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Abstract

The current classification of the beetle series Staphyliniformia is discussed, and a classification is presented that includes 455 taxa above the genus level (ranging in rank from subtribe through superfamily). This classification is used as the framework for a catalog of earliest use and synonyms of the valid names of these taxa, with explanatory discussions as needed. The main provisions of the International Code of Zoological Nomenclature relating to family-group names are reviewed. Application of the Code to such names in Staphyliniformia requires changes (summarized in a table) in about 60 commonly used names. A third of these needed changes have already been pointed out and implemented by others, but 39 are first noted here, required by priority (20), homonymy (2), homonymy of type genus (6), or incorrect stem formation (11, including unjustified emendations).

The most significant of the changes adopted here, grouped by family, are Hydrophilidae: Acidocerina (for Helocharina); Leiodidae: Leptodirini (for Bathysciini), Platypsyllinae (for Leptininae), Sogdini (for Hydnobiini); Pselaphidae: Iniocyphini (for Tanypleurini), Natypleurina, **nom. nov.** (for Tanypleurina); Ptiliidae: Cephaloplectinae (for Limulodinae); Scydmaenidae: Cyrtoscydmini (for Euconnini, Neuraphini, or Stenichnini), Mastiginae (for Clidicinae); Staphylinidae: Athetini (for Callicerini), Clavilispinina, **nom. nov.** (for Paralispinina), Dorylophilini (for Deremini), Geostibina (for Callicerina), Glyptomina, **nom. nov.** (for Calocerina), Homalotini (for Bolitocharini or Gyrophaenini), Hypocyphtini (for Oligotini), Hyptiomina (for Holisina), Leptanillophilini (for Mimecitonini), Lomechusini (for Myrmedoniini or Zyrasini), Mimanommatini (for Dorylomimini), Mycetoporini (for Bolitobiini), Paglini, **nom. nov.** (for Pachyglossini), Solieriinae, **nom. nov.** (for Physognathinae), Strigotina (for Acrotonina), and Thoracophorini (for Lispinini). A few required changes are not implemented for reasons discussed in the text, which include pending applications to the ICZN.

Ten cases apparently involving homonymy of family-group names (but not their type genera) were discovered and are discussed. Those in which the Staphyliniformia name is junior are Leiodidae: Triarthrini Jeannel, 1962 (not Ulrich, 1930, Trilobita); Pselaphidae: Metopiini Raffray, 1904 (not Foerster, 1868, Hymenoptera; senior to Townsend, 1908, Diptera); Staphylinidae: Callicerini Jacobson, 1908 (not Rondani, 1856, Diptera), Cyphini Lohse, 1974 [nom. nud.?] (not Leng, 1920, Coleoptera: Curculionidae), and Toxoderina Bernhauer & Schubert, 1911 (not Saussure, 1869, Mantodea). Those in which the Staphyliniformia name is senior are Hydrophilidae: Helocharina Orchymont, 1919 (predates Metcalf, 1965, Homoptera [nom. nud.?]), Hydrobiini Mulsant, 1844 (predates Troschel, 1857, Mollusca); Staphylinidae: Cryptobiina Casey, 1905 (predates Hollande, 1952, Protozoa [nom. nud.?]), Steninae MacLeay, 1825 (predates Fraser & Purves, 1960, Mammalia [nom. nud.?]), and Tachininae Fleming, 1821 (predates Robineau-Desvoidy, 1830, Diptera).

The name Empelinae, **subfam. nov.** (type genus, *Empelus* LeConte; Staphylinidae), is made available for the first time; diagnoses are provided for this and for Solieriinae. In Pselaphidae,

the replacement name *Natypleurus*, **nom. nov.**, is proposed for the genus *Tanypleurus* Raffray (not Steenstrup & Luetken).

Many common family-group names in Coleoptera have been attributed to "Leach, 1817"; evidence is presented that they should actually be treated as "Fleming, 1821." Relative priority of four works published by Erichson and by Heer in 1839 is discussed.

Introduction

The beetle series Staphyliniformia is an enormous group including over 57,000 named species. This is about a sixth of the order Coleoptera and nearly 4% of named living organisms. These species are currently placed in nearly 500 named groups above the generic level, ranging in rank from subtribe to superfamily.

Existing classifications of this group are in many cases widely divergent from one another, and are inadequate or unsatisfactory in many respects. A fundamental problem is the lack of a clear philosophical basis for many of these classifications. Authors of even the most novel classifications have provided little explanation or justification for their systems. There is growing agreement that classifications should reflect evolution, using demonstrably monophyletic groups and reflecting a firm understanding of phylogenetic relationships. With some exceptions, existing classifications have evolved without consideration of these factors, and many probably do not represent phylogenetic relationships within their groups. Even when inferred phylogeny is used in constructing classifications, there is often wide disagreement among different authors on the conclusions and their application to a classification. Progress is being made steadily in this area for some included groups, but it is not yet possible to propose a comprehensive classification of Staphyliniformia based on thorough phylogenetic analysis.

Two other limitations of existing classifications of Staphyliniformia, and of phylogenetic studies as well, are more easily dealt with now. One is incompleteness: the last complete worldwide classification is well over half a century old (*Coleopterorum Catalogus*, 1910–1934; see "Methods" for full list). The intervening decades have seen a tremendous amount of taxonomic activity. Most works during this period have, however, included only higher taxa (i.e., down to family or subfamily level) or have been regional in scope, with many "exotic" groups not mentioned or placed and the impact of studies from other regions overlooked or not fully considered. A second limitation has been inadequate attention to correct use of family-group names by many authors, due to lack of information on the names themselves or misconceptions about the rules governing use of such names. The purpose of the present work is to help overcome these limitations by presenting (1) an updated worldwide classification of Staphyliniformia above the generic level, and (2) a review of family-group nomenclature to help determine the correct names to apply to suprageneric taxa. We hope that providing these necessary tools will facilitate progress toward a new and phylogenetically based classification of Staphyliniformia as well as stability in use of names. In addition, the present paper will serve as a contribution toward the preparation of an official register of family-group names as recently discussed by the International Commission on Zoological Nomenclature (ICZN, 1990c; Savage, 1990).

Family-Group Names and the Code

Determining the correct names to be applied to family-group taxa is not a simple task, as others have noted (e.g., Madge, 1989; Michener, 1986; Nilsson et al., 1989; Silfverberg, 1990; Watt, 1975). The use of family-group names in zoology was not formally regulated to the degree that genus- and species-group names were until the appearance of the modern International Code of Zoological Nomenclature (ICZN, 1961c, 1985a, hereafter referred to as "the Code," or implied by citation of Article numbers).

Family-group names under the Code are applied to taxa ranked above genus, up to and including superfamily. Each is based on a generic name, or "type genus," rather than on a taxonomic concept. The lack of clear principles guiding choice of names before 1961 resulted in a certain amount of inconsistency and confusion in usage, much of it arising from the confounding of nomenclatural matters and taxonomic concepts in the application of names. Even when citations of earlier usage of a family-group name have been given, they have often referred to the cited author's *concept* of the group (i.e., its scope), rather than to nomenclatural *proposal* (or validation) of a group name; it is usu-

ally impossible to tell from the citation itself which was involved. Also, new names have often been used without being noted as new. Perhaps because of such problems, catalogs such as the *Coleopterorum Catalogus* and cataloging services such as the *Zoological Record* did not (indeed, could not) keep as careful records of family-group names as of generic and specific ones. Hence, these standard references often do not include the earliest use of each family-group name, and some names are omitted.

Since the introduction of formal rules in 1961, zoologists have given increased attention to the issue of correct family-group name usage. Within Staphyliniformia, three families have benefited from recent reviews of this subject in conjunction with study at lower taxonomic levels: Histeridae (Mazur, 1984), Pselaphidae (Newton & Chandler, 1989), and Hydrophilidae (Hansen, 1990). Nomenclatural review of generic names, an essential foundation for determination of correct family-group names, has also been completed for Staphylinidae (Blackwelder, 1952; Tottenham, 1949), European Ptiliidae (Biström & Silfverberg, 1979), and Silphidae and Agyrtidae (Madge, 1980). Within Staphyliniformia, this leaves the generic nomenclature of only Scydmaenidae, Leiodidae (*sensu lato*), Staphylinidae: Scaphidiinae, and non-European Ptiliidae not yet comprehensively reviewed. Problems in the application of generic names that are type genera of family-group names have resulted in several applications to the International Commission on Zoological Nomenclature (hereafter called the ICZN or the Commission) to conserve or clarify those names (ICZN, 1957–1961b, 1969a–1984, 1985b–1991). The existence of this broad foundation of generic-level work and the relative lack of study at the family-group level make an overall review of family-group nomenclature in Staphyliniformia timely.

The basic task in family-group nomenclature is determination of the earliest use (author and date) and availability of individual family-group names. These data are independent of the suprageneric classification in use, and the results of such investigations can be presented clearly in a straightforward alphabetical listing (e.g., Madge, 1989; Nilsson et al., 1989; Watt, 1975). Since the ultimate use of such information, however, is the determination of the correct names to be applied to particular taxa, it seems to us much more useful to present the results in the context of a classification (e.g., Michener, 1986) in order to make the ramifications of the nomenclatural data readily apparent. The correct name to apply to a taxon may be only one of many available names that compete in priority for application to that taxon, and the correct name may change according to different concepts of the composition of the taxon (see "Current Classification of Staphyliniformia," below).

The definitions of two commonly misunderstood nomenclatural terms are worth repeating here. An *available* name is one that meets specified provisions of the Code (Arts. 10–20, and not excluded under Art. 1b). Available names can include currently valid names, junior synonyms, unjustified emendations, etc. A *valid* name is an available name that is the correct name for a taxon at a given point in time. The validity of a name depends on taxonomic judgment (i.e., on the user's concept of a taxon, which determines which available names compete to be the valid name of the taxon) as well as nomenclatural rules, such as priority, that are governed by the Code.

Because misconceptions about the application of family-group names are common, it seems worthwhile to highlight the principles most important in determining correct family-group names. The Code should be consulted for general principles applicable to all scientific names and for additional detail and occasional exceptions to those listed here. The most basic principles are

Each family-group name is based on a nominal type genus, and its placement in a classification follows that of the type genus (Art. 35c). The taxonomic concept adopted by the author or subsequent user of a name is not relevant.

Each name must, when first published, be a noun in the nominative plural based on the generic name then used as valid for a genus contained in that family-group taxon (Art. 11f(i)1), and must end in a latinized suffix (Art. 11f(i)3). The type genus need not be the present valid name for the genus (Art. 40), nor need it be the oldest genus included in the taxon (Art. 64), but it cannot be a junior homonym (Art. 39).

Each name must be formed from the correct stem of the name of its type genus; if not so spelled originally, it must be corrected (keeping its original authorship and date). A name based on a misspelling or an unjustified emendation of a generic name must be corrected so as to use the original spelling of the generic name (Arts. 32c(iii), 35d). The endings -IDAE and -INAE are to be used for family and subfamily, respectively (Art. 29a); -OIDEA and -INI are recommended for

superfamily and tribe, respectively (Recommendation 29A). (Subtribal endings are not mentioned in the Code, but -INA is widely accepted in Coleoptera and is used here.)

All names based on a given type genus are coordinate, i.e., take the author and date of the first available name based on that generic name, regardless of rank (Arts. 36a, 63a).

The Principle of Priority is fundamental to application of family-group names: the correct name for a taxon is the oldest available name based on a genus included in the taxon (Art. 23). In the case of synonymous names of the same date, priority is determined by the first reviser (Art. 24) (not by, e.g., page number if in the same work).

The Principle of Homonymy applies to family-group names: the same name (i.e., based on a given stem) cannot be applied to two or more different taxa (Arts. 52, 53a). A family-group name based on a generic name that is a junior homonym must be rejected (even if no family-group name has yet been based upon the senior homonym) (Art. 39). Nonhomonymous generic names differing only in their endings can, however, have identical stems, potentially giving rise to homonymous family-group names. Cases in which such homonymous family-group names have been proposed must be referred to the Commission for arbitration (Art. 55b).

A name published before 1900 and available except for not being latinized is available with its original authorship and date if it has been subsequently latinized, generally accepted, and attributed to the author of the non-latinized form (Art. 11f(iii)).

A name proposed after 1930 must be accompanied by a description or definition "that purports to differentiate the taxon," or a reference thereto, or must be a replacement name (Art. 13). For names proposed before 1931, no description or definition is required: for example, a family-group name merely formed from the stem of a generic name and used in a published work (even if only in a list or index) is thereby made available (see Art. 12b for this and other validating indications).

If a name was rejected before 1961 because its type genus became recognized as a junior synonym, and the replacement name (based on the senior synonym) became generally accepted, the replacement name is to be maintained. A name thus adopted retains its own author and date, but for purposes of determining priority takes the precedence of the replaced name (of which it is deemed to be a senior synonym) (Art. 40b). If the author and date of the replacement name are cited, they should be given as: author, date of replacement name (date of replaced name) (Recommendation 40A). After 1960, synonymy of the type genus has no effect on the family-group name based on it.

The above discussion reflects the provisions of the current Code (ICZN, 1985a). At a July 1990 meeting (ICZN, 1990c; Savage, 1990), the ICZN began to consider fundamental changes to the Code, two of which would have important implications for determination of some family-group names in Staphyliniformia. The first of these changes "will severely constrain the strict application of priority by giving heaviest weight to the criterion of current usage as the determinant for establishing the validity of names" (Savage, 1990). One option discussed was automatic rejection (without application to the ICZN) of a forgotten senior synonym when a junior name has been in general use; such a rule would affect about half of the priority-based changes implemented here. The second change involves determination of correct spelling of names, which would be "established by current usage rather than Latin grammar" (Savage, 1990); 11 of the name corrections made here apparently would not be required if the proposed new rules were now in effect.

We learned of the proposed changes to the Code after completing our manuscript. We are certainly sympathetic with the overall objective of the changes, namely improving the stability and ease of application of nomenclature, and with the general thrust of the proposals (ICZN, 1990c; Savage, 1990). We can see no alternative, however, to applying the current Code here, because it represents the rules in effect now and for the immediate future. Furthermore, many details of the proposed changes are not yet formulated (or at least circulated) and, in any case, the final provisions of a new edition of the Code could be substantially different from those now proposed, after the discussion by zoologists that is part of the constitutional procedure for modifying the Code.

Methods

We began the search for earliest use of particular family-group names with the most recent world

catalog, at or above the species level, for each family. With the exceptions of Histeridae (Mazur, 1984), Pselaphidae (Newton & Chandler, 1989), and Hydrophilidae (*sensu lato*) (Hansen, 1990), this was the relevant volumes of the *Coleopterorum Catalogus*, which were completed for all Staphyliniformia between 1910 and 1934 (Bernhauer & Schubert, 1910–1916; Bernhauer & Scheerpeltz, 1926; Bickhardt, 1910; Csiki, 1910a,b, 1911, 1919; Hatch, 1928, 1929; Hetschko, 1926a,b; Jeannel, 1914; Knisch, 1924; Raffray, 1911; Scheerpeltz, 1933, 1934; Schenkling, 1931a,b; Zaitzev, 1910). We also consulted the *Genera Insectorum* for the relatively few groups treated in that series (Bickhardt, 1916, 1917, 1918; Desneux, 1906; Fenyes, 1918, 1920, 1921b; Gardner, 1935; Raffray, 1908). We searched the *Zoological Record* through Volume 127 (1990/91) for names described in years subsequent to the catalogs mentioned above (but found that family-group names were not consistently cited there until about the 1960s). Other sources of special value were the comprehensive but little-known list of insect family-group names in Handlirsch (1925), the complete list of pre-1816 Coleoptera family-group names of Watt (1975), and the catalogs of Agassiz (1846, 1847) and Lucas (1920).

We examined all works cited in the above sources as apparent first uses of particular family-group names for both those names and others included in Staphyliniformia. In addition, we scanned hundreds of revisions, older or regional catalogs and checklists, and general handbooks and identification guides for additional names or earlier citations. With the two exceptions indicated, we have seen all the works listed in "Literature Cited." We included literature available to us through January 1992 in this survey.

We constructed a computerized database of all names, including exact original spelling, rank, type genus, author/year/page reference, and present taxonomic position in the classification used here (see "Current Classification of Staphyliniformia," below). We constructed a second database containing the full references for all family-group names, including exact publication dates as far as we could determine them.

We checked the status of type genera in recent reviews of names in the genus-group for staphyliniform families (Biström & Silfverberg, 1979; Blackwelder, 1952; Hansen, 1990; Madge, 1980; Mazur, 1984; Newton & Chandler, 1989; Tottenham, 1949). We also checked standard sources (Neave, 1939, 1940, 1950; Edwards & Hopwood, 1966; Edwards & Vevers, 1975; *Zoological Record* for 1965 and later) for homonymy of the names of type genera and for potential homonymy of family-group names based on distinct generic names with identical stems. We searched Handlirsch (1925) and a variety of recent catalogs for homonymous family-group names in insects and a number of general references for such names in other groups. Finally, we consulted all Opinions of the ICZN concerning genus-group or family-group names in Staphyliniformia (ICZN, 1957–1961b, 1969a–1984, 1985b–1991).

In a further effort to locate overlooked family-group names, as well as solicit comments on the classification used here and on potential problems resulting from implementation of the name changes required by application of the Code, we distributed copies of the first draft of this manuscript to numerous systematists now working on all or part of Staphyliniformia (see "Acknowledgments").

Current Classification of Staphyliniformia

Classifications are often a matter of considerable disagreement among workers on a group. Staphyliniformia is no exception, and there is no universally accepted classification at present. The last complete published worldwide classification for most families appeared in the *Coleopterorum Catalogus* (1910–1934) and is now far out of date. More modern classifications exist for some families, but most are regional in scope or otherwise incomplete. In this work, we have tried to integrate all work published to date to produce a classification representing something of a consensus of systematists at present. A true consensus does not appear to exist on many points, or is difficult for us to determine, so the resulting classification unavoidably includes a certain number of arbitrary decisions. We are aware that no one is likely to be entirely happy with this classification, and in fact we ourselves do not endorse it as the best possible representation of Staphyliniformia at present. Future work will bring better understanding of phylogenetic relationships among the included taxa, with resultant changes in classification. Such needed changes will, of course, change the application of some family-group names (as would some current variations in classification), because they will compete in priority with different sets of names from those shown here.

The composition of the series Staphyliniformia

is reasonably well agreed upon (Crowson, 1981; Lawrence & Newton, 1982; Paulian, 1988). There is, however, no such agreement on the higher classification (superfamily and family) within this group. The families are commonly organized into either two superfamilies, Hydrophiloidea and Staphylinoidea (e.g., Lawrence & Newton, 1982), or three superfamilies, with Histeroidea separated from Hydrophiloidea (e.g., Crowson, 1981; Paulian, 1988). One family (Hydraenidae) is included in either Hydrophiloidea or Staphylinoidea about equally often. Family concepts vary enormously: Hydrophilidae, Leiodidae, and Staphylinidae in the broadest senses are divided into up to 6, 5, and 10 families, respectively, in some classifications. Similar but generally less drastic disagreements may be found at lower taxonomic levels.

The choice of a classification to use in a general review such as this is therefore difficult. We are among those presently involved in trying to clarify phylogenetic relationships and develop a new classification of Staphyliniformia, in our case with special emphasis on Staphylinidae *sensu lato* (AFN, MKT) and Leiodidae *sensu lato* (AFN). With relatively few exceptions (nearly all being tribes or subtribes included in Pselaphidae or the staphylinid subfamily Aleocharinae), one or both of us has examined representatives of all of the family-group taxa currently recognized in Staphyliniformia. In cases of ambiguity or lack of consensus in the ranking and taxonomic concepts that have been applied to particular taxa, our choice has been guided by our knowledge of the taxa in question. However, the present work is not an appropriate vehicle for introducing changes to existing taxonomic concepts or classification, and we refrain from doing so.

Our overall framework is the superfamily and family classification of Lawrence & Newton (1982). At lower taxonomic levels, when we have found no clear consensus in current classifications, we have tended to recognize subfamilies and many tribes in a broad rather than narrow sense. However, at the lowest levels (tribe or subtribe), we have tried to be comprehensive in listing as valid all family-group taxa that have been proposed and not subsequently formally synonymized. Within some groups, such as Leptodirini (Leiodidae; = Bathysciini), Euaesthetinae and Scaphidiinae (both Staphylinidae), and Agyrtidae, fairly elaborate classifications have been proposed that are not now in general use. In other cases, new family-group taxa have been used only once and never mentioned again in the literature. It is often not clear to us if these taxa have been explicitly rejected, simply overlooked, or never restudied. In such cases we have included these taxa as valid groups, in the hope that highlighting their existence will encourage specialists on these groups to deal with them in some way.

Specific comments on the classification we have adopted for each family are presented below, in the sequence in which the families appear in our catalog (alphabetically within each superfamily). A synopsis of the classification used here is presented in Table 1, arranged as in the catalog, subtaxa being listed alphabetically within each taxon.

Hydrophiloidea

Histeridae

The recent worldwide classification of Mazur (1984) is used, except that Hetaeriinae are not divided into tribes (Helava et al., 1985). Yélamos and Ferrer (1988) modified Mazur's classification by dropping all taxa one rank (without adequate justification, in our view).

Hydrophilidae

The worldwide classification of Knisch (1924) is adopted here, except for the removal of Hydraeninae and Limnebiinae to Hydraenidae (e.g., Perkins, 1980) and the addition of Georissidae as a subfamily of Hydrophilidae (Emden, 1956). A few subfamilies of Knisch (1924) have been treated by some later authors (e.g., Crowson, 1955, 1981; Hansen, 1987) as families, and some of his tribes of Hydrophilinae as subfamilies; this treatment has not been universally adopted, however (e.g., Lawrence & Newton, 1982), and is not followed here. Hansen (1990, in prep.) will propose a new classification of this family, but because this is not yet formally published we do not adopt it here. We have, however, made use of data included in Hansen (1990) regarding published family-group names. (See Addendum, p. 83.)

Staphylinoidea

Agyrtidae

Separate family status for this group, generally treated as a subgroup of Silphidae (e.g., Hatch,

1928, 1957; Arnett, 1963, 1985; Madge, 1980), has been advocated recently (Lawrence, 1982; Lawrence & Newton, 1982; Anderson & Peck, 1985; Peck, 1990). Jeannel (1936) placed the genera of this family, along with some extraneous genera, in four tribes, one of which (Necrophilini) is evidently a nomen nudum. The internal organization of the group has not been reviewed recently, and tribes have not been used in works treating the group as a family (Anderson & Peck, 1985; Peck, 1990).

Hydraenidae

The classification proposed by Perkins (1980) as extended by Hansen (1991) is used.

Leiodidae

This family is used here in the broad sense of Crowson (1981), Lawrence & Newton (1982), and Peck (1990) to include groups often placed in up to five separate families (e.g., Jeannel, 1936) or included in the old broad concept of Silphidae (e.g., Jeannel, 1914; Hatch, 1928). The internal organization has not been completely reviewed recently. The classification and ranking of taxa at the subfamilial and tribal levels is adapted from Peck (1973, Cholevinae; 1990, Catopocerinae, Cholevinae, Leiodinae), Wheeler (1984, Leiodinae), Newton (1985, Camiarinae), and Perkovsky (1991, Sogdini). Tribal and subtribal groups within Cholevinae are also adapted in part from Jeannel (1936) and Perreau (1989) except for Leptodirini, which is modified from Guéorguiev (1974, 1976).

Pselaphidae

The classification follows Newton and Chandler (1989) and Coulon (1989), as modified by Besuchet (1987, 1991). This family has recently been formally combined or linked with certain parts of the family Staphylinidae (Naomi, 1985; Thayer, 1987). Inclusion of Pselaphidae in Staphylinidae will require some modification of internal organization of the group, because two "extra" ranks are in use in Pselaphidae (between family and subfamily and between subfamily and tribe). For this reason, and pending more conclusive evidence of its relationships, we maintain Pselaphidae here as a separate family.

Ptiliidae

Seevers and Dybas (1943) advocated removal of the subfamily Cephaloplectinae (as Limulodinae) to form a separate family, but the return of this family to Ptiliidae has been adopted in some recent classifications (Crowson, 1981; Lawrence, 1982; Lawrence & Newton, 1982). The internal organization of the family used here is, except for the addition of Cephaloplectinae, that discussed by Dybas (1976), who indicated the artificial nature of the existing formal groups but did not propose a new system.

Scydmaenidae

The classification of this family has not been recently reviewed at the world level. The internal classification adopted here is compiled from the systematic literature, including Csiki (1919), Arnett (1963), and recent work of Franz (1985, 1989, 1990).

Silphidae

The restricted concept and the classification of Anderson and Peck (1985) and Peck (1990) are used, including the removal of some subfamilies or tribes to form a separate family Agyrtidae (*q.v.*) and the removal of other groups to the families Leiodidae or Staphylinidae (Newton, 1975, 1985; Lawrence & Newton, 1982).

Staphylinidae

There is very wide disagreement on the limits of this family as well as on the composition and ranking of subordinate taxa (e.g., Lohse, 1964; Moore, 1964; Coiffait, 1972; Tikhomirova, 1973; Lawrence & Newton, 1982; Naomi, 1985; Newton & Thayer, 1988). The traditional family Staphylinidae has been broken into 3–10 families by some authors (Coiffait, 1972; Naomi, 1985) but is still recognized in the broad sense by the others cited above. Three relatively small taxa frequently regarded as separate families are treated as staphylinid subfamilies here because strong arguments

TABLE 1. Synopsis of current classification of Staphyliniformia. Subtaxa are listed alphabetically within each taxon.

STAPHYLINIFORMIA Latreille, 1802

HYDROPHILOIDEA Latreille, 1802

HISTERIDAE Gyllenhal, 1808
HISTEROMORPHAE Gyllenhal, 1808
DENDROPHILINAE Reitter, 1909
ANAPLEINI Olexa, 1982
BACANIINI Kryzhanovskij, 1976
DENDROPHILINI Reitter, 1909
PAROMALINI Reitter, 1909
HETAERIINAE Marseul, 1857
HISTERINAE Gyllenhal, 1808
EXOSTERNINI Bickhardt, 1914
HISTERINI Gyllenhal, 1808
HOLOLEPTINI Hope, 1840
OMALODINI Kryzhanovskij, 1972
PLATYSOMATINI Bickhardt, 1914
ONTHOPHILINAE MacLeay, 1819
TRIBALINAE Bickhardt, 1914
SAPRINOMORPHAE Blanchard, 1845
ABRAEINAE MacLeay, 1819
ABRAEINI MacLeay, 1819
ACRITINI Wenzel, 1944
ACRITOMORPHINI Wenzel, 1944
PLEGADERINI Portevin, 1929
TERETRIINI Bickhardt, 1914
CHLAMYDOPSINAE Bickhardt, 1914
NIPONIINAE Fowler, 1912
SAPRININAE Blanchard, 1845
TRYPANAEINAE Marseul, 1857
TRYPETICINAE Bickhardt, 1914

HYDROPHILIDAE Latreille, 1802
EPIMETOPINAE Zaitzev, 1908
GEORISSINAE Laporte, 1840
HELOPHORINAE Leach, 1815
HYDROCHINAE Thomson, 1859
HYDROPHILINAE Latreille, 1802
AMPHIOPINI Kuwert, 1890
BEROSINI Mulsant, 1844
CHAETARTHRIINI Bedel, 1881 (1844)
HYDROBIINI Mulsant, 1844
ACIDOCERINA Zaitzev, 1908
HYDROBIINA Mulsant, 1844
HYDROPHILINI Latreille, 1802
SPERCHEINAE Erichson, 1837
SPHAERIDIINAE Latreille, 1802
CERCYONINI Horn, 1890
MEGASTERNINI Mulsant, 1844
OMICRINI Smetana, 1975
RYGMODINI Orchymont, 1916
SPHAERIDIINI Latreille, 1802

SPHAERITIDAE Shuckard, 1839

SYNTELIIDAE Lewis, 1882

STAPHYLINOIDEA Latreille, 1802

AGYRTIDAE Thomson, 1859
AGYRTINI Thomson, 1859
LYROSOMATINI Horn, 1880
PTEROLOMATINI Thomson, 1862

HYDRAENIDAE Mulsant, 1844
HYDRAENINAE Mulsant, 1844
HYDRAENIDINI Perkins, 1980
HYDRAENINI Mulsant, 1844
HYDRAENINA Mulsant, 1844
LIMNEBIINA Mulsant, 1844
OCHTHEBIINAE Thomson, 1859

LEIODIDAE Fleming, 1821
CAMIARINAE Jeannel, 1911
AGYRTODINI Jeannel, 1936
CAMIARINI Jeannel, 1911
NEOPELATOPINI Jeannel, 1962
CATOPOCERINAE Hatch, 1927 (1880)
CATOPOCERINI Hatch, 1927 (1880)
GLACICAVICOLINI Westcott, 1968
CHOLEVINAE Kirby, 1837
ANEMADINI Hatch, 1928
ANEMADINA Hatch, 1928
EOCATOPINA Jeannel, 1936
NEMADINA Jeannel, 1936
PARACATOPINA Jeannel, 1936
CHOLEVINI Kirby, 1837
CATOPINA Chaudoir, 1845
CHOLEVINA Kirby, 1837
EUCATOPINI Jeannel, 1921
LEPTODIRINI Lacordaire, 1854 (1849)
ANTROHERPONINA Jeannel, 1910
BATHYSCIINA Horn, 1880
BATHYSCIOTINA Guéorguiev, 1974
GHIDINIINA Guéorguiev, 1974
LEPTODIRINA Lacordaire, 1854 (1849)
PHOLEUINA Reitter, 1886
PLATYCHOLEINA Horn, 1880
SPELAEOBATINA Guéorguiev, 1974
ORITOCATOPINI Jeannel, 1936
PTOMAPHAGINI Jeannel, 1911
PTOMAPHAGINA Jeannel, 1911
PTOMAPHAGININA Szymczakowski, 1964
COLONINAE Horn, 1880 (1859)

TABLE 1. *Continued.*

- LEIODINAE Fleming, 1821
  - AGATHIDIINI Westwood, 1838
  - ESTADIINI Portevin, 1914
  - LEIODINI Fleming, 1821
  - PSEUDOLIODINI Portevin, 1926
  - SCOTOCRYPTINI Reitter, 1884
  - SOGDINI Lopatin, 1961
    - SOGDINA Lopatin, 1961
    - TRIARTHRINA Jeannel, 1962
- PLATYPSYLLINAE Ritsema, 1869

PSELAPHIDAE Latreille, 1802

- BRACHYSCELIA Raffray, 1890
  - BATRISINAE Reitter, 1882
    - AMAUROPINI Jeannel, 1948
    - BATRISINI Reitter, 1882
      - AMBICOCERINA Leleup, 1970
      - BATRISINA Reitter, 1882
      - LEUPELIINA Jeannel, 1954
      - STILIPALPINA Jeannel, 1954
    - METOPIASINI Raffray, 1904
  - EUPLECTINAE LeConte, 1861
    - EUPLECTOMORPHI LeConte, 1861
      - EUPLECTINI LeConte, 1861
        - ACETALIINA Jeannel, 1958
        - BIBLOPLECTINA Jeannel, 1959
        - BIBLOPORELLINA Jeannel, 1952
        - BIBLOPORINA Park, 1951
        - CHRESTOMERINA Jeannel, 1962
        - EUPLECTINA LeConte, 1861
        - PANAPHANTINA Jeannel, 1950
        - RHINOSCEPSINA Bowman, 1934
        - TRIMIINA Bowman, 1934
        - TRIMIODYTINA Jeannel, 1964
      - PTERACMINI Jeannel, 1962
      - RAFFRAYIINI Jeannel, 1949
      - TROGASTRINI Jeannel, 1949
        - MITRAMETOPINA Park, 1952
        - PHTEGNOMINA Park, 1951
        - RHEXIINA Park, 1951
        - TRISIGNINA Park & Schuster, 1955
        - TROGASTRINA Jeannel, 1949
    - JUBOMORPHI Raffray, 1904
      - JUBINI Raffray, 1904
  - FARONINAE Reitter, 1882
    - BYTHINOPLECTINI Schaufuss, 1890
      - BYTHINOPLECTINA Schaufuss, 1890
      - PYXIDICERINA Raffray, 1904
    - DIMERINI Raffray, 1908
    - FARONINI Reitter, 1882
    - MAYETIINI Winkler, 1925
  - GONIACERINAE Reitter, 1882 (1872)
    - BRACHYGLUTOMORPHI Raffray, 1904
      - ARNYLLIINI Jeannel, 1952
      - BRACHYGLUTINI Raffray, 1904
        - BARADINA Park, 1951
        - BRACHYGLUTINA Raffray, 1904
        - DECARTHRINA Park, 1951
        - EUPSENIINA Park, 1951
        - HALORABYXINA Leleup, 1969
        - PSELAPTINA Park, 1976
    - GONIACEROMORPHI Reitter, 1882 (1872)
      - BYTHININI Raffray, 1890
        - BYTHININA Raffray, 1890
        - MACHAERITINA Jeannel, 1950
        - XENOBYTHINA Jeannel, 1950
      - GONIACERINI Reitter, 1882 (1872)
      - INIOCYPHINI Park, 1951
        - DALMODINA Park, 1951
        - GLOBINA Jeannel, 1959
        - INIOCYPHINA Park, 1951
        - NATYPLEURINA Newton & Thayer, **nom. nov.**
      - PYGOXYINI Reitter, 1909
      - TRICHONYCHINI Reitter, 1882
      - VALDINI Park, 1953
    - PROTEROMORPHI Jeannel, 1949
      - IMIRINI Jeannel, 1949
      - PROTERINI Jeannel, 1949
    - TYCHOMORPHI Raffray, 1904
      - SPELEOBAMINI Park, 1951
      - TYCHINI Raffray, 1904
- MACROSCELIA Raffray, 1890
  - CLAVIGERINAE Leach, 1815
    - CLAVIGERINI Leach, 1815
    - COLILODIONINI Besuchet, 1991
    - TIRACERINI Besuchet, 1986
  - PSELAPHINAE Latreille, 1802
    - CTENISTOMORPHI Blanchard, 1845
      - ATTAPSENIINI Bruch, 1933
      - CEOPHYLLINI Park, 1951
      - CHALCOPLECTINI Oke, 1925
      - CTENISTINI Blanchard, 1845
      - ODONTALGINI Jeannel, 1949
      - PACHYGASTRODINI Leleup, 1969
      - PETANOPINI Jeannel, 1954
      - SCHISTODACTYLINI Raffray, 1890
      - SOMATIPIONINI Jeannel, 1949
      - TMESIPHORINI Jeannel, 1949
      - TYRINI Reitter, 1882
        - CENTROPHTHALMINA Jeannel, 1949
        - HAMOTINA Park, 1951
        - JANUSCULINA Cerruti, 1970
        - TYRINA Reitter, 1882

