: 68207, Pago Pago Harbor (specimen #4), 1 col.-Recent. Remarks: Junior synonym, in part, of Acropora listeri (Brook, 1893) (see Veron and Wallace, 1984). USNM 68207 is Acropora rotumana (Gardiner, 1898), according to Wallace (1978). tutuilensis var., Psammocora contigua Hoffmeister, 1925 H: 68211, Pago Pago Harbor, 1 col.-Recent. tuvuthaensis, Astreopora Hoffmeister, 1945 H: 68243, sta. L344A, 1 col. in 3 pieces .- Neogene. uber, Trochocyathus Vaughan and Popenoe, 1935 S: M371032, USGS 10846, 3 coralla.-Eocene. undulata, Echinopora Dana, 1846 H: 126, Sulu Sea (USEE), 1 col.-Recent. Remark: Junior synonym of Echinopora lamellosa (Esper, 1795) (see Veron, Pichon, and Wijsman-Best, 1977). valida, Madrepora Dana, 1846 H: 272, Fiji (USEE), 1 col.-Recent. Remark: Species subsequently transferred to Acropora. valdiviae, Caryophyllia Zibrowius and Gili, 1990 P: 86879, BB-11, 2 coralla; P: 86880, BB-12, 16 coralla (9 in alcohol); P: 86881, BB-13, 9 coralla; P: 86882, BB-14, 2 coralla.-Recent. valverdensis, Actinacis Wells, 1933 H: 175158, Painted Caves, 1 col.-L. Cretaceous. vancouverensis, Siderastrea Vaughan, 1923 H: I312607, Sooke Farm, 1 col.-Oligocene or Miocene. vanderhorsti, Acropora Hoffmeister, 1925 H: 68205, Pago Pago Harbor, 1 col., 1 branch.-Recent. Remark: Junior synonym of Acropora grandis (Brook, 1892). vanuatu, Flabellum Wells, 1984 H: 71860, USGS 25715, 1 corallum; P: 71861, USGS 25715, 12 coralla.-Pleistocene. variabilis, Tethocyathus Cairns, 1979 H: 46980, Pillsbury-861, 1 corallum; P: 46981, Pillsbury-861, 20 coralla; P: 46982, Pillsbury-929, 16 coralla; P: 46983, Caroline-38, 2 coralla.-Recent. variegatus, Fungiacyathus (Bathyactis) Cairns, 1989 H: 81761, Albatross-5113, 1 corallum; P: 81762, Albatross-5113, 10 coralla; P: 81763, Albatross-5278, 11 coralla; P: 81764, Albatross-5314, 58 coralla; P: 81765, Albatross-5403, 54 coralla, SEM stubs 497-499.-Recent. vaughani, Acropora Wells, 1954 H: 44452, sta. 35, 2 branches; P: 44453, sta. 35, many branches.-Recent. vaughani, Concentrotheca Cairns, 1991 H: 84802, Johnson-Sea-Link 1937, 1 corallum; P: 84803, Johnson-Sea-Link 1932, 6 coralla, SEM stub 533.-Recent. vaughani, Cyphastrea Hoffmeister, 1932 H: 68225, sta. 406, 1 large col.-?Eocene.

Recent. (Cairns, 1984). Dana. S: 26, Fiji (USEE), 1 col.-Recent.

vaughani, Diploastrea Wells, 1933 H: I75128, Hiram Hill Ranch, 1 col.-L. Cretaceous. vaughani, Flabellum Cairns, 1984 H: 20721, Albatross-4115, 1 corallum; P: 20717, Albatross-3835, 1 corallum; P: 20799, Albatross-4079, 9 coralla; P: 20713, 20715, and 20720, Albatross-4080, 52 coralla; P: 20716, Albatross-4081, 1 corallum.-Recent. vaughani, Fungia Boschma, 1923 PL: 20835 and 20836, Hawaii, 3 coralla.-Recent. Remarks: Based on Vaughan's (1907a) specimen of Fungia patella (Ellis and Solander, 1786) from Hawaii. Lectotype and paralectotypes designated by Hoeksema (1989). vaughani, Montipora Hoffmeister, 1925 H: 68309, Pago Pago, 1 col.-Recent. vaughani, Paracyathus Gane, 1895 S: 68311, Carter's Landing, 3 coralla.-Miocene. vaughani, Trochocyathus Stephenson, 1916 H: I147655, Brightseat, 1 corallum.-U. Cretaceous. vaughanianus, Discotrochus Wells, 1945 H: 68334, sta. \$58, 1 corallum.-Eocene. venusta, Pavonia Dana, 1846 S: 68389, USEE, 4 frag.-Recent. Remark: Species subsequently transferred to Pavona. vernonensis, Archohelia Vaughan, 1941 S: M547346, USGS 14726A, 5 col.; S: M547347, USGS 14726A, 2 col.-Eocene. veroni, Bourneotrochus Wells, 1984 H: 71852, Fraser Id., 1 corallum; P: 71853, Fraser Id., 1 corallum; P: 71854, Lady Musgrave Id., 1 corallum.-Remark: Junior synonym of Bourneotrochus stellulatus verrilli, Montipora Vaughan, 1907a S: 20819, Molokai, 1 col.; S: 21628, Oahu, 1 col.-Recent. verrilli, Psammocora Vaughan, 1907a S: 21637, Molokai, 1 col.-Recent. verrilliana, Alveopora Dana, 1872 S: 327, Sandwich Ids. (USEE), 1 col.-Recent. Remarks: Based on Dana's (1846) Alveopora daedalea (Forskal). Ordinarily this species would have taken the authorship of Verrill (1872), as did twelve other species from Verrill's appendix to Dana (1872) (see Table 1, herein), but, because this species was named in honor of Verrill, it had to be authored by someone else, namely vincentinus, Deltocyathus Dennant, 1906 S: 85706, Kangaroo Id., 5 coralla.-Recent. Remark: Species subsequently transferred to Australocyathus by Cairns and Parker, in press. virens, Astraea (Fissicella) Dana, 1846

Remark: Junior synonym of Favites abdita (Ellis and Solander, 1786) (see Veron, Pichon, and Wijsman-Best, 1977).

