

BIBLIOGRAPHY AND INDEX
OF THE
SIRENIA AND DESMOSTYLIA

by

Daryl Paul Domning

Research Associate, Department of Paleobiology, National Museum of Natural History,
Smithsonian Institution, Washington, D.C. 20560

and

Professor of Anatomy, Laboratory of Evolutionary Biology, Department of Anatomy,
College of Medicine, Howard University, Washington, D.C. 20059

Database Programming and User Interface

by

Michael Bragg

[Compendium Software Systems, LLC](#)

TO THE GREATER GLORY OF GOD
and
TO THE SERVICE OF THOSE
WHO WILL BUILD ON THIS FOUNDATION

Contents

Abstract

Introduction

Aim and Content of the Bibliography

Format of the Bibliography

Design and Use of the Index

Comments on Information Retrieval Methods

Acknowledgements

Some Abbreviations and Symbols Used

List of Errata for the 1996 Printed Version of the Bibliography

Previous Releases

Appendices 1-6:

1. Serial Publications Devoted to Sirenia
2. Some Additional Sources for the History of Sirenology and Sirenian Conservation
3. Coins and Postage Stamps Depicting Sirenians
4. Classification and Synonymy of the Sirenia and Desmostylia
5. Summary of the Nomenclature of the Recent Species of Sirenians
6. Alphabetical List of Species-Group Names of Sirenians and Desmostylians

ABSTRACT

The significant published literature on the neobiology, paleobiology, and ethnobiology of the mammalian orders Sirenia and Desmostylia is exhaustively cataloged in over 5,300 main entries alphabetized by author. Both technical and popular works are included, and many entries are annotated. The earliest work cited is a letter by N. Syllacio published in 1494 or 1495, describing Columbus's second voyage to the New World.

Six appendices list serial publications devoted to Sirenia, additional sources for history of sirenology and sirenian conservation, coins and postage stamps depicting sirenians, a comprehensive classification and synonymy of sirenians and desmostylians, a summary of the nomenclature of the Recent species of sirenians, and an alphabetical list of the species-group names that have been applied to sirenians and desmostylians.

An extensive index is provided, employing over 1,000 subject headings and cross references; the subject headings include all Linnaean names and combinations ever employed for sirenians and desmostylians, as well as names of all reported sirenian food plants and parasites. Some 40% of the main entries are fully indexed, and many others are partially indexed, yielding a total of over 14,000 index entries. Each complete index entry includes author and date of the work cited, a brief annotation describing the content of the work as it pertains to the indexed subject, and a page reference in that work for the material pertaining to that subject.

PREFACE

What can human beings learn about a particular sort of animal, given five hundred years in which to study it? Sea cows, though long familiar to other large segments of the human race, did not enter the consciousness of Europeans until the time of Columbus. Perhaps the question is not entirely fair, since most of the ensuing centuries have been precisely those in which we were first learning how to learn about nature effectively. If we are granted another half-millennium, our performance will surely eclipse that of our apprenticeship. Furthermore, the wonders revealed by the Age of Discovery were such that shy and homely creatures of distant seas could not expect to rank high on the agenda of investigation.

For these reasons the study of sirenians, like that of other strange new beasts of the tropics, emerged but slowly from the mists of legend and anecdote. The last of the living species regarded today as taxonomically distinct was not recognized until the 1830s, about the time that the fossil record of the order was starting to be uncovered. Some physiological experiments were reported in the 1940s; careful observations of free-ranging wild sirenians began only in the 1950s; controlled experiments on behavior not until the 1970s. Desmostylians were discovered in 1876, but not generally recognized as a distinct order until 1953.

Even today, knowledge of the Sirenia lags behind that of many more diverse but more familiar, accessible, or economically important orders of mammals. This is only natural. But it would be

wide of the mark to imagine, as those newly acquainted with this group sometimes do, that our information about it is, on some absolute scale, scanty. I discovered this for myself when, in 1967, I naively began to compile an "exhaustive bibliography" of the Sirenia and Desmostylia. Like Joseph Sabin at the start of his incomparably greater task of cataloging the printed works dealing with America (*Bibliotheca Americana*, Vol. 1, 1868), had I imagined the eventual scope of the project, I would probably never have attempted it. So it is, I suppose, with all the larger goals we set ourselves; among our greatest blessings is ignorance of the future. Hence the present work.