TABLE 1. *Continued.*

- CYATHIGERIMORPHI Schaufuss, 1872
  - BARROSELLINI Leleup, 1973
  - CYATHIGERINI Schaufuss, 1872
  - HYBOCEPHALINI Raffray, 1890
  - MACHADOINI Jeannel, 1951
- PSELAPHOMORPHI Latreille, 1802
  - ARHYTODINI Raffray, 1890
  - PHALEPSINI Jeannel, 1949
  - PSELAPHINI Latreille, 1802

PTILIIDAE Erichson, 1845
- ACROTRICHINAE Reitter, 1909 (1856)
- CEPHALOPLECTINAE Sharp, 1883
- NANOSELLINAE Barber, 1924
- PTILIINAE Erichson, 1845

SCYDMAENIDAE Leach, 1815
- MASTIGINAE Fleming, 1821
  - CLIDICINI Casey, 1897
  - LEPTOMASTACINI Casey, 1897
  - MASTIGINI Fleming, 1821
- SCYDMAENINAE Leach, 1815
  - ASCYDMINI Casey, 1897
  - CEPHENNIINI Reitter, 1882
  - CHEVROLATIINI Reitter, 1882
  - CYRTOSCYDMINI Schaufuss, 1889
  - EUTHEIINI Casey, 1897
  - LEPTOSCYDMINI Casey, 1897
  - PLAUMANNIOLINI Costa Lima, 1962
  - SCYDMAENINI Leach, 1815
  - SIAMITINI Franz, 1989
  - SYNDICINI Csiki, 1919

SILPHIDAE Latreille, 1807
- NICROPHORINAE Kirby, 1837
- SILPHINAE Latreille, 1807

STAPHYLINIDAE Latreille, 1802
- ALEOCHARINAE Fleming, 1821
  - ACTOCHARINI Bernhauer & Schubert, 1911
  - ALEOCHARINI Fleming, 1821
    - ALEOCHARINA Fleming, 1821
    - COMPACTOPEDIINA Kistner, 1970
    - HODOXENINA Kistner, 1970
  - ATHETINI Casey, 1910
    - ATHETINA Casey, 1910
    - COPTOTERMOECIINA Kistner & Pasteels, 1970
    - GEOSTIBINA Seevers, 1978
    - MICROCEROXENINA Kistner, 1970
    - NASUTIPHILINA Kistner, 1970
    - SCHISTOGENIINA Fenyes, 1918
    - STRIGOTINA Casey, 1910
    - TAXICERINA Lohse, 1989
    - TERMITOTELINA Kistner, 1970
    - THAMIARAEINA Fenyes, 1921
  - AUTALIINI Thomson, 1859
  - COROTOCINI Fenyes, 1918
    - ABROTELINA Seevers, 1957
    - COROTOCINA Fenyes, 1918
    - EBURNIOGASTRINA Jacobson et al., 1986
    - NASUTITELLINA Jacobson et al., 1986
    - SPHURIDAETHINA Pace, 1988
    - TERMITOCHARINA Seevers, 1957
    - TERMITOCUPIDINA Jacobson et al., 1986
    - TERMITOGASTRINA Bernhauer & Scheerpeltz, 1926
    - TERMITOICEINA Jacobson et al., 1986
    - TERMITOPITHINA Jacobson et al., 1986
    - TERMITOPTOCHINA Fenyes, 1921
    - TIMEPARTHENINA Fenyes, 1921
  - CREMATOXENINI Mann, 1921
  - DEINOPSINI Sharp, 1883
  - DIESTOTINI Mulsant & Rey, 1871
  - DIGLOTTINI Jacobson, 1909
  - DIGRAMMINI Fauvel, 1900
  - DIMONOMERINI Cameron, 1933
  - DORYLOPHILINI Fenyes, 1921
  - DREPANOXENINI Kistner & Watson, 1972
  - ECITOCHARINI Seevers, 1965
  - ECITOGASTRINI Fenyes, 1918
  - EUSTENIAMORPHINI Bernhauer & Scheerpeltz, 1926
  - FALAGRIINI Mulsant & Rey, 1873
  - FELDINI Kistner, 1972
  - GYMNUSINI Heer, 1839
  - HETEROTAXINI Fenyes, 1921
  - HOMALOTINI Heer, 1839
    - BOLITOCHARINA Thomson, 1859
    - DINARDOPSINA Bernhauer & Scheerpeltz, 1926
    - GYROPHAENINA Kraatz, 1856
    - HOMALOTINA Heer, 1839
    - OXYPODININA Fenyes, 1918
    - SILUSINA Fenyes, 1918
  - HOPLANDRIINI Casey, 1910
  - HYGRONOMINI Thomson, 1859
    - HYGRONOMINA Thomson, 1859
    - SAPHOGLOSSINA Bernhauer & Scheerpeltz, 1926
  - HYPOCYPHTINI Laporte, 1835
  - LEPTANILLOPHILINI Fenyes, 1918
    - LABIDOPULLINA Jacobson & Kistner, 1991

TABLE 1. *Continued.*

LEPTANILLOPHILINA Fenyes, 1918
MIMECITINA Bernhauer & Scheerpeltz, 1926
MIMONILLINA Bernhauer & Scheerpeltz, 1926
LEUCOCRASPEDINI Fenyes, 1921
LOMECHUSINI Fleming, 1821
LOMECHUSINA Fleming, 1867
MYRMEDONIINA Thomson, 1867
TERMITONDINA Seevers, 1957
TERMITOZYRINA Seevers, 1957
MASURIINI Cameron, 1939
MESOPORINI Cameron, 1959
MIMANOMMATINI Wasmann, 1912
MYLLAENINI Ganglbauer, 1895
OXYPODINI Thomson, 1859
APHYTOPODINA Bernhauer & Scheerpeltz, 1926
BLEPHARHYMENINA Klimaszewski & Peck, 1986
DINARDINA Mulsant & Rey, 1873
MEOTICINA Seevers, 1978
OCYUSINA Mulsant & Rey, 1874
OXYPODINA Thomson, 1859
PHLOEOPORINA Thomson, 1859
TACHYUSINA Thomson, 1859
PAGLINI Newton & Thayer, **nom. nov.**
PARADOXENUSINI Bruch, 1937
PEDICULOTINI Adám, 1987
PHILOTERMITINI Seevers, 1957
PLACUSINI Mulsant & Rey, 1871
PHYLLODINARDINI Wasmann, 1916
PHYTOSINI Thomson, 1867
PRONOMAEINI Mulsant & Rey, 1873
PSEUDOPERINTHINI Cameron, 1939
PYGOSTENINI Fauvel, 1899
SCEPTOBIINI Seevers, 1978
SKATITOXENINI Kistner & Pasteels, 1969
TERMITODISCINI Wasmann, 1904
TERMITOHOSPITINI Seevers, 1941
HETAIROTERMITINA Seevers, 1957
TERMITOHOSPITINA Seevers, 1941
TERMITONANNINI Fenyes, 1918
PERINTHINA Bernhauer & Scheerpeltz, 1926
TERMITONANNINA Fenyes, 1918
TERMITOPAEDIINI Seevers, 1957
TERMITUSINI Fenyes, 1918
TERMITOSPECTRINA Seevers, 1957
TERMITUSINA Fenyes, 1918
TRICHOPSENIINI LeConte & Horn, 1883
TRILOBITIDEINI Fauvel, 1899
APATETICINAE Fauvel, 1895
APHAENOSTEMMINAE Peyerimhoff, 1914
DASYCERINAE Reitter, 1887
EMPELINAE Newton & Thayer, **subfam. nov.**
EUAESTHETINAE Thomson, 1859
ALZADAESTHETINI Scheerpeltz, 1974
AUSTROESTHETINI Cameron, 1944
EUAESTHETINI Thomson, 1859
FENDERIINI Scheerpeltz, 1974
NORDENSKIOLDIINI Bernhauer & Schubert, 1911
STENAESTHETINI Bernhauer & Schubert, 1911
HABROCERINAE Mulsant & Rey, 1877
LEPTOTYPHLINAE Fauvel, 1874
CEPHALOTYPHLINI Coiffait, 1963
ENTOMOCULIINI Coiffait, 1957
LEPTOTYPHLINI Fauvel, 1874
METROTYPHLINI Coiffait, 1963
NEOTYPHLINI Coiffait, 1963
MEGALOPSIDIINAE Leng, 1920
MICROPEPLINAE Leach, 1815
NEOPHONINAE Fauvel, 1905
OLISTHAERINAE Thomson, 1859
OMALIINAE MacLeay, 1825
ANTHOPHAGINI Thomson, 1859
ARPEDIOMIMINI Cameron, 1917
CORNEOLABIINI Steel, 1950
CORYPHIINI Jacobson, 1908
BOREAPHILINA Zerche, 1990
CORYPHIINA Jacobson, 1908
EUSPHALERINI Hatch, 1957
GLYPHOLOMATINI Jeannel, 1962
HADROGNATHINI Portevin, 1929
MICRALYMMINI Mulsant & Rey, 1880
MICROSILPHINI Crowson, 1950
OMALIINI MacLeay, 1825
TETRADELINI Fauvel, 1904
OSORIINAE Erichson, 1839
ELEUSININI Sharp, 1887
LEPTOCHIRINI Sharp, 1887
OSORIINI Erichson, 1839
OSORIINA Erichson, 1839
PAROSORIINA Bernhauer & Schubert, 1911
THORACOPHORINI Reitter, 1909
CLAVILISPININA Newton & Thayer, **nom. nov.**
GLYPTOMINA Newton & Thayer, **nom. nov.**
LISPININA Bernhauer & Schubert, 1910
THORACOPHORINA Reitter, 1909

TABLE 1. *Continued.*

OXYPORINAE Fleming, 1821
OXYTELINAE Fleming, 1821
  COPROPHILINI Heer, 1839
  OXYTELINI Fleming, 1821
PAEDERINAE Fleming, 1821
  PAEDERINI Fleming, 1821
    ACANTHOGLOSSINA Coiffait, 1982
    ASTENINA Hatch, 1957
    CRYPTOBIINA Casey, 1905
    CYLINDROXYSTINA Bierig, 1943
    DOLICAONINA Casey, 1905
    ECHIASTERINA Casey, 1905
    LATHROBIINA Laporte, 1835
    LITHOCHARINA Casey, 1905
    MEDONINA Casey, 1905
    PAEDERINA Fleming, 1821
    SCOPAEINA Mulsant & Rey, 1878
    STILICINA Casey, 1905
    STILICOPSINA Casey, 1905
  PINOPHILINI Nordmann, 1837
    PINOPHILINA Nordmann, 1837
    PROCIRRINA Bernhauer & Schubert, 1912
PHLOEOCHARINAE Erichson, 1839
PIESTINAE Erichson, 1839
PROTEININAE Erichson, 1839
  ANEPIINI Steel, 1966
  NESONEINI Steel, 1966
  PROTEININI Erichson, 1839
PSEUDOPSINAE Ganglbauer, 1895
SCAPHIDIINAE Latreille, 1807
  CYPARIINI Achard, 1924
  HETEROSCAPHINI Achard, 1914
  SCAPHIDIINI Latreille, 1807
    CERAMBYCISCAPHINA Pic, 1915
    DIATELIINA Achard, 1924
    SCAPHIDIINA Latreille, 1807
    SCAPHIINA Achard, 1924
  SCAPHISOMATINI Casey, 1894
    BAEOCERIDIINA Achard, 1924
    BAEOCERINA Achard, 1924
    SCAPHISOMATINA Casey, 1894
  TOXIDIINI Achard, 1924
SOLIERIINAE Newton & Thayer, **nom. nov.**
STAPHYLININAE Latreille, 1802
  DIOCHINI Casey, 1906
  OTHIINI Thomson, 1859
  PLATYPROSOPINI Lynch, 1884
  STAPHYLININI Latreille, 1802
    AMBLYOPININA Seevers, 1944
    CRASPEDOMERINA Bernhauer, 1911
    HYPTIOMINA Casey, 1906
    PHILONTHINA Kirby, 1837
    QUEDIINA Kraatz, 1857
    STAPHYLININA Latreille, 1802
    TANYGNATHININA Reitter, 1909
    TRIACRINA Bernhauer, 1931
    XANTHOPYGINA Sharp, 1884
  XANTHOLININI Erichson, 1839
STENINAE MacLeay, 1825
TACHYPORINAE MacLeay, 1825
  CORDOBANINI Bernhauer, 1910
  DEROPINI Smetana, 1983
  MEGARTHROPSINI Cameron, 1919
  MYCETOPORINI Thomson, 1859
  SYMMIXINI Bernhauer, 1915
  TACHYPORINI MacLeay, 1825
  VATESINI Seevers, 1958
TRICHOPHYINAE Thomson, 1859
TRIGONURINAE Reiche, 1865

relating them to particular groups of staphylinids have been made recently and they have been formally included in Staphylinidae by some authors: Scaphidiidae (Kasule, 1966; Crowson, 1981; Lawrence & Newton, 1982), Dasyceridae (Thayer, 1987), and Micropeplidae (e.g., Ganglbauer, 1895; Bernhauer & Schubert, 1910; Arnett, 1963, 1985; Lohse, 1964; Campbell, 1968; Thayer, 1987). Pselaphidae have also been combined with a part of Staphylinidae *sensu lato* in one recent study (Naomi, 1985), but the disputed relationships, large size, and complex hierarchical classification of this group have led us to retain pselaphids as a separate family for the time being.

The system of staphylinid subfamilies recognized here, we feel, approaches a consensus among those recent specialists using a relatively broad traditional concept of this family, and differs most from the deliberately artificial system of Moore (1964) used in some North American works (Moore & Legner, 1979; Arnett, 1985). Two monotypic subfamilies, Empelinae and Solieriinae, have appeared in the literature but lack available names; these are treated in a later section. The larger subfamilies with much internal classification, and a few others, are discussed individually below.

ALEOCHARINAE—Used here in the broad sense of Hammond (1975) to include those staphylinids that share a uniquely derived complex aedeagal structure. Some of the included taxa are com-

monly treated as separate subfamilies, notably Trichopseniini (e.g., Pasteels & Kistner, 1971; Seevers, 1978) and Hypocyphtini (e.g., Arnett, 1963; Lohse, 1974). Seevers (1978) made the most comprehensive recent attempt to deal with the internal classification of the subfamily, and we have generally followed his arrangement. However, his classification is problematic in several ways, including the absence of numerous non-Nearctic taxa and the use of many new subtribal names that are nomina nuda. Also, he organized the Nearctic tribes into a new system of supertribes, most of which appear only as headings in a checklist and cannot be applied readily to a world classification; these supertribes are therefore not used here. The tribal and subtribal classification used here is thus based on Seevers (1978) but heavily modified and augmented by reference to Ashe (1991); Fenyes (1918, 1920, 1921a,b); Hammond (1975); numerous works of Kistner, Pasteels, and coworkers (see "Literature Cited," plus others); Jacobson et al. (1986); Jacobson and Kistner (1991); Klimaszewski (1982); Klimaszewski and Peck (1986); Lohse (1974, 1989); Lohse et al. (1990); Muona (1979); Pace (1989); and Seevers (1957, 1965), as well as the *Coleopterorum Catalogus* (Bernhauer & Scheerpeltz, 1926; Scheerpeltz, 1934). A number of subtribes recently proposed by Seevers (1978) and Muona (1979) are nomina nuda. We list these as synonyms under the appropriate tribes; in the case of coordinate names subsequently made available, we list the nomina nuda under the available names. It is possible that we have overlooked additional family-group taxa, as well as some synonymies and changes in rank, in this most difficult and poorly known staphylinid subfamily.

EUAESTHETINAE—After Scheerpeltz (1974). This tribal system, which did not place all known genera, has not been discussed or adopted by others, and needs critical review. Coiffait (1984) characterized a tribe Tamotini by the supposedly 3-segmented tarsi of *Tamotus*, but Puthz (1973) had already shown that *Tamotus* has 4-segmented tarsi and placed it in Euaesthetini.

LEPTOTYPHLINAE—After Coiffait (1963, 1972).

OMALIINAE—No complete recent review; tribes are not universally used and many genera have never been formally placed in tribes. The system of tribes and subtribes used here is adapted from Bernhauer and Schubert (1910), Hatch (1957), Newton (1975, 1985), Portevin (1929), Scheerpeltz (1933), Thayer and Newton (1979), and Zerche (1990). We follow Hatch (1957), Hammond (1971), and Thayer (1985) rather than Arnett (1963, 1985) or Watanabe (1990) in placement of *Brathinus*.

OSORIINAE—Modified from Blackwelder (1942) by elevation to tribal status of Eleusinini (treated as the subfamily Eleusiinae [*sic*] by Watt & McColl, 1982).

OXYTELINAE—After Herman's (1970) world review, as slightly modified by Newton (1982b). In an overlooked work, Scheerpeltz (1944) proposed a new tribe for the new genus *Trigonobregma*; the genus appears to belong in Coprophilini of Herman (1970).

PAEDERINAE—No complete recent review. The classification is adapted from Arnett (1963), Blackwelder (1944), Bordoni (1975), Hatch (1957), and Herman (1981, 1991).

PHLOEOCHARINAE—Concept of Herman (1972); excludes *Olisthaerus* (to subfamily Olisthaerinae; e.g., Lohse, 1964) and *Derops* (to Tachyporinae, Smetana, 1983).

PIESTINAE—Used in a restricted sense, excluding the former tribes Trigonurini and Apateticini (removed to Silphidae by some authors, including Madge, 1980; here treated as staphylinid subfamilies), other tribes or subtribes removed to Osoriinae by Blackwelder (1942), and genera removed to Phloeocharinae (Herman, 1972) and Pseudopsinae (Newton, 1982a).

PROTEININAE—After Steel (1966).

PSEUDOPSINAE—Concept of Newton (1982a).

SCAPHIDIINAE—After Achard (1924), modified by generic placements of Löbl (1971) and later generic synonymies (Löbl, 1977, 1987). Achard's system has not been fully used or reviewed by Löbl or other recent workers on this group.

STAPHYLININAE—Used in the broad sense (Blackwelder, 1943; Kasule, 1966), including Xantholininae of many authors and six subfamilies of Moore (1964). The tribes grouped as Xantholininae by Coiffait (1972) and Smetana (1982) are here treated as tribes of Staphylininae. The remaining staphylinine family-group taxa are in need of comprehensive review; they are treated here as subtribes of Staphylinini (Blackwelder, 1944; Hatch, 1957; Arnett, 1963) rather than separate tribes (many other authors) or in some cases subfamilies (Moore, 1964; Arnett, 1985). Smetana (1984) has made recent changes to this group. Inclusion of *Creophilus* and *Thinopinus* in the subtribe Staphylinina rather than Xanthopygina follows Sharp (1884), Coiffait (1956), Lohse (1964), and Newton (in prep.). If these genera are placed in Xanthopygina, as done by Bernhauer and Schubert (1914), Cameron (1932), Hatch (1957), Coif-

fait (1974), and Outerelo and Gamarra (1985), then Creophilina Kirby, 1837, becomes the valid name of that group.

TACHYPORINAE—After Smetana (1983), with the addition of two tribes (Cordobanini and Symmixini) not discussed in the recent literature. Several tribes formerly included in Tachyporinae have been moved to Aleocharinae (Hammond, 1975).

XANTHOLININAE—See Staphylininae.

Discussion and Summary of Changes

Even before the imposition of formal rules culminating in the current Code (ICZN, 1961c, 1985a), most systematists working on Staphyliniformia generally followed widely accepted (though informal) guidelines for use of family-group names, including the Principle of Priority. This is evident, for example, in the extensive published discussions covering the proper name to apply to Bathysciini (see {5}, below). Thus, full application of the Code to the use of family-group names in this group requires relatively few changes in current usage of the nearly 500 names concerned. Table 2 summarizes all such changes that we and others have found recently and the reasons for them. (The examples of recent implementation given may not include the first use of the change indicated, but we have found no previous implementation of those labeled only "present work.")

In the following catalog we have implemented the current Code, making a deliberate effort to justify existing usage if possible, in the interest of stability. We have adopted all but six required changes of which we are aware. Five are the subject of current applications to the Commission (Hydrophilidae: Helophorinae, see {3}, below; Leiodidae: Coloninae, see {3}, below; Staphylinidae: Tachyporinae, see {16}, below; and Staphylinidae: Quediina and Xantholinini, see {23}, below). The sixth is a case where an imminent taxonomic change will make the question of priority irrelevant (Hydrophilidae: Rygmodini and Cylomini; see Addendum). For the most part, we feel that implementing the remaining changes will not cause serious problems or confusion. Specialists on the groups involved may disagree and wish to apply to the Commission to conserve some other well-known names, such as Bolitocharini, Myrmedoniini, and Bolitobiini in Staphylinidae; Limulodinae in Ptiliidae; or Leptininae and Bathysciini in Leiodidae. The last-mentioned is perhaps one especially deserving of conservation because of the extensive ecological and physiological literature on the group. There are a few cases involving homonymy of family-group names in which we simply maintain existing usage for the time being (see {21}, below).

The reasons for some changes require more extensive comment than can be readily indicated in Table 2 and the catalog. These are discussed here and referred to by number in Table 2 and the catalog.

{1} **Acceptance of Non-latinized Names**—Article 11f(iii) provides for the availability of a pre-1900 non-latinized name, if it has been subsequently latinized, "generally accepted," and attributed to the author of the non-latinized name. The last two conditions are often difficult to determine, as Madge (1989) and others have pointed out, given the casual way in which family-group names have generally been used. Madge (1989) urged the acceptance of all non-latinized names based on type genera, at least when the names are from well-known publications.

In our review of family-group names, we have accepted as available all non-latinized names that have been subsequently latinized, if we could find at least one subsequent citation of the non-latinized name as the origin of the name. We indicated other non-latinized names in the catalog as "unavail. ?" if we could find no subsequent latinized use, or no subsequent citation of that particular non-latinized use. We have found only two cases in which name changes would result from acceptance of non-latinized names that evidently have not been subsequently latinized or otherwise cited:

Coryphiina Jacobson, 1908, is preceded by Boréaphilaires Mulsant & Rey, 1880, for the name of the present tribe Coryphiini; Zerche (1990) used Boreaphilina as a new subtribal name without reference to Mulsant & Rey's earlier name.

Dolicaones Casey, 1905, is preceded by Gnatimenitos Solier, 1849, and Gnathyménites Lacordaire, 1854, for the name of the present subtribe Dolicaonina.

{2} **Correction of Stem To Be Used in Forming Family-Group Name**—The Code (Arts. 29, 35d(i)) provides that a family-group name must be correctly formed from the stem of the name of its type genus, and if not so formed originally is to be corrected. The proper stem for family-group name formation for generic names that are or end

in Latin or Greek words is the genitive singular form with the case ending removed (Art. 29b). The family-group name stems of most generic names that are, or can be regarded as, Latin nouns are determined easily by dropping the nominative case ending (most commonly *-us, -a, -um, -es*, and many *-is*). The Code (Appendices B, D; Examples) and numerous lexicons (e.g., in English, Jaeger, 1944; Woods, 1944, 1966; Brown, 1956; also see Steyskal, 1980) offer guidance in determining family-group stems. Several names requiring a stem change to form their genitive have been used correctly in Staphyliniformia (corresponding generic endings and stems given): *-gaster, -gastr-*; *-hospes, -hospit-*; *-onyx, -onych-*; and *-termes, -termit-*. We have, however, found numerous names in Staphyliniformia that have not been formed correctly, either at the time of their proposal or in subsequent use. In the catalog, all of these are indicated as "(incorrect original [or subsequent] spelling)," but are not otherwise discussed there. Because these misspellings fall into relatively few categories, it seems worthwhile to discuss each category here once, with cross-references by number in Table 2 and the catalog.

{2a} A relatively trivial but common error in family group name formation is inappropriately adding or eliminating an *-i-* at the end of the stem of the name of the type genus, for example, Valdiini instead of the correct Valdini (from *Valda*) or Rhexini instead of the correct Rhexiini (from *Rhexius*). Many of these have already been corrected in the literature, and such errors are numerous and obvious enough from the information given in the catalog that we do not list them here. On the other hand, in names such as Hydrophilii, Pselaphii, and Staphyliniae of Latreille (1802), it is difficult to determine what was meant as stem and what as ending (*-i/-ii, -ae/-iae*). The endings clearly are not ones currently in use, but whether the original spellings were correct in terms of stem formation cannot be determined.

Somewhat less obvious errors are those based on stems incorrectly formed through misinterpretation of Latin or Greek case endings and stems. We discuss these here grouped by ending, and list the names newly affected. One incorrectly formed family-group name of each type is given as an example. In the interest of stability, we have tried to keep existing usage if it can be justified (see especially {2f}).

{2b} *-on*. This is a Greek ending; the genitive stem of the noun depends on its gender. Masculine and feminine nouns ending in *-on* keep the *-on* as the end of their stems; neuter nouns drop it. (A few masculine nouns with long *o* in the ending have genitive stems ending in *-ont-*; see Steyskal, 1980.) Four names in Staphyliniformia based on neuter generic names of this type must be corrected: Decarthrina (not Decarthronina), Pholeuina, Mimecitini, and Elachistarthrini. The last two of these are currently junior synonyms.

{2c} *-soma, -loma,* and *-stoma*. These are all endings of Greek neuter nouns (meaning body, edge, and mouth) whose genitive stems end in *-somat-, -lomat-,* and *-stomat-*, respectively. Superficially, they resemble, and can be mistaken for, Latin nouns ending in *-a* (which are normally feminine, but occasionally masculine). Type genera of family-group names in Staphyliniformia having the three endings listed have been uniformly treated as neuter, and thus must be regarded as Greek nouns. The family-group names based on these genera that have not been corrected previously are Coelostomatini (not Coelostomini; a junior synonym), Lyrosomatini, Pterolomatini, Glypholomatini, Scaphisomatini, and Conosomatini (a junior synonym). The similar-looking name *Cyloma* was indicated by Sharp at the time of its description as having "no classical derivation"; the family-group stem of such a name is determined (Art. 29b(ii)) by the author first basing a family-group name upon it (Cyllomina Zaitzev, 1908, the second "l" added erroneously), so Cylom- is the resulting family group stem.

{2d} *-ops*. These are Greek nouns, originally either masculine or feminine, but to be treated as masculine under the Code (Art. 30a(ii)). Their genitive stems end in *-op-*. Most such names in Staphyliniformia have been formed correctly, but three require correction: Amauropini (not Amauropsini), Deropini, and Heterothopini (a junior synonym).

{2e} *-as*. This is a Greek ending, occasionally adopted in Latin (Code: Appendix D); the genitive stem of the noun depends on its gender. Masculine nouns ending in *-as* drop the *-as* to form their stems; neuter nouns replace *-as* with *-at-*, and feminine nouns replace *-as* with *-ad-*. The only needed correction of this type that we found in Staphyliniformia is Zyrini (not Zyrasini; a junior synonym); this correct spelling was used by Bradley (1930). Seevers (1957) also seems to have followed this interpretation in describing the genus *Termitozyras* (evidently derived from *Zyras*) and basing the family-group name Termitozyrina on it.

{2f} *-opsis, -scepsis, -scelis,* and *-charis*. These are endings of somewhat ambiguous standing. All

TABLE 2. Summary of changes from recent usage of family-group names in Staphyliniformia required by the Code (ICZN, 1985a). Numbers in braces { } refer to items in "Discussion and Summary of Changes."

Name change required		Reason	Examples of recent implementation
From:	To:		
HISTERIDAE			
Platysomini	Platysomatini	correction of stem {2c}	Mazur, 1973, 1984
HYDROPHILIDAE			
Georyssinae	Georissinae	original spelling of stem {3}	Pope, 1977; Hansen, 1987, 1990; Lohse, 1989
Helocharina	Acidocerina	priority	present work (ex Hansen, 1990)
Helophorinae	Elophorinae	original spelling of stem	McCorkle, 1965; Hansen, 1990; NOT IMPLEMENTED {3}
Rygmodini	Cylomini	priority	NOT IMPLEMENTED (see Catalog; Hansen, 1990)
AGYRTIDAE			
Lyrosomini	Lyrosomatini	correction of stem {2c}	present work
Pterolomini	Pterolomatini	correction of stem {2c}	present work
LEIODIDAE			
Anisotomidae, -inae	Leiodidae, -inae	priority {6,19}	Arnett, 1963, 1985; Peck, 1973, 1990; Lohse, 1989
Anisotomini	Agathidiini	Art.11f(i)(1); priority {6}	Arnett, 1963; Lohse, 1989; Peck, 1990
Bathysciini	Leptodirini	priority {5}	Silfverberg, 1990; present work
Catopinae, -ini	Cholevinae, -ini	priority	Zwick, 1979; Perreau, 1989; Peck, 1990
Coloninae	Koloninae	original spelling of stem	NOT IMPLEMENTED {3}
Hydnobiini	Sogdini	priority {7}	Perkovsky, 1991
Leptininae	Platypsyllinae	priority {8}	present work
Pholeuonina	Pholeuina	correction of stem {2b}	present work
PSELAPHIDAE			
Amauropsini	Amauropini	correction of stem {2d}	present work
Articerini	Tiracerini	misidentified type genus	Besuchet, 1986; Newton & Chandler, 1989
Bythininae	Goniacerinae	priority	Newton & Chandler, 1989
Bythinomorphi	Goniaceromorphi	priority {4}	present work
Decarthronina	Decarthrina	correction of stem {2b}	present work
Fustigerini	Clavigerodini	priority	Newton & Chandler, 1989
Metopiini	Metopiasini	group name homonymy {9}	present work
Octomicrini	Dimerini	priority	Newton & Chandler, 1989; Coulon, 1989
Pyxidicerini	Bythinoplectini	priority	Newton & Chandler, 1989; Coulon, 1989
Tanypleurina	Natypleurina, **nom. nov.**	preoccupied type genus {10}	present work
Tanypleurini	Iniocyphini	preoccupied type genus {10}	present work
Zethopsina	Bythinoplectina	priority	Newton & Chandler, 1989; Coulon, 1989
PTILIIDAE			
Limulodinae	Cephaloplectinae	priority	Lawrence & Newton, 1982
SCYDMAENIDAE			
Clidicinae	Mastiginae	priority {19}	present work
Euconnini	Cyrtoscydmini	priority	present work
Neuraphini	Cyrtoscydmini	priority	present work
Stenichnini	Cyrtoscydmini	priority	present work

TABLE 2. *Continued.*

Name change required			
From:	To:	Reason	Examples of recent implementation
STAPHYLINIDAE			
Acrotonina	Strigotina	priority	present work
Anthobiini	Eusphalerini	misidentified type genus	Hatch, 1957; Arnett, 1963; Muona, 1979; Watanabe, 1990
Aphytopina	Aphytopodina	correction of stem {2g}	present work
Atanygnathina	Tanygnathinina	priority	Burakowski et al., 1980
Bolitobiini	Mycetoporini	priority {17}	present work
Bolitocharini	Homalotini	priority {12}	present work
Callicerina	Geostibina	group name homonymy {11}	present work
Callicerini	Athetini	group name homonymy {11}	Klimaszewski & Peck, 1986; Lohse, 1989; Lohse et al., 1990
Calocerina	Glyptomina, **nom. nov.**	preoccupied type genus	present work
Deremini	Dorylophilini	priority	present work
Deropsini	Deropini	correction of stem {2d}	present work
Dorylomimini	Mimanommatini	priority	present work
Glypholomini	Glypholomatini	correction of stem {2c}	present work
Gyrophaenini	Homalotini	priority {12}	present work
Holisina	Hyptiomina	priority {15}	present work
Lispinini	Thoracophorini	priority	present work
Mimecitonini	Leptanillophilini	priority {13}	present work
Myrmedoniini	Lomechusini	priority {14,19}	present work
Oligotini	Hypocyphtini	priority	present work
Pachyglossini	Paglini, **nom. nov.**	preoccupied type genus	present work
Paralispinina	Clavilispinina, **nom. nov.**	preoccupied type genus	present work
Physognathinae	Solieriinae, **nom. nov.**	preoccupied type genus	present work
Quediina	Platycnemina	priority	NOT IMPLEMENTED {23}
Scaphisomini, -ina	Scaphisomatini, -ina	correction of stem {2c}	present work
Suniina	Astenina	misidentified type genus	Hatch, 1957; Arnett, 1963
Tachyporinae	Tachininae	priority {19}	NOT IMPLEMENTED {16}
Xantholinini	Agrodini or Gyrohypnini	priority	NOT IMPLEMENTED {23}
Zyrasina	Myrmedoniina	priority {14}	Seevers, 1978; Lohse, 1989
Zyrasini	Lomechusini	priority {14,19}	present work

are originally Greek, but can also be interpreted as latinized Greek endings. The two interpretations result in different genitive stems (and thus differently spelled family-group names). The alternative forms are

Nominative	Genitive stem ending if Greek	Genitive stem ending if Latin
-opsis	*-opse-*	*-ops-*
-charis	*-charit-*	*-char-*
-scepsis	*-scepse-*	*-sceps-*
-scelis	*-scelid-*	*-scel-*

In Staphyliniformia, all the family-group names in use that are based on generic names having these endings use the Latin stems shown above, thus implicitly interpreting the generic names as latinized Greek nouns. Because this universal interpretation can be justified linguistically, it seems preferable for stability to maintain existing usage by treating these generic names in Staphyliniformia as Latin nouns. There seems little reason to overturn established *and justifiable* usage merely because an alternative interpretation of the stems (often with more complex spelling!) is possible.