virgata, Madrepora Dana, 1846 S: 290, Fiji (USEE), 2 col.-Recent. Remark: Junior synonym of Acropora formosa (Dana, 1846) (see Veron and Wallace, 1984). vitiensis, Pocillopora Hoffmeister, 1945 H: 68235, sta. 110A, 1 col.; P: 68239, sta. 110A, 1 branch; P: 67694, sta. 160, 12 frag.-Neogene. walli, Astreopora Wells, 1934 H: 44796, Jamaica, 1 col.-M. Eocene. walli, Leptoseris Vaughan in Vaughan and Hoffmeister, 1926 H: M353670, USGS 8299, 1 col.-Miocene. washitaensis, Heterocoenia Wells, 1933 H: I75192, Pecos Co., 1 col.-L. Cretaceous. wautubbeensis, Turbinolia Vaughan, 1900a S: M158127, Bienville, 1 corallum; S: M158126, Wautubbee, 1 corallum.-Eocene. waylandi, Porites Foster, 1986 H: M325063, USGS 6016, 1 col.; P: M325064, USGS 6016, 2 col.-M. Miocene. Remark: Replacement name for junior homonym Porites panamensis Vaughan, 1919, not Porites panamensis Verrill, 1866. wellingtoni, Rhizopsammia Wells, 1982 H: 46969, Tagus Cove, 1 col.; P: 46970, Tagus Cove, 2 col.-Recent. wellsi, Balanophyllia Cairns, 1977a H: 45855, Gerda-1312, 1 corallum; P: 45856, Gerda-1312, 1 corallum; P: 45857, Gerda-1125, 1 corallum.-Recent. wellsi, Brachyseris Hamilton, 1956 H: I189893, Guyot Seamount, 6 frag.-Cretaceous. wellsi, Coscinaraea Veron and Pichon, 1980 H: 44818, Bikini, 1 col.-Recent. wellsi, Polymyces Cairns, 1991 H: 84836, Johnson-Sea-Link 1916, 1 corallum; P: 84837, Johnson-Sea-Link 1916, 5 coralla; P: 84838, Johnson-Sea-Link 1921, 2 coralla; P: 84839, Johnson-Sea-Link 1935, 1 corallum; P: 77273, Albatross-2818, 2 coralla.-Recent. wilcoxensis, Astrangia Vaughan, 1900a H: M158291, Wilcox Co., 1 col.-Eocene.

williamsonensis, Microsolena Wells, 1944b H: M547426, Round Rock, 1 col., 1 TS.—U. Cretaceous. willoughbiensis, Manicina Vaughan, 1919 H: M325006a, USGS 6881, 1 col.; P: M325006b, USGS 6881, 1 col.—Oligocene. Remark: Species subsequently transferred to Colpophyllia. willoughbyi, Stylophora Wells, 1945 H: 68324, sta. S43, 1 col.; P: 68325, sta. S43, 1 col.-Eocene. wintoni, Stephanocoenia Wells, 1933 H: I75137, Cragin's Knobs, 1 col.-L. Cretaceous. wintoni, Trochocyathus Wells, 1933 H: I75138, Sycamore Creek, 1 corallum.-L. Cretaceous. woodjonesi, Pocillopora Vaughan, 1918 S: 38343, Cocos-Keeling Id., 3 frag.-Recent. woodsi, Cyathoceras Wells, 1964 H: 68371, Jumpin Pin, 1 corallum; P: 68372, Jumpin Pin, 5 coralla.-Recent. Remark: Species subsequently transferred to Crispatotrochus (see Cairns, 1991). wrangelliana, Thecosmilia Russo in Montanaro Gallitelli, Russo, and Ferrari, 1979 H: I316956, sta. M1708, 1 col.; P: I316957, sta. M1708, 7 coralla .--- U. Triassic. wyckoffi, Psammocora Hoffmeister in Vaughan and Hoffmeister, 1926 H: M353677, USGS 9286, 1 col.-Miocene. yborensis, Favites Weisbord, 1973 H: 66162, USGS 4999, 1 col.-L. Miocene. Remark: Based on Maeandra tampaensis Vaughan, 1915 nom. nud. zeidleri, Paraconotrochus Cairns and Parker, in press P: 85677, Soela-51, 3 coralla.-Recent. zopyros, Caryophyllia Caims, 1979 P: 46869, Pillsbury-890, 1 corallum; P: 46870, Blake-273, 1 corallum; P: 46056, DBL 1429, 1 corallum.-Recent.

53

Literature Cited

Publications Wherein Stony Coral Types are Designated that are Deposited at the National Museum of Natural History

Boschma, H.

- 1923. The Madreporaria of the Siboga Expedition, Part 4: Fungia patella. Siboga-Expeditie, 16d: 20 pages.
- 1956. Stylasterina in the Collections of the Paris Museum, II: Errina amoena nov. spec. Proceedings, Koninklijke Nederlandse Akademie van Wetenschappen, series C, 59(3):281-289.
- 1963. Errina (Lepidopora) diffusa, a new Stylasterine Coral from South Africa. Proceedings, Koninklijke Nederlandse Akademie van Wetenschappen, series C, 66(5):391-396.
- 1964a. Errina (Lepidopora) decipiens, a new Stylasterine Coral from the West Indies. Proceedings, Koninklijke Nederlandse Akademie van Wetenschappen, series C, 67(2):55-63.
- 1964b. On Stylasterina of the Genus Stenohelia. Proceedings, Koninklijke Nederlandse Akademie van Wetenschappen, series C, 67(2):64-74.
- 1965a. On Stylasterine Corals of the Genus Errina from the Island Mauritius. Proceedings, Koninklijke Nederlandse Akademie van Wetenschappen, series C, 68(1):1-7.
- 1965b. Errina carnea, a new Stylasterine Coral from the Antarctic. Proceedings, Koninklijke Nederlandse Akademie van Wetenschappen, series C, 68(1):19-24.
- 1968a. Calyptopora reticulata n. g., n. sp., a Stylasterine Coral from Deep Water in the New Zealand Region. Proceedings, Koninklijke Nederlandse Akademie van Wetenschappen, series C, 71(2):99-108.
- 1968b. Errina cruenta, a Stylasterine Coral from New Zealand. Proceedings, Koninklijke Nederlandse Akademie van Wetenschappen, series C, 71(2):109-113.
- 1970. Stylaster brunneus, a new Stylasterine Coral from New Caledonia. Proceedings, Koninklijke Nederlandse Akademie van Wetenschappen, series C, 73(2):154-158.
- Broch, H.
 - 1936. Untersuchungen an Stylasteriden. Skrifter utgitt av Det Norske Videnskaps-Akademi i Oslo, I: Matematisk-Naturvidenskapelig Klasse, 8: 103 pages.
 - 1942. Investigations on Stylasteridae (Hydrocorals). Skrifter utgitt av Det Norske Videnskaps-Akademi i Oslo, I: Matematisk-Naturvidenskapelig, Klasse, 3: 113 pages.
 - 1947. Stylasteridae (Hydrocorals) of the John Murray Expedition to the Indian Ocean. Scientific Reports of the John Murray Expedition, 8(2):305-316.
- Caims, S.D.
 - 1977a. A Revision of the Recent Species of Balanophyllia in the Western Atlantic, with Descriptions of Four New Species. Proceedings of the Biological Society of Washington, 90(1):132-148.
 - 1977b. A Revision of the Recent Species of Stephanocyathus in the Western Atlantic, with Descriptions of Two New Species. Bulletin of Marine Science, 27(4):729-739.
 - 1977c. Corals: Dendrophylliina and Caryophylliina. Memoirs of the Hourglass Cruises, 3(4): 27 pages.
 - 1978a. A Checklist of the Ahermatypic Scleractinia of the Gulf of Mexico, with the Description of a New Species. Gulf Reserach Reports, 6(1):9-15.
 - 1978b. New Genus and Species of Ahermatypic Coral (Scleractinia) from the Western Atlantic. Proceedings of the Biological Society of Washington, 91(1):216-221.