AIM AND CONTENT OF THE BIBLIOGRAPHY

This work is intended to be, as nearly as possible, an exhaustive bibliography of the significant publications dealing with the mammalian orders Sirenia and Desmostylia. Its compilation was begun at Tulane University in January of 1967, and continues at this writing. Even aside from the daily growth of the literature, true completeness in a work of this scope can only be approached asymptotically. It now contains well over 5,300 main entries. Of equal importance with its comprehensiveness, it is both annotated and indexed, for without this apparatus its size would render it almost useless.

My aim has been to cover all aspects of the paleobiology, neobiology, and ethnobiology of sirenians and desmostylians - in short, to embrace all published material dealing with these orders that might conceivably be of use in any sort of biological research. The extinct Desmostylia are justifiably included because they were long regarded as sirenians, are closely related to sirenians, and shared with sirenians the distinction of being the only herbivorous marine mammals. One noteworthy "ethnobiological" topic, however, has been almost ignored: the vast literature on mermaids, whose connection with sirenians is questionable at best and whose interest to zoology is in any case nil.

I have included parasitological literature that reports or discusses actual occurrences of parasites in sirenians, but have tried to avoid works that only discuss the taxonomy or biology of the parasites themselves, on the grounds that this is a bibliography of the sirenians and not of the species that parasitize them. The same principle applies to their food plants.

Articles in popular magazines as well as in technical journals are included. However, newspapers, textbooks, encyclopedias, Grassé's *Traité de Zoologie*, and other general reference works have for the most part been omitted. This rule has been applied more strictly to the more recent literature; hence I have included many such secondary sources and works of a general nature published prior to the mid-19th century.

Likewise omitted are newsletters of many governmental and nongovernmental organizations and private companies, notices in the *United States Federal Register*, unpublished theses and dissertations, and other forms of "gray literature" such as in-house and contract reports, unless these latter are available through the U.S. National Technical Information Service (NTIS). Newsletters specifically devoted to sirenians are listed in **Appendix 1**, but their contents are in most cases not

listed in the Bibliography. Also omitted, but of potential historical interest, are some sources listed in **Appendix 2**. To these might be added a host of leaflets, brochures, posters, and other ephemera dealing with sirenians, which I have endeavored to collect over the years but have not attempted to catalog. (The U.S. Geological Survey's Sirenia Project, headquartered in Gainesville, Florida, also possesses an outstanding collection of such material, especially items pertaining to Florida.)

Having excluded the above, I must add that even many of the references that remain might better have been omitted. The Bibliography as it stands embraces much that is repetitious and trivial - partly because I preferred to err on the side of inclusiveness, especially when citing works I had not seen; but largely because the time needed to weed out the truly worthless could better be spent on other things. I hope and suspect that the bulk of the chaff lies among those items not yet indexed (see below), where it will waste a minimum of the user's time. A still better argument for inclusiveness, however, is that even trivial items are sometimes cited in other works, and it will be useful to the reader to find their true nature and content clarified to some degree here - perhaps forestalling a tedious search in a library.

Regarding those miniature substitutes for scholarly publication known as abstracts, they are a perennial, and usually unmitigated, bibliographical nuisance, and I for one would much prefer they did not exist. Decisions about how to treat them in a work such as this (whether to deem them "published" or not; whether to list them separately from the properly published works which they sometimes summarize but frequently precede; how to list them when they are summaries of one author's work written and signed by another author, or when they differ in authorship from the main work; etc.) are almost impossible to make and apply consistently. Whoever is annoyed by my lack of consistency will, I hope, resolve not to burden future bibliographers with any more such writings than can be avoided.

One area in which this work may prove less helpful than the user might wish is that of the pre-19th and especially pre-18th century literature. Though I think I have been adequately inclusive for that period, I would like to have spent more time on the annotations for those works, in order to provide clearer guidance respecting their many and various editions and to give more detailed and critical summaries of their sirenological contents. Not having found time to do this in the course of over forty years, however, I thought it best not to delay the promulgation of this database further on this account and to put the greater effort into analyzing the more modern literature, which is of interest to the greater number of readers.