{2g} *-pus*. When this termination is derived from the Greek *pous*, meaning foot, the genitive stem ends in *-pod-*. Staphyliniform names requiring correction on this basis are Aphytopodina (not Aphytopina) and Ocypodina (a junior synonym). Several other names ending in *-pus* that have given rise to family-group names actually are derived from unrelated words ending in *-pus* (three ending in *-metopus*; also *Platyprosopus* and *Stilipalpus*) and thus have stems ending in *-p-*.

{2h} *-odus*. When this termination is derived from the Greek *odous*, meaning tooth, the genitive stem ends in *-odont-*. None of the basonyms of family-group names in Staphyliniformia have this

termination, although a few seem to: *Holozodus* appears to be derived instead from *holo-*, whole, and *zodion*, a small carved figure; *Rygmodus* is evidently derived from another generic name ("near *Amarygmus*"; White, 1846); and *Stylopodus* actually ends in *-podus*.

{2i} Finally, there are two type genera requiring individual discussion. The first is *Eleusis* Laporte, upon which Sharp (1887b) based the family-group name Eleusinina, with the stem Eleusin-. Laporte gave no indication of its derivation. Agassiz (1846) indicated the generic name as a proper noun (otherwise unexplained) from the Greek. Sharp clearly regarded the generic name as being the Greek name *Eleusis* (genitive, *Eleusinos*), the name of a town in Attica where the goddess Ceres was worshiped (also applied to Ceres herself). Some later workers have used a name coordinate with Sharp's but based on the stem Eleusi-. There seems to be no justification for that spelling; if the generic name were regarded as Latin or latinized instead of Greek, its genitive stem would be Eleus-.

{2j} The second unique case is that of *Hister*, upon which the family name Histeridae and several nominotypical subtaxa are based. This appears to be simply a (second declension) Latin noun, whose stem should be Histr- (*hister, -tri,* = *histrio*, an actor; Simpson, 1968). This stem has been used in only three of the works cited by, for instance, Agassiz (1846) and Mazur (1984). Linnaeus, in describing the genus, gave no indication of its derivation. Marseul (1854) gave its origin as "mot etrusque, [meaning] *histrion*." Jaeger (1944) also said: "hister- . . . Etruscan *hister*, an actor, *giving rise to* L. *histrio, . . . -onis . . .*" (emphasis added here). *Hister* is thus a non-Latin, non-Greek noun. For such generic names, the stem "for the purposes of the Code is that used by the author who establishes a family-group name based on that generic name" (Art. 29b(ii)). Gyllenhal (1808) used Hister-, so that is the correct stem.

{3} **Confusion Concerning Original Spelling of Type Genus**—In four cases, family-group names in common use have been based on emendations (only one justified) of the original spelling of the type genus.

In two of these cases, Elophorinae and Georissinae of the family Hydrophilidae, the family-group names have already been corrected and used by several authors (see Table 2). In the case of the former, however, R. B. Angus (letter of 18 October 1990 to A. F. Newton) has submitted an application to the ICZN (Case No. 2796) requesting conservation of the more common usage *Helophorus*. Approval of this request would make Helophorinae the correct spelling, and we maintain this prevailing usage here.

The leiodid genus commonly called *Colon* was originally spelled *Kolon* by Herbst (1797). There is no doubt that this is Herbst's intended spelling; it is used as a generic heading and for two species in the text, as well as in the "Verzeichnis" on page vi and in the legend to figures of both species on plate 109. The name *Colon* is an evident emendation of *Kolon* Herbst by Illiger (1801), and is the base for the currently accepted family-group name Coloninae Horn, 1880. The original spelling *Kolon* has been pointed out by (e.g.) Hatch (1928) and Pope (1977), but never adopted as the valid spelling for the genus or the family-group name based on it. Correcting the generic and family-group names to *Kolon* and Koloninae would cause a substantial alphabetical shift in this name, probably creating considerable confusion. In view of the wide distribution of the genus and widespread usage of the names, Dr. H. Silfverberg (letter of 11 July 1990 to M. K. Thayer) is preparing an application to the Commission requesting conservation of the current usage, *Colon* and Coloninae. With this application pending, we maintain existing usage here.

The staphylinid genus commonly called *Thoracophorus* was originally spelled *Thoraxophorus* by Motschulsky (1837). Both Erichson (1840a) and Motschulsky (1840) emended this to *Thoracophorus*, in which form the name has been subsequently used by all authors except Burakowski et al. (1979). Blackwelder (1952) considered *Thoracophorus* to be a justified emendation (of an error of transcription), but such emendations are not justified according to the Code (Art. 32c(ii)). It appears, in fact, that Motschulsky's original spelling was much more than an error of transcription. He gave the meaning of the name as "un homme ou un cheval armé d'une cuirasse [a man or horse armed with a breastplate]." The Greek word he gave as the supposed base of the name was incorrectly spelled, however. The correct spelling of the Greek word he obviously intended (see, e.g., Liddell & Scott, 1869, p. 719; Brown, 1956, p. 165) is indeed transliterated as *Thoracophorus*. We regard Motschulsky's (1837) French designation of the meaning of the name as indicating his true intent, and providing internal evidence of an inadvertent error in the original (Greek) spelling of the name (as required by Art. 32c(ii) of the Code and illustrated by the Examples associated with it). The original

spelling, *Thoraxophorus*, must therefore be corrected to *Thoracophorus*, as it has been by virtually all authors since.

{4} **Nonstandard Ranks and Endings**—In certain families, formal genus-based names have been used between the ranks of family and subfamily (e.g., Histeridae: names ending in -MORPHAE), or between subfamily and tribe (e.g., Pselaphidae: names ending in -MORPHI). These have generally been treated as independent of the coordinate set of family-group names regulated by the Code, and therefore have been cited with their own authors and dates (e.g., Mazur, 1984; Newton & Chandler, 1989). Because such names are based on a type genus, and are within the range of ranks covered by the Code, we see no reason why these names should not be treated the same as all other coordinate family-group names, taking the author and date of the oldest name based on the type genus. With one exception, this interpretation requires only a change in citation of author and date for such names in our catalog; in all cases, the first use of the name in its nonstandard form is also cited. The one change is the pselaphid name Bythinomorphi, which becomes Goniaceromorphi.

{5} **Bathysciini/Leptodirini**—The first family-group name to be applied to this taxon was Stagobiinae Schiödte (1849), based on the genus *Stagobius* Schiödte, but *Stagobius* was soon recognized as a junior synonym of *Leptodirus* Schmidt. Lacordaire (1854) pointed out this synonymy and replaced the name Stagobiinae with "Leptodérides," a non-latinized name based on *Leptoderus* Schmidt, 1852 (an unjustified emendation of *Leptodirus* Schmidt, 1832). Latinized versions of Lacordaire's name had appeared by 1859 (Leptoderini Gutfleisch & Bose, 1859; Leptoderidae Kraatz, 1859a), and were used extensively in catalogs and lists published during the following 20 years (e.g., the 1862, 1868, and 1877 editions of Schaum's *Catalogus Coleopterorum Europae*; 1863 and later editions of Marseul's *Catalogue des Coléoptères d'Europe et du Bassin de la Méditerranée en Afrique et en Asie*) and intermittently thereafter (e.g., Reitter, 1891, 1906; Handlirsch, 1925; Hatch, 1933). Abeille de Perrin (1878) was evidently the first to use a name "Leptodirites" based on the correct original spelling *Leptodirus*, but his name is not a formal group name according to Jeannel (1936); Hatch (1933) was probably the first to use the correct spelling in a formal latinized name. Hatch (1933) and Arnett (1963, 1985) also used the name at a higher level, as Leptodiridae, for the group generally known as Catopidae (treated as Cholevinae in the catalog, below).

Horn (1880) was evidently the first to use the name Bathysciae, based on *Bathyscia* Schiödte, for this group; he gave no reason for not using a name based on *Leptoderus* or *Leptodirus*, which he included in the group. Most subsequent authors, including virtually all systematists and ecologists working on this taxon, have followed Horn, using a name based on *Bathyscia* as the valid name for the group (e.g., Jeannel, 1910, 1911, 1914, 1936; Hatch, 1957; Laneyrie, 1967, 1978; Guéorguiev, 1974, 1976; Peck, 1973, 1990). Reitter (1884, 1886), using group names based on both *Bathyscia* and *Leptoderus*, adopted one based on *Bathyscia* for the larger group including both, but later (Reitter, 1891, 1906) chose Leptoderini for the larger group, and still later (1909) returned to Bathysciini. We have not been able to find discussions regarding the replacement of Leptoderini with Bathysciini until Hatch (1933), Jeannel (1936), and Zwick (1979), who were unaware of the latinized names based on *Leptoderus* used prior to Horn (1880). Lacordaire's (1854) name Leptodérides was accepted (with correction) by Hatch (1933), rejected by Jeannel (1936) because it was not latinized, and rejected by Zwick (1979) because it was based on an unjustified emendation. Silfverberg (1990) independently arrived at conclusions similar to ours (next paragraph) regarding the priority of Leptodirini Lacordaire over Bathysciini Horn.

Schiödte's (1849) name based on the junior synonym *Stagobius* should be rejected under Article 40b, due to universal rejection of this name by authors from 1854 on. Names based on the unjustified emendation *Leptoderus* are available with original author and date, with correction of the stem to the original spelling of the genus, *Leptodirus* (Art. 35d), and with date of precedence of 1849 (Art. 40b). We accept Lacordaire's non-latinized name as providing availability of Leptodirini by provision of Article 11f(iii), because his name was subsequently latinized and widely accepted with attribution to him. If one wishes to question whether Leptodirini has been "generally accepted," because of more widespread use of the later name Bathysciini, then the first latinized use of the name (Kraatz, 1859a, or Gutfleisch & Bose, 1859) would provide availability. In either case, present evidence indicates that Leptodirini is the correct name to apply to this taxon.

Handlirsch (1925) and Arnett (1963) cited "Solier, 1834" as author and date for Leptodiridae, but Zwick (1979) and Silfverberg (1990) correctly

pointed out that Solier's (1834) name "Leptodérides" was not based on a genus and was applied to a section of Coleoptera: Heteromera!

{6} **Anisotomini/Agathidiini**—The first use of the name Anisotomidae was by Stephens (1829a, p. 157, published February 1), who, however, did not mention *Anisotoma* Panzer as a valid genus in this group. His list of species belonging to the group included under *Leiodes* Latreille all those species normally included in both *Leiodes* and *Anisotoma*, so that *Anisotoma* must be considered an implied junior synonym of *Leiodes*. Later in the same year, Stephens repeated this treatment (1829b, published June 1) and finally (1829c, published July 15) mentioned *Anisotoma* explicitly, but only as a junior synonym. Anisotomidae Stephens is therefore not available (Art. 11f(i)1). Later, the genera *Leiodes* and *Anisotoma* were misidentified by Schmidt (1841), with their identities reversed, leading to much subsequent confusion. Erichson (1845) used a name Anisotomidae based on *Anisotoma* of Schmidt, not Panzer, and therefore Erichson's name is also unavailable. Reitter (1884) straightened out the misidentifications of Schmidt (1841) and was apparently the first to use a name Anisotomidae correctly based on *Anisotoma* Panzer. However, the name Leiodidae Fleming (1821) has priority over Anisotomidae Reitter (1884) for the name of this family, and Agathidiini Westwood (1838) has priority over Anisotomini Reitter (1884) for the tribe that includes both *Agathidium* and *Anisotoma*.

{7} **Hydnobiini/Sogdini**—Perkovsky (1988) established that the genus *Sogda* Lopatin, 1961, type genus of the monotypic family Sogdidae Lopatin (1961), is a senior subjective synonym of the genus *Trichohydnobius* Vogt, 1961, of the leiodid tribe Hydnobiini Jeannel, 1962. As noted later by Perkovsky (1991), the name Sogdini has priority over Hydnobiini and Triarthrini (= Hydnobiini) Jeannel (1962b). Triarthrini is also a junior homonym (see {21}), however, so in light of Perkovsky's (1991) use of Triarthrina as a subtribal name, the case should be referred to the Commission.

{8} **Leptininae/Platypsyllinae**—The name Leptinidae has been attributed by virtually all authors, including LeConte (1872), to LeConte (1866). In that work, however, no family-group name based on the genus *Leptinus* was actually used. LeConte (1866, p. 368) merely said, after comparing the genus to members of several other families, "I therefore infer that *Leptinus* is a highly specialized type, representing a distinct family, having less affinity with Silphidae than with Hydrophilidae." The name Leptinidae was apparently first made available by LeConte (1872), subsequent to proposal of the name Platypsyllidae by Ritsema (1869).

{9} **Metopiini/Metopiasini**—The name Metopiini Raffray (1904b) (type genus, *Metopias* Gory), in current use for a tribe of Pselaphidae, is a junior homonym of the name Metopioidae Foerster (1868) (type genus, *Metopius* Panzer), in current use for a subfamily of Ichneumonidae (Insecta: Hymenoptera). There is also a third homonym, Metopiini Townsend (1908) (type genus, *Metopia* Meigen) in common use for a tribe of Sarcophagidae (Insecta: Diptera). In cases such as this, where the names of type genera have identical stems and result in homonymous family-group names, the Code (Art. 55b) requires that the case be referred to the Commission for a ruling. We have submitted an application to the Commission (with T. Pape; Case No. 2793) to resolve this situation, including fixation of *Metopias-* as the stem of *Metopias* Gory (giving Metopiasini) and *Metopia-* as the stem of *Metopia* Meigen (giving Metopiaini). Pending a decision by the Commission (and anticipating approval of our proposal), we here use Metopiasini as the valid name for this group; Jeannel (1949) used this incorrect spelling of Raffray's name.

{10} **Tanypleurini, -ina/Iniocyphini, Natypleurina**—In a recent review of the genera and higher taxa of Pselaphidae, Newton and Chandler (1989) overlooked the fact that *Tanypleurus* Raffray (1890) was preoccupied by *Tanypleurus* Steenstrup & Luetken, 1861. The currently used family-group names Tanypleurini and Tanypleurina Jeannel (1949), based on *Tanypleurus* Raffray, are therefore no longer available and must be replaced. The names Iniocyphini and Dalmodini, both of Park (1951) and therefore of equivalent priority, are available for use as a tribal name; we choose the former to replace Tanypleurini, because of doubts about the identity of the type species of *Dalmodes*, type genus of Dalmodini (see Newton & Chandler, 1989, p. 7).

The subtribe Tanypleurina has no available replacement name. Because there are no other available names for the genus *Tanypleurus* Raffray, we propose the replacement name *Natypleurus*, **nom. nov.** (gender masculine; type species, *Tanypleurus*

malaianus Raffray). We also propose the replacement name Natypleurina, **nom. nov.** (type genus, *Natypleurus*, **nom. nov.**) for the unavailable name Tanypleurina Jeannel (1949).

{11} **Callicerini, -ina/Athetini, -ina**—Horion (1967) and Lohse (1969) used the name Callicerini instead of Athetini for this tribe because *Callicerus* Gravenhorst was the oldest generic name in the group, without referring to Jacobson's (1908) much earlier use of Callicerini. This usage continued for a time (e.g., Lohse, 1974; Muona, 1979) and then changed back to Athetini (Lohse, 1989; Lohse et al., 1990) without explanation. Muona (1979) and Lohse et al. (1990) listed Callicerina and Athetina as separate subtribes within Callicerini/Athetini, thus placing the two type genera in separate groups at a lower level. Although Callicerini Jacobson (1908) has priority over Athetini Casey (1910b), it is a junior homonym of Callicerini Rondani (1856) (based on *Callicera* Panzer), in use for a tribe of Syrphidae (Insecta: Diptera). This case of family-group homonymy must be referred to the Commission (Art. 55b), which can either suppress the junior name or change the stem of one homonym. The relative merit of these alternatives as far as usage within Staphylinidae depends on the taxonomic situation within the group. Athetini is available (and is in fact better known) as a name for any group including *Atheta* (with or without *Callicerus*), but a subordinate taxon including *Callicerus* and not *Atheta* would need a different name. Muona (1979) placed the genus *Geostiba* in the subtribe Callicerina; the available name Geostibina Seevers can be used for a taxon including *Geostiba* and *Callicerus*. The key question is, if *Geostiba* and *Callicerus* were to be separated, would *Callicerus* likely be combined with another genus already the basis of a family-group name? If not, a family-group name based on *Callicerus* would still be needed, and a stem change (for it or *Callicera*) would therefore be the most desirable course. Lacking the knowledge of this group necessary to answer the question, we will leave it to specialists in the group to submit an appropriate application to the Commission. In the meantime, we maintain existing usage of Athetini (the next oldest name) for the tribe and we use Geostibina Seevers for Callicerina of recent authors. If the name Callicerini Jacobson is made available by changing its stem (or that of the older Callicerini Rondani) through exercise of the plenary powers of the Commission, Jacobson's name would become the oldest family-group name in the present Athetini and would take precedence over any other name for taxa that include *Callicerus*.

{12} **Bolitocharini/Gyrophaenini/Homalotini**—Seevers (1978, p. 5) pointed out that the name Gyrophaenini Kraatz (1856) had priority over Bolitocharides Thomson (1859), but was inconsistent in his use: in the main entry in his text (Seevers, 1978, p. 160) he used Bolitocharini, but in the checklist (Seevers, 1978, p. 266) he used Gyrophaenini. However, the still older name Homalotida Heer (1839a; see {20}) has priority over both names. Heer (1839a,b) used the genus *Homalota* Mannerheim in a very broad sense, evidently following Erichson (1837), rather than the restricted (monotypic) original sense of Mannerheim, and did not specifically mention the type species of *Homalota*, *H. plana* (Gyllenhal). Erichson (1837) included *Homalota plana* in his concept of the genus; although he indicated later (Erichson, 1839a, pp. 689, 700, 1839b) that he had misidentified *H. plana* in his 1837 work, he still included the true *H. plana* (Gyllenhal) in his broad concept of the genus, and compared this species to *H. linearis* (Gravenhorst), included in *Homalota* by Heer (1839a,b) as well as Erichson (1837). Thus, although both Erichson (1837, 1839a,b) and Heer (1839a,b) used the genus *Homalota* in a sense that included many species now placed in different tribes, and Erichson's (1837) original use of this expanded generic concept included a misidentification of the type species, we see no basis for considering *Homalota* of Erichson and Heer to be a misidentified type genus, and thus no reason to reject Heer's family-group name.

{13} **Mimecitonini/Leptanillophilini**—Seevers (1965) used the name Mimecitonina (should be Mimecitina; see {2b}, above) for this group. In a list (1965, p. 188) he included the name "Mimecitonini, Wasmann, 1916" without further reference. We have searched the publications of Wasmann for 1916 (including the one in Seevers's bibliography) and other publications in which Wasmann discussed his genus *Mimeciton*, but we cannot find any evidence that Wasmann used a family-group name based on this genus. The first use of the name Mimecitonini appears to be by Bernhauer and Schubert (1926), who gave no reference to an earlier use of this name. The name Leptanillophilini Fenyes (1918) precedes Mimecitonini and Mimonillae, both of Bernhauer and Scheerpeltz (1926).

{14} **Zyrasini/Myrmedoniini/Lomechusini**—This tribe was long known by the name Myrmedoniini, until Jeannel and Jarrige (1949) proposed the new name "Zyrasini" (correct spelling would be Zyrini; see {2e}, above) because *Myrmedonia* had been synonymized with *Zyras*; Bradley (1930) had earlier proposed "Zyrini" for the same reason. Usage since then has not stabilized: Lohse (1969, 1974), Kistner (1975), Klimaszewski (1982), Lohse et al. (1990), and other authors have used Zyrasini, but Arnett (1963), Palm (1968), Seevers (1978), Muona (1979), Klimaszewski and Peck (1986), Lohse (1989), and others have used Myrmedoniini for this group. Because the criterion of Article 40b of "general acceptance" of such a replacement name has not been met, Myrmedoniini would seem to be the appropriate name to use. However, Lomechusidae Fleming, 1821, has priority over both Myrmedoniini and Zyrasini, and should become the tribal name. At the subtribal level, the argument above for use of Myrmedoniini over Zyrasini remains relevant, and the subtribe including the genus *Zyras* (= *Myrmedonia*) should be known as Myrmedoniina.

{15} **Holisina/Hyptiomina**—Casey (1906) first used the name "Hyptiomae" for a group based on his new genus *Hyptioma*. Shortly thereafter (Casey, 1910a), he pointed out that *Hyptioma* was a junior synonym of *Holisus* Erichson, but did not mention a family-group name. The next use of a family-group name involving this genus was apparently by Blackwelder (1944), who used the subtribal heading "Holisi" for *Holisus* and another genus, without comment. Newton (1988), acting in the belief that Blackwelder's name was a replacement name for "Hyptiomae" and therefore acceptable under Article 40b, used "Holisina" as a subtribal name for this group when redefining it. We can find no direct evidence, however, that Blackwelder intended his name as a replacement name rather than a new name (several of which appear in the same catalog). If considered a new name, "Holisi" is not available because it was not accompanied by a description or indication acceptable for that time (Art. 13a). If considered a replacement name, it is still doubtful if it can be considered available because we can find no evidence that it was used at all, much less generally accepted before 1961 (Art. 40b; the only other use of this name we can find is Newton, 1988). Thus "Hyptiomina" is the valid name for this group, and "Holisina," inadvertently made available by Newton (1988), is a junior synonym.

{16} **Tachyporinae and Tachininae**—Tachinidae Fleming (1821) (based on *Tachinus* Gravenhorst, 1802 [Coleoptera: Staphylinidae]) is older than Tachinariae Robineau-Desvoidy (1830) (based on *Tachina* Meigen, 1803 [Diptera: Tachinidae]). Family-group names based on *Tachinus* were frequently used in Staphylinidae until about 1839 (e.g., Mannerheim, 1830; Westwood, 1838; Heer, 1839a). Since then, however, the name Tachyporinae (MacLeay, 1825) has been used uniformly for the staphylinid group in question, and the name Tachinidae has been virtually universally used in Diptera. Deliberate replacement of Tachininae by Tachyporinae in Staphylinidae apparently began with Erichson (1839a,b), who used Tachyporinae to avoid conflict with Tachinidae in Diptera (according to Erichson, 1840b, p. 230). His regarding Tachininae (Staphylinidae) as the junior name apparently resulted from attribution of Tachininae to Mannerheim (1830) (e.g., Erichson, 1839b, p. 25), making it appear to be a junior synonym of MacLeay's Tachyporinae. We have found no discussion of the use of the junior homonym Tachinidae Robineau-Desvoidy in Diptera, although it was listed alongside the Coleoptera names (including Tachinidae Fleming, as "Leach 1817"; see {19} below) by Agassiz (1847). In recent years a group Tachinini, subordinate to Tachyporinae, has sometimes been used in the staphylinids (e.g., Coiffait, 1954). Because Tachyporinae (Staphylinidae) and Tachinidae (Diptera) are both well-established and frequently used names, we have continued existing usage of these names here, and have submitted an application to the Commission (with C. W. Sabrosky; Case No. 2786) requesting suppression of family-group names based on *Tachinus* before Mannerheim (1830) and change of the stem of *Tachinus* to *Tachinus-* (for taxa including this genus and not *Tachyporus*). If approved, this would validate existing usage and leave (1) Tachinidae Robineau-Desvoidy available in Diptera, (2) Tachyporinae MacLeay as the correct name for the staphylinid taxon including both *Tachyporus* and *Tachinus*, and (3) an available name based on *Tachinus* for taxa including *Tachinus* but not *Tachyporus*.

{17} **Mycetoporini/Bolitobiini**—Mycetoporini Thomson (1859) has priority over Bolitobiini Horn (1877). Mycetoporini was used extensively for a few decades (e.g., Thomson, 1867; Seidlitz, 1874, 1889; Sahlberg, 1876) but then was rather abruptly replaced by Bolitobiini, which has been in universal use since (e.g., Ganglbauer, 1895; Bern-

hauer & Schubert, 1916; Cameron, 1932; Blackwelder, 1944; Arnett, 1963; Lohse, 1964; Tikhomirova, 1973). We have found no discussion of this change, but it may have arisen from Ganglbauer's (1895) adoption of Bolitobiini without citation of Mycetoporini. Recently, Outerelo and Gamarra (1985) used the name "Mycetoporiini" for a tribe of "Bolitobiinae," without reference to an earlier use of the name.

Thomson ostensibly based his name on *Mycetoporus* Mannerheim, 1830, but in fact included the previously designated type species of that genus in a separate genus, *Ischnosoma* Stephens, 1829 (Tottenham, 1949; Blackwelder, 1952). A recent application submitted to the Commission by J. M. Campbell (Case No. 2733) discusses the complexities of this situation at the generic level and requests conservation of *Mycetoporus* in the sense of Thomson and nearly all subsequent authors. Mycetoporini Thomson (1859) is the proper name for a family-group taxon including both *Mycetoporus* of Thomson (= *Schinomosa* Tottenham if the application is denied) and *Ischnosoma*. If the request for conservation is denied (leaving Mycetoporini Thomson based on a mistaken type-species designation) and a future author wishes to place *Ischnosoma* (= *Mycetoporus*) and *Schinomosa* in separate family-group taxa, then application of the family-group name would need to be referred to the Commission (Art. 65b).

{18} **Necrophilidae Gistel**—This family name appeared between the families Peltidae (= Trogossitidae) and Silphidae in a checklist of Bavarian insects (Gistel, 1856), with the only included species being "*Thymallus* Lat. *limbatus*" (= *Thymalus limbatus* (Fabricius), now in the family Trogossitidae). Gistel's (1856) family names, many of them new, were evidently all based on generic names, although the implied type genus was not always included in the checklist. In the case of Necrophilidae, there are no generic names usually associated with *Thymalus* or other Trogossitidae that would give rise to such a family name. However, the adjacent family Silphidae (in which *Thymalus* and some other trogossitids were included by some early authors) included at that time two such names, neither of which was mentioned by Gistel: *Necrophila* Kirby & Spence, 1828 (still a genus of Silphidae), and *Necrophilus* Latreille, 1829 (now a genus of Agyrtidae). Because of uncertainty about which, if either, of these names might have been meant by Gistel, we conclude that Necrophilidae Gistel is unavailable, as it does not meet the criterion of availability set out in Article 11f(i)(1).

{19} **"Leach 1817"/Fleming, 1821, Names**—A number of early family-group names in Staphyliniformia were cited by Agassiz (1846) as "Leach 1817," with the reference "Encycl. Brit." Subsequent workers (including Agassiz, 1847) have at most credited these names to Leach, 1817 (without specific reference). They are not, however, among the new family-group names in Leach's *Zoological Miscellany*, nor are they in his other 1817 works.

According to R. B. Madge (letter of 14 May 1990), Leach wrote the articles on "Annulosa" and "Entomology" in the *Supplement to the 4th, 5th, and 6th editions of the Encyclopædia Britannica*, but neither contains family-group names. The names attributed by Agassiz (1846, 1847) to Leach, 1817, appear instead in the "Insecta" article of the *Supplement*, an article written by John Fleming. Authorship of articles in the *Supplement* is indicated by a code given at the end of each article. "Q.Q." at the end of the "Insecta" article meant J. Fleming, and "V." following the "Annulosa" and "Entomology" articles meant Leach; Volume 1 contains a list of contributors and their corresponding codes (R. B. Madge, letter of 14 May 1990). Publication dates for the parts of the *Supplement* are given in Volume 6, Part 2; Volume 5, Part 1, containing the "Insecta" article, is there dated as July 1821.

The peculiar spelling of many names in Fleming (1821), reproduced in Agassiz's lists and there attributed to Leach, supports the idea that Fleming's "Insecta" article was Agassiz's source for them. For example, some names are formed upon entire generic names instead of generic stems (e.g., Leiodesidae and, outside Staphyliniformia, Clerusidae, Ptinusidae, Erotylusidae, etc.); others have the termination -ADAE instead of -IDAE (e.g., Spheridiadae and, outside Staphyliniformia, Melolonthadae); and some have nonstandard stems (e.g., Mastigoidae). MacLeay (1830), in a caustic review of Fleming's overall work including the article in the *Supplement*, criticized these spellings and concluded "Luckily, however, no great harm is done; for few naturalists place [Fleming's] names even in their list of synonyms." This statement may explain why Fleming's names were generally overlooked or ignored by contemporary authors. Fleming's names are fully available, however, and most of them have been cited at least occasionally following their appearance in Agassiz (1846, 1847). The attribution of these names to "Leach 1817"

(*Encyclopædia Britannica*) is apparently a mistake on the part of Agassiz (1846), and should be corrected to Fleming (1821). Wheeler (1986, p. 135) independently arrived at the conclusion that another "Leach 1817" name, Lymexylonidae, was first published by Fleming (1821).

{20} **Priority of Erichson, 1839/Heer, 1839, Names**—Several family-group names in Staphylinidae were first published in 1839, in up to four places by two authors: Erichson (1839a, *Die Käfer der Mark Brandenburg*, 1(2); 1839b, *Genera et Species Staphylinorum*, pt. 1) and Heer (1839a, *Fauna coleopterorum Helvetica*, 1(2); 1839b, *Die Käfer der Schweiz*, 1(2)). (Heer (1839b) was a separate printing of a paper that appeared in *Neue Denkschriften der allgemeinen schweizerischen Gesellschaft für die gesammten Naturwissenschaften*, Volume 3 (1839), according to the title page of the separate, but Volume 4 (1840) according to Hagen (1862) and the title page of the journal itself.) The title pages and other standard bibliographic sources give only "1839" as the date of publication for all four of these works. Both Erichson (1839b) and Heer (1839a) cited (with page numbers) new names published by Erichson (1839a). Heer (1839b), in a checklist that gave at most authors' names with the taxa listed, included names of many species described by Erichson (1839a) and Heer (1839a). The names published as new in Heer (1839a) were listed as "Heer" in Heer (1839b). Heer (1839a,b) did not refer to Erichson (1839b), and vice versa. Later, Heer (1841a, p. 553) expressed the opinion that Erichson (1839b) appeared in 1840, the year after Heer (1839a), but other evidence (e.g., publication notice in *Entomologische Zeitung [Stettin]*: 1: 12) shows that Erichson (1839b) did indeed appear in 1839. Erichson (1840b), in a review of 1839 entomological literature, discussed all four 1839 works in the apparently chronological sequence Erichson (1839a), Heer (1839a), Heer (1839b), and Erichson (1839b), although without explicit mention of absolute or relative dates of publication. Although we have no exact publication dates for any of the 1839 works (so technically they should be considered simultaneously published), it is clear that Erichson (1839a) appeared before the other works; Heer (1839a) probably preceded Heer (1839b); and the priority of Erichson (1839b) relative to Heer (1839a) and Heer (1839b) is uncertain. We accept Erichson's (1840b) own sequence of discussion of these works as setting their order of precedence and treat Erichson (1839b) as the last published of the four.

