Family-group names of fossil fishes

Richard VAN DER LAAN
Grasmeent 80, 1357JJ Almere, The Netherlands.
Email: richard.vanderlaan80@gmail.com

Abstract. The family-group names of animals (superfamily, family, subfamily, supertribe, tribe and subtribe) are regulated by the International Code of Zoological Nomenclature. Particularly, the family names are very important, because they are among the most widely used of all technical animal names. A uniform name and spelling are essential for the location of information. To facilitate this, a list of family-group names for fossil fishes has been compiled. I use the concept ‘Fishes’ in the usual sense, i.e., starting with the Agnatha up to the †Osteolepidiformes. All the family-group names proposed for fossil fishes found to date are listed, together with their author(s) and year of publication. The main goal of the list is to contribute to the usage of the correct family-group names for fossil fishes with a uniform spelling and to list the author(s) and date of those names. No valid family-group name description could be located for the following family-group names currently in usage: †Brindabellaspidae, †Diabolepididae, †Dorsetichthyidae, †Erichalcidae, †Holodipteridae, †Kentuckiidae, †Lepidaspididae, †Loganelliidae and †Pituriaspididae.

Keywords. Nomenclature, ICZN, Vertebrata, Agnatha, Gnathostomata.


Contents
Introduction .............................................................................................................................................. 1
A note on the dagger (†) symbol.................................................................................................................. 2
Methods .................................................................................................................................................... 2
Rules for the family-group names and how the comments are reported in the list ................................. 4
How to use the family-group names list ............................................................................................... 14
Family-group names of fossil Fishes ................................................................................................. 15
Acknowledgements .................................................................................................................................. 92
References ............................................................................................................................................... 92
Index [Recent fish families in bold] .................................................................................................. 148

Introduction
Family names in zoology are useful tools for the storage and retrieval of biological and non-biological information attached to a group of related species and are among the most widely used of all technical names for fossil fishes.
These zoological family-group names, the names for the family-series: superfamily (suffix -oidea), family (suffix -idae), subfamily (suffix -inae), tribe (suffix -ini) and subtribe (suffix -ina), are regulated by the International Code of Zoological Nomenclature (hereafter named the Code) as published by the International Commission on Zoological Nomenclature (ICZN). The fourth edition of the Code (in effect from 1 January 2000) provides a set of rules for the naming of animals and the resolution of nomenclatural problems. Articles within the Code are called out in the text of this article using the abbreviations Art. or Arts.

The principle of priority also applies to family-group names, with some restrictions (see Van der Laan et al. 2014: 8–9). In order to be available, a family-group name proposed before 1931 must be a scientific name (i.e., in Latinized form) in the nominative plural based on the stem of an available genus name then used as valid in the new suprageneric taxon (Art. 11.7). New family-group names proposed between 1931 and 1999 had to be described in words or associated with a bibliographic reference to such a description in order to be considered available (Arts 13, 15). A family-group name proposed in that time period without a description is available from its original publication (Art. 13.1.3), only if it was used as valid before 2000 and not rejected by an author who, after 1960 and before 2000, expressly applied Art. 13 of the then current editions of the Code (Art. 13.2.1). Family-group names proposed since 2000 have to be explicitly indicated as new and the name of the type genus has to be clearly cited in order to be available (Art. 16).

Given the importance of family names in the scientific literature, it is very important to use uniform family-group names (Van der Laan et al. 2014: 3). A uniform name and spelling diminishes the trouble of finding the information connected with the family name. A single spelling of the stem is also important for having uniform names in the order series. For example, it is somewhat confusing to state the family †Astraspidae (with stem Astrasp-) as belonging to the order †Astraspidiformes (with stem Astraspid-).

Locating the widely scattered family-group names in the literature is not easy and workers have often ignored priority of these names. A lot of works do not have accurate authors and dates for families and subfamilies. For easy access it is useful to have accurate family-group name lists (Van der Laan et al. 2014; see for more examples Bouchet & Rocroi 2005 or Bouchard et al. 2011).

Family-group names of Recent fishes were published by Van der Laan et al. (2014) and are regularly updated (e.g. Van der Laan 2018).

A note on the dagger (†) symbol

Fossils can sample lineages close in time to relatively deep splitting events. They may bridge problematic morphological gaps and display combinations of character states that are not found in the extant biota, thereby subdividing long branches and improving phylogenetic accuracy (Cobbett et al. 2007; Edgecombe 2010). To make use of this advantage, many studies use fossil taxa in combination with Recent taxa in phylogenetic analyses (e.g., Grande & Bemis 1991, 1998; Santini & Tyler 2003, 2004; Grande & Hilton 2006; Davesne et al. 2014; Bemis et al. 2018). When fossil fishes appear alongside living fishes in the same classification scheme, it is important to distinguish if a certain taxon contains fossil or Recent fishes, or both. This distinction conveys the meaning that the information about the fossil taxon is necessarily less complete than it would be for an extant taxon (Bemis 2016: 321). Thus, in this work, I use the dagger symbol “†” preceding the scientific name, to denote all taxa containing exclusively fossil fishes.

Methods

The concept ‘Fishes’ is used in the usual, non-monophyletic sense (Bemis 2016: 312), i.e., starting with Agnatha and including all non-tetrapods. Although Fowler (1964: 20) included the lancelets in
his famous *A Catalog of World Fishes*, these fish-like marine chordates are nowadays classified in the subphylum Cephalochordata and no longer included in ‘Fishes’. The debate over conodont relationships still remains a somewhat open question and I have not included the conodont family names in this list of ‘Fishes’.

As with the family-group names for Recent fishes (Van der Laan *et al.* 2014), problems were encountered with the priority of some names for fossil fishes and with the spelling of certain family names. Some seniority problems can be easily solved by applying the Code, but there are many senior ‘overlooked / forgotten’ names that are not in use. Changing a well-established family name to a little-known older name (although in line with the present Code), will seriously upset the classification and cause unneeded confusion. In this list, the practical concept of *prevailing recent practice* is followed (Van der Laan *et al.* 2014).

For example, the family-group name †Crossognathidae Woodward, 1901 is a well-known family of fossil fishes (hundreds of citations). However, earlier in 1901, Cragin (1901) proposed two family-group names, †Syllaemidae and †Pelecorapidae. As long as the type genera are thought to belong to the same family, one of the names of Cragin has priority (†Pelecorapidae was selected by the first revisor).

Art. 23.9 Reversal of Priority cannot be evoked, because both senior names are used after 1899 (Art. 23.9.1.1). Changing the familiar family name †Crossognathidae (also echoed in the name of the order †Crossognathiformes) is clearly undesirable. The formal solution is to appeal to the Commision (Art. 23.9.3). With the practical concept of *prevailing recent practice*, the time-consuming appeal process can be avoided. In contrast to the names of species, where ‘stability is ignorance’ (Raposo *et al.* 2017), the names and spelling of families can easily be stabilized.

The spelling of family-group names ending in -aspidae or -aspididae (genus name ending in -aspis), -lepidae or -lepididae (genus name ending in -lepis) and -odidae or -odontidae (genus name ending in -odus) is a source of confusion. Besides the arguments expressed in Van der Laan *et al.* (2014), I think it is probably best to follow the advice of Woodward (1891a: xxii), Gill (1893: 129) and Jarvik (1985: 10) to use the shorter version for clarity and simplicity, unless the longer version is in *prevailing recent practice* (see Van der Laan *et al.* 2014: 4). However, there is a definite trend in the literature to use the longer family names. When in doubt which of the spellings is used more often, it is probably best to retain the original spelling.

Another problem is the lack of a database for the species of fossil fishes, equivalent to the *Catalog of Fishes* for Recent fishes (Eschmeyer *et al.* 2018).

Searching for the correct author / date combination of a fossil fish genus, its validity, and its current systematic placement required a great deal of time and in some cases proved insufficient. I checked all the type genera in Neave’s *Nomenclator Zoologicus* with the help of Internet and generally follow the given describer(s) and date. As already noted by Bemis (2016: 323), a dedicated, comprehensive and scholarly *Catalog of Fossil Fishes*, that has been carefully interpreted using the Code, is sorely missed.

Internet was searched with the help of:
- [http://fossilworks.org/](http://fossilworks.org/) [Gateway to the Paleobiology Database];
- [http://www.organismnames.com/query.htm](http://www.organismnames.com/query.htm) [Index to Organism Names (ION)];

Because there are few comprehensive genus-based phylogenies of fossil fishes, the phylogenetic framework used here is a compilation of phylogenies found in the literature for each order, family and genus. The family-group names are indexed, so searching for a possible family-group name based on a genus (but placed in a different family in this work), should be straightforward.

If the systematic placement is in doubt (taxonomic groups that are difficult to place with any degree of certainty), then I have listed the family-group names alphabetically under a higher rank with the remark incertae sedis.

If the name is dubious and has not recently been used as a separate family (or nowadays not used at all), I simply state the name in one line. If the name is dubious, but has recently been used as a separate family, then the name is stated as a separate family.

As the rules of the ICZN do not require the use of commas in the authorship, they were left out in this paper for the family-group names and the type genera. All authorships of family-group names have been included in the bibliography.

The more than eleven-hundred family-group names in the list below are presented in the following way:

Original name and spelling [correction of obvious type-setting error] author year: page number (rank)
type Genus author year [comments on spelling / correction of the stem / availability / validity].

Synonymous family-group names are listed according to decreasing priority under the valid family name. I do not list all the invalid vernacular or non-typical names used for fossil fishes. Moreover, some very old family names that are nowadays used exclusively in the ordinal series are not listed.

Every stem of the family name found in the literature has been mentioned, so electronically searching with the stem should find a proposed family-group name.

**Rules for the family-group names and how the comments are reported in the list**

The important articles of the Code for the family-group names as applied herein are listed below. I came across so many errors in the family-group names that I found it useful to quote most articles in full (sometimes with comments inserted in brackets). I have deleted a few instances where the sections of the code were repeated elsewhere or were unnecessary (see The Code Online, http://iczn.org/iczn/index.jsp, for the entire document). In between the articles (between << >>) are explanations of how I report my findings in the family-group names list.
The International Commission on Zoological Nomenclature has recently expanded and refined the methods of publication allowed by the Code, particularly in relation to electronic publication. The amendment allows electronic publication after 2011 under certain conditions and disallows publication on optical discs after 2012. The requirements for electronic publications are that the work be registered in ZooBank before it is published, that the work itself state the date of publication and contain evidence that registration has occurred, and that the ZooBank registration state both the name of an electronic archive intended to preserve the work and the ISSN or ISBN associated with the work.

Article 11.6. Publication as a synonym. A name which when first published in an available work was treated as a junior synonym of a name then used as valid is not thereby made available.

11.6.1. However, if such a name published as a junior synonym had been treated before 1961 as an available name and either adopted as the name of a taxon or treated as a senior homonym, it is made available thereby but dates from its first publication as a synonym.

11.6.3. A name first published after 1960 and treated as a junior synonym on that occasion cannot be made available from that act under Art. 11.6.

<< If a family-group name was published as a synonym and is not available, I add the remark: [name in synonymy; treated as available before 1961?; not available, Art. 11.6.1]. Or I add: [published after 1960 as a junior synonym; not available, Art. 11.6.3].>>

Article 11.7.1. A family-group name when first published must meet all the following criteria. It must:

11.7.1.1. be a noun in the nominative plural formed from the stem of an available generic name [Art. 29, this generic name is called the type genus Art. 63] (indicated either by express reference to the generic name or by inference from its stem, but for family-group names proposed after 1999 see Art. 16.2); the generic name must be a name then used as valid in the new family-group taxon [Arts 63–64] (use of the stem alone in forming the name is accepted as evidence that the author used the generic name as valid in the new family-group taxon unless there is evidence to the contrary).

<<If the family-group name is not formed from the stem of an available generic name I add the remark: [no stem of the type genus, not available, Art. 11.7.1.1]. I only list some old atypical names.

If the family-group name is formed from the stem of a, not used as a valid, available generic name I add: [no valid type genus, not available, Art. 11.7.1.1]. This usage is sometimes difficult to find (and easily missed!) as the synonymy of the type genus is sometimes in a different part of the publication.

If the type genus is not mentioned, but the stem of an available generic name has been used in forming the name and there is no evidence of invalidity of the type genus, I add: [type genus inferred from the stem, Art. 11.7.1.1], and I treat the name as available.

If an author published a few papers mentioning the invalidity of the potential type genus before and after the publication with the new family-group name, then I determined there was evidence to the contrary (Art. 11.7.1.1), and I add: [no valid type genus, not available, Art. 11.7.1.1]. If it is evident from the publication that an author listed all of the valid genera and the type genus is not among them, then I also determined there was evidence to the contrary (Art. 11.7.1.1), and I add: [no valid type genus, not available, Art. 11.7.1.1].

If the type genus is not mentioned and the inference is questionable, I add a question mark before the family-group name (and sometimes add: [family uncertain] if the systematic position of the family-group name is uncertain), and I treat the name as not available.>>
11.7.1.2. be clearly used as a scientific name to denote a suprageneric taxon and not merely as a plural noun or adjective referring to the members of a genus.

<<If an author used the nominative singular to denote a new family-group name (against Art. 11.7.1.1), but it is otherwise very obvious that the author used the name for a suprageneric taxon (for multiple genera), I treat the name as available.

If merely a plural noun I add the remark: (no family-group name). I only list those plural nouns that were referred to by some author as a potential family-group name.>>

11.7.1.3. end with a family-group name suffix except as provided in Art. 11.7.2; a family-group name of which the family-group name suffix [Art. 29.2] is incorrect is available with its original authorship and date, but with a corrected suffix [Arts 29, 32.5.3];

11.7.1.4. not be based on certain names applied only to fossils and ending in the suffix -ites, -ytes or -ithes [Art. 20];

11.7.1.5. not be based on a genus-group name that has been suppressed by the Commission [Art. 78].

11.7.2. If a family-group name was published before 1900, in accordance with the above provisions of this article but not in latinized form, it is available with its original author and date only if it has been latinized by later authors and has been generally accepted as valid by authors interested in the group concerned and as dating from that first publication in vernacular form.

<<If the family-group name is not proposed in a latinized form and has been latinized by later authors I add the remark: [latinized to {family-group name} by {author year: page number}]. If the family-group name has been generally accepted as valid by authors interested in the group concerned and as dating from that first publication in vernacular form, I add: [considered valid with this authorship by {author year: page number} Art. 11.7.2]. If I state both provisions, then I treated the name as available.

For fossil fishes, it is very difficult to find authors who mention the author(s)/date of family-group names. For fishes, Art. 11.7.2 can be difficult and lead to different opinions. I tried to establish the most accepted author(s)/date combination.

If not treated as valid and as dating from the first publication in vernacular form, I add: [published not in latinized form before 1900, not available, Art. 11.7.2]. I list only some early vernacular names that possibly could have been latinized by a later author, and I do not present an exhaustive list of all the vernacular family-group names.

If the family-group name is not proposed in a latinized form after 1899, I add: [published not in latinized form after 1899, not available].>>

Article 12. Names published before 1931

12.1. Requirements. To be available, every new name published before 1931 must satisfy the provisions of Art. 11 and must be accompanied by a description or a definition of the taxon that it denotes, or by an indication.

12.2. Indications. For the purposes of this article the word ‘indication’ denotes only the following:

12.2.1. A bibliographic reference to a previously published description or definition even if the description or definition is contained in a work published before 1758, or that is not consistently binominal, or that
has been suppressed by the Commission (unless the Commission has ruled that the work is to be treated as not having been published [Art. 8.7]);

12.2.2. The inclusion of a name in an index to a work that is not consistently binominal, provided that the provisions of Art. 11.4.3 are satisfied;

12.2.3. The proposal of a new replacement name (nomen novum) for an available name, whether or not required by any provision of the Code;

12.2.4. The formation of a family-group name from an available generic name [Art. 29].

Article 13. Names published after 1930

13.1. Requirements. To be available, every new name published after 1930 must satisfy the provisions of Art. 11 and must

13.1.1. be accompanied by a description or definition that states in words characters that are purported to differentiate the taxon, or

13.1.2. be accompanied by a bibliographic reference to such a published statement, even if the statement is contained in a work published before 1758, or in one that is not consistently binominal, or in one that has been suppressed by the Commission (unless the Commission has ruled that the work is to be treated as not having been published [Art. 8.7]), or

13.1.3. be proposed expressly as a new replacement name (nomen novum) for an available name, whether required by any provision of the Code or not.

13.2. Family-group names. To be available, every new family-group name published after 1930 must satisfy the provisions of Art. 13.1 and must be formed from an available genus-group name then used as valid by the author in the family-group taxon [Arts 11.7.1.1 and 29].

13.2.1. A family-group name first published after 1930 and before 1961 which does not satisfy the provisions of Art. 13.1 is available from its original publication only if it was used as valid before 2000, and also was not rejected by an author who, after 1960 and before 2000, expressly applied Art. 13 of the then current editions of the Code.

13.5. Combined description of new family-group taxon and new genus. The combined description or definition of a new nominal family-group taxon and a single new nominal genus of which the name provides the basis for the new family-group name [Art. 11.5] is deemed to confer availability on each name under Art. 13.1.1, but for such names published after 1930 availability is not conferred on either name unless a type species is fixed for the new nominal genus [Arts 13.2 and 13.3].

<<If there is no description of the taxon, I add the remark: [name only]. If the family-group name was published before 1961 and if used as valid before 2000, I add: [name only, but used as valid by {author year}: page number Art. 13.2.1], and I treat the name as available. If I could not find a validating usage, I add: [name only, used as valid before 2000?; not available].

If the family-group name was published before 1961 and has been rejected with the help of Art. 13 after 1960 and before 2000, I add: [name only, rejected by {author year}: page number with the help of Art. 13; not available]. If the family-group name was published after 1960, I add: [name only, published after 1960, not available, Art. 13.1.1].>>
Article 16. Names published after 1999

16.1. All names: intention of authors to establish new nominal taxa to be explicit. Every new name published after 1999, including new replacement names (nomina nova), must be explicitly indicated as intentionally new.

16.2. Family-group names: type genus to be cited. In addition to satisfying the provisions of Arts 13–15, a new family-group name published after 1999 must be accompanied by citation of the name of the type genus (i.e., the name from which the family-group name is formed).

<<If a family-group name proposed after 1999 does not satisfy the provisions of Arts 13–16, I add the remark: [not published according to the rules, not available]. In most cases the publication lacks an exact description or definition that states in words characters that are purported to differentiate the taxon or the indication ‘new’ is absent.>>

Article 23. Principle of Priority

23.1. Statement of the Principle of Priority. The valid name of a taxon is the oldest available name applied to it, unless that name has been invalidated or another name is given precedence by any provision of the Code or by any ruling of the Commission. For this reason priority applies to the validity of synonyms [Art. 23.3], to the relative precedence of homonyms [Arts 53–60], the correctness or otherwise of spellings [Arts 24, 32], and to the validity of nomenclatural acts (such as acts taken under the Principle of the First Reviser [Art. 24.2] and the fixation of name-bearing types [Arts 68–69, 74.1.3, 75.4]).

23.1.1. For exceptions for certain family-group names see Arts 35.5 and 40.

23.1.2. For the case of disused family-group names which are homonyms see Art. 55.3.1.1.

23.2. Purpose. In accordance with the objects of the Code (see Preamble), the Principle of Priority is to be used to promote stability and it is not intended to be used to upset a long-accepted name in its accustomed meaning by the introduction of a name that is its senior synonym or homonym (for certain such cases see Art. 23.9), or through an action taken following the discovery of a prior and hitherto unrecognized nomenclatural act (such as a prior type fixation; for such cases see Arts 70.2 and 75.6).

23.3.1. Priority of the name of a nominal taxon is not affected by elevation or reduction in rank of the taxon within the family group, genus group or species group [Arts 36, 43, 46], nor by any mandatory change in suffix of a family-group name consequent upon change in rank [Art. 34].

23.9. Reversal of precedence. In accordance with the purpose of the Principle of Priority [Art. 23.2], its application is moderated as follows:

23.9.1. prevailing usage must be maintained when the following conditions are both met:

23.9.1.1. the senior synonym or homonym has not been used as a valid name after 1899, and

23.9.1.2. the junior synonym or homonym has been used for a particular taxon, as its presumed valid name, in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years.

<<Use of Art. 23.9.1.1 is straightforward, but Art. 23.9.1.2 presents some problems with family-group names that appear rarely in publications. If I have evidence that the name of a family-group taxon is a long-accepted name in its accustomed meaning, I add: Name in prevailing recent practice behind
the family-group name regardless of whether it met the criteria of “25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years”.

23.9.2. An author who discovers that both the conditions of 23.9.1 are met should cite the two names together and state explicitly that the younger name is valid, and that the action is taken in accordance with this article; at the same time the author must give evidence that the conditions of Art. 23.9.1.2 are met, and also state that, to his or her knowledge, the condition in Art. 23.9.1.1 applies. From the date of publication of that act the younger name has precedence over the older name. When cited, the younger but valid name may be qualified by the term ‘nomen protectum’ and the invalid, but older, name by the term ‘nomen oblitum’. In the case of subjective synonymy, whenever the names are not regarded as synonyms the older name may be used as valid.

23.9.3. If the conditions of 23.9.1 are not met but nevertheless an author considers that the use of the older synonym or homonym would threaten stability or universality or cause confusion, and so wishes to maintain use of the younger synonym or homonym, he or she must refer the matter to the Commission for a ruling under the plenary power [Art. 81]. While the case is under consideration use of the junior name is to be maintained [Art. 82].

23.9.4. If the case is one of homonymy in family-group names resulting from similarity but not identity in the names of type-genera, see Art. 55.3.

Article 24. **Precedence between simultaneously published names, spellings or acts**

24.1. Automatic determination of precedence of names. When homonyms or synonyms are established simultaneously, but proposed at different ranks, in the family group, genus group or species group the name proposed at higher rank takes precedence [Arts 55.5, 56.3 and 57.7].

Article 29. **Family-group names**

29.1. Formation of family-group names. A family-group name is formed by adding to the stem of the name [Art. 29.3] of the type genus, or to the entire name of the type genus [see Art. 29.6], a suffix as specified in Art. 29.2.

29.2. Suffixes for family-group names. The suffix -OIDEA is used for a superfamily name, -IDEA for a family name, -INAE for a subfamily name, -INI for the name of a tribe, and -INA for the name of a subtribe. These suffixes must not be used at other family-group ranks. The suffixes of names for taxa at other ranks in the family-group are not regulated.

29.2.1. Names in the genus and species groups which have endings identical with those of the suffixes of family-group names are not affected by this article.

29.3. Determination of stem in names of type genera. The stem of a family-group name is based on the name of its type genus [Art. 63] and determined as follows.

29.3.1. If a generic name is or ends in a Greek or Latin word, or ends in a Greek or Latin suffix, the stem for the purposes of the Code is found by deleting the case ending of the appropriate genitive singular.

29.3.1.1. If the stem so formed ends in -id, those letters may be elided before adding the family-group suffixes. If, however, the unelided form is in prevailing usage, that spelling is to be maintained, whether or not it is the original spelling.
29.3.2. If the name of a genus is or ends in a Greek word latinized with a change in ending, the stem is that appropriate to the latinized form, as determined in Art. 29.3.1.

29.3.3. If a generic name is or ends in a word not Greek or Latin, or is an arbitrary combination of letters, the stem for the purposes of the Code is that adopted by the author who establishes the new family-group taxon, either the entire generic name (see Art. 29.6), or the entire generic name with the ending elided, or the entire generic name with one or more appropriate linking letters incorporated in order to form a more euphonious family-group name.

<<In some cases, the stem of the type genus is not the correct grammatical stem, but is the genitive without its case-ending. See Steyskal (1980) for some guidance in forming the stem. Also the extract from the 3rd edition of the Code on the ICZN website (http://iczn.org/content/formation-names; accessed 1 Apr. 2014) can be of some help. Sheiko (2013) also lists many stems.

I add the remark: [changed to ... by {author year:page number}] to present a different spelling by an author (changed by mistake or insight or dislike?), or [corrected to ... by {author year:page number}] to present a possibly intentional different spelling by an author [a bit arbitrarily], or [emended to ... by {author year:page number}] in the strict sense of Art. 33.2.1 of the Code; i.e., an explicit statement of intentional change of spelling with citation of both spellings. I tried to establish the stem in prevailing recent practice.

As nomenclature is based on the examination of individual cases, one cannot extend a certain stem to all such generic name endings (for instance, although the correct stem of a type genus ending in -ichthys is -ichthy-, a different stem can be found in the accepted family-names).>>

29.4. Acceptance of originally formed stem. If after 1999 a new family-group name is based on a generic name which is or ends in a Greek or Latin word or ends in a Greek or Latin suffix, but its derivation does not follow the grammatical procedures of Arts 29.3.1 or 29.3.2, its original spelling must be maintained as the correct original spelling, provided

29.4.1. it has a correctly formed suffix [Art. 29.2], and

29.4.2. its stem is formed from the name of the type genus as though it were an arbitrary combination of letters [Art. 29.3.3].

29.5. Maintenance of current spellings. If a spelling of a family-group name was not formed in accordance with Art. 29.3 but is in prevailing usage, that spelling is to be maintained, whether or not it is the original spelling and whether or not its derivation from the name of the type genus is in accordance with the grammatical procedures in Arts 29.3.1 and 29.3.2.

<<The central issue of Arts 29.3 and 29.5 is whether the emendation of a family-group name is justified. Today a growing number of zoologists (perhaps a majority) is against changing the originally proposed stem. Art. 29.5 shifts the balance between the two principles of zoological nomenclature: original intent/linguistic correction vs stability, towards stability. I applied Art. 29.5 with the working principle of prevailing recent practice.>>

29.6. Avoidance of homonymy in family-group names. An author wishing to establish a new family-group name must avoid its homonymy with any known previously established names by forming an appropriate stem from the name of the type genus. (See Art. 55.3.1 for the elimination of homonymy between existing family-group names).
Article 32. Original spellings

32.5.3. A family-group name is an incorrect original spelling and must be corrected if it
32.5.3.1. has an incorrectly formed suffix [Art. 29.2], or
32.5.3.2. is formed from an unjustified emendation of a generic name (unless the unjustified emendation has become a substitute name), or
32.5.3.3. is formed from an incorrect subsequent spelling of a generic name [Art. 35.4.1], or
32.5.3.4. is formed from one of two or more original spellings of a genus-group name which was not that selected by the First Reviser [Art. 24.2.3].

<<I place the correction of an obvious spelling error (type-setting error) in the family-group name in brackets immediately behind the name; e.g., †Jekelotodontidae [†Jaekelotodontidae] Glickman 1964a: 11 (family) †Jaekelotodus Menner 1928.

If an incorrect spelling of the type genus was used, I add after the type genus the remark: [type genus as {used incorrect spelling of the type genus}, name must be corrected Art. 32.5.3 to ...]; e.g., †Acanthoëssidae Hay 1902: 273 (family) †Acanthoëssus Agassiz 1832 [type genus as †Acanthoëssus, name must be corrected Art. 32.5.3 to †Acanthoëssidae]>>

Article 34. Mandatory changes in spelling consequent upon changes in rank or combination

34.1. Family-group names. The suffix of a family-group name must be changed when the taxon denoted by the name is raised or lowered in rank; the author and date of the name remain unchanged [Arts 23.3.1, 29.2, 50.3.1].

Article 35. The family group

35.1. Definition. The family group encompasses all nominal taxa at the ranks of superfamily, family, subfamily, tribe, subtribe, and any other rank below superfamily and above genus that may be desired (see also Art. 10.3 for collective groups and ichnotaxa).

<<Most early English and American writers used the family-group name group (and subgroup) for a grouping of some genera (equivalent to the currently used term tribe/subtribe). The word Gruppe of early writers (e.g., Bassani, Jaekel, Wagner) is also more or less equivalent to the currently used term tribe. I list the family-group names when they were used for grouping genera below the family. I did not list the (non-regulated) higher rank names of the order/class-series.>>

35.2. Provisions applicable to all family-group nominal taxa and their names. Family-group nominal taxa and their names are subject to the same provisions whatever their rank, except in respect of their suffixes [Art. 29.2] (for the application of the Principle of Coordination to family-group names, see Art. 36).

35.3. Application of family-group names. The application of each family-group name is determined by reference to the type genus of the nominal taxon [Arts 61–65].

35.4. Formation and treatment of family-group names. A family-group name is to be formed and treated in accordance with Art. 11.7 and the relevant provisions of Arts 25–34.
35.4.1. A family-group name based upon an unjustified emendation (but see Art. 35.4.2) or an incorrect spelling of the name of the type genus must be corrected, unless it is preserved under Art. 29.5 or unless the spelling of the genus-group name used to form the family-group name is preserved under Arts 33.2.3.1 or 33.3.1.

35.4.2. If an unjustified emendation of the name of the type genus becomes its substitute name, the family-group name is then to be based on it by correcting the name to the spelling formed from the stem of the substitute name, or the whole substitute name [Art. 29.1]; the author and date of the family-group name remain unchanged.

35.5. Precedence for names in use at higher rank. If after 1999 when a name in use for a family-group taxon (e.g. for a subfamily) is found to be older than a name in prevailing usage for a taxon at higher rank in the same family-group taxon (e.g. for the family within which the older name is the name of a subfamily) the older name does not displace the younger name.

<<If I found an older subfamily name, I add after the family name: Name in prevailing recent practice, Art. 35.5. If I found an older family name and if I have evidence that the current family name (or the current spelling) is in prevailing recent practice, I add: Name (or spelling) in prevailing recent practice.

I checked the family-group names against Nelson et al. (2016) and recent literature. If I use the same name and spelling as in most of these recent works, I add: Name in prevailing recent practice, or if I use the same spelling, I add: Spelling in prevailing recent practice where appropriate, or I use a combination of both phrases.>>

Article 36. Principle of Coordination

36.1. Statement of the Principle of Coordination applied to family-group names. A name established for a taxon at any rank in the family group is deemed to have been simultaneously established for nominal taxa at all other ranks in the family group; all these taxa have the same type genus, and their names are formed from the stem of the name of the type genus [Art. 29.3] with appropriate change of suffix [Art. 34.1]. The name has the same authorship and date at every rank.

36.2. Type genus. When a nominal taxon is raised or lowered in rank in the family group its type genus remains the same [Art. 61.2.2].

Article 37. Nominotypical taxa

37.1. Definition. When a family-group taxon is subdivided, the subordinate taxon that contains the type genus of the superior taxon is denoted by the same name (except for suffix) with the same author and date [Art. 36.1]; this subordinate taxon is termed the “nominotypical taxon”.

37.2. Effect of change of name on nominotypical taxa. If the name in use for a family-group taxon is unavailable or invalid it must be replaced by the name valid under Art. 23.3.5; any subordinate taxa containing the type genus of the substitute nominal taxon (and therefore denoted by the valid family-group name, with appropriate suffixes) become nominotypical taxa.

Article 39. Invalidity due to homonymy or suppression of the name of the type genus

The name of a family-group taxon is invalid if the name of its type genus is a junior homonym or has been totally or partially suppressed (see Arts 81.2.1 and 81.2.2) by the Commission. If that family-group
name is in use it must be replaced either by the next oldest available name from among its synonyms [Art. 23.3.5], including the names of its subordinate family-group taxa, or, if there is no such synonym, by a new name based on the valid name (whether a synonym or a new replacement name (nomen novum)) of the former type genus.

<<If a family-group taxon is based on a junior homonym or on a suppressed generic name, I add the remark: [invalid, Art. 39].>>

Article 40. Synonymy of the type genus

40.1. Validity of family-group names not affected. When the name of a type genus of a nominal family-group taxon is considered to be a junior synonym of the name of another nominal genus, the family-group name is not to be replaced on that account alone.

40.2. Names replaced before 1961. If, however, a family-group name was replaced before 1961 because of the synonymy of the type genus, the substitute name is to be maintained if it is in prevailing usage.

40.2.1. A name maintained by virtue of this article retains its own author but takes the priority of the replaced name, of which it is deemed to be the senior synonym.

Recommendation 40A. Citation of author and date. If the author and date are cited, a family-group name maintained under the provisions of Art. 40.2.1 should be cited with its original author and date (see Recommendation 22A.2.2), followed by the date of its priority as determined by this article; the date of priority should be enclosed in parentheses.

<<The changing of the rules over the century (particularly if the type genus was found to be a junior synonym) was responsible for many new family-group names. Some came into prevailing practice, others disappeared. If I have found evidence that a name replaced before 1961 is in prevailing practice, I add the remark: ((date of priority)) Name in prevailing recent practice, Art. 40.2.>>

Article 53. Definitions of homonymy in the family group, genus group and species group

53.1. Homonyms in the family group. In the family group, two or more available names having the same spelling or differing only in suffix [Art. 29.2] and denoting different nominal taxa are homonyms.

Article 55. Homonymy in family-group names

55.1. Application of the Principle of Homonymy. The Principle of Homonymy applies to all family-group names, including names of ichnotaxa at the family-group level.

55.2. Homonymy from identical generic names. See Art. 39.

55.3. Homonymy from similar generic names. Homonymy between family-group names may result from similarity but not identity of the names of their type genera.

55.3.1. Such a case involving family-group names must be referred to the Commission for a ruling to remove homonymy unless the senior homonym is a nomen oblitum.

55.3.1.1. When the senior homonym is determined to be a nomen oblitum under the conditions of Art. 23.9.2, a new family-group name (a nomen novum) based on the same type genus may be proposed, but choosing a new stem from the name of the type genus which avoids the homonymy [Arts 29.1, 29.4 and 29.6].
55.4. One-letter difference. Even if the difference between two family-group names is only one letter, they are not homonyms.

55.5. Precedence of names at higher rank. Of two homonymous family-group names of identical date but established at different ranks, the one established at the higher rank is deemed to be the senior homonym [Art. 24.1].

<<I note the cases of homonymy as: [preoccupied by {family-group name} in {...}; not to be used, Art. 55.3].>>

Article 61.3. Name-bearing types and synonymy

61.3.2. If two or more objectively synonymous generic names have been used as the basis for names in the family group, the family-group names are objective synonyms.

<< If two objectively synonymous generic names have been used as the basis for family names, I add: [junior objective synonym of {family-group name author year}, invalid, Art. 61.3.2] or [senior objective synonym of {family-group name author year}]; e.g., †Acanthoëssidae Hay 1902: 273 (family) †Acanthoëssus Agassiz 1832 [type genus as †Acanthoëssus, name must be corrected Art. 32.5.3 to †Acanthoëssidae; junior objective synonym of †Acanthodidae Agassiz 1844, invalid, Art. 61.3.2].>>

How to use the family-group names list

A researcher wishing to create a new family-group name can use this list in the following way:

First determine the desired level, such as subtribe, tribe, subfamily or family.

Check to see if any of the genera (and their synonyms) to be included in the new taxon are in the family-group names list (if there are Recent fishes classified in the family-group name, check Van der Laan et al. 2014 and the cumulative addenda to this publication on http://www.calacademy.org/scientists/catalog-of-fishes-family-group-names/).

If none is in the list, then a new name can be proposed according to the Code. State the new family-group name, indicate the name as NEW, give a diagnosis of the new taxon and state the (valid) type genus. Use the dagger notation (†) correctly.