I gladly acknowledge my debt to a long line of other compilers of sirenian bibliographies, beginning with the admirable work of Joel Asaph Allen (1882), who set a standard of descriptive bibliography that I have not attempted to match. I have greatly shortened and simplified his citations, in order to maintain throughout the present work a relatively uniform style which nonetheless should suffice for the purposes of biological (as opposed to bibliographical) research. I refer the reader to Allen's work for further collational and other information on the items he lists, which I have identified as such in the annotations given here.

All compilations of sirenian literature subsequent to Allen's (for a list of which see the Index under Bibliographies of the Sirenia) I have tried to supersede by the present one, though I have omitted some items from those collections in accordance with the criteria outlined above. In addition to those published bibliographies, I have also had the benefit of some manuscript sources: "An annotated bibliography of the helminth parasites of the Sirenia" by David Blair, and "An annotated bibliography of the Antillean manatee, *Trichechus manatus manatus*" by Antonio A. Mignucci-Giannoni. Also consulted were the specialized collections of sirenian literature at the U.S. Geological Survey's Sirenia Project (Gainesville, Florida) and in the laboratory of Dr. Helene Marsh (James Cook University, Townsville, Australia). I particularly thank these colleagues for giving me access to their materials.

FORMAT OF THE BIBLIOGRAPHY

The **main entries** are hopefully self-explanatory in most respects, but it is necessary to understand the following points in order to use the Bibliography most efficiently.

Many of the works listed here I have not seen, and many that I have seen I have not indexed, or have indexed only partially and provisionally. (The latter are represented in the Index by obviously incomplete citations.) Works that are as fully indexed and fully annotated as I intend to make them are marked by an "x" at the left-hand margin in both Bibliography and Index, or by an "n" in the Bibliography. **N.B.:** Only the citations so marked should be relied upon for completeness and accuracy. Though I have tried to make all citations as accurate as possible (but have included even very fragmentary ones for the sake of completeness), I do not vouch for the correctness of any entry not marked as verified. In addition, I have marked with a question mark any information in the main entries or annotations of verified items of which I am unsure. This includes the citations of reviews and abstracts of major works, many of which I have taken from A. S. Romer et al., "Bibliography of Fossil Vertebrates Exclusive of North America, 1509-1927", *Mem. Geol. Soc. Amer.* 87 (2 vols.), 1962. Such of these citations as I have not personally verified are followed by a question mark, though they are probably quite reliable.

I have attempted to transcribe the **titles** of works as fully and accurately as possible, but note that my transcriptions are of the titles alone and not the title-pages. In other words, material appearing on the title-page other than the title itself is not included or not necessarily transcribed exactly as it appears (e.g., name and titles of the author; mottoes; listings of illustrative material; address of the publisher; etc.). Names of the **places of publication** are generally given in their modern English forms, however they may appear on the title-page (e.g., "Leiden" rather than "Lugduni Batavorum").

In **citations** of periodical articles, except where otherwise stated, the numbers following the name of the periodical signify (series)volume(number)(whole number or article number, if any): pages. These are followed by the numbers of included tables, figures (= text-figures), plates, portraits, and/or maps. The **date** following the citation is either the nominal date of publication as stated in the work itself, or the actual date of publication where this can be determined (or both),

unless otherwise noted. The **abbreviations of serial titles** are fairly standardized and will hopefully be readily understood, so readers should not often have to consult works like the *Union List of Serials* or the *Bibliography of Fossil Vertebrates* to decipher them. If you have to do this only to satisfy journal editors, some of whom now insist that serial titles be written out in full, then please blame them for the inconvenience and not me!

The **annotations** generally present information in the following sequence, where applicable: Number assigned to the work in the bibliography of Allen (1882); language of the work and any summaries in other languages that are included (where not stated, the language of the work is the same as the language of the title); information on other editions and translations; brief citations of extracts, notices, separately published abstracts, reviews, and reprintings of the work (where the year of publication of any of these is not stated, it is the same as that of the main entry); any other information of a bibliographical or historical sort pertaining to the work; summary of the contents or major conclusions as they pertain to sirenians or desmostylians, together with critical comments. I have generally restricted the latter to comments that would steer the reader to related works or away from objective pitfalls of interpretation; purely subjective evaluations of quality or accuracy have been kept to a minimum.