{21} **Apparently Homonymous Family-Group Names**—Under Article 55b of the Code, if "homonymy between family-group names results from similarity but not identity of the names of their type genera, the case is to be referred to the Commission for a ruling. . . ." The Commission may either reject the junior homonym or amend the stem of one name, thus removing the homonymy. If rejected, a junior homonym must be replaced unless it is rejected as a junior synonym (Art. 60).

We have found 10 instances of apparently homonymous family-group names in Staphyliniformia and other taxa. Strict application of the Code would require that most of these be submitted to the Commission. We are submitting applications concerning two of these, but for the reasons indicated below we are not pursuing the other cases. Finding and tracking family-group names in other groups is generally as difficult as in Staphyliniformia, and there may be others we have not found. Full citations and type genera for all names are given in the catalog.

Callicerini Jacobson (1908), Staphylinidae, not Callicerini Rondani (1856), Diptera.

See {11}, above.

Cryptobiina Casey (1905) Staphylinidae, predates Cryptobiinae Hollande (1952), Protozoa.

The junior name as cited is a nomen nudum; if it has been validated elsewhere, the case needs to be referred to the Commission.

Cyphinae Lohse (1974), Staphylinidae, not Cyphini Leng (1920), Coleoptera: Curculionidae.

We can find no earlier use of Cyphinae (Staphylinidae) than Lohse (1974), but it was given there as a synonym of Hypocyphtinae. If this was its first use, it is therefore not available from that date (Art. 11e). Adám (1987) used the incorrect spelling Cyphainae as the valid name for a group including the same staphylinid genus *Cypha*, but without making it available or giving any reference to an earlier use. If the staphylinid name has been validated elsewhere, the case needs to be referred to the Commission.

Helocharina Orchymont (1919), Hydrophilidae, predates Helocharini Metcalf (1965), Homoptera.

The junior name as cited is a nomen nudum; if it has been validated elsewhere, the case needs to be referred to the Commission.

Hydrobiini Mulsant (1844), Hydrophilidae, predates Hydrobiidae Troschel (1857), Mollusca.

Recently, in an application to the Commission dealing with other problems in Mollusca, Rosenberg and Davis (1990) requested that Hydrobiidae Troschel be placed on the Official List of Family-Group Names, apparently unaware of the homonymy indicated above. We have submitted a comment on that application recommending against such action until the homonymy has been dealt with (Newton & Thayer, 1990). The case needs to be submitted to the Commission.

Metopiini Raffray (1904b), Pselaphidae, not Metopiinae Foerster (1868), Hymenoptera; both predate Metopiini Townsend (1908), Diptera.

See {9}, above.

Steninae MacLeay (1825), Staphylinidae, predates Stenidae Fraser & Purves (1960), Mammalia.

The junior name as cited is a nomen nudum; if it has been validated elsewhere, the case needs to be referred to the Commission. It has been treated by at least some workers as a synonym of Delphinidae.

Tachininae Fleming (1821), Staphylinidae, predates Tachinidae Robineau-Desvoidy (1830), Diptera.

See {16}, above.

Toxoderina Bernhauer & Schubert (1911), Staphylinidae, not Toxoderinae Saussure (1869), Mantodea.

The junior name has seldom, if ever, been used except by Scheerpeltz (1933). It is currently treated as a junior synonym of Coprophilini, the type genus having been synonymized with *Homalotrichus* (Herman, 1970). An application requesting rejection of Toxoderina Bernhauer & Schubert should be submitted to the Commission.

Triarthrini Jeannel (1962b), Leiodidae, not Triarthrinae Ulrich (1930), Trilobita.

The junior name has recently been considered either a junior synonym (Daffner, 1983; Peck, 1990) or a subtribe of Sogdini (Perkovsky, 1991).

{22} **Tryponaeinae/Trypanaeinae**—Marseul (1857) based the name Trypanéens (later latinized by Jacobson, 1910) on *Trypanaeus* Eschscholtz, citing Erichson's (1834) spelling *Tryponaeus* as a typographical error. Both spellings of the generic (and resultant family-group) name have been used (*-a-*: Agassiz, 1846; Marseul, 1857; Bickhardt, 1910, 1916; Blackwelder, 1944; *-o-*: Erichson, 1834; Agassiz, 1847; Dohrn, 1865; Bickhardt, 1914; Mazur, 1984). Although there has been some discussion of the discrepancy (e.g., Dohrn, 1865, 1870), there has been no satisfactory resolution of the conflict. We finally discovered its source, however: there were two separately typeset printings of the original description, one of which (Eschscholtz, 1829a, p. 11) used *Trypanaeus*, the other (Eschscholtz, 1829b, p. 10) *Tryponaeus*! We can find no evidence regarding relative or exact publication dates of the two editions, both of which bear the date 1829. The two editions must thus be considered as simultaneously published, with the correct name to be determined by the first reviser (Art. 24). The first reviser appears to have been Agassiz (1846), who cited both spellings as "Eschscholtz 1829," and used *Trypanaeus* as the correct form. We therefore choose to use *Trypanaeus* (also the more common spelling) and Trypanaeinae.

{23} **Quediina/Platycnemina and Xantholinini/Agrodini/Gyrohypnini**—Nordmann (1837) established two group names, Platycnemidiformes and Agraeformes, for new genera now placed in Quediina Kraatz, 1857 and Xantholinini Erichson, 1839, respectively. In each case, Nordmann's group name has not been used or even cited subsequently, and his type genus has long been treated as a synonym or subgenus of another genus (*Platycnemus* of *Haematodes* Laporte, *Agrodes* of *Plochionocerus* Dejean). Kirby (1837) based the name Gyrohypnidae on the genus *Gyrohypnus* "Kirb. Steph.," but his name has not been used or cited since, and the genus *Gyrohypnus* has long been placed in Xantholinini. Hatch (1957) independently proposed Gyrohypnini (based on a now-rejected concept of *Gyrohypnus* [see ICZN, 1983]) as a new name for Xantholinini. Since the names Quediina and Xantholinini (and their coordinate forms) have been in universal use for well over a century, one of us (AFN) is submitting a proposal to the ICZN requesting their conservation over the never-used names of Nordmann and Kirby.

Diagnoses of Taxa

Empelinae Newton & Thayer, **subfam. nov.**

Type genus: *Empelus* LeConte, 1861.

The genus *Empelus* LeConte includes the single rare species *E. brunnipennis* (Mannerheim), known from southern Alaska to California. The genus was originally described in the tribe Clambini of the family Silphidae (LeConte, 1861), and was retained as a rather aberrant member of that tribe (e.g., Horn, 1880), even as the group was later elevated to family status as Clambidae (e.g., Hatch, 1929, 1957). Crowson (1955) and Endrödy-Younga (1959) removed *Empelus* from that family and placed it in Anisotomidae (now Leiodidae), without further comment. Later, Crowson (1960) characterized the genus as one of the most primitive members of Staphylinoidea, and discussed how other staphylinoid families might be derived from it, but did not assign the genus to a family-group taxon. Hammond (1971) commented that *Empelus* ". . . clearly does not belong [in Leiodidae], but has distinct affinities with the Proteininae [Staphylinidae] and may eventually be assigned to that subfamily."

Perhaps with these discussions of Crowson (1960) or Hammond (1971) in mind, but without citing them, many authors providing checklists or discussions of higher taxa of Coleoptera have mentioned a staphylinoid family Empelidae (e.g., Abdullah, 1969, and later works; Crowson, 1981; Paulian, 1988), or a staphylinid subfamily Empelinae (e.g., Hlavac, 1975; Lawrence & Newton, 1982; Thayer, 1987). However, none of these publications using a family-group name based (explicitly or by inference) on *Empelus* LeConte provides a differential diagnosis or description of the family-group taxon, or reference thereto, that would make the name available (Art. 13a).

Because a family-group name based on *Empelus* is being widely used in the systematic literature, and because of our conviction that such a name will be needed regardless of the final consensus on ranking and exact placement of the group, we here provide a differential diagnosis and discussion to make the name available. Descriptions or mention of significant characteristics of *Empelus brunnipennis* have been published by LeConte (1861), Horn (1880, including figures of habitus and antenna), Hatch (1957, including habitus figure), Crowson (1960), Hammond (1971), Hlavac (1975, including figure of prothorax), and Thayer (1987). Our diagnosis and discussion are based on those sources and on examination of cleared and slide-mounted specimens of adults of both sexes of the species. We have also examined a probable syntype in the Museum of Comparative Zoology, Harvard University. The immature stages are unknown.

DIAGNOSTIC DESCRIPTION—Small (under 2 mm long), compact, and dorsally convex beetles with: head hypognathous, strongly flattened, without ocelli, with antennal groove ventrally between eye and maxillary foramen; antenna 11-segmented with loose but very distinct 3-segmented club; mandible with membranous prostheca, large molar lobe, without preapical teeth; maxillary palp 4-segmented, segment 3 subquadrate, segment 4 about 4 times as long as 3; pronotum short and broad, evenly convex, with rounded antero- and posterolateral corners; prosternum a very narrow transverse strip anterior to procoxae, without intercoxal process; elytra without striae, nearly covering abdomen (no more than 3 segments exposed), elytral epipleural fold only half as long as elytron; abdominal sternites 3–8 visible, sternite 3 with carina-delimited coxal cavities; abdominal sternite 8 with basal projection associated with glandular structures (projection more than one third as wide as sternite); functional spiracles on abdominal segments 1–8; abdominal intersegmental membranes long, apically attached, with brick-wall pattern; wing-folding patches on abdominal terga 2–4; pro- and mesocoxa oblique, very elongate; mesosternum very short, leaving procoxa and mesocoxa separated from each other by less than width of either; hind coxa transverse, excavate posteriorly, covering short femur in repose; each femur with tibial groove ventrally; all tarsi 5-segmented, empodia unisetose; wing-folding asymmetrical; wing with costal hinge proximal to radial sector; aedeagus composed of basally enlarged median lobe with small foramen, pair of free parameres, and internal sac with well-developed flagellum.

DISCUSSION—The wing-folding pattern, wing hinge placement, structure of the median lobe of the aedeagus, and abdominal intersegmental pattern are derived or apomorphous characteristics of the family Staphylinidae *sensu lato*, while the presence of the unique glandular structure at the base of abdominal sternite 8 clearly places Empelinae in the "Omaliine Group" of staphylinid subfamilies (Hammond, 1971; Lawrence & Newton, 1982; Thayer, 1987). Within this group, the presence of a full set of functional abdominal spiracles excludes Empelinae from the "Proteinine Subgroup" of Thayer (1987), in which the intermediate abdominal spiracles are atrophied. Empelinae also differ from Proteininae (to which

Hammond (1971) suggested they might belong) in having long abdominal intersegmental membranes with a brick-wall pattern. This leaves Empelinae together with Omaliinae and Aphaenostemminae as primitive members of the Omaliine Group, with unresolved relationships to one another. Empelinae differ from both Omaliinae and Aphaenostemminae in lacking a postcoxal process of the pronotum. Some of the following features of Empelinae occur in some Omaliinae, but not all of them occur there in combination: lack of ocelli; strong 3-segmented antennal club; antennal groove; long elytra almost completely covering the abdomen dorsally; excavate metacoxae.

Solieriinae Newton & Thayer, **nom. nov.**

Type genus: *Solierius* Bernhauer, 1921 (new name for *Physognathus* Solier, 1849, not Agassiz, 1847).

The genus *Solierius* Bernhauer (replacement name for *Physognathus* Solier, preoccupied) is known from a single rare species, *S. obscurus* (Solier), found in southern Chile and adjacent parts of Argentina. Solier (1849) originally placed the genus in a new staphylinid subtribe, "Fisognatitos," and compared it to genera now placed in Omaliinae, with a comment on its pselaphid-like appearance. Lacordaire (1854) repeated Solier's treatment of the genus in French, using the group name "Physognathites." Kraatz (1859b) reviewed the characteristics and placement of the genus, agreed that it did not belong in any of the established groups of Staphylinidae, and concluded that ". . . die Gruppe der Physognathites am besten neben den Omalini einzuschalten sein. . . ." Evidently there has been no subsequent use of a family-group name for this genus based on either of its generic names. Most subsequent authors and all catalogs have placed *Solierius* in the tribe Omaliini (of Oxytelinae) or the equivalent subfamily Omaliinae (e.g., Gemminger & Harold, 1868; Eichelbaum, 1909; Bernhauer & Schubert, 1910; Blackwelder, 1944; Coiffait & Sáiz, 1968; Puthz, 1974; Shibata, 1970: in "*Coryphium* complex"). However, Fauvel (1889) noted that the genus ". . . est aberrant et doit former une tribu spéciale reliant les Staphylinides aux Psélaphides . . . ," and Newton (1985), listing the genus as "subfamily uncertain," indicated that it did not belong in Omaliinae and ". . . cannot be related definitely to any other higher taxon of staphylinids, or to . . . pselaphids. . . ."

We interpret Kraatz's (1859b) name "Physognathites" as latinized, from the context of his comments quoted above. If this interpretation is accepted, then technically we are simply proposing a new name to replace one based on a preoccupied type genus. If, however, Kraatz's name is interpreted as a subsequent use of Lacordaire's name of the same spelling, which is clearly not latinized (an accent appears in names of some other taxa of the same rank and appearing in the same format), then our treatment here will constitute the description of a new taxon. In either case, this group currently lacks an available family-group name, and in our opinion requires one (regardless of the rank and placement that eventually will be decided upon). Thus, we provide a diagnosis and discussion comparable to that for the new taxon Empelinae. Descriptions of *Solierius obscurus* have been presented by Solier (1849, including an inaccurate habitus figure and seven more accurate detail figures), Kraatz (1859b), Coiffait and Sáiz (1968, including a good habitus figure), and Puthz (1974, including figures of maxillary palp and aedeagus). Our diagnosis and discussion are based on those sources and on examination of cleared and slide-mounted specimens of adults of both sexes of the species. We have also examined syntypes in the Muséum National d'Histoire Naturelle (Paris) and Deutsches Entomologisches Institut (Eberswalde). The immature stages are unknown.

Diagnostic Description—Slender, pubescent beetles (about 3.5 mm long) with: head narrow, with distinct neck constriction, dorsum of head medially with triangular impression at base grading into carina between antennal bases, eyes strongly protruding; antennal insertions hidden in dorsal view, distinctly separated from anterior margin of head capsule; antennae 11-segmented, not clubbed; mandible with molar lobe and bifid apex; maxillary palp subequal in length to head width including eyes, 4-segmented, segment 3 swollen and distinctly longer and wider than acutely conical segment 4; pronotum constricted basally, with 2 pairs of furrows (one paramedian and longitudinal, other more lateral and somewhat oblique) and shallow median pit near base; elytra short, covering part of tergite 3, epipleural fold lacking; abdominal sternites 3–8 visible, functional spiracles on segments 1–8, segments 3–7 each with two pairs of paratergites; abdominal inter-

segmental membranes long, apically attached, with brick-wall pattern; sternite 3 with carina-delimited coxal cavities; anterior margin of tergite 7 bisinuate, projecting further than usual into segment 6; tergal wing-folding patches and sternite 8 gland absent; protrochantin concealed, procoxa projecting, lacking external keel; all tarsi 5-segmented, empodia bisetose, setae truncate and slightly expanded apically; wing-folding asymmetrical; wing with costal hinge proximal to radial sector; male with curled laminar structure projecting ventrally from gula, median cluster of stout setae at apex of prosternum, and apically bifid sternite 9; aedeagus very elongate, basal bulb of median lobe small, parameres long and narrow, slightly asymmetrical; female genital segment with single pair of apically well-sclerotized and densely setose gonocoxites, without styli.

DISCUSSION—The wing-folding pattern, wing hinge placement, structure of the aedeagus, and abdominal intersegmental pattern are derived or apomorphic characteristics of the family Staphylinidae *sensu lato* (Lawrence & Newton, 1982). The lack of the sternite 8 gland and the presence of two pairs of abdominal paratergites rule out placement of *Solierius* in the Omaliinae, where it has usually been placed, or anywhere in the "Omaliine Group" of staphylinid subfamilies (Hammond, 1971; Lawrence & Newton, 1982; Thayer, 1987). As yet, we have not found any characters that link it convincingly with any other subgroups of Staphylinidae, and the position of Solieriinae within this large assemblage remains ambiguous.

Catalog

With two exceptions, we have chosen to limit the taxonomic ranks used in this list to the generally accepted ones of superfamily, family, subfamily, tribe, and subtribe, using the Code-mandated or recommended endings of -OIDEA, -IDAE, -INAE, -INI (Art. 29a, Rec. 29A), and -INA, respectively (the last not mentioned in the Code, but widely accepted in Coleoptera, at least). In certain families, formal or informal groups have been used between the ranks of family and subfamily (e.g., Histeridae: genus-based names ending in -MORPHAE; Pselaphidae: informal names), or between subfamily and tribe (e.g., Pselaphidae: genus-based names ending in -MORPHI). In Histeridae and Pselaphidae, where such taxa are in general use, we have listed them as valid names and placed them appropriately in the classification. In all other cases, we have cited such names with other names based on the same type genus, or (informal names) as synonyms of the next higher taxon.

It has been occasional practice to use informal or formal names for groups between family and superfamily, or of indeterminate status above the family level, as in Reitter (1909), Naomi (1985) and Paulian (1988). Such groups are not in general use and are not included in the classification here. Because these names also are either not formal ones or, if based on a type genus, are established family-group names previously used at the family level or below, we have not included them in our list at all. The rank of infratribe, used recently in Staphyliniformia only within one subtribe (Jacobson et al., 1986), is not formally shown in the list: the two names concerned are given as synonyms of their subtribe.

We have not tried to include all existing uses of family-group names. Citations are given only for the first use of a family-group name based on a given type genus, for independent proposals of names based on the same genus, and for a few subsequent uses of names using different orthographies or unusual suffixes or when it is not clear whether a use is based on an earlier name or independently proposed. Clearly subsequent uses are indicated by a semicolon (;) between the name and reference. We have also attempted to determine and cite the first latinized use of family-group names originally proposed in the vernacular. We have included emendations, but have made no attempt to list all variant spellings, incorporating only those that have attained widespread use. For the sake of brevity, each citation (i.e., name with reference) is listed only once. Because of the Principle of Coordination, uses of a name at different ranks or for different concepts of a group are not separate nomenclatural acts, and therefore we do not cite such multiple uses.

For each taxon recognized here, the correct spelling of the valid name is given as a heading in all upper case letters, followed by its author, date of availability, and (if applicable) currently used or well-known synonyms. Names coordinate with (i.e., based on the same type genus as) a valid name have their full citations given *only* under the highest ranked use of that name (up to the family level). Citations for synonymous (or otherwise invalid) names based on other type genera are placed under the lowest ranked taxa to which their type genera are assigned (Art. 35c).

As an example, family-group names based on

the genus *Staphylinus* Linnaeus are used at six different hierarchical levels (series through subtribe). Full citations for names based on *Staphylinus* are listed *only* under the heading for the family Staphylinidae. At the other levels (Staphyliniformia, Staphylinoidea, Staphylininae, Staphylinini, and Staphylinina), the respective taxon names appear as headings with author and date, but without full citations. Names based on the genera *Creophilus*, *Thinopinus*, and *Ocypus*, placed in the same subtribe as *Staphylinus*, are listed only under the heading for the subtribe Staphylinina (i.e., under the lowest taxon to which they can be assigned). The full citation for any name may be found by looking up its type genus in the index.

Within each taxon, subtaxa of the next lowest rank are listed in alphabetical order. Within each taxon, the citation for the valid name is first (unless given at a higher taxonomic level), followed by other citations in chronological order.

Each citation of a name includes the stated or implied type genus (with its author and date). If the author of a particular citation of a name gave the type genus differently, did not indicate one, or gave a different author for the type genus, this is so indicated (in parentheses). The notation "see Discussion {#}" refers to the numbered items in the section "Discussion and Summary of Changes" above. References for all family-group name citations are listed in "Literature Cited," but those for type genera are not (unless they happen to contain cited family-group names). All family-group names and type genera included in the catalog are listed in the index.

STAPHYLINIFORMIA Latreille, 1802

HYDROPHILOIDEA Latreille, 1802

HISTERIDAE Gyllenhal, 1808

Histeroides Gyllenhal, 1808: 74 (see Discussion {2j}). Type genus: *Hister* Linnaeus, 1758.
Cyrthisterinae Houlbert & Monnot, 1922: 12 (unavail., not based on genus).
Plathisterinae Houlbert & Monnot, 1922: 12 (unavail., not based on genus).
Histeromorphae; Wenzel, 1944: 53 (group between family and subfamily; see Discussion {4}). Type genus: *Hister* Linnaeus, 1758 (not cited).

HISTEROMORPHAE Gyllenhal, 1808

DENDROPHILINAE Reitter, 1909
Dendrophilini Reitter, 1909: 288. Type genus: *Dendrophilus* Leach, 1817.

ANAPLEINI Olexa, 1982
Anapleini Olexa, 1982: 38. Type genus: *Anapleus* Horn, 1873.

BACANIINI Kryzhanovskij, 1976
Bacaniini Kryzhanovskij, 1976: 266. Type genus: *Bacanius* LeConte, 1853.
Bacaniini Vienna, 1974: 273 (unavail., no description). Type genus: *Bacanius* LeConte, 1853.

DENDROPHILINI Reitter, 1909

PAROMALINI Reitter, 1909
Paromalini Reitter, 1909: 287. Type genus: *Paromalus* Erichson, 1834.

HETAERIINAE Marseul, 1857
Hétériens Marseul, 1857: 148 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Hetaerius* Erichson, 1839.
Hetaeriini Schmidt, 1885: 281. Type genus: *Hetaerius* Erichson, 1839. NOTE: First latinized use?
Hetaeriomorphini Bickhardt, 1914: 308 (avail., Art. 12b(4)). Type genus: *Hetaeriomorphus* Schmidt, 1893. NOTE: Treated incorrectly as nomen nudum by Mazur (1984).

HISTERINAE Gyllenhal, 1808

EXOSTERNINI Bickhardt, 1914

Exosternini Bickhardt, 1914: 308 (avail., Art. 12b(4)). Type genus: *Exosternus* Lewis, 1902. NOTE: Treated incorrectly as nomen nudum by Mazur (1984).

HISTERINI Gyllenhal, 1808

HOLOLEPTINI Hope, 1840

Hololeptidae Hope, 1840: 106. Type genus: *Hololepta* Paykull, 1811.

OMALODINI Kryzhanovskij, 1972

Omalodini Kryzhanovskij, 1972: 19. Type genus: *Omalodes* Erichson, 1834.

Omalodini Reichardt, 1941: 37 (unavail., no description). Type genus: *Omalodes* Erichson, 1834 (not cited).

PLATYSOMATINI Bickhardt, 1914 (= Platysomini)

Platysomini Bickhardt, 1914: 307 (avail., Art. 12b(4); incorrect original spelling; see Discussion {2c}). Type genus: *Platysoma* Leach, 1817. NOTE: Treated incorrectly as nomen nudum by Mazur (1984).

Althanini Cooman, 1939: 138 (as tribe of Teretriinae). Type genus: *Althanus* Lewis, 1903.

Platysomatini; Mazur, 1973: 51 (correction of original spelling). Type genus: *Platysoma* Leach, 1817.

ONTHOPHILINAE MacLeay, 1819

Onthophilidae MacLeay, 1819: 25 (with "?"). Type genus: *Onthophilus* Leach, 1817 (not cited).

Onthophilidae Gistel, 1856: 363. Type genus: *Onthophilus* Leach, 1817.

Onthophilina Thomson, 1862: 247. Type genus: *Onthophilus* Leach, 1817.

Scolytini Jacobson, 1911: 652 (new name for Abraeini (unnecessary); based on preoccupied type genus). Type genus: *Scolytus* Müller, 1764 (not Geoffroy, 1762; = *Onthophilus* Leach, 1817).

Onthophilinae; Vienna, 1974: 280 (as new subfamily, elevated from tribe). Type genus: *Onthophilus* Leach, 1817.

TRIBALINAE Bickhardt, 1914

Tribalini Bickhardt, 1914: 307 (avail., Art. 12b(4)). Type genus: *Tribalus* Erichson, 1834. NOTE: Treated incorrectly as nomen nudum by Mazur (1984).

SAPRINOMORPHAE Blanchard, 1845

Saprinites Blanchard, 1845: 276 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Saprinus* Erichson, 1834.

Saprinides Lacordaire, 1854: 273 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Saprinus* Erichson, 1834.

Saprinii Fairmaire & Laboulbène, 1855: 273 (incorrect original spelling; see Discussion {2a}). Type genus: *Saprinus* Erichson, 1834. NOTE: First latinized use?

Saprinomorphae; Wenzel, 1944: 52 (group between family and subfamily; see Discussion {4}). Type genus: *Saprinus* Erichson, 1834 (not cited).

ABRAEINAE MacLeay, 1819

Abreidae MacLeay, 1819: 25 (with "?"; incorrect original spelling). Type genus: *Abraeus* Leach, 1817 (not cited).

Abréens Marseul, 1857: 148 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Abraeus* Leach, 1817.

ABRAEINI MacLeay, 1819

ACRITINI Wenzel, 1944

Acritini Wenzel, 1944: 57. Type genus: *Acritus* LeConte, 1853.

ACRITOMORPHINI Wenzel, 1944

Acritomorphini Wenzel, 1944: 55. Type genus: *Acritomorphus* Wenzel, 1944.

PLEGADERINI Portevin, 1929

Plegaderini Portevin, 1929: 602. Type genus: *Plegaderus* Erichson, 1834.

Plegaderini Reichardt, 1941: 97 (as new). Type genus: *Plegaderus* Erichson, 1834.

TERETRIINI Bickhardt, 1914

Teretriinae Bickhardt, 1914: 306 (avail., Art. 12b(4)). Type genus: *Teretrius* Erichson, 1834. NOTE: Treated incorrectly as nomen nudum by Mazur (1984).

CHLAMYDOPSINAE Bickhardt, 1914

Chlamydopsini Bickhardt, 1914: 308 (avail., Art. 12b(4)). Type genus: *Chlamydopsis* Westwood, 1869. NOTE: Treated incorrectly as nomen nudum by Mazur (1984).

NIPONIINAE Fowler, 1912

Niponiidae Fowler, 1912: 93. Type genus: *Niponius* Lewis, 1885.

SAPRININAE Lacordaire, 1854

Myrmetini Portevin, 1929: 593. Type genus: *Myrmetes* Marseul, 1862.

TRYPANAEINAE Marseul, 1857

Trypanéens Marseul, 1857: 148 (not latinized; avail., Art. 11f(iii); see Discussion {1, 22}). Type genus: *Trypanaeus* Eschscholtz, 1829.

Trypanaeina Jacobson, 1910: 638. Type genus: *Trypanaeus* Eschscholtz, 1829 (not cited). NOTE: First latinized use?

Tryponaeinae; Bickhardt, 1914: 306 (based on rejected spelling of type genus; see Discussion {22}). Type genus: *Trypanaeus* Eschscholtz, 1829 (as *Tryponaeus*).

TRYPETICINAE Bickhardt, 1914

Trypeticinae Bickhardt, 1914: 306 (avail., Art. 12b(4)). Type genus: *Trypeticus* Marseul, 1864. NOTE: Treated incorrectly as nomen nudum by Mazur (1984).

HYDROPHILIDAE Latreille, 1802 (including 6 families of Hansen, 1990; see Addendum)

Hydrophilii Latreille, 1802: 136 (incorrect original spelling?; see Discussion {2a}). Type genus: *Hydrophilus* Müller, 1764.

EPIMETOPINAE Zaitzev, 1908

Epimetopina Zaitzev, 1908: 353. Type genus: *Epimetopus* Lacordaire, 1854.

GEORISSINAE Laporte, 1840 (= Georyssinae)

Géorissites Laporte, 1840: 44 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Georissus* Latreille, 1809.

Georissida Heer, 1841a: 471. Type genus: *Georissus* Latreille, 1809. NOTE: First latinized use?

Georissida Heer, 1841b: 40. Type genus: *Georissus* Latreille, 1809.

Georyssii Agassiz, 1846: 72 (based on unjustified emendation). Type genus: *Georissus* Latreille, 1809 (as *Georyssus*, unjustified emendation).

HELOPHORINAE Leach, 1815 (= Elophorinae)

Helopherida Leach, 1815: 95 (based on unjustified emendation; incorrect original spelling; see Discussion {3}). Type genus: *Elophorus* Fabricius, 1775 (as *Helophorus* Leach, unjustified emendation by Illiger, 1801).

Elophorii Fairmaire & Laboulbène, 1855: 234 (incorrect original spelling; see Discussion {2a}). Type genus: *Elophorus* Fabricius, 1775.

Elophorinae; McCorkle, 1965: 23. Type genus: *Elophorus* Fabricius, 1775.

HYDROCHINAE Thomson, 1859

Hydrochidae Thomson, 1859: 15. Type genus: *Hydrochus* Leach, 1817.

HYDROPHILINAE Latreille, 1802

AMPHIOPINI Kuwert, 1890

Amphiopitae Kuwert, 1890: 120. Type genus: *Amphiops* Erichson, 1843.

BEROSINI Mulsant, 1844

Bérosaires Mulsant, 1844: 97 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Berosus* Leach, 1817 (ICZN, 1990a: Official Name).

Berosina Thomson, 1859: 17. Type genus: *Berosus* Leach, 1817 (ICZN, 1990a: Official Name). NOTE: First latinized use?

CHAETARTHRIINI Bedel, 1881 (1844)

Chaetarthriini Bedel, 1881: 314 (maintained, Art. 40b). Type genus: *Chaetarthria* Stephens, 1835 (= senior synonym of *Cyllidium*).

Cyllidiaires Mulsant, 1844: 143 (replaced, Art. 40b; not latinized; see Discussion {1}). Type genus: *Cyllidium* Erichson, 1837 (= *Chaetarthria* Stephens, 1835). NOTE: Ever latinized?

HYDROBIINI Mulsant, 1844

Hydrobiaires Mulsant, 1844: 116 (not latinized; avail., Art. 11f(iii); see Discussion {1}; senior homonym of Hydrobiidae Troschel, 1857 [Mollusca: Gastropoda: *Hydrobia* Hartmann]). Type genus: *Hydrobius* Leach, 1815 (ICZN, 1990a: Official Name).

Hydrobii Fairmaire & Laboulbène, 1855: 227. Type genus: *Hydrobius* Leach, 1815 (ICZN, 1990a: Official Name). NOTE: First latinized use?

ACIDOCERINA Zaitzev, 1908 (= Helocharina)

Acidocerini Zaitzev, 1908: 353. Type genus: *Acidocerus* Klug, 1855.

Philhydrates Mulsant, 1844: 131 (based on unjustified emendation of preoccupied type genus; not latinized; see Discussion {1}). Type genus: *Philydrus* Solier, 1834 (as *Philhydrus*; not *Philydrus* Duftschmid, 1805; = *Enochrus* Thomson, 1859). NOTE: *Philhydrus* Brullé, 1835 (misspelling or unjustified emendation?) also preoccupied, by *Philhydrus* Brookes, 1828.

Helopeltini Horn, 1873: 118 (based on preoccupied type genus). Type genus: *Helopeltis* Horn, 1873 (not Signoret, 1858; = *Helobata* Bergroth, 1888).

Helocharae Orchymont, 1919: 147 (senior homonym of Helocharini Metcalf, 1965, nomen nudum [Homoptera: Tettigellidae: *Helochara* Fitch]). Type genus: *Helochares* Mulsant, 1844.

HYDROBIINA Mulsant, 1844

HYDROPHILINI Latreille, 1802

Hydatophilidae Gistel, 1856: 353. Type genus: *Hydatophilus* Gistel, 1856 (= *Hydrophilus* Müller, 1764).

SPERCHEINAE Erichson, 1837

Spercheini Erichson, 1837: 193. Type genus: *Spercheus* Kugelann, 1798.

SPHAERIDIINAE Latreille, 1802

Sphaeridiota Latreille, 1802: 135. Type genus: *Sphaeridium* Fabricius, 1775.

CERCYONINI Horn, 1890

Cercyones Horn, 1890: 287. Type genus: *Cercyon* Leach, 1817.

MEGASTERNINI Mulsant, 1844

Mégasternaires Mulsant, 1844: 186 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Megasternum* Mulsant, 1844.

Megasterni Horn, 1890: 307. Type genus: *Megasternum* Mulsant, 1844. NOTE: First latinized use?

OMICRINI Smetana, 1975

Omicrini Smetana, 1975: 155. Type genus: *Omicrus* Sharp, 1879.

RYGMODINI Orchymont, 1916

Rygmodini Orchymont, 1916: 238 (see Discussion {2h}). Type genus: *Rygmodus* White, 1846. NOTE: Cylomini has priority, but removal of *Cyloma* from tribe is imminent (see Hansen, 1990), so we do not replace Rygmodini.

Cyllomina Zaitzev, 1908: 400 (based on unjustified emendation of type genus; see Discussion {2c}). Type genus: *Cyloma* Sharp, 1872 (as *Cylloma*, unjustified emendation).
Rygmodini Orchymont, 1919: 105 (as new). Type genus: *Rygmodus* White, 1846.