- 1978c. Distichopora (Haplomerismos) anceps, a New Stylasterine Coral from Deep Water off the Hawaiian Islands. Micronesica, 14(1): 83-87.
- 1979. The Deep-Water Scleractinia from the Caribbean Sea and Adjacent Waters. Studies on the Fauna of Curaçao and other Caribbean Islands, 57(180): 341 pages.
- 1982a. Antarctic and Subantarctic Scleractinia. Antarctic Research Series, 34:1-74.
- 1982b. A New Subfamily of Operculate Stylasterine from the Subantarctic. Journal of Natural History, 16:71-81.
- 1983a. Antarctic and Subantarctic Stylasterina. Antarctic Research Series, 38:61-164.
- 1984. New Records of Ahermatypic Corals (Scleractinia) from the Hawaiian and Line Islands. Occasional Papers of the Bernice P. Bishop Museum, 25(10): 30 pages.
- 1985. Three New Species of Stylasteridae. Proceedings of the Biological Society of Washington, 98(3):728-739.
- 1986a. A Revision of the Northwest Atlantic Stylasteridae. Smithsonian Contributions to Zoology, 418: 131 pages.
- 1986b. Stylasteridae of the Galápagos Islands. Smithsonian Contributions to Zoology, 426: 42 pages.
- 1987. Conopora adeta, New Species from Australia, the First Known Unattached Stylasterid. Proceedings of the Biological Society of Washington, 100(1):141-146.
- 1988a. Cryptotrochus, New Genus and Two New Species of Deep-Water Corals (Scleractinia: Turbinoliinae). Proceedings of the Biological Society of Washington, 101(4):709-716.
- 1988b. New Records of Stylasteridae from Western Australia, including the Description of Two New Species. *Records of the Western Australian Museum*, 14(1):105-119.
- 1989. A Revision of the Ahermatypic Scleractinia of the Philippine Islands and Adjacent Waters, Part 1: Fungiacyathidae, Micrabaciidae, Turbinoliinae, Guyniidae, and Flabellidae. Smithsonian Contributions to Zoology, 486: 136 pages.
- 1991. A Revision of the Ahermatypic Scleractinia of the Galápagos and Coccos Islands. Smithsonian Contributions to Zoology, 504: 44 pages.

In press. Review of the Recent Scleractinia of South Australia, Victoria, and Tasmania. Records of the South Australian Museum.

Cairns, S.D., and J.W. Wells

1987. Neogene Paleontology of the Northern Dominican Republic, Part 5: The Suborders Caryophylliina and Dendrophylliina (Anthozoa: Scleractinia). Bulletins of American Paleontology, 93(328):23-43, 52-55.

Conrad, T.A.

 Descriptions of Cretaceous and Tertiary Fossils. In W.H. Emory, editor, Report on the United States and Mexico Boundary Survey, 1(2):141-174.

Dall, W.H.

1884. On some Hydrocorallinae from Alaska and California. Proceedings of the Biological Society of Washington, 2:111-115.

Dana, J.D.

1846. Zoophytes. United States Exploring Expedition during the Years

Cairns, S.D., and S. Parker

1838-1842 under the Command of Charles Wilkes, 7: vi + 740 pages. Lea and Blanchard, Philadelphia.

1872. Corals and Coral Islands. 398 pages. New York: Dodd & Mead, Publishers.

Dennant, J.

- 1906. Madreporaria from the Australian and New Zealand Coasts. Transactions of the Royal Society of South Australia, 30:151-165.
- Dinesen, Z.D. 1980. A Revision of the Coral Genus Leptoseris. Memoirs of the Queensland Museum, 20(1):181-235.

Duncan, P.M.

- 1863. On the Fossil Corals of the West Indian Islands, Part 1. Proceedings of the Geological Society (The Quarterly Journal of the Geological Society of London), 19:406-458.
- 1864. On the Fossil Corals of the West Indian Islands, Part 2. Proceedings of the Geological Society (The Quarterly Journal of the Geological Society of London), 20:20-44.
- Durham, J.W.
- 1942. Eocene and Oligocene Coral Faunas of Washington. Journal of Paleontology, 16(1):84-104.
- 1947. Corals from the Gulf of California and the North Pacific Coast of America. Memoirs of the Geological Society of America, 20:68 pages.

Ehrenberg, C.G.

- 1834. Beiträge zur Physiologischen Kenntniss der Corallenthiere im Allgemeinen und besonders des Rothen Meeres. Abhandlungen der Königlichen Academie der Wissenschaften zu Berlin, 1832:225-380.
- Ellis, J., and D. Solander
 - 1786. The Natural History of Many Curious and Uncommon Zoophytes, Collected from Various Parts of the Globe. xii + 206 pages. London: B. White and Son.
- Fisher, W.K.
 - 1931. Californian Hydrocorals. Annals and Magazine of Natural History, series 10, 8:391-399.

1938. Hydrocorals of the North Pacific Ocean. Proceedings of the United States National Museum, 84(3024):493-554.

- Gane, H.S.
- 1895. A Contribution to the Neocene Corals of the United States. Circular of the Johns Hopkins University, 15:8-10.

Gardiner, J.S., and P. Waugh

- 1938. The Flabellid and Turbinolid Corals. John Murray Expedition Scientific Reports, 5(7):167-202.
- Greeff, R.
- 1886. Ueber Westafrikanische Stylasteriden. Sitzungsberichte der Gesellschaft zur Beförderung der Gesamten Naturwissenschaften zu Marburg, 1: 11 pages.
- Hamilton, E.L.
- 1956. Sunken Islands of the Mid-Pacific Mountains. Memoirs of the Geological Society of America, 64: x + 97 pages.
- Hickson, S.J.
- 1912a. On the Hydrocoralline Genus Errina. Proceedings of the Zoological Society of London, 1912:876-896.
- 1912b. Notes on some Stylasterina in the Muséum d'Histoire Naturelle de Paris. Bulletin du Muséum d'Histoire Naturelle, Paris, 1912 (7):461-466.
- Hickson, S.J., and H.M. England
 - 1905. The Stylasterina of the Siboga Expedition. Siboga-Expeditie, 8:1-26.
 - 1909. The Stylasterina of the Indian Ocean. Transactions of the Linnaean Society of London, series 2, 12:345-354.

Hoffmeister, J.E.

1925. Some Corals from American Samoa and the Fiji Islands. Publications of the Carnegie Institute of Washington, number 343 (Papers of the Department of Marine Biology, 22):1-90.