In the cases of some works I have not seen, I have taken brief annotations as well as citations from other sirenian bibliographies. Since these have sometimes appeared verbatim in more than one other compilation (in most cases those of Husar and of Marsh, Channells and Morrissey), I have generally not bothered to indicate the source(s) from which I obtained each of them. Instead I repeat here my thanks to them all for making my own work much easier and, indeed, possible.

Where a book has appeared in multiple **editions**, I do not guarantee that I have listed them all, and I have usually not attempted to. Instead I have, in general, listed those that I happened to become aware of, unless they are excessively numerous, and paid special attention to different editions only when I was aware of differences in the sirenian-related material contained. For the rest (and for more nearly complete transcriptions of title-pages and descriptions of formats and collations), I refer the reader to library catalogs and the standard works of reference, with the reminder that this work is primarily intended as an aid to biological rather than bibliographical research. The information I have provided should certainly be adequate for citing books in any of the styles presently used in scientific literature.

Where **Linnaean names** other than those in current use (see Appendices 4 and 5) appear in the annotations, it is because those are the names used in the work being described; I have frequently not attempted to "correct" the author's nomenclature, but neither have I consistently refrained from doing so. (Consistency of any sort is no easy thing to maintain over the course of a labor spanning more than four decades!) However, in annotations of Index entries pertaining to Recent species, I have generally used the modern designations of the species in order to facilitate rapid scanning and to avoid annoying the reader with obsolete synonyms when this would serve no useful purpose.

DESIGN AND USE OF THE INDEX

From the outset, I envisioned the Index as an absolutely essential (and the most original) aspect of this work, as it was obvious that without a highly detailed analytical apparatus the Bibliography would be rendered nearly useless by its own size and comprehensiveness - features that ought to be assets rather than liabilities. My goal was to create an index of the entire corpus of literature that would be practically as detailed as the index of a single book, including page references. Furthermore, because many subject headings have large numbers of entries, it was desirable to give each Index entry a brief annotation of its own to aid the reader in choosing among them. This goal has been only partially achieved; but the advent of the searchable electronic database will compensate for the deficiencies at least in part.

In constructing the Index, I have tried to adhere to the following rules, though I am sure that inconsistencies have crept in over the many years during which this project has been a part-time occupation.

1. Systematics.

A. Generic and specific names of sirenians or desmostylians given in a work are indexed except where only mentioned by way of general orientation (e.g., when an article begins with a brief synopsis of the living species and where they occur).

B. When only a generic name is given in a particular passage, but the author considers that genus to include only a single species whose name is given elsewhere in the same work, that passage too is indexed under that specific name.

C. When generic and specific names are not explicitly given in a work, the material is indexed under the narrowest deducible taxon (e.g., statements concerning "the dugong" are indexed under *Dugong dugon*; those concerning "manatees" or "the manatee" are under *Trichechus*; but those concerning "the manatee in Florida" are under *Trichechus manatus latirostris*).

D. Higher-category names are indexed (if at all) when they are given as part of a suggested classification scheme, or when the group as a whole is explicitly treated as such.

E. Names of food plants and parasites of sirenians are indexed as given in the work.

F. Names used by an author in direct or indirect quotations from other works are not indexed.

2. Geographic Occurrence.

A. Fossil occurrences are indexed under state, country, or region when reported for the first time or when treated at considerable length. Usually only those pages of a work where the geographic location itself is discussed are cited in the Index.

B. Recent occurrences are indexed under state, country, or region when discussed at length or (if the locality is highly unusual) whenever mentioned. Usually only those pages of a work where the geographic location itself is discussed are cited in the Index.

C. Localities of food plants and parasites are usually indexed when reported for the first time or when treated at considerable length.

D. Localities only mentioned in direct or indirect quotations from other works are not indexed.

3. Geologic Age.

A. Fossil occurrences are indexed under geological epoch when reported for the first time or when treated at considerable length, and when their age is explicitly stated or is determinable. They are indexed under the epoch to which they are assigned in the work, even if this has proven to be erroneous. Usually only those pages of a work where the age is discussed are cited in the Index.

