

Simpson G G. The principles of classification and a classification of mammals.
Bull. Am. Mus. Nat. Hist. 85:1-350, 1945.
[Department of Vertebrate Paleontology, American Museum of Natural History,
New York, NY]

This volume begins with an essay on the principles of classification. A detailed classification of all then-known fossil and recent mammals at taxonomic levels down to genera, with geographic and geological data on families and genera, follows. Also included are a review of mammalian classification, an extensive bibliography, and indexes of technical and vernacular names. [The SCI² indicates that this paper has been cited in over 565 publications since 1955.]

George Gaylord Simpson
Simroe Foundation
151 East Holmes Street
Tucson, AZ 85711

August 31, 1984

My basic research long involved the classification, relationships, and evolution of fossil and living mammals. When I joined the scientific staff of the American Museum of Natural History in 1927, the most recent overall classifications of mammals, both extinct and extant, were those of E.L. Trouessart published in three volumes from 1897 to 1905 and the more succinct one by W.K. Gregory and W.D. Matthew written in 1909 and published in 1910 as an appendix to a book by H.F. Osborn. That work did not give authors or dates for the technical names but did give continental geographic areas and geological dates for fossils.

It occurred to me that, for my research and that of my fellow mammalogists and paleomammalogists, a classification of mammals with more detailed information was needed. I started work on this soon after I went to the American Museum. In 1931, I published an outline of the classification of mammals down to families that named and gave dates on 242 families, 129 extinct and 113 still living.¹ Thereafter, although I was involved with other matters, for about 10 years I devoted what time I could to expanding and updating the classification and carrying it down to genera. Except for checking the bibliography and making the two indexes, this work was completed by the end of 1942, when I went overseas as an army officer. I returned to the US and the American Museum about two years later, and the complete volume was officially published in 1945. The classification includes 139 extinct and 118 living families and 1,932 extinct and 932 living genera.

In the preface, I adapted part of Samuel Johnson's apology for his monumental and now classical dictionary. I had toiled over my volume much as Johnson had over his, and I substituted words applicable to this work for some of Johnson's words. "Useful diligence will at last prevail, and there never can be wanting some to distinguish desert; who will consider that no [classification] ever can be perfect, since while it is hastening to publication, some [discoveries] are budding and some [theories] falling away; that a whole life cannot be spent upon [one classification], and that even a whole life would not be sufficient."

The classification was already somewhat out of date when published. That is always true of any extensive work in a rapidly advancing technical field. This volume, which was sold through the museum's library, was kept in print without modification for years. When I could, I collected further data for eventual revision. In 1959, I left the American Museum and Columbia University for the Museum of Comparative Zoology and Harvard University. It was no longer possible for me to continue the planned revision of the classification, and it was handed on to another mammalogist-paleontologist, who joined the American Museum staff when I left. In 1975, he published a summary of a proposed classification of mammals above the level of families. This is not a revision of my much older classification, being based on quite different principles. There is a report that these classification data are now (1984) being put into a computer.

This volume has long been out of print but is still widely available, mostly in specialized university and museum libraries, and so it is sometimes cited almost 40 years after it was published. The reason for this must be simply that nothing comparable to it has been published in the meantime. [There is a great book about 700 pages long, with three editors and 189 contributors, published in 1982, that gives data on all the known living species of mammals but none on the even more numerous extinct species.²]

I am somewhat baffled by the apparent evidence that this is my most-cited publication. I have considered that *Tempo and Mode in Evolution*,³ first published in 1944, and *The Major Features of Evolution*⁴ were more often cited, sometimes adversely. I am somewhat annoyed that so many scientists in the same field generally seem to be unaware that I have published more and, I believe, better books since 1953, including two in 1983^{5,6} and one in 1984.⁷ In a few months I will be 82, and sometimes I fear that I am now considered a historical rather than a contemporary character.

[George Gaylord Simpson died on October 6, 1984.]

1. Simpson G G. A new classification of mammals. *Bull. Am. Mus. Nat. Hist.* 59:259-93, 1931.
2. Honacki J H, Klumman K E & Koeppl J W, eds. *Mammal species of the world*. Lawrence, KS: Allen Press and Association of Systematics Collections, 1982. 694 p.
3. Simpson G G. *Tempo and mode in evolution*. New York: Columbia University Press, 1944. 237 p. (Cited 215 times since 1955.)
4. *The major features of evolution*. New York: Columbia University Press, 1953. 434 p. (Cited 500 times since 1955.)
5. *Fossils and the history of life*. New York: Scientific American Books, 1983. 239 p.
6., ed. *The book of Darwin*. New York: Washington Square Press, 1983. 224 p.
7. *Discoverers of the lost world*. New Haven, CT: Yale University Press, 1984. 222 p.