- 1929a. Some Reef Corals from Tahiti. Journal of the Washington Academy of Sciences, 19(16):357-365.
- 1929b. A New Fossil Coral from the Cretaceous of Texas. Proceedings of the United States National Museum, 76(23):1-3.
- 1932. Geology of Eua, Tonga. Bulletin of the Bernice P. Bishop Museum, 96: 93 pages.
- 1933. Report on Deep-Sea Corals, obtained by F.I.S. "Endeavour" on the Coasts of New South Wales, Victoria, South Australia, and Tasmania. Biological Results of the FJ.S. Endeavour, 1909-14, 6(1):1-16.
- 1945. Corals. In H.S. Ladd and J.E. Hoffmeister, Geology of Lau, Fiji, Bulletin of the Bernice P. Bishop Museum, 181:298-311.

Hubbard, R.H., and J.W. Wells

1986. Ahermatypic Shallow-Water Corals of Trinidad. Studies on the Fauna of Curaçao and other Caribbean Islands, 68(211):121-147. Johnson, J.Y.

1862. Description of some New Corals from Madeira. Proceedings of the Zoological Society of London, 1862:194-197.

Kent, W.S.

1871. On Some New and Little-Known Species of Madrepores, or Stony Corals, in the British Museum. Proceedings of the Zooloical Society of London, 1871:275-286.

Kirkpatrick, R.

1887. Description of a New Genus of Stylasteridae. Annals and Magazine of Natural History, series 5, 19:212-214.

Lamberts, A.E.

1984. The Reef Corals Lithactinia and Polyphyllia: A Study of Morphological, Geographical, and Statistical Differences. Pacific Science, 38(1):12-27.

Lea, I.

- 1833. Corals In Carey, Lea, and Blanchard, editors, Contributions to Geology, pages 192-197, Philadelphia.
- Lesson, R.P.
- 1831. Illustrations de zoologie ou recueil de figures d'animaux peintes d'après Nature. 60 plates. Bertrand, Paris.
- Marenzeller, E. von
 - 1903. Madreporaria und Hydrocorallia. Resultats du Voyage du S. Y. Belgica en 1897-1898-1899, Rapports Scientifiques (Zoologie), 7:1-7.
 - 1904. Stein- und Hydro-Korallen. Bulletin of the Museum of Comparative Zoology, Harvard, 43(2):75-87.

Meek F.B.

1876. A Report on the Invertebrate Cretaceous and Tertiary Fossils of the Upper Missouri Country. United Staes Geological and Geographical Survey Territorial Report, 9:1-4.

Milne Edwards, H., and J. Haime

- 1848a. Recherches sur les Polypiers. Mémoire 2, Monographie des Turbinolides. Annales des Sciences Naturelles, Zoologie, series 3, 9:211-344.
- 1848b. Recherches sur les Polypiers. Mémoire 4(1), Monographie des Astreides. Annales des Sciences Naturelles, Zoologie, series 3, 10:209-320.
- 1850. Recherches sur les Polypiers. Mémoire 5, Monographie des Oculinides. Annales des Sciences Naturelles, Zoologie, series 3, 13:63-110.
- 1851a. Recherches sur les Polypiers. Mémoire 6, Monographie des Fongides. Annales des Sciences Naturelles, Zoologie, series 3, 15:73-144.
- 1851b. Recherches sur les Polypiers. Mémoire 7, Monographie des Poritides. Annales des Sciences Naturelles, Zoologie, series 2, 16:21-70.
- 1857. Histoire Naturelle des Coralliaires, volume 2. 633 pages. Paris: Roret.

- 1860. Histoire Naturelle des Coralliaires, volume 3. 560 pages. Paris: Roret.
- Montanaro Gallitelli, E., A. Russo, and P. Ferrari
- 1979. Upper Triassic Coelenterates of Western North America. Bollettino della Società Paleontologica Italiana, 18(1):133-156.

Moseley, H.N.

- 1879. On the Structure of the Stylasteridae, a Family of Hydroid Stony Corals. Philosophical Transactions of the Royal Society of London, 169:425-503.
- 1881. Report on Certain Hydroid, Alcyonarian and Madreporarian Corals Procured During the Voyage of H.M.S. Challenger, in the Years 1873-1876, Part 1: On the Hydrocorallinae. Report on the Scientific Results of the Voyage of H.M.S. Challenger, Zoology, 2(7):1-101, 209-230.
- Naumov, D.V.
- 1960. Keys to the Fauna of the USSR: Hydroids and Hydromedusae of the USSR, number 70: 660 pages. Leningrad: Academy of Sciences of the USSR. [Translated from Russian to English by the Israel Program for Scientific Translation, 1969].

Nomland, J.O.

- 1916. Corals from the Cretaceous and Tertiary of California and Oregon. Bulletin of the Department of Geology, University of California, 9(5):59-76.
- Owens, J.M.
- 1986. Rhombopsammia, a New Genus of the Family Micrabaciidae. Proceedings of the Biological Society of Washington, 99(2): 248-256.
- Peters, E.C., S.D. Cairns, M.E.Q. Pilson, J.W. Wells, W.C. Jaap, J.C. Lang, C.E. Vasleski, and L. St. Pierre
 - 1988. Nomenclature and Biology of Astrangia poculata (= A. danae, = A. astreiformis). Proceedings of the Biological Society of Washington, 101(2):234-250.

- 1867. Contributions to the Fauna of the Gulf Stream at Great Depths. Bulletin of the Museum of Comparative Zoology, Harvard, 1(6): 103-120.
- 1868. Contributions to the Fauna of the Gulf Stream at Great Depths. Bulletin of the Museum of Comparative Zoology, Harvard, 1(7): 121-141.
- Deep-Sea Corals. Illustrated Catalogue of the Museum of Comparative Zoology, Harvard, 4: 93 pages.
- 1874. Zoological Results of the Hassler Expedition, Deep-Sea Corals. Illustrated Catalogue of the Museum of Comparative Zoology, Harvard, 8:33-49.
- 1878. Report on the Results of Dredging, under the Supervision of Alexander Agassiz, in the Gulf of Mexico, by the U. S. Coast Survey Steamer Blake, Corals. Bulletin of the Museum of Comparative Zoology, Harvard, 5(9):197-212.

- 1932. Fossil Corals of the Genus Turbinolia from the Eocene of California. Transactions of the San Diego Society of Natural History, 7(10):91-109.
- Quelch, J.J.
 - 1884. On New Stylasteridae, with Remarks on Some Recently Described Forms. Annals and Magazine of Natural History, series 5, 13:111-117.
- Rathbun, R.
 - 1888. Annotated Catalogue of the Species of Porites and Synaraea in the United States National Museum, with a Description of a New Species of Porites. Proceedings of the United States National Museum, 10:354-366.

Rehberg, H.

1892. Neue und wenig bekannte Korallen. Abhandlungen aus dem Gebiete der Naturwissenschaften, 12(1):1-50. Richards, H.G.

1933. A New Species of Hydrocorallinae from the Pleistocene of New Jersey. Journal of the Washington Academy of Science, 23(4): 211-212.

Rousseau, L.

