

ZOOLOGICAL NAMES

A List of Phyla, Classes, and Orders



Prepared for

Section F

American Association for the Advancement
of Science

Durham, North Carolina
Duke University Press

1936

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INTRODUCTION

American zoological writers who have published books or scientific papers during the past decade show little uniformity in their reference to larger groups of animals. Of course no zoologist wishes to be limited in the choice of names which seem to be most appropriate; no one wishes to have imposed on him terms which he is ordered to use; and none desires to have nomenclature become fixed and inflexible. Of all the rewards that Science gives to her retainers those most prized and enjoyed are independence and the right to change old dogmas as soon as the discovery of new truths makes them illogical. Yet because the species of animals now number several hundreds of thousands, the sorting of species into groups must necessarily be continually more accurate and critical. Furthermore, there are men who through ignorance, inertia, or bigotry take little or no cognizance of the progress of current scientific evidence and opinion. For example, certain writers of recent textbooks use such old terms as *Annulata* and *Amura* when the most thoughtful and competent students of annelids and amphibians agree that *Annelida* and *Salientia* are to be preferred. Dr. R. E. Snodgrass, who has recently studied the anatomy of onychophorans in detail, is convinced that these animals cannot be called arthropods because their muscular systems have quite different relations to nervous structures from those which obtain in arthropods. Dr. J. P. Moore does not believe that onychophorans may be included among annelids. There seems to be no alternative but to set off *Onychophora* as a group by itself.

Those who know animals and their classifications in detail perhaps may enjoy using various names for the same group and delight in thus displaying their technical knowledge, but a novice who refers to two or three textbooks and finds the same group called by two or three names is greatly confused. In an attempt to bring about greater uniformity and more careful selection in the use of zoological group names the writer was authorized to form an informal committee and to prepare a list of phyla, classes, and orders of animals which would represent current good usage. This action was taken by Section F of the American Association for the Advancement of Science at the Boston Meeting; December, 1933.

Since then many persons who appeared to be interested have been consulted. The following gave advice in connection with the groups mentioned:

Invertebrata: A. H. Clark, B. G. Chitwood, Roy Miner, L. E. Noland, H. S. Pratt, Waldo Schmitt, H. J. Van Cleave.

Protozoa: L. E. Noland, and forty-odd protozoologists to whom he sent a questionnaire.

Porifera: H. V. Wilson.

Cocenterata: Elizabeth Deichmann (except Zoantharia).

Aschelminthes: B. G. Chitwood, M. C. Hall.

Platyhelminthes: E. B. Price.

Cestoda: G. R. La Rue.

Nemertea: W. R. Coe.

Nemathelminthes: B. G. Chitwood, G. Steiner.

Acanthocephala: H. J. Van Cleave.

Bryozoa: R. S. Bassler, R. C. Osburn.

Echinodermata: A. H. Clark, H. L. Clark, E. Kirk.

Brachiopoda: G. A. Cooper.

Enteropneusta: W. E. Ritter.

Annelida: J. P. Moore, A. L. Treadwell.
 Arthropoda: H. E. Ewing, R. E. Snodgrass.
 Crustacea: E. A. Birge, Norma C. Furtos, H. A. Pilsbry, *Mary J. Rathbun*, Waldo Schmitt, J. P. Visscher, C. B. Wilson.
 Pycnogonida: *L. J. Cole*.
 Arachnida: *H. E. Ewing*.
 Insecta: C. L. Kennedy, *Z. P. Metcalf*, J. G. Needham, H. G. Barber, H. E. Ewing.
 Mollusca: *P. Bartsch*, H. Rehder.
 Chordata: C. W. Gilmore, W. K. Gregory.
 Tunicata: *W. E. Ritter*, W. G. Van Name.
 Pisces: W. K. Gregory, C. L. Hubbs, W. G. Myers.
 Amphibia: Helen T. Gaige, *G. K. Noble*.
 Reptilia: Helen T. Gaige, *G. K. Noble*.
 Aves: *A. Wetmore*.
 Mammalia: *L. R. Dice*, C. W. Gilmore, Remington Kellogg.

Those whose names appear in italics furnished essentially the terms that appear in the following pages. While the writer gladly acknowledges the obligation to those persons and appreciates greatly the work they did, they are not to be held responsible for the published list. The differences of opinion among zoologists in the United States were found to be so great that there was little hope of agreement and the editor finally did what seemed to him best.

Perhaps forty per cent of those consulted strongly urged the use of uniform endings for the larger groups of animals. The difficulty encountered in this connection was that protozoologists, helminthologists, conchologists, ornithologists, etc. had already moved more or less in the direction of uniformity and each group of specialists had a tendency to adopt a different system. After long consideration the editor has used the system in vogue among protozoologists and students of some other groups, as it seemed to be at present more generally in use than any other. The endings are as follows: Phylum and Subphylum, *-a*; Class, *-ea*; Subclass, *-ia*; Order, *-ida*; Suborder, *-ina*. In presenting this report to Section F it is not supposed that uniform endings shall be adopted as official, or even recommended. The zoological world had perhaps best be left to make its own choice. In the list the names in the first column represent what the editor after consultation believes to be best current usage; those in the second column are what a few zoologists would like to see used, but perhaps in presenting these the editor is "a hundred years ahead of his time." In any attempt to attain uniformity difficulties arise. For example, Dr. Steiner points out that two names suggested as suborders under Nematoda are objectionable because identical names already have good standing as genera in the same group (*Rhabditina* Cobb 1922, *Chromadorina* Filipjev 1926).

Another matter about which there is wide disagreement is whether there should be few or many groups—the old controversy between "lumpers" and "splitters." Shall there be ten or thirty phyla, or orders of insects? The position has been taken that it is more truthful, and therefore more scientific, to present many groups; otherwise it is necessary to compromise to the extent of grouping things together which have remote or insignificant relationships. To the objection that students cannot be expected to master such a long list of technical jargon there is only one answer. It is better to tell students part of the truth frankly than to falsely affirm that they are learning a complete and simple story. Biology is not always simple and clear. It therefore seems proper to say to a student in an elementary course, "of the thirty-odd phyla of animals, or orders of insects, only ten or a dozen which are of particular biological significance to you will be studied," rather than, "for convenience and simplicity all animals, or all insects, are presented under ten phyla, or orders, which may be easily remembered." Science is truth.

Classification must be expected to grow more complex as knowledge increases and becomes more critical.

In most groups the authors names and the dates following correctly indicate when a particular scientific name was given to a group, but these should be used with caution for in cases where no specialist could be found to furnish accurate information (birds, fishes, etc.), the editor browsed through systematic works and found such information, some of which later proved to be incorrect. For example, some references credited to Lamarck by various writers are for vernacular names which should have no scientific standing as scientific names. The following groups have been carefully corrected by specialists and are believed to be reliable for authors and dates: Protozoa, Porifera, Coelenterata (except Zoantaria), Platyhelminthes, Nemertea, Acanthocephala, Nematoda, Bryozoa, Brachiopoda, Echinodermata, Annelida, Arachnida, Crustacea, Insecta, Tunicata, Amphibia, Reptilia, and Mammalia; other groups may not be.

A. S. PEARSE, Editor.

Duke University,

June 1, 1936.

A List of Phyla, Classes, and Orders

Extinct groups are indicated by an asterisk (*).

