

## Are Binomial Common Names for Animals Really Necessary?

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Recently, some efforts were made (and are ongoing) by some Mongolian zoologists, mainly mammalogists, to change traditional common names for mammals into the binomial format so that Mongolian names follow the International Code of Zoological Nomenclature (ICZN). These researchers pushed hard to make these newly designated names accepted widely - all mammals that occur within Mongolia now supposedly have binomial Mongolian names, analogous to the scientific names denoting the genus and species that they belong to. It started with mammals (e.g. Dulamtseren, 2001, 2003), and will presumably continue with other groups of organisms. However, we do not see what such changes would actually accomplish or benefit, and how it is important to apply the rules of scientific nomenclature to common names. We caution that negative consequences might outweigh its advantages if any. We discuss the potential effects of this nomenclature and why it is unnecessary here.

First, it is unnecessary to apply the rules of the ICZN to local names for any organisms, because common names are used at the local level, whereas scientific binomial names are used globally across languages and cultural boundaries. Moreover, local names already exist and people are accustomed to using them. It is not that Mongolians did not have local names for animals, there is a rather rich vocabulary of names by which we refer to animals, some of which have already been documented in early and recent scientific literature (e.g. Tsend-Ayush & Luvsanjav, 1969; Dulamtseren, 1970; Munkhbayar, 1976; Tsendsuren & Ulykpan, 1979; Sokolov & Orlov, 1980; Dulmaa et al., 1983; Tsendsuren, 1987; Dulamtseren & Tsendjav, 1989 etc.). Moreover, we cannot see the necessity or reason for Mongolian common names to follow the international codes of scientific nomenclature. Even if these changes are made, science will not benefit from such a change at the local level.

Second, people spearheading this effort argue that some animal species belonging to different genera have the same common name in Mongolian. But we should point out that this is not only

the case in Mongolian language. For example, the English word 'tern' can denote birds belonging to any of the genera including *Chlidonias*, *Gelochelidon*, *Hydroprogne* and *Sterna*. English-speaking countries will not at this stage change the name 'tern' used for birds belonging to these different genera. It is simply unnecessary as these names are so established and well known.

Third, Mongolians already have many different names to refer to animals, as mentioned above. Even on such a rich background of terminology, the authors created some new words. This artificial forcing changed common names of some animals so radically that they do not have any familiarity to people, who would not recognize that these new names are referring to animals they have otherwise known all their life. The authors are probably aware that such artificial linguistic changes cannot be adopted unless they artificially force the usage of their nomenclature, and this is exactly what they are doing. If the campaign to change and invent common binomial names for all animals continues it will probably not be possible to complete after re-naming vertebrates. It is evident that there is less possibility to provide binomial common names for each species of organism, especially for such groups as nematodes, mites, insects, protists etc. Estimated species richness on earth is more diverse than a vocabulary of any known language.

Fourth, there is an economic issue. Things are supposed to be developing in a direction to make things easier. Regrettably in that sense the same information that was coded in a single word now needs to be denoted in two words. That is, less information is conveyed by more words, at the same time creating confusion to an average Mongolian person who is not aware of these changes. It is a waste of resources not only for the scientists who are spending their valuable time on this venture, but for everybody concerned. Sentences are getting longer, and articles or books are getting thicker.

Fifth, it is important that the public and scientists in different fields understand and exchange information with each other. So much effort is made in forward thinking societies just for this purpose: to

put scientists and laymen on the same page. We emphasize that this is absolutely crucial, a point that could have been the primary reason of this discussion. We know of no other countries where scientists decided common names used in their language must follow the rules of scientific nomenclature. In our case, we feel that the binomial common names will further separate the public from scientists, as scientists are being required to use these new names and the public will not know what is meant.

Finally, assuming this new scheme is adopted, a zoologist would have to know at least three names of their study organisms: common name, the new common name (because they are radically different in many cases) and scientific name. This really is an unnecessary complication for what is supposed to be an uncomplicated learning process. Unfortunately, whoever devises the rules of a game usually wins. Thus the only people who benefit from this new 'invention' are the authors of the new nomenclature because they are already spending their time enforcing it. As Albert Einstein said, "things should be made simpler" if we are to advance popularity of science and to foster cross-communication between scientists and the public.

In conclusion, we can see no advantage from adopting rules of scientific nomenclature to common names. There is no scientific progress, economic advantage or even linguistic improvement that we can see from this. We believe it is an unnecessary complication and that otherwise productive researchers should not be spending their time on something without precedent. The famous evolutionary biologist Ernst Mayr found during his New Guinea expedition in the 1930s that local tribesmen had names for all species of birds present; they were even able to distinguish between, and had names for, two confusingly similar bird species. This fact nicely illustrates the intimate knowledge native people have of their environment and the biological diversity that they witness every day. This kind of knowledge and the key to it (which is the traditional nomenclature, established over a long time and well known among people) should be respected and used for the benefit of science, but it should not be interfered with.

Because this radical change in common names of animals proposed by Mongolian zoologists will eventually affect how we communicate with the public and with each other in Mongolia, we were curious to know what other biologists think about it. Unfortunately, Mongolian biologists have yet

to express any opinion formally even after these new rules started being enforced. We are not sure whether this represents silent approval, silent resignation with their fate, indifference or a complete lack of opinion. None of these is a good sign of vitality! Having said this, we welcome an open discussion on the pages of this journal and encourage researchers in concerned fields to express their views on this topic.

### Acknowledgments

We thank biologists who were supportive of the views expressed in the article. We also thank an anonymous reviewer for constructive comments and suggestions which made the manuscript better.

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