SPHAERIDIINI Latreille, 1802
Cyclonotaires Rey, 1886: 113 (not latinized; see Discussion {1}). Type genus: *Cyclonotum* Erichson, 1837 (= *Coelostoma* Brullé, 1835).
Cyclonoti Horn, 1890: 281. Type genus: *Cyclonotum* Erichson, 1837 (= *Coelostoma* Brullé, 1835). NOTE: First latinized use?
Coelostomitae Heyden, 1891: 71 (incorrect original spelling; see Discussion {2c}). Type genus: *Coelostoma* Brullé, 1835 (senior synonym of *Cyclonotum* Erichson, 1837).

SPHAERITIDAE Shuckard, 1839
Sphaeritidae Shuckard, 1839: 159. Type genus: *Sphaerites* Duftschmid, 1805.
Sphaeritida Heer, 1841a: 421. Type genus: *Sphaerites* Duftschmid, 1805.
Sphaeritida Heer, 1841b: 21. Type genus: *Sphaerites* Duftschmid, 1805.

SYNTELIIDAE Lewis, 1882
Synteliidae Lewis, 1882: 137. Type genus: *Syntelia* Westwood, 1864.

STAPHYLINOIDEA Latreille, 1802

AGYRTIDAE Thomson, 1859 (= Silphidae, part)
Agyrtidae Thomson, 1859: 57. Type genus: *Agyrtes* Frölich, 1799.

AGYRTINI Thomson, 1859
Necrophilini Jeannel, 1936: 10 (unavail., no description). Type genus: *Necrophilus* Latreille, 1829. NOTE: First use? Ever made available?

LYROSOMATINI Horn, 1880 (= Lyrosomini)
Lyrosomini Horn, 1880: 247 (incorrect original spelling; see Discussion {2c}). Type genus: *Lyrosoma* Mannerheim, 1853.

PTEROLOMATINI Thomson, 1862 (= Pterolomini)
Pterolomini Thomson, 1862: 20 (incorrect original spelling; see Discussion {2c}). Type genus: *Pteroloma* Gyllenhal, 1827.

HYDRAENIDAE Mulsant, 1844 (= Limnebiidae)
Hydraenaires Mulsant, 1844: 50 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Hydraena* Kugelann, 1794.
Hydraenidae Gistel, 1856: 354. Type genus: *Hydraena* Kugelann, 1794. NOTE: First latinized use?

HYDRAENINAE Mulsant, 1844

HYDRAENIDINI Perkins, 1980
Hydraenidini Perkins, 1980: 414. Type genus: *Hydraenida* Germain, 1901.

HYDRAENINI Mulsant, 1844

HYDRAENINA Mulsant, 1844

LIMNEBIINA Mulsant, 1844
Limnébiaires Mulsant, 1844: 88 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Limnebius* Leach, 1815.
Limnebiidae Thomson, 1859: 14. Type genus: *Limnebius* Leach, 1815. NOTE: First latinized use?

OCHTHEBIINAE Thomson, 1859

Ochtebiidae Thomson, 1859: 15 (based on misspelled type genus). Type genus: *Ochthebius* Leach, 1815 (as *Ochtebius*; ICZN, 1991: Official Name).

Ochthebiinae Perkins, 1980: 430 (as new subfamily). Type genus: *Ochthebius* Leach, 1815.

LEIODIDAE Fleming, 1821 (= Liodidae, Anisotomidae, Camiaridae, Catopidae, Colonidae, Leptodiridae, Leptinidae, Platypsyllidae)

Leiodesidae Fleming, 1821: 51 (incorrect original spelling; see Discussion {2,19}). Type genus: *Leiodes* Latreille, 1796.

Liodini Reitter, 1884: 91 (based on unjustified emendation). Type genus: *Leiodes* Latreille, 1796 (as *Liodes*, unjustified emendation by Gemminger & Harold, 1868).

CAMIARINAE Jeannel, 1911

Camiarinae Jeannel, 1911: 192. Type genus: *Camiarus* Sharp, 1878.

AGYRTODINI Jeannel, 1936

Agyrtodini Jeannel, 1936: 99. Type genus: *Agyrtodes* Portevin, 1907.

CAMIARINI Jeannel, 1911

NEOPELATOPINI Jeannel, 1962

Neopelatopini Jeannel, 1962b: 487. Type genus: *Neopelatops* Jeannel, 1936.

CATOPOCERINAE Hatch, 1927 (1880)

Catopocerini Hatch, 1927: 4 (new name for Pinodytini [genus = junior synonym]; maintained, Art. 40b). Type genus: *Catopocerus* Motschulsky, 1869.

CATOPOCERINI Hatch, 1927 (1880)

Pinodytini Horn, 1880: 248 (replaced, Art. 40b). Type genus: *Pinodytes* Horn, 1880 (= *Catopocerus* Motschulsky, 1869).

GLACICAVICOLINI Westcott, 1968

Glacicavicolinae Westcott, 1968: 1. Type genus: *Glacicavicola* Westcott, 1968.

CHOLEVINAE Kirby, 1837 (= Catopinae, Leptodirinae)

Cholevidae Kirby, 1837: 108. Type genus: *Choleva* Latreille, 1796.

ANEMADINI Hatch, 1928

Anemadina Hatch, 1928: 159. Type genus: *Anemadus* Reitter, 1884.

Anemadinae Jeannel, 1936: 179 (as new). Type genus: *Anemadus* Reitter, 1884.

ANEMADINA Hatch, 1928

EOCATOPINA Jeannel, 1936

Eocatopina Jeannel, 1936: 124. Type genus: *Eocatops* Peyerimhoff, 1924.

NEMADINA Jeannel, 1936

Nemadinae Jeannel, 1936: 96. Type genus: *Nemadus* Thomson, 1867.

PARACATOPINA Jeannel, 1936

Paracatopini Jeannel, 1936: 181. Type genus: *Paracatops* Portevin, 1907.

CHOLEVINI Kirby, 1837 (= Catopini)

CATOPINA Chaudoir, 1845

Catopides Chaudoir, 1845: 195 (latinized?; see Discussion {1}). Type genus: *Catops* Paykull, 1798 (as Fabricius).

Catopidae Thomson, 1859: 59. Type genus: *Catops* Paykull, 1798. NOTE: First latinized use?

CHOLEVINA Kirby, 1837

EUCATOPINI Jeannel, 1921
Eucatopini Jeannel, 1921: 233. Type genus: *Eucatops* Portevin, 1903.

LEPTODIRINI Lacordaire, 1854 (1849) (= Bathysciini)
Leptodérides Lacordaire, 1854: 195 (kept for Stagobiini, Art. 40b; not latinized; avail., Art. 11f(iii); based on unjustified emendation; see Discussion {1, 5}). Type genus: *Leptodirus* Schmidt, 1832 (as *Leptoderus*, unjustified emendation by Schmidt, 1852).
Leptoderini Gutfleisch & Bose, 1859: 202 (based on unjustified emendation). Type genus: *Leptodirus* Schmidt, 1832 (as *Leptoderus*, unjustified emendation by Schmidt, 1852). NOTE: First latinized use?
Leptoderidae Kraatz, 1859a: 35 (based on unjustified emendation). Type genus: *Leptodirus* Schmidt, 1832 (as *Leptoderus*, unjustified emendation by Schmidt, 1852). NOTE: First latinized use?
Leptodirites; Abeille de Perrin, 1878: 145 (not formal Latin name?; see Discussion {1}). Type genus: *Leptodirus* Schmidt, 1832.
Gynomorphi Jeannel, 1910: 14 (unavail., not based on genus).
Brachyscapiti Jeannel, 1910: 19 (unavail., not based on genus).
Euryscapiti Jeannel, 1910: 7 (unavail., not based on genus).
Leptodiridae; Hatch, 1933: 188. Type genus: *Leptodirus* Schmidt, 1832.
Leptodirina Guéorguiev, 1974: 841 (as new subtribe). Type genus: *Leptodirus* Schmidt, 1832 (not cited).

ANTROHERPONINA Jeannel, 1910
Antroherpona Jeannel, 1910: 25. Type genus: *Antroherpon* Reitter, 1889.
Antroherponina Guéorguiev, 1974: 841 (as new subtribe). Type genus: *Antroherpon* Reitter, 1889.

BATHYSCIINA Horn, 1880
Bathysciae Horn, 1880: 251 (see Discussion {5}). Type genus: *Bathyscia* Schiödte, 1847.
Oriotini Reitter, 1889: 296 (based on misspelled type genus). Type genus: *Oryotus* Miller, 1856 (as *Oriotus*).
Bathysciina Guéorguiev, 1974: 841 (as new subtribe). Type genus: *Bathyscia* Schiödte, 1847 (not cited).

BATHYSCIOTINA Guéorguiev, 1974
Bathysciotina Guéorguiev, 1974: 841. Type genus: *Bathysciotes* Jeannel, 1910 (not cited).

GHIDINIINA Guéorguiev, 1974
Ghidiniina Guéorguiev, 1974: 841. Type genus: *Ghidinia* Pavan, 1938 (not cited).

LEPTODIRINA Lacordaire, 1854 (1849)
Stagobiinae Schiödte, 1849: 16 (replaced, Art. 40b; see Discussion {5}). Type genus: *Stagobius* Schiödte, 1847 (= *Leptodirus* Schmidt, 1832).

PHOLEUINA Reitter, 1886 (= Pholeuonina)
Pholeuones Reitter, 1886: 314 (incorrect original spelling; see Discussion {2b}). Type genus: *Pholeuon* Hampe, 1856. NOTE: Type genus senior homonym of *Pholeuon* L. Koch, 1873 (Araneae).
Pholeuonina Guéorguiev, 1974: 841 (as new subtribe; incorrect original spelling; see Discussion {2b}). Type genus: *Pholeuon* Hampe, 1856 (not cited).

PLATYCHOLEINA Horn, 1880
Platycholei Horn, 1880: 254. Type genus: *Platycholeus* Horn, 1880.

SPELAEOBATINA Guéorguiev, 1974
Spelaeobatina Guéorguiev, 1974: 841. Type genus: *Spelaeobates* Müller, 1901.

ORITOCATOPINI Jeannel, 1936
Oritocatopini Jeannel, 1936: 116. Type genus: *Oritocatops* Jeannel, 1921.

PTOMAPHAGINI Jeannel, 1911
Ptomaphagini Jeannel, 1911: 193. Type genus: *Ptomaphagus* Illiger, 1798.
Ptomaphagina Hatch, 1928: 164. Type genus: *Ptomaphagus* Illiger, 1798.

PTOMAPHAGINA Jeannel, 1911

PTOMAPHAGININA Szymczakowski, 1964
Ptomaphaginini Szymczakowski, 1964: 66. Type genus: *Ptomaphaginus* Portevin, 1914.

COLONINAE Horn, 1880 (1859)
Colones Horn, 1880: 266 (maintained, Art. 40b; based on unjustified emendation; see Discussion {3}). Type genus: *Kolon* Herbst, 1797 (as *Colon*, unjustified emendation by Illiger, 1801).
Myloechina Thomson, 1859: 60 (replaced, Art. 40b). Type genus: *Myloechus* Latreille, 1807 (= *Kolon* Herbst, 1797).

LEIODINAE Fleming, 1821 (= Anisotominae)

AGATHIDIINI Westwood, 1838 (= Anisotomini)
Agathidiidae Westwood, 1838: 10 (new name for Anisotomidae [genus as junior synonym]; see Discussion {6}). Type genus: *Agathidium* Illiger, 1798.
Anisotomidae Stephens, 1829a: 157 (unavail., Art. 11f(i)1 [type genus implied junior synonym of *Leiodes*]; see Discussion {6}). Type genus: *Anisotoma* Panzer, 1797 (not cited).
Anisotomidae Reitter, 1884: 91 (see Discussion {6}). Type genus: *Anisotoma* Panzer, 1797 (as Illiger).

ESTADIINI Portevin, 1914
Estadiini Portevin, 1914: 199. Type genus: *Estadia* Fairmaire, 1903.
Eustadiini; Hatch, 1928: 77 (based on misspelled type genus). Type genus: *Estadia* Fairmaire, 1903 (as *Eustadia*).

LEIODINI Fleming, 1821
Anisotomidae Erichson, 1845: 41 (based on misidentified type genus; see Discussion {6}). Type genus: *Anisotoma* of Schmidt, 1841 (not Panzer, 1797; = *Leiodes* Latreille, 1796).

PSEUDOLIODINI Portevin, 1926
Pseudoliodini Portevin, 1926a: 75. Type genus: *Pseudoliodes* Portevin, 1926.
Dermatohomoeini Hlisnikovský, 1963: 311. Type genus: *Dermatohomoeus* Hlisnikovský, 1963.

SCOTOCRYPTINI Reitter, 1884
Scotocryptini Reitter, 1884: 91. Type genus: *Scotocryptus* Girard, 1874.

SOGDINI Lopatin, 1961 (= Hydnobiini)
Sogdiidae Lopatin, 1961: 121 (incorrect original spelling; see Discussion {2a, 7}). Type genus: *Sogda* Lopatin, 1961 (= senior synonym of *Trichohydnobius* Vogt, 1961).

SOGDINA Lopatin 1961
Hydnobiini Jeannel, 1962b: 492 (see Discussion {7}). Type genus: *Hydnobius* Schmidt, 1841.

TRIARTHRINA Jeannel 1962
Triarthrini Jeannel, 1962b: 486 (junior homonym of Triarthridae Ulrich, 1930 [Trilobita: Olenidae: *Triarthrus* Green]); needs application to ICZN. Type genus: *Triarthron* Märkel, 1840 (not cited).
Triarthriina; Perkovsky, 1991: 20 (incorrect subsequent spelling; see Discussion {2a}). Type genus: *Triarthron* Märkel, 1840.

PLATYPSYLLINAE Ritsema, 1869 (= Leptininae)
Platypsyllidae Ritsema, 1869: 38 (see Discussion {8}). Type genus: *Platypsyllus* Ritsema, 1869 (senior homonymic synonym of *Platypsyllus* Westwood, 1869).

Leptinidae [implied] LeConte, 1866: 368 (unavail., name not given; see Discussion {8}). Type genus: *Leptinus* Müller, 1817.

Achreioptera Westwood, 1869: 118 (as order; unavail., not based on genus; for *Platypsyllus* Westwood, 1869, not Ritsema, 1869).

Platypsyllidae LeConte, 1872: 799. Type genus: *Platypsyllus* Ritsema, 1869 (senior homonymic synonym of *Platypsyllus* Westwood, 1869).

Leptinidae LeConte, 1872: 802 (see Discussion {8}). Type genus: *Leptinus* Müller, 1817.

PSELAPHIDAE Latreille, 1802

Pselaphii Latreille, 1802: 239 (incorrect original spelling?; see Discussion {2a}). Type genus: *Pselaphus* Herbst, 1792.

Pselaphides Leach, 1815: 116. Type genus: *Pselaphus* Herbst, 1792.

Pselaphidea Leach, 1817: 80. Type genus: *Pselaphus* Herbst, 1792.

Pselaphidae Fleming, 1821: 51 (see Discussion {19}). Type genus: *Pselaphus* Herbst, 1792.

Pselaphomorphi; Jeannel, 1949: 162 (group between subfamily and tribe; see Discussion {4}). Type genus: *Pselaphus* Herbst, 1792.

BRACHYSCELIA Raffray, 1890 (informal group)

Brachyscelidae Raffray, 1890: 82 (unavail., not based on genus; group between family and subfamily).

Brachyscelia; Park, 1942: 34 (unavail., not based on genus).

Brachyscélides; Jeannel, 1955: 5 (unavail., not based on genus; informal).

BATRISINAE Reitter, 1882

Batrisini Reitter, 1882a: 187. Type genus: *Batrisus* Aubé, 1833.

Batrisini Raffray, 1890: 108. Type genus: *Batrisus* Aubé, 1833.

Batrisomorphi; Jeannel, 1949: 113 (group between subfamily and tribe; see Discussion {4}). Type genus: *Batrisus* Aubé, 1833.

AMAUROPINI Jeannel, 1948 (= Amauropsini)

Amauropsini Jeannel, 1948: 1 (incorrect original spelling; see Discussion {2d}). Type genus: *Amaurops* Fairmaire, 1851.

BATRISINI Reitter, 1882

AMBICOCERINA Leleup, 1970

Ambicocerina Leleup, 1970: 309. Type genus: *Ambicocerus* Leleup, 1970.

BATRISINA Reitter, 1882

Trabisina Jeannel, 1949: 116. Type genus: *Trabisus* Raffray, 1890 (= *Atheropterus* Raffray, 1882).

Oropygiina Jeannel, 1949: 114 (based on misspelled type genus). Type genus: *Orropygia* Raffray, 1910 (as *Oropygia*).

LEUPELIINA Jeannel, 1954

Leupeliina Jeannel, 1954c: 106. Type genus: *Leupelia* Jeannel, 1954.

STILIPALPINA Jeannel, 1954

Stilipalpina Jeannel, 1954c: 118. Type genus: *Stilipalpus* Jeannel, 1951.

METOPIASINI Raffray, 1904 (= Metopiini)

Metopiini Raffray, 1904b: 106 (junior homonym of Metopioidae Foerster, 1868 [Hym.: Ichneumonidae: *Metopius* Panzer]; senior homonym of Metopiini Townsend, 1908 [Dipt.: Sarcophagidae: *Metopia* Meigen]; see Discussion {9}). Type genus: *Metopias* Gory, 1832.

Metopiasini; Jeannel, 1949: 42 (incorrect subsequent spelling; see Discussion {9}). Type genus: *Metopias* Gory, 1832 (not cited).

EUPLECTINAE LeConte, 1861

Euplectini LeConte, 1861: 57. Type genus: *Euplectus* Leach, 1817.
Euplectini Reitter, 1882a: 194. Type genus: *Euplectus* Leach, 1817.
Euplectini Raffray, 1890: 91. Type genus: *Euplectus* Leach, 1817.
Euplectidae Schaufuss, 1890: pl. Type genus: *Euplectus* Leach, 1817 (as Kirby).
Euplectomorphi; Jeannel, 1949: 44 (group between subfamily and tribe; see Discussion {4}). Type genus: *Euplectus* Leach, 1817.

EUPLECTOMORPHI LeConte, 1861

EUPLECTINI LeConte, 1861

ACETALIINA Jeannel, 1958
Acetaliini Jeannel, 1958: 81. Type genus: *Acetalius* Sharp, 1883.

BIBLOPLECTINA Jeannel, 1959
Bibloplectina Jeannel, 1959: 110. Type genus: *Bibloplectus* Reitter, 1881.

BIBLOPORELLINA Jeannel, 1952
Bibloporellina Jeannel, 1952a: 92. Type genus: *Bibloporellus* Jeannel, 1949.

BIBLOPORINA Park, 1951
Bibloporini Park, 1951: 64. Type genus: *Bibloporus* Thomson, 1859.

CHRESTOMERINA Jeannel, 1962
Chrestomerina Jeannel, 1962a: 344. Type genus: *Chrestomera* Jeannel, 1962.

EUPLECTINA LeConte, 1861

PANAPHANTINA Jeannel, 1950
Panaphantina Jeannel, 1950: 76. Type genus: *Panaphantus* Kiesenwetter, 1858.

RHINOSCEPSINA Bowman, 1934
Rhinoscepsii Bowman, 1934: 8 (incorrect original spelling; see Discussion {2a, f}). Type genus: *Rhinoscepsis* LeConte, 1878.

TRIMIINA Bowman, 1934
Trimii Bowman, 1934: 8. Type genus: *Trimium* Aubé, 1833.
Trimiina Jeannel, 1950: 139 (as new subtribe). Type genus: *Trimium* Aubé, 1833.

TRIMIODYTINA Jeannel, 1964
Trimiodytina Jeannel, 1964: 39. Type genus: *Trimiodytes* Raffray, 1897.

PTERACMINI Jeannel, 1962
Pteracmini Jeannel, 1962a: 347. Type genus: *Pteracmes* Raffray, 1890.

RAFFRAYIINI Jeannel, 1949
Raffrayina Jeannel, 1949: 76 (incorrect original spelling; see Discussion {2a}). Type genus: *Raffrayia* Reitter, 1882.
Ranavalini Jeannel, 1954a: 183. Type genus: *Ranavala* Raffray, 1898.

TROGASTRINI Jeannel, 1949
Trogastrini Jeannel, 1949: 75. Type genus: *Trogaster* Sharp, 1874.

MITRAMETOPINA Park, 1952
Mitrametopina Park, 1952: 87 (new name for Mitracephalini [based on preoccupied genus]). Type genus: *Mitrametopus* Raffray, 1911 (new name for *Mitracephala* [preoccupied]).
Mitracephalini Park, 1951: 64 (based on preoccupied type genus). Type genus: *Mitracephala* Raffray, 1890 (not Thomson, 1859; replaced by *Mitrametopus* Raffray, 1911).

PHTEGNOMINA Park, 1951
Phtegnomini Park, 1951: 64. Type genus: *Phtegnomus* Raffray, 1890.

RHEXIINA Park, 1951

Rhexini Park, 1951: 63 (incorrect original spelling; see Discussion {2a}). Type genus: *Rhexius* LeConte, 1849.

TRISIGNINA Park & Schuster, 1955

Trisignina Park & Schuster, 1955: 1. Type genus: *Trisignis* Park & Schuster, 1955.

TROGASTRINA Jeannel, 1949

JUBOMORPHI Raffray, 1904

Jubini Raffray, 1904a: 507. Type genus: *Jubus* Schaufuss, 1872.

Jubinini; Raffray, 1908: 25 (incorrect subsequent spelling). Type genus: *Jubus* Schaufuss, 1872.

Jubomorphi; Park, 1951: 59 (group between subfamily and tribe; see Discussion {4}). Type genus: *Jubus* Schaufuss, 1872.

JUBINI Raffray, 1904 (= Auxenocerini)

Auxenocerini Jeannel, 1962a: 319. Type genus: *Auxenocerus* Jeannel, 1962.

FARONINAE Reitter, 1882

Faronides Reitter, 1882a: 199. Type genus: *Faronus* Aubé, 1844.

Faronina Sharp, 1887a: 44. Type genus: *Faronus* Aubé, 1844.

Faronini Raffray, 1890: 84. Type genus: *Faronus* Aubé, 1844.

BYTHINOPLECTINI Schaufuss, 1890 (= Pyxidicerini)

Bythinoplectini Schaufuss, 1890: pl. Type genus: *Bythinoplectus* Reitter, 1882.

BYTHINOPLECTINA Schaufuss, 1890 (= Zethopsina)

Zethini Schaufuss, 1890: pl. (based on preoccupied type genus). Type genus: *Zethus* Schaufuss, 1872 (not Fabricius, 1805, or Pander, 1830; replaced by *Zethopsus* Reitter, 1880).

Zethopsina Jeannel, 1952a: 51. Type genus: *Zethopsus* Reitter, 1880 (new name for *Zethus* Schaufuss, 1872 [preoccupied]).

PYXIDICERINA Raffray, 1904

Pyxidicerini Raffray, 1904a: 500. Type genus: *Pyxidicerus* Motschulsky, 1863.

DIMERINI Raffray, 1908 (= Octomicrini)

Dimerini Raffray, 1908: 412 (published February 1908). Type genus: *Dimerus* Fiori, 1899 (= *Octomicrus* Schaufuss, 1877).

Dimerini Bernhauer, 1908: 327 (as tribe of Staphylinidae; published March 1908). Type genus: *Dimerus* Fiori, 1899 (= *Octomicrus* Schaufuss, 1877).

Octomicrini Jeannel, 1952a: 43 (not accepted, Art. 40b). Type genus: *Octomicrus* Schaufuss, 1877.

FARONINI Reitter, 1882

MAYETIINI Winkler, 1925

Mayetiini Winkler, 1925: 348 (as tribe of Staphylinidae: Oxytelinae). Type genus: *Mayetia* Mulsant & Rey, 1875.

Mayetinae Scheerpeltz, 1933: 1139 (as new subfamily of Staphylinidae; unavail., no description; incorrect original spelling; see Discussion {2a}). Type genus: *Mayetia* Mulsant & Rey, 1875.

Mayetini Park, 1947: 124 (unavail., no description; incorrect original spelling; see Discussion {2a}). Type genus: *Mayetia* Mulsant & Rey, 1875 (not cited).

Mayetini Park, 1951: 58 (incorrect original spelling; see Discussion {2a}). Type genus: *Mayetia* Mulsant & Rey, 1875. NOTE: Not indicated as new; cites Park, 1947.

GONIACERINAE Reitter, 1882 (1872) (= Bryaxinae, Bythininae)

Goniacerides Reitter, 1882a: 188 (maintained, Art. 40b). Type genus: *Goniacerus* Motschulsky, 1855.

Goniastini Schaufuss, 1872: 245 (replaced, Art. 40b). Type genus: *Goniastes* Westwood, 1870 (= *Goniacerus* teste Reitter, Sharp; now valid genus).
Goniacerina Sharp, 1887a: 21. Type genus: *Goniacerus* Motschulsky, 1855.
Goniacerini Raffray, 1890: 131. Type genus: *Goniacerus* Motschulsky, 1855.

BRACHYGLUTOMORPHI Raffray, 1904 (= Bryaxini)
Brachyglutini Raffray, 1904b: 108 (new name for Bryaxini of authors [based on preoccupied genus]). Type genus: *Brachygluta* Thomson, 1859.
Brachyglutomorphi; Jeannel, 1959: 510 (new name for Bryaximorphi [based on preoccupied genus]; group between subfamily and tribe; see Discussion {4}). Type genus: *Brachygluta* Thomson, 1859 (not cited).

ARNYLLIINI Jeannel, 1952
Arnylliini Jeannel, 1952b: 100. Type genus: *Arnyllium* Reitter, 1884.

BRACHYGLUTINI Raffray, 1904

BARADINA Park, 1951
Baradiini Park, 1951: 62 (incorrect original spelling; see Discussion {2a}). Type genus: *Barada* Raffray, 1891.

BRACHYGLUTINA Raffray, 1904
Bryaxes LeConte, 1861: 57 (based on rejected type genus). Type genus: *Bryaxis* Leach, 1817 (not Kugelann, 1794; ICZN, 1969b: Rejected Name No. 1953; = *Rybaxis* Saulcy, 1876).
Bryaxini Reitter, 1882a: 188 (based on rejected type genus). Type genus: *Bryaxis* Leach, 1817 (not Kugelann, 1794; ICZN, 1969b: Rejected Name No. 1953; = *Rybaxis* Saulcy, 1876).
Bryaxini Raffray, 1890: 117 (based on rejected type genus). Type genus: *Bryaxis* Leach, 1817 (not Kugelann, 1794; ICZN, 1969b: Rejected Name No. 1953; = *Rybaxis* Saulcy, 1876).
Reichenbachiina Jacobson, 1910: 577 (new name for Bryaxina and Brachyglutina [unnecessary]). Type genus: *Reichenbachia* Leach, 1826.
Bryaximorphi; Jeannel, 1949: 86 (based on rejected type genus). Type genus: *Bryaxis* Leach, 1817 (not Kugelann, 1794; ICZN, 1969b: Rejected Name No. 1953; = *Rybaxis* Saulcy, 1876).

DECARTHRINA Park, 1951 (= Decarthronina)
Decarthronini Park, 1951: 61 (incorrect original spelling; see Discussion {2b}). Type genus: *Decarthron* Brendel, 1865.

EUPSENIINA Park, 1951
Eupseniini Park, 1951: 61. Type genus: *Eupsenius* LeConte, 1849.

HALORABYXINA Leleup, 1969
Halorabyxina Leleup, 1969a: 138. Type genus: *Halorabyxis* Jeannel, 1954.

PSELAPTINA Park, 1976
Pselaptina Park, 1976: 48. Type genus: *Pselaptus* LeConte, 1880.

GONIACEROMORPHI Reitter, 1882 (1872) (= Bythinomorphi)

BYTHININI Raffray, 1890
Bythinini Raffray, 1890: 126. Type genus: *Bythinus* Leach, 1817 (ICZN, 1969b: Name No. 1849).
Bythinomorphi; Jeannel, 1949: 79 (group between subfamily and tribe; see Discussion {4}). Type genus: *Bythinus* Leach, 1817 (ICZN, 1969b: Name No. 1849).

BYTHININA Raffray, 1890
Bryaxina Jacobson, 1910: 579 (new name for Tychina and Bythinina [unnecessary]). Type genus: *Bryaxis* Kugelann, 1794 (ICZN, 1969b: Name No. 1848).

MACHAERITINA Jeannel, 1950
Machaeritina Jeannel, 1950: 168. Type genus: *Machaerites* Miller, 1855.

XENOBYTHINA Jeannel, 1950
Xenobythina Jeannel, 1950: 201. Type genus: *Xenobythus* Peyerimhoff, 1901.

GONIACERINI Reitter, 1882 (1872)
Simini Schaufuss, 1890: pl. (based on preoccupied type genus). Type genus: *Simus* Raffray, 1882 (not Bonaparte, 1838, or Hodgson, 1841; replaced by *Ipsimus* Reitter, 1885).
Listriophorini Schaufuss, 1890: pl. Type genus: *Listriophorus* Schaufuss, 1872.

INIOCYPHINI Park, 1951 (= Tanypleurini)
Iniocyphini Park, 1951: 60. Type genus: *Iniocyphus* Raffray, 1912.

DALMODINA Park, 1951
Dalmodiini Park, 1951: 61 (incorrect original spelling; see Discussion {2a}). Type genus: *Dalmodes* Reitter, 1882.

GLOBINA Jeannel, 1959
Globina Jeannel, 1959: 471. Type genus: *Globa* Raffray, 1887.

INIOCYPHINA Park, 1951

NATYPLEURINA Newton & Thayer, **nom. nov.** (= Tanypleurina)
Natypleurina Newton & Thayer, **nom. nov.** (for Tanypleurini Jeannel [based on preoccupied type genus]; see Discussion {10}). Type genus: *Natypleurus* Newton & Thayer, **nom. nov.** (for *Tanypleurus* Raffray, 1890, not Steenstrup & Luetken, 1861).
Tanypleurini Jeannel, 1949: 79 (based on preoccupied type genus; see Discussion {10}). Type genus: *Tanypleurus* Raffray, 1890 (not Steenstrup & Luetken, 1861; replaced by *Natypleurus*, **nom. nov.**).

PYGOXYINI Reitter, 1909
Pygoxyini Reitter, 1909: 202. Type genus: *Pygoxyon* Reitter, 1880.

TRICHONYCHINI Reitter, 1882
Trichonyides Reitter, 1882a: 198 (incorrect original spelling; see Discussion {2}). Type genus: *Trichonyx* Chaudoir, 1845.
Trichonycina Sharp, 1887a: 40 (incorrect original spelling). Type genus: *Trichonyx* Chaudoir, 1845.
Trichonyni Raffray, 1890: 102 (incorrect original spelling). Type genus: *Trichonyx* Chaudoir, 1845.
Trichonychini; Ganglbauer, 1895: 798 (emendation of Trichonyni Raffray). Type genus: *Trichonyx* Chaudoir, 1845.

VALDINI Park, 1953
Valdiini Park, 1953: 261 (incorrect original spelling; see Discussion {2a}). Type genus: *Valda* Casey, 1894.

PROTEROMORPHI Jeannel, 1949
Proterini Jeannel, 1949: 41. Type genus: *Proterus* Raffray, 1897.
Proteromorphi; Jeannel, 1959: 492 (group between subfamily and tribe; see Discussion {4}). Type genus: *Proterus* Raffray, 1897 (not cited).

IMIRINI Jeannel, 1949
Imirini Jeannel, 1949: 41. Type genus: *Imirus* Reitter, 1885 (new name for *Mirus* Saulcy, 1877 [preoccupied]).
Mirini Raffray, 1917: 110 (based on preoccupied type genus). Type genus: *Mirus* Saulcy, 1877 (not Albers, 1850; replaced by *Imirus* Reitter, 1885).

PROTERINI Jeannel, 1949

TYCHOMORPHI Raffray, 1904

Tychini Raffray, 1904b: 254. Type genus: *Tychus* Leach, 1817.

Tychomorphi; Jeannel, 1959: 461 (group between subfamily and tribe; see Discussion {4}). Type genus: *Tychus* Leach, 1817 (not cited).

SPELEOBAMINI Park, 1951

Speleobamini Park, 1951: 51. Type genus: *Speleobama* Park, 1951.

TYCHINI Raffray, 1904

MACROSCELIA Raffray, 1890 (informal group)

Macroscelidae Raffray, 1890: 83 (unavail., not based on genus; group between family and subfamily).

Macroscelia; Park, 1942: 34 (unavail., not based on genus).

Macroscélides; Jeannel, 1955: 6 (unavail., not based on genus; informal).

CLAVIGERINAE Leach, 1815

Clavigerides Leach, 1815: 117. Type genus: *Claviger* Preyssler, 1790.

Clavigeridae Hope, 1836: 139. Type genus: *Claviger* Preyssler, 1790 (not cited).

Clavigerida Heer, 1839a: 353 (see Discussion {20}). Type genus: *Claviger* Preyssler, 1790.