Kingdom Animalia Linnaeus 1758.....	Animalia
Subkingdom Protozoa Goldfuss 1820.....	Protozoa
Phylum Protozoa Goldfuss 1820.....	Protozoa
Subphylum Plasmodroma Doflein 1901.....	Plasmodroma
<u>Class Mastigophora</u> Diesing 1866.....	Mastigophorea
(Flagellata Cohn 1853)	
Subclass Phytomastigophora Calkins 1909.....	Phytomastigophoria
Order Chryomonadida Stein 1878.....	Chryomonadida
Order Heterochlorida Pascher 1912.....	Heterochlorida
Order Cryptomonadida Stein 1878.....	Cryptomonadida
Order Dinoflagellida Bütschli 1885.....	Dinoflagellida
Order Euglenida Blochmann 1895.....	Euglenida
Order Chloromonadida Klebs 1893.....	Chloromonadida
Order Phytomonadida Blochmann 1895.....	Phytomonadida
Subclass Zoomastigophora Calkins 1909.....	Zoomastigophoria
Order Pantostomatida Minchin 1912.....	Pantostomatida
Order Protomastigida Klebs 1893.....	Protomastigida
Order Polymastigida Klebs 1893.....	Polymastigida
Order Hypermastigida Grassi 1895.....	Hypermastigida
Class Sarcodina Hertwig and Lesser 1874.....	Sarcodinea
Subclass Rhizopoda Von Siebold 1845.....	Rhizopodia
Order Amoebida Claparède and Lachmann	
1858	Amoebida
Order Proteomyxa Lankester 1909.....	Proteomyxida
Order Testacea Max Schultze 1854.....	Testacida
Order Foraminifera D'Orbigny 1826.....	Foraminiferida
Order Mycetozoa De Bary 1859.....	Mycetozoida
Subclass Actinopoda Calkins 1926.....	Actinopodia
Order Heliozoa Haeckel 1866.....	Heliozoida
Order Radiolaria Johannes Müller 1858.....	Radiolarida
Class Sporozoa Leuckart 1879.....	Sporozoea
Subclass Telosporidia Schaudinn 1900.....	Telosporidia
Order Gregarinida Lankester 1866.....	Gregarinida
Order Coccidiomorpha Doflein 1901.....	Coccidiomorphida
Suborder Coccidia Leuckart 1879.....	Coccidina
Suborder Haemosporidia Danilewsky 1886.....	Haemosporina
Subclass Cnidosporidia Doflein 1901.....	Cnidosporidia
Order Myxosporidia Bütschli 1880.....	Myxosporida
Order Actinomyxidida Stolz 1899.....	Actinomyxidida
Order Microsporidia Balbiani 1883.....	Microsporida
Subclass Sarcosporidia Balbiani 1882.....	Sarcosporidia
Order Sarcosporidia Balbiani 1882.....	Sarcosporida
Order Globidia Bubdieri 1932.....	Globidiida
Subclass Haplosporidia Caullery & Mesnil	
1899	Haplosporidia

- Subphylum Ciliophora Doflein 1901.....Ciliophora
 - Class Ciliata Perty 1852.....Ciliatea
 - Subclass Protociliata Metcalf 1918.....Protociliatia
 - Order Opalinata Stein 1867.....Opalinida
 - Subclass Euciliata Metcalf 1918.....Euciliatia
 - Order Holotrichida Stein 1859.....Holotrichida
 - Suborder Gymnostomina Bütschli 1889.....Gymnostomina
 - Suborder Trichostomina Bütschli 1889.....Trichostomina
 - Suborder Astomina Minchin 1912.....Astomina
 - Order Spirotrichida Bütschli 1889.....Spirotrichida
 - Suborder Heterotrichina Stein 1859.....Heterotrichina
 - Suborder Oligotrichina Bütschli 1889.....Oligotrichina
 - Suborder Tintinnoina Claparede and Lachmann 1858Tintinnoina
 - Suborder Entodiniomorphina Reichenow 1929Entodiniomorphina
 - Suborder Hypotrichina Stein 1859.....Hypotrichina
 - Order Peritrichida Stein 1859.....Peritrichida
 - Order Chonotrichida Wallengren 1896.....Chonotrichida
 - Class Suctorina Claparede and Lachmann 1858.....Suctorea
- Subkingdom Metazoa Haeckel 1877.....Metazoa
- Branch Parazoa Sollas 1884.....Parazoa
- Phylum Porifera Grant 1835.....Porifera
 - Class Calcarea Bowerbank 1864.....Calcarea
 - Order Homocoela Polejaeff 1883.....Homocoelida
 - Order Heterocoela Polejaeff 1883.....Heterocoelida
 - Class Noncalcarea Vosmaer 1887.....Noncalcarea
 - Order Myxospongida Dendy 1905.....Myxospongida
 - Order Hexactinellida O. Schmidt 1870.....Hexactinellida
 - Suborder Amphidiscophora F. E. Schulze 1899Amphidiscophorina
 - Suborder Hexasterophora F. E. Schulze 1899Hexasterophorina
 - Order Tetraxonida Dendy 1905.....Tetraxonida
 - Suborder Homosclerophora Dendy 1905.....Homosclerophorina
 - Suborder Astrophora Sollas 1888.....Astrophorina
 - Suborder Hadromerina Topsent 1898.....Hadromerina
 - Suborder Sigmatophora Sollas 1888.....Sigmatophorina
 - Suborder Halichondrina Vosmaer 1887.....Halichondrina
 - Suborder Lithistida O. Schmidt 1870.....Lithistidina
 - Order Keratosa Grant 1861.....Keratosida
- Branch Enterozoa Lankester 1878.....Enterozoa
- Subbranch Enterozoela Lankester 1900.....Enterozoela
- Phylum Coelenterata Leuckart 1848.....Coelenterata
 - Subphylum Cnidaria Milne Edwards & Haime 1857...Cnidaria
 - Class Hydrozoa Huxley 1857.....Hydrozoa
 - Order Hydroida Leuckart 1857.....Hydroida
 - Order Trachylina Haeckel 1877.....Trachylida
 - Order Milleporina Hickson 1899.....Milleporida
 - Order Stylasterina Hickson 1899.....Stylasterida

Order Siphonophora Eschscholtz 1829.....	Siphonophorida
Suborder Calycophorae Leuckart 1854.....	Calycophorina
Suborder Rhizophysaliae Chm 1882.....	Rhizophysalina
Suborder Chondrophorae Chamisso & Eysenhard 1821	Chondrophorina
Class Scyphozoa Grobben 1910.....	Scyphozoea
Order Lucernariidea Johnston 1847.....	Lucernariida
Order Charybdeidea Gegenbaur 1856.....	Charybdiida
Order Corona Vanhoffen 1892.....	Coronida
Order Semastomeae L. Agassiz 1862.....	Semastomida
Order Rhizostomeae Cuvier 1799.....	Rhizostomida
Class Anthozoa Ehrenberg 1834.....	Anthozoea
Subclass Alcyonaria Milne-Edwards & Haime 1857	Alcyonaria
Order Stolonifera Hickson 1883.....	Stoloniferdia
Order Telestacea Hickson 1930.....	Telestacida
Order Alcyonacea Verrill 1866.....	Alcyonacida
Order Gorgonacea Verrill 1866.....	Gorgonacida
Suborder Pseudaxonia Koch 1878.....	Pseudaxonina
Suborder Axifera Koch 1873.....	Axiferina
Order Coenothecalia Bourne 1900.....	Coenothecalida
Order Pennatulacea Verrill 1866.....	Pennatulacida
Subclass Zoantharia Blainville 1830.....	Zoantharia
Order Cerianthidea Milne-Edw. & Haime 1857	Cerianthida
Order Antipitharia Dana 1846.....	Antipithida
Order Zoanthidea Dana 1846.....	Zoanthida
Order Edwardsiidea R. Hertwig.....	Edwardsiida
Order Proactiniae McMurrich	Proactinida
Order Actiniaria McMurrich	Actiniarida
Suborder Protanthia Carlgren	Actiniina
Suborder Nynanthia	Stichodactylina
Order Madreporaria Linnaeus 1748	Madreporerarida
Suborder Aporosa Milne-Edw. & Haime 1857.....	Aporosina
Suborder Fungacea Milne-Edw. & Haime 1857	Fungacina
Suborder Perforata Milne-Edw. & Haime 1857	Perforina
Subphylum Acnidaria Krumbach 1925.....	Acnidaria
Class Tentaculata Wagner 1834.....	Tentaculatea
Order Cydippidea Lesson 1843.....	Cydippida
Order Lobata Eschscholtz 1829.....	Lobatida
Order Cestoidea Lesson 1843.....	Cestida
Order Platyctenea Bourne 1900.....	Platyctenida
Class Nuda Bourne 1900.....	Nudea
Order Beroidea Eschscholtz 1929.....	Beroidea
Subbranch Triploblastica Lankester 1900.....	Triploblastica
Enterocoela Lankester 1876.....	Enterocoela
Series Parenchymata	Parenchymata
Phylum Platyhelminthes Gegenbaur 1859.....	Platyhelmintha Vogt 1851
Class Turbellaria Ehrenberg 1831.....	Turbellarea
Order Acoela Uljanin 1870.....	Acoelida