- 1854. Description des Mollusques, Coquilles et Zoophytes. Voyage au Pôle Sud et dans l'Océanie sur les Corvettes l'Astrolabe et la Zélée, executé ... pendant les années 1837-1840, 5: 132 pages.
- Scott, R.W., and A. Aleman
 - 1984. Stylina columbaris n. sp. in a Lower Cretaceous Coral Biostrom. Journal of Paleontology, 58(4):1136-1142.

Smith, J.P.

- 1927. Upper Triassic Marine Invertebrate Faunas of North America. Professional Papers of the United States Geological Survey, 141: 262 pages.
- Scheer, G., and C.S.G. Pillai
- 1983. Report on the Stony Corals from the Red Sea. Zoologica, 133: 198 pages.
- Sokolow, N. von
- 1894. Die Unteroligocane Fauna ... von Jekaterinoslaw. Mémoires Comité Géologique, 9(3): 138 pages.
- Squires, D.F.
 - 1958. The Cretaceous and Tertiary Corals of New Zealand. Paleontological Bulletin of the New Zealand Geological Survey, 29: 107 pages.
 - 1962. Additional Cretaceous and Tertiary Corals from New Zealand. Transactions of the Royal Society of New Zealand, Geology, 1(9):133-150.
 - 1964. New Stony Corals from Northeastern New Zealand. Records of the Auckland Institution Museum, 6(1):1-9.
 - 1965a. A New Species of Pliobothrus, a Hydrocoral from the Oligocene of New Zealand. Publications of the New Zealand Geological Survey, 3(3):23-25.
 - 1966. Port Phillip Survey 1957-1963. Memoirs of the National Museum of Victoria, 27:167-174.
- Squires, D.F., and P.M. Ralph
 - 1965. A New Scleractinian Coral of the Genus Flabellum from New Zealand, with a Record of Stephanocyathus. Proceedings of the Biological Society of Washington, 78:259-264.

Stephenson, L.W.

- 1916. Coelenterata, Anthozoa. In Systematic Paleontology, Upper Cretaceous, Maryland Geological Survey, Upper Cretaceous, pages 752-757.
- 1917. North American Upper Creatceous Corals of the Genus Micrabacia. Professional Papers of the United States Geological Survey, 98:115-131.

1878. On a New Coral, Stylaster stellulatus; and Note on Tubipora musica. Transactions of the Royal Microscopical Society, 1:41-44.

1948. Some English Cretaceous and Eocene Hexacorals. Quarterly Journal of the Geoloical Society of London, 103(3):163-170.

1904. Hydrozoa. In Systematic Paleontology, Miocene, Maryland Geologic Survey, Miocene, pages 433-438.

Vaughan, T.W.

- 1895. Eocene Fauna of the Middle Atlantic Slope, Coelenterata. Johns Hopkins University Circulars, 15(121):6.
- 1900a. The Eocene and Lower Oligocene Coral Faunas of the United States with Descriptions of a Few Doubtfully Cretaceous Species. Monographs of the United States Geological Survey, 39: 263 pages.
- 1900b. A New Fossil Species of Caryophyllia from California, and a New Genus and Species of Turbinolid Coral from Japan. Proceedings of the United States National Museum, 22(1194):199-203.
- 1901a. The Stony Corals of the Porto Rican Waters. Bulletin of the United

Pourtalès, L. F.

Quayle, E.H.

Stewart, C.

Thomas, H.D.

Ulrich, E.O.

States Fish Commission, 1900, 20(2):290-320.

- 1901b. Coelenterata. In Systematic Paleontology, Eocene, Maryland Geological Survey, Eocene, pages 222-232.
- 1903a. Coelenterata. In R. Amold, editor, The Pliocene and Pleistocene Fauna of San Pedro and Vicinity, Part 2: Systematic Descriptions. Memoirs of the California Academy of Sciences, 3:86-90.
- 1903b. Corals of the Buda Limestone. In G.B. Shattuck, The Mollusca of the Buda Limestone. Bulletin of the Unites States Geological Survey, series C, Systematic Geology and Paleontology, 205:37-40, 89-92.
- 1905. Coelenterata. In F.W. Crangin and T.W. Stanton, Malone Jurassic Formation of Texas. Bulletin of the United States Geological Survey, 266:34-35, 114.
- 1906a. Reports on the Scientific Results of the Expedition to the Eastern Tropical Pacific... by the U. S. Fish Commission Steamer Albatross from October, 1904, to March, 1905, Part 6: Madreporaria. Bulletin of the Museum of Comparative Zoology, Harvard, 50(3):61-72.
- 1906b. Three New Fungiae, with a Description of a Specimen of Fungia granulosa Klunzinger and a Note on a Specimen of Fungia concinna Verrill. Proceedings of the United States National Museum, 30(1473):827-832.
- 1906c. A New Species of Coenocyathus from California and the Brazilian Astrangiid Corals. Proceedings of the United States National Museum, 30(1477):847-850.
- 1907a. Recent Madreporaria of the Hawaiian Islands and Laysan. Bulletin of the United States National Museum, 59: 427 pages.
- 1907b. Some Madreporarian Corals from French Somaliland, East Africa, collected by Dr. Charles Gravier. Proceedings of the United States National Museum, 32(1526):249-266.
- 1909. In R. Arnold, Paleontology of the Coalinga District, Fresno and King Counties, California. Bulletin of the United States Geological Survey, 396: plate 23, fig. 3.
- 1917a. Some Corals from the Kermadec Islands. Transactions of the New Zealand Institute, 49:275-279.
- 1917b. The Reef-Coral Fauna of Carrizo Creek, Imperial County, California and its Significance. Professional Papers of the United States Geological Survey, 98T:355-395.
- 1918. Some Shoal-Water Corals from the Murray Islands (Australia), Cocos-Keeling Islands, and Fanning Island. Publications of the Carnegie Institute of Washington, number 213 (Papers of the Department of Marine Biology, 9):49-234.
- 1919. Fossil Corals from Central America, Cuba, and Porto Rico, with an Account of the American Tertiary, Pleistocene, and Recent Coral Reefs. Bulletin of the United States National Museum, 103(9): 189-524.
- 1920. Corals from the Cannonball Marine Member of the Lance Formation. Professional Papers of the United States Geological Survey, 128A:61-64.
- 1923. Fauna of the Sooke Formation, Vancouver Island, Description of a New Coral. Publications of Geology, University of California, 14:175-176.
- 1941. New Corals: One Recent, Alaska; Three Eocene, Alabama and Louisiana. Journal of Paleontology, 15(3):280-284.

Vaughan, T.W., and J.E. Hoffmeister

 New Species of Fossil Corals from the Dominican Republic. Bulletin of the Museum of Comparative Zoology, Harvard, 67(8):315-326.
 Miocene Corals from Trinidad. Publications of the Carnegie

Institute of Washington, number 344:105-134.