B. Chronostratigraphic occurrences mentioned in direct or indirect quotations from other works are not indexed.

4. Other Subjects.

A. Subjects other than those above are indexed when significant information is provided.

B. Subjects mentioned in direct or indirect quotations from other works are not indexed or are indexed only under general topics.

An obstacle to retrieving information on particular species is the great number of **synonyms** that have been used for many of them in the past. As stated in Rule 1A above, I have indexed all material under the Linnaean name actually used by the author. Therefore, citations pertaining to *Trichechus manatus*, for example, are scattered under some 20 different subject headings. Uniting them all under a single heading, which would be desirable for many purposes, did not seem advisable because many synonymies are subjective and hence liable to revision, especially in the case of fossil forms. To aid the user I have instead included, as **Appendix 4**, a complete classification and synonymy of the Sirenia and Desmostylia (reflecting, of course, my own current

views on their proper nomenclature and arrangement). This appendix lists, under each of the names presently in use, all the other names and combinations under which that species is cited in the Index.

As a short cut around this problem, however, the user interested in the Recent Sirenia should realize that the majority of synonyms of these species were hardly ever used. Indeed, if just the following three synonymies are kept in mind, the Index can be used efficiently for nearly all purposes without reference to Appendix 4 and with no significant loss of information. The names used in much of the older literature for the three Recent genera - indeed, the only synonyms ever used for them to any important extent - were *Manatus* for *Trichechus*; *Halicore* for *Dugong*; and *Rytina* (or *Rhytina*) for *Hydrodamalis*. These rules of thumb, together with the indications of synonymy given in the Index headings themselves, should make the Index simpler to use than may at first appear. Finally, **Appendix 5** provides a convenient list (unencumbered by synonyms) of the correct scientific names now used for the living species of sirenians, and **Appendix 6** is a finding index showing all the generic names with which a given specific or subspecific name has been combined in the sirenian-desmostylian literature.

If the user is seeking lists and synonymies of the various **vernacular or informal names** of sirenians that appeared in the earlier literature, extensive compilations of these can be found in the more comprehensive 18th- and 19th-century works such as those of Erxleben (1777), G. Cuvier (1809), Blainville (1844), J. F. Brandt (1846c, 1868a), and J. E. Gray (1866). For non-European vernacular names, see the Index under Vernacular Names.

COMMENTS ON INFORMATION RETRIEVAL METHODS

This work was originally put into computerized form using the Notebook II database program (Pro/Tem Software, Inc., Stanford, Calif.), and later migrated to Citation Version 8 (Oberon/askSam Systems, Columbus, Ohio). However, I designed it long before the advent of personal computers, and with the intention that it would be disseminated and used purely in printed form. Although the use of a computer to convert my handwritten index cards into the 1996 hard-copy publication yielded an electronic database as a byproduct, the work's format still reflects my original intent. Specifically, and in contrast to most other computerized bibliographies, there is nothing here that corresponds to "key-words"; the Index has not been generated by the computer, but rather has been constructed entirely by hand, as a glance at the annotations will show. Though demanding great labor from the bibliographer, this approach has the very important advantage to the user that most of the computer searches that might be desired (including many Boolean combinations) have, in effect, already been "done" and the results printed out in the Index. Thus the user who lacks ready access to a computer can retrieve from the printed copy most of the more commonly desired sorts of information, and do so about as efficiently as could be done with a computer, simply by visually scanning the Index.

Having put myself to the trouble of constructing in this manner an index (still obviously far from complete) of a comparatively small body of literature (roughly 5,000 titles), I have several

observations to offer on the implications of this work for future developments in information retrieval:

1. A hand-made index of this level of detail is not really practical for a corpus of literature even as small as the present one, and would require tremendous amounts of time and dedication even for a bibliography of only a few hundred titles. Therefore I do not recommend this work as a pattern for most others to follow.

2. Only you, the user, will be able to decide whether the result has been worth the trouble, in terms of the rapidity with which you can locate the information you want and avoid searching out in a library works you do not want. On the other hand, however, the existence of such a detailed index of at least one body of scientific literature provides precisely the opportunity to determine whether this degree of indexing (however achieved) is worth the trouble. In other words, it sets a benchmark (approaching a theoretically "maximal" depth of indexing, though short of the detail of a concordance) for comparison with other retrieval systems. It shows what can be accomplished, given sufficient investment of labor, and poses the question: Is this level of detail needed, or desirable?