If one genus to be included in the new taxon is in the list of family-group names, check the original reference and transfer the name to the desired rank with the correct suffix. Do not change the stem of the family-group name to prevent confusion.

If two or more genera to be included in the new taxon are in the list of family-group names, check the original references, take the oldest name (to satisfy the rule of priority) and transfer the name to the desired rank with the correct suffix.

Check if the stem to be used has been used in a family-group name for any animal, not only fishes, to avoid homonymy. This can be done efficiently by searching for the stem on Google.

Mention the to be created family-group name in the abstract and in the keywords of the new publication.
Family-group names of fossil fishes

No valid family-group name description could be located for the following family-group names currently in usage:
†Brindabellaspidae, †Diabolepididae, †Dorsetichthyidae, †Erichalcidae, †Holodipteridae, †Kentuckiidae, †Lepidaspididae, †Loganelliidae and †Pituriaspididae.

Family-group names not anymore in ‘Fishes’
†Angustidontidae Cooper 1936: 93 (family) †Angustidontus Cooper 1936 [jaws of a shrimp]

Family-group names with unknown systematic placement
†Propenserinae Applegate 1970: 398 (subfamily) †Propenser Applegate 1970 [fossilized portions of a coelacanth and a pycnodont]
†Palaeodontidae Obruchev 1964a: 43 (family) †Palaeodus Rohon 1890
†Rogeniidae Jordan 1919: 8 (family) †Rogenio Jordan 1907 [family name sometimes seen as †Rogenionidae]

CHORDATA
SUBPHYLUM CRANIATA
Order †Myllokunmingiiformes
Family †Myllokunmingiidae Shu 2003
   †Myllokunmingiidae Shu 2003: 727 (family) †Myllokunmingia Shu, Zhang & Han 1999

INFRAPHYLUM MYXINOMORPHI
CLASS MYXINI
Order Myxiniformes
Family Myxinidae Rafinesque 1815

INFRAPHYLUM VERTEBRATA
CLASS PETROMYZONTIDA (CEPHALASPIDOMORPHI)
†Gilpichthyidae Halstead 1993: 580 (family) †Gilpichthys Bardack & Richardson 1977 [name only, published after 1960, not available, Art. 13.1.1]
†Pipisciidae Halstead 1993: 580 (family) †Pipiscius Bardack & Richardson 1977 [name only, published after 1960, not available, Art. 13.1.1]

Order Petromyzontiformes
†Hardistiellidae Halstead 1993: 580 (family) †Hardistiella Janvier & Lund 1983 [name only, published after 1960, not available, Art. 13.1.1]
Family †Mayomyzontidae Bardack & Zangerl 1971
   †Mayomyzontidae Bardack & Zangerl 1971: 80 (family) †Mayomyzon Bardack & Zangerl 1968 [family name sometimes seen as †Mayomyzonidae]
Family Petromyzontidae Bonaparte 1831
Family Geotriidae Gill 1893
Family Mordaciidae Gill 1893

SUPERCLASS †PTERASPIDOMORPHI
CLASS †PTERASPIDOMORPHA
Subclass †ASTRASPIDA
Subclass †ARANDASPIDA
†Aseraspidae Halstead 1993: 573 (family) †Aseraspis Dineley & Loeffler 1976 [name only, published after 1960, not available, Art. 13.1.1]

Order †Arandaspidiformes
Family †Arandaspididae Ritchie & Gilbert-Tomlinson 1977
†Arandaspididae Ritchie & Gilbert-Tomlinson 1977: 351 (family) †Arandaspis Ritchie & Gilbert-Tomlinson 1977
†Porophoraspidae Halstead 1993: 573 (family) †Porophoraspis Ritchie and Gilbert-Tomlinson 1977 [name only, published after 1960, not available, Art. 13.1.1]

Subclass †HETEROSTRACI
Family †Ariaspididae Elliott & Swift 2010
†Ariaspididae Elliott & Swift 2010: 1874 (family) †Ariaspis Denison 1963

Order †Cardipeltiformes
Family †Cardipeltidae Bryant 1933
†Cardipeltidae Bryant 1933: 307 (family) †Cardipeltis Branson & Mehl 1931 [family name sometimes seen as †Cardipeltididae]

Order †Corvaspidiformes
Family †Corvaspididae Dineley 1955, spelling in prevailing recent practice
†Corvaspididae Dineley 1955: 178 (family) †Corvaspis Woodward 1934 [family name also seen as †Corvaspidae]

Order †Lepidaspidiformes
Family †Lepidaspidae
†Lepidaspidae Halstead 1993: 573 (family) †Lepidaspis Dineley & Loeffler 1976 [name only, published after 1960, not available, Art. 13.1.1; family name sometimes seen as †Lepidaspidae]

Order †Tesseraspidiformes
Family †Tesseraspididae Berg 1955, spelling in prevailing recent practice
†Tesseraspididae Berg 1955: 25 (family) †Tesseraspis Wills 1935 [family name also seen as †Tesseraspidae]
†Natlaspididae Halstead 1993: 575 (family) †Natlaspis Dineley & Loeffler, 1976 [name only, published after 1960, not available, Art. 13.1.1]

Order †Traquairaspidiformes
Family †Traquairaspididae Kiaer 1932, spelling in prevailing recent practice
†Traquairaspidae Kiaer 1932: 25 (family) †Traquairaspis Kiaer 1932 [family name also seen as †Traquairaspididae]
†Weigeltaspiden Brotzen 1933: 655 (family) †Weigeltaspis Brotzen 1933 [published not in latinized form after 1899, not available]
†Weigeltaspididae Berg 1940: 361 [family name sometimes seen as †Weigeltaspididae; could date to Obruchev 1937 from an article in Transactions of the Paleontological Institute, not located yet]
†Phialaspididae White 1946b: 236 (family) †Phialaspis Wills 1935 [family name sometimes seen as †Phialaspidae]

Order †Tolypelepidiformes
Family †Tolypelepididae Strand 1934 (1932), name and spelling in prevailing recent practice, Art. 40.2
†Tolypaspidae Kiaer 1932: 24 (family) †Tolypaspis Schmidt 1893 [senior objective synonym of †Tolypelepididae; family name sometimes seen as †Tolypaspididae]
†Tolypelepidae Strand 1934: 328 (family) †Tolypelepis Pander 1856 [junior objective synonym of †Tolypaspidae, invalid, Art. 61.3.2, but name in prevailing recent practice Art. 40.2; family name also seen as †Tolypelepididae]

Order †Cyathaspidiformes
Suborder †Amphiaspidoidei
Family †Amphiaspididae Obruchev 1939
†Amphiaspididae Obruchev 1939: 327 (family) †Amphiaspis Obruchev 1936 [family name sometimes seen as †Amphiaspididae]
Family †Gabreyaspididae Novitskaya 1968
†Gabreyaspididae Novitskaya 1968: 49 (family) †Gabreyaspis Novitskaya 1968
Family †Obliaspididae Obruchev 1964
†Obliaspididae Obruchev 1964a: 78 (family) †Obliaspis Obruchev 1964 [family name sometimes seen as †Obliaspidae]
†Angaraspididae Halstead 1993: 576 (family) †Angaraspis Obruchev 1964 [name only, published after 1960, not available, Art. 13.1.1]
Family †Edaphaspididae Novitskaya 1968
†Edaphaspididae Novitskaya 1968: 57 (family) †Edaphaspis Novitskaya 1968

Suborder †Hibernaspidoidei
Family †Eglonaspididae Tarlo 1962
†Eglonaspididae Tarlo 1962: 268 (family) †Eglonaspis Obruchev 1959
Family †Hibernaspididae Obruchev 1939
†Hibernaspididae Obruchev 1939: 320 (family) †Hibernaspis Obruchev 1939
Family †Aphataspididae Novitskaya 1971
†Aphataspididae Novitskaya 1971: 104 (family) †Aphataspis Obruchev 1964

Suborder †Siberiaspidoidei
Family †Siberiaspididae Novitskaya 1968
†Siberiaspididae Novitskaya 1968: 59, 60 (family) †Siberiaspis Obruchev 1964
†Tuxeraspididae Novitskaya 1968: 59 (family) †Tuxeraspis Novitskaya 1971 [no valid type genus, not available, Art. 11.7.1.1; also name only]
†Tuxeraspididae Novitskaya 1971: 43 (family) †Tuxeraspis Novitskaya 1971

Suborder †Cyathaspidoidei
Family †Cyathaspididae Kiaer 1932, name and spelling in prevailing recent practice
†Poraspidae Kiaer 1932: 12 (family) †Poraspis Kiaer 1930 [family name sometimes seen as †Poraspididae or as subfamily †Poraspidinae]
†Dinaspidae Kiaer 1932: 15 (family) †Dinaspis Kiaer 1932 [type genus preoccupied by Dinaspis Leonardi 1911 in Hemiptera; invalid, Art. 39; family name sometimes seen as †Dinaspidae]
†Palaeaspidae Kiaer 1932: 15 (family) †Palaeaspis Claypole 1885 [type genus preoccupied by †Palaeaspis Gray 1870 in Reptilia; invalid, Art. 39; family name sometimes seen as †Palaeaspididae]
†Anglaspidae Kiaer 1932: 19 (family) †Anglaspis Jaekel 1927 [family name sometimes seen as †Anglaspididae]
†Cyathaspidae Kiaer 1932: 21 (family) †Cyathaspis Lankester 1865 [family name also seen as †Cythaspididae]
†Diplaspidae Kiaer 1932: 25 (family) †Diplaspis Matthew 1887 [family name sometimes seen as †Diplaspididae]
†Dinaspellidae Strand 1934: 327 (family) †Dinaspellida Strand 1934
†Irregularaspidae [†Irregularaspidae] Kiaer & Heinz 1935: 42 (family) †Irregularaspididae Zych 1931 [family name sometimes seen as †Irregularaspidae]
†Dictyonaspidae [†Dictyaspididae] Berg 1940: 362 (family) †“Dictyaspidas” († Dictyaspis Kiaer 1932) [no valid type genus, not available, Art. 11.7.1.1; probably a printing error for †Dictyaspidas, also Berg 1955: 27; type genus preoccupied by Dictyaspis Haeckel 1887 in Radiozoa; invalid, Art. 39; family name corrected to †Dictyaspididae by Schultz 1948: 221]
†Americaspidae Fowler 1947: 3 (family) †Americaspis White & Moy-Thomas 1941 [family name sometimes seen as †Americaspidae]
†Dictyaspidellidae Fowler 1947: 4 (family) †Dictyaspidella Strand 1934
†Torpedaspididae Halstead 1993: 574 (family) †Torpedaspis Broad & Dineley 1973 [name only, published after 1960, not available, Art. 13.1.1]
†Boothiaspidinae Elliott 2016: 1213 (subfamily) †Boothiaspis Broad, 1973

Family †Ctenaspidae Kiaer 1930, spelling in prevailing recent practice
†Ctenaspidae Kiaer 1930: 5 (family) †Ctenaspis Kiaer 1930 [family name also seen as †Ctenaspidae]

Order †Pteraspidiformes

Incertae sedis:
†Belgicaspinae Zych 1931: 86 (subfamily) †Belgicaspis Zych 1931
†Larnovaspididae Novitskaya 1986: 91 (family) †Larnovaspis Blieck 1984 [variously credited to Holstead or Halstead, but Novitskaya is responsible for the description and can be credited as author]
†Penygaspididae Halstead 1993: 575 (family) †Penygaspis Stensiö 1958 [name only, published after 1960, not available, Art. 13.1.1]
†Podolaspineae Zych 1931: 86 (subfamily) †Podolaspis Zych 1931 [also as a new family, †Podolaspididae, in Novitskaya 1983: 161]
†Protaspidae Bryant 1933: 287 (family) †Protaspis Bryant 1933 [family name sometimes seen as †Protaspididae]
†Psephaspidae Novitskaya 1983: 165 (family) †Psephaspis Ørvig 1961 [name only, published after 1960, not available, Art. 13.1.1]
†Pteraspidae Claypole 1885: 56 (family) †Pteraspis Kner 1847 [type genus inferred from the stem, Art. 11.7.1.1; family name sometimes seen as †Pteraspidae]
†Rostraspinae Zych 1931: 86 (subfamily) ? [no valid type genus, not available, Art. 11.7.1.1]
†Skalviaspididae Karatajüttö-Talimaa 1989: 79 (family) †Skalviaspis Karatajüttö-Talimaa 1989

Suborder †Pteraspidodei
Family †Anchipteraspididae Elliott 1984
†Anchipteraspidinae Elliott 1984: 173 (subfamily) †Anchipteraspis Elliott 1984
Family †Doryaspidae Heintz 1962
†Doryaspidae Heintz in Tarlo 1962: 265 (family) †Doryaspididae Heintz 1935
†Lyktaspidae Heintz 1968: 79 (family) †Lyktaspis Heintz 1968
Family †Protopteraspidae Novitskaya 1983
†Protopteraspidae Novitskaya 1983: 161 (family) †Protopteraspis Leriche 1924
†Gigantaspidae Pernègre & Elliott 2008: 397 (family) †Gigantaspis Heintz 1962
Family †Rhinopteraspididae Novitskaya 1983
†Rhinopteraspididen Brotzen 1933: 655 (family) †Rhinopteraspis Jaekel 1919 [published not in latinized form after 1899, not available]
†Rhinopteraspididae Novitskaya 1983: 164 (family) †Rhinopteraspis Jaekel 1919

Suborder †Psammosteoidei
Family †Drepanaspidae Traquair 1900, spelling in prevailing recent practice
†Drepanaspidae Traquair 1900: 844 (family) †Drepanaspis Schlüter 1887 [family name also seen as †Drepanaspididae]
Family †Guerichosteidae Tarlo 1965
†Guerichosteidae Tarlo 1965: 113 (family) †Guerichosteus Tarlo 1965
Family †Obrucheviidae Tarlo 1965 (1955), name in prevailing recent practice, Art. 40.2
†Aspidosteidae Berg 1955: 23 (family) †Aspidosteus Obruchev 1941 [senior objective synonym of †Obrucheviidae Tarlo 1965]
†Obrucheviidae Tarlo 1965: 117 (family) †Obruchevia Whitley 1940 [junior objective synonym of †Aspidosteidae, invalid, Art. 61.3.2, but name in prevailing recent practice Art. 40.2]
Family †Pycnosteidae Tarlo 1962
†Pycnosteidae Tarlo 1962: 261 (family) †Pycnosteus Preobrazhensky 1911 [type genus author also seen as Preobrajensky or Preobrashensky]
Family †Psammolepididae Tarlo 1962
†Psammolepididae Tarlo 1962: 261 (family) †Psammolepis Agassiz 1844
Family †Psammosteidae Traquair 1896
†Psammosteidae Traquair 1896: 260 (family) †Psammosteus Agassiz 1845
†Placosteinae Glinskiy 2018: 231 (subfamily) †Placosteus Agassiz 1844

SUPERCLASS †ANASPIDOMORPHI
Order †Jamoytiiformes
Family †Jamoytiidae White 1946
†Jamoytiidae White 1946a: 96 (family) †Jamoytius White 1946
Family †Achanarellidae Newman 2002
†Achanarellidae Newman 2002: 934 (family) †Achanarella Newman 2002
Family †Euphaneropidae Woodward 1900
†Euphaneropidae Woodward 1900: 418 (family) †Euphanerops Woodward 1900 [family name sometimes seen as †Euphaneropsidae or †Euphaneropidae]
†Lasaniidae Goodrich 1909: 202 (family) †Lasanius Traquair 1898

CLASS †ANASPIDA
Order †Endeiolepidiformes
Family †Endeiolepididae Stensiö 1939, spelling in prevailing recent practice
†Endeiolepididae Stensiö 1939: 18 (family) †Endeiolepis Stensiö 1939 [family name also seen as †Endeiolepidae]

Order †Anaspidiformes
Family †Birkeniidae Traquair 1900
†Birkeniidae Traquair 1900: 837 (family) †Birkenia Traquair 1898
Family †Pterygolepididae Obruchev 1964 (1947), name and spelling in prevailing recent practice, Art. 40.2
†Pterolepidae Abel 1919: ix (family) †Pterolepis Kiaer 1911 [type genus preoccupied by Pterolepis Rambur 1838 in Orthoptera; invalid, Art. 39; family name sometimes seen as †Pterolepididae]

†Pterolepidopidae Fowler 1947: 5 (family) †Pterolepidops Fowler 1947 [senior objective synonym of †Pterygolepididae Obruchev 1964]

†Pterygolepididae Obruchev 1964a: 112 (family) †Pterygolepis Cossmann 1920 [junior objective synonym of †Pterolepidopidae, but name in prevailing recent practice Art. 40.2; family name also seen as †Pterygolepididae]

Family †Rhyncholepididae Kiaer 1924, spelling in prevailing recent practice
†Rhyncholepididae Kiaer 1924: 129 (family) †Rhyncholepis Kiaer 1911 [family name also seen as †Rhyncholepididae]

Family †Pharyngolepididae Kiaer 1924, spelling in prevailing recent practice
†Pharyngolepididae Kiaer 1924: 62 (family) †Pharyngolepis Kiaer 1911 [family name also seen as †Pharyngolepididae]

Family †Tahulalepididae Blom, Märs & Miller 2002
†Tahulalepididae Blom, Märs & Miller 2002: 305 (family) †Tahulalepis Blom, Märs & Miller 2002

Family †Septentrioniidae Blom, Märs & Miller 2002
†Septentrioniidae Blom, Märs & Miller 2002: 307 (family) †Septentrionia Blom, Märs & Miller 2002

Family †Ramsaasalepididae Blom, Märs & Miller 2003
†Ramsaasalepididae Blom, Märs & Miller 2003: 57 (family) †Ramsaasalepis Blom, Märs & Miller 2003

SUPERCLASS †THELODONTOMORPHI
CLASS †THELODONTI

Family †Helenolepididae Wilson & Märs 2009
†Helenolepididae Wilson & Märs 2009: 306 (family) †Helenolepis Karatajutė-Talimaa 1978

Family †Longodiidae Märs 2006
†Longodiidae Märs 2006: 59 (family) †Longodus Märs 2006 [family name sometimes seen as †Longodontidae]

Family †Oeseliidae Märs 2005
†Oeseliidae Märs 2005: 183 (family) †Oeselia Märs 2005

Order †Archipelepidiformes

Family †Archipelepididae Märs 2001
†Archipelepididae Märs in Soehn, Märs, Caldwell & Wilson 2001: 652 (family) †Archipelepis Märs 2001

Family †Boothialepididae Märs 1999
†Boothialepididae Märs 1999: 1082 (family) †Boothialepis Märs 1999

Order †Furcacaudiformes

Family †Furcacaudidae Wilson & Caldwell 1998

Family †Pezopallichthyidae Wilson & Caldwell 1998

Family †Nikoliviidae Karatajutė-Talimaa 1978
†Nikoliviidae Karatajutė-Talimaa 1978: 140 (family) †Nikolivia Karatajutė-Talimaa 1978

Family †Lanarkiidae Obruchev 1949
†Lanarkiidae Obruchev 1949: 316 (family) †Lanarkia Traquair 1898

Family †Drepanolepididae Wilson & Märss 2009
 †Drepanolepididae Wilson & Märss 2009: 306 (family) †Drepanolepis Wilson & Caldwell 1998

Family †Barlowodidae Märss, Wilson & Thorsteinsson 2002
 †Barlowodidae Märss, Wilson & Thorsteinsson 2002: 113 (family) †Barlowodus Märss, Wilson & Thorsteinsson 2002 [family name sometimes seen as †Barlowodontidae]

Family †Apalolepididae Turner 1976
 †Apalolepididae Turner 1976: 15 (family) †Apalolepis Karatajūtė-Talimaa 1968

Order †Thelodontiformes

Family †Thelodontidae Jordan 1905, name in prevailing recent practice
 †Coelolepiden Pander 1856: 64 (family) †Coelolepis Pander 1856 [latinized to †Coelolepididae by Woodward 1891a: 157 and by Berg 1940: 363; considered valid with this authorship by Woodward 1891a: 157, by Traquair 1900: 828, by Obruchev 1964a: 42, by Karatajūtė-Talimaa 1968: 34 and by Halstead 1993: 576; family name sometimes seen as †Coelolepididae]
 †Thelodontidae Jordan 1905: 573 (family) †Thelodus Agassiz 1838 [Jordan 1923: 85 and Burrow et al. 2013: 1046 claim †Thelodontidae as the correct family name; family name sometimes seen as †Thelodontididae]

Family †Eestilepididae Märss, Wilson & Thorsteinsson 2002
 †Eestilepididae Märss, Wilson & Thorsteinsson 2002: 112 (family) †Eestilepis Märss, Wilson & Thorsteinsson 2002

Family †Turiniidae Obruchev 1964
 †Turiniidae Camp & Allison 1961: 502 (family) †Turinia Traquair 1896 [name only, published after 1960, not available, Art. 13.1.1]
 †Turiniidae Obruchev 1964a: 43 (family) †Turinia Traquair 1896 [family name sometimes seen as †Turinidae]

Family †Talivaliidae Märss, Wilson & Thorsteinsson 2002
 †Talivaliidae Märss, Wilson & Thorsteinsson 2002: 110 (family) †Talivalia Märss, Wilson & Thorsteinsson 2002

Order †Sandiviiformes

Family †Sandiviidae Karatajūtė-Talimaa & Märss 2004
 †Sandiviinae Karatajūtė-Talimaa 1997b: 6 (subfamily) †Sandivia Karatajūtė-Talimaa 1997 [name only, published after 1960, not available, Art. 13.1.1]
 †Sandiviidae Karatajūtė-Talimaa & Märss 2004: 21 (family) †Sandivia Karatajūtė-Talimaa 1997

Family †Stroinolepididae Märss & Karatajūtė-Talimaa 2004
 †Stroinolepididae Märss & Karatajūtė-Talimaa in Karatajūtė-Talimaa & Märss 2004: 22 (family) †Stroinolepis Märss & Karatajūtė-Talimaa 2002

Family †Angaralepididae Märss & Karatajūtė-Talimaa 2004
 †Angaralepidinae Karatajūtė-Talimaa 1997b: 14 (subfamily) †Angaralepis Karatajūtė-Talimaa 1997 [name only, published after 1960, not available, Art. 13.1.1]

Order †Loganelliiformes

Family †Loganelliidae
 †Loganiidae Karatajūtė-Talimaa 1978: 66 (family) †Logania Gross 1967 [type genus preoccupied by Logania Distant 1884 in Lepidoptera; invalid, Art. 39]
 †Loganelliidae Halstead 1993: 576 (family) †Loganellia Fredholm 1990 [name only, published after 1960, not available, Art. 13.1.1]
†Loganelliinae Karatajüte-Talimaa 1997b: 14 (subfamily) †Loganellia Fredholm 1990 [name only, published after 1960, not available, Art. 13.1.1]
†Loganelliidae Märss, Wilson & Thorsteinsson 2002: 90 (family) †Loganellia Fredholm 1990 [not published according to the rules, not available]
†Loganelliidae Karatajüte-Talimaa & Märss 2004: 23 (family) †Loganellia Fredholm 1990 [not published according to the rules, not available]
†Loganelliidae Nelson, Grande & Wilson 2016: 32 (family) †Loganellia Fredholm 1990 [not published according to the rules, not available]
Family †Nunavutiidae Märss, Wilson & Thorsteinsson 2002
†Nunavutiidae Märss, Wilson & Thorsteinsson 2002: 94 (family) †Nunavutia Märss, Wilson & Thorsteinsson 2002

Order †Shielliiformes
Family †Shieliidae Märss, Wilson & Thorsteinsson 2002
†Shieliidae Märss, Wilson & Thorsteinsson 2002: 95 (family) †Shielia Märss 1998

Order †Phlebolepiformes
Family †Phlebolepidae Berg 1940, spelling in prevailing recent practice
†Phlebolepidae Berg 1940: 363 (family) †Phlebolepis Pander 1856 [family name also seen as †Phlebolepididae]
Family †Katoporodidae Märss, Wilson & Thorsteinsson 2002
†Katoporidae Karatajüte-Talimaa 1970: 40 (family) †Katoporus Gross 1967 [type genus preoccupied by †Katoporus John 1956 in Lepidoptera; invalid, Art. 39]
†Katoporodidae Soehn, Märss, Caldwell & Wilson 2001: 656 (family) †Katoporodus Turner in Turner & Peel 1986 [not published according to the rules, not available]
†Katoporodidae Märss, Wilson & Thorsteinsson 2002: 98 (family) †Katoporodus Turner & Peel in Peel 1986 [family name sometimes seen as †Katoporidae and †Katoporodontidae]

SUPERCLASS †OSTEOSTRACOMORPHI
CLASS †OSTEOSTRACI
Order †Cephalaspidiformes
Suborder †Ateleaspidioidei
Family †Ateleaspididae Traquair 1900, spelling in prevailing recent practice
†Ateleaspididae Traquair 1900: 834 (family) †Ateleaspis Traquair 1900 [family name also seen as †Ateleaspididae or †Ateleaspididae]
†Hemicyclaspinae Heintz 1940: 98 (subfamily) †Hemicyclaspis Lankester 1870 [family name also seen as †Hemicyclaspidae]
†Hirellidae Heintz 1949: 321 (family) †Hirella Cossmann 1920
†Aceraspidae Stensiö 1958: 216 (family) †Aceraspis Kiaer 1911 [family name sometimes seen as †Aceraspididae]
Family †Kalanaspidae Tinn & Märss 2018
†Kalanaspidae Tinn & Märss 2018: [3] (family) †Kalanaspis Tinn & Märss 2018

Suborder †Cephalaspidioidei
Family †Cephalaspididae Agassiz 1844, spelling in prevailing recent practice
†Cephalaspides Agassiz 1844 Tome II pt. 1: 308 (family) †Cephalaspis Agassiz 1835 [family name sometimes seen as †Céphalaspides; latinized to †Cephalaspides by Bonaparte 1846: 4 (subfamily), latinized to †Cephalaspidae by Owen 1846: 50, Huxley 1861: 38 and Günther 1880: 353, latinized to †Cephalaspides by Giebel 1846: 64 and Giebel 1847: 261, latinized to †Cephalaspida by Asmuss 1856: 10; considered valid with this authorship by Müller 1846: 122, 151, by M'Coy 1848: 6, by Bronn 1849: 656, by Quenstedt 1852: 231, by M'Coy 1855:
Family †Parametoraspidae Afanassieva 1991
†Parametoraspidae Afanassieva 1991: 79 (family) †Parametoraspis Blieck, Goujet & Janvier 1987
†Escuminaspidae Arsenault & Janvier 1995: 20 (family) †Escuminaspis Ørvig 1957
Family †Superciliaspidae Scott & Wilson 2014
†Superciliaspidae Scott & Wilson 2014: 169 (family) †Superciliaspis Adrain & Wilson 1994

Suborder †Scolenaspidoidei
Family †Scolenaspidae Afanassieva 1991
†Scolenaspidae Afanassieva 1991: 91 (family) †Scolenaspis Jarvik 1954
Family †Zenaspidae Stensiö 1958, spelling in prevailing recent practice
†Zenaspidae Stensiö 1958: 215 (family) †Zenaspis Lankester 1870 [family name also seen as †Zenaspidae]

Order †Thyestiformes
Family †Procephalaspidae Stensiö 1958
†Procephalaspidae Stensiö 1958: 215 (family) †Procephalaspis Denison 1951
Family †Thyestidae Rohon 1892
†Thyestidae Rohon 1892: 85 (family) †Thyestes Eichwald 1854 [Pierce in Fowler 1947: 4 and Fowler 1965a: 179 used †Thyestidae; family name sometimes seen as †Thyestiidae]
Family †Witaaspididae Afanassieva 1991
†Witaaspididae Afanassieva 1991: 67 (family) †Witaaspis Robertson 1939
Family †Tremataspidae Woodward 1891, spelling in prevailing recent practice
†Tremataspidae Woodward 1891a: 201 (family) †Tremataspis Schmidt 1866 [family name also seen as †Tremataspidae]
†Odontotodontidae Jordan 1905: 506 (family) †Odontotodus Pander 1856
†“new family” Patten 1931: 672 (family) †Dartmuthia Patten 1931 [as a new family, but without the name, not available]
†Dartmuthiidae Robertson 1935: 282 (family) †Dartmuthia Patten 1931
†Oeselaspidae Robertson 1935: 282 (family) †Oeselaspis Robertson 1935 [family name sometimes seen as †Oeselaspidae or as subfamily †Oeselaspinae]
†Didymaspidae Berg 1940: 357 (family) †Didymaspis Lankester 1867 [family name sometimes seen as †Didymaspidae or as subfamily †Didymaspinae]
†Sclerodidae Berg 1940: 357 (family) †Sclerodus Agassiz 1839 [corrected to †Sclerodontidae by Fowler 1947: 4, confirmed by Romer 1966: 347 and by Halstead 1993: 578]
†Stigmolepidae Fowler 1947: 4 (family) †Stigmolepis Pander 1856
†Timanaspidinae Obruchev in Kossovoy & Obruchev 1962: 1149 (subfamily) †Timanaspis Obruchev 1962 [English translation: 108; also as a new family, †Timanaspididae, in Halstead 1993: 578]
†Tannuaspidinae Obruchev 1964a: 97 (family) †Tannuaspis Obruchev 1956
†Tyriaspididae Halstead 1993: 578 (family) †Tyriaspis Heintz 1967 [name only, published after 1960, not available, Art. 13.1.1]

Family †Kiaeraspididae Stensiö 1932, spelling in prevailing recent practice
†Kiaeraspinae Stensiö 1932b: 75 (subfamily) †Kiaeraspis Stensiö 1927 [family name also seen as †Kiaeraspididae]
†Nectaspididae Stensiö 1958: 220 (family) †Nectaspis Wängsjö 1952 [changed to †Nectaspidae by Fowler 1965b: 348]
†Axinaspididae Janvier 1981: 115 (family) †Axinaspis Wängsjö 1952
†Acrotomaspididae Janvier 1981: 115 (family) †Acrotomaspis Wängsjö 1952 [also as new subfamily †Acrotomaspidinae]

Order †Benneviaspidiformes
Family †Mimetaspididae Stensiö 1958
†Mimetaspididae Stensiö 1958: 213 (family) †Mimetaspis Stensiö 1958
Family †Pattenaspididae Stensiö 1958
†Pattenaspididae Stensiö 1958: 216 (family) †Pattenaspis Stensiö 1958 [changed to †Pattenaspidae by Fowler 1965a: 177]
Family †Benneviaspididae Denison 1951, spelling in prevailing recent practice
†Benneviaspinae Denison 1951: 190 (subfamily) †Benneviaspis Stensiö 1927 [family name also seen as †Benneviaspididae]
Family †Boreaspididae Berg 1955, spelling in prevailing recent practice
†Boreaspidae Berg 1955: 17 (family) †Boreaspis Stensiö 1927 [corrected to †Boreaspidae by Stensiö 1958: 213]
†Hoelaspidae Stensiö 1958: 214 (family) †Hoelaspis Stensiö 1927

CLASS †GALEASPIDOMORPHI
Incertae sedis:
†Hyperaspididae Pan 1992: 64 (family) †Hyperaspis Pan 1992 [type genus preoccupied by Hyperaspis Redtenbacher 1843 in Coleoptera Coccinellidae; invalid, Art. 39]

Order †Hanyangaspidiformes
Family †Hanyangaspidae Pan & Liu 1975, spelling in prevailing recent practice
†Hanyangaspidae Pan & Liu in Pan, Wang & Liu 1975: 147 (family) †Hanyangaspis Pan & Liu 1975 [family name also seen as †Hanyangaspidae]
Family †Xiushuiaspidae Pan & Wang 1983, spelling in prevailing recent practice
†Xiushuiaspidae Pan & Wang 1983: 505 (family) †Xiushuiaspis Pan & Wang 1983 [family name also seen as †Xiushuiaspidae]
Family †Dayongaspidae Pan & Zeng 1985, spelling in prevailing recent practice
†Dayongaspidae Pan & Zeng 1985: 207, 212 (family) †Dayongaspis Pan & Zeng 1985 [family name also seen as †Dayongaspidae]

Order †Eugaleaspiformes
Family †Sinogaleaspidae Pan & Wang 1980, spelling in prevailing recent practice
†Sinogaleaspidae Pan & Wang in Pan, Wang & Liu 1980: 10 (family) †Sinogaleaspis Pan & Wang 1980 [family name also seen as †Sinogaleaspidae]
Family †Eugaleaspidae Liu 1980, spelling in prevailing recent practice
†Galeaspidae Liu 1965: 125, 130 (family) †Galeaspis Liu 1965 [type genus preoccupied by †Galeaspis Ivshin 1955 in Trilobita; invalid, Art. 39]
†Eugaleaspidae Liu 1980: 256 (family) †Eugaleaspis Liu 1980 [family name also seen as †Eugaleaspidae]
†Tridensaspidae Liu 1986: 2, 9 (family) †Tridensaspis Liu 1986 [family name sometimes seen as †Tridensaspidae]
Superorder †Polybranchiaspidida

Incertae sedis:
Family †Geraspididae Pan & Chen 1993
†Geraspididae Pan & Chen 1993: 226, 230 (family) †Geraspis Pan & Chen 1993

Order †Polybranchiaspidiformes

Family †Pentathyraspididae Pan 1992, spelling in prevailing recent practice
†Pentathyraspididae Pan 1992: 58 (family) †Pentathyraspis Pan 1992 [family name also seen as †Pentathyraspidae]
†Microhoplonaspididae Pan 1992: 60 (family) †Microhoplonaspis Pan 1992

Family †Duyunolepidae Pan & Wang 1982, spelling in prevailing recent practice
†Duyunoaspidae Pan & Wang 1978: 301 (family) †Duyunaspis Pan & Wang 1978 [type genus preoccupied by †Duyunaspis Zhang & Qian 1977 in Trilobita; invalid, Art. 39]
†Duyunoaspidae Pan & Wang 1982: 370 (family) †Duyunolepis Pan & Wang 1982 [family name also seen as †Duyunolepididae]

Family †Polybranchiaspididae Liu 1965, spelling in prevailing recent practice
†Polybranchiaspididae Liu 1965: 128, 133 (family) †Polybranchiaspis Liu 1965 [family name also seen as †Polybranchiaspididae]
†Cyclodiscaspidae Liu 1975: 211 (family) †Cyclodiscaspis Liu 1975 [family name sometimes seen as †Cyclodiscaspidae]

Order †Zhaotongaspidiformes

Family †Zhaotongaspididae Wang & Zhu 1994

Order †Huananaspidiformes

Family †Sanqiaspididae Pan & Wang 1981, spelling in prevailing recent practice
†Sanqiaspididae Pan & Wang 1981: 114, 120 (family) †Sanqiaspis Pan & Wang 1981 [family name also seen as †Sanqiaspididae]

Family †Gantarostrataspididae Wang & Wang 1992, spelling in prevailing recent practice
†Gantarostrataspididae Wang & Wang 1992: 186, 192 (family) †Gantarostrataspis Wang & Wang 1992 [family name also seen as †Gantarostrataspididae]