- Order Rhabdocoela Ehrenberg 1831.....Rhabdocoelida
- Order Allocoela Graff 1882.....Allocoelida
- Order Tricladida Ehrenberg 1831.....Tricladida
- Order Polycladida Lang 1882.....Polycladida
- Order Temnocephalida Haswell 1888.....Temnocephalida
- Class Trematoda Rudolphi 1808.....Trematodea
 - Subclass Monogenea Carus 1863.....Monogenia
 - Order Monopisthocotylea Odhner 1912.....Monopisthocotylida
 - Order Polyopisthocotylea Odhner 1912.....Polyopisthocotylida
 - Subclass Digena Carus 1863.....Digenia
 - Order Gasterostomata Odhner 1905.....Gasterostomatida
 - Order Prostomatata Odhner 1905.....Prostomatida
 - Suborder Aspidocotylea Burmeister 1856.....Aspidocotylinea
 - Suborder Monostomata Zeder 1800.....Monostomatina
 - Suborder Strigeidea La Rue 1926.....Strigeina
 - Suborder Amphistomata Rudolphi 1801.....Amphistomatina
 - Suborder Distomata Leuckart 1856.....Distomatina
- Class Cestoidea Rudolphi 1808.....Cestodea
 - Subclass Cestodaria Monticelli 1892.....Cestodaria
 - Order Amphilinidea Poche 1922.....Amphilinida
 - Order Gyrocotylidea Benham 1901.....Gyrocotylida
 - Subclass Cestoda van Beneden 1849.....Cestodia
 - Order Pseudophyllidea van Beneden 1850.....Pseudophyllida
 - Order Tetraphyllidea Schmarda 1871.....Tetraphyllida
 - Order Cyclophyllidea Braum 1900.....Cyclophyllida
- Class Nemertea Siebold and Stannius 1842.....Nemertea
 - Order Paleonemertea Hubrecht 1879.....Paleonemertida
 - Order Heteronemertea Bürger 1892.....Heteronemertida
 - Order Hoplonemertea Hubrecht 1879.....Hoplonemertida
 - Suborder Polystiliferia Brinkmann 1917.....Polystiliferina
 - Suborder Monostiliferia Brinkmann 1917.....Monostiliferina
 - Order Bdellonemertea Verrill 1892.....Bdellonemertida
- Phylum Acanthocephala Rudolphi 1808.....Acanthocephala
 - Class Echinorhynchidea Cobbold 1879.....Echinorhynchea
 - Order Palaeacanthocephala Meyer 1931.....Palaeacanthocephalida
 - Order Archiacanthocephala Meyer 1931.....Archiacanthocephalida
 - Order Eoacanthocephala Van Cleave 1936.....Eoacanthocephalida
 - Suborder Gyracanthocephala Van Cleave
 - 1936.....Gyracanthocephalina
 - Suborder Neoacanthocephala Van Cleave
 - 1936.....Neoacanthocephalina
- Series Coelomocoela Lankester 1900.....Coelomocoela
 - Subseries Prosopygia Lang.....Prosopygia
 - Subseries Aschelminthes Grobben 1909.....Aschelmintha
- Phylum Rotatoria Lamarck 1816.....Rotatoria
 - Class Seisonidea Plate 1886.....Seisonidea
 - Class Belloidea Hudson & Gosse 1889.....Belloidea
 - Class Monogononta Ehrenberg 1832.....Monogonontea
 - Order Plioma Hudson & Gosse 1889.....Pliomida
 - Order Flosculariaceae Harring 1913.....Floscularida
 - Order Collothecaceae Harring 1913.....Collothecida

- Phylum Gastrotricha Metchnikof 1865.....Gastrotricha
 Order Macrodasyoidea Zelinka 1889.....Macrodasyoidea
 Order Chaetonotoidea Zelinka 1883.....Chaetonotida
- Phylum Echinodera (Kinorhyncha Leuckart 1854)...Echinodera
- Phylum Nematomorpha Potts 1908.....Nematomorpha
 Class Gordiidae Orthepp 1924.....Gordiacea
 Class Nectonematoidea Rauther 1930.....Nectonematidea
- Phylum Nematoda Rudolphi 1808.....Nemata Cobb, 1919
 Class Phasmidia Chitwood and Chitwood 1933.....Phasmidea
 Order Rhabditida Chitwood 1933.....Rhabditida
 Suborder Rhabditata Chitwood 1933.....Rhabditina
 Suborder Ascaridata Skrjabin 1915.....Ascaridina
 Suborder Strongylata Railliet & Henry
 1913Strongylina
 Order Spirurida Chitwood 1933.....Spirurida
 Suborder Spirurata Railliet and Henry
 1913Spirurina
 Suborder Camallanata Chitwood 1936.....Camallanina
- Class Aphasmidia Chitwood and Chitwood 1933.....Aphasmeida
 Order Enoplida Chitwood 1933.....Enoplida
 Suborder Enoplata Filipjev 1929.....Enoplina
 Suborder Dorylaimata Chitwood 1933.....Dorylaimina
 Suborder Diectophymata Skrjabin 1923.....Diectophymatina
- Order Chromadorida Chitwood 1933.....Chromadorida
 Suborder Monhysterata Filipjev 1929.....Monhysterina
 Suborder Desmoscolecata Filipjev 1929.....Desmoscolecina
 Suborder Chromadorata Filipjev 1929.....Chromadorina
- Phylum Tardigrada Spallanzani 1776.....Tardigrada
 Class Heterotardigrada Marcus 1927.....Heterotardigradea
 Order Arthrotardigrada Marcus 1927.....Arthrotardigradida
 Order Echiniscoidea Richters 1926.....Echiniscida
 Class Eutardigrada Richters 1926.....Eutardigradea
- Phylum Chaetognatha Leuckart 1854.....Chaetognatha
- Phylum Bryozoa Ehrenberg 1831.....Bryozoa
 Class Entoprocta Nitsche 1869.....Entoproctea
 Class Ectoprocta Nitsche 1869.....Ectoproctea
 Subclass Gymnolaemata Allman 1856.....Gymnolaemia
 Order Ctenostomata Busk 1852.....Ctenostomida
 Order Cyclostomata Busk 1852.....Cyclostomida
 Suborder Tubipora Hagenow 1851.....Tubiporina
 Suborder Cerioporina Hagenow 1851.....Cerioporina
 Suborder Ceramoporoidea Bassler 1913.....Ceramoporina
 Suborder Hederelloidea Bassler 1934.....Hederellina
 Order Trepostomata Ulrich 1883.....Trepostomida
 Order Cryptostomata Vine 1883.....Cryptostomida
 Order Cheilostomata Busk 1852.....Cheilostomida
 Suborder Anasca Levinsen 1909.....Anascina
 Suborder Ascophora Levinsen 1909.....Ascophorina
 Subclass Phylactolaemata Allman 1856.....Phylactolaemia

Phylum Brachiopoda Cuvier 1802.....	Brachiopoda
Order Palcotremata Thompson 1927.....	Palcotrematida
Order Atremata Beecher 1891.....	Atrematida
Order Neotremata Beecher 1891.....	Neotrematida
Order Protremata Beecher 1891.....	Protrematida
Order Telotremata Beecher 1891.....	Telotrematida
Phylum Pterobranchia Lankester 1877.....	Pterobranchia
Phylum Enteropneusta Gegenbaur 1870.....	Enteropneusta
Class Balanoglossida Delle Chiaje 1820.....	Balanoglossa
Phylum Echinodermata Lasker 1778.....	Echinodermata
Subphylum Pelmatozoa Leuckart 1848.....	Pelmatozoa
Class *Cystoidea von Buch 1844.....	*Cystoidea
Order *Amphoridea Haeckel 1896.....	*Amphoroida
Order *Rhombifera Zittel 1879.....	*Rhombiferida
Order *Diploporita Zittel 1879.....	*Diploporida
Order *Aporita Zittel 1879.....	*Aporida
Order *Edrioasteroidea Billings 1858.....	*Edrioasterida
Class *Blastoidea Say 1825.....	*Blastoidea
Order *Protoblastoidea Bather 1899.....	*Protoblastida
Order *Eublastoidea Bather 1899.....	*Eublastida
Class Crinoidea Miller 1821.....	Crinoidea
Order *Camerata Wachsmuth and Springer	
1885	*Camerida
Order *Adunata Bather 1899.....	*Adunida
Order Flexibilia Zittel 1879.....	Flexibilibida
Suborder *Sagenocrinida Springer 1926.....	*Sagenocrinina
Suborder Taxocrinida Springer 1926.....	Taxocrinina
Order *Inadunata Wachsmuth and Springer	
1885	*Inadunida
Suborder *Larviformia Wachsmuth and	
Springer 1885	*Larvina
Suborder *Fistulata Wachsmuth and	
Springer 1885	*Fistulina
Order Articulata, Miller 1821.....	Articulatida
Suborder Bourgueticrinida H. L. Clark	
Mss.	Bourgueticrinina
Suborder Pentaerina Claus 1868.....	Pentaerina
Suborder Holopida Haeckel 1896.....	Holopina
Order Comatulida (Parks 1891) A. H. Clark	
1908	Comatulida
Suborder Oligophreata A. H. Clark 1908.....	Oligophreina
Suborder Macrophreata A. H. Clark 1908.....	Macrophreina
Subphylum Asterozoa Leuckart 1848.....	Asterozoa
Class Asteroidea Burmeister 1837.....	Asteroidea
Order Phanerozoia Sladen 1889.....	Phanerozonida
Order Spinulosa Perrier 1894.....	Spinulosida
Order Forcipulata Perrier 1894.....	Forcipulatida
Class Ophiuroidea Norman 1865.....	Ophiurea
Subclass *Aegophiurida Matsumoto 1915.....	*Aegophiurida
Order *Lysophiurida Matsumoto 1913.....	*Lysophiurida

