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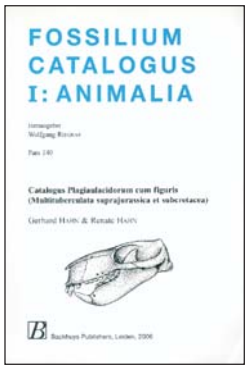

Catalogus cum figuris

Gerhard Hahn and Renate Hahn 2006. *Catalogus Plagiaulacidorum cum figuris (Multituberculata suprajurassica et subcretacea)* [in German]. Fossilium Catalogus I: Animalia, pars 140. 344 pp. (edited by Wolfgang Riegraf). Backhuys Publishers, Leiden. Paperbound ISBN 90-5782-177-X; ISBN 978-90-5782-177-6, Price: 140 Euro; 135 US dollars.

Fossilium Catalogi are extremely important tools facilitating the work of paleontologists, in particular those dealing with taxonomy of fossil animals and plants. The first volume of *Fossilium Catalogus* (42 pages on *Ammoneae Devonicae*) was compiled by Fritz Frech in 1913 (vol. 138 by Dieter Korn and Christian Klug, devoted to the same topic and published in 2002 has 393 pages). The series was published in Germany until 1941 (vol. 95) and resurrected in 1959 in The Hague, where W. Junk moved his publishing house from Berlin. Since then the series has been mostly published in The Netherlands, albeit in various cities. About a decade ago, beginning with vol. 135 of the animalian fossil catalogue, the Backhuys Publishers from Leiden took over printing the series from Kugler Publications of Amsterdam.

Prof. Gerhard Hahn and his wife Dr. Renate Hahn are internationally known specialists on a major extinct group of Mesozoic mammals, the multituberculates, in particular on the earliest stages of their evolution. In 1961 Walter Georg Kühne published the first report on the fascinating discovery of a Jurassic mammalian fauna in the Guimarota coal mine in Portugal (see Martin and Krebs 2000 for review). Paleontologists from the Freie Universität, Berlin, working in Guimarota for many years, gathered a spectacular collection of Kimmeridgian mammals, including the oldest uncontested multituberculates known at that time. The finds were divided among specialists, and Prof. Hahn set to work on multituberculates. He published the first monograph on the Guimarota multituberculates in 1969 and dozens of papers followed, half of them co-authored by his wife, on Jurassic mammals from Portugal, Early Cretaceous mammals from Spain and Morocco, as well as papers co-authored by other authors on a Triassic multituberculate from Belgium and on the teeth of cynodonts and other related groups.

The fossil record of Multituberculata ranges from the Middle Jurassic (Bathonian) to the end of the Eocene. They are divided into two suborders: Plagiaulacida and Cimolodonta. The reviewed book is confined to the suborder Plagiaulacida Ameghino, 1889. In 1983 Hahn and Hahn published their first *Fossilium Catalogus*, comprising all the Multituberculata. At that time the Plagiaulacida embraced only three families, 13 genera and 26 species. During the two decades that followed, the number of taxa assigned to Plagiaulacida more than doubled, as they embrace now 12 families and 44 genera incorporating a total of 57 species. The reviewed book, like other *Fossilium Catalogi*, shows encyclopedic knowledge and pedantry of the authors, and enormous work involved in compiling it. The *Introductory part* (pp. 1–19) contains two sections: *The historical review of the studies of multituberculates*, with subchapters on five successive periods: 1857–1899, 1900–1949, 1950–1979, 1980–1999, and 2000–2005; and *The stratigraphical and geographical distribution of Multituberculata*. This is followed by 280 pages (20–300) of the *Systematic part*, twenty seven pages of the *References* (301–327), and 17 pages (328–344) of the *Index*.

The most important *Systematic part* deals with the following systematic categories: superfamilies, families, subfamilies, genera, subgenera, species, and subspecies. The complete lists of synonymies are given for each of these categories. Information on anatomical basis (i.e., the element(s) upon which each taxon was established) for the given taxon is provided, as well as information about the types (holotype, lectotype, neotype, paratypes, etc.), together with illustrations of the holotypes, and, if available, also of the paratypes and reconstructions (the previous catalogue by Hahn and Hahn lacked figures). Type horizon and locality are provided. Not being a multituberculate specialist I do not feel qualified to judge the level of accuracy of the data in the book. However, a well-known multituberculate worker assured me that for years of using the previous book by Hahn and Hahn (1983) as a reference, she never happened to find a single mistake in it. There is no reason to doubt that the current book is similarly flawless in its accuracy.

The authors are to be congratulated for their meticulous work and outstanding resultant monograph. The only drawback of the book is its less-than-ideal quality of photographic illustrations, reproduced from printed photographs rather than from originals (but this is more than compensated by the sheer amount of illustrations gathered in one easily accessible tome). Due to the nature of the book, even readers not fluent in German will be able to use it—most of the book contents consist of self-explanatory synonymies, material listings, locality data etc. The brief diagnoses of particular taxa and other general information texts are also understandable with a minimal knowledge of German, and are largely replaceable with the descriptions available in the relevant chapters of the recent *magnum opus* on Mesozoic mammals by Kielan-Jaworowska et al. (2004); incidentally, the volume by Hahn and Hahn is dedicated to Zofia Kielan-Jaworowska for her contribution to advancing the study of multituberculates.

Unfortunately, the price of the volume will be prohibitive to young individual workers or students. Perhaps in the near future such compendia will be published on-line, with double benefits: reducing printing costs and facilitating data search and retrieval. I highly recommend this book for paleontological libraries, especially those used by researchers dealing with Mesozoic mammals or Mesozoic stratigraphy.

Hahn, G. and Hahn, R. 1983. *Multituberculata*. Fossilium Catalogus, I: Animalia, Pars 127 (ed. F. Westphal). 409 pp. Kugler Publications, Amsterdam.

Kielan-Jaworowska, Z., Cifelli, R., and Luo, Z. 2004. *Mammals from the Age of Dinosaurs: Origins, Evolution, and Structure*. 630 pp. Columbia University Press, New York.

Martin, T. and Krebs, B. (eds.) 2000. *Guimarota: A Jurassic Ecosystem*. Verlag Dr. Friedrich Pfeil, München, 155 pp.

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