Family †Sanqiaspididae Liu 1975, spelling in prevailing recent practice
†Sanqiaspididae Liu 1975: 211 (family) †Sanqiaspis Liu 1975 [family name also seen as †Sanqiaspididae]

Family †Huananaspididae Liu 1973, spelling in prevailing recent practice
†Huananaspididae Liu 1973: 133 (family) †Huananaspis Liu 1973 [family name also seen as †Huananaspididae]
†Lungmenshanaspididae Pan 1992: 45 (family) †Lungmenshanaspis Pan & Wang 1975
†Macrothyraspidae Pan 1992: 49 (family) †Macrothyraspis Pan 1992
†Qingmenaspidae Halstead 1993: 580 (family) †Qingmenaspis Pan & Wang 1981 [name only, published after 1960, not available, Art. 13.1.1]

Family †Nanpanaspididae Liu 1975, spelling in prevailing recent practice
†Nanpanaspididae Liu 1975: 203 (family) †Nanpanaspis Liu 1965 [family name also seen as †Nanpanaspididae]

Order †Pituriaspidiformes

Family †Pituriaspididae
†Pituriaspida Young 1991: 86 (Class) [no family-group name]
†Pituriaspididae Davis 1994: 8 (family) †Pituriaspis Young 1991 [name only, published after 1960, not available, Art. 13.1.1]
†Neeyambaspidae Davis 1994: 8 (family) †Neeyambaspis Young 1991 [name only, published after 1960, not available, Art. 13.1.1]

SUPERCLASS GNATHOSTOMATA
CLASS †PLACODERMI

Incertae sedis:
†Cratoselachiidae Woodward 1932: 60 (family) †Cratoselache Woodward 1924 [family name sometimes seen as †Cratoselachidae]

Order †Brindabellaspida
Family †Brindabellaspidae
†Brindabellaspidae Gardiner 1993a: 583 (family) †Brindabellaspis Young 1980 [name only, published after 1960, not available, Art. 13.1.1]
†Brindabellaspidae Davis 1994: 10 (family) †Brindabellaspis Young 1980 [name only, published after 1960, not available, Art. 13.1.1]

Order †Stensiöelliformes
Family †Stensiöellidae Berg 1940
†Stensiöellidae Berg 1940: 370 (family) †Stensiöella Broili 1933 [type genus as †Stensiöella, name must be corrected Art. 32.5.3; family name sometimes seen as †Stensiöllidae]

Order †Pseudopetalichthyiformes
Family †Paraplesiobatidae Berg 1940, spelling in prevailing recent practice
†Paraplesiobatidae Berg 1940: 363 (family) †Paraplesiobatis Broili 1933 [family name also seen as †Paraplesiobatididae; correct stem would be Paraplesiobatid-, no correction needed Art. 29.3.1.1]
†Pseudopetalichthyidae Gregory 1973: 702, 718 (family) †Pseudopetalichthys Moy-Thomas 1939 [downgraded from ordinal series?; name only, published after 1960, not available, Art. 13.1.1]
†Nessariostomidae Gregory 1973: 718 (family) †Nessariostoma Broili 1933 [name only, published after 1960, not available, Art. 13.1.1]
†Pseudopetalichthyidae Goujet 1984a: 213 (family) †Pseudopetalichthys Moy-Thomas 1939 [name only, published after 1960, not available, Art. 13.1.1]

Order †Acanthothoraci

Incertae sedis:
†Weejasperaspidae White 1978: 155 (family) †Weejasperaspis White 1978 [family name sometimes seen as †Weejasperaspidae]

Family †Radotinidae Arambourg 1958
†Radotinidae Arambourg 1958: 203 (family) †Radotina Gross 1950 [also as new family in Obruchev 1964b: 132]

Family †Kolymaspidae Bystrow 1956, spelling in prevailing recent practice
†Kolymaspidae Bystrow 1956: 7 (family) †Kolymaspis Bystrow 1956 [family name also seen as †Kolymaspidae]

Family †Palaeacanthaspidae Stensiö 1944, spelling in prevailing recent practice
†Palaeacanthaspidae Stensiö 1944: 70 (family) †Palaeacanthaspis Brotzen 1934 [family name also seen as †Palaeacanthaspidae or †Palaeacanthaspididae]

Family †Hagiangellidae Dupret, Phuong, Thanh, Phong, Janvier & Clément 2011
†Hagiangellidae Dupret, Phuong, Thanh, Phong, Janvier & Clément 2011: 532 (family)  
†Hagiangella Janvier 2005

Order †Rhenanida  
Family †Asterosteidae Woodward 1891  
†Asterosteidae Woodward 1891a: 312 (family) †Asterosteus Newberry 1875  
†Gemuendinidae Traquair 1903: 734 (family) †Gemuendina Traquair 1903  
†Jagorinidae Woodward 1932: 59 (family) †Jagorina Jaekel 1921

†ANTIARCHI  
Incertae sedis:  
†Minicranidae ? Jia 2008: 14 (family) †Minicrania Zhu & Janvier 1996 [correct stem would be Minicrani-; unavailable publication, family-group name not available]

Family †Liujiangolepidae Wang 1987, spelling in prevailing recent practice  
†Liujiangolepidae Wang 1987: 82, 88 (family) †Liujiangolepis Wang 1987 [family name also seen as †Liujiangolepididae]

Family †Silurolepidae Zhang, Wang, Wang & Zhu 2010, spelling in prevailing recent practice  
†Silurolepidae Zhang, Wang, Wang & Zhu 2010: 129 (family) †Silurolepis Zhang et al. 2010 [family name also seen as †Silurolepididae]

Order †Yunnanolepidiformes  
Family †Yunnanolepididae Gross 1965, spelling in prevailing recent practice  
†Yunnanolepidinae Gross 1965: 77 (subfamily) †Yunnanolepis Liu 1963 [as a new family in Zhang 1978b: 148; family name also seen as †Yunnanolepididae]

Family †Chuchinolepididae Zhang 1978, spelling in prevailing recent practice  
†Chuchinolepididae Zhang 1978a: 296 (family) †Chuchinolepis Zhang 1978 [family name also seen as †Chuchinolepididae; author also seen as Chang]  
†Qujinolepididae Zhang 1978b: 173 (family) †Qujinolepis Zhang 1978 [family name sometimes seen as †Qujinolepididae]  
†Procondylolepidae Zhang 1984: 82 (family) †Procondylolepis Zhang 1984

Order Sinolepiformes  
Family †Sinolepididae Liu & Pan 1958, spelling in prevailing recent practice  
†Sinolepidinae Liu & Pan 1958: 8 (family) †Sinolepis Liu & Pan 1958 [family name also seen as †Sinolepididae]  
†Grenfellaspididae Davis 1994: 18 (family) †Grenfellaspis Ritchie, Wang, Young & Zhang 1992 [name only, published after 1960, not available, Art. 13.1.1]

Order †Asterolepidiformes  
Family †Asterolepididae Traquair 1888, name and spelling in prevailing recent practice  
†Asterolepididae Traquair 1888a: 485 (family) †Asterolepis Eichwald 1840 [family name also seen as †Asterolepidae, †Astrolepididae and †Asterolepididae]  
Family †Remigolepididae Stensiö 1931, spelling in prevailing recent practice  
†Remigolepididae Stensiö 1931: 156 (family) †Remigolepis Stensiö 1931 [family name also seen as †Remigolepididae]  
Family †Lepadolepididae Berg 1955, spelling in prevailing recent practice  
†Lepadolepididae Gross 1933: 16 (family) †Ceratolepis Gross 1933 [type genus preoccupied by Ceratolepis Chapuis 1873 in Coleoptera; invalid, Art. 39]
†Lepadolepinae Berg 1955: 38 (subfamily) †Lepadolepis White & Moy-Thomas 1940 [senior objective synonym of †Ceratolepichthyinae Fowler 1965; family name also seen as †Lepadolepididae]
†Ceratolepichthyinae Fowler 1965b: 347 (subfamily) †Ceratolepichthys Whitley 1940 [junior objective synonym of †Lepadolepinae Berg 1955, invalid, Art. 61.3.2]

Family †Pterichthyodidae Stensiö 1948
†Pterichthidae M’Coy in Sedgwick & M’Coy 1855: 579 (family) †Pterichthys Agassiz 1841 [type genus preoccupied by Pterichthys Swainson 1839 in fishes Apistidae; invalid, Art. 39; family name sometimes seen as †Pterichthyidae]
†Ceraspidae Woodward 1891a: 233 (family) †Ceraspis Schlüter 1887 [type genus preoccupied by Ceraspis Le Peletier & Audinet Serville 1825 in Coleoptera; invalid, Art. 39; family name sometimes seen as †Ceraspididae]
†Byssacanthidae Gross 1937: 19 (family) †Byssacanthus Agassiz 1845 [type genus inferred from the stem, Art. 11.7.1.1; name only, but used as valid by Romer 1945: 575 and (as subfamily) by Stensiö 1948: 219 and by Gross 1965: 15 Art. 13.2.1; subfamily name sometimes seen as †Byssacanthidae]
†Cornaspidae Whitley 1940: 242 (family) †Cornaspis Whitley 1940 [name only, but as substitute for †Ceraspidae; also used as valid by Fowler 1965b: 346 Art. 13.2.1; senior objective synonym of †Grossaspidae Stensiö 1959]
†Pterichthyodidae Stensiö 1948: 38 (family) †Pterichthyodes Bleeker 1859
†Gerdalinae Stensiö 1948: 219 (subfamily) †Gerdalis Hoffmann 1916 [family name sometimes seen as †Gerdalidae]
†Grossaspidae Stensiö 1959: 7 (family) †Grossaspid White & Moy-Thomas 1940 [name only; junior objective synonym of †Cornaspidae Whitley 1940, invalid, Art. 61.3.2]

Family †Asperaspididae Moloshnikov 2012
†Asperaspididae Moloshnikov 2012: 1124 (family) †Asperaspis Panteleyev 1993

Family †Pambulaspidae Young 2010
†Pambulaspidae Davis 1994: 52 (family) †Pambulaspid Young 1983 [name only, published after 1960, not available, Art. 13.1.1]
†Pambulaspidae Young 2010: 85 (family) †Pambulaspid Young 1983

Order †Bothriolepiformes
Family †Dianolepididae Long 1983, name in prevailing recent practice
†Wudinolepididae Chang 1965: 1, 6 (family) †Wudinolepis Chang 1965 [family name sometimes seen as †Wudinolepididae]
†Dianolepididae Long 1983a: 318 (family) †Dianolepis Chang 1965
†Jiangxilepidida Zhang & Liu 1991: 196 (family) †Jiangxilepis Zhang & Liu 1991 [family name sometimes seen as †Jiangxilepididae]
†Tenizolepididae Moloshnikov 2012: 1131 (subfamily) †Tenizolepis Malinovskaja 1977

Family †Microbrachiidae Stensiö 1931
†Microbrachiinae Stensiö 1931: 157 (subfamily) †Microbrachius Traquair 1888

Family †Bothriolepidae Cope 1886
†Bothriolepidae Cope 1886: 1031 (family) †Bothriolepis Eichwald 1840 [family name sometimes seen as †Bothriolepidae]
†Monarolepidae Moloshnikov 2012: 1180 (subfamily) †Monarolepis Young 1988
†Livnolepidae Moloshnikov 2012: 1180 (subfamily) †Livnolepis Moloshnikov 2008

Family †Tubalepidae Moloshnikov 2011
†Tubalepidae Moloshnikov 2011: 303 (family) †Tubalepis Panteleyev 2003
Order †Macropetalichthyiformes
Family †Macropetalichthyidae Eastman 1898
 †Acanthaspidae Woodward 1891: 3 (family) †Acanthaspis Newberry 1875 [type genus preoccupied by Acanthaspis Amyot & Audinet Serville 1843 in Hemiptera; invalid, Art. 39]
 †Macropetalichthyidae Eastman 1898: 372 (family) †Macropetalichthys Norwood & Owen 1846 [correct stem is Macropetalichthys-]
 †Polyaspidae Heintz 1929: 25, 69 (family) †Polyaspis ?? [no stem of the type genus, not available, Art. 11.7.1.1; also Polyaspis preoccupied by Berlese 1882 in mites Acari, then invalid, Art. 39]
 †Lunaspididae Gross 1933: 28 (family) †Lunaspis Broili 1929 [name only, but used as valid by Fowler 1965b: 356 Art. 13.2.1]
 †Heintzaspidae Strand 1942: 384 (family) †Heintzaspis Strand 1932
Family †Quasipetalichthyidae Liu 1991
 †Quasipetalichthyidae Liu 1991: 167 (family) †Quasipetalichthys Liu 1973

Order †Ptyctodontiformes
Family †Ptyctodontidae Woodward 1891
 †Ptyctodontidae Woodward 1891a: 37 (family) †Ptyctodus Pander 1858 [family name sometimes seen as †Ptyctodontidae]
 †Rynchodonida Jaekel 1907: 186 (Gruppe?) †Rynchodus Newberry 1873 [no stem of the type genus, not available, Art. 11.7.1.1]
 †Aulacosteidae Fowler 1947: 6 (family) †Aulacosteus Eichwald 1846

†ARTHRODIRA
Incerta sedis:
 †Mediaspididae Heintz 1929: 25, 66 (family) †Mediaspis Heintz 1929 [family name sometimes seen as †Mediaspidae]
 †Pholidosteiden Jaekel 1907: 176 (family?) †Pholidosteus Jaekel 1907 [published not in latinized form after 1899, not available]
 †Pholidosteidae Gross 1932: 11 (family) †Pholidosteus Jaekel 1907
 †Prescottaspidae White 1961: 297 (family) †Prescottaspis White 1961 [corrected by Miles 1969: 125 to †Prescottaspidae]

Order †Actinolepidiformes
Family †Antarctaspidae White 1968, spelling in prevailing recent practice
 †Antarctaspidae White 1968: 18 (family) †Antarctaspis White 1968 [family name also seen as †Antarctaspidae]
Family †Wuttagoonaspidae Ritchie 1973, spelling in prevailing recent practice
 †Wuttagoonaspidae Ritchie 1973: 70 (family) †Wuttagoonaspis Ritchie 1973 [family name also seen as †Wuttagoonaspidae]
Family †Kujdanowiaspidae Berg 1955, spelling in prevailing recent practice
 †Kujdanowiaspidae Berg 1955: 41 (family) †Kujdanowiaspis Stensiö 1942 [family name also seen as †Kujdanowiaspidae]
Family †Gavinaspidae Dupret & Zhu 2008
Family †Phyllolepididae Woodward 1891, spelling in prevailing recent practice
 †Phyllolepididae Woodward 1891a: 313 (family) †Phyllolepis Agassiz 1844 [family name also seen as †Phyllolepididae]
Family †Actinolepididae Gross 1940, spelling in prevailing recent practice
†Actinolepidae Gross 1940: 54 (family) †Actinolepis Agassiz 1845 [family name also seen as †Actinolepididae]

Order †Phlyctaeniiformes
Suborder †Phlyctaenioidae
Family †Phlyctaeniidae Fowler 1947 (1929), name in prevailing recent practice, Art. 40.2
†Phlyctaenaspidae Jaekel 1903: 58 (? family) †Phlyctaenaspis Traquair 1890 [published not in latinized form after 1899, not available]
†Phlyctaenaspidae Jaekel 1907: 176 (? family) †Phlyctaenaspis Traquair 1890 [published not in latinized form after 1899, not available]
†Phlyctaenasi Jaekel 1911: 46 (suborder) [no family-group name]
†Monaspidae Heintz 1929: 25, 26 (family) †Monaspis Heintz 1929 [type genus preoccupied by Monaspis Smith 1849 in Reptilia; invalid, Art. 39]
†Phlyctaenaspinae Hay 1929: 651 (subfamily) †Phlyctaenaspis Traquair 1890 [name only, but in reference to †phlyctaenaspids Stensiö 1925, and used as valid by Romer 1945: 574 and by Romer 1966: 348 Art. 13.2.1; senior objective synonym of †Phlyctaeniidae]
†Jaekelaspidae Heintz 1932: 210 (family) †Jaekelaspis Heintz 1929
†Heterogaspidae Strand 1933: 120 (family) †Heterogaspis Strand 1932
†Phlyctaeniidae Fowler 1947: 5 (family) †Phlyctaenius Traquair 1890 [junior objective synonym of †Phlyctaenaspinae, invalid, Art. 61.3.2, but name in prevailing recent practice Art. 40.2; †Phlyctaenius Traquair not preoccupied by †Phlyctaenium Zittel 1879]
†Williamsaspidae White 1952: 254 (family) †Williamsaspis White 1952 [family name sometimes seen as †Williamsaspidae]
†Aggeraspidae Miles 1969: 125, 145 (family) †Aggeraspis Gross 1962 [name only, published after 1960, not available, Art. 13.1.1]
Family †Arctolepididae Heintz 1937, spelling in prevailing recent practice
†Arctolepididae Heintz 1937: 14 (family) †Arctolepis Eastman 1908 [family name also seen as †Arctolepididae]
Family †Gronlandaspidae Obruchev 1964
†Gronlandaspidae Obruchev 1964b: 143 (family) †Gronlandaspis Heintz 1932 [type genus as †Gronlandaspis, name must be corrected Art. 32.5.3 and 32.5.2.1; type genus corrected to †Gronlandaspis by Snitting & Blom 2009: 269]
†Tiaraspidae Miles 1969: 125, 145 (family) †Tiaraspis Gross 1962 [name only, published after 1960, not available, Art. 13.1.1; family name sometimes seen as †Tiaraspidae]
Family †Arctaspidae Goujet 1984
†Arctaspidae Goujet 1978 (family) †Arctaspis Heintz 1929 [unpublished PhD thesis, not available]
†Arctaspidae Goujet 1984b: 251 (family) †Arctaspis Heintz 1929
Family †Holonematidae Obruchev 1933, spelling in prevailing recent practice
†Holonematidae Obruchev 1933: 97 (family) †Holonema Newberry 1890 [family name also seen as †Holonematidae]
Suborder †Brachythoraci
Family †Homostiidae Eastman 1907
†Homostiiden Jaekel 1903: 58 (? family) †Homostius Asmuss 1856 [type genus as †Homosteus; published not in latinized form after 1899, not available]
†Homostiidae Eastman 1907: 23 (family) †Homostius Asmuss 1856 [type genus as †Homosteus, name must be corrected Art. 32.5.3; corrected to †Homostiidae by Heintz 1934: 85, confirmed by Camp & Vanderhoof 1940: 489]
†Euleptaspidae Obruchev 1964b: 144 (family) †Euleptaspis White & Moy-Thomas 1940
†Burrinjucosteidae White 1978: 177 (family) †Burrinjucosteus White 1978
†Goodradigbeconidae White 1978: 162 (family) †Goodradigbecon White 1978

Family †Buchanosteidae White 1952
†Buchanosteidae White 1952: 266 (family) †Buchanosteus Stensiö 1945
†Taemasosteidae White 1952: 276 (family) †Taemasosteus White 1952

Family †Parabuchanosteidae Long, Mark-Kurik & Young 2014
†Parabuchanosteidae Long, Mark-Kurik & Young 2014: 37 (family) †Parabuchanosteus White & Toombs 1972

Family †Gemuendenaspidae Miles 1962
†Gemuendenaspidae Miles 1962: 74 (family) †Gemuendenaspis Miles 1962 [family name sometimes seen as †Gemuendenaspidae]

†Coccosteomorphi
Family †Coccosteidae Asmuss 1856
†Coccosteida Asmuss 1856: 6 (family) †Coccosteus Agassiz 1841 [type genus inferred from the stem, Art. 11.7.1.1]
? †Solenosteidae Heintz 1932: 210 (family) ? “Solenosteus” [no valid type genus, not available, Art. 11.7.1.1] [family uncertain]
†Millerosteidae Stensiö 1963: 392 (family) †Millerosteus Stensiö 1959

Family †Torosteidae Gardiner & Miles 1990
†Torosteidae Gardiner & Miles 1990: 159 (family) †Torosteus Gardiner & Miles 1990

Family †Trematosteidae Gross 1932
†Trematosteidae Gross 1932: 30 (family) †Trematosteus Gross 1932

Family †Camuropiscidae Dennis & Miles 1979
†Camuropiscidae Dennis & Miles 1979: 297 (family) †Camuropiscis Dennis & Miles 1979
†Incisoscutidae Denison 1984: 396 (family) †Incisoscutum Dennis & Miles 1981 [also as a new family in Gardiner 1993a: 587]

Family †Mylostomatidae Woodward 1891
†Mylostomatidae Woodward 1891a: 315 (family) †Mylostoma Newberry 1883 [family name sometimes seen as †Mylostomidae]
†Trachosteiidae Dean 1901: 120 (family) †Trachosteus Newberry 1890
†Kendrickichthyidae Gardiner 1993a: 587 (family) †Kendrickichthys Dennis & Miles 1980 [name only, published after 1960, not available, Art. 13.1.1]

Family †Bungartiidae Denison 1975
†Bungartiidae Denison 1975: 19 (family) †Bungartius Dunkle 1947

†Pachyosteomorphi
Family †Rhachiosteidae Stensiö 1963
†Rhachiosteidae Stensiö 1963: 392 (family) †Rhachiosteus Gross 1938 [family name sometimes seen as †Rachioisteidae]

Family †Panxiosteidae Wang 1979
†Panxiosteidae Wang 1979: 179 (family) †Panxiosteus Wang 1979
†Plourdosteidae Vézina 1990: 677 (family) †Plourdosteus Ørvig 1951

Family †Dunkleosteidae Stensiö 1963, name in prevailing recent practice
†Heterosteen Jaekel 1903: 58 (family) †Heterostius Asmuss 1856 [type genus as †Heterosteus; published not in latinized form after 1899, not available]
†Heterostii Jaekel 1919: 98 (no family-group name)
†Heterosteidae Gross 1932: 55 (family) †Heterostius Asmuss 1856 [type genus as †Heterosteus, name must be corrected Art. 32.5.3; corrected to †Heterostiidae by Gross 1933: 38, confirmed by Berg 1940: 368]
†Ichthyosauroididae Fowler 1947: 5 (family) †Ichthyosaurus Kutorga 1837
†Dunkleosteidae Stensiö 1963: 387 (family) †Dunkleosteus Lehman 1956
†Hussakoidea Obruchev 1964b: 148 (family) †Hussakofia Cossman 1910
†Aspinothoraciidae
Family †Dinichthiidae Newberry 1885
†Dinichthiidae Newberry 1885: 28 (family) †Dinichthys Newberry 1868 [corrected to †Dinichthyidae by Cope 1889: 856; correct stem is Dinichthy-]
Family †Brachydeiriidae Gross 1932
†Auchenosteidae Jaekel 1911: 48 (family) †Auchenosteus Jaekel 1919 [no valid type genus, not available; Art. 11.7.1.1]
†Brachydiridae Gross 1932: 34 (family) †Brachydirus Koenen 1880 [type genus as †Brachydirus, name must be corrected Art. 32.5.3; corrected to †Brachydeiriidae by Fowler 1947: 6, confirmed by Fowler 1965b: 378]
Family †Braunosteidae Stensiö 1963
†Braunosteidae Stensiö 1963: 387 (family) †Braunosteus Stensiö 1959 [“represents a separate family”, but not named by Stensiö 1959: 113]
Family †Hadrosteidae Gross 1932
†Hadrosteidae Gross 1932: 26 (family) †Hadrosteus Gross 1932 [family name sometimes seen as †Hadrostiidae]
Family †Selenosteidae Dean 1901
†Selenosteidae Dean 1901: 120 (family) †Selenosteus Dean 1901
†Pachyosteidae Gross 1932: 16 (family) †Pachyosteus Jaekel 1903
†Rhinosteidae Stensiö 1963: 387 (family) †Rhinosteus Jaekel 1911
Family †Leiosteidae Stensiö 1963
? †Leiosteidae Jaekel 1919: 106 (family) ? †Leiosteus Gross 1932 [type genus inferred from the stem, Art. 11.7.1.1; no valid type genus, not available, Art. 11.7.1.1] [family uncertain]
†Leiosteidae Stensiö 1963: 387 (family) †Leiosteus Gross 1932
†Erromenosteidae Obruchev 1964b: 150 (family) †Erromenosteus Jaekel 1919
Family †Leptosteidae Gross 1932
†Leptosteidae Jaekel 1911: 48 (family) †Leptosteus Jaekel 1919 [no valid type genus, not available, Art. 11.7.1.1]
†Leptosteidae Gross 1932: 27 (family) †Leptosteus Jaekel 1919
Family †Titanichthyidae Dean 1901
†Titanichthyidae Dean 1901: 120 (family) †Titanichthys Newberry 1885
†Leiosteiden Jaekel 1919: 90 (family) †Oxyosteus Jaekel 1911 [no stem of type genus, not available, Art. 11.7.1.1; and published not in latinized form after 1899, not available]
†Oxyosteidae Gross 1932: 39 (family) †Oxyosteus Jaekel 1911
†Synauchenidae Gross 1932: 44 (family) †Synauchenia Jaekel 1919 [name only, but used as valid by Gross 1933: 45 (as †Synauchenidae), by Berg 1940: 368 and by Fowler 1965b: 379 Art. 13.2.1]
Family †Bulbocanthidae Young & Goujet 2003
†Bulbocanthidae Young & Goujet 2003: 24 (family) †Bulbocanthus Bryant 1932

CLASS †ACANTHODII
Incertae sedis:
†Onchidae Jordan 1923: 92 (family) †Onchus Agassiz 1837
Family †Machaeracanthidae Burrow & Young 2005
†Machaeracanthidae Burrow & Young 2005: 17 (family) †Machaeracanthus Newberry 1857
Family †Sinacanthidae Zhu 1998
†Sinacanthidae Zhu 1998: 161 (family) †Sinacanthus Pan 1959

Family †Tchunacanthidae Karatajūtė-Talimaa & Smith 2003
†Lenacanthidae Karatajūtė-Talimaa & Smith 2003: 281 (family) †Lenacanthus Karatajūtė-Talimaa & Smith 2003

Order †Diplacanthiformes
Family †Culmacanthidae Long 1983
†Culmacanthidae Long 1983b: 52 (family) †Culmacanthus Long 1983

Family †Diplacanthidae Bleeker 1859
†Diplacanthidae Bleeker 1859: XVII (family) †Diplacanthus Agassiz 1844 [family name sometimes seen as †Diplocanthidae]

Family †Gladiobranchidae Bernacsek & Dineley 1977
†Gladiobranchidae †Gladiobranchidae Bernacsek & Dineley 1977: 13 (family) †Gladiobranchus Bernacsek & Dineley 1977

Order †Ischnacanthiformes
Family †Tetanopsyridae Gagnier, Hanke & Wilson 1999
†Tetanopsyridae Gagnier, Hanke & Wilson 1999: 83 (family) †Tetanopsyrus Gagnier, Hanke & Wilson 1999

Family †Ischnacanthidae Woodward 1891
†Ischnacanthidae Woodward 1891a: 20 (family) †Ischnacanthus Powrie 1864
†Ictinocephalidae Jordan 1923: 91 (family) †Ictinocephalus Page 1864 [name in synonymy; treated as available before 1961?; not available, Art. 11.6.1]

Family †Acritolepididae Valiukevičius & Burrow 2005
†Acritolepididae Valiukevičius & Burrow 2005: 644 (family) †Acritolepis Valiukevičius 2003 [family name sometimes seen as †Acritolepididae]

Family †Poracanthodidae Vergoossen 1997
†Poracanthodidae Vergoossen 1997: 44 (family) †Poracanthodes Brotzen 1934

Order †Acanthodiformes
Family †Mesacanthidae Moy-Thomas 1939
†Mesacanthidae Moy-Thomas 1939: 34 (family) †Mesacanthus Traquair 1888

Family †Cheiracanthidae Bleeker 1859
†Cheiracanthidae Bleeker 1859: XVII (family) †Cheiracanthus Agassiz 1835

Family †Acanthodidae Agassiz 1844
†Acanthodien Agassiz 1844 Tome II pt. 1: 308 (family) †Acanthodes Agassiz 1833 [latinized to †Acanthoidini by Bonaparte 1846: 4 (subfamily), latinized to †Acanthodei by Owen 1846: 50, latinized to †Acanthoides by Giebel 1846: 65, latinized to †Acanthodii by Giebel 1847: 227, latinized to †Achantodontini †Acanthodontini by Bonaparte 1850a: 455; considered valid with this authorship by Müller 1846: 122, 151, by Bronn 1849: 656 and by Pander 1860: 69 Art. 11.7.2; senior objective synonym of †Acanthoëssidae Hay 1902]
†Acanthoëssidae Hay 1902: 273 (family) †Acanthoëssus Agassiz 1832 [type genus as †Acanthoëssus, name must be corrected Art. 32.5.3 to †Acanthoëssidae; junior objective synonym of †Acanthodidae Agassiz 1844, invalid, Art. 61.3.2]
†Howittacanthidae Zajic 1995: 168 (family) †Howittacanthus Long 1986
Order †Climatiiformes
Family †Climatiidae Berg 1940, name in prevailing recent practice
†Brachyacanthidae Moy-Thomas 1939: 34 (family) †Brachyacanthus Egerton 1860
†Climatiidae Berg 1940: 373 (family) †Climatius Agassiz 1845
†Parexidae Berg 1940: 373 (family) †Parexus Agassiz 1845
Family †Gyracanthidae Woodward 1906
†Gyracanthidae Woodward 1906: 3 (family) †Gyracanthus Agassiz 1835 [family name sometimes seen as †Gyracanthididae]
†Gyracanthididae Miles 1971: 28 (family) †Gyracanthides McCoy 1890
Family †Vesperaliidae Valiukevičius & Burrow 2005
†Vesperaliidae Valiukevičius & Burrow 2005: 643 (family) †Vesperalia Valiukevičius 2004
Family †Euthacanthidae Berg 1940
†Euthacanthidae Berg 1940: 373 (family) †Euthacanthus Powrie 1864
Family †Brochoadmonidae Bernacsek & Dineley 1977
†Brochoadmonidae Bernacsek & Dineley 1977: 17 (family) †Brochoadmones Bernacsek & Dineley 1977

CLASS CHONDRICHTHYES
Incertae sedis:
Family †Bandringidae Zangerl 1969
†Bandringidae Zangerl 1969: 157 (family) †Bandringa Zangerl 1969
Family †Kathemacanthidae Gagnier & Wilson 1996
†Kathemacanthidae Gagnier & Wilson 1996: 243 (family) †Kathemacanthus Gagnier & Wilson 1996
Family †Palaeospondylidae Gill 1896
†Palaeospondylidae Gill 1896a: 11 (family) †Palaeospondylus Traquair 1890
Family †Polysentoridae Zangerl 1979
†Polysentoridae Zangerl 1979: 458, 460 (family) †Polysentor Zangerl 1979
Family †Protodontidae Woodward 1932
†Protodontidae Woodward 1932: 56 (family) †Protodus Woodward 1892
Family †Wellingtonellidae Märss, Wilson & Thorsteinsson 2002
†Wellingtonellidae Märss, Wilson & Thorsteinsson 2002: 117 (family) †Wellingtonella Märss, Wilson & Thorsteinsson 2002

Order †Altholepidiformes
Family †Altholepididae Andreev, Coates, Shelton, Cooper, Smith & Sansom 2015
†Altholepididae Andreev, Coates, Shelton, Cooper, Smith & Sansom 2015: 693 (family) †Altholepis Karatjūtė-Talimaa 1997
Family †Tazakidae Andreev, Coates, Shelton, Cooper, Smith & Sansom 2015
†Tazakidae Andreev, Coates, Shelton, Cooper, Smith & Sansom 2015: 694 (family) †Tazakia Andreev, Coates, Shelton, Cooper, Smith & Sansom 2015 [correct stem would be Tazaki-]

Order †Elegestolepidida
Family †Kannathalepididae Märss & Gagnier 2001
†Kannathalepididae Märss & Gagnier 2001: 695 (family) †Kannathalepis Märss & Gagnier 2001
Family †Elegestolepididae Andreev, Coates, Karatjūtė-Talimaa, Shelton, Cooper & Sansom 2017
†Elegestolepididae Andreev, Coates, Karatjūtė-Talimaa, Shelton, Cooper & Sansom 2017: e1245664-4 (family) †Elegestolepis Karatjūtė-Talimaa 1973
Order †Mongolepidiformes
Family †Mongolepididae Karatajutė-Talimaa & Novitskaya 1990
  †Mongolepididae Karatajutė-Talimaa & Novitskaya in Karatajutė-Talimaa, Novitskaya, Rozman & Sodov 1990: 79 (family) †Mongolepis Karatajutė-Talimaa & Novitskaya 1990 [family name sometimes seen as †Mongolepididae]
Family †Shiqianolepidae Sansom, Aldridge & Smith 2000
  †Shiqianolepidae Sansom, Aldridge & Smith 2000: 259 (family) †Shiqianolepis Sansom, Aldridge & Smith 2000 [family name sometimes seen as †Shiqianolepididae]

Order †Polymerolepidiformes
Family †Polymerolepididae Karatajutė-Talimaa 1968
  †Polymerolepididae Karatajutė-Talimaa 1968: 37 (family) †Polymerolepis Karatajutė-Talimaa 1968

Order †Omalodontiformes
Family †Omalodontidae Ginter, Liao & Valenzuela-Ríos 2008
  †Omalodontidae Ginter, Liao & Valenzuela-Ríos 2008: 167 (family) †Omalodus Ginter & Ivanov 1992
Family †Aztecodontidae Hairapetian, Ginter & Yazdi 2008
  †Aztecodontidae Hairapetian, Ginter & Yazdi 2008: 174 (family) †Aztecodus Long & Young 1995

Order †Antarctilamniformes
Family †Antarctilamnidae Ginter, Liao & Valenzuela-Ríos 2008
  †Antarctilamnidae Davis 1994: 58 (family) †Antarctilamna Young 1982 [name only, published after 1960, not available, Art. 13.1.1]
  †Antarctilamnidae Ginter, Liao & Valenzuela-Ríos 2008: 169 (family) †Antarctilamna Young 1982
Family †Coronodontidae Romer 1945

Order †Phoebodontiformes
Family †Phoebodontidae Williams 1985, name in prevailing recent practice
  †Diademodidae Arambourg 1958: 2021 (family) †Diademodus Harris 1951
  †Phoebodontidae Williams 1979 (family) †Phoebodus St. John & Worthen 1875 [unavailable publication, family-group name not available]
  †Phoebodontidae Williams in Zangerl 1981: 54 (family) †Phoebodus St. John & Worthen 1875 [name only, published after 1960, not available, Art. 13.1.1]
  †Phoebodontidae Williams 1985: 124 (family) †Phoebodus St. John & Worthen 1875
  †Thrinacodontidae Grogan & Lund 2008: 971 (family) †Thrinacodus St. John & Worthen 1875
Family †Jalodontidae Ginter, Hairapetian & Klug 2002
  †Jalodontidae Ginter, Hairapetian & Klug 2002: 188 (family) †Jalodus Ginter 1999

Superorder †Cladoselachimorpha (†Cladodontomorpha)
Order †Cladoselachiformes
Family †Cladoselachidae Dean 1894
  †Cladoselachidae Dean 1894: 111 (family) †Cladoselache Dean 1894