Vaughan, T.W., and W.P. Popenoe

1935. The Coral Fauna of the Midway Eocene of Texas. Bulletin of the University of Texas, number 3301:325-343.

Veron, J.E.N., and M. Pichon

1980. Scleractinia of Eastern Australia, Part 3. Australian Institute of Marine Science, Monograph Series, 4: 422 pages. Verrill, A.E.

- 1864. List of the Polyps and Corals sent by the Museum of Comparative Zoology to other Institutions in Exchange, with Annotations. Bulletin of the Museum of Comparative Zoology, Harvard, 1(3): 29-60.
- 1866a. Synopsis of the Polyps and Corals of the North Pacific Exploring Expedition from 1853 to 1856 ... with Descriptions of Some Additional New Species from the West Coast of North America, Part 3: Madreporaria. Proceedings and Communications of the Essex Institute, 5:17-50.
- 1866b. On the Polyps and Corals of Panama, with Descriptions of New Species. Proceedings of the Boston Society of Natural History, 10:323-333.
- 1869a. Synopsis of the Polyps and Corals of the North Pacific Exploring Expedition from 1853 to 1856... Part 4: Additions and Corrections. Proceedings and Communications of the Essex Institute, 6:75-103.
- 1869b. On Some New and Imperfectly Known Echinoderms and Corals. Proceedings of the Boston Society of Natural History, 12:381-396.
- 1870. Contributions to Zoology from the Museum of Yale College, 7: Descriptions of New Corals. American Journal of Science, series 2, 49(147):370-375.
- 1872. Appendix 4, Names of Species in the Author's Report on Zoophytes. In: J. D. Dana, Corals and Coral Islands, pages 379-388. New York: Dodd & Mead, Publishers.
- 1878. Brief Contributions to Zoology from the Museum of Yale College, 39: Notice of Recent Additions to the Marine Fauna of the Eastern Coast of North America, number 2. American Journal of Science, series 3, 16:371-378.
- 1885. Notice of the Remarkable Fauna Occupying the Outer Banks Off the Southern Coast of New England, number 11. American Journal of Science, series 3, 29(170):149-157.
- 1900. Additions to the Anthozoa and Hydrozoa of the Bermudas. Transactions of the Connecticut Academy of Arts and Sciences, 10(14):551-572.
- 1901. Variations and Nomenclature of Bermudian, West Indian, and Brazilian Reef Corals, with Notes on Various Indo-Pacific Corals. Transactions of the Connecticut Academy of Arts and Sciences, 11:63-168.

Wade, B.

1926. The Fauna of the Ripley Formation on Coon Creek, Tennessee. Professional Papers of the United States Geological Survey, 137: 192 pages.

Weisbord, N.E.

- 1973. New and Little-Known Corals from the Tampa Formation of Florida. Geological Bulletins of the Florida Bureau of Geology, 56: 146 pages.
- 1974. Late Cenozoic Corals of South Florida. Bulletins of American Paleontology, 66(285):259-544.

Wells, J.W.

- 1932. Corals of the Trinity Group of the Comanchean of Central Texas. Journal of Paleontology, 6(3):225-256.
- 1933. Corals of the Cretaceous of the Atlantic and Gulf Coastal Plains and Western Interior of the United States. Bulletins of American Paleontology, 18(67):83-288.
- 1934. Some Fossil Corals from the West Indies. Proceedings of the United States National Museum, 83:71-110.
- 1944a. Cretaceous, Tertiary, and Recent Corals, a Sponge, and an Alga from Venezuela. Journal of Paleontology, 18:429-447.
- 1944b. A New Coral from the Buda Limestone (Cenomanian) of Texas. Journal of Paleontology, 18(1):100.
- 1945. American Old and Middle Tertiary Larger Foraminifera and Corals, Part 2: West Indian Eocene and Miocene Corals. *Memoirs of the Geological Society of America*, 9: 25 pages.
- 1947. Coral Studies, III: Three New Cretaceous Corals from Texas and

- Reef Corals from the Cocos-Keeling Atoll. Bulletin of the Raffles Museum, 22:29-52.
- 1954. Recent Corals of the Marshall Islands. Professional Papers of the United States Geological Survey, 2601:385-486.
- 1955. Recent and Subfossil Corals of Moreton Bay, Queensland. Papers of the Department of Geology, University of Queensland, new series, 4(10): 23 pages.
- 1959. Notes on Indo-Pacific Scleractinian Corals, Part 1: Oryzotrochus, a New Genus of Turbinolian Coral; Part 2: A New Species of *Turbinaria* from the Great Barrier Reef. Pacific Science, 13: 286-290.
- 1961. Notes on Indo-Pacific Scleractinian Corals, Part 3: A New Reef Coral from New Caledonia. Pacific Science, 15:189-191.
- 1962. Two New Scleractinian Corals from Australia. Records of the Australian Museum, 25:239-241.
- 1964a. Ahermatypic Corals from Queensland. Papers of the Department of Zoology, University of Queensland, 2(6):107-121.
- 1964b. Fossil Corals from Eniwetok Atoll. Professional Papers of the United States Geological Survey, 260DD:1101-1111.
- 1968. Notes on Indo-Pacific Scleractinian Corals, Part 5: A New Species of Alveopora from New Caledonia; Part 6: Further Note on Bantamia merleti Wells. Pacific Science, 22:274-276.
- 1972. Notes on Indo-Pacific Scleractinian Corals, Part 8: Scleractinian Corals from Easter Island. Pacific Science, 26:182-190.
- 1973a. New and Old Scleractinian Corals from Jamaica. Bulletin of Marine Science, 23:16-55.
- 1973b. Texastrea, a New Scleractinian Coral from the Lower Cretaceous of Texas. Journal of Paleontology, 47(5):913-914.
- 1974a. A New Genus of Scleractinian Coral from the Early Tertiary of Venezuela. Verhandlungen Naturforschende Gesellschaft in Basel, 84:377-380.
- 1974b. Two New Hermatypic Scleractinian Corals from the West Indies. Bulletin of Marine Science, 23:925-932.
- 1975. A New Species of Endopachys from the Miocene of Florida. Tulane Studies in Geology and Paleontology, 11:173-174.
- 1977 ("1976"). Eocene Corals from Eua, Tonga. Professional Papers of the United States Geological Survey, 640G:1-13.

SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY

- 1982. Notes on Indo-Pacific Scleractinian Corals, Part 9: New Corals from the Galápagos Islands. Pacific Science, 36(2):211-219.
- 1984. Notes on Indo-Pacific Scleractinian Corals, Part 10: Late Pleistocene Ahermatypic Corals from Vanuatu. Pacific Science, 38(3):205-219.
- 1985. Notes on Indo-Pacific Scleractinian Corals, Part 11: A New Species of Acropora from Australia. Pacific Science, 39(4):338-339.

Wells, J.W., and P.N. Alderslade

1979. The Scleractinian Coral Archohelia Living on the Coastal Shores of Queensland, Australia. Records of the Australian Museum, 32(5):211-216.

White, C.A.