Clavigerida; Heer, 1839b: 67 (see Discussion {20}). Type genus: *Claviger* Preyssler, 1790 (as Müller).

CLAVIGERINI Leach, 1815

Adranites Chenu & Desmarest, 1857: 144 (latinized). Type genus: *Adranes* LeConte, 1849.

Adranini Schaufuss, 1872: 245. Type genus: *Adranes* LeConte, 1849.

Clavigerodini Schaufuss, 1882a: 205. Type genus: *Clavigerodes* Raffray, 1877.

Commatocerini Schaufuss, 1882b: 349. Type genus: *Commatocerus* Raffray, 1882 (= *Fustiger* LeConte, 1866).

Clavigeropsini Schaufuss, 1890: pl. Type genus: *Clavigeropsis* Raffray, 1882.

Diarthricerini Jeannel, 1949: 29 (based on misspelled type genus). Type genus: *Disarthricerus* Raffray, 1895 (as *Diarthricerus*).

Fustigerini Jeannel, 1949: 31. Type genus: *Fustiger* LeConte, 1866.

Miroclavigerini Jeannel, 1949: 29. Type genus: *Miroclaviger* Wasmann, 1893.

Adraniini Park, 1951: 58 (as new; incorrect original spelling; see Discussion {2a}). Type genus: *Adranes* LeConte, 1849.

Apoderigerini Jeannel, 1954a: 310. Type genus: *Apoderiger* Wasmann, 1897.

Mastigerini Jeannel, 1954a: 291. Type genus: *Mastiger* Motschulsky, 1851.

Neocerini Jeannel, 1954a: 316. Type genus: *Neocerus* Wasmann, 1893.

Radamini Jeannel, 1954a: 319. Type genus: *Radama* Raffray, 1883.

Theocerini Jeannel, 1954a: 314. Type genus: *Theocerus* Raffray, 1897.

Thysdariini Jeannel, 1954a: 332. Type genus: *Thysdarius* Fairmaire, 1904.

Hoplitoxenini Célis, 1969: 418. Type genus: *Hoplitoxenus* Jeannel, 1960.

Lunillini Célis, 1969: 416. Type genus: *Lunilla* Jeannel, 1957.

Dimerometopini Célis, 1970: 244. Type genus: *Dimerometopus* Célis, 1970.

Neoceratopsini Célis, 1970: 260. Type genus: *Neoceratopsis* Jeannel, 1956.

Neocerina; Célis, 1970: 252 (as new). Type genus: *Neocerus* Wasmann, 1893.

Theocerina; Célis, 1970: 253 (as new). Type genus: *Theocerus* Raffray, 1896.

COLILODIONINI Besuchet, 1991

Colilodionini Besuchet, 1991: 514. Type genus: *Colilodion* Besuchet, 1991.

TIRACERINI Besuchet, 1986 (= Articerini)

Tiracerini Besuchet, 1986: 263 (new name for Articerini [based on misidentified genus]). Type genus: *Tiracerus* Besuchet, 1986 (new name for *Articerus* of Hope, 1845).

Articerides Chenu & Desmarest, 1857: 145 (based on misidentified type genus; latinized). Type genus: *Articerus* of Hope, 1845 (not Dalman, 1926; replaced by *Tiracerus* Besuchet, 1986).

Articerini Schaufuss, 1872: 245 (based on misidentified type genus). Type genus: *Articerus* of Hope, 1845 (not Dalman, 1926; as *Articeros*; replaced by *Tiracerus* Besuchet, 1986).
Articerini Jeannel, 1954a: 291 (based on misidentified type genus). Type genus: *Articerus* of Hope, 1845 (not Dalman, 1926; replaced by *Tiracerus* Besuchet, 1986).

PSELAPHINAE Latreille, 1802

CTENISTOMORPHI Blanchard, 1845
Cténistites Blanchard, 1845: 306 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Ctenistes* Reichenbach, 1816.
Ctenistini Reitter, 1882a: 183. Type genus: *Ctenistes* Reichenbach, 1816.
Ctenistini Raffray, 1890: 140. Type genus: *Ctenistes* Reichenbach, 1816.
Ctenistomorphi; Jeannel, 1949: 177 (group between subfamily and tribe; see Discussion {4}). Type genus: *Ctenistes* Reichenbach, 1816.

ATTAPSENIINI Bruch, 1933
Attapseniini Bruch, 1933a: 26. Type genus: *Attapsenius* Bruch, 1933.

CEOPHYLLINI Park, 1951
Ceophyllini Park, 1951: 67. Type genus: *Ceophyllus* LeConte, 1849.

CHALCOPLECTINI Oke, 1925
Chalcoplectini Oke, 1925: 13. Type genus: *Chalcoplectus* Oke, 1925.

CTENISTINI Blanchard, 1845
Chenniides Reitter, 1882a: 184. Type genus: *Chennium* Latreille, 1807.
Chenniina Jacobson, 1910: 585 (new name for Ctenistina [unnecessary]). Type genus: *Chennium* Latreille, 1807.

ODONTALGINI Jeannel, 1949
Odontalgini Jeannel, 1949: 177. Type genus: *Odontalgus* Raffray, 1877.

PACHYGASTRODINI Leleup, 1969
Pachygastrodini Leleup, 1969b: 282. Type genus: *Pachygastrodes* Leleup, 1969.

PETANOPINI Jeannel, 1954
Petanopini Jeannel, 1954b: 102. Type genus: *Petanops* Jeannel, 1954.

SCHISTODACTYLINI Raffray, 1890
Schistodactylini Raffray, 1890: 162. Type genus: *Schistodactylus* Raffray, 1883.

SOMATIPIONINI Jeannel, 1949
Somatipionini Jeannel, 1949: 208. Type genus: *Somatipion* Schaufuss, 1877.

TMESIPHORINI Jeannel, 1949
Tmesiphorini Jeannel, 1949: 202. Type genus: *Tmesiphorus* LeConte, 1849.

TYRINI Reitter, 1882
Tyrides Reitter, 1882a: 185. Type genus: *Tyrus* Aubé, 1833.
Tyrina Sharp, 1887a: 3. Type genus: *Tyrus* Aubé, 1833.
Tyrini Raffray, 1890: 144. Type genus: *Tyrus* Aubé, 1833.

CENTROPHTHALMINA Jeannel, 1949
Centrophthalmina Jeannel, 1949: 209. Type genus: *Centrophthalmus* Schmidt-Göbel, 1838.

HAMOTINA Park, 1951
Hamotini Park, 1951: 67. Type genus: *Hamotus* Aubé, 1844.

JANUSCULINA Cerruti, 1970
Janusculina Cerruti, 1970: 123. Type genus: *Janusculus* Cerruti, 1970.

TYRINA Reitter, 1882

CYATHIGERIMORPHI Schaufuss, 1872

Cyathigerini Schaufuss, 1872: 245. Type genus: *Cyathiger* King, 1865.

Cyathigerini Raffray, 1890: 133. Type genus: *Cyathiger* King, 1865.

Cyathigerimorphi; Jeannel, 1951: 100 (group between subfamily and tribe; see Discussion {4}). Type genus: *Cyathiger* King, 1865.

BARROSELLINI Leleup, 1973

Barrosellini Leleup, 1973: 81. Type genus: *Barrosellus* Jeannel, 1951.

CYATHIGERINI Schaufuss, 1872

HYBOCEPHALINI Raffray, 1890

Hybocephalini Raffray, 1890: 134. Type genus: *Hybocephalus* Motschulsky, 1851.

Mestogastrina Jacobson, 1910: 585 (new name for Hybocephalina [unnecessary]). Type genus: *Mestogaster* Schmidt-Göbel, 1838.

MACHADOINI Jeannel, 1951

Machadoini Jeannel, 1951: 105. Type genus: *Machadous* Jeannel, 1951.

PSELAPHOMORPHI Latreille, 1802

ARHYTODINI Raffray, 1890

Arhytodini Raffray, 1890: 162. Type genus: *Arhytodes* Reitter, 1882 (= *Rhytus* Westwood, 1870).

Holozodini Raffray, 1900: 518. Type genus: *Holozodus* Fairmaire, 1898.

Arhytodimorphi; Jeannel, 1951: 100 (group between subfamily and tribe; see Discussion {4}). Type genus: *Arhytodes* Reitter, 1882 (= *Rhytus* Westwood, 1870).

Arytodini; Jeannel, 1955: 9 (incorrect subsequent spelling). Type genus: *Arhytodes* Reitter, 1882 (not cited; = *Rhytus* Westwood, 1870).

Arytodimorphi; Jeannel, 1955: 9 (incorrect subsequent spelling). Type genus: *Arhytodes* Reitter, 1882 (not cited; = *Rhytus* Westwood, 1870).

PHALEPSINI Jeannel, 1949

Phalepsini Jeannel, 1949: 208. Type genus: *Phalepsus* Westwood, 1870.

PSELAPHINI Latreille, 1802

PTILIIDAE Erichson, 1845 (= Trichopterygidae)

Ptilina Erichson, 1845: 15 (incorrect original spelling; see Discussion {2a}). Type genus: *Ptilium* Gyllenhal, 1827 (as Schüppel; ICZN, 1984: Name No. 2216).

Ptilina Heer, 1843: 60 (unavail., Art. 11f(i)1 [based on junior synonym]; incorrect original spelling; see Discussion {2a}). Type genus: *Ptilium* Gyllenhal, 1827 (as Schüppel; as junior synonym of *Trichopteryx* Kirby; ICZN, 1984: Name No. 2216).

ACROTRICHINAE Reitter, 1909 (1856)

Acrotrichini Reitter, 1909: 272 (maintained, Art. 40b). Type genus: *Acrotrichis* Motschulsky, 1848.

Trichopterygia Erichson, 1845: 13 (based on preoccupied type genus). Type genus: *Trichopteryx* Kirby, 1826 (not Hübner, 1825; = *Acrotrichis* Motschulsky, 1848).

Cleopteriidae Gistell, 1856: 360 (replaced, Art. 40b). Type genus: *Cleopterium* Gistel, 1856 (= *Acrotrichis* Motschulsky, 1848).

Nephanini Portevin, 1929: 574. Type genus: *Nephanes* Thomson, 1859 (ICZN, 1985b: Name No. 2252).

CEPHALOPLECTINAE Sharp, 1883 (= Limulodinae)

Cephaloplectinae Sharp, 1883: 295 (as subfamily of Staphylinidae). Type genus: *Cephaloplectus* Sharp, 1883.

Limulodinae Ganglbauer, 1899: 297. Type genus: *Limulodes* Matthews, 1866.

Limulodidae; Seevers & Dybas, 1943: 564 (as new family, raised from subfamily of Ptiliidae). Type genus: *Limulodes* Matthews, 1866.

NANOSELLINAE Barber, 1924

Nanosellinae Barber, 1924: 170. Type genus: *Nanosella* Motschulsky, 1869.

PTILIINAE Erichson, 1845

Ptenidiini Flach, 1889: 489. Type genus: *Ptenidium* Erichson, 1845 (ICZN, 1984: Name No. 2217).

Neuglenini Reitter, 1891: 146 (replaced [type genus = junior synonym]). Type genus: *Neuglenes* Thomson, 1859 (ICZN, 1985b: = *Ptinella* Motschulsky, 1844 [objective]).

Ptinellini Reitter, 1906: 259 (new name for Neuglenini [implied; genus = junior synonym]). Type genus: *Ptinella* Motschulsky, 1844 (ICZN, 1985b: Name No. 2251).

Actidiini Portevin, 1929: 571. Type genus: *Actidium* Matthews, 1868.

SCYDMAENIDAE Leach, 1815

Scydmaenides Leach, 1815: 92. Type genus: *Scydmaenus* Latreille, 1802.

MASTIGINAE Fleming, 1821 (= Clidicinae)

Mastigoidae Fleming, 1821: 49 (incorrect original spelling; see Discussion {2, 19}). Type genus: *Mastigus* Latreille, 1802.

Mastigini Reitter, 1882b: 142. Type genus: *Mastigus* Latreille, 1802.

CLIDICINI Casey, 1897

Clidicinae Casey, 1897: 541. Type genus: *Clidicus* Laporte, 1833.

Clidicini Ganglbauer, 1899: 60. Type genus: *Clidicus* Laporte, 1833.

LEPTOMASTACINI Casey, 1897

Leptomastacini Casey, 1897: 541. Type genus: *Leptomastax* Pirazzoli, 1855.

MASTIGINI Fleming, 1821

SCYDMAENINAE Leach, 1815

ASCYDMINI Casey, 1897

Ascydmini Casey, 1897: 505. Type genus: *Ascydmus* Casey, 1897.

CEPHENNIINI Reitter, 1882

Cephenniini Reitter, 1882b: 142. Type genus: *Cephennium* Müller & Kunze, 1822.

Anisosphaeridae Tömösváry, 1882: 128 (based on larva only). Type genus: *Anisosphaera* Tömösváry, 1882 (= *Cephennium* Müller & Kunze, 1822).

CHEVROLATIINI Reitter, 1882

Chevrolatini Reitter, 1882b: 142 (incorrect original spelling; see Discussion {2a}). Type genus: *Chevrolatia* Jacquelin du Val, 1859.

CYRTOSCYDMINI Schaufuss, 1889 (= Euconnini, Lophioderini, Neuraphini, Opresini, Stenichnini)

Cyrtoscydmini Schaufuss, 1889: 2. Type genus: *Cyrtoscydmus* Motschulsky, 1869 (= *Stenichnus* Thomson, 1859).

Scydmaenini; Reitter, 1882b: 159 (based on misidentified type genus). Type genus: *Scydmaenus* of Schaum, 1844 (not Latreille, 1802; = *Stenichnus* Thomson, 1859).

Glandulariidae Schaufuss, 1889: 3. Type genus: *Glandularia* Schaufuss, 1889 (= *Euconnus* (*Napochus*) Thomson, 1859).

Lophioderini Casey, 1897: 356. Type genus: *Lophioderus* Casey, 1897.

Opresini Casey, 1897: 493. Type genus: *Opresus* Casey, 1897 (= *Microscydmus* Saulcy & Croissandeau, 1893).

Euconnini Casey, 1897: 362. Type genus: *Euconnus* Thomson, 1859.

Stenichnini Ganglbauer, 1899: 25. Type genus: *Stenichnus* Thomson, 1859.

Neuraphini Csiki, 1909: 18 (based on misspelled type genus). Type genus: *Nevraphes* Thomson, 1859 (as *Neuraphes*).
Sciacharini Csiki, 1919: 69. Type genus: *Sciacharis* Broun, 1893.

EUTHEIINI Casey, 1897
Eutheiini Casey, 1897: 507. Type genus: *Eutheia* Stephens, 1830.

LEPTOSCYDMINI Casey, 1897
Leptoscydmini Casey, 1897: 518. Type genus: *Leptoscydmus* Casey, 1897.

PLAUMANNIOLINI Costa Lima, 1962
Plaumanniolinae Costa Lima, 1962: 415 (as subfamily of Ptinidae). Type genus: *Plaumanniola* Costa Lima, 1962.
Plaumanniini; Franz, 1990: 33 (incorrect subsequent spelling). Type genus: *Plaumanniola* Costa Lima, 1962.

SCYDMAENINI Leach, 1815
Eumicrini Reitter, 1882b: 192. Type genus: *Eumicrus* Laporte, 1833 (= *Scydmaenus* Latreille, 1802).

SIAMITINI Franz, 1989
Siamitini Franz, 1989: 44. Type genus: *Siamites* Franz, 1989.

SYNDICINI Csiki, 1919
Syndicini Csiki, 1919: 17. Type genus: *Syndicus* Motschulsky, 1851

SILPHIDAE Latreille, 1807
Silphales Latreille, 1807: 1. Type genus: *Silpha* Linnaeus, 1758.

NICROPHORINAE Kirby, 1837
Necrophoridae Kirby, 1837: 95 (based on unjustified emendation). Type genus: *Nicrophorus* Fabricius, 1775 (as *Necrophorus*, unjustified emendation by Thunberg, 1789).
Nicrophorini; Hatch, 1927: 5. Type genus: *Nicrophorus* Fabricius, 1775.

SILPHINAE Latreille, 1807 (= Necrodini)
Necrodeidae Gistel, 1856: 362 (incorrect original spelling; see Discussion {2}). Type genus: *Necrodes* Leach, 1815 (as Wilk.).
Necrodini Portevin, 1926b: 155. Type genus: *Necrodes* Leach, 1815.

STAPHYLINIDAE Latreille, 1802 (= Dasyceridae, Micropeplidae, Scaphidiidae, Oxyporidae, Oxyteliidae, etc.)
Staphyliniae Latreille, 1802: 124 (incorrect original spelling?; see Discussion {2a}; ICZN, 1959: Rejected Name No. 291, misspelled as Staphylinii). Type genus: *Staphylinus* Linnaeus, 1758 (ICZN, 1959: Name No. 1338).
Staphylinoidea; Ganglbauer, 1895: v (as superfamily). Type genus: *Staphylinus* Linnaeus, 1758 (ICZN, 1959: Name No. 1338).
Staphyliniformia; Lameere, 1900: pl. (as suborder). Type genus: *Staphylinus* Linnaeus, 1758 (ICZN, 1959: Name No. 1338).
Staphylinidae; ICZN, 1959: 142 (ICZN, 1959: Official Name No. 260 [correction of Staphylinii [*sic*] Latreille, 1802]). Type genus: *Staphylinus* Linnaeus, 1758 (ICZN, 1959: Name No. 1338).

ALEOCHARINAE Fleming, 1821 (= Trichopseniinae, Hypocyphtinae, Pygosteninae, etc.)
Aleocharidae Fleming, 1821: 49 (see Discussion {19}). Type genus: *Aleochara* Gravenhorst, 1802.
Aleocharides Mannerheim, 1830: 11. Type genus: *Aleochara* Gravenhorst, 1802.
Aleocharinea; Seevers, 1978: 17 (as supertribe). Type genus: *Aleochara* Gravenhorst, 1802.
Aleocharidea; Seevers, 1978: 34 (as "section" above subfamily). Type genus: *Aleochara* Gravenhorst, 1802.

ACTOCHARINI Bernhauer & Schubert, 1911

Actochari Bernhauer & Schubert, 1911: 91 (as subtribe of Oxytelini). Type genus: *Actocharis* Fauvel, 1869 (senior homonymic synonym of *Actocharis* Sharp, 1870). NOTE: *Actocharis* Fauvel = Nov. 1869; *Actocharis* Sharp = May 1870.

ALEOCHARINI Fleming, 1821

ALEOCHARINA Fleming, 1821

Piochardiae Fenyes, 1918: 20. Type genus: *Piochardia* Heyden, 1870.

COMPACTOPEDIINA Kistner, 1970

Compactopedina Kistner, 1970b: 18 (incorrect original spelling; see Discussion {2a}). Type genus: *Compactopedia* Kistner, 1970.

HODOXENINA Kistner, 1970

Hodoxenina Kistner, 1970a: 12. Type genus: *Hodoxenus* Kistner, 1970.

ATHETINI Casey, 1910 (= Callicerini)

Athetae Casey, 1910b: 2 (see Discussion {11}). Type genus: *Atheta* Thomson, 1858 (ICZN, 1961b: Name No. 1422).

Athetini Fenyes, 1921a: 34 (new name for Myrmedoniini [as inappropriate]). Type genus: *Atheta* Thomson, 1858 (ICZN, 1961b: Name No. 1422).

Xenotae Seevers, 1978: 113 (not indicated as new; unavail., no description). Type genus: *Xenota* Mulsant & Rey, 1873. NOTE: Subtribal placement?

Trichomicrina Muona, 1979: 23 (unavail., no description). Type genus: *Trichomicra* Brundin, 1945. NOTE: Subtribal placement?

Dadobiina Muona, 1979: 23 (unavail., no description). Type genus: *Dadobia* Thomson, 1858. NOTE: Subtribal placement?

Hydrosmectina Muona, 1979: 23 (unavail., no description). Type genus: *Hydrosmecta* Thomson, 1858. NOTE: Subtribal placement?

Amischina Muona, 1979: 25 (unavail., no description). Type genus: *Amischa* Thomson, 1858. NOTE: Subtribal placement?

Hydrosmectina Lohse et al., 1990: 123 (unavail., no description). Type genus: *Hydrosmecta* Thomson, 1858. NOTE: Subtribal placement?

ATHETINA Casey, 1910

Plagiarthrini Cameron, 1926: 184. Type genus: *Plagiarthrina* Keys, 1920 (= *Atheta* Thomson, 1858).

Dimetrotae Seevers, 1978: 102 (not indicated as new). Type genus: *Dimetrota* Mulsant & Rey, 1873.

COPTOTERMOECIINA Kistner & Pasteels, 1970

Coptotermoeciina Kistner & Pasteels, 1970: 86 (not indicated as new; validation of Seevers, 1957). Type genus: *Coptotermoecia* Oke, 1933.

Coptotermoeciina Seevers, 1957: 248 (unavail., no description; not indicated as new). Type genus: *Coptotermoecia* Oke, 1933.

GEOSTIBINA Seevers, 1978 (= Callicerina)

Geostibae Seevers, 1978: 126 (not indicated as new). Type genus: *Geostiba* Thomson, 1858.

Callicerina Jacobson, 1908: 448 (new name for Myrmedoniini of authors; junior homonym of Callicerina Rondani, 1856 [Diptera: Syrphidae: *Callicera* Panzer]; see Discussion {11}). Type genus: *Callicerus* Gravenhorst, 1802.

Callicerini Horion, 1967: 220 ("*sensu* Lohse i. l. 1966"). Type genus: *Callicerus* Gravenhorst, 1802.

Callicerini Lohse, 1969: 173 (new name for Athetini of authors, because type genus is oldest name; junior homonym of Callicerina Rondani, 1856 [Diptera: Syrphidae: *Callicera* Panzer]; see Discussion {11}). Type genus: *Callicerus* Gravenhorst, 1802 (not cited).

MICROCEROXENINA Kistner, 1970
Microceroxenina Kistner, 1970c: 10. Type genus: *Microceroxenus* Kistner, 1970.

NASUTIPHILINA Kistner, 1970
Nasutiphilina Kistner, 1970d: 500. Type genus: *Nasutiphilus* Kistner, 1970.

SCHISTOGENIINA Fenyes, 1918
Schistogeniae Fenyes, 1918: 18. Type genus: *Schistogenia* Kraatz, 1857.
Schistogeniae Bernhauer & Scheerpeltz, 1926: 681. Type genus: *Schistogenia* Kraatz, 1857.

STRIGOTINA Casey, 1910 (= Acrotonina)
Strigotae Casey, 1910b: 176. Type genus: *Strigota* Casey, 1910.
Ischnopodini Hatch, 1957: 141 (new name for Athetini auct. [genus = junior synonym]; based on now-rejected type species designation). Type genus: *Ischnopoda* of Westwood, 1838 (not Stephens, 1835; ICZN, 1961b: = *Acrotona* Thomson, 1859).
Acrotonae Seevers, 1978: 97 (not indicated as new). Type genus: *Acrotona* Thomson, 1859 (ICZN, 1961b: Name No. 1423).

TAXICERINA Lohse, 1989
Taxicerina Lohse, 1989: 210. Type genus: *Taxicera* Mulsant & Rey, 1873.

TERMITOTELINA Kistner, 1970
Termitotelina Kistner, 1970a: 4 (not indicated as new; validation of Seevers, 1957). Type genus: *Termitotelus* Wasmann, 1908.
Termitotelina Seevers, 1957: 250 (unavail., no description; not indicated as new). Type genus: *Termitotelus* Wasmann, 1908.

THAMIARAEINA Fenyes, 1921
Thamiaraeini Fenyes, 1921a: 34. Type genus: *Thamiaraea* Thomson, 1858.

AUTALIINI Thomson, 1859
Autaliides Thomson, 1859: 30. Type genus: *Autalia* Leach, 1819.
Rhopalogastra Fenyes, 1918: 17. Type genus: *Rhopalogastrum* Bernhauer, 1912.
Ophioglossae Fenyes, 1918: 18. Type genus: *Ophioglossa* Fauvel, 1866.

COROTOCINI Fenyes, 1918
Corotocini Fenyes, 1918: 61. Type genus: *Corotoca* Schiödte, 1847.

ABROTELINA Seevers, 1957
Abrotelina Seevers, 1957: 121 (not indicated as new). Type genus: *Abroteles* Casey, 1889.

COROTOCINA Fenyes, 1918
Termitomimini Fenyes, 1921a: 33. Type genus: *Termitomimus* Trägårdh, 1907.

EBURNIOGASTRINA Jacobson, Kistner & Pasteels, 1986
Eburniogastrina Jacobson et al., 1986: 27. Type genus: *Eburniogaster* Seevers, 1938.

NASUTITELLINA Jacobson, Kistner & Pasteels, 1986
Nasutitellina Jacobson et al., 1986: 95. Type genus: *Nasutitella* Pasteels, 1967.

SPHURIDAETHINA Pace, 1988
Sphuridaethina Pace, 1988: 980. Type genus: *Sphuridaethes* Pace, 1988. NOTE: Does not belong in Corotocini (D. H. Kistner, *in litteris*, 1990).

TERMITOCHARINA Seevers, 1957
Termitocharina Seevers, 1957: 139 (not indicated as new). Type genus: *Termitochara* Wasmann, 1893.

TERMITOCUPIDINA Jacobson, Kistner & Pasteels, 1986
Termitocupidina Jacobson et al., 1986: 35. Type genus: *Termitocupidus* Jacobson et al., 1986.

TERMITOGASTRINA Bernhauer & Scheerpeltz, 1926
Termitogastri Bernhauer & Scheerpeltz, 1926: 734. Type genus: *Termitogaster* Casey, 1889.
Termitogastrici Jacobson et al., 1986: 58 (as infratribe). Type genus: *Termitogaster* Casey, 1889.
Termitellici Jacobson et al., 1986: 47 (as infratribe). Type genus: *Termitella* Wasmann, 1911.

TERMITOICEINA Jacobson, Kistner & Pasteels, 1986
Termitoiceina Jacobson et al., 1986: 84. Type genus: *Termitoiceus* Silvestri, 1901.

TERMITOPITHINA Jacobson, Kistner & Pasteels, 1986
Termitopithina Jacobson et al., 1986: 80. Type genus: *Termitopithus* Seevers, 1957.

TERMITOPTOCHINA Fenyes, 1921
Termitoptochini Fenyes, 1921a: 33. Type genus: *Termitoptochus* Silvestri, 1911.
Termitoptochina Jacobson et al., 1986: 96 (as new subtribe). Type genus: *Termitoptochus* Silvestri, 1911.

TIMEPARTHENINA Fenyes, 1921
Timeparthenini Fenyes, 1921a: 34. Type genus: *Timeparthenus* Silvestri, 1901.

CREMATOXENINI Mann, 1921
Crematoxenini Mann, 1921: 547. Type genus: *Crematoxenus* Mann, 1921.
Pulicomorphini Mann, 1924: 87. Type genus: *Pulicomorpha* Mann, 1924.
Philacamatini Bruch, 1933b: 206. Type genus: *Philacamatus* Bruch, 1933.
Pulicomorphinae; Sanderson, 1943: 135 (as new subfamily, elevated from tribe). Type genus: *Pulicomorpha* Mann, 1924.

DEINOPSINI Sharp, 1883
Deinopsini Sharp, 1883: 294. Type genus: *Deinopsis* Matthews, 1838.
Dinopsini Ganglbauer, 1895: 323 (based on unjustified emendation). Type genus: *Deinopsis* Matthews, 1838 (as *Dinopsis*, unjustified emendation by Kraatz, 1857).
Adinopsini Cameron, 1919: 242. Type genus: *Adinopsis* Cameron, 1919.

DIESTOTINI Mulsant & Rey, 1871
Diestotates Mulsant & Rey, 1871: 96 (not latinized; avail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Diestota* Mulsant & Rey, 1870. NOTE: Latinized prior to Lohse (1989)?
Elachistarthronini Notman, 1920: 714 (incorrect original spelling; see Discussion {2b}). Type genus: *Elachistarthron* Notman, 1920 (= *Diestota* Mulsant & Rey, 1870).
Diestotini Lohse, 1989: 186. Type genus: *Diestota* Mulsant & Rey, 1870 (not cited). NOTE: Not indicated as new, but no reference given. First latinization of Mulsant & Rey 1871?

DIGLOTTINI Jacobson, 1909
Diglottina Jacobson, 1909: 529 (new name for Diglossini [based on preoccupied genus]). Type genus: *Diglotta* Champion, 1899 (new name for *Diglossa* Haliday, 1837 [preoccupied]). NOTE: Priority over Eichelbaum (1909) uncertain.
Diglossaires Mulsant & Rey, 1873a: 73 (based on preoccupied type genus; not latinized; see Discussion {1}). Type genus: *Diglossa* Haliday, 1837 (not Wagler, 1832; replaced by *Diglotta* Champion, 1899).
Diglossini; Ganglbauer, 1895: 313 (based on preoccupied type genus). Type genus: *Diglossa* Haliday, 1837 (not Wagler, 1832; replaced by *Diglotta* Champion, 1899).
Diglottini Eichelbaum, 1909: 204 (new name for Diglossini [based on preoccupied genus]). Type genus: *Diglotta* Champion, 1899 (new name for *Diglossa* Haliday, 1837 [preoccupied]).
Diglottinea; Seevers, 1978: 21 (as supertribe; no description). Type genus: *Diglotta* Champion, 1899.

DIGRAMMINI Fauvel, 1900
Digrammini Fauvel, 1900: 123. Type genus: *Digrammus* Fauvel, 1900.

DIMONOMERINI Cameron, 1933

Dimonomerini Cameron, 1933: 103 (avail., Art. 13d). Type genus: *Dimonomera* Cameron, 1933.

DORYLOPHILINI Fenyes, 1921 (= Deremini)

Dorylophilini Fenyes, 1921a: 34. Type genus: *Dorylophila* Wasmann, 1904 (as *Dorylophilus*).

Deremini Seevers, 1965: 294 (*Dorylophila* treated as subgenus of type genus). Type genus: *Derema* Fauvel, 1899.

DREPANOXENINI Kistner & Watson, 1972

Drepanoxenini Kistner & Watson, 1972: 2. Type genus: *Drepanoxenus* Kistner & Watson, 1972.

ECITOCHARINI Seevers, 1965

Ecitocharini Seevers, 1965: 287. Type genus: *Ecitochara* Wasmann, 1887.

ECITOGASTRINI Fenyes, 1918

Ecitogastrini Fenyes, 1918: 74. Type genus: *Ecitogaster* Wasmann, 1899.

EUSTENIAMORPHINI Bernhauer & Scheerpeltz, 1926

Eusteniamorphini Bernhauer & Scheerpeltz, 1926: 517 (not indicated as new). Type genus: *Eusteniamorpha* Cameron, 1920.

FALAGRIINI Mulsant & Rey, 1873

Falagriates Mulsant & Rey, 1873b: 8 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Falagria* Leach, 1819 (as Mannerheim).

Falagriina Seidlitz, 1874: 291. Type genus: *Falagria* Leach, 1819 (as Stephens). NOTE: First latinized use?

Falagriinea; Seevers, 1978: 18 (as supertribe). Type genus: *Falagria* Leach, 1819.

FELDINI Kistner, 1972

Feldini Kistner, 1972: 2 (not indicated as new; validation of Seevers, 1957). Type genus: *Felda* Blackwelder, 1952.

Feldina Seevers, 1957: 236 (unavail., no description). Type genus: *Felda* Blackwelder, 1952.

GYMNUSINI Heer, 1839

Gymnusida Heer, 1839a: 302 (see Discussion {20}). Type genus: *Gymnusa* Gravenhorst, 1806 (as Karsten).

Gymnusida Heer, 1839b: 49 (see Discussion {20}). Type genus: *Gymnusa* Gravenhorst, 1806 (as Karsten).

Gymnusinea; Seevers, 1978: 173 (as supertribe). Type genus: *Gymnusa* Gravenhorst, 1806.

HETEROTAXINI Fenyes, 1921

Heterotaxini Fenyes, 1921a: 33. Type genus: *Heterotaxus* Bernhauer, 1915. NOTE: Present status? Bernhauer & Scheerpeltz (1926: 522): *Heterotaxus* placed in Hygronomini: Saphoglossina.

HOMALOTINI Heer, 1839 (= Bolitocharini, Gyrophaenini)

Homalotida Heer, 1839a: 305 (see Discussion {12, 20}). Type genus: *Homalota* Mannerheim, 1830 (*sensu latiore* of Erichson, 1837).

Homalotida Heer, 1839b: 50 (see Discussion {20}). Type genus: *Homalota* Mannerheim, 1830 (*sensu latiore* of Erichson, 1837).

Homalotides Thomson, 1859: 33. Type genus: *Homalota* Mannerheim, 1830 (*sensu stricto*).

Cypheae Seevers, 1978: 272 (not indicated as new; unavail., no description). Type genus: *Cyphea* Fauvel, 1863. NOTE: Subtribal placement?