35
Order †Symmoriiformes
Family †Symmoriidae Dean 1909
†Symmoriidae Dean 1909: 242 (family) †Symmorium Cope 1893
†Stethacanthidae Lund 1974: 164 (family) †Stethacanthus Newberry 1890
Family †Falcatidae Zangerl 1990, name in prevailing recent practice
†Deneidae Fournier & Pruvost 1928: 16 (family) †Denaea Pruvost 1922 [type genus as †Denea, name must be corrected Art. 32.5.3; corrected to †Denaeidae by Berg 1940: 376, confirmed by Fowler 1966a: 121]
†Falcatidae Zangerl 1990: 139 (family) †Falcatus Lund 1985

Superorder †Ctenacanthimorpha
Order †Ctenacanthiformes
Family †Ctenacanthidae Bonaparte 1850, name in prevailing recent practice
†Cladodini Giebel 1846: 62 (family) †Cladodus Agassiz 1843 [stem changed to Cladodont- by Bonaparte 1850a: 454, confirmed by Woodward 1889a: 16 and by Lydekker in Nicholson & Lydekker 1889: 927; †Cladodontidae used after 1900, e.g., by Hay 1902: 267 and by Jordan 1905: 520]
†Ctenacanthini Bonaparte 1850a: 454 (subfamily) †Ctenacanthus Agassiz 1837 [type genus inferred from the stem, Art. 11.7.1.1; also as a new family in Dean 1909: 242]
†Tamiobatidae Hay 1902: 315 (family) †Tamiobatis Eastman 1897 [also Woodward in Zittel 1902: 41]
Family †Heslerodidae Maisey 2010
†Heslerodidae Maisey 2010: 14 (family) †Heslerodus Ginter 2002 [family name sometimes seen as †Heslerodontidae]

Order †Squatinactiformes
Family †Squatinactidae Lund & Zangerl 1974

Superorder †Xenacanthimorpha (†Pleuracanthodii)
Order †Bransonelliformes †Bransonella Harlton 1933

Order †Xenacanthiformes
Family †Diplodoselachidae Dick 1981
†Orthacanthidae Jordan 1923: 91 (family) †Orthacanthus Agassiz 1843 [name in synonymy; treated as available before 1961?; not available, Art. 11.6.1]†Diplodoselachidae Dick in Zangerl 1981: 64 (family) †Diplodoselache Dick 1981 [also Dick 1981: 99]
†Orthacanthidae Heyler & Poplin 1990: 70 (family) †Orthacanthus Agassiz 1843
†Lebachacanthidae Soler-Gijón 1997: 3 (family) †Lebachacanthus Soler-Gijón 1997
Family †Xenacanthidae Geinitz 1860
†Xenacanthi Geinitz 1860: 468 (family) †Xenacanthus Beyrich 1848 [corrected to †Xenacanthidae by Hoernes 1884: 430]
†Pleuracanthidae Hasse 1878b: 169 (no family-group name)
†Pleuracanthidae Woodward 1889a: 1 (family) †Pleuracanthus Agassiz 1837 [type genus preoccupied by Pleuracanthus Gray 1832 in Coleoptera; invalid, Art. 39]
Subclass HOLOCEPHALI (Euchondrocephali/Subterbranchialia)

Incertae sedis:
†Desmiodontidae Hansen 1985: 523 (family) †Desmiodus St. John & Worthen 1875 [also as a new family in Cappetta, Duffin & Zidek 1993: 596; †Desmiodus is a nomen dubium, no longer recognized as a valid genus]

Family †Gregoriidae Lund & Grogan 2004
†Gregoriidae Lund & Grogan 2004b: 506 (family) †Gregorius Lund & Grogan 2004
Family †Harpacanthidae Lund & Grogan 2004
†Harpacanthidae Lund & Grogan 2004a: 172 (family) †Harpacanthus Traquair 1886
Family †Lagarodontidae Lebedev 2008
†Lagarodontidae Lebedev 2008: 201 (family) †Lagarodus Jaekel 1898

Order †Iniopterygiformes
Family †Iniopterygidae Zangerl & Case 1973
†Iniopterygidae Zangerl & Case 1973: 6 (family) †Iniopteryx Zangerl & Case 1973
Family †Sibyrhynchidae Zangerl & Case 1973
†Sibyrhynchidae Zangerl & Case 1973: 35 (family) †Sibyrhynchus Zangerl & Case 1973

Order †Orodontiformes
Family †Leiodontidae Ginter, Hampe & Dufﬁn 2010
†Leiodontidae Ginter, Hampe & Dufﬁn 2010: 116 (family) †Leiodus St. John & Worthen 1875 [not Leiodidae Fleming 1821 in Coleoptera]
Family †Orodontidae de Koninck 1878
†Orodontidae de Koninck 1878: 29 (family) †Orodus Agassiz 1838

Order †Eugeneodontiformes
Suborder †Eugeneodontoidei
Family †Caseodontidae Zangerl 1981
†Caseodontidae Zangerl 1981: 79 (superfamily) †Caseodus Zangerl 1981 [also as new family]
Family †Eugeneodontidae Zangerl 1981
†Eugeneodontidae Zangerl 1981: 82 (family) †Eugeneodus Zangerl 1981

Suborder †Edestoidei
Family †Helicoprionidae Karpinsky 1911
†Helicoprionidae Karpinsky 1911: 1113 (family) †Helicoprion Karpinsky 1899 [family name sometimes seen as †Helicopriidae]
†Agassizodontidae Zangerl 1981: 86 (family) †Agassizodus St. John & Worthen 1875
Family †Edestidae Leidy 1857
†Edestina Leidy 1857: 302 (family) †Edestus Leidy 1856

Order †Petalodontiformes
Family †Belantseidae Lund 1989
†Belantseidae Lund 1989: 352 (family) †Belantsea Lund 1989
Family †Petalodontidae Newberry & Worthen 1866
†Petalodontes Giebel 1847: 344 (? subfamily) †Petalodus Owen 1845 [published not in latinized form before 1900, not available, Art. 11.7.2]
†Petalodontidae Newberry & Worthen 1866: 31 (family) †Petalodus Owen 1845
†Polyrhizodontinae Jaekel 1898: 49 (subfamily) †Polyrhizodus M’Coy 1848 [subfamily name sometimes seen as †Polyrhizontinae]
Family †Pristodontidae Woodward 1889
†Pristodontidae Woodward 1889a: 62 (family) †Pristodus Davis 1883
†Peripristidae Eastman 1902: 389 (family) †Peripristis St. John 1870

Family †Janassidae Jaekel 1898
†Janassinae Jaekel 1898: 49 (subfamily) †Janassa Münster 1839

Family †Petalorhynchidae Lund, Grogan & Fath 2014
†Petalorhynchidae Lund, Grogan & Fath 2014: 1026 (family) †Petalorhynchus Morris & Roberts 1862

Family †Obruchevodidae Lund, Grogan & Fath 2014
†Obruchevodidae Lund, Grogan & Fath 2014: 1026 (family) †Obruchevodus Grogan, Lund & Fath 2014

Order †Debeeriiformes
Family †Debeeriidae Grogan & Lund 2000
†Debeeriidae Grogan & Lund 2000: 220 (family) †Debeerius Grogan & Lund 2000

Order †Helodontiformes
Family †Helodontidae Jaekel 1898
†Helodontinae Jaekel 1898: 50 (subfamily) †Helodus Agassiz 1838

Superorder Holocephalimorpha
Order †Psammodontiformes
Family †Psammodontidae de Koninck 1878
†Psammodonten Pander 1856: 77 (family) †Psammodus Agassiz 1838 [published not in latinized form before 1900, not available, Art. 11.7.2]
†Psammodontidae de Koninck 1878: 38 (family) †Psammodus Agassiz 1838

Order †Copodontiformes
Family †Copodontidae Davis 1883
†Copodontidae Davis 1883: 57 (family) †Copodus Morris & Roberts 1862

†Cochliodontomorpha
Order †Squalorajiformes
Family †Squalorajidae Hasse 1878
†Squalorajidae Hasse 1878a: 247, 257 (family) †Squaloraja Riley 1833 [family name sometimes seen as †Squaloraiidae]

Order †Chondrenchelyiformes
Family †Chondrenchelyidae Jordan 1923
†Chondrenchelyidae Jordan 1923: 92 (family) †Chondrenchelys Traquair 1888

Order †Menaspiformes
Family †Menaspidae Woodward 1891, spelling in prevailing recent practice
†Trachyacanthidae Jaekel 1890: 130 (family) †Menaspis Ewald 1848 [no stem of the type genus, not available, Art. 11.7.1.1]
†Menaspidae Woodward 1891b: 424 (family) †Menaspis Ewald 1848 [family name sometimes seen as †Menaspididae or †Manaspidae]

Family †Deltoptygiidae Patterson 1965
†Deltoptygiidae Patterson 1965: 149 (family) †Deltoptygius Morris & Roberts 1862

Family †Traquairiidae Lund & Grogan 1997
†Traquairiidae Lund & Grogan 1997: 477 (family) †Traquairius Lund & Grogan 1997 [family name sometimes seen as †Traquairidae]
Order †Cochliodontiformes
Family †Cochliodontidae Owen 1867
 †Cochliodontidae Owen 1867: 59 (family) †Cochliodus Agassiz 1838
 †Rhadamantidae Woodward 1932: 73 (family) †Radamas Münster 1843 [type genus as †Rhadamas, name must be corrected Art. 32.5.3; corrected to †Radamantidae by Berg 1940: 383, confirmed by Fowler 1966b: 317]
 †Deltodontidae Zangerl 1981: 42, 46 (family) †Deltodus Morris & Roberts 1862 [name only, published after 1960, not available, Art. 13.1.1]
Family †Psephodontidae Jaekel 1898
 †Psephodontinae Jaekel 1898: 50 (subfamily) †Psephodus Morris & Roberts 1862

Chimaerimorpha
Order Chimaeriformes
Suborder †Echinochimaeroidei
Family †Echinochimaeridae Lund 1977
 †Echinochimaeridae Lund 1977: 198 (family) †Echinochimaera Lund 1977
Suborder †Myriacanthoidei
Family †Myriacanthidae Woodward 1889
 †Myriacanthidae Woodward 1889b: 279 (family) †Myriacanthus Agassiz 1837
 †Acanthorhiniidae Patterson 1965: 146 (family) †Acanthorhina Fraas 1910
Family †Chimaeropsis Jaekel 1919
 †Chimaeropsis Jaekel 1919: 107 (family) †Chimaeropsis Zittel 1887
Suborder Chimaeroidei
Family Callorhinchidae Garman 1901
 †Edaphodontidae Owen 1846: 51 (family) †Edaphodon Buckland 1838 [also as a new subfamily †Edaphodontinae in Stahl 1999: 138]
Family Rhinocidae Garman 1901
Family Chimaeridae Rafinesque 1815

Subclass EUSELACHII
Incertae sedis:
Family †Listracanthidae Martill, Del Strother & Gallien 2014
 †Listracanthidae Martill, Del Strother & Gallien 2014: 7 (family) †Listracanthus Newberry & Worthen 1870

Order †Protacrodontiformes
Family †Protacrodontidae Zangerl 1981
 †Protacrodontoidea Zangerl 1981: 61 (superfamily) †Protacrodus Jaekel 1925 [also as a new family, †Protacrodontidae, in Cappetta, Duffin & Zidek 1993: 596]

Infraclasse †HYBODONTA
Order †Hybodontiformes
Family †Hybodontidae Agassiz 1843
 †Hybodontes Agassiz 1843 Tome III: 206 (family) †Hyodus Agassiz 1837 [latinized to †Hybodontidae by Owen 1846; latinized to †Hybodontidae by Giebel 1846: 152 and Giebel 1847: 311, latinized to †Hybodontinae [†Hybodontini] by Bonaparte 1850a: 453; considered valid with this authorship by Bronn 1849: 650, by Bleeker 1859: XII and by de Koninck 1878: 26 Art. 11.7.2]
Family †Thaiodontidae Cuny, Suteethorn, Kamha & Buffetaut 2008
†Thaiodontidae Cuny, Suteethorn, Kamha & Buffetaut 2008: 98 (family) †Thaiodus Cappetta, Buffetaut & Suteethorn 1990
Family †Tristychiidae Moy-Thomas 1939
†Tristychiidae Moy-Thomas 1939: 65 (family) †Tristychius Agassiz 1837
Family †Distobatidae Werner 1899
†Distobatidae Werner 1899: 88 (family) †Distobatus Werner 1899
Family †Acrodontidae Giebel 1846
†Acrodontidae Giebel 1846: 152 (family) †Acrodus Agassiz 1834 [corrected to †Acrodontidae by Fraas 1896: 17]
Family †Polyacrodontidae Glickman 1964
†Polyacrodontidae Glickman 1964a: 10 (family) †Polyacrodus Jaekel 1889 [also Glickman 1964b: 212]
Family †Lonchidiidae Herman 1977
†Lonchidiidae Herman 1977: 40, 44 (family) †Lonchidion Estes 1964 [family name sometimes seen as †Lonchidionidae]
Family †Steinbachodontidae Reif 1980
†Steinbachodontidae Reif 1980: 63 (family) †Steinbachodus Reif 1980
Family †Pseudodalatiidae Reif 1978
†Pseudodalatiidae Reif 1978: 55 (family) †Pseudodalatias Reif 1978
Family †Homalodontidae Mutter, Neuman & de Blanger 2008
†Homalodontidae Mutter, Neuman & de Blanger 2007: 309 (family) †Wapitiodus Mutter, de Blanger & Neuman 2007 [type genus preoccupied by †Wapitiodus Orchard 2005 in Conodonta; invalid, Art. 39]
†Homalodontidae Mutter, Neuman & de Blanger 2008: 419 (family) †Homalodontus Mutter, Neuman & de Blanger 2008
Family †Xenosynechodontidae Glickman 1980, name in prevailing recent practice
†Sphenacanthidae Maisey 1982: 21 (family) †Sphenacanthus Agassiz 1837

Infraclass ELASMOBRANCHII (Neoselachii)

Incertae sedis:
Family †Agaleidae Rees 2000
†Agaleidae Rees 2000: 412 (family) †Agaleus Duffin & Ward 1983
Family †Anachronistidae Duffin & Ward 1983
†Anachronistidae Duffin & Ward 1983: 95 (family) †Anachronistes Duffin & Ward 1983 (= †Cooleyella Gunnell 1933) [family name sometimes seen as †Cooleyellidae]
Family †Lugalepididae Karatajutė-Talimaa 1997
†Lugalepididae Karatajutė-Talimaa 1997a: 25 (family) †Lugalepis Karatajutė-Talimaa 1997
Family †Mcmurdodontidae White 1968
†Mcmurdodontidae White 1968: 9 (family) †Mcmurdodus White 1968
Family †Ostenoselachidae Duffin 1998
†Ostenoselachidae Duffin 1998: 5 (family) †Ostenoselache Duffin 1998

Superorder Galeomorphi (Selachimorpha)

Incertae sedis:
Family †Ptychodontidae Jaekel 1898
†Ptychodontinae Jaekel 1898: 50 (subfamily) †Ptychodus Agassiz 1838
†Hylaebatidae Herman & van Waes 2014: 161 (family) †Hylaebatis Woodward 1916 [not published according to the rules, not available]
Order †Synechodontiformes
Family †Palaeospinacidae Regan 1906
†Palaeospinacinae Regan 1906: 723, 750 (subfamily) †Palaeospinx Egerton 1872
[†Palaeospinx is a nomen dubium, no longer recognized as a valid genus]
†Synchodontidae Casier 1947b: 34 (family) †Synechodus Woodward 1888
†Orthacodidae Glickman 1957: 114 (family) †Orthacodus Woodward 1889 [corrected to
†Orthacodontidae by Beaumont 1960: 4]
†Paraorthacodidae Glickman 1958: 668 (family) †Paraorthacodus Glickman 1957 [family
name sometimes seen as †Paraorthacodontidae]
Family †Pseudonotidanidae Underwood & Ward 2004
†Welcommiidae Leidner & Delsate 2000: 46 (family) †Welcommia Capetta 1990 [unavailable
publication, family-group name not available]
†Welcommiidae Delsate 2001: 59 (family) †Welcommia Capetta 1990 [not published according
to the rules, not available]
†Pseudonotidanidae Underwood & Ward 2004: 474 (family) †Pseudonotidanus Underwood &
Ward 2004

Order Heterodontiformes
Family Heterodontidae Gray 1851
†Paracestrationidae Herman & van Waes 2012c: 11 (family) †Paracestration Koken 1911 [type
genus as †Paracestration, name must be corrected Art. 32.5.3; corrected to †Paracestracionidae
by Herman & van Waes 2014: 171]

Order Orectolobiformes
Incertae sedis:
†Palaeocarcharidae Applegate 2001a (family) †Palaeocarcharias Beaumont 1960 [unavailable
publication, family-group name not available]
Family †Phorcynidae Herman & van Waes 2014
†Phorcynidae Herman & van Waes 2014: 114, 135, 173 (family) †Phorcynis Thiolière 1854
[family name sometimes seen as †Phorcinidae]

Suborder Parascyllioidei
Family Parascylliidae Gill 1862

Suborder Orectoloboidei
Family Brachaeluridae Applegate 1974
Family Orectolobidae Gill 1896
Family Hemiscylliidae Gill 1862
Family Ginglymostomatidae Gill 1862
Pseudoginglymostomatidae Herman & van Waes 2014: 118 (family) Pseudoginglymostoma
Dingerkus 1986 [not published according to the rules, not available]
Family Stegostomatidae Gill 1862
Family Rhincodontidae Müller & Henle 1841 [ICZN Opinion 1278]

Order Lamniformes
Family †Haimirichiidae Vullo, Guinot & Barbe 2016
†Haimirichiidae Vullo, Guinot & Barbe 2016: 1004 (family) †Haimirichia Vullo, Guinot &
Barbe 2016
Family †Otodontidae Glickman 1964
†Otodontidae Glickman 1964a: 103 (family) †Otodus Agassiz 1838

Family †Xiphodolamiidae Glickman 1964
  †Xiphodolaminae [†Xiphodolaminae] Glickman 1964a: 105 (subfamily) †Xiphodolamia Leidy 1877
Family †Cardabiodontidae Siverson 1999
  †Cardabiodontidae Siverson 1999: 49 (family) †Cardabodon Siverson 1999
Family †Cretoxyrhinidae Glickman 1958
  †Cretoxyrhinidae Glickman 1958: 669 (family) †Cretoxyrhina Glickman 1958
Family †Archaeolamnidae Underwood & Cumbaa 2010
  †Archaeolamnidae Underwood & Cumbaa 2010: 921 (family) †Archaeolamnia Siverson 1992
Family †Pseudoscapanorhynchidae Herman 1979
  †Pseudoscapanorhynchidae Herman 1979: 361 (family) †Pseudoscapanorhynchus Herman 1977
Family †Anacoracidae Casier 1947
  †Coracidae sometimes used for fossil fishes? (family) †Corax Agassiz 1843 [type genus preoccupied by Corax Ledru 1810 in Aves; invalid, Art. 39; not Coraciidae Rafinesque 1815 in Aves]
  †Anacoracidae Casier 1947a: 5 (family) †Anacorax White & Moy-Thomas 1940 [also Casier 1947b: 36; also as a new family in Glickman 1956; senior objective synonym of †Squalicoracidae Patterson 1967]
  †Squalicoracidae Patterson in Andrews, Gardiner, Miles & Patterson 1967: 671 (family) †Squalicorax Whitley 1939 [junior objective synonym of †Anacoracidae Casier 1947, invalid, Art. 61.3.2]
  †Ptychcoracidae Herman & van Waes 2012a: 8 (family) †Ptychcorax Glickman & Istchenko 1980
  †Paracoracidae Herman & van Waes 2014: 186 (family) †Paracorax Cappetta 1977 [not published according to the rules, not available; also type genus preoccupied by Paracorax Lambrecht 1933 in Aves; invalid, Art. 39]
Family †Pseudocoracidae Capetta 2012
  †Pseudocoracidae Capetta 2012: 249 (family) †Pseudocorax Priem 1897
Family Mitsukurinidae Jordan 1898
  †Scapanorhynchidae White 1936a: 4 (family) †Scapanorhynchus Woodward 1889
  †Anomotodontidae Herman 1979: 362 (family) †Anomotodon Arambourg 1952
Family Odontaspididae Müller & Henle 1839 [ICZN Opinion 723]
  †Jekelotodontidae [†Jekelotodontidae] Glickman 1964a: 11 (family) †Jaekelotodus Menner 1928
  †Eostriatolamiidae Glickman in Zhelezko & Glickman 1971: 179 (family) †Eostriatolamia Glickman 1979 [no valid type genus, Art. 11.7.1.1; also name only, published after 1960, not available, Art. 13.1.1]
  †Striatolamiidae Glickman, Mertiniene & Nessov in Glickman, Mertiniene, Nessov, Rozhdestvensky, Khosatzky & Yakovlev 1987: 252 (family) †Striatolamia Glickman 1964 [name only, published after 1960, not available, Art. 13.1.1]
  †Striatolamiidae Zhelezko 1989: 16 (family) †Striatolamia Glickman 1964 [correct stem would be Striatolami-; name only, published after 1960, not available, Art. 13.1.1]
  †Johnlonginae Shimada, Popov, Siversson, Welton & Long 2015: 2 (subfamily) †Johnlongia Siverson 1996 [correct stem would be Johnlongi-]
Family Carchariidae Müller & Henle 1838 [ICZN Opinion 1459]
Family Pseudocarchariidae Taylor, Compagno & Struhsaker 1983
Family Alopiidae Bonaparte 1835
Family Megachasmidae Taylor, Compagno & Struhsaker 1983
Family Cetorhinidae Gill 1861
Family Lamnidae Bonaparte 1835
   †Lamiostomatidae Glickman 1964a: 11, 105 (family) †Lamiostoma Glickman 1964
Family †Paraisuridae Herman 1979
   †Paraisuridae Herman 1979: 361 (family) †Paraisurus Glickman 1957
Family †Serratolamnidae Landemaine 1991
   †Serratolamnidae Landemaine 1991: 12 (family) †Serratolamna Landemaine 1991
Family †Eoptolamnidae Kriwet, Klug, Canudo & Cuenca-Bescós 2008
   †Eoptolamnidae Kriwet, Klug, Canudo & Cuenca-Bescós 2008: 280 (family) †Eoptolamna Kriwet, Klug, Canudo & Cuenca-Bescós 2008 [family name sometimes seen as †Eoleptolamnidae]

Order Carcharhiniformes
Family Scyliorhinidae Gill 1862
   †Megascyliorhinidae Pfeil 1984: 112 (family) †Megascyliorhinus Cappetta & Ward 1977
   †Premontreinae Cappetta 1992a: 644 (subfamily) †Premontreia Cappetta 1992
   †Pteroscyllinae Cappetta 1992a: 644 (subfamily) †Pteroscyllium Cappetta 1980
   †Palaeoscylliidae Herman & van Waes 2012d: 50 (family) †Palaeoscyllium Wagner 1857
Family Pentanchidae Smith 1912
   Holohalaeluridae Herman & van Waes 2012d: 51 (family) Holohalaelurus Fowler 1934 [not published according to the rules, not available; Recent, omitted in Van der Laan et al. 2014]
Family Proscylliidae Fowler 1941
Family Pseudotriakidae Gill 1893
Family Leptochariidae Gray 1851
Family Triakidae Gray 1851
Family Hemigaleidae Hasse 1878
Family Carcharhinidae Jordan & Evermann 1896
   Galeoceridae Herman & van den Eckhaut 2010: 51 (family) Galeocerdo Müller & Henle 1837 [Recent, omitted in Van der Laan et al. 2014]
   Trienodonidae Herman & van den Eckhaut 2010: 52 (family) Triaenodon Müller & Henle 1834 [Recent, omitted in Van der Laan et al. 2014; correct stem would be Triaenodont-]
Family Sphyrnidae Bonaparte 1840

Superorder Squalomorphi
Order Hexanchiformes
Family Chlamydoselachidae Garman 1884
Family †Crassodontidanidae Kriwet & Klug 2016
   †Crassonotidae Kriwet & Klug 2011: S108 (family) †Crassodontidanus Kriwet & Klug 2011 [no stem of the type genus, not available, Art. 11.7.1.1]
   †Crassodontidanidae Kriwet & Klug 2016: 1 (family) †Crassodontidanus Kriwet & Klug 2011
Family Hexanchidae Gray 1851
   †Eonotidanidae Pfeil 1983: 25 (family) †Eonotidanus Pfeil 1983
Family Heptanchidae Barnard 1925

Order Squaliformes
Family †Eoscymnidae Herman & van den Eckhaut 2010
   †Eoscymnidae Herman & van den Eckhaut 2010: 39 (family) †Eoscymnus Herman & van den Eckhaut 2010 [family name sometimes seen as †Eoscymnorhinidae]
Family Centrophoridae Bleeker 1859
Family Etmopteridae Fowler 1934
   Aculeolidae Herman & van Waes 2012b: 8 (family) Aculeola de Buen 1959 [Recent, omitted in Van der Laan et al. 2014]
Family Somniosidae Jordan 1888
Family Oxynotidae Gill 1863
Family Dalatiidae Gray 1851
Family Squallidae de Blainville 1816

Order †Protospinaciformes
Family †Protospinacidae Woodward 1919
   †Protospinacidae Woodward 1919: 232 (family) †Protospinax Woodward 1919

Order Echinorhiniformes
Family †Pseudoechinorhinidae Herman & van Waes 2014
   †Pseudoechinorhinidae Herman & van Waes 2014: 166 (family) †Pseudoechinorhinus Pfeil 1983
Family †Orthechinorhinidae Herman & van Waes 2014
   †Orthechinorhinidae Herman & van Waes 2014: 167 (family) †Orthechinorhinus Adnet 2006
Family Echinorhinidae Gill 1862

Order Squatiniformes
Family †Pseudorhinidae Klug & Kriwet 2012
   †Pseudorhinidae Klug & Kriwet 2012: 94 (family) †Pseudorhina Jaekel 1898
Family Squatinidae de Blainville 1816

Order Pristiophoriformes
Family Pristiophoridae Bleeker 1859

Division Batomorphi
Incertae sedis:
†Archaeobatidae Delsate & Candoni 2001: 132 (family) †Toarcibatis Delsate & Candoni 2001 [no stem of the type genus, not available, Art. 11.7.1.1; family name sometimes seen as †Archaeobatididae]
†Arthropteridae Jordan 1905: 553 (family) †Arthropterus Agassiz 1843 [type genus preoccupied by Arthropterus M’Leay 1838 in Carabidae Coleoptera; invalid, Art. 39]
†Asterodermini Bonaparte 1850a: 453 (subfamily) †Asterodermus Agassiz 1843 [type genus inferred from the stem, Art. 11.7.1.1; family name sometimes seen as †Asterodermatidae and †Astrodermidae]
†Belemnobatidae Suteethorn, Le Loeuff, Buffetaut, Suteethorn & Wongko 2013: 461 (family)
   †Belemnobatis Thiolière 1854 [not published according to the rules, not available; family name sometimes seen as †Belemnobatididae]
Centrobatidae Jaekel 1898: 51 [ref. 34311] (family) ? [no valid type genus, not available; Recent, omitted in Van der Laan et al. 2014]
Rhinorajidae Jaekel 1898: 51 (family) ? [not based on Rhinoraja; no valid type genus, not available; Recent, omitted in Van der Laan et al. 2014]
†Spathobatidae Dames 1888: 130 (family) †Spathobatis Thiolière 1854 [type genus inferred from the stem, Art. 11.7.1.1]

Order Torpediniformes
Family Torpedinidae Henle 1834
Family Hypnidae Gill 1862
Family Narcinidae Gill 1862
Family Narkidae Fowler 1934

Order Rajiformes
Family †Cyclobatidae Jaekel 1911
†Cyclobatidae Jaekel 1911: 64 (family) †Cyclobatis Egerton 1844 [family name sometimes seen as †Cyclobatididae]

Family †Hypsobatidae Cappetta 1992
†Hypsobatidae Cappetta 1992b: 33 (family) †Hypsobatis Cappetta 1992 [family name sometimes seen as †Hypsobatididae]

Family †Parapalaeobatidae Cappetta 1992
†Parapalaeobatidae Cappetta 1992b: 50 (family) †Parapalaeobates Weiler 1930

Family Rajidae de Blainville 1816
Rostrorajinae Ishihara, Treloar, Bor, Senou & Jeong 2012: 31 (subfamily) Rostroraja [not published according to the rules, not available; Recent, omitted in Van der Laan et al. 2014]

Family Anacanthobatidae von Bonde & Swart 1923
Family Crurirajidae Hulley 1972
Family Arhynchobatidae Fowler 1934
Family Gurgesiellidae Buen 1959

Order Rhinopristiformes
Family Trygonorhinidae Last, Séret & Naylor 2016
Family Rhinobatidae Bonaparte 1835
Family Rhinidae Müller & Henle 1841
Family Glaucostegidae Last, Séret & Naylor 2016
Family Pristidae Bonaparte 1835

Order Sclerorhynchiformes
Family †Sclerorhynchidae Cappetta 1974, name in prevailing recent practice
†Ischyrididae Cope 1875: 280 (family) †Ischyriaza Leidy 1856
†Ganopristinae Arambourg 1941: 139 (subfamily) †Ganopristis Arambourg 1935 [sometimes seen as †Ganopristiinae]
†Sclerorhynchidae Cappetta 1974: 225 (family) †Sclerorhynchus Woodward 1889
†Schizorhizinae Kirkland & Aguillón-Martínez 2002: 21 (subfamily) †Schizorhiza Weiler 1930

Family †Ptychotrygonidae Kriwet, Nunn & Klug 2009
†Ptychotrygonidae Kriwet, Nunn & Klug 2009: 333 (family) †Ptychotrygon Jaekel 1894 [also as a new family in Herman & van Waes 2012a: 4]

Order Myliobatiformes
Suborder Platyrhinoidei
Family Platyrhinidae Jordan 1923

Suborder Myliobatoidei
Family †Rhombothiidae Cappetta 1987
†Rhombothiidae Cappetta 1987: 174 (family) †Rhombothus Dames 1881
Family Zanobatidae Fowler 1934
Family Hexatrygonidae Heemstra & Smith 1980
Family Dasyatidae Jordan & Gilbert 1879
Family Potamotrygonidae Garman 1877
Family Urotrygonidae McEachran, Dunn & Miyake 1996
Family Gymnuridae Fowler 1934
Family Plesiobatidae Nishida 1990
Family Urolophidae Müller & Henle 1841
Family Aetobatidae Agassiz 1858
Family Myliobatidae Bonaparte 1835
†Hypolophitinae White 1935a: 34 (subfamily) †Hypolophites Stromer 1910
†Rhizochlatridae Silva Santos & Travassos 1960: 16 (family) †Rhizochlatrus Silva Santos & Travassos 1960
†Brachyrhizodontidae Herman & van Waes 2012a: 10 (family) †Brachyrhizodus Romer 1942
Family Rhinopteridae Jordan & Evermann 1896
†Zygzabatidae Mendiola 1995: 2 (family) †Zygzabatis Mendiola 1995
Family Mobulidae Gill 1893

CLASS OSTEICHTHYES (Euteleostomi)

Incertae sedis:
†Andreolepididae Märss 2001: 179 (family) †Andreolepis Gross 1968
†Halecopsidae Casier 1946: 114 (family) †Halecopsis Woodward 1901 [family name sometimes seen as †Halecopsididae]
†Histiothriissinae Arambourg 1955: 40 (subfamily) †Histiothrissa Woodward 1901
†Lophosteidae Gross 1969: 17 (family) †Lophosteus Pander 1856
†Mesolepidae Young 1866: 316 (family) †Mesolepis Young 1866 [family name sometimes seen as †Mesolepididae]

Order †Dialipiniformes
†Dialipina Schultze 1968

Subclass ACTINOPTERYGII

Incertae sedis:
†Coccolepidae Berg 1940: 400 (family) †Coccolepis Agassiz 1844 [family name also seen as †Coccolepididae]
†Tienshaniscidae Liu & Wang 1978: 3 (family) †Tienshaniscus Liu & Wang 1978 [Lu & Chen 2010: 7 wrote †Tienshanididae]
†Uighuroniscidae Su 1985: 65, 129 (family) †Uighuroniscus Su 1985

Order †Cheirolepidiformes

Family †Acropholidae Kazantseva-Selezneva 1977
†Acropholidae Kazantseva-Selezneva 1977: 102 (family) †Acropholis Aldinger 1935 [family name sometimes seen as †Acropholididae]
Family †Cheirolepididae Pander 1860, spelling in prevailing recent practice
†Cheirolepiden Pander 1860: 69 (family) †Cheirolepis Agassiz 1835 [family name sometimes seen as †Cheirolépidés Eichwald 1860: 1572; latinized to †Cheirolepini by Huxley 1861: 40 and by Traquair 1875: 238, latinized to †Chirnolepidae by Hoernes 1884: 438; considered valid with this authorship by Huxley 1861: 40, by Traquair 1875: 238, by Berg, Kazantseva & Obruchev 1964: 336, by Andrews et al. 1967: 644, by Kazantseva-Selezneva 1977: 99, by Beltan 1990: 79 and by Gardiner 1993b: 611 Art. 11.7.2; family name also seen as †Cheirolepidae]
Family †Karaunguriidae Kazantseva-Selezneva 1977
†Karaunguriidae Kazantseva-Selezneva 1977: 102 (family) †Karaunguria Kazantseva-Selezneva 1977

Order †Palaeonisciformes

Incertae sedis:
Family †Acrolepididae Aldinger 1937, spelling in prevailing recent practice
†Acrolepididae Aldinger 1937: 32, 250 (family) †Acrolepis Agassiz 1833 [family name also seen as †Acrolepididae]
Family †Asarotidae Schaeffer 1968
†Asarotidae Schaeffer 1968: 4 (family) †Asarotus Schaeffer 1968
Family †Atherstoniidae Gardiner 1967
†Atherstoniidae Gardiner 1967: 176 (family) †Atherstonia Woodward 1889
Family †Birgeriidae Aldinger 1937
†Birgeriidae Aldinger 1937: 377 (family) †Birgeria Stensiö 1919 [name only, but used as valid by Berg 1940: 172, by Romer 1945: 579, by Schultz 1948: 228 and by Andrews et al. 1967: 645 Art. 13.2.1]

Family †Boreolepididae Aldinger 1937, spelling in prevailing recent practice
†Boreolepidae Aldinger 1937: 122, 304 (family) †Boreolepis Aldinger 1937 [family name also seen as †Boreolepididae]

Family †Brazilichthyidae Cox & Hutchinson 1991
†Brazilichthyidae Cox & Hutchinson 1991: 563 (family) †Brazilichthys Cox & Hutchinson 1991

Family †Canobiidae Aldinger 1937
†Canobiidae Aldinger 1937: 317 (family) †Canobius Traquair 1881

Family †Carbovelidae Romer 1945

Family †Centrolepididae Gardiner 1960, spelling in prevailing recent practice
†Centrolepididae Gardiner 1960: 248 (family) †Centrolepis Egerton 1858 [family name also seen as †Centrolepidae]

Family †Coccocephalichthyidae Fowler 1951 (1945), name in prevailing recent practice, Art. 40.2
†Coccocephalichthyidae Fowler 1951: 2 (family) †Coccocephalichthys Whitley 1940 [type genus inferred from the stem, Art. 11.7.1.1; junior objective synonym †Cocconiscidae Romer 1945, invalid, Art. 61.3.2, but name in prevailing recent practice Art. 40.2; family name sometimes seen as †Coccocephalichthyidae]
†Monesedeiphidae Beltan 1990: 79 (family) †Monesedeiphus Beltan 1990
†Irajapintoseidae Beltan 1990: 81 (family) †Irajapintoseidon Beltan 1990 [correct stem is Irajapintoseid-; original, spelling a printing error?]