- 1879. Contributions to Invertebrate Paleontology, number 1: Cretaceous Fossils of the Western States and Territories. United States Geological and Geographic Survey of the Territories of Idaho and Wyoming for the Year 1877, Annual Report, 11:273-319.
- 1888. On Hindeastraea, A New Generic Form of Cretaceous Astraeidae. Geology Magazine, new series, decade 3, 5:362-365.

Zibrowius, H.

1981. Associations of Hydrocorallia Stylasterina with Gall-Inhabiting Copepoda Siphonostomatoidea from the South-West Pacific, Part 1: On the Stylasterine Hosts, including Two New Species, Stylaster papuensis and Crypthelia cryptotrema. Bijdragen tot de Dierkunde, Amsterdam, 51(2):268-286.

Zibrowius, H., and A. Brito

1984. Dendrophyllia laboreli n. sp., coralliaire infralittoral et circalittoral de l'Afrique occidentale et des iles Canaries. Bulletin Muséum National Histoire Naturelle, Paris, series 4, 6(section A)(3): 641-657.

Zibrowius, H., and S.D. Cairns

1982. Remarks on the Stylasterine Fauna of the West Indies, with the Description of Stylaster antillarum, a New Species from the Lesser Antilles. Proceedings of the Biological Society of Washington, 95(1):210-221.

Zibrowius, H., and J.-M. Gili

1990. Deep-Water Scleractinia (Cnidara: Anthozoa) from Namibia, South Africa, and Walvis Ridge, Southeastern Atlantic. Scientia Marina, 54(1):19-46.

Zlatarski, V.N.

1990. Porites colonensis, New Species of Stony Coral off the Caribbean Coast of Panama. Proceedings of the Biological Society of Washington, 103(2):257-264.

Other Literature Cited

Barnard, H.N.

1906. Catalogue of the Madreporarian Corals in the British Museum (Natural History). Volume 6: The Family Poritidae, Part 2: The Genus Porites, Part 2: Porites of the Atlantic and West Indies, with the European Fossil Forms. 173 pages. London: British Museum (Natural History).

- 1990. A List of Tertiary Hermatypic Corals in the U.S. National Museum. Fossil Cnidaria, 19(1.1):79-87.
- In press. Neogene Paleontology in the Northern Dominican Republic, XX. The Family Faviidae (Anthozoa: Scleractinia), Part 1: The Genera Montastraea and Solenastrea. Bulletins of American Paleontology.
- Caims, S.D.
 - 1978d. Types and Figured Specimens of Stylasterina and Scleractinia at the NMNH, Smithsonian, Part 1: Recent and Cenozoic. *Fossil Cnidaria*, 7(2):9-14.
 - 1983b. Pseudocrypthelia, a New Genus of Stylasterine Coral from the Indonesian Region. Beaufortia, 33(3):29-35.

- 1983c. A Generic Revision of the Stylasterina. Bulletin of Marine Science, 33(2):427-508.
- 1983d. Observations on Species of the Fossil Genus Axopora (Coelenterata: Hydrozoa) and its Evolutionary Significance to the Stylasteridae. Proceedings of the Biological Society of Washington, 96(4): 758-769.

Carpenter, M.

1973. List of Dana's Coral Types as Arranged in U.S. Exploring Expedition, vol. VII, Zoophytes. 10 manuscript pages. [Unpublished manuscript in files of Stephen D. Caims, Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution.]

Chevalier, J.-P.

1971. Les Scléractiniaires de la Mélanesie Francaise. Expédition Francaise

sur les Récifs Coralliens de la Nouvelle-Calédonie, 5: 307 pages. Foster, A.B.

1986. Neogene Paleontology in the Northern Dominican Republic, 3: The Family Poritidae. Bulletins of American Paleontology, 90(325):

Budd, A.

43-123.

- 1987. Neogene Paleontology in the Northern Dominican Republic, 4: The Genus Stephanocoenia. Bulletins of American Paleontology, 93(328):5-22, 52-55, 68-74.
- Hoeksema, B.W.
 - 1989. Taxonomy, Phylogeny and Biogeography of Mushroom Corals (Scleractinia: Fungiidae). Zoologische Verhandelingen, 254: 295 pages.

International Code of Zoological Nomenclature

- 1985. W.D. Ride, Chairman of Editorial committee, International Code of Zoological Nomenclature, Third Edition, adopted by the XX General Assmbly of the International Union of Biological Sciences. xx + 338 pages. London: International Trust for Zoological Nomenclature.
- Opresko, D.M.
 - 1982. List of Coelenterate Types at the Museum of Comparative Zoology, Harvard. 23 manuscript pages. [Unpublished manuscript in files of Stephen D. Cairns, Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution.]

Rathbun, R.

1887. Catalogue of the Species of Corals Belonging to the Genus Madrepora, Contained in the United States National Museum. Proceedings of the United States National Museum, 10:10-19.

Squires, D.F.

- 1965b. Neoplasm in a Coral? Science, 148:503-505.
- Umbgrove, J.H.F.
- 1950. Corals from the Putjangan Beds (Lower Pleistocene) of Java. Journal of Paleontology, 24(6):637-651.

Vaughan, T.W.

1915. Corals from the "Silex Bed" of the Tampa Formation. In: W.H. Dall, Monograph of the Molluscan Fauna of the Orthaulax pugnax Zone of the Oligocene of Tampa Florida. Bulletin of the United States National Museum, 90:18.

Veron, J.E.N., and G.Hodgson

- Annotated Checklist of the Hermatypic Corals of the Philippines. Pacific Science, 43(3):233-287.
- Veron, J.E.N., and L.M. Marsh
- 1988. Hermatypic Corals of Western Australia. Records of the Western Australian Museum, Supplement Number 29: 136 pages.

Veron, J.E.N., and M. Pichon

- 1976. Scleractinia of Eastern Australia, Part 1. Australian Institute of Marine Science Monograph Series, 1: 86 pages.
- 1982. Scleractinia of Eastern Australia, Part 4. Australian Institute of Marine Science Monograph Series, 5: 159 pages.

Veron, J.E.N., M. Pichon, and M. Wijsman-Best

1977. Scleractinia of Eastern Australia, Part 2. Australian Institute of

Marine Science Monograph Series, 3: 233 pages.

Veron, J.E.N., and C.C. Wallace

1984. Scleractinia of Eastern Australia, Part 5. Australian Institute of Marine Science Monograph Series, 6: 485 pages.

Vervoort, W., and H. Zibrowius

1981. Annotations on H. Boschma's Work on Hydrocorals, with Additions to His List of the Described Species of Stylasetrina. Zoologische Verhandelingen, 181: 40 pages.

Wallace, C.C.

1978. The Coral Genus Acropora in the Central and Southern Great Barrier Reef Province. Memoirs of the Queensland Museum, 18(2): 273-319.

Wells, J.W.

