

## Points of View

### Problems of Family Nomenclature

Recent discussion by Arkell (1954, 1955), Sabrosky (1954), and Follett (1956) of the modifications to the International Rules of Zoological Nomenclature proposed at Copenhagen with regard to the naming of families is accentuated by certain proposals now before the International Commission for consideration. These proposals, submitted by A. E. Ellis (1956), concern primarily the official listing of three well-known generic names for freshwater Mollusca, and, as an addendum, the three family names based on these genera are recommended for addition to the Official List.

The generic names involved are *Unio* Philipsson, *Lymnaea* Lamarck, and *Margaritifera* Schumacher. Conservation of the first name necessitates stabilisation of the other two names. The family names based on the first two genera, Unionidae Fleming and Lymnaeidae Rafinesque, have been in use for many years and their authorship and validity are not in question. However, the proposal to add to the Official List the name Family Margaritiferidae Haas, 1940, raises several questions.

For many years the generic name *Margaritana* Schumacher, 1817 was used for the taxon which includes the species *Mya margaritifera* Linné. The type species of *Margaritana* is, by monotypy, *Margaritana fluviatilis* Schumacher, a substitute name for *M. margaritifera* Linné. However, Kennard, Salisbury and Woodward (1925) brought to light an earlier generic name for this taxon, *Margaritifera* Schumacher, 1816 (a valid emendation of *Margartifera*). The type species is again, by monotypy, *fluviatilis* Schumacher and *Margaritana* is thus a junior objective synonym of *Margaritifera*. The latter name is now used almost exclusively for this group.

Ellis, on the authority of Dr. L. Cox,

states that Haas (1940) was the first to use the family name Margaritiferidae and therefore proposes to have that name included in the Official List credited to Haas as author. While it is possibly true that Haas was the first to write "Margaritiferidae," he was not the first person to recognise the family status of this group of mollusks. Ortmann (1909) first separated the group from the family Unionidae as a subfamily and later (1911) elevated it to full family rank. However, since the generic name then accepted was *Margaritana* Schumacher, Ortmann wrote Margaritaninae and Margaritanidae. This usage persisted for many years, but the first person after 1925 (that is, after the discovery of the prior *Margaritifera*) to emend the family name in conformity with Article 5 of the old rules appears to have been Haas. He simply wrote "Family Margaritiferidae" at the head of a list of species and it is quite obvious from the context that Haas was not claiming to have done anything new; he was simply following the rules then in operation. Under the old rules, the question of the author of a family name was not considered. There was nothing to say that the author of the emended family name in this case should not still be regarded as Ortmann. In fact, another worker (Modell, 1942) has since written "Family Margaritiferidae Ortmann, 1911."

It should also be remembered that if the family name had not been emended prior to 1953, it would now have to remain unchanged as Margaritanidae Ortmann in accordance with C.D.Z.N., p. 36, par. 54, (1)(a).

The problems which arise in connection with this family name are as follows. Are the Copenhagen Decisions to be retroactive as Arkell (1954, 1955) claims, in which case we should have to return to

the older Margaritanidae, or are they not to be retroactive as Sabrosky (1954) claims and as the modifications proposed by Follett (1956) aim to ensure, in which case we shall continue to use the later Margaritiferidae? More important, who is the author of the name Margaritiferidae?

It would seem obviously desirable to continue the use of Margaritiferidae now that it has become more or less established, and it is hoped that Sabrosky's interpretation is correct or that Follett's proposals are accepted. I agree with Arkell that it would be highly undesirable to have forgotten family names based on invalid junior synonyms brought into use. At the same time, the preservation of well-known and established family names from frequent alteration based on subjective opinion is worthwhile.

There seems to be some inconsistency in outlook between C.D.Z.N., p. 36, par. 54, (1) (a) which allows a family name to be based on a generic name which is not necessarily the oldest available for the type genus, and par. 54, (1) (b) and the following Recommendation where it is implied that the family name *should* be based on the oldest available name.

Neither the old rules nor the new proposals state definitely who is to be considered the author of a name which was emended under the old Article 5, unless C.D.Z.N., p. 36, par. 53, (1) is to be construed as establishing authorship from the date of first usage. Although there is a parallel between this type of emendation and that of an author publishing a new name for an invalid junior homonym, there is a subtle difference. In the latter case, credit for the new name is given to its author even though he was not the first to recognise the group as a zoological entity, but he is at least required to think up a new name. In the case of an emendation to a family name under the old rules however, no originality is required of the emending author, other than a knowledge of the rules and knowledge of the invalidity of the generic name on which the family is based. In the present case, Haas' emendation required only a knowledge

of Kennard, Salisbury and Woodward's paper and the application of an automatic adjustment. There is a closer parallel between this type of emendation and the Valid Emendation of a generic or specific name which has been incorrectly formed or based on a misspelling.

It seems wrong to take credit away from Ortmann for the family name, especially in view of the vital part which he played in solving the many problems of classification in this most complex group of animals. The ideal solution seems to be to use the name Margaritiferidae Ortmann, 1909, as a Valid Emendation of Margaritanidae Ortmann.

It seems clear that some definite statement should be included in the new rules as to the person who is to be regarded as the author of a family name emended under the old rules. The comments of other zoologists interested in this matter would be welcome.

The problems raised here are brought to the attention of zoologists as indicative of the complexity of modern nomenclatural rules and of the sort of questions which are bound to arise when further attempts are made to stabilise family names. The matter should receive urgent attention from those responsible for drafting the new rules in order that confusion should not prevail.

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