Family †Commentryidae Gardiner 1963
†Commentryidae Gardiner 1963: 290 (family) †Commentrya Sauvage 1888

Family †Cornuboniscidae White 1939
†Cornuboniscidae White 1939: 42 (family) †Cornuboniscus White 1939

Family †Cosmolepididae Gardiner 1967
†Cosmolepididae Gardiner 1967: 177 (family) †Cosmolepis Egerton 1858 [family name sometimes seen as †Cosmolepidae]

Family †Cosmoptygiidae Gardiner 1963
†Cosmoptygiidae Gardiner 1963: 259 (family) †Cosmoptygius Traquair 1877 [family name sometimes seen as †Cosmoptygidae]

Family †Cryptiolepididae Moy-Thomas 1939, spelling in prevailing recent practice
†Cryptiolepididae Moy-Thomas 1939: 112 (family) †Cryptiolepis Traquair 1881 [family name also seen as †Cryptiolepididae]

Family †Dicellopygidae Romer 1945

Family †Eigiliidae Kazantseva-Selezneva 1977
†Eigiliidae Kazantseva-Selezneva 1977: 112 (family) †Eigilia Kazantseva-Selezneva 1977 [family name sometimes seen as †Eigillidae]
Family †Elonichthyidae Aldinger 1937
†Elonichthyidae Aldinger 1937: 16, 204 (family) †Elonichthys Giebel 1848

Family †Eurynotoididae Minikh & Minikh 1990
†Eurynotoididae [†Eurynotoidiidae] Minikh & Minikh 1990: 86 (family) †Eurynotoides Berg 1940

Family †Gyrolepidotidae Gardiner 1967
†Gyrolepidotidae Gardiner 1967: 175 (family) †Gyrolepidotus Rohon 1889

Family †Holuridae Moy-Thomas 1939
†Holuridae Moy-Thomas 1939: 113 (family) †Holurus Traquair 1881

Family †Lawniidae Gardiner 1967
†Lawniidae Gardiner 1967: 176 (family) †Lawnia Wilson 1953

Family †Pygopteridae Fitzinger 1873
†Pygopteri Fitzinger 1873: 52 (family) †Pygopterus Agassiz 1833

Family †Sceletophoridae Štamberg 2006
†Sceletophoridae Štamberg 2006: 217 (family) †Sceletophorus Frič 1894

Family †Strepheoschemidae Gardiner 1985
†Strepheoschemidae Gardiner 1985: 61 (family) †Strepheoschema White 1927 [family name sometimes seen as †Strepheoschematidae]

Family †Trissolepididae Frič 1893, spelling in prevailing recent practice
†Trissolepidae Frič 1893: 76 (family) †Trissolepis Frič 1893 [senior objective synonym of †Sphaerolepidae Fowler 1951; family name also seen as †Trissolepididae]
†Gymnoniscidae Berg 1936: 345 (family) †Gymnoniscus Berg 1936
†Sphaerolepidae Fowler 1951: 2 (family) †Sphaerolepis Frič 1877 [name only; junior objective synonym of †Trissolepidae Frič 1893, invalid, Art. 61.3.2; family name sometimes seen as †Sphaerolepididae]

Family †Urosthenidae Woodward 1931
†Urosthenidae Woodward 1931: 366 (family) †Urosthenes Dana 1848 [family name sometimes seen as †Urosthenidae]

Family †Varialepididae Minikh 1990
†Varialepididae Minikh 1990: 71 (family) †Varialepis Minikh 1986

Family †Whiteichthyidae Kazantsseva-Selezneva 1977
†Whiteichthyidae Kazantsseva-Selezneva 1977: 108 (family) †Whiteichthys Moy-Thomas 1942

Family †Stegotrachelidae Gardiner 1963, name in prevailing recent practice
†Stegotrachelidae Gardiner 1963: 294 (family) †Stegotrachelus Woodward & White 1926

Family †Kentuckiidae
†Kentuckiidae Gardiner 1993b: 612 (family) †Kentuckia Rayner 1951 [name only, published after 1960, not available, Art. 13.1.1]

Family †Howqualepididae Long, Choo & Young 2008
†Howqualepididae Long, Choo & Young 2008: 396 (family) †Howqualepis Long 1988

Family †Moythomasiidae Kazantsseva 1971
†Moythomasiidae Kazantsseva 1971: 164 (family) †Moythomasia Gross 1950
†Mimiidae Gardiner 1993b: 611 (family) †Mimia Gardiner & Bartram 1977 [name only, published after 1960, not available, Art. 13.1.1; also type genus preoccupied by Mimia Evans 1953 in Lepidoptera; invalid, Art. 39; type genus replaced by †Mimipiscis Choo 2012, if found to belong to a separate family, a new family-group name is needed]

Family †Rhabdolepididae Gardiner 1963, spelling in prevailing recent practice
†Rhabdolepididae Gardiner 1963: 284 (family) †Rhabdolepis Troschel 1857 [family name also seen as †Rhabdolepidae]
†Osorioichthyidae Gardiner 1967: 175 (family) †Osorioichthys Casier 1954
†Willomorichthyidae Gardiner 1969: 423, 438 (family) †Willomorichthys Gardiner 1969
Family †Aesopichthyidae Poplin & Lund 2000
†Aesopichthyidae Poplin & Lund 2000: 429 (family) †Aesopichthys Poplin & Lund 2000
Family †Amblypteridae Romer 1945
†Heterocercoidei Bleeker 1859: XIV (family) †Amblypterus Agassiz 1833 [no stem of the type genus, not available, Art. 11.7.1.1]
Family †Paramblypteridae Blot 1966
†Paramblypteridae Blot 1966: 15 (family) †Paramblypterus Sauvage 1888
Family †Rhadinichthyidae Romer 1945
Family †Palaeoniscidae Bonaparte 1846
†Palaeoniscini Bonaparte 1846: 4 (subfamily) †Palaeoniscum de Blainville 1818 [type genus inferred from the stem, Art. 11.7.1.1]
†Oxygnathidae Berg 1940: 400 (family) †Oxygnathus Egerton 1854 [type genus preoccupied by Oxygnathus Dejean 1826 in Carabidae Coleoptera; invalid, Art. 39]
†Thrissonotidae Berg 1955: 121 (family) †Thrissonotus Agassiz 1844
†Turseoidae Bock 1959: 4 (family) †Turseodus Leidy 1857 [family name also seen as †Turseodiidae; correct stem is Turseodont-]
Family †Gonatodidae Gardiner 1967, spelling in prevailing recent practice
†Gonatodidae Gardiner 1967: 146 (family) †Gonatodus Traquair 1877 [family name also seen as †Gonatodontidae]

Order †Dorypteriformes
Family †Dorypteridae Fitzinger 1873
†Doryopteri Fitzinger 1873: 51 (family) †Doryopterus Germar 1842 [type genus as †Doryopterus, name must be corrected Art. 32.5.3; corrected to †Dorypteridae by Cope 1877a: 58, confirmed by Steinmann & Döderlein 1890: 567]

Order †Platysomiformes
Family †Platysomidae Bleeker 1859
†Platysomatoidei Bleeker 1859: XVII (family) †Platysomus Agassiz 1833 [not Platysomatidae Bickhardt 1914 in Diptera; family name corrected to †Platysomidae by Young 1866: 316 and confirmed by Günther 1880: 370; family name corrected to †Platysomidae or not by Nicholson 1879: x, 979 and erratum slip in Volume II for p. 134 and 138; senior objective synonym of †Stroteidae Fowler 1951]
†Eurytomidae Young 1866: 316 (family) †Eurytomus Agassiz 1833
†Scroteidae †[†Stroteidae] Jordan 1923: 112 (family) †Strotes Gistel 1848 [name in synonymy, not available; or, if treated as available with the help of Art. 11.6.1, junior objective synonym of †Platysomatoidae Bleeker 1859, invalid, Art. 61.3.2]
†Cheirodidae Moy-Thomas 1939: 126 (family) †Cheirodopsis Traquair 1881 or †Chirodus M’Coy 1848 [name only, used as valid before 2000?; not available]
†Stroteidae Fowler 1951: 2 (family) †Strotes Gistel 1848 [name only; junior objective synonym of †Platysomatoidei Bleeker 1859, invalid, Art. 61.3.2]
†Uropterygidae Fowler 1958: 3 (family) †Uropteryx Agassiz 1835
†Chirodontidae Moy-Thomas & Miles 1971: 94 (family) †Chirodus M’Coy 1848 [family name sometimes seen as †Cheirodonta, this spelling preoccupied by Cheiroodontinae Eigenmann 1915 in fishes]
Family †Bobasataniidae Stensiö 1932
†Bobasataniidae Stensiö in Koch 1931: 74 (family) †Bobasatrania White 1932 [no valid type genus, not available, Art. 11.7.1.1]
†Bobasataniidae Stensiö 1932a: 96, 125 (family) †Bobasatrania White 1932

Order †Tarrasiiformes
Family †Tarrasiidae Traquair 1881
†Tarrasiidae Traquair 1881a: 61 (family) †Tarrassius Traquair 1881 [family name sometimes seen as †Tarrasiidae]

Order †Guildayichthyiformes
Family †Guildayichthyidae Lund 2000
†Guildayichthyidae Lund 2000: 173 (family) †Guildayichthys Lund 2000

Order †Phanerorhynchiformes
Family †Phanerorhynchidae Stensiö 1931
†Phanerorhynchidae Stensiö in Koch 1931: 74 (family) †Phanerorhynchus Gill 1923 [type genus inferred from the stem; name only, but used as valid by Stensiö 1932a: 74, 97, by Berg 1940: 402, by Romer 1966: 353 and by Andrews et al. 1967: 648 Art. 13.2.1]

Order †Saurichthyiformes
Family †Saurichthyidae Bleeker 1859
†Saurichthyidae Bleeker 1859: XVI (family) †Saurichthys Agassiz 1834
†Rhyochodontidae Zittel 1887: 219 (family) †Rhyochodus Newberry 1873 [no stem of the type genus, not available, Art. 11.7.1.1]
†Belonorhynchidae Woodward 1889c: 407 (family) †Belonorhynchus Bronn 1858 [type genus inferred from the stem, Art. 11.7.1.1; family name sometimes seen as †Belonorynchidae]
†Saurorhynchidae Jordan 1905: 17 (family) †Saurorhynchus Reis 1892
Family †Yelangichthyidae Wu, Chang, Sun & Xu 2013
†Yelangichthyidae Wu, Chang, Sun & Xu 2013: 2 (family) †Yelangichthys Wu et al. 2013

Order †Redfieldiiformes
Family †Redfieldiidae Berg 1940, name in prevailing recent practice
†Catopteridae Woodward 1890a: 424 (family) †Catopterus Redfield 1837 [also Woodward 1890b: 15; type genus preoccupied by †Catopterus Agassiz 1833 in fishes; invalid, Art. 39]
†Dictyopygidae Hay 1899: 789 (family) †Dictyopyge Egerton 1847 [family name sometimes seen as †Dictypygidae]
†Redfieldiidae Berg 1940: 404 (family) †Redfieldius Hay 1899
†Brookvaliidae Berg 1940: 404 (family) †Brookvalia Wade 1933
†Schizurichthyidae Hutchinson 1973: 285 (family) †Schizurichthys Wade 1935
Family †Igornichthyidae Heyler 1977
†Igornichthyidae Heyler 1977: 13 (family) †Igornichthys Heyler 1969
Order †Ptycholepidiformes
Family †Ptycholepididae Brough 1939, spelling in prevailing recent practice
 †Ptycholepididae Brough 1939: 57 (family) †Ptycholepis Agassiz 1832 [family name also seen as †Ptycholepididae]
 †Boreosomidae Gardiner 1967: 177 (family) †Boreosomus Stensiö 1921
Family †Chungkingichthyidae Su 1974
 †Chungkingichthyidae Su 1974: 1, 14 (family) †Chungkingichthys Su 1974

Infraclass CLADISTIA
Order Polypteriformes
Family Polypteridae Bonaparte 1835

Infraclass ACTINOPTERI

Incertae sedis:
†Dwykiidae Gardiner 1969: 423, 443 (family) †Dwykia Gardiner 1969
†Inichthyidae Kazantseva-Selezneva 1981: 579 (family) †Inichthys Kazantseva-Selezneva 1979
†Kenderlichthyidae Kazantseva-Selezneva 1977: 106 (family) †Kenderlichthys Kazantseva-Selezneva 1977
†Nematoptychiidae Kazantseva-Selezneva 1977: 104 (family) †Nematoptychius Traquair 1875
†Palaeobergiidae Kazantseva 1968: 104 (family) †Palaeobergia Matveeva 1958

Order †Paphosisciformes
Family †Paphosiscidae Grogan & Lund 2015
 †Paphosiscidae Grogan & Lund 2015: 112 (family) †Paphosiscus Grogan & Lund 2015

Order †Discordichthyiformes
Family †Discordichthyidae Minikh 1998
 †Discordichthyidae Minikh 1998: 49 (family) †Discordichthys Minikh 1998

Order †Amphicentriformes
Family †Teleopterinidae Berg 1936
 †Teleopterinidae Berg 1936: 346 (family) †Teleopterina Berg 1936
†Eurylepidae Moy-Thomas 1939: 112 (family) †Eurylepis Newberry 1857 [type genus preoccupied by Eurylepis Blyth 1854 in Reptilia; invalid, Art. 39]
Family †Styracopteridae Moy-Thomas 1937
 †Styracopteridae Moy-Thomas 1937: 353 (family) †Styracopterus Traquair 1890
†Chichiidae Lu & Chen 2010: 7 (family) †Chichia Liu & Wang 1978 [name only?]
Family †Amphicentridae Young 1866
 †Amphicentridae Young 1866: 316 (family) †Amphicentrum Young 1866

Order †Scanilepidiformes
Family †Scanilepididae Aldinger 1937, spelling in prevailing recent practice
†Scanilepididae Aldinger 1937: 220 (family) †Scanilepis Aldinger 1937 [family name also seen as †Scanilepididae]
Family †Evenkiidae Selezneva 1985
 †Evenkiidae Selezneva 1985: 71 (family) †Evenka Berg 1941 [not Evenkiidae based on †Evenka Rasnitsyn 1983 in Protoptera Insecta]

Order †Aeduelliformes
Family †Aeduellidae Romer 1945
Family †Platysellidae Heyler & Poplin 1983: 41 (family) †Platysella Heyler & Poplin 1983
Family †Haplolepidae Westoll 1944, spelling in prevailing recent practice
†Haplolepidae Westoll 1944: 63 (family) †Haplolepis Miller 1892 [family name also seen as †Haplolepididae]

Superdivision CHONDROSTEI

Order †Chondrosteiformes
Family †Chondrosteidae Huxley 1861
†Gyrosteini Bonaparte 1850b (subfamily) †Gyrosteus Agassiz or Morris 1854 [type genus inferred from the stem; no valid type genus, not available, Art. 11.7.1.1]
Family †Haplolepidae Westoll 1944, spelling in prevailing recent practice
†Haplolepidae Westoll 1944: 63 (family) †Haplolepis Miller 1892 [family name also seen as †Haplolepididae]

Superdivision NEOPTERYGII

Incertae sedis:
Family †Lombardinidae Saint-Seine 1955
†Lombardinidae Saint-Seine 1955: 73 (family) †Lombardina Saint-Seine 1955
Family †Signeusellidae Saint-Seine 1955
†Signeusellidae Saint-Seine 1955: 74 (family) †Signeuella Saint-Seine 1955 [family name sometimes seen as †Signeusellidae]
Family †Sphaerodontidae Giebel 1846
†Sphaerodini Giebel 1846: 294 (family) †Sphaerodus Agassiz 1844 [correct stem is Sphaerodont-; family name also seen as †Sphaerodentes]
Order †Pycnodontiformes
Suborder †Gyrodontoidei
Family †Mesturidae Nursall 1996
  †Mesturidae Nursall 1996: 134 (family) †Mesturus Wagner 1862
Family †Gyrodontidae Berg 1940
  †Gyrodontidae Berg 1940: 413 (family) †Gyrodus Agassiz 1833
Suborder †Pycnodontoidei
Family †Gibbodontidae Nursall 1999
  †Gibbodontidae Nursall 1999: 189, 199, 210 (family) †Gibbodon Tintori 1981
Family †Brembodontidae Tintori 1981
  †Brembodontidae Tintori 1981: 796 (family) †Bremodus Tintori 1981 [family name sometimes seen as †Brembodidae]
Family †Macromesodontidae Nursall & Maisey 1991
  †Macromesodontidae Nursall & Maisey in Maisey 1991: 130 (family) †Macromesodon Blake 1905
Family †Coccodontidae Berg 1940
  †Coccodontidae Berg 1940: 413 (family) †Coccodus Pictet 1850
  †Trewavasiidae Nursall 1996: 140 (family) †Trewavasia White & Moy-Thomas 1941
Family †Pycnodontidae Agassiz 1833
  †Pycnodontidae Agassiz 1832: 141 (family) †Pycnodus Agassiz 1833 [no valid type genus, not available, Art. 11.7.1.1]
  †Palaeobalistidae Blot 1987: 87 (family) †Palaeobalistum de Blainville 1818
  †Nursalliidae Blot 1987: 119 (family) †Nursallia Blot 1987 [family name sometimes seen as †Nursalliidae; correct stem is Nursalli-]
  †Tepexichthyinae Applegate 2001b: 3 (subfamily) †Tepexichthys Applegate 1992 [unavailable publication, family-group name not available]
  †Nahuaiychthyinae Applegate 2001b: 3 (subfamily) ? [unavailable publication, family-group name not available]
  †Huehueichthyinae Applegate 2001b: 3 (subfamily) ? [unavailable publication, family-group name not available]
  †Matzichthyinae Applegate 2001b: 3 (subfamily) ? [unavailable publication, family-group name not available]
  †Proscinetinae Poyato-Ariza & Wenz 2002: 221 (subfamily) †Proscinetes Gistel 1848 [curiously as “new rank”; subfamily name also seen as †Proscinitinae]
  †Turboscinetinae Ebert 2016: 18 (subfamily) ? †Turboscinetes Ebert 2016 [incorrectly (?) cited with type genus †Proscinetes Gistel 1848; unneeded family-group name if †Proscinetes Gistel 1848 is also included in the clade]
Family †Hadrodontidae Thurmond & Jones 1981
  †Hadrodontidae Thurmond & Jones 1981: 82 (family) †Hadrodus Leidy 1857
Family †Gladiopycnodontidae Taverne & Capasso 2013
  †Gladiopycnodontidae Taverne & Capasso 2013: 4 (family) †Gladiopycnodus Taverne & Capasso 2013
Family †Gebrayelichthyidae Nursall & Capasso 2004
  †Gebrayelichthyidae Nursall & Capasso 2004: 318 (family) †Gebrayelichthys Nursall & Capasso 2004
Order †Pholidopleuriformes
Family †Pholidopleuridae Abel 1919
†Pholidopleuridae Abel 1919: x (family) †Pholidopleurus Bronn 1858 [also as a new family in Wade 1932: 473]
†Australosomidae Burton 1931: 45 (family) †Australosomus Piveteau 1930
Family †Brachydegmidae Gardiner 1967
†Brachydegmidae Gardiner 1967: 177 (family) †Brachydegma Dunkle 1939 [family name sometimes seen as †Brachydegmatidae or †Brachidegmidae]

Order †Perleidiformes
Family †Platysiagidae Brough 1939
†Platysiagidae Brough 1939: 14 (family) †Platysiagum Egerton 1872
Family †Fuyuanperleididae Sun, Lombardo, Tintori, Jiang, Hao, Sun & Lin 2012
†Fuyuanperleididae Sun, Lombardo, Tintori, Jiang, Hao, Sun & Lin 2012: 362 (family) †Fuyuanperleidus Geng, Jin, Wu & Wang 2012
Family †Colobodontidae Andersson [= Stensiö] 1916
†Colobodontidae Andersson 1916: 17 (family) †Colobodus Agassiz 1844
†Asterodontidae Jordan 1923: 112 (family) †Asterodon Münster 1841 [not Asterodon Perrier 1891 in Asteroidea: Odontasteridae]
Family †Cleithrolepididae Wade 1935, spelling in prevailing recent practice
†Cleithrolepididae Wade 1935: 47 (family) †Cleithrolepis Egerton 1864 [family name also seen as †Cleithrolepididae]
Family †Gabanelliidae Tintori & Lombardo 1996
†Gabanelliidae Tintori & Lombardo 1996: 229 (family) †Gabanellia Tintori & Lombardo 1996 [correct stem is Gabanelli-]
Family †Perleidiidae Brough 1931
†Perleidiidae Brough 1931: 280 (family) †Perleidus Deecke 1911
Family †Hydropessidae Hutchinson 1973
†Hydropessidae Hutchinson 1973: 316 (family) †Hydropessum Broom 1909
Family †Pseudobeaconiidae López-Arbarello & Zavattieri 2008
†Pseudobeaconiidae López-Arbarello & Zavattieri 2008: 1031 (family) †Pseudobeaconia Bortdas 1944
Family †Eosemionotidae Bürgin, Eichenberger, Furrer & Tschanz 1991
†Eosemionotidae Bürgin, Eichenberger, Furrer & Tschanz 1991: 953 (family) †Eosemionotus Stolley 1920
Family †Cephaloxenidae Brough 1939
†Cephaloxenidae Brough 1939: 19 (family) †Cephaloxenus Brough 1939

Order †Peltopleuriformes
Family †Polzbergiidae Griffith 1977
†Polzbergiidae Griffith 1977: 11 (family) †Polzbergia Griffith 1977 [family name sometimes seen as †Polzbergiidae]
Family †Peltopleuridae Brough 1939
†Peltopleuridae Brough 1939: 23 (family) †Peltopleurus Kner 1866
Family †Habroichthyidae Gardiner 1967
†Habroichthyidae Gardiner 1967: 178 (family) †Habroichthys Brough 1939
Family †Thoracopteridae Griffith 1977
†Thoracopteridae Griffith 1977: 1 (family) †Thoracopterus Bronn 1858
Family †Venusichthyidae Xu & Zhao 2016
†Venusichthyidae Xu & Zhao 2016: 339 (family) †Venusichthys Xu & Zhao 2016
Order †Luganoiiformes
Family †Luganoiidae Brough 1939
  †Luganoiidae Brough 1939: 39 (family) †Luganoia Brough 1939 [family name sometimes seen as †Luganoidae]
Family †Aetheodontidae Brough 1939
  †Aetheodontidae Brough 1939: 51 (family) †Aetheodontus Brough 1939 [also seen as †Aethodoncus and †Aethodontidae or †Aetheodontidae]

Division Ginglymodi
  Incertae sedis:
Family †Kyphosichthyidae Sun & Ni 2017
  †Kyphosichthyidae Sun & Ni 2017: 67 (family) †Kyphosichthys Xu & Wu 2012

Order †Dapediiformes
Family †Dapediidae Bleeker 1859
  †Dapediden Vogt 1851: 133 (family) †Dapedium Leach 1822 [published not in latinized form before 1900, not available, Art. 11.7.2]
  †Dapedioidei Bleeker 1859: XVII (family) †Dapedium Leach 1822 [type genus as †Dapedius Agassiz 1833]

Order †Lepisosteiformes
Family †Obaichthyidae Grande 2010
  †Obaichthyidae Grande 2010: 792 (family) †Obaichthys Wenz & Brito 1992
Family Lepisosteidae Agassiz 1832 [correction of Van der Laan et al. 2014]
  Lepidosteii Agassiz 1832: 144 (family) Lepisosteus [type genus as Lepidosteus, name must be corrected Art. 32.5.3, see Van der Laan et al. 2014: 28; Agassiz 1833: 10 placed Lepidosteus in Sauroides]
  †Masillosteinae Grande 2010: 661 (subfamily) †Masillostes Micklich & Klappert 2001
  †Cuneattini Grande 2010: 792 (tribe) †Cuneatus Grande 2010

Order †Semionotiformes
  Incertae sedis:
Family †Uarbryichthyidae Bartram 1977
  †Uarbryichthyidae Bartram 1977: 204 (family) †Uarbryichthys Wade 1941
Family †Semionotidae Woodward 1890, name in prevailing recent practice
  †Lépidoides Agassiz 1833 Tome II pt. 1: 1 (family) †Lepidotes Agassiz 1832 [latinized to †Lepidoidei by Owen 1846: 50, latinized to †Lepidotinae by Giebel 1847: 185, latinized to †Lepidoidea by M’Coy 1855: 605, latinized to †Lepidotidei by Owen 1860: 143; considered valid with this authorship by Bronn 1849: 657, by Eichwald 1868: 1208 and by Cope 1877a: 57 Art. 11.7.2]
  †Stylodontes Wagner 1863: 613 (family) ? [no stem of the type genus, not available, Art. 11.7.1.1]
  †Pleurolepididae Lütken 1871: 333 (family) †Pleurolepis Quenstedt 1852 [changed to †Pleurolepidae by Günther 1880: 366; not the ordinal series name †Pleurolepididae Quenstedt 1852 / †Lepidopleuridae Young 1866; to avoid confusion it is probably better not to treat †Pleurolepidae in the family-group series]
  †Styloodontidae Günther 1880: 368 (family) ? †Tetragonolepis Bronn 1830 [no stem of the type genus, not available, Art. 11.7.1.1; also preoccupied by †Styloodontidae Marsh 1879 in Mammalia]
†Sphaerodontidae Günther 1880: 368 (family) †Lepidotes Agassiz 1832 [type genus as †Lepidotus; no stem of the type genus, not available, Art. 11.7.1.1; also preoccupied by †Sphaerodontidae Giebel 1846 in fishes]
†Semionotidae Woodward 1890b: 30 (family) †Semionotus Agassiz 1832
†Acentrophoridae Berg 1936: 345 (family) †Acentrophorus Traquair 1877

Family †Callipurbekkiidae López-Arbarello 2012
†Paralepidotidae Stolley 1920: 53 (family) †Paralepidotus Stolley 1920 [mentioned as a possible new family name, not proposed conditionally in the sense of Art. 15; not available]
†Callipurbekkiidae López-Arbarello 2012: 35, 41 (family) †Callipurbekia López-Arbarello 2012 [family name sometimes seen as †Callipurbbeckidae]

Family †Macrosemiidae Wagner 1860, name in prevailing recent practice
“une troisième famille qui réduira un peu le nombre de ces formes génériques encore flottantes. Elle aura pour type le genre †Macrosemius, A.” Thiollière 1858: 791 (family) †Macrosemius Agassiz 1834 [no family name used, not available]
†Propteroidei Bleeker 1859: XVII (family) †Propterus Agassiz 1834
†Macrosemi  Wagner 1860a: 399 (Gruppe) †Macrosemius Agassiz 1834 [corrected to †Macrosemiidae by Cope 1889: 858]

Division Halecomorphi
I incertae sedis:
†Gigantodontidae Weiler 1935: 26, 29 (family) †Stromerichthys Weiler 1935 [no stem of the type genus, not available, Art. 11.7.1.1]
†Pingolepidae Chang & Chou 1974: 184 (family) †Pingolepis Chang & Chou 1974 [also Chang & Chou 1977: 23, 56]
†Praesemionotidae Jörg 1969: 89, 94 (family) †Praesemionotus Jörg 1969

Order †Parasemionotiformes
Family †Parasemionotidae Stensiö 1931
†Ospiidae Stensiö in Koch 1931: 74 (family) †Ospia Stensiö 1932 [no valid type genus, not available, Art. 11.7.1.1]
†Bronghiidae [†Broughiidae] Koch 1931: 88 (family) †Broughia Stensiö 1932 [no valid type genus, not available, Art. 11.7.1.1]
†Ospiidae Stensiö 1932a: 97, 183 (family) †Ospia Stensiö 1932
†Tungusichthyidae Berg 1940: 406 (family) †Tungusichthys Berg 1941 [no valid type genus, not available, Art. 11.7.1.1]
†Tungusichthyidae Berg 1941: 462 (family) †Tungusichthys Berg 1941
†Promecosominidae Wade 1941a: 380 (family) †Promecosomina Wade 1935
†Paracentrophoridae Gardiner 1960: 347 (family) †Paracentrophorus Piveteau 1941

Order †Panxianichthyiformes
Family †Panxianichthyidae Sun, Tintori, Xu, Lombardo, Ni & Jiang 2016
†Panxianichthyidae Sun, Tintori, Xu, Lombardo, Ni & Jiang 2016: 224 (family) †Panxianichthys Xu & Shen 2015

Order †Ophiopsiformes
I incertae sedis:
†Furidae Jordan 1923: 116 (family) †Furo Gistel 1848 [family name sometimes seen as †Furonidae]
†Ophiopsidae Bartram 1975: 201 (family) †Ophiopsis Agassiz 1834 [family name sometimes seen as †Ophiopsididae]

Family †Ophiopsiellidae Ebert 2018
   †Ophiopsiellidae Ebert 2018: [15] (family) †Ophiopsiella Lane & Ebert 2015

Order Amiiformes
Family †Ionoscopidae Lehman 1966
   †Ionoscopidae Lehman 1966: 141 (family) †Ionoscopus Costa 1853
   †Oshuniidae Grande & Bemis 1998: 606 (family) †Oshunia Wenz & Kellner 1986

Suborder †Caturoidae
Family †Caturidae Owen 1860, name in prevailing recent practice
   †Trapeziolipodoidei Bleeker 1859: XVI (family) †Caturus Agassiz 1834 [no stem of the type genus, not available, Art. 11.7.1.1]
   †Lophiostomatoidei Bleeker 1859: XVII (family) †Lophiostomus Egerton 1852
   †Caturidae Owen 1860: 139 (family) †Caturus Agassiz 1834 [also †Caturini Wagner 1860a: 396, published later]
   †Cyclolepodiota Zittel 1887: 227 (family) ? †Caturus Agassiz 1834 [no stem of the type genus, not available, Art. 11.7.1.1]
   †Eugnathidae Lydekker in Nicholson & Lydekker 1889: 986 (family) †Eugnathus Agassiz 1844
   [type genus preoccupied by Eugnathus Schönherr 1833 in Coleoptera; invalid, Art. 39]
   †Isopholidota Hay 1899: 790 (family) †Isopholus Zittel 1887
   †Liosmedidae Jordan 1905: 34 (family) †Liosmesus Wagner 1859

Suborder Amioidei
Family †Sinamiaidae Berg 1940
   †Sinamiidae Berg 1940: 412 (family) †Sinamia Stensiö 1935

Family Amiidae Bonaparte 1831
   †Megaluridae Zittel 1895: 584 (family) †Megalurus Agassiz 1833 [type genus preoccupied by Megalurus Horsfield 1821 in Aves; invalid, Art. 39; not Megaluridae in Aves]
   †Vidalamiinae Grande & Bemis 1998: 337 (subfamily) †Vidalamia White & Moy-Thomas 1941
   [also as new tribe †Vidalamini]
   †Amiopsinae Grande & Bemis 1998: 483 (subfamily) †Amiopsis Kner 1863
   †Calamopleurini Grande & Bemis 1998: 405 (tribe) Calamopleurus Agassiz 1841

Superdivision TELEOSTEOMORPHA
Incertae sedis:
   †Palaeolabridae Estes 1969b: 2 (family) †Palaeolabrus Casier 1967
   †Pseudoberycidae Berg 1940: 420 (family) †Pseudoberyx Pictet & Humbert 1866

Division †Aspidorhynchei
Order †Aspidorhynchiformes
Family †Aspidorhynchidae Bleeker 1859
   †Aspidorhynchoidei Bleeker 1859: XVI (family) †Aspidorhynchus Agassiz 1833
   †Vinctiferidae Silva Santos 1990: 252 (family) †Vinctifer Jordan 1920

Order †Pachycormiformes
Family †Pachycormidae Lydekker 1889, name in prevailing recent practice
   †Saurotomini [†Saurostomini] Bonaparte 1846: 4 (subfamily) †Saurostomus Agassiz 1843
   [genus inferable from the stem?; corrected to †Saurostomini by Bonaparte 1850a: 455; corrected to †Saurostomata by Fitzinger 1873: 50]
Pelecopteridae Cope 1875: 244A (family) †Pelecopterus Cope 1875

†Sauropsidae Cope 1877a: 60 (family) †Sauropsis Agassiz 1832

†Erisichthidae Cope 1877b: 822 (family) †Erisichthe Cope 1872 [family name sometimes seen as †Erisichthidae or †Erisichthidae]

†Microlepidoti Zittel 1887: 223 (family) ? †Pachycormus Agassiz 1833 [no stem of the type genus, not available, Art. 11.7.1.1]

†Pachycormidae Lydekker in Nicholson & Lydekker 1889: 989 (family) †Pachycormus Agassiz 1833

†Protosphyraenidae Lydekker in Nicholson & Lydekker 1889: 996 (family) †Protosphyraena Leidy 1857

†Diphyodontidae Jordan 1923: 113 (family) †Diphyodus Lambe 1902

Order †Prohaleciteiformes
Family †Prohaleciteidae Arratia 2017
†Prohaleciteidae Arratia 2017: 23 (family) †Prohalecites Deeke 1889

Division Teleostei

Incertae sedis:
Family †Sorbinicharacidae Taverne 2003
†Sorbinicharacidae Taverne 2003: 29 (family) †Sorbinicharax Taverne 2003

Order †Pholidophoriformes
†Mjollnirulidae Lund 1968 (family) †’Mjollnirus’ [unavailable publication, family-group name not available]

†Nybelineidae Lund 1968 (family) †’Nybeline’ [not Nybelinea Whitley 1976: 48; unavailable publication, family-group name not available]

†Tjalvidae Lund 1968 (family) †’Tjalvis’ [unavailable publication, family-group name not available]

Family †Ligulellidae Saint-Seine 1955
†Ligulellidae Saint-Seine 1955: 103 (family) †Ligulella Saint-Seine 1955

Family †Siyuichthyidae Su 1980
†Siyuichthyidae Su 1980: 77 (family) †Siyuichthys Su 1980 [also Su 1985: 73, 130]

Family †Eurycorridae Arratia 2017
†Eurycorridae Arratia 2017: 23 (family) †Eurycorax Wagner 1863

Family †Pholidophoridae Wagner 1860
†Monostichii Giebel 1847: 203 (family) †Pholidophorus Agassiz 1832 [no stem of the type genus, not available, Art. 11.7.1.1]
†Pholidophori Wagner 1860b: 402 (Gruppe) †Pholidophorus Agassiz 1832