BOLITOCHARINA Thomson, 1859

Bolitocharides Thomson, 1859: 31 (ICZN, 1961a: Rejected Name No. 328 [as misspelling];

see Discussion {12}). Type genus: *Bolitochara* Mannerheim, 1830 (ICZN, 1961a: Name No. 1417).

Euryusides Thomson, 1859: 40. Type genus: *Euryusa* Erichson, 1837 (not cited).

Myrméciates Mulsant & Rey, 1873b: 98 (not latinized; unavail., Art. 11f(iii); see Discussion {1}). Type genus: *Myrmoecia* Mulsant & Rey, 1873 (= *Bolitochara* Mannerheim, 1830).

Sipaliae Casey, 1910b: 167. Type genus: *Sipalia* Mulsant & Rey, 1853 (as Rey).

Leptusae Fenyes, 1918: 18. Type genus: *Leptusa* Kraatz, 1856.

Heterotae Fenyes, 1918: 18. Type genus: *Heterota* Mulsant & Rey, 1873.

Nanoglossae Fenyes, 1918: 20. Type genus: *Nanoglossa* Fauvel, 1868 (= *Leptusa* Kraatz, 1856).

Ditropaliini Hatch, 1957: 147 (new name for Bolitocharini [*Bolitochara* then = *Zyras*; changed by ICZN, 1961a]). Type genus: *Ditropalia* Casey, 1906.

Bolitocharini; ICZN, 1961a: 238 (ICZN, 1961a: Name No. 296 [correction of Bolitocharides Thomson]). Type genus: *Bolitochara* Mannerheim, 1830 (ICZN, 1961a: Name No. 1417).

Bolitocharinea; Seevers, 1978: 20 (as supertribe; no description). Type genus: *Bolitochara* Mannerheim, 1830.

DINARDOPSINA Bernhauer & Scheerpeltz, 1926

Dinardopsis Bernhauer & Scheerpeltz, 1926: 525 (lapsus for Dinardopses?; not indicated as new). Type genus: *Dinardopsis* Bruch, 1917.

GYROPHAENINA Kraatz, 1856

Gyrophaenini Kraatz, 1856: 351 (see Discussion {12}). Type genus: *Gyrophaena* Mannerheim, 1830.

HOMALOTINA Heer, 1839

Thecturotae Fenyes, 1918: 18. Type genus: *Thecturota* Casey, 1893.

OXYPODININA Fenyes, 1918

Oxypodinini Fenyes, 1918: 18. Type genus: *Oxypodinus* Bernhauer, 1901.

SILUSINA Fenyes, 1918

Silusae Fenyes, 1918: 17. Type genus: *Silusa* Erichson, 1837 (as Kraatz).

Silusae Bernhauer & Scheerpeltz, 1926: 548. Type genus: *Silusa* Erichson, 1837.

HOPLANDRIINI Casey, 1910

Hoplandriae Casey, 1910b: 170. Type genus: *Hoplandria* Kraatz, 1857.

Hoplandriini Fenyes, 1918: 19. Type genus: *Hoplandria* Kraatz, 1857.

HYGRONOMINI Thomson, 1859

Hygronomides Thomson, 1859: 31. Type genus: *Hygronoma* Erichson, 1837.

HYGRONOMINA Thomson, 1859

SAPHOGLOSSINA Bernhauer & Scheerpeltz, 1926

Saphoglossae Bernhauer & Scheerpeltz, 1926: 521 (not indicated as new). Type genus: *Saphoglossa* Sharp, 1883.

HYPOCYPHTINI Laporte, 1835 (= Oligotini)

Hypocyphtidae Laporte, 1835: 135. Type genus: *Hypocyphtus* Gyllenhal, 1827 (as Schüppel; = *Cypha* Leach, 1819).

Oligotides Thomson, 1859: 30. Type genus: *Oligota* Mannerheim, 1830.

Nematoscelini Fenyes, 1921a: 33. Type genus: *Nematoscelis* Wollaston, 1867. NOTE: Present status?

Cyphinae Lohse, 1974: 7 (unavail., published in synonymy with Hypocyphtinae; junior homonym of Cyphini Leng, 1920 [Coleoptera: Curculionidae: *Cyphus* Schönherr]). Type genus: *Cypha* Leach, 1819. NOTE: First use?

Oligotinea; Seevers, 1978: 21 (as supertribe; no description). Type genus: *Oligota* Mannerheim, 1830.

Cyphainae Adám, 1987: 155 (unavail., no description; incorrect subsequent spelling). Type genus: *Cypha* Leach, 1819.

LEPTANILLOPHILINI Fenyes, 1918 (= Mimecitonini)
Leptanillophilini Fenyes, 1918: 59 (see Discussion {13}). Type genus: *Leptanillophilus* Holmgren, 1908.

LABIDOPULLINA Jacobson & Kistner, 1991
Labidopullina Jacobson & Kistner, 1991: 7. Type genus: *Labidopullus* Borgmeier, 1958.

LEPTANILLOPHILINA Fenyes, 1918

MIMECITINA Bernhauer & Scheerpeltz, 1926
Mimecitonini Bernhauer & Scheerpeltz, 1926: 518 (incorrect original spelling; see Discussion {2b, 13}). Type genus: *Mimeciton* Wasmann, 1893.

MIMONILLINA Bernhauer & Scheerpeltz, 1926
Mimonillae Bernhauer & Scheerpeltz, 1926: 518. Type genus: *Mimonilla* Wasmann, 1913.

LEUCOCRASPEDINI Fenyes, 1921
Leucocraspedini Fenyes, 1921a: 34. Type genus: *Leucocraspedum* Kraatz, 1859.

LOMECHUSINI Fleming, 1821 (= Myrmedoniini, Zyrasini)
Lomechusidae Fleming, 1821: 49 (see Discussion {14, 19}). Type genus: *Lomechusa* Gravenhorst, 1806.
Lomechusidae Laporte, 1835: 136. Type genus: *Lomechusa* Gravenhorst, 1806.
Lomechusida Heer, 1839a: 304. Type genus: *Lomechusa* Gravenhorst, 1806.
Lomechusida Heer, 1839b: 50. Type genus: *Lomechusa* Gravenhorst, 1806.
Lomechusini Wasmann, 1902: 99. Type genus: *Lomechusa* Gravenhorst, 1806.
Dinocorynae Seevers, 1978: 13 (unavail., no description). Type genus: *Dinocoryna* Casey, 1893. NOTE: Subtribal placement?
Ecitoporae Seevers, 1978: 13 (unavail., no description). Type genus: *Ecitopora* Wasmann, 1887. NOTE: Subtribal placement?
Tetradoniae Seevers, 1978: 13 (unavail., no description). Type genus: *Tetradonia* Wasmann, 1894. NOTE: Subtribal placement?

LOMECHUSINA Fleming, 1821
Xenodusae group Seevers, 1978: 155 (not used as Latin group name). Type genus: *Xenodusa* Wasmann, 1894. NOTE: Available subtribal name?

MYRMEDONIINA Thomson, 1867 (= Zyrasina)
Myrmedoniides Thomson, 1867: 209 (see Discussion {14}). Type genus: *Myrmedonia* Erichson, 1837 (= *Zyras* Stephens, 1835).
Zyrini Bradley, 1930: 83 (new name for Myrmedoniini [genus = junior synonym]; see Discussion {2e, 14}). Type genus: *Zyras* Stephens, 1835 (ICZN, 1961a: Name No. 1418).
Zyrasini Jeannel & Jarrige, 1949: 304 (new name for Myrmedoniini [genus = junior synonym]; incorrect original spelling; see Discussion {2e, 14}). Type genus: *Zyras* Stephens, 1835 (ICZN, 1961a: Name No. 1418).
Bolitocharina Hatch, 1957: 146 (new name for Myrmedoniini [genus = junior synonym]; based on rejected type species designation). Type genus: *Bolitochara* of Westwood, 1838 (not ICZN, 1961a; = *Zyras* Stephens, 1835).
Myrmedoniinea; Seevers, 1978: 18 (as supertribe; no description). Type genus: *Myrmedonia* Erichson, 1837 (= *Zyras* Stephens, 1835).

TERMITONDINA Seevers, 1957
Termitondina Seevers, 1957: 238. Type genus: *Termitonda* Seevers, 1957.

TERMITOZYRINA Seevers, 1957
Termitozyrina Seevers, 1957: 240 (see Discussion {2e}). Type genus: *Termitozyras* Seevers, 1957.

MASURIINI Cameron, 1939
Masuriini Cameron, 1939: 24 (not indicated as new). Type genus: *Masuria* Cameron, 1928.

MESOPORINI Cameron, 1959
Mesoporinae Cameron, 1959: 119. Type genus: *Mesoporus* Cameron, 1959.

MIMANOMMATINI Wasmann, 1912 (= Dorylomimini)
Mimanommatinae Wasmann, 1912a: 478. Type genus: *Mimanomma* Wasmann, 1912.
Dorylomimini Wasmann, 1916: 99. Type genus: *Dorylomimus* Wasmann, 1902.
Dorylogastrini Wasmann, 1916: 103. Type genus: *Dorylogaster* Wasmann, 1904.

MYLLAENINI Ganglbauer, 1895
Myllaenini Ganglbauer, 1895: 317. Type genus: *Myllaena* Erichson, 1837.

OXYPODINI Thomson, 1859
Oxypodides Thomson, 1859: 36 (ICZN, 1957: Name No. 150). Type genus: *Oxypoda* Mannerheim, 1830 (ICZN, 1957: Name No. 1078).
Oxypodinea; Seevers, 1978: 14 (as supertribe; no description). Type genus: *Oxypoda* Mannerheim, 1830.

APHYTOPODINA Bernhauer & Scheerpeltz, 1926
Aphytopi Bernhauer & Scheerpeltz, 1926: 740 (incorrect original spelling; see Discussion {2g}). Type genus: *Aphytopus* Sharp, 1886.

BLEPHARHYMENINA Klimaszewski & Peck, 1986
Blepharrhymeni Klimaszewski & Peck, 1986: 58 (not indicated as new; based on misspelled type genus; validation of Seevers, 1978). Type genus: *Blepharhymenus* Solier, 1849 (as *Blepharrhymenus*, unjustified emendation of Gemminger & Harold, 1868).
Blepharhymeni Seevers, 1978: 82 (not indicated as new; unavail., no description). Type genus: *Blepharhymenus* Solier, 1849.

DINARDINA Mulsant & Rey, 1873
Dinardaires Mulsant & Rey, 1873a: 6 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Dinarda* Leach, 1819 (as Mannerheim).
Homéusates Mulsant & Rey, 1874: 2 (not latinized; avail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Homoeusa* Kraatz, 1856. NOTE: Ever latinized?
Dinardini Wasmann, 1904b: 218. Type genus: *Dinarda* Leach, 1819. NOTE: First latinized use?
Decusini Fenyes, 1918: 19. Type genus: *Decusa* Casey, 1900.
Dinardae Bernhauer & Scheerpeltz, 1926: 736. Type genus: *Dinarda* Leach, 1819 (as Mannerheim).

MEOTICINA Seevers, 1978
Meoticae Seevers, 1978: 78 (not indicated as new). Type genus: *Meotica* Mulsant & Rey, 1873.
Meoticina Muona, 1979: 22 (unavail., no description). Type genus: *Meotica* Mulsant & Rey, 1873.

OCYUSINA Mulsant & Rey, 1874
Ocyusates Mulsant & Rey, 1874: 416 (not latinized; avail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Ocyusa* Kraatz, 1856.
Ocyusae Fenyes, 1918: 20. Type genus: *Ocyusa* Kraatz, 1856. NOTE: First latinized use?

OXYPODINA Thomson, 1859
Ocaleides Thomson, 1859: 38. Type genus: *Ocalea* Erichson, 1837.
Calodérates Mulsant & Rey, 1874: 456 (not latinized; avail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Calodera* Mannerheim, 1830.
Microglottae Fenyes, 1918: 20. Type genus: *Microglotta* Kraatz, 1862 (= *Haploglossa* Kraatz, 1856).

Caloderae Fenyes, 1918: 20. Type genus: *Calodera* Mannerheim, 1830. NOTE: First latinized use?

Caloderae Bernhauer & Scheerpeltz, 1926: 718. Type genus: *Calodera* Mannerheim, 1830.

Microglossina Hatch, 1957: 136 (unavail., no description; evidently based on misspelled genus). Type genus: *Microglotta* Kraatz, 1862 (not cited; = *Haploglossa* Kraatz, 1856).

PHLOEOPORINA Thomson, 1859

Phloeoporides Thomson, 1859: 33. Type genus: *Phloeopora* Erichson, 1837.

Phloeoporini Cameron, 1939: 562 (new name for Oxypodini [supposedly preoccupied by Bernhauer, 1901]). Type genus: *Phloeopora* Erichson, 1837. NOTE: Bernhauer, 1901, uses genus *Oxypodinus*, not a family-group name.

TACHYUSINA Thomson, 1859

Tachyusides Thomson, 1859: 34. Type genus: *Tachyusa* Erichson, 1837 (ICZN, 1961b: Name No. 1420).

PAGLINI Newton & Thayer, **nom. nov.** (= Pachyglossini)

Paglini Newton & Thayer, **nom. nov.** (for Pachyglossini Fenyes [based on preoccupied type genus]). Type genus: *Pagla* Blackwelder, 1952 (new name for *Pachyglossa* [preoccupied]).

Pachyglossini Fenyes, 1918: 60 (based on preoccupied type genus). Type genus: *Pachyglossa* Fauvel, 1868 (not Hodgson, 1843; replaced by *Pagla* Blackwelder, 1952).

PARADOXENUSINI Bruch, 1937

Paradoxenusini Bruch, 1937: 354. Type genus: *Paradoxenusa* Bruch, 1937.

PEDICULOTINI Adám, 1987

Pediculotini Adám, 1987: 156. Type genus: *Pediculota* Adám, 1987.

PHILOTERMITINI Seevers, 1957

Philotermitini Seevers, 1957: 250. Type genus: *Philotermes* Kraatz, 1857.

PHYLLODINARDINI Wasmann, 1916

Phyllodinardini Wasmann, 1916: 105. Type genus: *Phyllodinarda* Wasmann, 1916.

PHYTOSINI Thomson, 1867

Phytosides Thomson, 1867: 206. Type genus: *Phytosus* Curtis, 1838.

Liparocephali Fenyes, 1918: 18. Type genus: *Liparocephalus* Mäklin, 1853.

PLACUSINI Mulsant & Rey, 1871

Placusates Mulsant & Rey, 1871: 102 (not latinized; avail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Placusa* Erichson, 1837.

Placusae Fenyes, 1918: 17. Type genus: *Placusa* Erichson, 1837. NOTE: First latinized use?

Euvirae Seevers, 1978: 272 (unavail., no description). Type genus: *Euvira* Sharp, 1883.

PRONOMAEINI Mulsant & Rey, 1873

Pronoméates Mulsant & Rey, 1873b: 8 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Pronomaea* Erichson, 1837.

Pronomaeini; Ganglbauer, 1895: 315. Type genus: *Pronomaea* Erichson, 1837. NOTE: Cited Mulsant & Rey; first latinized use?

PSEUDOPERINTHINI Cameron, 1939

Pseudoperinthinae Cameron, 1939: 1. Type genus: *Pseudoperinthus* Wasmann, 1916.

PYGOSTENINI Fauvel, 1899

Pygostenini Fauvel, 1899: 5. Type genus: *Pygostenus* Kraatz, 1858.

Sympolemonini Fenyes, 1918: 51. Type genus: *Sympolemon* Wasmann, 1900.

SCEPTOBIINI Seevers, 1978

Sceptobiini Seevers, 1978: 148. Type genus: *Sceptobius* Sharp, 1883.

SKATITOXENINI Kistner & Pasteels, 1969

Skatitoxenini Kistner & Pasteels, 1969: 1190. Type genus: *Skatitoxenus* Kistner & Pasteels, 1969.

TERMITODISCINI Wasmann, 1904

Termitodiscini Wasmann, 1904a: 656. Type genus: *Termitodiscus* Wasmann, 1899.

Termitodiscinae Wasmann, 1912b: 91 (as new). Type genus: *Termitodiscus* Wasmann, 1899.

TERMITOHOSPITINI Seevers, 1941

Termitohospini Seevers, 1941: 331 (incorrect original spelling; see Discussion {2}). Type genus: *Termitohospes* Seevers, 1941.

Termitohospitini; Seevers, 1957: 191. Type genus: *Termitohospes* Seevers, 1941.

HETAIROTERMITINA Seevers, 1957

Hetairotermitina Seevers, 1957: 191 (not indicated as new). Type genus: *Hetairotermes* Cameron, 1920.

TERMITOHOSPITINA Seevers, 1941

TERMITONANNINI Fenyes, 1918

Termitonannini Fenyes, 1918: 75. Type genus: *Termitonannus* Wasmann, 1902.

PERINTHINA Bernhauer & Scheerpeltz, 1926

Perinthi Bernhauer & Scheerpeltz, 1926: 521. Type genus: *Perinthus* Casey, 1889.

Poduroideae Scheerpeltz, 1934: 1537 (unavail., no description). Type genus: *Poduroides* Mann, 1926.

TERMITONANNINA Fenyes, 1918

TERMITOPAEDIINI Seevers, 1957

Termitopaediini Seevers, 1957: 214. Type genus: *Termitopaedia* Wasmann, 1911.

TERMITUSINI Fenyes, 1918

Termitusae Fenyes, 1918: 18. Type genus: *Termitusa* Wasmann, 1905.

TERMITOSPECTRINA Seevers, 1957

Termitospectrina Seevers, 1957: 191 (not indicated as new). Type genus: *Termitospectrum* Mann, 1926.

TERMITUSINA Fenyes, 1918

TRICHOPSENIINI LeConte & Horn, 1883

Trichopsenii LeConte & Horn, 1883: 100. Type genus: *Trichopsenius* Horn, 1877.

Schizelythrinae Kemner, 1925: 122. Type genus: *Schizelythron* Kemner, 1925.

Schizelythreae; Scheerpeltz, 1934: 1706 (as new subtribe). Type genus: *Schizelythron* Kemner, 1925.

Trichopseniinae; Seevers, 1941: 320 (as new subfamily, raised from tribe). Type genus: *Trichopsenius* Horn, 1877.

TRILOBITIDEINI Fauvel, 1899

Trilobitideidae Fauvel, 1899: 3. Type genus: *Trilobitideus* Raffray, 1898.

APATETICINAE Fauvel, 1895

Apateticae Fauvel, 1895: 190. Type genus: *Apatetica* Westwood, 1848.

APHAENOSTEMMINAE Peyerimhoff, 1914

Aphaenostemmini Peyerimhoff, 1914: 248. Type genus: *Aphaenostemmus* Peyerimhoff, 1914. NOTE: Originally as tribe of Oxytelinae (*sensu lato*) between Proteinini and Omaliini; these are now Proteininae and Omaliinae, so Aphaenostemmini is here given equivalent rank.

DASYCERINAE Reitter, 1887

Dasycerini Reitter, 1887: 8 (as tribe of Lathridiidae). Type genus: *Dasycerus* Brongniart, 1800.

EMPELINAE Newton & Thayer, **subfam. nov.** (see Diagnoses)

Empelinae Newton & Thayer, **subfam. nov.** Type genus: *Empelus* LeConte, 1861.

Empelidae Abdullah, 1969: 683 (unavail., no description). Type genus: *Empelus* LeConte, 1861 (not cited).

Empelinae Hlavac, 1975: 180 (unavail., no description). Type genus: *Empelus* LeConte, 1861.

Empelidae Crowson, 1981: 695 (unavail., no description). Type genus: *Empelus* LeConte, 1861 (not cited).

EUAESTHETINAE Thomson, 1859

Euaesthetina Thomson, 1859: 42. Type genus: *Euaesthetus* Gravenhorst, 1806.

ALZADAESTHETINI Scheerpeltz, 1974

Alzadaesthetini Scheerpeltz, 1974: 102. Type genus: *Alzadaesthetus* Kistner, 1961.

AUSTROESTHETINI Cameron, 1944

Austroaesthetini Cameron, 1944: 69 (based on unjustified emendation). Type genus: *Austroesthetus* Oke, 1933 (as *Austroaesthetus*, unjustified emendation). NOTE: Type genus originally spelled *Austroesthethus*, judged a *lapsus* for *Austroesthetus* based on Oke's use of "Euaesthethinae."

EUAESTHETINI Thomson, 1859

Tamotini Coiffait, 1984: 353. Type genus: *Tamotus* Schaufuss, 1872.

FENDERIINI Scheerpeltz, 1974

Fenderiini Scheerpeltz, 1974: 103. Type genus: *Fenderia* Hatch, 1957.

NORDENSKIOLDIINI Bernhauer & Schubert, 1911

Nordenskioeldiini Bernhauer & Schubert, 1911: 186 (based on misspelled type genus). Type genus: *Nordenskioldia* Sahlberg, 1880 (as *Nordenskioeldia*, misspelling). NOTE: Type genus originally spelled *Nordenskiöldia,* based on a Swedish (not German) name, so umlaut is dropped in latinization (Art. 32d(i)(2)).

STENAESTHETINI Bernhauer & Schubert, 1911

Stenaesthetini Bernhauer & Schubert, 1911: 186. Type genus: *Stenaesthetus* Sharp, 1874.

HABROCERINAE Mulsant & Rey, 1877

Habrocériens Mulsant & Rey, 1877: 65 (not latinized; avail., Art. 11f(iii); see Discussion {1}). Type genus: *Habrocerus* Erichson, 1839. NOTE: Published May 1877; cited by Ganglbauer, 1895: 326.

Habroceri Horn, 1877: 83. Type genus: *Habrocerus* Erichson, 1839. NOTE: First latinized use? Published June 1877.

LEPTOTYPHLINAE Fauvel, 1874

Leptotyphli Fauvel, 1874: 329. Type genus: *Leptotyphlus* Fauvel, 1874.

Leptotyphlini Coiffait, 1957: 61 (as new tribe). Type genus: *Leptotyphlus* Fauvel, 1874.

CEPHALOTYPHLINI Coiffait, 1963

Cephalotyphlini Coiffait, 1963: 381. Type genus: *Cephalotyphlus* Coiffait, 1955.

ENTOMOCULIINI Coiffait, 1957

Entomoculini Coiffait, 1957: 61 (incorrect original spelling; see Discussion {2a}). Type genus: *Entomoculia* Croissandeau, 1891.

LEPTOTYPHLINI Fauvel, 1874

METROTYPHLINI Coiffait, 1963
Metrotyphlini Coiffait, 1963: 381. Type genus: *Metrotyphlus* Coiffait, 1959.

NEOTYPHLINI Coiffait, 1963
Neotyphlini Coiffait, 1963: 382. Type genus: *Neotyphlus* Coiffait, 1959.

MEGALOPSIDIINAE Leng, 1920 (= Megalopininae, Stylopodinae)
Megalopsidiini Leng, 1920: 98 (new name for Megalopinae [based on preoccupied genus]). Type genus: *Megalopsidia* Leng, 1918 (new name for *Megalops* [preoccupied]; = *Megalopinus* Eichelbaum, 1915).
Megalopini Erichson, 1839b: 30 (based on preoccupied type genus). Type genus: *Megalops* Erichson, 1839 (not Lacepède, 1803, Rafinesque, 1815, or Dejean, 1833; = *Megalopinus* Eichelbaum, 1915).
Aulacotrachelinae Benick, 1920: 1 (new name for Megalopinae [based on preoccupied genus]; synonymized with Megalopsidiinae by Benick, 1922). Type genus: *Aulacotrachelus* Benick, 1920 (new name for *Megalops* [preoccupied]; = *Megalopinus* Eichelbaum, 1915).
Megalopsinae Cameron, 1921: 347 (based on preoccupied type genus; incorrect original spelling; see Discussion {2d}). Type genus: *Megalops* Erichson, 1839 (not Lacepède, 1803, Rafinesque, 1815, or Dejean, 1833; = *Megalopinus* Eichelbaum, 1915).
Stylopodinae Blackwelder, 1943: 202 (new name for Megalopinae and Megalopsidiinae [based on preoccupied genus, junior synonym]). Type genus: *Stylopodus* Benick, 1917 (= *Megalopinus* Eichelbaum, 1915).
Megalopininae Puthz, 1967: 152 (not indicated as new name). Type genus: *Megalopinus* Eichelbaum, 1915. NOTE: First use based on *Megalopinus*?
Megalopininae Naomi, 1986: 344 (new name for Megalopinae and Megalopsidiinae [because present valid name of type genus is *Megalopinus*]). Type genus: *Megalopinus* Eichelbaum, 1915.

MICROPEPLINAE Leach, 1815
Micropeplida Leach, 1815: 90. Type genus: *Micropeplus* Latreille, 1809.
Micropeplida Heer, 1839a: 169 (as new family). Type genus: *Micropeplus* Latreille, 1809.
Micropeplida; Heer, 1839b: 4. Type genus: *Micropeplus* Latreille, 1809.

NEOPHONINAE Fauvel, 1905
Neophoni Fauvel, 1905: 98. Type genus: *Neophonus* Fauvel, 1905.

OLISTHAERINAE Thomson, 1859
Olisthaerina Thomson, 1859: 47. Type genus: *Olisthaerus* Dejean, 1833.

OMALIINAE MacLeay, 1825
Omalidae MacLeay, 1825: 49 (incorrect original spelling; see Discussion {2a}). Type genus: *Omalium* Gravenhorst, 1802 (not cited).
Omalides Mannerheim, 1830: 9. Type genus: *Omalium* Gravenhorst, 1802.
Homalioidae Agassiz, 1847: 184 (based on unjustified emendation). Type genus: *Omalium* Gravenhorst, 1802 (as *Homalium*, unjustified emendation).

ANTHOPHAGINI Thomson, 1859 (= Brathinidae)
Anthophagides Thomson, 1859: 48. Type genus: *Anthophagus* Gravenhorst, 1802.
Brathinidae LeConte, 1861: 48 (as subfamily of Silphidae). Type genus: *Brathinus* LeConte, 1852.
Lestévates Mulsant & Rey, 1880: 8 (not latinized; avail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Lesteva* Latreille, 1796.
Lestevina Jacobson, 1908: 450 (new name for Omaliinae [as [H]omaliina; unnecessary]). Type genus: *Lesteva* Latreille, 1796.

ARPEDIOMIMINI Cameron, 1917
Arpediomimi Cameron, 1917b: 277 (new name for Arpediopsini [based on preoccupied

genus]). Type genus: *Arpediomimus* Cameron, 1917 (new name for *Arpediopsis* Cameron, 1917 [preoccupied]; = *Crymus* Fauvel, 1904).

Arpediopsini Cameron, 1917a: 123 (based on preoccupied type genus). Type genus: *Arpediopsis* Cameron, 1917 (not Ganglbauer, 1895; replaced by *Arpediomimus* Cameron, 1917; = *Crymus* Fauvel, 1904).

CORNEOLABIINI Steel, 1950

Corneolabiini Steel, 1950a: 54. Type genus: *Corneolabium* Steel, 1950.

CORYPHIINI Jacobson, 1908

Coryphiina Jacobson, 1908: 452. Type genus: *Coryphium* Stephens, 1834 (ICZN, 1990b: Official Name).

Coryphiini Portevin, 1929: 430. Type genus: *Coryphium* Stephens, 1834 (ICZN, 1990b: Official Name).

BOREAPHILINA Zerche, 1990

Boreaphilina Zerche, 1990: 158 (as new subtribe; see Discussion {1}). Type genus: *Boreaphilus* Sahlberg, 1832. NOTE: No reference to Mulsant & Rey, 1880.

Boréaphilaires Mulsant & Rey, 1880: 391 (not latinized; unavail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Boreaphilus* Sahlberg, 1832. NOTE: Ever latinized?

CORYPHIINA Jacobson, 1908

EUSPHALERINI Hatch, 1957 (= Anthobiini)

Eusphalerini Hatch, 1957: 82 (new name for Anthobiini [based on misidentified genus]). Type genus: *Eusphalerum* Kraatz, 1857.

Anthobiates Mulsant & Rey, 1880: 290 (based on misidentified type genus; not latinized; see Discussion {1}). Type genus: *Anthobium* of Erichson, 1840 (not Leach, 1819; = *Eusphalerum* Kraatz, 1857; as Stephens).

Anthobiini Portevin, 1929: 450 (based on misidentified type genus). Type genus: *Anthobium* of Erichson, 1840 (not Leach, 1819; = *Eusphalerum* Kraatz, 1857; as Stephens).

GLYPHOLOMATINI Jeannel, 1962 (= Glypholomini)

Glypholomini Jeannel, 1962b: 482 (as tribe of Silphidae; incorrect original spelling; see Discussion {2c}). Type genus: *Glypholoma* Jeannel, 1962.

HADROGNATHINI Portevin, 1929

Hadrognathini Portevin, 1929: 431. Type genus: *Hadrognathus* Schaum, 1852 (new name for *Eugnathus* Mulsant & Rey, 1851 [preoccupied]). NOTE: Type genus a senior homonym of *Hadrognathus* Walliser, 1964 (Conodonta).

Eugnathates Mulsant & Rey, 1880: 386 (based on preoccupied type genus; not latinized; see Discussion {1}). Type genus: *Eugnathus* Mulsant & Rey, 1851 (not Schönherr, 1833 or Agassiz, 1836; replaced by *Hadrognathus* Schaum, 1852).

MICRALYMMINI Mulsant & Rey, 1880

Micralymmates Mulsant & Rey, 1880: 3 (not latinized; avail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Micralymma* Westwood, 1838.

Micralymmini Portevin, 1929: 443. Type genus: *Micralymma* Westwood, 1838. NOTE: First latinized use?

MICROSILPHINI Crowson, 1950 (= Micragyrtini)

Microsilphinae Crowson, 1950: 284 (as subfamily of Silphidae). Type genus: *Microsilpha* Broun, 1886.

Micragyrtini Blackwelder, 1944: 84 (as tribe of Leiodidae; unavail., no description). Type genus: *Micragyrtes* Champion, 1918.

Micragyrtini Jeannel, 1962b: 484 (as tribe of Silphidae). Type genus: *Micragyrtes* Champion, 1918.

OMALIINI MacLeay, 1825

TETRADELINI Fauvel, 1904
Tetradeli Fauvel, 1904: 90. Type genus: *Tetradelus* Fauvel, 1904.

OSORIINAE Erichson, 1839
Osorini Erichson, 1839b: 30 (incorrect original spelling; see Discussion {2a}). Type genus: *Osorius* Latreille, 1829.

ELEUSININI Sharp, 1887
Eleusinina Sharp, 1887b: 728 (see Discussion {2i}). Type genus: *Eleusis* Laporte, 1835.
Eleusii Bernhauer & Schubert, 1910: 10 (incorrect subsequent spelling; see Discussion {2i}). Type genus: *Eleusis* Laporte, 1835.

LEPTOCHIRINI Sharp, 1887
Leptochirina Sharp, 1887b: 733. Type genus: *Leptochirus* Germar, 1824.

OSORIINI Erichson, 1839

OSORIINA Erichson, 1839

PAROSORIINA Bernhauer & Schubert, 1911
Parosorii Bernhauer & Schubert, 1911: 146. Type genus: *Parosorius* Bernhauer, 1904.

THORACOPHORINI Reitter, 1909 (= Lispinini)
Thoracophorinae Reitter, 1909: 199 (see Discussion {3}). Type genus: *Thoracophorus* Motschulsky, 1837 (correction of original spelling, *Thoraxophorus*). NOTE: Original spelling of type genus used by Burakowski et al., 1979.
Thoracophori Bernhauer & Schubert, 1910: 24 (see Discussion {3}). Type genus: *Thoracophorus* Motschulsky, 1837 (correction of original spelling, *Thoraxophorus*).

CLAVILISPININA Newton & Thayer, **nom. nov.** (= Paralispinina)
Clavilispinina Newton & Thayer, **nom. nov.** (for Paralispini Blackwelder [based on preoccupied type genus]). Type genus: *Clavilispinus* Bernhauer, 1926 (replaced *Paralispinus* [preoccupied]).
Paralispini Blackwelder, 1942: 79 (based on preoccupied type genus). Type genus: *Paralispinus* Bernhauer, 1921 (not Eichelbaum, 1913; = *Clavilispinus* Bernhauer, 1926).

GLYPTOMINA Newton & Thayer, **nom. nov.** (= Calocerina)
Glyptomina Newton & Thayer, **nom. nov.** (for Caloceri Blackwelder [based on preoccupied type genus]). Type genus: *Glyptoma* Erichson, 1839 (senior synonym of *Calocerus* Fauvel [preoccupied]).
Caloceri Blackwelder, 1942: 78 (based on preoccupied type genus). Type genus: *Calocerus* Fauvel, 1891 (not LeConte, 1853; = *Glyptoma* Erichson, 1839).

LISPININA Bernhauer & Schubert, 1910
Lispini Bernhauer & Schubert, 1910: 19. Type genus: *Lispinus* Erichson, 1839.