3. If it is judged desirable, or desirable up to a point, then the challenge will be to attain this level of detail by more efficient (i.e., automated) means. Barring presently unanticipated advances in artificial intelligence, however, this will not be easy. Key-word systems come close to doing the job only for the most recent technical literature, narrowly focused, accurately titled, and packaged in standardized formats. How much highly trained human labor would be needed to corral the exuberant chaos of writings left by earlier naturalists, and to reduce it to a comparable system, with or without the aid of computers – that, I invite you to judge for yourself by browsing through the pages that follow.

ACKNOWLEDGEMENTS

It would be impossible to acknowledge all my friends and colleagues who have contributed references or other forms of aid to this project. If bibliography itself is a thankless pursuit, assistance rendered to it seems to be still more so, though I would wish it otherwise. But some names cannot be omitted.

S. David Webb unknowingly set me on the path to this project when he taught me that one cannot claim to be a specialist in a field without thoroughly knowing its literature. Joseph A. Ewan gave the project its earliest material help, guidance, and encouragement, and, with his wife and collaborator Nesta, set an unforgettable example of scholarly dedication. Clayton E. Ray, while admirably filling the roles of mentor, colleague, and collaborator over many years, has also provided an example of persistent attention to detail that has often inspired or shamed me into rekindling my flagging energies.

László Kordos gave valuable assistance with the Hungarian literature, and Jean Smith helped with the references on Georges Cuvier. Galen Rathbun, Thomas O'Shea, Lynn Lefebvre (U.S. Geological Survey Sirenia Project), and Helene Marsh made available to me their libraries of sirenian literature, and librarians at many institutions helped me as greatly as they do countless others. Of particular value to me have been the libraries of institutions with which I have been affiliated during the course of this project: Tulane University; the University of California at Berkeley; the Instituto Nacional de Pesquisas da Amazônia in Manaus, Brazil; and the Smithsonian Institution (including its Remington Kellogg Library of Marine Mammalogy). At the Smithsonian, David Bohaska brought to my attention many references I would otherwise have missed.

Victor B. Scheffer, Noel D. Vietmeyer, and Paul K. Anderson generously bestowed on me their extensive personal collections of sirenian literature. My parents, Maud M. and Emile F. Domning, gave a lifetime of moral and material support, including purchase of the software for the original computerization of this work. Raymond L. Bernor gave crucial help in obtaining the necessary computer hardware. The Atherton Seidell Endowment of the Smithsonian Institution provided generous grant support to aid in the computerization of the Index. Here Clayton Ray's enthusiasm for the project was once again indispensable, in obtaining this support and in smoothing the project's path to completion. He and James G. Mead also reviewed the hard-copy manuscript for its 1996 publication.

Publication costs of that edition were defrayed by generous subsidies for which I thank the Smithsonian's Office of the Director, the Remington and Marguerite Kellogg Fund, and the Department of Paleobiology (chair, William A. DiMichele), National Museum of Natural History; the U.S. Marine Mammal Commission and its Executive Director, John R. Twiss, Jr.; the Save the Manatee Club and its Executive Director, Judith Delaney Vallee; the U.S. National Biological (now Geological) Survey Sirenia Project and its director, Lynn W. Lefebvre; and the Florida Department of Environmental Protection and its Environmental Administrator Patrick M. Rose.

Over the last half-decade of preparing the print edition, which called for the most intensive and sustained output of labor, my wife Kathy Hubbell cheered and sustained me with her encouragement and unwavering enthusiasm despite the many hours of my time that this work demanded. My sincere thanks to her and all the others, mentioned and unmentioned here, who have helped.

Following the 1996 publication, it was my intention to make the electronic database available on-line as soon as possible. This, however, required computer programming skills I do not possess; and my desultory search for a willing and able collaborator dragged on for more than a decade. Meanwhile, the Smithsonian helpfully made the printed version available on-line in both plain-text and PDF form, though this still fell short of a database that was both searchable and updated. In the end it was Caryn Self-Sullivan of Sirenian International, Inc., who rescued me from my predicament by putting me in touch with Michael Bragg. This extraordinarily generous volunteer lent his formidable databasing skills to creating an attractive user interface and putting my content into a form readily accessible to an on-line public. To them both, and especially to Michael for his

countless hours of labor at this task, I owe my profound gratitude. My thanks also to Sirenian International, Inc., for additional funding, and to Hosting.com for hosting the website.