Family †Archaecamaenidae Boulenger 1904
†Archaecamaenidae Boulenger 1904a: 163 (family) †Archaecamaena Woodward 1895
†Aetheolepidae Wade 1941b: 80 (family) †Aetheolepis Woodward 1895
†Aphnelepididae Wade 1941b: 78 (family) †Aphnelepis Woodward 1895 [family name sometimes seen as †Aphnelepididae]

Family †Protelopidae Saint-Seine 1949
†Protelopidae Saint-Seine 1949: 261 (family) †Protelops Laube 1885

Family †Pleuropholidae Saint-Seine 1949
†Pleuropholidae Saint-Seine 1949: 249, 255 (family) †Pleuropholis Egerton 1858 [family name sometimes seen as †Pleuropholidae]

Family †Galkiniidae Yakovlev 1962
†Galkiniidae Yakovlev 1962: 93 (family) †Galkinia Berg 1949
Family †Majokiidae Saint-Seine 1955
†Majokiidae Saint-Seine 1955: 107 (family) †Majokia Saint-Seine 1955
Family †Oligopleuridae Woodward 1895
†Oligopleuridae Woodward 1895: 490 (family) †Oligopleurus Thiolière 1850
Family †Catervariolidae Saint-Seine 1955
†Catervariolidae Saint-Seine 1955: 18 (family) †Catervariolus Saint-Seine 1955
Family †Ichthyokentemidae Griffith & Patterson 1963
†Ichthyokentemidae Griffith & Patterson 1963: 6 (family) †Ichthyokentema Woodward 1941
[family name sometimes seen as †Ichthyokentematidae]
Family †Ankylophoridae Gaudant 1978
†Ankylophoridae Gaudant 1967b: 373 (family) †Ankylophorus Gaudant 1978 [no valid type genus, not available, Art. 11.7.1.1]
†Ankylophoridae Gaudant 1978: 113 (family) †Ankylophorus Gaudant 1978
Order †Dorsetichthyiformes
Family †Dorsetichthyidae
†Dorsetichthyidae Nelson, Grande & Wilson 2016: 130 (family) †Dorsetichthys Arratia 2013
[not published according to the rules, not available]
†Dorsetichthyidae Arratia 2017: 24 (family) †Dorsetichthys Arratia 2013 [not published according to the rules, not available]
Order †Leptolepidiformes
Family †Leptolepididae Owen 1860, spelling in prevailing recent practice
†Leptolépides Pictet 1854: 135 (family) †Leptolepis Agassiz 1832 [published not in latinized form before 1900, not available, Art. 11.7.2]
†Cyclolepidoidei Bleeker 1859: XVI (family) †Leptolepis Agassiz 1832 [no stem of the type genus, not available, Art. 11.7.1.1]
†Leptolepididae Owen 1860: 144 (family) †Leptolepis Agassiz 1832 [family name also seen as †Leptolepididae]
? †Ctenolepides Fitzinger 1873: 50 (family) †Ctenolepis Agassiz 1844 [family uncertain]
Family †Koonwarriidae Waldman 1971
†Koonwarriidae Waldman 1971: 35 (family) †Koonwarria Waldman 1971
Family †Ascalaboidae Arratia 2016
†Ascalaboidae Arratia 2016: 33 (family) †Ascalabos Münster 1839 [family name sometimes seen as †Ascalabidae]
Order †Crossognathiformes
Incertae sedis:
†Salminopsidae Gayet 1985b: 896 (family) †Salminops Gayet 1985 [also in Gayet 1985c: 93]
Family †Varasichthyidae Arratia 1981
†Varasichthyidae Arratia 1981: 110 (family) †Varasichthys Arratia 1981
Family †Chongichthyidae Arratia 1982
†Chongichthyidae Arratia 1982: 132 (family) †Chongichthys Arratia 1982
Family †Crossognathidae Woodward 1901, name in prevailing recent practice
†Pelecorapidae Cragin 1901: 30 (family) †Pelecorapis Cope 1875 [Hay 1929: 734 selected
†Pelecorapidae over †Syllaemidae, confirmed by Fowler 1973: 296; family name sometimes seen as †Pelycorapidae]
†Syllaemidae Cragin 1901: 25 (family) †Syllaemus Cope 1875
†Crossognathidae Woodward 1901: 348 (family) †Crossognathus Pictet 1858

59
†Apsopelicidae Romer 1966: 354 (family) †Apsopelix Cope 1871 [name only, published after 1960, not available, Art. 13.1.1]

Family †Notelopidae Forey 1977
†Notelopidae Forey 1977: 129 (family) †Notelops Woodward 1901

Family †Pachyrhizodontidae Cope 1872
†Pachyrhizodontidae Cope 1872: 343 (family) †Pachyrhizodus Dixon 1850 [family name sometimes seen as †Pachyrhizodidae or †Pachyrhizolidae]
†Thrissoptarinidae Boulenger 1904b: 562 (subfamily) †Thrissoptera Günther 1872 [family name sometimes seen as †Thrissopteraidae]
†Raphiosauridae Fowler 1911: 151 (family) †Raphiosauroidea Owen 1842
†Greenwoodellidae Taverne 1973: 5 (family) †Greenwoodella Taverne & Ross 1973

Order †Ichthyodectiformes
Family †Allothrissopidae Patterson & Rosen 1977, name in prevailing recent practice
†Thressopina [†Thrissoptina] Bassani 1879a: 167 (Gruppe) †Thrissoptes Agassiz 1833 [corrected to †Thrissoptina by Bassani 1879b: 204]
†Allothrissopidae Patterson & Rosen 1977: 115, 163 (family) †Allothrissoidea Nybelin 1964
†Occithrissopidae Taverne & Chainet 2000: 32 (family) †Occithrissoidea Schaeffer & Patterson 1984 [not published according to the rules, not available]
†Unamichthyidae Alvarado-Ortega 2004: 803 (family) †Unamichthys Alvarado-Ortega 2004
Family †Chuhsiangichthyidae Yabumoto 1994
†Chuhsiangichthiidae [†Chuhsiungichthyidae] Yabumoto 1994: 130 (family) †Chuhsiungichthys Lew 1974

Family †Cladocyclidae Maisey 1991
†Cladocyclidae Maisey 1991: 190, 206 (family) †Cladocyclus Agassiz 1841

Family †Saurodontidae Bonaparte 1846
†Saurodontidae Bonaparte 1846: 4 (family) †Saurodon Hays 1830 [type genus inferred from the stem, Art. 11.7.1.1; also as subfamily †Saurodontini]
†Saurocephalidae Zittel 1888: 262 (family) †Saurocephalus Harlan 1824
†Gillicinae Taverne 2008: 224 (subfamily) †Gillicus Hay 1898

Family †Ichthyodectidae Crook 1892
†Ichthyodectidae Crook 1892: 111, 121 (family) †Ichthyodectes Cope 1870 [family name sometimes seen as †Ichthyodectidae based on †Ichthyodectes]

Family †Luisiellidae Sferco, López-Arbarello & Báez 2015
†Luisiellidae Sferco, López-Arbarello & Báez 2015: 13 (family) †Luisiella Bocchino 1967

Order †Tselfatiiformes
Family †Protobramidae Le Danois & Le Danois 1964
†Protobramidae Le Danois & Le Danois 1964: 185 (family) †Protobrama Woodward 1942

Family †Eoplethodidae Taverne & Gayet 2005
†Eoplethodidae Taverne & Gayet 2005: 66 (family) †Eoplethodus Taverne 2000 [family name sometimes seen as †Eoplethodontidae]

Family †Plethodidae Loomis 1900 [ICZN Opinion 921]
†Plethodidae Loomis 1900: 229 (family) †Plethodus Dixon 1850 [changed to †Plethodontidae by Hay 1929: 736, but Plethodontidae preoccupied in Amphibia; the incorrect subsequent spelling †Plethodontidae is invalid, ICZN Opinion 921]
†Thryptodontidae Jordan 1905: 44 (family) †Thryptodus Loomis 1900 [family name sometimes seen as †Thryptodidae]
†Anogmiidae Jordan 1925a: 219, 220 (family) †Anogmius Cope 1877 [type genus preoccupied by †Anogmius Cope 1871 in fishes; invalid, Art. 39]
†Niobraridae Jordan 1925a: 222 (family) †Niobrara Jordan 1925
†Tselseftidae Arambourg 1944: 282 (family) †Tselsefia Arambourg 1944 [family name also seen as †Tselsefidi; correct stem is Tselsefi-]
†Bananogmiidae Applegate 1970: 413 (family) †Bananogmius Whitley 1940 [family name sometimes seen as †Ananogmiidae, possibly based on †Ananogmius White & Moy Thomas 1940]

Order †Araripichthyiformes
Family †Araripichthyidae Silva Santos 1985
†Araripichthyidae Silva Santos 1985: 135 (family) †Araripichthys Silva Santos 1985

Cohort ELOPOMORPHA
Family †Anaethalionidae Gaudant 1967
†Anaethalionidae Gaudant 1967: 309 (family) †Anaethalion White 1938 [extended description in Gaudant 1968; family name sometimes seen as †Anaethaliidae]

Order Elopiformes
Family Elopidae Valenciennes 1847
Family Megalopidae Jordan & Gilbert 1883
†Sedenhorstiidae Goody 1969a: 3 (family) †Sedenhorstia White & Moy-Thomas 1941
Family †Phyllodontidae Sauvage 1875, spelling in prevailing recent practice
†Phyllodidae Sauvage 1875: 615 (family) †Phylododus Agassiz 1839 [family name also seen as †Phyllodondidae]
†Euphyllodontinae Dartevelle & Casier 1949: 229 (subfamily) ? [no valid type genus, not available, Art. 11.7.1.1]
†Pseudophyllodontinae Dartevelle & Casier 1949: 229 (subfamily) ? [no valid type genus, not available, Art. 11.7.1.1]
†Paralbulinae Estes 1969a: 321 (subfamily) †Paralbula Blake 1940

Order Albuliformes
Family †Osmeroididae Forey 1973
†Osmeroididae Forey 1973: 94 (family) †Osmeroides Agassiz 1837
Family †Eurokidae Bartholomai 2010
†Eurokidae Bartholomai 2010: 71 (family) †Euroka Bartholomai 2010
Family Albulidae Bleeker 1849

Order Notacanthiformes
Family Halosauridae Günther 1868
Family Notacanthidae Rafinesque 1810
†Pronotacanthidae Jordan 1923: 128 (family) †Pronotacanthus Woodward 1900

Order Anguilliformes
Incertae sedis:
†Derrhiidae Jordan 1925b: 15 (family) †Derrhias Jordan 1925
Family †Anguillavidae Hay 1903
†Anguillavidae Hay 1903: 436 (family) †Anguillavus Hay 1903
†Encheliidae Hay 1903: 441 (family) †Enchelion Hay 1903
†Mylomyridae Berg 1940: 450 (family) †Mylomurus Woodward 1910
Family †Georgidentidae Sytchevskaya & Prokofiev 2004
†Georgidentidae Sytchevskaya & Prokofiev 2004: 23 (family) †Georgidens Sytchevskaya & Prokofiev 2004
Family †Libanechelyidae Taverne 2004
   †Libanechelyidae Taverne 2004: 74 (family) †Libanechelys Taverne 2004
Family †Milananguillidae Blot 1978
   †Milananguillidae Blot 1976a: 510 (family) †Milananguilla Blot 1978 [no valid type genus, not available, Art. 11.7.1.1]
   †Milananguillidae Blot 1978: 75 (family) †Milananguilla Blot 1978
Family †Urenchelyidae Jordan 1905
   †Urenchelyidae Jordan 1905: 142 (family) †Urenchelys Woodward 1900 [family name sometimes seen as †Urenchelidae]

Suborder Protanguillioidei
Family Protanguillidae Johnson, Ida & Miya 2012

Suborder Synaphobranchoidei
Family Synaphobranchidae Johnson 1862

Suborder Moringuoidei
Family Moringuidae Gill 1885

Suborder Anguilloidei
Family †Anguilloididae Blot 1978
   †Anguilloididae Blot 1976: 510 (family) †Anguilloides Cadrobbi 1962 [name only, published after 1960, not available, Art. 13.1.1]
   †Anguilloididae Blot 1978: 100 (family) †Anguilloides Cadrobbi 1962
Family †Patavichthyidae Blot 1981
   †Patavichthyidae Blot 1976: 510 (family) †Patavichthys Blot 1981 [no valid type genus, not available, Art. 11.7.1.1]
   †Patavichthyidae Blot 1981: 349 (family) †Patavichthys Blot 1981 [family name also seen as †Patavichthyidae; correct stem is Patavichthy-]
Family †Proteomyridae Blot 1981
   †Proteomyridae Blot 1976: 510 (family) †Proteomyrus Cadrobbi 1962 [name only, published after 1960, not available, Art. 13.1.1]
   †Proteomyridae Blot 1981: 348 (family) †Proteomyrus Cadrobbi 1962
Family Nemichthyidae Kaup 1859
Family Anguillidae Rafinesque 1810

Suborder Muraenoidei
Family †Paranguillidae Blot 1981
   †Paranguillidae Blot 1976: 510 (family) †Paranguilla Bleeker 1864 [name only, published after 1960, not available, Art. 13.1.1]
   †Paranguillidae Blot 1981: 346 (family) †Paranguilla Bleeker 1864
Family Serrivomeridae Trewavas 1932
Family Heterenchelyidae Regan 1912
Family Myrocongridae Gill 1890
Family Muraenidae Rafinesque 1815

Suborder Chlopsoidei
Family Chlopsidae Rafinesque 1815

Suborder Congroidei
Family Congridae Kaup 1856
   †Bolcyridae White in Blot 1984: 234 (family) †Bolcyrus Blot 1978
Family Derichthyidae Gill 1884
Family Nettastomatidae Kaup 1859
Family Muraenesocidae Kaup 1859
Family †Nardoechelyidae Taverne & Capasso 2014
   †Nardoechelyidae Taverne & Capasso 2014: 4 (family) †Nardoechelys Taverne 2002
Family Ophichthidae Günther 1870
†Parechelidae Casier 1967: 8 (family) †Parechelus Casier 1967

Suborder Saccopharyngoidei
Family Cyematidae Regan 1912
Family Monognathidae Trewavas 1937
Family Saccopharyngidae Bleeker 1859
Family Eurypharyngidae Gill 1883

Cohort OSTEOGLOSSOMORPHA

Incertae sedis:
Family †Jiuquanichthyidae Ma 1993
†Jiuquanichthyidae Ma 1993: 23, 92 (family) †Jiuquanichthys Ma 1993
Family †Kipalaichthyidae Taverne 1976
†Kipalaichthyidae Taverne 1976: 25, 30 (family) †Kipalaichthys Taverne 1976
Family †Kuyangichthyidae Liu, Ma & Liu 1982
†Kuyangichthyidae Liu, Ma & Liu 1982: 101 (family) †Kuyangichthys Liu, Ma & Liu 1982

Order †Lycoperiformes
Family †Lycoperidae Cockerell 1924
†Lycoperidae Cockerell 1924: 131 (family) †Lycoptera Müller 1848
†Manchurichthynae [†Manchurichthyinae] Takai 1944: 248 (subfamily) †Manchurichthys Saito 1936 [correct stem is Manchurichthys]
Family †Wakinichthyidae Yabumoto 1994
†Wakinichthiidae [†Wakinichthyidae] Yabumoto 1994: 179 (family) †Wakinichthys Yabumoto 1994 [correct stem is Wakinichthy-; family name sometimes seen as †Wakinichthiidae or †Wakinoichthiidae]

Order Hiodontiformes
Family Hiodontidae Valenciennes 1847
†Jiaohichthyidae Ma 1983: 28 (family) †Jiaohichthys Ma 1983

Order Osteoglossiformes
Family †Ostariostomidae Schaeffer 1949
†Ostariostomidae Schaeffer 1949: 3 (family) †Ostariostoma Schaeffer 1949
Family †Huashiidae Chang & Chou 1974
†Huashiidae Chang & Chou 1974: 185 (family) †Huashia Chang & Chou 1974 [also Chang & Chou 1977: 39, 57]
Family Pantodontidae Peters 1876
†Singididae Greenwood & Patterson 1967: 213 (family) †Singida Greenwood & Patterson 1967
Family Osteoglossidae Bonaparte 1845
†Phareodontidae Jordan 1925a: 232 (family) †Phareodus Leidy 1873 [family name sometimes seen as †Phareodidae]
†Brychaetidae Bonde 1966: 199 (family) †Brychaetus Woodward 1901
†Laeliichthynae Silva Santos 1985b: 161 (subfamily) †Laeliichthys Silva Santos 1985
†Foreyichthyidae Taverne 1998: 67 (family) Foreyichthys Taverne 1979
Family Notopteridae Bleeker 1851
Family Mormyridae Bonaparte 1831
Family Gymnarchidae Bleeker 1859

63
Cohort CLUPEOCEPHALA
Incertae sedis:
†Lycoclupeidae Gowda 1967: 119, 123 (family) †Lycoclupea Gowda 1967

Subcohort Otomorpha
Incertae sedis:
Family †Clupavidae Bertin & Arambourg 1958
†Clupavidae Bertin & Arambourg 1958: 2230 (family) †Clupavus Arambourg 1950
Family †Ganolytidae Jordan 1923
†Ganolytidae Jordan 1923: 118 (family) †Ganolytes Jordan 1919

Superorder Clupei
Order †Ellimichthyiformes
Family †Sorbinichthyidae Bannikov & Bacchia 2000
†Sorbinichthyidae Bannikov & Bacchia 2000: 4 (family) †Sorbinichthys Bannikov & Bacchia 2000

Suborder †Armigatoidei
Family †Armigatidae Murray & Wilson 2013
†Diplomystidae Patterson 1970: 179 (family) †Diplomystus Cope 1877 [Diplomystidae preoccupied in fishes; not to be used, Art. 55.3]
†Armigatidae Murray & Wilson 2013: 282 (family) †Armigatus Grande 1982

Suborder †Ellimichthyoidae
Family †Paraclupeidae Chang & Chou 1974
†Paraclupeidae Chang & Chou 1974: 185 (family) †Paraclupea Du 1950 [=†Paraclupea Sun 1956] [also Chang & Chou 1977: 28, 56]
†Ellimichthyidae Grande 1982: 5 (family) †Ellimichthys Jordan 1919 [type genus as †Ellimichthys, name must be corrected Art. 32.5.3; correct stem is Ellimichthy-]
†Scutatuspinosinae Silva Santos & Silva Corréa 1985: 169 (subfamily) †Scutatuspinosus Silva Santos & Silva Corréa 1985
†Ellimminae Murray & Wilson 2013: 282 (subfamily) †Ellimma Jordan 1913
†Thorectichthyinae Murray & Wilson 2013: 282 (subfamily) †Thorectichthys Murray & Wilson 2013
†Triplomystini Murray & Wilson 2013: 282 (tribe) †Triplomystus Forey, Lu, Patterson & Davies 2003

Order Clupeiformes
Suborder Denticipitoidei
Family Denticipitidae Clausen 1959

Suborder Clupeoidei
Family †Garganoclupeidae Taverne 2014
†Garganoclupeidae Taverne 2014: 28 (family) †Garganoclupea Taverne 2014
Family Pristigasteridae Bleeker 1872
Family Engraulidae Gill 1861
Family Chirocentridae Bleeker 1849
Family Clupeidae Cuvier 1816

Superorder Alepocephali
Order Alepocephaliformes
Family Alepocephalidae Bonaparte 1846
Family Platyroctidae Koefoed 1927
Order †Sorbininardiformes
Family †Sorbininardidae Taverne 1999
   †Sorbininardidae Taverne 1999: 77 (family) †Sorbininardus Taverne 1999

Superorder Ostariophysi
Incertae sedis:
†Ancylostylidae Jordan 1923: 119 (family) †Ancylostylus Gorjanović-Kramberger 1895
†Erythrinolepidae Cockerell 1919: 182 (family) †Erythrinolepis Cockerell 1919

Section Anotophysa
Order Gonorynchiformes
Family Chanidae Günther 1868
   †Rubiesichthyinae Poyato-Ariza 1996: 5, 35 (subfamily) †Rubiesichthys Wenz 1984
Family †Apulichthyidae Taverne 1997
   †Apulichthyidae Taverne 1997: 402 (family) †Apulichthys Taverne 1997
Family Gonorynchidae Fowler 1941 (1848) [correction of Van der Laan et al. 2014]
   †Notogoneidae Cockerell in Jordan 1923: 120 (family) †Notogoneus Cope 1885
   †Judeichthyidae Gayet 1985a: 66 (family) †Judeichthys Gayet 1985
   †Charitosomidae Gayet 1993: 1 (family) †Charitosomus von der Marck 1885
Family Kneriidae Günther 1868

Section Otophysa
Family †Chanoididae Taverne 2005
   †Chanoididae Taverne 2005: 39 (family) †Chanoides Woodward 1901

Order Cypriniformes
Suborder Cyprinoidei
Family Psilorhynchidae Hora 1926
Family Cyprinidae Rafinesque 1815
Family Danionidae Bleeker 1863
Family Paedocyprididae Mayden & Chen 2010
Family Sundadanionidae Mayden & Chen 2010
Family Leptobarbidae Bleeker 1864
Family Xenocyprididae Günther 1868
Family Acheilognathidae Bleeker 1863
Family Tincidae Jordan 1878
Family Gobionidae Bleeker 1863
Family Tanichthyidae Mayden & Chen 2010
Family Leuciscidae Bonaparte 1835

Suborder Cobitoidei
Family †Jianghanichthyidae Liu, Chang, Wilson & Murray 2015
   †Jianghanichthyidae Liu, Chang, Wilson & Murray 2015: 4 (family) †Jianghanichthys Lei 1987
Family Catostomidae Agassiz 1850
Family Gyrinocheilidae Gill 1905
Family Botiidae Berg 1940
Family Vaillantellidae Nalbant & Bănărescu 1977
Family Cobitidae Swainson 1838 [ICZN Opinion 1500]
   †Acanthopsides Heckel & Kner 1857: 296 (family) †Acanthopsis Agassiz 1832
Family Balitoridae Swainson 1839
Family Barbuccidae Kottelat 2012
Family Gastromyzontidae Fowler 1905
Family Serpenticobitidae Kottelat 2012
Family Ellopostomatidae Bohlen & Šlechtová 2009
Family Nemacheilidae Regan 1911

**Order Characiformes**

**Suborder Citharinoidae**
Family Distichodontidae Günther 1864
Family Citharinidae Günther 1864

**Suborder Characoidei**
Family Crenuchidae Günther 1864
Family Ctenoluciidae Schultz 1944
Family Lebiasinidae Gill 1889
Family Chalceidae Fowler 1958
Family Acestrorhynchidae Eigenmann 1912
Family Iguanodectidae Eigenmann 1909
Family Triportheidae Fowler 1940
Family Gasteropelecidae Bleeker 1859
Family Bryconidae Eigenmann 1912
Family Characidae Latreille 1825
Family Alestidae Cockerell 1910
Family Hepsetidae Hubbs 1939 (1909)
Family Tarumaniidae de Pinna, Zuanon, Rapp Py-Daniel & Petry, 2017
Family Erythrinidae Valenciennes 1847
Family Cynodontidae Eigenmann 1903
Family Hemiodontidae Bleeker 1859
Family Serrasalmidae Bleeker 1859
Family Parodontidae Eigenmann 1910
Family Prochilodontidae Eigenmann 1909
Family Curimatidae Gill 1858
Family Chilodontidae Eigenmann 1903
Family Anostomidae Günther 1864

**Order Gymnotiformes**

**Suborder Gymnotoidei**
Family Gymnotidae Rafinesque 1815

**Suborder Sternopygoidei**
Family Rhamphichthyidae Regan 1911
Family Hypopomidae Eigenmann 1912
Family Sternopygidae Cope 1871
Family Apterontidae Jordan 1923

**Order Siluriformes**
Family †Vorhisiiidae Frizzell 1965
**†Vorhisiiidae Frizzell 1965: 179 (family)** †Vorhisia Frizzell 1965
Family †Andinichthyidae Gayet 1988
**†Andinichthyidae Gayet 1988: 833 (family)** †Andinichthys Gayet 1988

**Suborder Diplomystoidei**
Family †Bachmanniidae Azpelcueta & Cione 2011
**†Bachmanniidae Azpelcueta & Cione 2011: 259 (family)** †Bachmannia Dolgopol 1941
Family Diplomystidae Eigenmann 1890
### Suborder †Hypsidoroidei

Family †Hypsidoridae Grande 1987
- †Hypsidoridae Grande 1987: 28 (family) †Hypsidoras Lundberg & Case 1970 [family name sometimes seen as †Hypsidorididae]

### Suborder Cetopsoidei

Family Cetopsidae Bleeker 1858

### Suborder Loricarioidei

Family Trichomycteridae Bleeker 1858
- Family Nematogenyidae Bleeker 1862
- Family Callichthyidae Bonaparte 1835
- Family Scolopacidae Bailey & Baskin 1976
- Family Astroblepidae Bleeker 1862
- Family Loricariidae Rafinesque 1815

### Suborder Siluroidei

Family Siluridae Rafinesque 1815
- Family Kryptoglanidae Britz, Kakkassery & Raghavan 2014
- Family Austroglanididae Mo 1991
- Family Pangasiidae Bleeker 1858
- Family Chacidae Bleeker 1858
- Family Plotosidae Bleeker 1858
- Family Ritidae Bleeker 1862
- Family Ailiidae Bleeker 1858
- Family Horabagridae Jarayam 2006
- Family Bagridae Bleeker 1858 [ICZN Opinion 1402]
- Family Akysidae Gill 1861
- Family Amblycistidae Day 1873
- Family Sisoridae Bleeker 1858
- Family Amphiliidae Regan 1911
- Family Malapteruridae Bleeker 1858
- Family Mochokidae Regan 1912
- Family Schilbeidae Bleeker 1858
- Family Auchenoglanididae Jarayam 1966
- Family Claroteidae Bleeker 1862
- Family Lacantuniidae Rodiles-Hernández, Hendrickson & Lundberg 2005
- Family Claridae Bonaparte 1845
- Family Heteropneustidae Hora 1936
- Family Ancistruiidae Glaw & Vences 1994
- Family Ariidae Bleeker 1858
  - Torpedinidae Gill 1896b: 162 (family) Torpedo Forsskal 1775 [preoccupied by Torpedines Henle 1834 in fishes; not to be used, Art. 55.3; Recent, omitted in Van der Laan et al. 2014]
- Family Aspredinidae Adams 1854
- Family Doradidae Bleeker 1858
- Family Auchenipteridae Bleeker 1862
- Family Cranoglanididae Myers 1931
- Family †Astefidae Grande & Lundberg 1988
  - †Astefidae Grande & Lundberg 1988: 146 (subfamily) †Astephy Cope 1873
- Family Ictaluridae Gill 1861
- Family Heptapteridae Gill 1861
- Family Phreatobiidae Reichel 1927
- Family Pimelodidae Bonaparte 1835
- Family Pseudopimelodidae Fernández-Yépez & Antón 1966
Subcohort EUTELEOSTEOMORPHA
Incertae sedis:
†Erichalcidae ?? (family) †Erichalis Forey 1973 [correct stem would be Erichalcid-] [author / date not found]

Infracohort Lepidogalaxii
Order Lepidogalaxiiformes
Family Lepidogalaxiidae Rosen 1974

Infracohort Protacanthopterygii
Incertae sedis:
†Bernardichthyidae Huddleston 1981: 38 (family) †Bernardichthys Huddleston 1981
Family †Ferrifronsidae Arratia & Chorn 1998
    †Ferrifronsidae Arratia & Chorn 1998: 302 (family) †Ferrifrons Jordan 1925
Family †Orthogonikleithridae Arratia 1997
    †Orthogonikleithridae Arratia 1997: 89 (family) †Orthogonikleithrus Arratia 1987

Order Argentiniformes
Family †Pattersonellidae Taverne 1982
    †Pattersonellidae Taverne 1974: 57, 58 (family) †Pattersonella Taverne 1982 [no valid type genus, not available, Art. 11.7.1.1]
    †Pattersonellidae Taverne 1975: 488 (family) †Pattersonella Taverne 1982 [no valid type genus, not available, Art. 11.7.1.1]
    †Pattersonelloidea Taverne 1982: 1 (superfamily) †Pattersonella Taverne 1982
Family Bathylagidae Gill 1884
Family Microstomatidae Bleeker 1859
Family Opisthoproctidae Schmidt 1918
Family Argentinidae Bonaparte 1846

Order Galaxiiformes
Family Galaxiidae Müller 1845

Order Esociformes
Family †Palaeoesocidae Berg 1940
    †Palaeoesocidae Berg 1940: 430 (family) †Palaeosox Voigt 1934 [family name sometimes seen as †Palaeosocidae]
Family Esocidae Rafinesque 1815
Family Umbridae Bonaparte 1845

Order Salmoniformes
Family Salmonidae Jarocki or Schinz 1822

Infracohort Stomiati
Order Stomiiformes
Suborder Gonostomoidei
Family Gonostomatidae Cocco 1838
Suborder Stomioidei
Family Phosichthyidae Weitzman 1974
Family Sternoptychidae Duméril 1805
Family Stomiidae Bleeker 1859
Order Osmeriformes

Incertae sedis:
Family †Spaniodontidae Jordan 1905
   †Spaniodontidae Jordan 1905: 43 (family) †Spaniodon Pictet 1850

Suborder Osmeroidei
Family Osmeridae Regan 1913
Family Plecoglossidae Bleeker 1859
Family Salangidae Bleeker 1859

Suborder Retropinnoidae
Family Retropinnidae Gill 1862

Infracohort NEOTELEOSTEI

Incertae sedis:
†Protostomiatidae Arambourg 1955: 91 (family) †Protostomias Arambourg 1943 [family name sometimes seen as †Protostomiidae or †Protostomatidae]
†Thaumaturidae Voigt 1934: 42 (family) †Thaumaturus Reuss 1844
†Tomognathidae Jordan 1923: 126 (family) †Tomognathus Agassiz 1850

Order Ateleopodiformes
Family Ateleopodidae Bonaparte 1850

Supersection EURYPTERYGIA

Incertae sedis:
Family †Cheirothricidae Woodward 1901
   †Cheirothricidae Woodward 1901: 279 (family) †Cheirothrix Pictet & Humbert 1866 [type genus as †Cheirothrix, name must be corrected Art. 32.5.3; corrected to †Cheirothricidae by Jordan 1923: 153; family name sometimes seen as †Cheirothricidae]

Section Cyclosquamata

Order Aulopiformes

Incertae sedis:
Family †Nardorexidae Taverne 2004
   †Nardorexidae Taverne 2004a: 29 (family) †Nardrex Taverne 2004 [family name sometimes seen as †Nardorecidae]

Suborder †Ichthyotringoidei
Family †Ichthyotringidae Harry 1953
   †Ichthyotringidae Harry 1953: 243 (family) †Ichthyotringa Cope 1878
   †Apatopopholidae Goody 1969b: 30 (family) †Apatopholis Woodward 1891 [family name sometimes seen as †Apatopholididae]
Family †Dercetidae von der Marck 1863
   †Dercetiformes von der Marck 1863: 58 (family) †Dercetis Agassiz 1834 [family name sometimes seen as †Dercetididae]
   †Hoplopleurides Pictet & Humbert 1866: 90 (family) ? †Dercetis Agassiz 1834 [published not in latinized form before 1900, not available, Art. 11.7.2; also no stem of type genus]
   †Stratodontidae Cope 1872: 348 (family) †Stratodus Cope 1872
   †Hoplopleuridae Günther 1880: 665 (family) ? †Dercetis Agassiz 1834 [no stem of the type genus, not available, Art. 11.7.1.1]
Family †Prionolepididae Goody 1969
   †Prionolepididae Goody 1969b: 178 (family) †Prionolepis Egerton 1850

**Suborder †Halecoidei**

Family †Halecidae Agassiz 1844
   †Halecioides Agassiz 1844 Tome V pt. 1: 13 (family) †Halec Agassiz 1844 [latinized to †Halecioides by Giebel 1846: 160, 298; latinized to †Halecoidei by Giebel 1847: 120; latinized to †Halecidae by Goody 1969b: 126; considered valid with this authorship by Owen 1840: 5 and by Pander 1856: 12 Art. 11.7.2]
   †Serrilepidae Chalifa 1989: 11 (family) †Serrilepis Chalifa 1989 [family name sometimes seen as †Serrilepididae]

**Suborder Aulopoidei**

Family Synodontidae Gill 1861
Family Aulopidae Bonaparte 1831
Family Pseudotrichonotidae Yoshino & Araga 1975

**Suborder Paraulopoidei**

Family Paraulopidae Sato & Nakabo 2002

**Suborder Alepisauroidei**

*Incertae sedis:*
   †Polymerichthyidae Uyeno 1967: 384 (family) †Polymerichthys Uyeno 1967

Family Ipnopidae Gill 1884
Family Bathysauropsidae Sato & Nakabo 2002
Family Giganturidae Brauer 1906
Family Bathysauroididae Sato & Nakabo 2002
Family Bathysauridae Fowler 1944
Family Chlorophthalmidae Garman 1899
Family Notosudidae Parr 1928
Family Scopelarchidae Alcock 1896
Family Evermannellidae Fowler 1901
Family Sudidae Regan 1911
Family Paralepididae Bonaparte 1835
   †Holosteinae Prokoﬁev 2005: 293 (subfamily) †Holosteus Agassiz 1835

Family †Enchodontidae Lydekker 1889, name in prevailing recent practice
   †Saurorhamphoidei Bleeker 1859: XIV (family) †Saurorhamphus Heckel 1850
   †Enchodontidae Lydekker in Nicholson & Lydekker 1889: 997 (family) †Enchodus Agassiz 1835 [family name sometimes seen as †Enchodidae]
   †Cimolicthyiidae Goody 1969b: 36 (family) †Cimolicthys Leidy 1857 [family name sometimes seen as †Cymolicthyiidae]
   †Eurypholidae Goody 1969b: 99 (family) †Eurypholis Pictet 1850 [family name sometimes seen as †Eurypholididae]
   †Rharbichthinae Fielitz 2004: 631 (subfamily) †Rharbichthus Arambourg 1955 [correct stem would be Rharbichthy-
   †Palaeolycoinae Fielitz 2004: 632 (subfamily) †Palaeolycus von der Marck 1863

Family Alepisauridae Swainson 1839
Family Lestidiidae Harry 1953

Section Ctenosquamata
Subsection Myctophata

**Order Myctophiformes**

Family Neoscopelidae Jordan 1901
   †Sardinioididae Goody 1969b: 153 (family) †Sardinioides von der Marck 1858
†Neocassandridae Prokofiev 2002: 64 (family) †Neocassandra Daniltshenko 1968
Family Myctophidae Gill 1893
†Eomyctophinae Prokofiev 2006: S57 (subfamily) †Eomyctophum Daniltshenko 1947