- Subclass Myophiurida Matsumoto 1915.....Myophiuria
 - Order *Ophiocystiida H. L. Clark Mss.....*Ophiocystiida
 - Order *Aganasterida H. L. Clark Mss.....*Aganasterida
 - Order Phrynophiurida Matsumoto 1915.....Phrynophiurida
 - Order Laemophiurida Matsumoto 1915.....Laemophurida
 - Order Gnathophiurida Matsumoto 1915.....Gnathophurida
 - Order Chilophiurida Matsumoto 1915.....Chilophiurida
- Subphylum Echinozoa Leuckart 1848.....Echinozoa
 - Class Echinoidea Bronn 1860.....Echinoeaa
 - Order *Bothriocidaroida Duncan 1889.....Bothriocidarida
 - Order Cidaroida Duncan 1889.....Cidarida
 - Order Centrechinoida Jackson 1912.....Centrechinoida
 - Suborder Aulodonta Jackson 1912.....Aulodontina
 - Suborder Stirodonta Jackson 1912.....Stirodontina
 - Suborder Camarodonta Jackson 1912.....Camarodontina
 - Order Exocycloida Jackson 1912.....Exocycloida
 - Suborder Holoctypina Gregory 1900.....Holoctypina
 - Suborder Echinoneina Hawkins 1925.....Echinoneina
 - Suborder Clypeastrina Gregory 1900.....Clypeastrina
 - Suborder Nucleolitina Hawkins 1925.....Nucleolitina
 - Suborder Cassidulina Hawkins 1925.....Cassidulina
 - Suborder Urechinina H. L. Clark 1925.....Urechinina
 - Suborder Spatangina Jackson 1912.....Spatangina
 - Order Plesiocidaroida Jackson 1912.....Plesiocidarida
 - Order Echinocystoida Jackson 1912.....Echinocystina
 - Order Periechoechinoida Jackson 1912.....Periechoechinida
 - Class Holothurioidea Semper 1868.....Holothurea
 - Order Dendrochirota MacBride 1909.....Dendrochirotida
 - Order Elasipoda Theel 1882.....Elasipodida
 - Order Aspidochirota MacBride 1909.....Aspidochirotida
 - Order Molpadonia Ekman 1925.....Molpadonida
 - Order Apoda Lampert 1885.....Apodida
- Phylum Annelida Lamarck 1809.....Annelida
 - Class Archiannelida Hatschek 1878.....Archiannelidea
 - Class Polychaeta Grube 1850.....Polychaetaea
 - Subclass Phanerocephala Benham 1894.....Phanerocephalia
 - Order Nereidiformia Benham 1894.....Nereiida
 - Order Spioniiformia Soderström 1900.....Spioniida
 - Order Terebelliformia Benham 1894.....Terebellida
 - Order Capitelliformia Benham 1894.....Capitellida
 - Order Scoleciformia Benham 1894.....Scolecida
 - Subclass Cryptocephala Benham 1894.....Cryptocephalia
 - Order Sabelliformia Benham 1894.....Sabellida
 - Order Hermelliformia Benham 1894.....Hermellida
 - Class Myzostoma Graff 1884.....Mysostomea
 - Class Oligochaeta Grube 1850.....Oligochaetaea
 - Subclass Archioligochaeta Michaelsen 1921.....Archioligochaetia
 - Subclass Neoligochaeta Michaelsen 1921.....Neoligochaetia
 - Class Hirudinea Lamarck 1818.....Hirudinea
 - Order Rhynchobdellida Blanchard 1887.....Rhynchobdellida

- Order Gnathobdellida Vaillant 1890.....Gnathobdellida
- Order Pharyngobdellida Johansson 1913.....
- Class Echinurida Savigny 1817.....Echiurea
- Phylum Gephyrea Quatrefages 1866.....Gephyra
- Class Priapulida Savigny 1817.....Priapulidea
- Class Sipunculoidea Quatrefages 1866.....Sipunculidea
- Phylum Onychophora Grube 1851.....Onychophora
- ✓ Phylum Arthropoda Siebold and Stannius 1845.....Arthropoda
- Subphylum *Trilobita Schlottheim 1820.....*Trilobita
- Class *Hypoparia Beecher 1897.....*Hypoparea
- Class *Opisthoparia Beecher 1897.....*Opisthoparea
- Class *Proparia Beecher 1897.....*Proparea
- Subphylum Chelicerata
- Class Merostomata Woodward 1878.....Merostomatea
- Order *Eurypterida Burmeister 1843.....*Eurypterida
- Order *Synxiphosura Packard 1885.....*Synxiphosurida
- Order Xiphosura Latreille 1806.....Xiphosurida
- Class Pycnogonida Latreille 1804.....Pycnogonidea
- Order Colossendeomorpha Cole 1905.....Colossendeomorphida
- Order Nymphonomorpha Pocock 1904.....Nymphonomorphida
- Order Ascorhynchomorpha Pocock 1904.....Ascorhynchomorphida
- Order Pycnogonomorpha Pocock 1904.....Pycnogonomorphida
- Class Arachnida Lamarck 1815.....Arachnidea
- Order Scorpionida Latreille 1810.....Scorpionida
- Order Palpigrada Thorell 1888.....Palpigradida
- Order Pedipalpi Latreille 1806.....Pedipalpida
- Suborder Uropygi Thorell 1882.....Uropygina
- Suborder Amblypygi Thorell 1883.....Amblypigina
- Order Solpugida Smidevall 1833.....Solpugida
- Order *Anthracomarti Karsch & Scudder.....*Anthracomartida
- Order Phalangida Latreille 1802.....Phalangida
- Suborder Cyphophthalmi Simon 1879.....Cyphophthalmina
- Suborder Laniatores Thorell 1876.....Laniatorina
- Suborder Palpatores Thorell 1876.....Palpatorina
- Order Chelonethida Duges 1834.....Chelonethida
- Order Acarina Nitzsch 1818.....Acarinida
- Suborder Notostigmata With.....Notostigmata
- Suborder Eupodoidea Banks 1894.....Eupodina
- Suborder Trombidoidea Banks 1894.....Trombidina
- Suborder Hydrachnoidea Banks 1894.....Hydrachnina
- Suborder Ixodoidea Leach 1815.....Ixodina
- Suborder Parasitoidea Banks 1915.....Parasitina
- Suborder Holothyroidea Reuter.....Holothyrodina
- Suborder Oribatoidea Banks 1894.....Oribatina
- Suborder Sarcoptoidea Banks 1915.....Sarcoptina
- Suborder Demodicoidea Banks 1894.....Demodicina
- Suborder Linguatulida Thorell 1876.....Linguatulina
- Order Ricinulida Latreille 1802.....Ricinulida
- Order Araneida Lamarck 1818.....Araneida
- Suborder Liphistiomorphae
- Suborder Mygalomorphae Banks 1905.....Mygalomorpha

Suborder Hypochilomorphae Petrunkevitch	
1933	Hypochilomorpha
Suborder Dipneumonomorphae	Dipneumonomorpha
Suborder Apneumonomorphae	Apneumonomorpha
Subphylum Mandibulata McLeay 1821.....	Mandibulata
Subphylum Crustacea Pennant 1777.....	Crustacea
Class Eucrustacea Kingsley 1894.....	Eucrustacea
Subclass Branchiopoda Lamarck 1801.....	Branchiopoda
Order Anostraca Sars 1867.....	Anostracida
Order Notostraca Sars 1867.....	Notostracida
Order Conchostraca Sars 1867.....	Conchostracida
Order Leptostraca Claus 1872.....	Leptostracida
Order Cladocera Latreille 1829.....	Cladocera
Suborder Calyptomera Sars 1865.....	Calyptomerina
Suborder Gymnomera Sars 1865.....	Gymnomerina
Subclass Ostracoda Latreille 1802.....	Ostracodia
Order Myodocopa Sars 1866.....	Myodocopida
Order Cladocopa Sars 1866.....	Cladocopida
Order Podocopa Sars 1865.....	Podocopida
Order Platycopa Sars 1866.....	Platycopida
Subclass Copepoda Latreille 1831.....	Copepodia
Order Eucopepoda Claus 1875.....	Eucopepida
Suborder Calanoida Dana 1852.....	Calanina
Suborder Cyclopoida Burmeister 1834.....	Cyclopina
Suborder Notodelphyoida Sars 1903.....	Notodelphyina
Suborder Monstrilloida Sars 1903.....	Monstrillina
Suborder Caligoida Claus 1885.....	Caligina
Suborder Lerneopodida Stebbing 1910.....	Lerneopodina
Order Branchiura Burmeister 1834.....	Branchiurida
Suborder Arguloida Wilson 1932.....	Argulina
Subclass Cirripedia Burmeister 1834.....	Cirripedia
Order Thoracica Darwin 1854.....	Thoracida
Suborder Turrilepadomorpha Clarke 1896 ³	Turrilepadomorpha
Suborder Lepadomorpha Darwin 1852.....	Lepadomorpha
Suborder Verrucomorpha Darwin 1854.....	Verrucomorpha
Suborder Balanomorpha Darwin 1854.....	Balanomorpha
Order Ascothoracida Lacaze-Duthiers 1883.....	Ascothoracida
Order Apoda Darwin 1854.....	Apodida
Order Rhizocephala Fritz Müller 1862.....	Rhizocephalida
Subclass Malacostraca Latreille 1802.....	Malacostracia
Series Leptostraca Claus 1880.....	Leptostracia
Division Phyllocarida Packard 1879.....	Phyllocarida
Order Nebaliacea Clarke 1882.....	Nebalida
Order *Rhinocarina Clarke 1882.....	*Rhinocarida
Order *Ceratiocarina Clarke 1882.....	*Ceratiocarida
Order *Hymenocarina Clarke 1882.....	*Hymenocarida
Division *Nahecarida Broili 1928.....	*Nahecarida
Series Eumalacostraca Grobben 1892.....	Eumalacostracia