Finally, I thank in advance the users of this work who call to my attention the many errors and omissions that doubtless remain, and thereby help to improve it.

D.P.D.

Washington, D.C.
March 2010

SOME ABBREVIATIONS AND SYMBOLS USED

(used in left-hand margins)

- x Entry verified, fully indexed, and in final form
- n Entry verified and in final form but not indexed (used only in Bibliography)
- D Entry contains material on Desmostylia
- v Taxon referred to only under a vernacular name, or otherwise than by the Linnaean name under which the entry is listed (used only in Index)
- * Reference of particular interest or importance with regard to the subject in question (used only in Index)

(used in annotations)

- DD *Dugong dugon*
- HG *Hydrodamalis gigas*
- TI *Trichechus inunguis*
- TM *Trichechus manatus*
- TML *Trichechus manatus latirostris*
- TMM *Trichechus manatus manatus*
- TS *Trichechus senegalensis*
- abstr(s). abstract(s)
- capt. captivity
- comp. w/ compared with; when not otherwise stated, the comparison is usually with regard to osteology
- distr. distribution
- econ. use economic use

ed(s).	edition(s); editor(s)
Engl.	English
Eoc.	Eocene
gen. acc.	general account; contains no original data
m (before page number)	mention; i.e, only passing mention is made of the topic, so that the reader's examination of the reference would not be justified in most cases
Mioc.	Miocene
n.comb.	new combination
n.fam.	new family
n.gen.	new genus
n.sp.	new species
n.subsp.	new subspecies
NTIS	National Technical Information Service (U.S. Dept. of Commerce, Springfield, Va. 22151)
Olig.	Oligocene
Pleist.	Pleistocene
Plioc.	Pliocene
pop. acc.	popular account; written on a less formal level than "gen. acc."
publ.	published
Rec.	Recent
repr(s).	reprinting(s), reprinted
rev(s).	review(s)

sir(s).	sirenian(s)
summ.	summary(ies)
syn.	junior synonym
transl.	translation
{ }	enclosed quotation includes all sirenian-related information in the cited reference
{{ }}	enclosed quotation includes the entire content of the cited reference

LIST OF ERRATA
FOR THE 1996 PRINTED VERSION OF THE BIBLIOGRAPHY

P. iv: "FRONTISPIECE" is misspelled in the caption.

P. 321: In the annotation of the Stejneger 1883 reference, "Irkutsk" is misspelled.

P. 354: The Whitley 1970 reference was published by the Roy. Zool. Soc. New South Wales.

P. 461: The subject heading "Eocene" near the bottom of the right-hand column should be aligned with the preceding heading "Environmental Contaminants: SEE Pollution, Effects of" and separated from it by a blank line.

P. 581: In the Index entry for J. W. Clark, 1889, the annotation should read "(HG; skeleton at Cambridge, UK; 342.)"

Many other incomplete, wrongly dated, duplicated, or otherwise unsatisfactory entries in the 1996 Index and Bibliography have been expanded, corrected, or omitted here.

PREVIOUS RELEASES

On two previous occasions, this database has been made available to other workers. The present on-line version may be regarded as release 3.0.

Release 1.0: Released only in hard-copy form; published 25 July 1996 as "Bibliography and Index of the Sirenia and Desmostylia" by Daryl P. Domning, *Smithsonian Contributions to Paleobiology* No. 80, 1996. The effective closing date of this bibliography was 1 May 1994. In 2007 this version was made accessible on-line, in both PDF and plain-text modes, by the Smithsonian Library, together with the rest of the *Contributions* series. It can be found at:
http://www.sil.si.edu/SmithsonianContributions/Paleobiology/sc_RecordSingle.cfm?filename=SCtP-0080

Release 2.0: An experimental release of the original Notebook II electronic database files, limited to selected sirenian research centers; first distributed 3 March 1998. Its effective closing date was 31 December 1997.

Release 3.0: The present on-line version is being prepared for public roll-out at the end of March 2010; updating of its contents is continuing.