Subsection Acanthomorphata
*Incerta sedis:*
Family †Asineopidae Cope 1877
†Asineopidae Cope 1877c: 570 (family) †Asineops Cope 1870
Family †Bajaichthyidae Bannikov & Sorbini 2014
†Bajaichthyidae Bannikov & Sorbini in Bannikov 2014b: 625 (family) †Bajaichthys Sorbini 1983
Family †Pateropercae Gaudant 1978
†Pateropercae Gaudant 1978a: 189 (family) †Pateroperca Woodward 1942
Family †Pattersonichthyidae Gaudant 1976
†Pattersonichthyidae Gaudant 1976: 1629 (family) †Pattersonichthys Goody 1969 [described in more detail by Gaudant 1978c: 83]

**Order †Ctenothrissiformes**
Family †Ctenothrissidae Woodward 1901
†Ctenothrissidae Woodward 1901: 119 (family) †Ctenothrissa Woodward 1899
†Aulolepidae Patterson 1964: 247 (family) †Aulolepis Agassiz 1844 [family name sometimes seen as †Aulolepididae]

**Division Lampripterygii**
Family †Pycnosteroideidae Patterson 1964
†Pycnosteroideidae Patterson 1964: 389 (family) †Pycnostorides Woodward 1942
Family †Pharmacichthyidae Patterson 1964
†Pharmacichthyidae Patterson 1964: 362, 398 (family) †Pharmacichthys Woodward 1942
Family †Aipichthyidae Patterson 1964
†Aipichthyidae Patterson 1964: 303 (family) †Aipichthys Steindachner 1860
Family †Aipichthyoididae Gayet 1980
†Aipichthyoididae Gayet 1980a: 108 (family) †Aipichthyoides Gayet 1980

**Order Lampriformes**
Family †Turkmenidae Daniltshenko 1968
†Turkmenidae Daniltshenko 1968: 127 (family) †Turkmene Daniltshenko 1968
Family Veliferidae Bleeker 1859
Metaveliferinae Bannikov 1991c: 162 (subfamily) Metavelifer Walters 1960 [Recent, omitted in Van der Laan et al. 2014; subfamily name sometimes seen as Metaveliferinae]
Family †Palaeocentrotidae Bonde 1966
†Palaeocentrotidae Bonde 1966: 200 (family) †Palaeocentrotus Kühne 1941
Family Lophotidae Bonaparte 1845
Family Lampridae Gill 1862
Family Radicephalidae Osório 1917
Family Trachipteridae Swainson 1839
Family Regalecidae Gill 1884

**Division Paracanthopterygii**
*Incerta sedis:*
†Protosyngnathidae Boulenger 1902a: 151 (family) †Protosyngnathus von der Marck 1878
†Trebianiiidae Sorbini & Bannikov 1996: 47 (family) †Trebiania Sorbini & Bannikov 1996
Order †Sphenocephaliformes
Family †Sphenocephalidae Patterson 1964
   †Sphenocephalidae Patterson 1964: 383 (family) †Sphenocephalus Agassiz 1838

Order Percopsiformes
Family Percopsidae Agassiz 1850
   †Erismatopteridae Jordan 1905: 242 (family) †Erismatopterus Cope 1870
   †Libotoniidae Grande 1988: 122, 128 (family) †Libotonus Wilson 1977
Family †Mcconichthyidae Grande 1988
   †Mcconichthyidae Grande 1988: 119 (family) †Mcconichthys Grande 1988
Family Aphredoderididae Bonaparte 1845
Family Amblyopsidae Bonaparte 1845

Order Zeiformes
Suborder Cyttoidei
Family †Cretazeidae Tyler, Bronzi & Ghiandoni 2000
   †Cretazeidae Tyler, Bronzi & Ghiandoni 2000: 12 (family) †Cretazeus Tyler, Bronzi & Ghiandoni 2000
Family †Archaeozoidea Tyler & Santini 2005
   †Archaeozoidea Tyler & Santini 2005: 166 (family) †Archaeozoetus Bonde & Tyler 2000
Family †Protozeidea Tyler & Santini 2005
   †Protozeidea Tyler & Santini 2005: 166 (family) †Protozeus Bonde & Tyler 2000
Family Cyttidae Günther 1860

Suborder Zeoidei
Family Oreosomatidae Bleeker 1859
Family Zeniontidae Myers 1960
Family Parazeniidae McAllister 1968
   †Isozenidae Schwarzans 1996: 427 (family) †Isozen Schwarzans 2010 [no valid type genus, not available, Art. 11.7.1.1; also name only, published after 1960, not available, Art. 13.1.1]
Family Grammicolepididae Poey 1873
Family Zeidae Rafinesque 1815

Order Stylephoriformes
Family Stylephoridae Swainson 1839

Order Gadiformes
Suborder Melanonoidei
Family Melanonidae Goode & Bean 1896

Suborder Macrouroidoei
Family Steindachneriidae Parr 1942
Family Bathygadidae Jordan & Evermann 1898
Family Macrouridae Bonaparte 1831
Family Trachyrincidae Goode & Bean 1896

Suborder Gadoidei
Family Muraenolepididae Regan 1903
Family Euclichthyidae Cohen 1984
Family Moridae Moreau 1881
Family Macruronidae Regan 1903
Family Merlucciidae Rafinesque 1815
Family Ranicipitidae Bonaparte 1835
Family Bregmacerotidae Gill 1872
Family Phycidae Swainson 1838
Family Gaidropsaridae Jordan & Evermann 1898
Family Lotidae Bonaparte 1835
Family Gadidae Rafinesque 1810

Division Polymixiipterygii
Order Polymixiiformes

Family †Dinopterygidae Jordan 1923
†Dinopterygidae Jordan 1923: 173 (family) †Dinopteryx Woodward 1901 [family name sometimes seen as †Dinopterygiidae]
Family †Digoriidae Bannikov & Daniltshenko 1985
†Digoriidae Bannikov & Daniltshenko 1985: 197 (family) †Digoria Daniltshenko 1980
Family †Boreiohydriidae Murray & Cumbaa 2013
†Boreiohydriidae Murray & Cumbaa 2013: 294 (family) †Boreiohydrias Murray & Cumbaa 2013
Family Polymixiidae Bleeker 1859
†Berycopsidae Regan 1911: 4 (family) †Berycopsis Dixon 1850
†Homonotichthyidae Whitley 1933: 146 (family) †Homonotichthys Whitley 1933
†Dalmaticththyidae Radovčič 1975: 35 (family) †Dalmaticththys Radovčič 1975
†Omosomopsidae Gaudant 1978b: 86 (family) †Omosomopsis Gaudant 1978

Division Acanthopterygii
Subdivision Berycimorphaceae
Order Beryciformes
Suborder Berycoidei

Family †Quaesitoberycidae Bannikov & Sorbini 2005
†Quaesitoberycidae Bannikov & Sorbini 2005: 29 (family) †Quaesitoberyx Bannikov & Sorbini 2005
Family Berycidae Lowe 1839
Family Melamphaidae Gill 1893
Suborder Stephanoberycidei

Family Gibberichthyidae Par 1933
Family Hispidoberycidae Kotlyar 1981
Family Rondeletiidae Goode & Bean 1895
Family Stephanoberycidae Gill 1884
Family Barbourisiidae Parr 1945
Family Cetomimidae Goode & Bean 1895

Order Trachichthyiformes

Family Diretmidae Gill 1893
Family Anoplogastridae Gill 1893
Family Trachichthyidae Bleeker 1856
†Hoplopterygidae Cockerell 1919: 186 (family) †Hoplopteryx Agassiz 1838 [family name sometimes seen as †Hoplopterygiidae]
†Lissoberycinae Gayet 1980b: 99 (subfamily) †Lissoberyx Patterson 1967
Family Anomalopidae Gill 1889
Family †Pseudomonocentridae González-Rodriguez, Schultze & Arratia 2013
†Pseudomonocentridae González-Rodriguez, Schultze & Arratia 2013: 466 (family)
†Pseudomonocentris González-Rodriguez, Schultze & Arratia 2013 [family name sometimes seen as †Pseudomonocentridae]
Family Monocentridae Gill 1859

73
Subdivision Holocentrimorphaceae

**Order Holocentriiformes**
Family †Tenuicentridae Gayet 1982
  †Tenuicentrinae Gayet 1982a: 28 (subfamily) †Tenuicentrum Sorbini 1975
Family †Caproberyxidae Patterson 1967
  †Caproberycaea Patterson 1967: 88 (subfamily) †Caproberyx Regan 1911
  †Alloberycaea Gayet 1982a: 28 (subfamily) †Alloberyx Gaudant 1969
Family †Stichocentridae Gayet 1982a: 32 (family) †Stichocentrus Patterson 1967 [name only, published after 1960, not available, Art. 13.1.1]
  †Stichocentridae Gayet 1982b: 99 (family) †Stichocentrus Patterson 1967
Family Holocentridae Bonaparte 1833

Subdivision Percomorphaceae
Series Ophidiaria

**Order Ophidiiformes**

**Suborder Ophidioidei**
Family Ophidiidae Rafinesque 1810

**Suborder Bythitoidei**
Family Dinematichthyidae Whitley 1928
Family Bythitidae Gill 1861

Series Batrachoidaria

**Order Batrachoidiformes**
Family Batrachoididae Jordan 1896 (1835)

Series Pelagiaria

**Order Scombriformes**
Family Amarsipidae Haedrich 1969
Family Arionmatidae Haedrich 1967
Family Arripidae Gill 1893
Family Bramidae Bonaparte 1831
Family †Carangodidae Blot 1969
  †Carangodidae Blot 1969: 426 (family) †Carangodes Heckel 1856 [senior objective synonym of †Arambourgellidae Blot 1981]
  †Arambourgellidae Blot 1981: 377 (family) †Arambourgella Blot 1981 [junior objective synonym of †Carangodidae Blot 1969, invalid, Art. 61.3.2]
Family Caristiidae Gill & Smith 1905
Family Centrolophidae Bonaparte 1846
Family Chiasmodontidae Jordan & Gilbert 1883
Family †Euzaphlegidae Daniltshenko 1960
  †Zaphlegidae Jordan & Gilbert 1920: 23 (family) †Zaphleges Jordan 1920 [type genus preoccupied by Zaphleges Forster 1868 in Hymenoptera; invalid, Art. 39]
  †Euzaphlegidae Daniltshenko 1960: 135 (family) †Euzaphleges White & Moy-Thomas 1941 [family name sometimes seen as †Eusaphlegidae]
  †Dipterichthyidae Arambourg 1967: 111 (family) †Dipterichthys Arambourg 1967
Family Gempylidae Gill 1862
Family Icosteidae Jordan & Gilbert 1880
Family Nomeidae Günther 1860
Family Pomatomidae Gill 1863
Family †Propercarinidae Bannikov 1995
  †Propercarinidae Bannikov 1995: 179 (family) †Propercarina Paucă 1929
Family Scombridae Rafinesque 1815
  †Eocoelopomini Monsch & Bannikov 2012: 277 (tribe) †Eocoelopoma Woodward 1901
Family Scombrabolbocrini Fowler 1925
Family Scombrodidae Gill 1862
Family Stromateidae Rafinesque 1810
Family Tetragonuridae Risso 1827
Family Trichiuridae Rafinesque 1810
  †Anenchelini Bonaparte 1850b (subfamily) †Anenchelum de Blainville 1818 [type genus inferred from the stem, Art. 11.7.1.1]

Series Syngnatharia

Order Syngnathiformes

Incertae sedis:
Family †Aulorhamphidae Tyler 2004
  †Aulorhamphidae Tyler 2004: 37 (family) †Aulorhamphus de Zigno 1887
Family †Gerpegezhiidae Bannikov & Carnevale 2012
  †Gerpegezhiidae Bannikov & Carnevale 2012: 381 (family) †Gerpegezhus Bannikov & Carnevale 2012
Family †Paraeoliscidae Blot 1981
  †Paraeoliscidae Blot 1981: 361 (family) †Paraeoliscus Blot 1981
Family †Rhamphosidae Gill 1884
  †Rhamphosidae Gill 1884: 165 (family) †Rhamphosus Agassiz 1844 [family name sometimes seen as †Ramphosidae]
Family †Urosphenidae Gill 1884
  †Urosphenidae Gill 1884: 165 (family) †Urosphen Agassiz 1844

Suborder Dactylopteroidei
Family †Pterygocephalidae Clark Hubbs 1952
  †Pterygocephalidae Clark Hubbs 1952: 50 (family) †Pterygocephalus Agassiz 1839 [also as a new family in Blot 1981: 367]
Family Dactylopteridae Gill 1861
Family Pegasidae Bonaparte 1831

Suborder Callionymoidei
Family Callionymidae Bonaparte 1831
Family Draconettidae Jordan & Fowler 1903

Suborder Mulloidei
Family Mullidae Rafinesque 1815

Suborder Syngnathoidae
Family †Eekaulostomidae Cantalice & Alvarado-Ortega 2016
  †Eekaulostomidae Cantalice & Alvarado-Ortega 2016: 4 (family) †Eekaulostomus Cantalice & Alvarado-Ortega 2016
Family Fistulariidae Stark 1828
  †Parasynarcualidae Blot 1981: 363 (family) †Parasynarcualis Blot 1981
  †Fistularioididae Blot 1981: 363 (family) †Fistularioides Blot 1981
Family Aulostomidae Rafinesque 1815
Family Centriscidae Bonaparte 1831
Family Solenostomidae Nardo 1843
   †Solenorhynchinae Bannikov & Carnevale 2017: 320 (subfamily) †Solenorhynchus Heckel 1854
Family Syngnathidae Bonaparte 1831
   †Eogastrophinae Jerzmiańska 1969: 436 (subfamily) †Hipposyngnathus Daniltshenko 1960 [no stem of the type genus, not available, Art. 11.7.1.1]
   †Hipposyngnathinae Fritzsche 1980: 216 (subfamily) †Hipposyngnathus Daniltshenko 1960
   †Pshekhagnathinae Bannikov, Carnevale & Popov 2017: 80 (subfamily) †Pshekhagnathus Bannikov, Carnevale & Popov 2017

Series Gobiaria

Order Kurtiformes
Suborder Kurtoidei
Family Kurtidae Bleeker 1859
Suborder Apogonoidei
Family Apogonidae Günther 1859
   †Eoapogonini Bannikov 2005: 120 (tribe) †Eoapogon Bannikov 2005

Order Gobiiformes
Suborder Trichonotoidei
Family Trichonotidae Günther 1861
Suborder Gobiioidei
Family Rhyacichthyidae Jordan 1905
Family Odontobutidae Hoese & Gill 1993
Family Milyeringidae Whitley 1945
Family Eleotridae Bonaparte 1835
   †Pirskeniidæ Obrhelová 1961: 107 (family) †Pirskenius Obrhelová 1961
Family Butidae Bleeker 1874
Family Thalasseleotrididae Gill & Mooi 2012
Family Oxudercidae Günther 1861
Family Gobiidae Cuvier 1816

Series Anabantaria
Order Synbranchiformes
Suborder Mastacembeloidei
Family Mastacembelidae Swainson 1839
Family Chaudhuriidae Annandale 1918
Suborder Indostomoidei
Family Indostomidae Prasad & Mukerji 1929
Suborder Synbranchoidei
Family Synbranchidae Bonaparte 1835

Order Anabantiformes
Incertae sedis:
Family †Nardoichthyidae Sorbini & Bannikov 1991
   †Nardoichthyidae Sorbini & Bannikov 1991: 240 (family) †Nardoichthys Sorbini & Bannikov 1991

Suborder Anabantoidae
Family Anabantidae Bonaparte 1831
Family Helostomatidae Gill 1872
Family Osphronemidae van der Hoeven 1832
**Suborder Channoidei**  
Family Channidae Fowler 1934 (1831)

**Suborder Nandoidei**  
Family Pristolepididae Regan 1913  
Family Nandidae Bleeker 1852  
Family Badidae Barlow, Liem & Wickler 1968

Series Carangaria  
*Incertae sedis*:  
†Pygaeidae Jordan 1905: 405 (family) †*Pygaeus* Agassiz 1838

Family Centropomidae Poey 1867  
Family Lactariidae Boulenger 1904  
Family Leptobramidae Ogilby 1913  
Family Menidae Fitzinger 1873  
Family Polynemidae Rafinesque 1815  
Family Sphyraenidae Rafinesque 1815  
Family Toxotidae Bleeker 1859

**Order Istiophoriformes**  
Family †Palaeorhynchidae Günther 1880  
†*Palaeorhynchidae Günther* 1880: 437 (family) †*Palaeorhynchus* de Blainville 1818  
†*Aglyptorhynchinae* Fierstine & Weems 2009: 84 (subfamily) †*Aglyptorhynchus* Casier 1966

Family †Hemingwayidae Sytchevskaya & Prokofiev 2002  
†*Hemingwaya Sytchevskaya & Prokofiev* 2002: 227 (family)

Family Istiophoridae Rafinesque 1815  
Family Xiphiidae Rafinesque 1815  
†*Xiphiorhynchidae Regan* 1909: 75 (family) †*Xiphiorhynchus* van Beneden 1871

Family †Blochiidae Bleeker 1859  
†*Rostrati* Giebel 1847: 156 (family) †*Blochius* Volta 1796 [no stem of the type genus, not available, Art. 11.7.1.1]  
†*Blochioides* Pictet 1854: 124 (family) †*Blochius* Volta 1796 [published not in latinized form before 1900, not available, Art. 11.7.2]  
†*Blochioidei* Bleeker 1859: XVI (family) †*Blochius* Volta 1796

**Order Carangiformes**  
Family Nematistiidae Gill 1862  
Family Carangidae Rafinesque 1815  
†*Vomeropsinae* Bannikov 1984: 319 (subfamily) †*Vomeropsis* Heckel 1854  
†*Archaeinae* Bannikov 1990: 14 (subfamily) †*Archaeus* Agassiz 1844 [family-group name preoccupied by Archaeidae Koch & Berendt 1854 in Arachnida spiders, not to be used, Art. 55.3]  
†*Paratrachinotini* Springer & Smith-Vaniz 2008: 1 (tribe) †*Paratrachinotus* Blot 1969

Family †Ductoridae Blot 1969  
†*Ductoridae* Blot 1969: 95 (family) †*Ductor* Agassiz 1844

Family Rachycentridae Gill 1896  
Family Coryphaenidae Rafinesque 1815  
Family †Opisthomyzonidae Jordan 1923  
†*Opisthomyzonidae* Jordan 1923: 227 (family) †*Opisthomyzon* Cope 1889 [family name sometimes seen as †*Opisthomyzonidae* or †*Opisthomyzidae*]

Family Echeneidae Rafinesque 1810
Order Pleuronectiformes
Family †Amphistiidae Boulenger 1902
   †Amphistiidae Boulenger 1902b: 300 (family) †Amphistium Agassiz 1835
Suborder Psettodoidei
Family Psettodidae Regan 1910
Suborder Pleuronectoidei
Family †Joleaudichthyidae Chabanaud 1937
   †Joleaudichthyidae Chabanaud 1937: 51 (family) †Joleaudichthys Chabanaud 1937
Family Citharidae de Buen 1935
   Eucitharidae Romer 1966: 361 (family) Eucitharus Gill 1889 [name only, published after 1960, not available, Article 13.1.1; Recent, omitted in Van der Laan et al. 2014]
Family Paralichthyidae Regan 1910
Family Pleuronectidae Rafinesque 1815
Family Bothidae Smitt 1892
Family Paralichthodidae Regan 1920
Family Scophthalmidae Chabanaud 1933
Family Rhombosoleidae Regan 1910
Family Achiropsettidae Heemstra 1990
Family Achiридidae Rafinesque 1815
Family Samaridae Jordan & Goss 1889
Family Poecilopsettidae Norman 1934
Family Cynoglossidae Jordan 1888
Family Soleidae Bonaparte 1833
   †Eobuglossidae Chabanaud 1937: 73 (family) †Eobuglossus Chabanaud 1931

Series Ovalentaria
Incertae sedis:
   Family Ambassidae Klunzinger 1870
   Family Congrogadidae Günther 1862
   Family Embiotocidae Agassiz 1853
   Family Grammatidae Jordan 1887
   Family Opistognathidae Bonaparte 1835
   Family Plesiopidae Günther 1861
   Family Polycentridae Gill 1858
   Family Pomacentridae Bonaparte 1831
   Family Pseudochromidae Müller & Troschel 1849

Superorder Cichlomorphae
Order Cichliformes
Incertae sedis:
   Family †Priscacaridae Jordan 1923
      †Priscacaridae Jordan 1923: 218 (family) †Priscacara Cope 1877
Family Cichlidae Bonaparte 1835
Family Pholidichthyidae Jordan 1896

Superorder Atherinomorphae
Incertae sedis:
Family †Mesogasteridae Bannikov 2008
   †Mesogasteridae Bannikov 2008: 83 (family) †Mesogaster Agassiz 1844
Family †Rhamphognathidae Bannikov 2008
   †Rhamphognathidae Bannikov 2008: 78 (family) †Rhamphognathus Agassiz 1844

Order Atheriniformes
Suborder Atherinopoidei
   Family Atherinopsidae Fitzinger 1873
Suborder Atherinoidei
   Family Isonidae Rosen 1964
   Family Bedotiidae Jordan & Hubbs 1919
   Family Melanotaeniidae Gill 1894
   Family Pseudomugilidae Kner 1867
   Family Telmatherinidae Munro 1958
   Family Atherionidae Schultz 1948
   Family Dentatherinidae Patten & Ivantsoff 1983
   Family Phallostethidae Regan 1916
   Family Atherinidae Risso 1827

Order Beloniformes
   Family †Cobitopsidae Jordan 1905
      †Cobitopsidae Jordan 1905: 224 (family) †Cobitopsis Pomel 1853
   Family †Forficidae Jordan & Gilbert 1919
      †Forficidae Jordan & Gilbert 1919: 36 (family) †Forfex Jordan & Gilbert 1919 [family name sometimes seen as †Forfecidae or †Forficiidae]
Suborder Adrianichthyoidae
   Family Adrianichthyidae Weber 1913
Suborder Belonoidei
   Family Exocoetidae Risso 1827
      †Rhamphexocoetinae Bannikov, Parin & Pinna 1985: 154 (subfamily) †Rhamphexocoetus Bannikov, Parin & Pinna 1985
   Family Hemiramphidae Gill 1859
   Family Zenarchopteridae Fowler 1934
   Family Belonidae Bonaparte 1835

Order Cyprinodontiformes
Suborder Aplocheiloidei
   Family Aplocheilidae Bleeker 1859
   Family Nothobranchiidae Garman 1895
   Family †Kenyaichthyidae Altner & Reichenbacher 2015
      †Kenyaichthyidae Altner & Reichenbacher 2015: 6 (family) †Kenyaiichthys Altner & Reichenbacher 2015
   Family Rivulidae Myers 1925 [Case 3747 ICZN; also seen as Cynolebiidae]
Suborder Cyprinodontoidae
   Family Pantanodontidae Myers 1955
   Family Cyprinodontidae Wagner 1828
   Family Fundulidae Günther 1866
   Family Orestiidae Bleeker 1859
   Family Profundulidae Hoedeman & Bronner 1951
   Family Goodeidae Jordan & Gilbert 1883
   Family Valenciidae Parenti 1981
   Family Aphanidae Hoedeman 1949
Family Procatopodidae Fowler 1916
Family Fluviphylacidae Roberts 1970
Family Poeciliidae Bonaparte 1831
Family Anablepidae Bonaparte 1831

Superorder Mugilomorphae
Order Mugiliformes
Family Mugilidae Jarocki 1822

Superorder Blenniomorphae
Order Gobiesociformes
Family Gobiesocidae Bleeker 1859

Order Blenniiformes
Family Tripterygiidae Whitley 1931
Family Clinidae Swainson 1839
Family Dactyloscopidae Gill 1859
Family Labrisomidae Clark Hubbs 1952
Family Chaenopsidae Gill 1865
Family Blenniidae Rafinesque 1810

Series Eupercaria
Incertae sedis:
†Asianthidae Sytchevskaya & Prokofiev 2003: 2 (family) †Asianthus Sytchevskaya & Prokofiev 2003
Family Callanthiidae Ogilby 1899
Family †Caucasichthyidae Bannikov, Carnevale & Parin 2011
  †Caucasichthyidae Bannikov, Carnevale & Parin 2011: 83 (family) †Caucasichthys Bannikov,
  Carnevale & Parin 2011
Family Centrogenyidae Fowler 1907
Family Dinolestidae Whitley 1948
Family Dinopecidae Heemstra & Hecht 1986
Family Emmelichthyidae Poey 1867
Family †Eotrigonodontidae White 1935
  †Eotrigonodontidae White 1935: 19, 56 (family) †Eotrigonodon Weiler 1929 [family name
  sometimes seen as †Eotrigonidae or †Eotrogonidae]
Family †Exelliidae Blot 1969
  †Exelliidae Blot 1969: 120 (family) †Exellia White & Moy-Thomas 1941 [family name
  sometimes seen as †Exellidae]
Family Malacanthidae Poey 1861
Family Monodactylidae Jordan & Evermann 1898
Family Moronidae Jordan & Evermann 1896
Family Parascorpididae Smith 1949
Family †Pietschellidae Carnevale & Bannikov 2015
  †Pietschellidae Carnevale & Bannikov 2015: 18 (family) †Pietschellus Bannikov & Carnevale 2011
Family Pomacanthidae Jordan & Evermann 1898
Family †Quasimullidae Bannikov 1999
  †Quasimullidae Bannikov 1999: 119 (family) †Quasimullus Bannikov 1999
Family †Repropcidae Bannikov 1991
   †Repropcidae Bannikov 1991b: 90 (family) †Repropca Bannikov 1991
Family Scatophagidae Gill 1883
   †Ruffoichthyinae Bannikov & Tyler 2002: 43 (subfamily) †Ruffoichthys Sorbini 1983
Family Siganidae Richardson 1837
Family Sillaginidae Richardson 1846

Order Gerreiformes
Family Gerreidae Bleeker 1859 [ICZN Opinion 962]

Order Uranoscopiformes
Family Uranoscopidae Bonaparte 1831
Family Ammodytidae Bonaparte 1835
Family Cheimarrichthyidae Regan 1913
Family Pinguipedidae Günther 1860

Order Labriformes
Family †Tortonesiidae Sorbini, Boscaini & Bannikov 1991
   †Tortonesiidae Sorbini, Boscaini & Bannikov 1991: 116 (family) †Tortonesia Sorbini 1983
   [correct stem is Tortonesi-]
Family Labridae Cuvier 1816
   †Pharyngodopilidae Cocchi 1864: 25 (family) †Pharyngodopilus Cocchi 1864
   †Trigonodontidae Arambourg 1927: 221 (family) †Trigonodon Sismonda 1847

Order Ephippiformes
Family Drepaneidae Gill 1872 [ICZN Opinion 1046]
Family Ephippidae Bleeker 1859

Order Chaetodontiformes
Family Leiognathidae Gill 1893
   †Eoleiognathinae Bannikov 2014a: 36 (subfamily) †Eoleiognathus Bannikov 2014
Family Chaetodontidae Rafinesque 1815

Order Acanthuriformes
Family †Acanthonemidae Bannikov 1991
   †Acanthonemidae Bannikov 1991a: 50 (family) †Acanthonemus Agassiz 1834
Family †Sorbinipercaidae Tyler 1998
   †Sorbinipercaidae Tyler 1998: 523 (family) †Sorbiniperca Tyler 1998
Family †Zorzinichthyidae Tyler & Bannikov 2002
   †Zorzinichthyidae Tyler & Bannikov 2002: 24 (family) †Zorzinichthys Tyler & Bannikov 2002
Family Luvaridae Gill 1885
   †Beerichthyidae Casier 1966: 158 (family) †Beerichthys Casier 1966
Family †Kushlukiidae Daniltshenko 1968
   †Kushlukiidae Daniltshenko 1968: 147 (family) †Kushlukia Daniltshenko 1968
Family †Caprovesposidae Bannikov & Fedotov 1984
   †Caprovesposidae Bannikov & Fedotov 1984: 708 (family) †Caprovesposus Daniltshenko 1960
Family †Massalongiidae Tyler & Bannikov 2005
   †Massalongiidae Tyler & Bannikov 2005: 75 (family) †Massalongius Tyler & Bannikov 2005
Family Zanclidae Bleeker 1876
Family Acanthuridae Bonaparte 1835
Order Lutjaniformes
Family Haemulidae Gill 1885
Family Lutjanidae Gill 1861
Family Sciaenidae Cuvier 1829
†Ioscionidae David 1943: 149 (family) †Ioscion Jordan 1921 [family name sometimes seen as †Iosciidae]
†Carnevalellinae Bannikov 2013: 192 (subfamily) †Carnevalella Bannikov 2013

Order Lobotiformes
Family Datnioididae Fowler 1931
Family Lobotidae Gill 1861
Family Hapalogenyidae

Order Spariformes
Family Nemipteridae Regan 1913
Family Lethrinidae Bonaparte 1831
Family Sparidae Rafinesque 1818

Order Priacanthiformes
Family Cepolidae Rafinesque 1815
Family Priacanthidae Günther 1859

Order Caproiformes
Family Caproidae Bonaparte 1835

Order Lophiiformes
Suborder Lophioidei
Family Lophiidae Rafinesque 1810
Suborder Antennarioidei
Family Antennariidae Jarocki 1822
Family Tetrabrachiidae Regan 1912
Family Lophichthyidae Boeseman 1964
Family Brachionichthyidae Gill 1863
Suborder Chaunacoidei
Family Chaunacidae Gill 1863
Suborder Ogcocephaloidei
Family Ogcocephalidae Gill 1893
Suborder Ceratioidei
Family Caulophrynidae Goode & Bean 1896
Family Neoceratiidae Regan 1926
Family Melanocetidae Gill 1878
Family Himantolophidae Gill 1861
Family Diceratiidae Regan & Trewavas 1932
Family Oneirodidae Gill 1878
Family Thaumatichthyidae Smith & Radcliffe 1912
Family Centrophrynidae Bertelsen 1951
Family Ceratiidae Gill 1861
Family Gigantactinidae Boulenger 1904
Family Linophrynidae Regan 1925
Order Tetraodontiformes

Suborder †Plectocretacicoidae
Family †Cretatriacanthidae Tyler & Sorbini 1996
   †Cretatriacanthidae Tyler & Sorbini 1996: 4 (family) †Cretatriacanthus Tyler & Sorbini 1996
Family †Plectocretacicidae Tyler & Sorbini 1996
   †Plectocretacicoida Tyler & Sorbini 1996: 3 (superfamily) †Plectocretacicus Sorbini 1979
Family †Protacanthidae Tyler & Sorbini 1996
   †Protacanthidae Tyler & Sorbini 1996: 27 (family) †Protacanthus d’Erasmo 1946

Suborder Triacanthodoidei
Family Triacanthidae Gill 1862

Suborder Triacanthoidei
Family Triacanthidae Bleeker 1859
   †Protacanthodinae Tyler 1968: 238 (subfamily) †Protacanthodes Gill 1888
   †Cryptobalistinae Tyler 1968: 243 (subfamily) †Cryptobalistes Tyler 1968

Suborder Balistoidei
Family †Moclaybalistidae Santini & Tyler 2003
   †Moclaybalistiidae Santini & Tyler 2003: 603 (family) †Moclaybalistes Tyler & Santini 2002
Family †Bolcabalistidae Tyler & Sorbini 1998
   †Bolcabalistidae Tyler & Sorbini 1998: 43 (family) †Bolcabalistes Tyler & Sorbini 1998
Family †Eospinidae Santini & Tyler 2003
   †Eospinidae Santini & Tyler 2003: 603 (family) †Eospinus Tyler & Bannikov 1992
Family Balistidae Rafinesque 1810
   †Acanthodermaidae Bonaparte 1850b (family) †Acanthoderma Agassiz 1844
Family Monacanthidae Nardo 1843

Suborder Ostracioidae
Family †Spinacanthidae Jordan 1905
   †Spinacanthidae Jordan 1905: 415 (family) †Spinacanthus Agassiz 1835
Family †Protobalistidae Gill 1888
   †Protobalistidae Gill 1888: 447 (family) †Protobalistum Zigno 1887
Family Aracanidae Hollard 1860
Family Ostraciidae Rafinesque 1810

Suborder Tetraodontoidae

Incertae sedis:
Family †Avitoplectidae Bemis, Tyler, Bemis, Kumar, Singh Rana & Smith 2018
   †Avitoplectidae Bemis, Tyler, Bemis, Kumar, Singh Rana & Smith 2018: [3] (family)
   †Avitoplectus Bemis, Tyler, Bemis, Kumar, Singh Rana & Smith 2018
Family †Eoplectidae Tyler 1973
   †Eoplectinae Tyler 1973: 146 (subfamily) †Eoplectus Tyler 1973
Family †Zignoichthyidae Winterbottom 1974
   †Zignoichthyidae Winterbottom 1974: 99 (family) †Zignoichthys Tyler 1973
Family Triodontidae Bleeker 1859
Family Molidae Bonaparte 1835
Family †Balkariidae Bannikov, Tyler, Arcila & Carnevale 2016
Family Tetraodontidae Bonaparte 1831
Family Diodontidae Billberg 1833 [correction of Van der Laan et al. 2014]
   Diodontiides Billberg 1833: 52 (Natio ≈ family) Diodon Linnaeus 1758 [Recent, omitted in Van der Laan et al. 2014]
Order Pempheriformes
Family Acropomatidae Gill 1893
Family Banjosidae Jordan & Thompson 1912
Family Bathyclupeidae Gill 1896
Family Champsodontidae Jordan & Snyder 1902
Family Creediidae Waite 1899
Family Epigonidae Poey 1861
Family Glaucosomatidae Jordan & Thompson 1911
Family Hemerocoetidae Kaup 1873
Family Howellidae Ogilby 1899
Family Lateolabracidae
Family Leptosocidae Gill 1859
Family Ostracoberycidae Fowler 1934
Family Pempheridae Bleeker 1859
Family Pentacerotidae Bleeker 1859
Family Polyprionidae Bleeker 1874
Family Symphysanodontidae Katayama 1984

Order Centrarchiformes
Suborder Percolatei
Suborder Percichthyoidae
Family Percichthyidae Jordan & Eigenmann 1890
Suborder Terapontoidei
Family Girellidae Gill 1862
Family Dichistiidae Smith 1935
Family Kuhliidae Jordan & Evermann 1896
Family Oplegnathidae Bleeker 1853
Family Kyphosidae Jordan 1887
Family Microcanthidae Bleeker 1876
Family Scorpididae Günther 1860
Family Terapontidae Richardson 1842
Suborder Centrarchoidei
Family Centrarchidae Bleeker 1859
Family Elasmomorphae Jordan 1877
Family Enoplosidae Gill 1893
Family Siniperidae Jordan & Richardson 1910
Suborder Cirrhitioidei
Family Cirrhitidae Macleay 1841
Family Latridae Gill 1862
Family Cheilodactylidae Bonaparte 1850
Family Chironemidae Gill 1862
Family Aplodactylidae Günther 1859
Order Perciformes