³ Called Machaerida by Withers (1926), who suggests that these animals are related to annelids.

- Division Syncarida Packard 1886.....Syncarida
 Order Anaspidacea Thomson 1892.....Anaspidia
- Division Pericarida Calman 1904.....Pericarida
 Order Mysidacea Boas 1883.....Mysidacea
 Order Cumacea Kroyer 1846.....Cumacea
 Order Tanaidacea Hansen 1895.....Tanaida
 Order Isopoda Latreille 1817.....Isopodida
 Suborder Flabellifera Sars 1882.....Flabelliferina
 Suborder Valvifera Sars 1882.....Valviferina
 Suborder Asellota Latreille 1806.....Asellina
 Suborder Phreatoicoidea Stebbing 1893.....Phreatocina
 Suborder Epicaridea Latreille 1831.....Epicarina
 Suborder Oniscoidea Sars 1882.....Oniscina
 Order Amphipoda Latreille 1816.....Amphipodida
 Suborder Gammaridea Dana 1852.....Gammarina
 Suborder Hyperiidea Dana 1852.....Hyperina
 Suborder Caprellidea Dana 1852.....Caprellina
 Suborder Ingolfiellidea Hansen 1903.....Ingolfiellina
- Division Eucarida Calman 1904.....Eucarida
 Order Euphausiacea Boas 1883.....Euphausiida
 Order Decapoda Latreille 1802.....Decapodida
 Suborder Natantia Boas 1879.....Natantina
 Suborder Reptantia Boas 1879.....Reptantina
- Division Hoplocarida Calman 1904.....Hoplocarida
 Order Stomatopoda Latreille 1817.....Stomatopodida
- Superclass Progoneata Pocock 1893.....Progoneata
 Class Pauropoda Lubbock 1866.....Pauropodea
 Class Symphyla Ryder 1880.....Symphylea
 Class Diplopoda Latreille 1802.....Diplopodea
 Subclass Chilognatha Leach 1814.....Chilognathia
 Superorder Opisthandria Verhoeff 1894.....Opisthandrida
 Order Limacomorpha Pocock 1894.....Limacomorphida
 Order Oniscomorpha Pocock 1887.....Oniscomorphida
 Suborder Glomeridia Brandt 1883.....Glomerina
 Suborder Sphaerotheria Brandt 1883.....Sphaerotherina
 Superorder Proterandria Verhoeff 1894.....Proterandrina
 Order Polydesmoidea C. Koch 1847.....Polydesmida
 Suborder Polydesmiidea Attems 1914.....Polydesmina
 Suborder Strongylosomidea Attems 1914.....Strongylosomina
 Order Nematomorpha Verhoeff 1913².....Nematophotida
 Suborder Chordeumoidea C. Koch 1847.....Chordeumina
 Suborder Stemmiuloidea Cook 1895.....Stemmiulina
 Suborder Striaroidea Cook 1896.....Striarina
 Suborder Lysiopetaloidea Wood 1865.....Lysiopetalina
 Order Juliformia Saussure & Humbert 1872.....Julida
 Suborder Juloidea Meinert 1868.....Julina
 Suborder Spiroboloidea Silvestri 1896.....Spirobolina
 Suborder Spirostreptoidea Pocock 1894.....Spirostreptina
 Order Colobgnatha Brandt 1834.....Colobgnathida

² Nematomorpha Potts 1908 has been used for a group of roundworms (p. 10).

Superclass Opisthogoneata Pocock 1893.....	Opisthogonea
Class Chilopoda Latreille 1802.....	Chilopodea
Subclass Epimorpha Haase 1880.....	Epimorphia
Order Geophilomorpha	Geophilomorphida
Order Scolopendromorpha Newport 1844.....	Scolopendromorphida
Subclass Anamorpha Haase 1880.....	Anamorphia
Order Lithobiomorpha Pocock 1895.....	Lithobiomorphida
Order Scutigermorpha Brandt 1840.....	Scutigermorphida
Suborder Lithobioidea Latzell 1880.....	Lithobina
Suborder Craterostigmomorphae Pocock 1902	Craterostigmomorpha
Class Myrientomata Berlese 1909.....	Myrientomatea
Order Protura Silvestri 1907.....	Proturida
Class Insecta Linnaeus 1758.....	Insectea
Subclass Apterygota Lang 1883.....	Apterygotia
Order Thysanura Lubbock 1869.....	Thysanurida
Order Entotrophi Grassi 1890.....	Entotrophida
Order Collembola Lubbock 1869.....	Collembolida
Subclass Pterygota Leng 1888.....	Pterygotia
Superorder Orthopteroidea Handlirsch 1903.....	Orthoptera
Order Grylloblattodea Walker 1914.....	Grylloblattida
Order Orthoptera Latreille 1796.....	Orthopterida
Suborder Tettigoniodea Kary 1903.....	Tettigoniina
Suborder Acridodoa Burmeister 1829.....	Acridina
Order Phasmitodea Leach 1815.....	Phasmatida
Order Embiodea Kusnesow 1903.....	Embioida
Order Diploglossata Saussure 1879.....	Diploglossida
Order Dermaptera Degeer 1773.....	Dermapterida
Superorder Blattaeformia Handlirsch.....	Blattaemia
Order Blattariae Latreille 1810.....	Blattida
Order Mantodea Burmeister 1829.....	Mantida
Superorder Psocoidea Leach 1918.....	Psocia
Suborder Isoptera Brulle 1832.....	Isopterina
Suborder Zoraptera Silvestri 1913.....	Zorapterina
Order Corrodentia (Psocoptera) Burmeister 1839	Corrodentida (Psocida)
Order Mallophaga Nitzsch 1818.....	Mallophagida
Order Anoplura Leach 1815.....	Anoplurida
Superorder Hemipteroidea Linnaeus 1758.....	Hemipteria
Order Thysanoptera Haliday 1836.....	Thysanopterida
Order Heteroptera Latreille 1825.....	Heteropterida
Order Homoptera Latreille 1817.....	Homopterida
Suborder Auchenorrhyncha Dumeril 1806.....	Auchenorrhynchina
Suborder Sternorrhyncha Amyot et Serville 1843	Sternorrhynchina
Suborder Coleorrhyncha Brues and Melander 1932	Coleorrhynchina
Superorder Pseudoneuropteroidea Gerstaecker 1856	Pseudoneuroptera
Order Odonata Fabricius 1792.....	Odonatida
Order Ephemeroptera Haeckel 1896.....	Ephemerida