THORACOPHORINA Reitter, 1909

OXYPORINAE Fleming, 1821
Oxyporidae Fleming, 1821: 49 (see Discussion {19}). Type genus: *Oxyporus* Fabricius, 1775.
Oxyporidae Laporte, 1835: 110. Type genus: *Oxyporus* Fabricius, 1775.
Oxyporini Erichson, 1839b: 29. Type genus: *Oxyporus* Fabricius, 1775.

OXYTELINAE Fleming, 1821
Oxytelidae Fleming, 1821: 49 (see Discussion {19}). Type genus: *Oxytelus* Gravenhorst, 1802.
Oxytelides Mannerheim, 1830: 9. Type genus: *Oxytelus* Gravenhorst, 1802.

COPROPHILINI Heer, 1839
Coprophilina Heer, 1839a: 198 (see Discussion {20}). Type genus: *Coprophilus* Latreille, 1829.

Coprophilini Erichson, 1839b: 30 (see Discussion {20}). Type genus: *Coprophilus* Latreille, 1829.

Coprophilida; Heer, 1839b: 13 (see Discussion {20}). Type genus: *Coprophilus* Latreille, 1829.

Homalotriquitos Solier, 1849: 321 (not latinized; unavail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Homalotrichus* Solier, 1849. NOTE: Ever latinized?

Homalotrichites; Lacordaire, 1854: 153 (not latinized; unavail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Homalotrichus* Solier, 1849.

Planeustomites Jacquelin du Val, 1857: 58 (not latinized; unavail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Planeustomus* Jacquelin du Val, 1857.

Thinobiides Sahlberg, 1876: 242. Type genus: *Thinobius* Kiesenwetter, 1844.

Pholidiens Mulsant & Rey, 1877: 65 (based on preoccupied type genus; not latinized; see Discussion {1}). Type genus: *Pholidus* Mulsant & Rey, 1856 (not Rafinesque, 1815, or Gray, 1840; = *Euphanias* Fairmaire & Laboulbène, 1856).

Trogophléaires Mulsant & Rey, 1879: 246 (not latinized; avail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Trogophloeus* Mannerheim, 1830 (= *Carpelimus* Leach, 1819).

Thinobiina Sharp, 1887b: 705. Type genus: *Thinobius* Kiesenwetter, 1844.

Trogophloeina Seidlitz, 1889: 90. Type genus: *Trogophloeus* Mannerheim, 1830 (= *Carpelimus* Leach, 1819). NOTE: First latinized use?

Pholidini Acloque, 1896: 145 (based on preoccupied type genus). Type genus: *Pholidus* Mulsant & Rey, 1856 (not Rafinesque, 1815, or Gray, 1840; = *Euphanias* Fairmaire & Laboulbène, 1856).

Acrognathini Reitter, 1909: 164 (based on preoccupied type genus). Type genus: *Acrognathus* Erichson, 1839 (as Kraatz; not *Acrognathus* Agassiz, 1836; = *Manda* Blackwelder, 1952).

Deleasterini Reitter, 1909: 164. Type genus: *Deleaster* Erichson, 1839.

Euphaniae Reitter, 1909: 16. Type genus: *Euphanias* Fairmaire & Laboulbène, 1856.

Toxoderi Bernhauer & Schubert, 1911: 91 (junior homonym of Toxoderites Saussure, 1869 [Mantodea: Mantidae: *Toxodera* Audinet-Serville]). Type genus: *Toxoderus* Fauvel, 1900 (= *Homalotrichus* Solier, 1849).

Syntomiinae Böving & Craighead, 1931: 28 (based on larval characters). Type genus: *Syntomium* Curtis, 1828.

Trigonobregmini Scheerpeltz, 1944: 170. Type genus: *Trigonobregma* Scheerpeltz, 1944.

Deleasterini Hatch, 1957: 86. Type genus: *Deleaster* Erichson, 1839. NOTE: Cites "Horn, 1895: 236–239," but there is no family-group name there.

Carpelimini Hatch, 1957: 85. Type genus: *Carpelimus* Leach, 1819.

OXYTELINI Fleming, 1821

Apocellaria Lynch, 1884: 334. Type genus: *Apocellus* Erichson, 1839.

Ecitoclimacini Borgmeier, 1934: 452 (as tribe of Aleocharinae). Type genus: *Ecitoclimax* Borgmeier, 1934.

Apocellini Hatch, 1957: 85. Type genus: *Apocellus* Erichson, 1839.

PAEDERINAE Fleming, 1821

Poederidae Fleming, 1821: 49 (based on misspelled type genus; see Discussion {19}). Type genus: *Paederus* Fabricius, 1775 (as *Poederus*).

Paederidae Laporte, 1835: 120. Type genus: *Paederus* Fabricius, 1775.

Paederini Erichson, 1839a: 499. Type genus: *Paederus* Fabricius, 1775.

Paederi Bordoni, 1980: 170 (new name for "Paederina Bordoni, 1975" [unnecessary]). Type genus: *Paederus* Fabricius, 1775.

PAEDERINI Fleming, 1821

ACANTHOGLOSSINA Coiffait, 1982

Acanthoglossi Coiffait, 1982: 10. Type genus: *Acanthoglossa* Kraatz, 1859.

ASTENINA Hatch, 1957 (= Suniina)

Astenina Hatch, 1957: 151 (new name for Suniina? [based on misidentified genus]). Type genus: *Astenus* Dejean, 1833.

Suniina Sharp, 1886: 591 (based on misidentified type genus). Type genus: *Sunius* of Erichson, 1839 (not Curtis; = *Astenus* Dejean, 1833).

CRYPTOBIINA Casey, 1905

Cryptobia Casey, 1905: 21 (senior homonym of Cryptobiinae Hollande, 1952, nomen nudum [Protozoa: Bodonidae: *Cryptobia* Leidy]). Type genus: *Cryptobium* Mannerheim, 1830 (not cited; = *Ochthephilum* Stephens, 1829).

Cryptobiina Bordoni, 1975: 420 (as new). Type genus: *Cryptobium* Mannerheim, 1830 (= *Ochthephilum* Stephens, 1829).

Cryptobii Bordoni, 1980: 170 (new name for Cryptobiina Bordoni [unnecessary]). Type genus: *Cryptobium* Mannerheim, 1830 (= *Ochthephilum* Stephens, 1829).

CYLINDROXYSTINA Bierig, 1943

Cylindroxystini Bierig, 1943: 158. Type genus: *Cylindroxystus* Bierig, 1943.

DOLICAONINA Casey, 1905

Dolicaones Casey, 1905: 56 (see Discussion {2b}). Type genus: *Dolicaon* Laporte, 1835.

Gnatimenitos Solier, 1849: 326 (not latinized; unavail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Gnathymenus* Solier, 1849. NOTE: Ever latinized?

Gnathyménites; Lacordaire, 1854: 153 (not latinized; unavail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Gnathymenus* Solier, 1849.

Dolicaina; Bordoni, 1975: 419 (incorrect subsequent spelling; see Discussion {2b}). Type genus: *Dolicaon* Laporte, 1835 (not cited).

Leptobii Bordoni, 1980: 170 (new name for Dolicaina Bordoni [unnecessary]). Type genus: *Leptobium* Casey, 1905.

ECHIASTERINA Casey, 1905

Echiasteres Casey, 1905: 245. Type genus: *Echiaster* Erichson, 1839.

LATHROBIINA Laporte, 1835

Lathrobidae Laporte, 1835: 117 (incorrect original spelling; see Discussion {2a}). Type genus: *Lathrobium* Gravenhorst, 1802.

Lathrobiiformes Nordmann, 1837: 6. Type genus: *Lathrobium* Gravenhorst, 1802.

Lathrobiadae Kirby, 1837: 86. Type genus: *Lathrobium* Gravenhorst, 1802.

Sphaeronia Casey, 1905: 54 (based on misspelled type genus). Type genus: *Sphaeronum* Sharp, 1876 (as *Sphaeronium*).

Lathrobiina Bordoni, 1975: 420 (as new subtribe). Type genus: *Lathrobium* Gravenhorst, 1802.

Lathrobii Bordoni, 1980: 170 (new name for Lathrobiina Bordoni [unnecessary]). Type genus: *Lathrobium* Gravenhorst, 1802.

LITHOCHARINA Casey, 1905

Lithochares Casey, 1905: 146. Type genus: *Lithocharis* Dejean, 1833 (as Lacordaire).

Lithocharina Bordoni, 1974: 324 (as new). Type genus: *Lithocharis* Dejean, 1833 (as Boisduval & Lacordaire).

Lithocharina Bordoni, 1975: 420 (as new). Type genus: *Lithocharis* Dejean, 1833 (as Boisduval & Lacordaire).

Lithochari Bordoni, 1980: 170 (new name for Lithocharina Bordoni [unnecessary]). Type genus: *Lithocharis* Dejean, 1833 (not cited).

MEDONINA Casey, 1905

Medones Casey, 1905: 150 (see Discussion {2b}). Type genus: *Medon* Stephens, 1833.

Medina Bordoni, 1975: 420 (as new; incorrect original spelling; see Discussion {2b}). Type genus: *Medon* Stephens, 1833.

Medoni Bordoni, 1980: 170 (new name for Medina Bordoni [unnecessary]). Type genus: *Medon* Stephens, 1833.

PAEDERINA Fleming, 1821

Geopaederidae Gistel, 1856: 389. Type genus: *Geopaederus* Gistel, 1848 (= *Paederus* Fabricius, 1775).

SCOPAEINA Mulsant & Rey, 1878

Scopéates Mulsant & Rey, 1878: 178 (not latinized; avail.?, Art. 11f(iii); see Discussion {1}). Type genus: *Scopaeus* Erichson, 1839.

Polyodontidos Solier, 1849: 303 (based on preoccupied type genus; not latinized; see Discussion {1}). Type genus: *Polyodontus* Solier, 1849 (not Eysenhardt, 1818; = *Scopaeus* Erichson, 1839).

Polyodontides; Lacordaire, 1854: 152 (based on preoccupied type genus; not latinized; see Discussion {1}). Type genus: *Polyodontus* Solier, 1849 (not Eysenhardt, 1818; = *Scopaeus* Erichson, 1839).

Scopaeina Seidlitz, 1889: 93. Type genus: *Scopaeus* Erichson, 1839. NOTE: First latinized use?

STILICINA Casey, 1905

Stilici Casey, 1905: 218. Type genus: *Stilicus* Berthold, 1827 (as Latreille; = *Rugilus* Leach, 1819).

Rugilina Hatch, 1957: 170 (new name for Stilicina? [genus = junior synonym]; not accepted, Art. 40b). Type genus: *Rugilus* Leach, 1819.

STILICOPSINA Casey, 1905

Stilicopses Casey, 1905: 230. Type genus: *Stilicopsis* Sachse, 1852.

Xenasteres Bierig, 1939: 179 (based on preoccupied type genus). Type genus: *Xenaster* Bierig, 1939 (not Simonwitsch, 1871; needs new name).

Stamnoderes Blackwelder, 1944: 126 (not indicated as new; unavail., no description). Type genus: *Stamnoderus* Sharp, 1886.

PINOPHILINI Nordmann, 1837

Pinophiliniformes Nordmann, 1837: 6. Type genus: *Pinophilus* Gravenhorst, 1802.

Pinophilini Erichson, 1839b: 29. Type genus: *Pinophilus* Gravenhorst, 1802.

PINOPHILINA Nordmann, 1837

PROCIRRINA Bernhauer & Schubert, 1912

Procirri Bernhauer & Schubert, 1912: 197. Type genus: *Procirrus* Latreille, 1829.

PHLOEOCHARINAE Erichson, 1839

Phloeocharini Erichson, 1839a: 612 (see Discussion {20}). Type genus: *Phloeocharis* Mannerheim, 1830.

Phloeocharini Erichson, 1839b: 31 (see Discussion {20}). Type genus: *Phloeocharis* Mannerheim, 1830.

Phloeocharina Heer, 1839b: 5 (see Discussion {20}). Type genus: *Phloeocharis* Mannerheim, 1830.

Scotodytidae Saulcy, 1870: 90. Type genus: *Scotodytes* Saulcy, 1870 (= *Phloeocharis* Mannerheim, 1830).

PIESTINAE Erichson, 1839

Piestini Erichson, 1839b: 31. Type genus: *Piestus* Gravenhorst, 1806.

Prognathites Blanchard, 1845: 290 (not latinized; see Discussion {1}). Type genus: *Prognathus* Berthold, 1827 (as *Prognata* Latreille; = *Siagonium* Kirby and Spence, 1815). NOTE: Ever latinized?

Prognathaires Mulsant & Rey, 1879: 385 (not latinized; see Discussion {1}). Type genus: *Prognathus* Berthold, 1827 (as *Prognatha* Latreille; = *Siagonium* Kirby and Spence, 1815). NOTE: Ever latinized?

Siagoniini Crowson, 1980: 289 (unavail., no description). Type genus: *Siagonium* Kirby & Spence, 1815. NOTE: Name attributed to Steel (1950b), who did not use a family-group name.

PROTEININAE Erichson, 1839

Proteinini Erichson, 1839a: 641 (see Discussion {20}). Type genus: *Proteinus* Latreille, 1796 (ICZN, 1969a: Name No. 1839).

Proteinini Erichson, 1839b: 31 (see Discussion {20}). Type genus: *Proteinus* Latreille, 1796 (ICZN, 1969a: Name No. 1839).

Proteinina Heer, 1839b: 4 (see Discussion {20}). Type genus: *Proteinus* Latreille, 1796 (ICZN, 1969a: Name No. 1839).

ANEPIINI Steel, 1966

Anepiini Steel, 1966: 306. Type genus: *Anepius* Blackburn, 1902.

NESONEINI Steel, 1966

Nesoneini Steel, 1966: 292. Type genus: *Nesoneus* Bernhauer, 1939.

PROTEININI Erichson, 1839 (= Metopsiini)

Phléobiens Mulsant & Rey, 1877: 65 (based on misidentified type genus; not latinized; see Discussion {1}). Type genus: *Phloeobium* of Erichson, 1840 (not Dejean, 1833; = *Metopsia* Wollaston, 1854).

Phloeobiinae Fowler, 1888: 431 (based on misidentified type genus). Type genus: *Phloeobium* of Erichson, 1840 (not Dejean, 1833; = *Metopsia* Wollaston, 1854). NOTE: First latinized use?

Megarthrini Joy, 1932: 93. Type genus: *Megarthrus* Curtis, 1829 (as Stephens).

Metopsiinae Tottenham, 1954: 13 (new name for Phloeobiinae [genus misidentified]). Type genus: *Metopsia* Wollaston, 1854.

Pteroniinae Moore, 1964: 88 (new name for Proteininae [genus then in Nitidulidae; changed by ICZN, 1969a]). Type genus: *Pteronius* Blackwelder, 1952 (ICZN, 1969a: = *Proteinus* Latreille, 1796).

Metopsidinae; Adám, 1987: 136 (incorrect subsequent spelling). Type genus: *Metopsia* Wollaston, 1854.

PSEUDOPSINAE Ganglbauer, 1895

Pseudopsini Ganglbauer, 1895: 690. Type genus: *Pseudopsis* Newman, 1834.

SCAPHIDIINAE Latreille, 1807

Scaphidilia Latreille, 1807: 3 (incorrect original spelling; see Discussion {2a}). Type genus: *Scaphidium* Olivier, 1790.

CYPARIINI Achard, 1924

Cypariini Achard, 1924: 28. Type genus: *Cyparium* Erichson, 1845.

HETEROSCAPHINI Achard, 1914

Heteroscaphini Achard, 1914: 395. Type genus: *Heteroscapha* Achard, 1914 (= *Bironium* Csiki, 1909).

SCAPHIDIINI Latreille, 1807

CERAMBYCISCAPHINA Pic, 1915

Cerambyciscaphini Pic, 1915: 30. Type genus: *Cerambyciscapha* Pic, 1915.

Cerambyscaphini; Achard, 1924: 28 (incorrect subsequent spelling). Type genus: *Cerambyciscapha* Pic, 1915 (as *Cerambyscapha*).

DIATELIINA Achard, 1924

Diateliitae Achard, 1924: 28. Type genus: *Diatelium* Pascoe, 1863.

SCAPHIDIINA Latreille, 1807

SCAPHIINA Achard, 1924
Scaphiitae Achard, 1924: 27. Type genus: *Scaphium* Kirby, 1837. NOTE: Type genus a senior homonym of *Scaphium* Jordan, 1964 (Crustacea).

SCAPHISOMATINI Casey, 1894 (= Scaphisomini)
Scaphisomini Casey, 1894: 511 (incorrect original spelling; see Discussion {2c}). Type genus: *Scaphisoma* Leach, 1815.
Scaphisomidae; Tamanini, 1969: 136 (as new family, elevated from tribe; incorrect original spelling). Type genus: *Scaphisoma* Leach, 1815.

BAEOCERIDIINA Achard, 1924
Baeoceridiitae Achard, 1924: 30. Type genus: *Baeoceridium* Reitter, 1889.

BAEOCERINA Achard, 1924
Baeoceritae Achard, 1924: 30. Type genus: *Baeocera* Erichson, 1845 (ICZN, 1982: Name No. 2163).
Cyparellini Achard, 1924: 28. Type genus: *Cyparella* Achard, 1924 (= *Baeocera* Erichson, 1845).
Sciatrophitae Achard, 1924: 30. Type genus: *Sciatrophes* Blackburn, 1903 (= *Baeocera* Erichson, 1845).

SCAPHISOMATINA Casey, 1894 (= Scaphisomina)

TOXIDIINI Achard, 1924
Toxidiini Achard, 1924: 31. Type genus: *Toxidium* LeConte, 1860.
Scaphicomitae Achard, 1924: 31. Type genus: *Scaphicoma* Motschulsky, 1863.

SOLIERIINAE Newton & Thayer, **nom. nov.** (see Diagnoses)
Solieriinae Newton & Thayer, **nom. nov.** (for Physognathites Kraatz [based on preoccupied type genus]). Type genus: *Solierius* Bernhauer, 1921 (new name for *Physognathus* [preoccupied]).
Fisognatitos Solier, 1849: 303 (based on preoccupied type genus; not latinized; see Discussion {1}). Type genus: *Physognathus* Solier, 1849 (not Agassiz, 1847; replaced by *Solierius* Bernhauer, 1921).
Physognathites; Lacordaire, 1854: 152 (based on preoccupied type genus; not latinized; see Discussion {1}). Type genus: *Physognathus* Solier, 1849 (not Agassiz, 1847; replaced by *Solierius* Bernhauer, 1921).
Physognathites Kraatz, 1859b: 3 (based on preoccupied type genus; latinized?). Type genus: *Physognathus* Solier, 1849 (not Agassiz, 1847; replaced by *Solierius* Bernhauer, 1921).

STAPHYLININAE Latreille, 1802

DIOCHINI Casey, 1906
Diochi Casey, 1906: 359. Type genus: *Diochus* Erichson, 1839.
Diochinae Moore, 1964: 89 (as new). Type genus: *Diochus* Erichson, 1839.
Diochini; Coiffait, 1972: 368 (as new tribe). Type genus: *Diochus* Erichson, 1839.

OTHIINI Thomson, 1859 (= Atrecini)
Othiides Thomson, 1859: 26. Type genus: *Othius* Stephens, 1829 (as Leach; ICZN, 1983: Name No. 2192).
Atrecini Hatch, 1957: 172 (new name for Gyrohypnini auct., Othii Casey [*Othius* then = *Gyrohypnus*; changed by ICZN, 1983]). Type genus: *Atrecus* Jacquelin du Val, 1856 (= *Baptolinus* Roger, 1856).

PLATYPROSOPINI Lynch, 1884
Platyprosoparia Lynch, 1884: 165. Type genus: *Platyprosopus* Mannerheim, 1830.
Platyprosopina Sharp, 1887b: 783. Type genus: *Platyprosopus* Mannerheim, 1830.
Platyprosopinae Moore, 1964: 89 (as new subfamily). Type genus: *Platyprosopus* Mannerheim, 1830.

Platyprosopini; Coiffait, 1972: 371 (as new tribe). Type genus: *Platyprosopus* Mannerheim, 1830.

STAPHYLININI Latreille, 1802

AMBLYOPININA Seevers, 1944
Amblyopininae Seevers, 1944: 157. Type genus: *Amblyopinus* Solsky, 1875.

CRASPEDOMERINA Bernhauer, 1911
Craspedomeri Bernhauer, 1911: 88. Type genus: *Craspedomerus* Bernhauer, 1911.

HYPTIOMINA Casey, 1906 (= Holisina)
Hyptiomae Casey, 1906: 361 (see Discussion {15}). Type genus: *Hyptioma* Casey, 1906 (= *Holisus* Erichson, 1839).
Holisi Blackwelder, 1944: 143 (unavail., no description; see Discussion {15}). Type genus: *Holisus* Erichson, 1839.
Holisina Newton, 1988: 259 (not described as new; see Discussion {15}). Type genus: *Holisus* Erichson, 1839.

PHILONTHINA Kirby, 1837
Philonthidae Kirby, 1837: 91. Type genus: *Philonthus* Curtis, 1829 (as Leach).
Rémates Mulsant & Rey, 1877: 452 (based on misidentified type genus; not latinized; see Discussion {1}). Type genus: *Remus* of Thomson, 1859 (not Holme, 1837; = *Erichsonius* Fauvel, 1874).
Philonthini Coiffait, 1956: 183 (as new subtribe). Type genus: *Philonthus* Curtis, 1829 (not cited).

QUEDIINA Kraatz, 1857
Quediiformes Kraatz, 1857: 473 (see Discussion {23}). Type genus: *Quedius* Stephens, 1829 (as Leach).
Platycnemidiformes Nordmann, 1837: 6 (see Discussion {23}). Type genus: *Platycnemus* Nordmann, 1837 (= *Haematodes* Laporte, 1835).
Quediides Thomson, 1859: 25. Type genus: *Quedius* Stephens, 1829 (as Leach).
Acylophorini Scheerpeltz, 1968: 97 (unavail., no description). Type genus: *Acylophorus* Nordmann, 1837.
Heterothopsi Coiffait, 1978: 300 (incorrect original spelling; see Discussion {2d}). Type genus: *Heterothops* Stephens, 1829.
Acylophorini Outerelo & Gamarra, 1985: 48 (not indicated as new). Type genus: *Acylophorus* Nordmann, 1837.

STAPHYLININA Latreille, 1802
Creophilidae Kirby, 1837: 95. Type genus: *Creophilus* Leach, 1819 (as Kirby; ICZN, 1959: Name No. 1339).
Thinopininae Böving & Craighead, 1931: 30 (based on larval characters). Type genus: *Thinopinus* LeConte, 1852.
Ocypina Hatch, 1957: 173 (new name for Staphylinina? [*Staphylinus* then = *Creophilus*; changed by ICZN, 1959]; incorrect original spelling; see Discussion {2g}). Type genus: *Ocypus* Leach, 1819. NOTE: Correct spelling would be Ocypodina.
Staphylinina Hatch, 1957: 173 (based on now-rejected type species designation). Type genus: *Staphylinus* of Latreille, 1810 (not Linnaeus, 1758 [ICZN, 1959: Name No. 1338]; = *Creophilus* Leach, 1819).

TANYGNATHININA Reitter, 1909 (= Atanygnathina)
Tanygnathinini Reitter, 1909: 105. Type genus: *Tanygnathinus* Reitter, 1909 (new name for *Tanygnathus*; = *Atanygnathus* Jacobson, 1909).
Tanygnathini; Kuhnt, 1912: 247 (incorrect subsequent spelling?). Type genus: *Tanygnathinus* Reitter, 1909? NOTE: Lists *Tanygnathus* as synonym of *Tanygnathinus*; latter presumably is type genus of family-group name, with incorrect ending.

Tanygnathini Casey, 1915: 424 (based on preoccupied type genus). Type genus: *Tanygnathus* Erichson, 1839 (not Wagler, 1832; = *Atanygnathus* Jacobson, 1909).
Atanygnathina Lohse, 1964: 220. Type genus: *Atanygnathus* Jacobson, 1909.

TRIACRINA Bernhauer, 1931
Triacri Bernhauer, 1931: 84. Type genus: *Triacrus* Nordmann, 1837.

XANTHOPYGINA Sharp, 1884
Xanthopygina Sharp, 1884: 342. Type genus: *Xanthopygus* Kraatz, 1857.

XANTHOLININI Erichson, 1839
Xantholinini Erichson, 1839b: 28 (see Discussion {23}). Type genus: *Xantholinus* Dejean, 1821 (as Dahl; ICZN, 1983: Name No. 2191).
Gyrohypnidae Kirby, 1837: 88 (see Discussion {23}). Type genus: *Gyrohypnus* "Kirb. Steph."
Agraeformes Nordmann, 1837: 7 (incorrect original spelling; see Discussion {23}). Type genus: *Agrodes* Nordmann, 1837 (= *Plochionocerus* Dejean, 1833).
Metoponci Casey, 1906: 360. Type genus: *Metoponcus* Kraatz, 1857.
Araeocnemes Casey, 1906: 359 (based on misspelled type genus). Type genus: *Araeocnemus* Nordmann, 1837 (as *Araeocnemis*; = *Plochionocerus* Dejean, 1833).
Gyrohypnini Hatch, 1957: 233 (new name for Xantholinini [genus = junior synonym]; based on now-rejected type species designation). Type genus: *Gyrohypnus* of Leach, 1819 (not ICZN, 1983; = *Gauropterus* Thomson, 1869).

STENINAE MacLeay, 1825
Stenidae MacLeay, 1825: 49 (senior homonym of Stenidae Fraser & Purves, 1960, nomen nudum [Mammalia: Delphinidae: *Steno*]). Type genus: *Stenus* Latreille, 1796 (not cited).
Stenides Mannerheim, 1830: 8. Type genus: *Stenus* Latreille, 1796.

TACHYPORINAE MacLeay, 1825
Tachyporidae MacLeay, 1825: 49 (see Discussion {16}). Type genus: *Tachyporus* Gravenhorst, 1802 (not cited).
Tachyporiniformes Nordmann, 1837: 6. Type genus: *Tachyporus* Gravenhorst, 1802 (not cited).

CORDOBANINI Bernhauer, 1910
Cordobanini Bernhauer, 1910: 386. Type genus: *Cordobanus* Bernhauer, 1910.

DEROPINI Smetana, 1983 (= Deropsini)
Deropsini Smetana, 1983: 272 (incorrect original spelling; see Discussion {2d}). Type genus: *Derops* Sharp, 1889.

MEGARTHROPSINI Cameron, 1919
Megarthropsini Cameron, 1919: 231. Type genus: *Megarthropsis* Cameron, 1919.

MYCETOPORINI Thomson, 1859
Mycetoporides Thomson, 1859: 46 (see Discussion {17}). Type genus: *Mycetoporus* of Thomson, 1859 (not Mannerheim, 1830; = *Schinomosa* Tottenham, 1939).
Mycetoporina Seidlitz, 1874: 287. Type genus: *Mycetoporus* Mannerheim, 1830 (*sensu lato*, including *Ischnosoma* Stephens, 1829).
Bolitobii Horn, 1877: 83 (see Discussion {17}). Type genus: *Bolitobius* Leach, 1819 (*sensu latissimo*; as Stephens).
Mycetoporiini Outerelo & Gamarra, 1985: 118 (incorrect spelling; see Discussion {2a}). Type genus: *Mycetoporus* Mannerheim, 1830 (with *Ischnosoma* as separate genus).

SYMMIXINI Bernhauer, 1915
Symmixini Bernhauer, 1915: 56. Type genus: *Symmixus* Bernhauer, 1915.

TACHYPORINI MacLeay, 1825
Tachinidae Fleming, 1821: 49 (senior homonym of Tachinariae Robineau-Desvoidy, 1830

[Diptera: Tachinidae: *Tachina* Meigen]; see Discussion {16, 19}). Type genus: *Tachinus* Gravenhorst, 1802.

Tachinides Mannerheim, 1830: 11. Type genus: *Tachinus* Gravenhorst, 1802.

Conosomini Jeannel & Jarrige, 1949: 335 (based on preoccupied and misidentified type genus; incorrect original spelling; see Discussion {2c}). Type genus: *Conosoma* Kraatz, 1857 (not Lenz, 1794; = *Tachinus* Gravenhorst, 1802). NOTE: See Blackwelder (1952) for discussion of type genus.

Tachinini Coiffait, 1954: 48 (see Discussion {16}). Type genus: *Tachinus* Gravenhorst, 1802.

Tachiina Outerelo & Gamarra, 1985: 116 (incorrect spelling; see Discussion {2a, 16}). Type genus: *Tachinus* Gravenhorst, 1802.

VATESINI Seevers, 1958

Vatesini Seevers, 1958: 183 (new name for Xenocephalini [based on preoccupied genus]). Type genus: *Vatesus* Sharp, 1876 (senior synonym of *Wasmannotherium* Bernhauer, 1921, new name for *Xenocephalus* Wasmann, 1887 [preoccupied]).

Xenocephalini Wasmann, 1887: 411 (based on preoccupied type genus). Type genus: *Xenocephalus* Wasmann, 1887 (not Kaup, 1858; replaced by *Wasmannotherium* Bernhauer, 1921; = *Vatesus* Sharp, 1876). NOTE: Type genus a senior homonym of *Xenocephalus* Leakey, 1965 (Mammalia).

TRICHOPHYINAE Thomson, 1859

Trichophyina Thomson, 1859: 41. Type genus: *Trichophya* Mannerheim, 1830.

TRIGONURINAE Reiche, 1865

Trigonurides Reiche, 1865: 642 (latinized). Type genus: *Trigonurus* Mulsant, 1847.

Trigonuri Fauvel, 1871: 43. Type genus: *Trigonurus* Mulsant, 1847.

UNPLACEABLE NAMES

Hameedini Abdullah & Quadri, 1968: 310 (as tribe of Staphylinidae: Oxyporinae; incorrect original spelling (should be Hameediini); see Discussion {2a}). Type genus: *Hameedia* Abdullah & Quadri, 1968. NOTE: Judging from the very inadequate original description, the type genus (and only member of the tribe) does not belong in Staphyliniformia; it may belong in Karumiinae (Dascillidae), Cantharoidea, or Cleroidea.

Leptodérides Solier, 1834: 495 (unavail., not based on genus; not Staphyliniformia, see Discussion {5}).

Necrophilidae Gistel, 1856: 362 (unavail., see Discussion {18}).

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Addendum

We knew some time ago that an important work on the classification of Hydrophilidae and allied families was in preparation by Michael Hansen (see p. 6). This work appeared in December 1991 (Hansen, 1991b, below) as a revised and formally published version of the Ph.D. thesis on which it was based (Hansen, 1990). The publication became available to us at the page-proof stage of the present work, too late to incorporate Hansen's extensive changes, but we want to call attention to his work and summarize the relevant changes here.

Hansen (1991b) presented a complete review of the genera and higher taxa of Hydrophilidae (in our sense), including a phylogenetic analysis and catalog. As in some earlier works by Hansen and others (see p. 6), he excluded the three families of traditional Histeroidea from Hydrophiloidea and treated five of our subfamilies of Hydrophilidae as separate families; we are still hesitant to adopt this system. However, within Hydrophilidae in Hansen's narrower sense (our Hydrophilinae plus Sphaeridiinae), he made many changes to the classification that we would have adopted in our catalog if they had been available in time. In addition to erecting the new taxa and establishing the new synonymies indicated below, Hansen (1991b) made other changes to the composition of higher taxa and extensive changes in generic concepts; his work should be consulted for details. One change worth noting here is the transfer of *Cyloma* from Rygmodini to Coelostomatini, which renders the priority of the name Cylomini over Rygmodini (see Catalog, p. 33) irrelevant. The following is our revised classification of Hydrophilidae, which differs from Hansen's only in continuing to treat the taxa marked with asterisks (*) as subfamilies of Hydrophilidae rather than as families.

HYDROPHILIDAE
- EPIMETOPINAE*
- GEORISSINAE*
- HELOPHORINAE*
- HORELOPHINAE Hansen 1991b: 104
- HYDROCHINAE*
- HYDROPHILINAE
  - ANACAENINI Hansen 1991b: 129
  - BEROSINI
  - CHAETARTHRIINI (incl. AMPHIOPINI)
  - HYDROPHILINI (incl. HYDROBIINI)
    - ACIDOCERINA
    - HYDROBIINA
    - HYDROPHILINA
  - OOCYCLINI Hansen 1991b: 136
  - SPERCHOPSINI Hansen 1991b: 108
- SPERCHEINAE*
- SPHAERIDIINAE
  - ANDOTYPINI Hansen 1991b: 186
  - BORBOROPHORINI Hansen 1991b: 190
  - COELOSTOMATINI (ex. SPHAERIDIINI)
  - MEGASTERNINI (incl. CERCYONINI)
  - OMICRINI
  - PROTOSTERNINI Hansen 1991b: 212
  - RYGMODINI
  - SPHAERIDIINI
  - TORMISSINI Hansen 1991b: 181

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Index

This index includes all family-group names and type genera listed in the catalog section, and also new or resurrected names listed in the Addendum. Valid family-group names are listed in all UPPERCASE letters; other family-group names are in upper- and lowercase letters. Type genera are in *italics*, followed by authors' names.