Incertae sedis:
Family †Callipterygidae Jordan 1905
  †Callipterygidae Jordan 1905: 501 (family) †Callipteryx Agassiz 1838
Family †Eocottidae Bannikov 2004
  †Eocottidae Bannikov 2004: 18 (family) †Eocottus Woodward 1901 [also as new subfamily]
  †Bassaniinae Bannikov 2004: 25 (subfamily) †Bassania Bannikov 2004 [type genus preoccupied by Bassania Walker 1860 in Lepidoptera; invalid, Art. 39]
  †Bassanichthyinae Bannikov 2006: 340 (subfamily) †Bassanichthys Bannikov 2006
Family †Robertannidae Bannikov 2011
  †Robertannidae Bannikov 2011: 8 (family) †Robertania Bannikov 2011
Family †Trispinachidae Nazarkin 2002
  †Trispinachidae Nazarkin 2002: 419 (family) †Trispinax Nazarkin 2002

Suborder Bembropoidei
Family Bembropidae Regan 1913

Suborder Normanichthyoidei
Family Normanichthyoidea Clark 1937

Suborder Serranoidei
Family Serranidae Swainson 1839

Suborder Percoidei
Family Niphonidae Jordan 1923
Family Percidae Rafinesque 1815
Family Trachinidae Rafinesque 1815

Suborder Notothenioidei
Family Bovichtidae Gill 1862
Family Pseudaphritidae McCulloch 1929
Family Eleginopsidae Gill 1893
Family Nototheniidae Günther 1861
Family Harpagiferidae Gill 1861
Family Artdidraconidae Andriashev 1967
Family Bathydraconidae Regan 1913
Family Channichthyidae Gill 1861
Family Percophidae Swainson 1839

Suborder Congiopodoidei
Family Congiopodidae Gill 1889

Suborder Scorpaenoidae
Family Sebastidae Kaup 1873
Family Setarchidae Matsubara 1943
Family Neosebastidae Matsubara 1943
Family Plectrognathidae Fowler 1938
Family Scorpaenidae Risso 1827
Family Apistidae Gill 1859
Family Synanceiidae Swainson 1839
Family Eschmeyeriidae Mandrytsa 2001
Family Perryenidae Honma, Imamura & Kawai 2013
Family Aploactinidae Jordan & Starks 1904
Family Pataecidae Gill 1872
Family Gnathanaecanthidae Gill 1892
Family Bembridae Kaup 1873
Family Triglidae Rafinesque 1815
Family Peristediidae Jordan & Gilbert 1883
Family Hoplichthyidae Kaup 1873
Family Platyccephalidae Swainson 1839

**Suborder Cottoidei**

Infraorder Anoplopomatales
Family Anoplopomatidae Jordan & Gilbert 1883
Infraorder Zoarcales
Family Zoarcidae Swainson 1839
Family Anarhichadidae Bonaparte 1835
Family Neozoarcidae Jordan & Snyder 1902
Family Eulophiidae Smith 1902
Family Stichaeidae Gill 1864
Family Lumpenidae Jordan & Evermann 1898
Family Opisthocoelicaudata Jordan & Evermann 1898
Family Pholidae Gill 1893
Family Ptilichthyidae Jordan & Gilbert 1883
Family Zaproridae Jordan 1896
Family Cryptacanthodidae Gill 1861
Family Cebidichthyidae Gill 1862
Family Scytilalinidae Jordan & Starks 1895
Family Bathymasteridae Jordan & Gilbert 1883
Infraorder Gasterosteales
Family Aulorhynchidae Gill 1861
Family Hypoptychidae Steindachner 1880
Family Gasterosteidae Bonaparte 1831
Infraorder Zaniolepidales
Family Zaniolepididae Jordan & Gilbert 1883
Family Hexagrammidae Jordan 1888
Infraorder Cottales
Family Trichodontidae Bleeker 1859
Family Cyclopteridae Bonaparte 1831
Family Liparidae Gill 1861 [ICZN Opinion 1673]
Family Jordaniidae Jordan & Evermann 1898
Family Rhamphocottidae Jordan & Gilbert 1883
Family Scorpaenichthyidae Jordan & Evermann 1898
Family Agonidae Swainson 1839
Family Cottidae Bonaparte 1831
Family Psychrolutidae Günther 1861

**Subclass SARCOPTERYGII**

**Infraorder COTTOIDEA**

Family †Miguashaiidae Forey 1998
†Miguashaia Schultze 1973 [name only, published after 1960, not available, Art. 13.1.1]
†Miguashaia Cloutier & Ahlberg in Stiassny, Parenti & Johnson 1996: 451 (family)
†Miguashaia Schultze 1973 [name only, published after 1960, not available, Art. 13.1.1]
†Miguashaia Forey 1998: 223 (family) †Miguashaia Schultze 1973 [family name sometimes seen as †Miguashaiaidae]
Family †Diplocercididae Berg 1940
   †Diplocercididae Berg 1940: 391 (family) †Diplocercides Stensiö 1922 [corrected to †Diplocercidae by Camp, Welles & Green 1949: 271, confirmed by Fowler 1971b: 14; family name sometimes seen as †Diploceriidae]
   †Euporosteidae Romer 1966: 362 (family) †Euporosteus Jackel 1927 [name only, published after 1960, not available, Art. 13.1.1]
Family †Hadronectoridae Lund & Lund 1984
   †Hadronectoridae Lund & Lund 1984: 237 (family) †Hadronector Lund & Lund 1984
Family †Rhabdodermitidae Berg 1955, spelling in prevailing recent practice
   †Rhabdodermitidae Berg 1955: 100 (family) †Rhabdoderma Reis 1888 [family name also seen as †Rhabdodermitidae]
Family †Sasseniidae Forey 1998
   †Sasseniidae Forey 1998: 299 (family) †Sassenia Stensiö 1921
Family †Laugiidae Berg 1940
   †Laugiidae Berg 1940: 392 (family) †Laugia Stensiö 1932
   †Coccodermidae White 1956: 66 (family) †Coccoderma Zittel 1887

Order Coelacanthiformes
Suborder †Coelacanthoidei
Family †Whiteiidae Forey 1998
   †Whiteiidae Maisey 1991: 312 (family) †Whiteia Moy-Thomas 1935 [name only, published after 1960, not available, Art. 13.1.1]
   †Whiteiidae Schultze 1993: 660 (family) †Whiteia Moy-Thomas 1935 [name only, published after 1960, not available, Art. 13.1.1]
   †Whiteiidae Forey 1998: 225 (family) †Whiteia Moy-Thomas 1935
Family †Rebellatricidae Wendruff & Wilson 2012
   †Rebellatricidae Wendruff & Wilson 2012: 500 (family) †Rebellatrix Wendruff & Wilson 2012
Family †Coelacanthidae Agassiz 1844
Suborder Latimerioidei
Family †Mawsoniidae Forey 1998
   †Mawsoniidae Maisey 1991: 312 (subfamily) †Diplurus Newberry 1878 [family-group name preoccupied by Dipluridae Simon 1892 in spiders Arachnida, not to be used]
   †Mawsoniidae Schultze 1993: 660 (family) †Mawsonia Woodward 1907 [name only, published after 1960, not available, Art. 13.1.1]
   †Mawsoniidae Cloutier & Ahlberg in Stiassny, Parenti & Johnson 1996: 450 (family) †Mawsonia Woodward 1907 [name only, published after 1960, not available, Art. 13.1.1]
   †Mawsoniidae Forey 1998: 300 (family) †Mawsonia Woodward 1907
Family Latimeriidae Berg 1940, name in prevailing recent practice
   †Macropomidae Owen 1860: 144 (family) †Macropoma Agassiz 1835
   †Undinidae Whitley 1940: 242 (family) †Undina Münster 1834 [type genus inferred from the stem; name only, used as valid before 2000?; not available]
Infraclasse †ONYCHODONTIDA
Order †Onychodontiformes
Family †Onychodontidae Woodward 1891
†Onychodontidae Woodward 1891a: 391 (family) †Onychodus Newberry 1857 [family name sometimes seen as †Onychodidae]
†Pycnacanthidae Lebedev 1995: 362 (family) †Pycnacanthus Fischer von Waldheim 1852

Infraclasse DIPNOMORPHA
Superorder †Porolepidimorpha
Order †Porolepidiformes
Family †Porolepidae Berg 1940, spelling in prevailing recent practice
†Porolepidae Berg 1940: 390 (family) †Porolepis Woodward 1891 [family name also seen as †Porolepidae]
Family †Holoptychiidae Giebel 1847
†Holoptychiidae Giebel 1847: 270 (family) †Holoptychius Agassiz 1839 [changed to †Holoptychidae by Owen 1860: 156, corrected to †Holoptychiidae by Günther 1880: 365; correct stem is Holoptychi-]
†Dendrodonten Pander 1860: 24 (family) †Dendrodus Owen 1841 [published not in latinized form before 1900, not available, Art. 11.7.2; also seen as †Dendrodontès Eichwald 1860: 1557; the genus †Dendrodus Owen 1841 is not recognized anymore because of uncertainty of typification; not †Dendrodus Whiteaves 1897 in †Protodontidae]
†Glyptolépides Eichwald 1860: 1566 (family) †Glyptolepis Agassiz 1844 [published not in latinized form before 1900, not available, Art. 11.7.2]
†Dendrodontidae Traquair 1889: 490 (family) †Dendrodus Owen 1841 [as the type genus Dendrodus Owen 1841 is not recognized anymore because of uncertainty of typification, the family-group name is not to be used; not †Dendrodus Whiteaves 1897 in †Protodontidae]

Superorder Dipnoi [Ceratodontae]
Family †Povichthyiidae Jessen 1980
†Povichthyiidae †Povichthyiidae Jessen 1980: 209 (family) †Povichthys Jessen 1975
Family †Youngolepididae Gardiner 1984
†Youngolepididae Gardiner 1984: 404 (family) †Youngolepis Chang & Yu 1981 [family name sometimes seen as †Youngolepidae]

Order †Diabolepidiformes
Family †Diabolepididae
†Diabolepididae Schultze 1993: 657 (family) †Diabolepis Zhang & Yu 1987 [name only, published after 1960, not available, Art. 13.1.1]
†Diabolepididae Cloutier & Ahlberg 1996: 451 (family) †Diabolepis Zhang & Yu 1987 [name only, published after 1960, not available, Art. 13.1.1]
†Diabolepididae Nelson, Grande & Wilson 2016: 107 (family) †Diabolepis Zhang & Yu 1987 [not published according to the rules, not available]

Order †Dipnorhynchiformes
Family †Uranolophidae Miles 1977
†Uranolophidae Miles 1977: 308 (family) †Uranolophus Denison 1968 [family name sometimes seen as †Melanognathidae]
Family †Dipnorhynchidae Berg 1940
†Dipnorhynchidae Berg 1940: 385 (family) †Dipnorhynchus Jaekel 1927
†Speonesydrionidae Campbell & Barwick 1990: 165 (family) †Speonesydrion Campbell & Barwick 1983 [family name sometimes seen as †Speonesydrididae]
Order †Dipteriformes
Family †Stomiahykidae Bernacsek 1977

†Stomiahykidae Bernacsek 1977: 177 (family) †Stomiahykus Bernacsek 1977

Family †Dipteridae Agassiz 1844

†Diptéridiens Agassiz 1844 Tome II pt. 1: 308 (family) †Dipterus Sedgwick & Murchison 1828
[latinized to †Dipteri by Eichwald 1846: 307; latinized to †Dipteridae by Owen 1846: 50,
latinized to †Dipterida by Vogt 1851: 131, latinized to †Dipterini by Pander 1856: 79 and
Pander 1858: 5; considered valid with this authorship by Müller 1846: 151, by Bronn 1849:
655, by Pander 1856: 79 and by Quenstedt 1885: 349 Art. 11.7.2]

†Ctenodipteridae Günther 1880: 359 (family) ? †Dipterus Sedgwick & Murchison 1828 [no
stem of the type genus, not available, Art. 11.7.1.1]

†Rhinodipteridae Campbell & Barwick 1990: 165 (family) †Rhinodipterus Gross 1956

†Orlovichthyinae Krupina 2004: 395 (subfamily) †Orlovichthys Krupina 1980

Family †Chirodipteridae Campbell & Barwick 1990

†Chirodipteridae Campbell & Barwick 1990: 165 (family) †Chirodipterus Gross 1933

†Pillararhynchinae Long 1992: 12 (subfamily) †Pillararhynchus Campbell & Barwick 1990

†Conchodontinae Krupina 2004: 398 (subfamily) †Conchodus M'Coy 1848

Family †Rhynchodipteridae Moy-Thomas 1939

†Rhynchodipteridae Moy-Thomas 1939: 100 (family) †Rhynchodipterus Säve-Söderbergh 1937

Family †Holodipteridae

‡Holodontidae Gorizdro-Kulczycka 1950: 54 (family) †Holodus Pander 1858 [type genus
preoccupied by †Holodus Agassiz 1845 in fishes; invalid, Art. 39]

†Holodipterida Moy-Thomas & Miles 1971: 141 (order) †Holodipterus White & Moy-Thomas
1940 [no family-group name; also name only]

†holodipterids Moy-Thomas & Miles 1971: 149 (family?) †Holodipterus White & Moy-Thomas
1940 [published not in latinized form after 1899, not available]

†holodipterids Miles 1977: 241, 307 (family?) †Holodipterus White & Moy-Thomas 1940
[published not in latinized form after 1899, not available]

Family †Phaneropleuridae Huxley 1861

†Phaneropleurini Huxley 1861: 24 (family) †Phaneropleuron Huxley 1859

†Scaumenaciidae Berg 1940: 385 (family) †Scaumenacia Traquair 1893 [family name sometimes
seen as †Scaumenaciidae]

Family †Fleurantiidae Moy-Thomas 1939

‡Fleurantiidae Moy-Thomas 1939: 100 (family) †Fleurantia Graham-Smith & Westoll 1937 [stem
corrected to Fleuran- by Berg 1940: 385, confirmed by Fowler 1971a: 210]

Order †Ctenodontiformes
Family †Sagenodontidae Jaekel 1911

†Sagenodontidae Jaekel 1911: 78 (family) †Sagenodus Owen 1867

Family †Ctenodontidae Traquair 1890

†Ctenodonti Pander 1856: 79 (family) †Ctenodus Agassiz 1838 [also seen as †Ctenodipterini
Pander 1857: 1; no stem of the type genus, not available, Art. 11.7.1.1]

†Ctenodontéiens Eichwald 1860: 1534 (family) †Ctenodus Agassiz 1838 [published not in
latinized form before 1900, not available, Art. 11.7.2]

†Ctenododipteridae Günther 1880: 359 (family) ? †Ctenodus Agassiz 1838 [no stem of the type
genus, not available, Art. 11.7.1.1]

†Ctenodontidae Traquair 1890: 15 (family) †Ctenodus Agassiz 1838 [family name sometimes
seen as †Ctenodidae; not †Ctenodontidae Wohrmann 1893 in Mollusca]

Family †Conchopomatidae Berg 1940, spelling in prevailing recent practice

†Conchopomidae Berg 1940: 386 (family) †Conchopoma Kner 1868 [family name also seen as
†Conchopomatidae]
Family †Ganopristodidae Fowler 1958
   †Uronemidae Traquair 1891: 387 (family) †Uronemus Agassiz 1844 (type genus preoccupied by Uronemus Rafinesque 1815 in Vermes; invalid, Art. 39)
   †Ganopristodidae Fowler 1958: 3 (family) †Ganopristodus Traquair 1881

Order Ceratodontiformes
Family Lepidosirenidae Bonaparte 1841
Family Protopteridae Peters 1855
Family †Gnathorhizidae Olson 1951
   †Gnathorhizidae Olson 1951: 180 (family) †Gnathorhiza Cope 1883 [name only, but used as valid by Miles 1977: 308 and by Smith 1979: 32 Art. 13.2.1]
Family Neoceratodontidae Schultz 1948
Family †Ceratodontidae Günther 1871
   †Ceratodontina Günther 1871: 554 (subfamily) †Ceratodus Agassiz 1838 [family name sometimes seen as †Ceratodidae]
   †Protoceratodontidae Miles 1977: 308 (family) †Ceratodus sturii [no valid type genus, not available, Art. 11.7.1.1]
   †Arganodontidae Martin 1982a: 414 (family) †Arganodus [also in Martin 1982b]
   †Asiatoceratodontidae Castro, Toledo, de Sousa & Medeiros 2004: 264 (family) †Asiatoceratodus Vorobyeva 1967 [not published according to the rules, not available; the name †Asiatoceratodontidae is, contrary to numerous citations, not mentioned in Vorobyeva 1967]
   †Asiatoceratodontidae Agnolin 2010: 189 (family) †Asiatoceratodus Vorobyeva 1967 [not published according to the rules, not available]
   †Asiatoceratodontidae Nelson, Grande & Wilson 2016: 109 (family) †Asiatoceratodus Vorobyeva 1967 [not published according to the rules, not available]
Family †Psychoceratodontidae Martin 1982
   †Psychoceratodontidae Martin 1982a: 414 (family) †Psychoceratodus Jaekel 1926 [also in Martin 1982b]

Infraclass †RHIZODONTIDA
Order †Rhizodontiformes
Family †Rhizodontidae Traquair 1881
   †Rhizodontidae Traquair 1881a: 18 (family) †Rhizodus Owen 1840

Infraclass †OSTEOLEPIDIDA
Order †Osteolepidiformes

Incerta sedis:
   †Diplopteroidei Bleeker 1859: XVII (family) †Diplopterus Agassiz 1835 [type genus preoccupied by Diplopterus Boie 1826 in Aves; invalid, Art. 39]
   †Glyptolaemini Traquair 1888b: 515 (subfamily) †Glyptolaemus Huxley 1859 [type genus inferred from the stem, Art. 11.7.1.1]
   †Lamproptolepididae Vorobyeva 1975: 54 (family) †Lamproptolepis Vorobyeva 1977 [no valid type genus, not available, Art. 11.7.1.1]
   †Lamproptolepididae Young, Long & Ritchie 1992: 61 (family) †Lamproptolepis Vorobyeva 1977 [name only, published after 1960, not available, Art. 13.1.1]
   †Megistolepidinae Vorobyeva 1975: 54 (subfamily) †Megistolepis Obruchev 1955 [name only, published after 1960, not available, Art. 13.1.1]
   †Pleiopteri Fitzinger 1873: 52 (family) †Pleiopterus Agassiz 1835 [also as a new family, †Pleiopteridae, in Whitley 1951: 67]
†Rhizodopsidae Berg 1940: 389 (family) †Rhizodopsis Young 1866 [sometimes seen as †Rhizodopidae or †Rhizodopsididae]
†Rhombodipteridae Lütken 1871: 334 (family) [no stem of the type genus, not available, Art. 11.7.1.1]
†Sauridipteridae M’Coy 1855: 585 (family) †Diploterax M’Coy 1855 [no stem of the type genus, not available, Art. 11.7.1.1]
†Sauridipteridae Günther 1880: 365 (family) [no stem of the type genus, not available, Art. 11.7.1.1]
†Thysanolepidinae Vorobyea 1975: 54 (subfamily) †Thysanolepis Vorobyea 1977 [no valid type genus, not available, Art. 11.7.1.1]
†Thysanolepididae Young, Long & Ritchie 1992: 61 (family) †Thysanolepis Vorobyea 1977 [name only, published after 1960, not available, Art. 13.1.1]
†Vilulichthyinae Vorobyea 1977a: 165 (subfamily) †Vilulichthys Vorobyea 1977

Suborder †Osteolepidoidei
Family †Thursiidae Borgen & Nakrem 2016
†Thursius Traquair 1888
Family †Osteolepididae Cope 1887, spelling in prevailing recent practice
†Osteolepididae Cope 1887: 1018 (family) †Osteolepis Valenciennes 1829 [type genus inferred from the stem, Art. 11.7.1.1; family name also seen as †Osteolepididae]
†Glyptopomiidae Goodrich 1909: 285 (family) †Glyptopomus Agassiz 1844
Family †Megalichthyidae Hay 1902
†Megalichthyidae Hay 1902: 359 (family) †Megalichthys Agassiz 1835
†Ectosteorchidiidae Berg 1940: 389 (family) †Ectosteorchaxis Cope 1880 [also as a new subfamily, †Ectosteorchini, in Borgen & Nakrem 2016: 412]
†Parabatrachidae Berg 1955: 92 (family) †Parabatrachus Owen 1853
†Askerichthyinae Borgen & Nakrem 2016: 419 (subfamily) †Askerichthys Borgen & Nakrem 2016

Suborder †Cyclolepidoidei
†Eopodoidea Borgen & Nakrem 2016: 420 (superfamily) [no stem of the type genus, not available, Art. 11.7.1.1]
†Parapodoidea Borgen & Nakrem 2016: 463 (superfamily) [no stem of the type genus, not available, Art. 11.7.1.1]
Family †Gyroptychiidae Berg 1955
†Gyroptychiidae Berg 1955: 90 (family) †Gyroptychius M’Coy 1848
Family †Panderichthyidae Vorobyea 1968, name in prevailing recent practice
†Panderichthyidae Vorobyea in Vorobyea & Lyarskaya 1968: 74 (family) †Panderichthys Gross 1941 [Borgen & Nakrem 2016: 3 use the name †Panderichthyidae for the family, because “the name is in common use and is more informative”. Furthermore, the genus †Elpistostege could be a tetrapod.]
Family †Chrysolepididae Borgen & Nakrem 2016
†Chrysolepididae Borgen & Nakrem 2016: 438 (family) †Chrysolepis Lebedev 1983
Family †Tristichopteridae Cope 1887
†Tristichopteridae Cope 1887: 1018 (family) †Tristichopterus Egerton 1861 [type genus inferred from the stem, Art. 11.7.1.1]
†Eustenopteridae Berg 1955: 94 (family) †Eustenopteron Whiteaves 1881 [Borgen & Nakrem 2016: 4 prefer the family name †Eustenopteridae being ‘more convenient’ and by referring to the first (!) edition of the Code]

†Platycephalichthyinae Vorobyeva 1975: 54 (subfamily) †Platycephalichthys Vorobyeva 1959

†Notorhizodontidae Davis 1994: 70 (family) †Notorhizodon Young, Long & Ritchie 1992 [name only, published after 1960, not available, Art. 13.1.1]

†Mandageriinae Young 2008: 321 (subfamily) †Mandageria Johanson & Ahlberg 1997

Family †Medoeviidae Borgen & Nakrem 2016

†Medoevididae [†Medoeviidae] Borgen & Nakrem 2016: 463 (family) †Medoevia Lebedev 1995 [although family-group names proposed after 1999 cannot be corrected (Arts 29.3.3 and 29.4), I think a simple typing error can explain the incorrectly spelled family-group name; the correct stem is deemed to be Medoevi-]

Family †Canowindridae Young, Long & Ritchie 1992

†Canowindridae Young, Long & Ritchie 1992: 9 (family) †Canowindra Thomson 1973

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145


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**Index** [Recent fish families in bold]

<table>
<thead>
<tr>
<th>Family</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acanthaspidae</td>
<td>29</td>
</tr>
<tr>
<td>Acanthodermidae</td>
<td>83</td>
</tr>
<tr>
<td>Acanthodidae</td>
<td>33</td>
</tr>
<tr>
<td>Acanthodiformes</td>
<td>33</td>
</tr>
<tr>
<td>Acanthoeidae</td>
<td>33</td>
</tr>
<tr>
<td>Acanthonemidae</td>
<td>81</td>
</tr>
<tr>
<td>Acanthopsides</td>
<td>65</td>
</tr>
<tr>
<td>Acanthorhinidae</td>
<td>39</td>
</tr>
<tr>
<td><strong>Acanthuridae</strong></td>
<td>81</td>
</tr>
<tr>
<td>Acentrophoridae</td>
<td>56</td>
</tr>
<tr>
<td>Aceraspidae</td>
<td>22</td>
</tr>
<tr>
<td>Acestrorhynchidae</td>
<td>66</td>
</tr>
<tr>
<td>Achanarellida</td>
<td>19</td>
</tr>
<tr>
<td>Aceilognathidae</td>
<td>65</td>
</tr>
<tr>
<td>Achiridae</td>
<td>78</td>
</tr>
<tr>
<td>Achiropetidae</td>
<td>78</td>
</tr>
<tr>
<td>Acipenserida</td>
<td>52</td>
</tr>
<tr>
<td>Acritolepidae</td>
<td>33</td>
</tr>
<tr>
<td>Acrodini</td>
<td>40</td>
</tr>
<tr>
<td>Acrodontidae</td>
<td>40</td>
</tr>
<tr>
<td>Acrolepidae</td>
<td>46</td>
</tr>
<tr>
<td>Acrolepidae</td>
<td>46</td>
</tr>
<tr>
<td>Acropholidida</td>
<td>46</td>
</tr>
<tr>
<td>Acropomatidae</td>
<td>84</td>
</tr>
<tr>
<td>Acrotomaspidae</td>
<td>24</td>
</tr>
<tr>
<td>Actinolepidae</td>
<td>30</td>
</tr>
<tr>
<td>Actinolepididae</td>
<td>30</td>
</tr>
<tr>
<td><strong>Aculeolidae</strong></td>
<td>43</td>
</tr>
<tr>
<td><strong>Adrianichthyidae</strong></td>
<td>79</td>
</tr>
<tr>
<td>Adeuellae</td>
<td>51, 52</td>
</tr>
<tr>
<td>Aesopichthyidae</td>
<td>49</td>
</tr>
<tr>
<td>Aestiaspidae</td>
<td>23</td>
</tr>
<tr>
<td>Aethoedontidae</td>
<td>55</td>
</tr>
<tr>
<td>Aetheolepidae</td>
<td>58</td>
</tr>
<tr>
<td>Aetheolepididae</td>
<td>58</td>
</tr>
<tr>
<td><strong>Aetobatidae</strong></td>
<td>45</td>
</tr>
<tr>
<td>Agaleidae</td>
<td>40</td>
</tr>
<tr>
<td>Agassizodontidae</td>
<td>37</td>
</tr>
<tr>
<td>Aggeraspidae</td>
<td>30</td>
</tr>
<tr>
<td>Aglyptorhynchinae</td>
<td>77</td>
</tr>
<tr>
<td>Agonidae</td>
<td>86</td>
</tr>
<tr>
<td>Allidae</td>
<td>67</td>
</tr>
<tr>
<td>Aipichthyidae</td>
<td>71</td>
</tr>
<tr>
<td>Aipichthyoididae</td>
<td>71</td>
</tr>
<tr>
<td>Akysidae</td>
<td>67</td>
</tr>
<tr>
<td>Albulidae</td>
<td>61</td>
</tr>
<tr>
<td>Alepisauridae</td>
<td>70</td>
</tr>
<tr>
<td>Alepocephalidae</td>
<td>64</td>
</tr>
<tr>
<td>Alestidae</td>
<td>66</td>
</tr>
<tr>
<td>Alloberyicinae</td>
<td>74</td>
</tr>
<tr>
<td>Allothrissoidea</td>
<td>60</td>
</tr>
<tr>
<td>Alopiidae</td>
<td>42</td>
</tr>
<tr>
<td>Altholepididae</td>
<td>34</td>
</tr>
<tr>
<td>Amarsipidae</td>
<td>74</td>
</tr>
<tr>
<td>Ambassidae</td>
<td>78</td>
</tr>
<tr>
<td><strong>Amblycpiptidae</strong></td>
<td>67</td>
</tr>
<tr>
<td>Amblyopsidae</td>
<td>72</td>
</tr>
<tr>
<td>Amblypteriida</td>
<td>49</td>
</tr>
<tr>
<td>Americaclididae</td>
<td>18</td>
</tr>
<tr>
<td>Amiaidae</td>
<td>57</td>
</tr>
<tr>
<td>Amiopsinae</td>
<td>57</td>
</tr>
<tr>
<td>Ammodytidae</td>
<td>81</td>
</tr>
<tr>
<td>Amphiastididae</td>
<td>17</td>
</tr>
<tr>
<td>Amplicentrididae</td>
<td>51</td>
</tr>
<tr>
<td><strong>Amphiiidae</strong></td>
<td>67</td>
</tr>
<tr>
<td>Amphistidae</td>
<td>78</td>
</tr>
<tr>
<td>Anabantidae</td>
<td>76</td>
</tr>
<tr>
<td>Anablepidae</td>
<td>80</td>
</tr>
<tr>
<td>Anacanthobatidae</td>
<td>45</td>
</tr>
<tr>
<td>Anachronistidae</td>
<td>40</td>
</tr>
<tr>
<td>Anacoracidae</td>
<td>42</td>
</tr>
<tr>
<td>Anaethalionidae</td>
<td>61</td>
</tr>
<tr>
<td>Anarhichadidae</td>
<td>86</td>
</tr>
<tr>
<td><strong>Anchiiidae</strong></td>
<td>67</td>
</tr>
<tr>
<td>Anchipteraspididae</td>
<td>18</td>
</tr>
<tr>
<td>Anchipteraspidsinae</td>
<td>18</td>
</tr>
<tr>
<td>Ancoystylidae</td>
<td>65</td>
</tr>
<tr>
<td>Andichthyidae</td>
<td>66</td>
</tr>
<tr>
<td>Andreolepidae</td>
<td>46</td>
</tr>
<tr>
<td>Anencheilinii</td>
<td>75</td>
</tr>
<tr>
<td>Angaraeididae</td>
<td>21</td>
</tr>
<tr>
<td>Angaraelepidae</td>
<td>21</td>
</tr>
<tr>
<td>Angaraaspidae</td>
<td>17</td>
</tr>
<tr>
<td>Anglaspididae</td>
<td>18</td>
</tr>
<tr>
<td>Anguillavidae</td>
<td>61</td>
</tr>
<tr>
<td><strong>Anguillidae</strong></td>
<td>62</td>
</tr>
<tr>
<td>Anguilloidae</td>
<td>62</td>
</tr>
<tr>
<td>Angustidontidae</td>
<td>15</td>
</tr>
<tr>
<td>Ankylophoridae</td>
<td>59</td>
</tr>
<tr>
<td>Anommiidae</td>
<td>60</td>
</tr>
<tr>
<td>Anomalopidae</td>
<td>73</td>
</tr>
<tr>
<td>Anomotodontidae</td>
<td>42</td>
</tr>
<tr>
<td>Anoplogastridae</td>
<td>73</td>
</tr>
<tr>
<td>Anoplopomatidae</td>
<td>86</td>
</tr>
<tr>
<td>Anostomidae</td>
<td>66</td>
</tr>
</tbody>
</table>

149
<table>
<thead>
<tr>
<th>Family</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antarctaspidae</td>
<td>29</td>
</tr>
<tr>
<td>Antarctaspidae</td>
<td>29</td>
</tr>
<tr>
<td>Antarctilamnidae</td>
<td>35</td>
</tr>
<tr>
<td>Antennariidae</td>
<td>82</td>
</tr>
<tr>
<td>Apalolepididae</td>
<td>21</td>
</tr>
<tr>
<td>Apatopholidae</td>
<td>69</td>
</tr>
<tr>
<td>Aphaniidae</td>
<td>79</td>
</tr>
<tr>
<td>Aphataspididae</td>
<td>17</td>
</tr>
<tr>
<td>Aphnelepidae</td>
<td>58</td>
</tr>
<tr>
<td>Aphredoderidae</td>
<td>72</td>
</tr>
<tr>
<td>Apistidae</td>
<td>85</td>
</tr>
<tr>
<td>Aploactinidae</td>
<td>85</td>
</tr>
<tr>
<td>Aplocheilidae</td>
<td>79</td>
</tr>
<tr>
<td>Aplodactylidae</td>
<td>84</td>
</tr>
<tr>
<td>Apogonidae</td>
<td>76</td>
</tr>
<tr>
<td>Apsopeclidae</td>
<td>60</td>
</tr>
<tr>
<td>Apterontidae</td>
<td>66</td>
</tr>
<tr>
<td>Apulichthyidae</td>
<td>65</td>
</tr>
<tr>
<td>Aracanidae</td>
<td>83</td>
</tr>
<tr>
<td>Arambourgellidae</td>
<td>74</td>
</tr>
<tr>
<td>Arandaspidae</td>
<td>16</td>
</tr>
<tr>
<td>Araripichthyidae</td>
<td>61</td>
</tr>
<tr>
<td>Archaeinae</td>
<td>77</td>
</tr>
<tr>
<td>Archaeobatidae</td>
<td>44</td>
</tr>
<tr>
<td>Archaeolamnidae</td>
<td>42</td>
</tr>
<tr>
<td>Archiepomidae</td>
<td>58</td>
</tr>
<tr>
<td>Archaeozeidae</td>
<td>72</td>
</tr>
<tr>
<td>Archipelepidae</td>
<td>20</td>
</tr>
<tr>
<td>Arcaspididae</td>
<td>30</td>
</tr>
<tr>
<td>Arctolepidae</td>
<td>30</td>
</tr>
<tr>
<td>Arctolepididae</td>
<td>30</td>
</tr>
<tr>
<td>Arganodontidae</td>
<td>90</td>
</tr>
<tr>
<td>Argentinidae</td>
<td>68</td>
</tr>
<tr>
<td>Arhynchobatidae</td>
<td>45</td>
</tr>
<tr>
<td>Ariaspidae</td>
<td>16</td>
</tr>
<tr>
<td>Ariidae</td>
<td>67</td>
</tr>
<tr>
<td>Ariommatidae</td>
<td>74</td>
</tr>
<tr>
<td>Armigatidae</td>
<td>64</td>
</tr>
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Parasynchthidea ..............................................56  Phebrodonta ......................................................35
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</table>

Ptychocoracidae          | 42   |
Ptychodontidae            | 40   |
Ptychodontinae            | 40   |
Ptycholepididae           | 51   |
Ptycholepididae           | 51   |
Ptychotrygonidae          | 45   |
Ptyctodontidae            | 29   |
Pycnacanthidae            | 88   |
Pycnodontae               | 53   |
Pycnodonotes              | 53   |
Pycnodontidae             | 53   |
Pycnosteidae              | 19   |
Pycnostereididae          | 71   |
Pygaiidae                 | 77   |
Pygopteri                 | 48   |
Pygopteridae              | 48   |

**Q**

Qingmenaspididae          | 25   |
Quaesitoberycidae         | 73   |
Quasimullidae             | 80   |
Quasipetalichthyidae      | 29   |
Qujinolepididae           | 27   |

**R**

Rachycentridae            | 77   |
Radiicephalidae           | 71   |
Radotinidae               | 26   |
Rajidae                   | 45   |
Ramsaasalepididae         | 20   |
Ranicipitidae             | 72   |
Raphiosauridae            | 60   |
Rebellatricidae           | 87   |
Redfieldiidae             | 50   |
Regalecidae               | 71   |
Remigolepidae             | 27   |
Remigolepididae           | 27   |
Repropidae                | 81   |
Retropinnidae             | 69   |
Rhabdodermidae            | 87   |
Rhabdolepididae           | 48, 49 |
Rhaichiosteidae           | 31   |
Rhadamantidae             | 39   |
Rhadinichthyidae          | 49   |
Rhamphexocoetinae         | 79   |
Rhamphichthyidae          | 66   |
Rhamphocottidae           | 86   |
Rhamphognathidae          | 79   |
Rhamphosidae              | 75   |
Rharbichthinae            | 70   |

163
<table>
<thead>
<tr>
<th>Family</th>
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<tbody>
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