Order Plecoptera Burmeister 1835.....	Plecopterida
Superorder Coleopteroidea Handlirsch 1906.....	Coleopteria
Order Coleoptera Linnaeus 1758.....	Coleopterida
Suborder Adephaga Leconte and Horne	
1883	Adephagina
Suborder Polyphaga Emery 1885.....	Polyphagina
Order Strepsiptera Kirby 1813.....	Strepsipterida
Superorder Neuropteroidea Handlirsch 1903.....	Neuropteria
Order Megaloptera Latreille 1802.....	Megalopterida
Order Rhabdiodia Aclque 1897.....	Rhabdiodida
Order Neuroptera Linnaeus 1758.....	Neuropterida
Order Mecoptera Packard 1886.....	Mecopterida
Order Trichoptera Kirby 1813.....	Trichopterida
Order Lepidoptera Linnaeus 1758.....	Lepidopterida
Suborder Jugatae Comstock 1892.....	Jugatina
Suborder Frenatae Comstock 1892.....	Frenatina
Suborder Rhopalocera Boisduck 1836.....	Rhopalocerina
Superorder Hymenopteroidea Linnaeus 1758.....	Hymenopteria
Order Hymenoptera Linnaeus 1758.....	Hymenopterida
Suborder Chalastogastra Konow 1897.....	Chalastogastrina
Suborder Clistogastra Konow 1905.....	Clistogastrina
Superorder Dipteroidea Linnaeus 1905.....	Dipteria
Order Diptera Linnaeus 1758.....	Dipterida
Suborder Nematocera Brauer 1883.....	Nematocerina
Suborder Brachycera Macquart 1834.....	Brachycerina
Order Siphonaptera Latreille 1825.....	Siphonapterida
Order *Palaeodictyoptera Goldenberg	Palaeodictyopterida
Order *Protoblattoidea Handlirsch 1906.....	Protoblattida
Order *Protophemeroidea	Protophemerida
Order *Protodonata Brogniart	Protodonatida
Order *Permodonata	Permodonatida
Order *Hadentomoidea Handlirsch 1906.....	Hadentomida
Order *Hapalopteroidea Handlirsch 1906.....	Hapalopterida
Order *Mixotermitoidea Handlirsch 1906.....	Mixotermitida
Order *Protorthoptera Handlirsch 1906.....	Protorthopterida
Order *Protohemiptera Handlirsch.....	Protohemipterida
Phylum Mollusca Linnaeus 1758.....	Mollusca
Subphylum Isopleura Lankester.....	Isopleura
Class Amphineura von Ihering 1876.....	Amphineurca
Order Polyplacophora Gray 1821.....	Polyplacophorida
Suborder Eoplacophora Pilsbry 1892.....	Eoplacophorina
Suborder Mesoplacophora Pilsbry 1892.....	Mesoplacophorina
Suborder Teleoplacophora Pilsbry 1892.....	Teleoplacophorina
Order Aplacophora von Ihering 1877.....	Aplacophorida
Suborder Neomeniomorpha von Ihering	
1877	Neomeniomorphina
Suborder Chaetodermomorpha von Ihering	
1877	Chaetodermomorphina
Subphylum Prorhipidoglossomorpha Grobben.....	Prorhipidoglossomorpha
Class Gastropoda Cuvier 1798.....	Gastropodea
Subclass Streptoneura Spengel 1881.....	Streptoneuria

- Order Aspidobranchia Schweigger.....Aspidobranchida
 - Suborder Docoglossa Troschel 1866.....Docoglossina
 - Suborder Rhipidoglossa Troschel 1866.....Rhipidoglossina
- Order Pectinibranchia Cuvier 1817.....Pectinibranchida
 - Suborder Taenioglossa Troschel 1866.....Taenioglossina
 - Suborder StenoglossaStenoglossina
- Subclass Euthyneura Spengel 1881.....Euthyneuria
- Order Opisthobranchia Milne-Edwards.....Opisthobranchida
 - Suborder Tectibranchia Cuvier 1817.....Tectibranchina
 - Suborder Nudibranchia Cuvier 1817.....Nudibranchina
- Order Pulmonata Ehrenberg 1831.....Pulmonatida
 - Suborder Basommatophora A. Schmidt.....Basommatophorina
 - Suborder Stylommatophora A. Schmidt.....Stylommatophorina
- Class Scaphopoda Bronn 1862.....Scaphopoda
- Class Pelecypoda Goldfuss 1820.....Pelecypodea
 - Order ProtobranchiaProtobranchida
 - Suborder Solenomyacea Swainson 1840.....Solenomyacina
 - Suborder Nuculacea Orbigny 1844.....Nuculacina
 - Order FilibranchiaFilibranchida
 - Suborder Anomiacea Herrmannsen 1855.....Anomiacina
 - Suborder Arcacea Latreille 1825.....Arcacina
 - Suborder Mytilacea Latreille 1825.....Mytilacina
 - Suborder Pectinacea Reeve 1841.....Pectinacina
 - Suborder Dimyacea Lamarck 1807.....Dimyacina
 - Order EulamellibranchiaEulamellibranchida
 - Suborder Ostracea Lamarck 1809.....Ostracina
 - Suborder Submytilacea FerussacSubmytilacina
 - Suborder Tellinacea Lamarck 1819.....Tellinacina
 - Suborder Veneracea Menke 1828.....Veneracina
 - Suborder Cardiacea Lamarck 1809.....Cardiacina
 - Suborder Chamacea Geinitz 1864.....Chamacina
 - Suborder Myacea Menke 1828.....Myacina
 - Suborder Adesmacea Blainville 1824.....Adesmaccina
 - Suborder Anatinacea Dall 1895.....Anatinacina
 - Order Septibranchia Latreille 1825.....Septibranchida
- Subphylum Siphonopoda Haan 1825.....Siphonopoda
- Class Cephalopoda Cuvier 1798.....Cephalopodea
 - Order Tetrabranchia Owen 1832.....Tetrabranchida
 - Suborder Nautiloidea Lamarck 1809.....Nautiloidina
 - Suborder *Ammonitoidea Haan 1825.....*Ammonitina
 - Order Dibranchia Owen 1832.....Dibranchida
 - Suborder Decapoda Leach 1817^s.....Decapodina
 - Suborder Octopoda Hasselquist 1850.....Octopodina
- Phylum ChordataChordata
- Division AcraniataAcraniata
- Subphylum Tunicata Lamarck 1815.....Tunicata
 - Class Larvacea Herdman 1882.....Larvaca (Copelata)
 - Class Ascidiacea Blainville 1825.....Ascidiacea
 - Order Ptychobranchia Seeliger 1909.....Ptychobranchida
 - Order Aspiraculata Seeliger 1909.....Aspiraculatida

^s Decapoda Latreille 1802 in an order of crustaceans (p. III).

Order Dietyobranchia Seeliger 1909.....	Dietyobranchida
Order Krikobranchia Seeliger 1909.....	Krikobranchida
Order Pyrosomida Jones 1848.....	Pyrosomida
Class Thaliacea Vander Hoeven 1850.....	Thaliacea
Order Salpida Jones 1848.....	Salpida
Order Doliolida Keferstein 1862.....	Doliolida
Subphylum Leptocardii J. Müller 1845.....	Leptocardia
Class Amphioxi J. Müller 1844.....	Amphioxea
Order Amphioxi J. Müller 1844.....	Amphioxida
Division Craniata	Craniata
Superclass Pisces Linnaeus 1758.....	Pisces
Class Agnatha.....	Agnatha
Subclass *Ostracodermi Cope 1889.....	*Ostracodermia
Order *Heterostraci Lankester 1868.....	*Heterostracida
Order *Osteostraci Lankester 1868.....	*Osteostracida
Order *Anaspida Traquair 1899.....	*Anaspida
Order *Palaeospondyloidea Sollas 1903.....	*Palaeospondylida
Subclass Marsipobranchii Bonaparte 1837.....	Marsipobranchia
Order Hyperotreti Müller 1836.....	Hyperotretida
Order Hyperoartii Müller 1836.....	Hyperoartida
Class Placodermi McCoy 1848.....	Placodermia
Order *Arthrodira Cope 1891.....	*Arthrodira
Suborder *Acanthaspida Newberry 1889	*Acanthaspida
Suborder *Coccosteoidea Woodward 1891.....	*Coccosteina
Suborder *Homosteoidea Traquair 1889.....	*Homosteina
Suborder *Ptectodontoidea Woodward 1891.....	*Ptectodontina
Order Antiarchii Cope 1885.....	Antiarchia
Class Chondrichthyes J. Müller 1846.....	Chondrichthea
Order Acanthodii Owen 1860.....	Acanthodida
Order Stegoselachii	Stegoselachida
Order Cladoselachii Dean 1894.....	Cladoselachida
Order Pleuracanthodii Cope 1889.....	Pleuracanthodida
Order Elasmobranchii Bonaparte 1832.....	Elasmobranchida
Suborder Selachii Cuvier 1829.....	Selachina
Suborder Batoidea Gunther 1870.....	Batina
Order Rhenanida	Rhenanida
Order Bradyodonti	Bradyodontida
Order Holocephali Bonaparte 1832.....	Holocephalida
Class Osteichthyes	Osteichthya
Subclass Actinopterygii Cuvier 1828.....	Actinopterygia
Order Chondrostei J. Müller 1846.....	Chondrostida
Suborder Palaeoniscoidea Bridge 1879.....	Palaeoniscina
Suborder Polypterini Bonaparte 1837.....	Polypterina
Suborder Belonorhynchoidea Woodward 1890.....	Belonorhynchina
Suborder Acipenseroidea Agassiz 1843.....	Acipenserina
Order Holostei J. Müller 1846.....	Holostida
Suborder Semionotoidea Woodward 1890.....	Semionotina
Suborder Amioidea Huxley 1861.....	Amioidina
Suborder Pholidophoroidea Woodward 1890.....	Pholidophorina
Order Teleostei Owen 1847.....	Teleostida
Suborder Isospondyli Cope 1872.....	Isospondyliina