- 1937. Five New Genera of the Madreporaria. Bulletins of American Paleontology, 79:242-250.
- 1952. Primary Types of Post-Paleozoic Corals in the United States National Museum. 31 manuscript pages. [Unpublished manuscript in files of Stephen D. Cairns, Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution.]
- 1956. Scleractinia. In R.C. Moore, editor, Treatise of Invertebrate Paleontology, Part F: Coelenterata, F328-444. New York: Geological Society of America.

Wijsman-Best, M.

- 1972. Systematics and Ecology of New Caledonian Faviinae. Bijdragen tot de Dierkunde, Amsterdam, 42(1): 95 pages.
- 1977. Indo-Pacific Coral Species Belonging to the Subfamily Montastreinae Vaughan and Wells, 1943, Part 1: The Genera Montastrea and Plesiastrea. Zoologische Mededelingen, 52(7):81-97.
- 1980. Indo-Pacific Coral Species Belonging to the Subfamily Montastreinae Vaughan and Wells, 1943, Part 2: The Genera Cyphastrea, Leptastrea, Echinopora and Diploastrea. Zoologische Mededelingen, 55(21):235-263.

Zibrowius, H.

1973. Revision des espèces actuelles du genre Enallopsammia Michelotti, 1871, et description de E. marenzelleri, nouvelle espèce bathyale à large distribution: océan Indien et Atlantique central. Beaufortia, 21(276):37-54.

Zlatarski, V.N.

- 1982. Les Scléractiniaires de Cuba. 472 pages. Sofia: Académie Bulgare des Sciences. [French edition cited; original Russian edition published in 1980].
- 1988. List of Original Publications Including Types of Mesozoic Scleractinia at the U.S. National Museum of Natural History, Smithsonian Institution. Fossil Cnidaria, 17(2):40-42.

REQUIREMENTS FOR SMITHSONIAN SERIES PUBLICATION

Manuscripts intended for series publication receive substantive review (conducted by their originating Smithsonian museums or offices) and are submitted to the Smithsonian Institution Press with Form SI-36, which must show the approval of the appropriate authority designated by the sponsoring organizational unit. Requests for special treatment—use of color, foldouts, case-bound covers, etc.—require, on the same form, the added approval of the sponsoring authority.

Review of manuscripts and art by the Press for requirements of series format and style, completeness and clarity of copy, and arrangement of all material, as outlined below, will govern, within the judgment of the Press, acceptance or rejection of manuscripts and art.

Copy must be prepared on typewriter or word processor, double-spaced, on one side of standard white bond paper (not erasable), with $1\frac{14}{7}$ margins, submitted as ribbon copy (not carbon or xerox), in loose sheets (not stapled or bound), and accompanied by original art. Minimum acceptable length is 30 pages.

Front matter (preceding the text) should include: title page with only title and author and no other information, **abstract** page with author, title, series, etc., following the established format; table of **contents** with indents reflecting the hierarchy of heads in the paper; also, **foreword** and/or **preface**, if appropriate.

First page of text should carry the title and author at the top of the page; **second page** should have only the author's name and professional mailing address, to be used as an unnumbered footnote on the first page of printed text.

Center heads of whatever level should be typed with initial caps of major words, with extra space above and below the head, but no other preparation (such as all caps or underline, except for the underline necessary for generic and specific epithets). Run-in paragraph heads should use period/dashes or colons as necessary.

Tabulations within text (lists of data, often in parallel columns) can be typed on the text page where they occur, but they should not contain rules or numbered table captions.

Formal tables (numbered, with captions, boxheads, stubs, rules) should be submitted as carefully typed, double-spaced copy separate from the text; they will be typeset unless otherwise requested. If camera-copy use is anticipated, do not draw rules on manuscript copy.

Taxonomic keys in natural history papers should use the aligned-couplet form for zoology and may use the multi-level indent form for botany. If cross referencing is required between key and text, do not include page references within the key, but number the keyed-out taxa, using the same numbers with their corresponding heads in the text.

Synonymy in zoology must use the short form (taxon, author, year:page), with full reference at the end of the paper under "Literature Cited." For botany, the long form (taxon, author, abbreviated journal or book title, volume, page, year, with no reference in "Literature Cited") is optional.

Text-reference system (author, year:page used within the text, with full citation in "Literature Cited" at the end of the text) must be used in place of bibliographic footnotes in all Contributions Series and is strongly recommended in the Studies Series: "(Jones, 1910:122)" or "... Jones (1910:122)." If bibliographic

footnotes are required, use the short form (author, brief title, page) with the full citation in the bibliography.

Footnotes, when few in number, whether annotative or bibliographic, should be typed on separate sheets and inserted immediately after the text pages on which the references occur. Extensive notes must be gathered together and placed at the end of the text in a notes section.

Bibliography, depending upon use, is termed "Literature Cited," "References," or "Bibliography." Spell out titles of books, articles, journals, and monographic series. For book and article titles use sentence-style capitalization according to the rules of the language employed (exception: capitalize all major words in English). For journal and series titles, capitalize the initial word and all subsequent words except articles, conjunctions, and prepositions. Transliterate languages that use a non-Roman alphabet according to the Library of Congress system. Underline (for italics) titles of journals and series and titles of books that are not part of a series. Use the parentheses/colon system for volume (number): pagination: "10(2):5–9." For alignment and arrangement of elements, follow the format of recent publications in the series for which the manuscript is intended. Guidelines for preparing bibliography may be secured from Series Section, SI Press.

Legends for illustrations must be submitted at the end of the manuscript, with as many legends typed, double-spaced, to a page as convenient.

Illustrations must be submitted as original art (not copies) accompanying, but separate from, the manuscript. Guidelines for preparing art may be secured from Series Section, SI Press. All types of illustrations (photographs, line drawings, maps, etc.) may be intermixed throughout the printed text. They should be termed **Figures** and should be numbered consecutively as they will appear in the monograph. If several illustrations are treated as components of a single composite figure, they should be designated by lowercase italic letters on the illustration; also, in the legend and in text references the italic letters (underlined in copy) should be used: "Figure 9b." Illustrations that are intended to follow the printed text may be termed **Plates**, and any components should be similarly lettered and referenced: "Plate 9b." Keys to any symbols within an illustration should appear on the art rather than in the legend.

Some points of style: Do not use periods after such abbreviations as "mm, ft, USNM, NNE." Spell out numbers "one" through "nine" in expository text, but use digits in all other cases if possible. Use of the metric system of measurement is preferable; where use of the English system is unavoidable, supply metric equivalents in parentheses. Use the decimal system for precise measurements and relationships, common fractions for approximations. Use day/month/year sequence for dates: "9 April 1976." For months in tabular listings or data sections, use three-letter abbreviations with no periods: "Jan, Mar, Jun," etc. Omit space between initials of a personal name: "J.B. Jones."

Arrange and paginate sequentially every sheet of manuscript in the following order: (1) title page. (2) abstract, (3) contents, (4) foreword and/or preface, (5) text, (6) appendixes, (7) notes section, (8) glossary, (9) bibliography. (10) legends, (11) tables. Index copy may be submitted at page proof stage, but plans for an index should be indicated when manuscript is submitted.