- Suborder Ostariophysii Boulenger 1909.....Ostariophysina
- Suborder Apodes Rafinesque 1815.....Apodina
- Suborder Haplomi Cope 1872.....Haplomina
- Suborder Microcyprines Reagan 1911.....Microcyprina
- Suborder Peresoces Cope 1871.....Peresocina
- Suborder Hemibranchii Cope 1871.....Hemibranchina
- Suborder Anacanthini J. Müller.....Anacanthina
- Suborder Acanthopterygii Cuvier 1828.....Acanthopterygina
- Subclass Crossopterygii Huxley 1861.....Crossopterygia
- Order Rhipidistia Cope 1887.....Rhipidistida
- Order Coelacanthini Agassiz 1843.....Coelacanthida
- Superclass Tetrapoda Williston
- Class Amphibia Linnaeus 1758.....Amphibia
- Order *Labyrinthodontia Huxley 1871.....Labyrinthodontida
- Suborder Ichthyostegalia Save-Soderbergh
1934.....Ichthyostegalina
- Suborder *Embolomeri Cope 1880.....Embolomerina
- Suborder *Rhachitomi Cope 1882.....Rhachitomina
- Suborder *Stereospondyli Fraas 1889.....Stereospondylina
- Order *Lepospondyli Zittel 1887.....Lepospondylida
- Suborder *Micramphibia.....Micramphibia
- Suborder *Lysorophia Cope.....Lysorophina
- Suborder *Aistopoda Miall 1890.....Aistopodina
- Suborder Nectridia Miall 1890.....Nectridina
- Order *Phyllospondyli Credner 1881.....Phyllospondylida
- Order Caudata Opperl 1811.....Caudatida
- Suborder Cryptobranchoidea Dunn 1922.....Cryptobranchina
- Suborder Ambystomoidea Noble 1931.....Ambystomina
- Suborder Salamandroidea Cope 1890.....Salamandrina
- Suborder Proteida Cope 1866.....Proteina
- Suborder Meantes Linnaeus 1766.....Meantina
- Order Salientia Laurenti 1768.....Salientida
- Suborder Amphicoela Noble 1931.....Amphicoelina
- Suborder Opisthocoele Nicholls 1916.....Opisthocoeleina
- Suborder Anomocoela Nicholls 1916.....Anomocoelina
- Suborder Procoela Nicholls 1916.....Procoelina
- Suborder Diplasiocoela Nicholls 1916.....Diplasiocoelina
- Order Apoda Opperl 1811.....Apodida
- Class Reptilia Laurenti 1768.....Reptileia
- Subclass Anapsida Osborn 1918.....Anapsidea
- Order *Cotylosauria Cope 1880.....*Cotylosaurida
- Suborder *Seymouriamorpha Watson 1917.....*Seymouriamorphina
- Suborder *Diadectomorpha Case 1911.....*Diadectomorphina
- Suborder *Captorhinomorpha Watson 1917.....*Captorhinomorphina
- Order Chelonia Owen 1842 (Testudinata)
(Opperl 1811).....Chelonida (Testudinida)
- Suborder Eumotosauria Watson 1914.....Eumotosaurina
- Suborder Amphichelydia Lydekker 1889.....Amphichelina
- Suborder Pleurodira Cope 1869.....Pleurodirina
- Suborder Cryptodira Cope 1869.....Cryptodirina

Subclass	*Ichthyopterygia	Owen 1860	.....	*Ichthyopterygia
Order	*Mesosauria	Cope 1886	.....	*Mesosaurida
Order	*Ichthyosauria	Blainville 1835	.....	*Ichthyosaurida
Subclass	*Synapsauria	Williston 1912	.....	*Synapsauria
Order	*Proterosauria	Seeley 1871	.....	*Proterosaurida
Order	*Sauropterygia	Owen 1859	.....	*Sauropterygida
Suborder	*Trachelosauria	Broili 1917	.....	*Trachelosaurina
Suborder	*Tanysitrachelia	Preyer 1931	.....	*Tanysitrachelina
Suborder	*Nothosauria	Deecke 1886	.....	*Nothosaurina
Suborder	*Plesiosauria	Andrews 1895	.....	*Plesiosaurina
Suborder	*Placodontia	Meyer 1863	.....	*Placodontina
Subclass	Lepidosauria	Zittel 1890	.....	Lepidosauria
Order	*Eusuchia	Huxley 1875	.....	*Eusuchida
Order	Rhynchocephalia	Gunther 1886	.....	Rhynchocephalida
Order	Eosuchia	Broom 1714	.....	Eosuchida
Order	Squamata	Oppel 1811	.....	Squamata
Suborder	Lacertilia	Cuvier 1834	.....	Lacertilina
Suborder	Ophidia	Brongriart 1799	.....	Ophidida
Subclass	*Archosauria	Cope 1891	.....	*Archosauria
Order	*Thecodontia	Owen 1860	.....	*Thecodontida
Suborder	*Pseudosuchia	Cope 1891	.....	*Pseudosuchia
Suborder	*Phytosauria	Lydekker 1888	.....	*Phytosaurina
Order	Crocodylia	Wagler 1830	.....	Crocodylida
Suborder	*Protosuchia	Mook 1934	.....	*Protosuchina
Suborder	Mesosuchia	Mook 1934	.....	Mesosuchina
Suborder	Eusuchia	Mook 1934	.....	Eusuchina
Suborder	Thallosuchia	Mook 1934	.....	Thallosuchina
Order	*Pterosauria	Kaup 1834	.....	*Pterosaurida
Suborder	*Rhamphorhynchoidii	Abel 1919	.....	*Rhamphorhynchina
Suborder	*Pterodactyloidea	Seeley 1866	.....	*Pterodactylina
Order	*Saurischia	Seeley 1888	.....	*Saurischida
Suborder	*Theropoda	Marsh 1881	.....	*Theropodina
Suborder	*Sauropoda	Marsh 1878	.....	*Sauropodina
Order	*Ornithischia	Seeley 1888	.....	*Ornithischida
Suborder	*Ornithopoda	Cope 1869	.....	*Ornithopodina
Suborder	*Stegosauria	Cope 1880	.....	*Stegosaurina
Suborder	*Ankylosauria	Brown 1908	.....	*Ankylosaurina
Suborder	*Ceratopsia	Zittel 1890	.....	*Ceratopsina
Subclass	*Synapsida	Osborn 1903	.....	*Synapsida
Order	*Pelycosauria	Cope 1878	.....	*Pelycosaurida
Order	*Therapsida	Broom 1905	.....	*Therapsida
Suborder	*Anningiamorpha	Broom 1927	.....	*Anningiamorphina
Suborder	*Dromaeosauria	Matthew & Brown	.....	*Dromaeosaurina
	1922	.....	.....
Suborder	*Dinocephalia	Broom 1914	.....	*Dinocephalina
Suborder	*Dicynodontia	Owen 1859	.....	*Dicynodontina
Suborder	*Theriodontia	Owen 1876	.....	*Theriodontina
Suborder	*Ictidosauria	Broom 1912	.....	*Ictidosaurina
Suborder	*Protodonta	Osborn 1887	.....	*Protodontina

Class	Aves	Linnaeus 1758.....	Avea
Subclass	*Archaeornithes	Cope 1898.....	*Archaeornithia
Order	*Archaeopterygiformes	Fürbringer 1888	*Archaeopterygida
Subclass	Neornithes	Reynolds 1897.....	Neornithia
Superorder	*Odontognathae	Marsh 1873.....	*Odontognatha
Order	*Hesperornithiformes	Marsh 1872.....	*Hesperornithida
Order	*Ichthyornithiformes	Marsh 1873.....	*Ichthyornithida
Superorder	Palaeognathae	Pycraft 1910.....	Palaeognathea
Order	Struthioniformes	Haeckel 1866.....	Struthionida
Order	Rheiformes	Newton 1884.....	Rheida
Order	Casuariiformes	Sclater 1880.....	Casuariida
Order	Dinornithidae	Stejneger 1884.....	Dinornithida
Order	Aepyornithiformes	Newton 1884.....	Aepyornithida
Order	Apterygiformes	Sclater 1880.....	Apterygida
Order	Tinamiformes	Gray 1840.....	Tinamida
Superorder	Impennes	Hiliger 1811.....	Impennea
Order	Sphenisciformes	Viellot 1818.....	Spheniscida
Superorder	Neognathae	Pycraft 1896.....	Neognathea
Order	Gaviiformes	Brandt 1839.....	Gaviida
Order	Procellariiformes	Wagner 1843.....	Procellariida
Order	Pelecaniformes	Stejneger 1885.....	Pelecanida
Suborder	Phaethontes	Gray 1840.....	Phaethontina
Suborder	Pelecani	Owen 1856.....	Pelecanina
Suborder	Fregatae	Vigors 1830.....	Fregatina
Suborder	Odontopteryges	Lydekker 1892.....	Odontopterygina
Order	Ciconiiformes	Owen 1832.....	Ciconiida
Suborder	Ardeae	Wagler 1830.....	Ardina
Suborder	Balaenicipites	.....	Balaenicipitina
Suborder	Ciconiae	Bonaparte 1834.....	Ciconina
Suborder	Phoenicopteriformes	Bonaparte 1831.....	Phoenicopterina
Order	Anseriformes	Swainson 1837.....	Anserida
Suborder	Anhimae	.....	Anhimina
Suborder	Anseres	Linnaeus 1735.....	Anserina
Order	Falconiformes	Naumann 1822.....	Falconida
Suborder	Cathartidae	Lafresnaye 1829.....	Cathartina
Suborder	Falcones	Naumann 1822.....	Falconina
Order	Galliformes	Latreille 1825.....	Gallida
Suborder	Galli	Dumeril 1806.....	Gallina
Suborder	Opisthocomi	Gray 1840.....	Opisthocomina
Order	Gruiformes	Stejneger 1885.....	Gruida
Suborder	Mesoanatides	Lowe 1924.....	Mesoanatidina
Suborder	Turnices	Gray 1840.....	Turnicina
Suborder	Grues	Owen 1856.....	Gruina
Suborder	Helionithes	Gray 1840.....	Helionithina
Suborder	Rhynocheti	.....	Rhynochetina
Suborder	Eurypygae	.....	Eurypygina
Suborder	Phororhaci	Lydekker 1893.....	Phororhaciina
Suborder	Cariamae	.....	Cariamina
Suborder	Otides	Wagler 1830.....	Otidina
Order	Diatrymiformes	Cope 1877.....	Diatrymida

Order Charadriiformes	Furbringer 1888.....	Charadriida
Suborder Charadrii	Huxley 1867.....	Charadriina
Suborder Lari	Bonaparte 1857.....	Larina
Suborder Alcae	Stejneger 1885.....	Alcina
Order Columbiformes	Bonaparte 1853.....	Columbida
Suborder Pterocletes	Knowlton 1909.....	Pterocletina
Suborder Columbae	Bonaparte 1857.....	Columbina
Order Psittaciformes	Illiger 1811.....	Psittacida
Order Cuculiformes	Stejneger 1884.....	Cuculida
Suborder Musophagi	Sharpe 1891.....	Musophagina
Suborder Cuculi	Sharpe 1891.....	Cuculina
Order Strigiformes	Wagler 1830.....	Strigida
Order Caprimulgiformes	Stejneger 1885.....	Caprimulgida
Suborder Steatornithes	Bonaparte 1850.....	Steatornithina
Suborder Caprimulgai	Bonaparte 1840.....	Caprimulgina
Order Micropodiformes	Lucas 1889.....	Micropodida
Suborder Micropodi	.....	Micropodina
Suborder Trochili	Lesson 1831.....	Trochilina
Order Coliiformes	Swainson 1837.....	Coliida
Order Trogoniformes	Swainson 1831.....	Trogonida
Order Coraciiformes	Seeböhm 1880.....	Coraciida
Suborder Alcedines	Bonaparte 1831.....	Alcedina
Suborder Meropes	Bonaparte 1831.....	Meropina
Suborder Coracii	Gray 1845.....	Coracina
Suborder Bucerotes	Fürbringer 1888.....	Bucerotina
Order Piciformes	Sharpe 1891.....	Picida
Suborder Galbulae	Fürbringer 1888.....	Galbulina
Suborder Pici	Wagler 1830.....	Picina
Order Passeriformes	Nitzsch 1829.....	Passerida
Suborder Eurylaimi	Gadow 1893.....	Eurylaimina
Suborder Tyranni	Swainson 1837.....	Tyrannina
Suborder Menuræ	Stejneger 1885.....	Menurina
Suborder Passeres	Linnaeus 1758.....	Passerina
Class Mammalia	Linnaeus 1758.....	Mammalia
Subclass Prototheria	Gill 1872.....	Prototheria
Order Monotremata	Tiedemann 1808.....	Monotremata
Subclass *Allotheria	Marsh 1880.....	*Allotheria
Order *Multituberculata	Cope 1884.....	*Multituberculata
Suborder *Tritylodontoidea	Simpson 1928.....	*Tritylodontina
Suborder *Plagiaulacoidea	Simpson 1928.....	*Plagiaulacina
Order *Triconodonta	Osborn, 1888.....	*Triconodontida
Subclass Theria	Parker & Haswell 1897.....	Theria
Superorder *Pantotheria	Marsh 1880.....	*Pantotheria
Order *Pantotheria	Marsh 1880.....	*Pantotheria
Order *Symmetrodonta	Simpson 1925.....	*Symmetrodontida
Superorder Metatheria	Huxley 1880.....	Metatheria
Order Marsupialia	Illiger 1811.....	Marsupialia
Superorder Eutheria	Gill 1872.....	Eutheria
Order Insectivora	Gray 1827.....	Insectivora
Order *Tillodontia	Marsh 1875.....	*Tillodontida
Order Dermoptera	Illiger 1811.....	Dermoptera

Order Chiroptera Blumenbach 1779.....	Chiropterida
Suborder Megachiroptera Dobson 1875.....	Megachiropterina
Suborder Microchiroptera Dobson 1875.....	Microchiropterina
Order Primates Linnaeus 1758.....	Primatida
Suborder Lemuroidea Mivart 1864.....	Lemurina
Suborder Tarsioidea Weber 1928.....	Tarsina
Suborder Anthroptidea Mivart 1864.....	Anthropoidina
Order *Taeniodonta Cope 1876.....	*Taeniodontida
Order Edentata Vicq-d'Azyr 1792.....	Edentatida
Suborder *Palaeonodonta Matthew 1918.....	*Palaeodontina
Suborder Xenarthra Gill 1884.....	Xenarthrina
Suborder Loricata Owen 1882.....	Loricatina
Suborder Pholidota Weber 1904.....	Pholidotina
Order Rodentia Vicq-d'Azyr 1792.....	Rodentida
Order Lagomorpha Brandt 1859.....	Lagomorphida
Order Carnivora Vicq-d'Azyr 1792.....	Carnivorida
Suborder *Creodonta Cope 1875.....	*Creodontina
Suborder Fissipedia Fischer von Waldheim	
1813	Fissipedina
Suborder Pinnipedia Storr 1780.....	Pinnipedina
Order Cetacea Blumenbach 1779.....	Cetacida
Suborder *Archaeoceti Flower 1883.....	*Archaeocetina
Suborder Odontoceti Flower 1864.....	Odontocetina
Suborder Mysticeti Flower 1864.....	Mysticetina
Order *Condylarthra Cope 1881.....	*Condylarthrida
Order Tubulidentata Huxley 1872.....	Tubulidentida
Order *Amblypoda Cope 1875.....	*Amblypodida
Order *Dinocerata Marsh 1872.....	*Dinoceratida
Order *Notoungulata Roth 1903.....	*Notoungulatida
Suborder *Entelonychia Ameghino 1893.....	*Entelonychina
Suborder *Astrapotheria Ameghino 1893.....	*Astrapotherina
Suborder *Toxodontia Owen 1858.....	*Toxodontina
Suborder *Typotheria Zittel 1893.....	*Typotherina
Order *Pyrotheria Ameghino 1895.....	*Pyrotherida
Order *Litopterna Ameghino 1889.....	*Litopternida
Order Proboscidea Illiger 1811.....	Proboscida
Order *Barytheria Andrews 1904.....	*Barytherida
Order Hyracoidea Huxley 1872.....	Hyracida
Order Sirenia Illiger 1811.....	Sirenida
Suborder Trichechiformes Hay 1923.....	Trichechina
Suborder *Desmostyiformes Hay 1923.....	*Desmostyilina
Order Embrithopoda Andrews 1905.....	Embrithopodida
Order Perissodactyla Owen 1848.....	Perissodactylida
Order Artiodactyla Owen 1848.....	Artiodactylida
Suborder Bunodonta Kowalevsky 1873.....	Bunodontina
Suborder *Anconodonta Matthew 1929.....	*Anconodontina
Suborder Tylopoda Illiger 1811.....	Tylopodina
Suborder Pecora Linnaeus 1758.....	Pecorina

