

Methods in mammalian ecology

Methoden feldökologischer Säugetierforschung – Methods in Mammalian Field Ecology. Vol. 1. M. Stubbe, A. Stubbe and D. Heidecke, eds. Martin-Luther-Universität Halle-Wittenberg, Wissenschaftliche Beiträge, Halle/Saale, 1995, 474 pp (pbk).

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The book presents proceedings of an international symposium, organized by the Institute of Zoology of the Martin-Luther-University in Halle-Wittenberg (Germany) on 15–17 April 1994, in cooperation with the Society for Wildlife Management and Hunting and the German Society for Mammalogy. It is appearing in a series of proceedings concerning, among other, population ecology of bats (1989), small mammals (1991) and semiaquatic mammals (1992). Volume no. 1 seems to indicate that “Methods in mammalian field ecology” will be continued (?).

This was in fact a German symposium with few colleagues invited from neighboring countries (Austria, Holland, Luxemburg, Poland, Russia, Slovakia, Sweden). All papers are in German, but summaries in English are usually available.

The volume contains 45 papers of different approaches, from case studies to more extensive reviews, and a wide spectrum of methods used in current mammalogy. They include modelling of growth patterns of body size, assessing the population distribution, size and density, monitoring population density, measuring home ranges, activity rhythms and migration, catching small mammals and efficiency of different types of traps for terrestrial and arboreal species, studies of small mammal communities, radiotracking, marking of small mammals with transponders (containing microchips), etc. Methods of age determination on the base of registering structures of bones and dry mass of eye lens are presented in few papers. They are followed by a more extensive review (based on 320 references) of eye lens as criterion of age in mammals (Stubbe *et al.*). Adaptation of DNA-fingerprinting and PCR methods for population ecology of the common vole is described. Examples of some parasitological investigations of German mammals are also included.

Presented methods are usually described in details and examples of their application in current studies (sometimes preliminary) are given. A number of mammalian species were used in these studies, most frequently small mammals (including dormice, voles, mice, hares, bats), but also carnivores (fox, otter, raccoon) and ungulates.

Some qualitative and quantitative methods used for mapping mammal distribution in the eastern regions of Germany (former GDR) are briefly exemplified in the frame of an extensive overview of mammals and field mammalogy in this part of the country (Stubbe M. and Stubbe A.). This paper overpasses slightly the frames of the volume, but clearly indicates a great effort already made for describing the state of mammal fauna of Eastern Lands of Germany. It is understood as a brief summary (with 78 maps for all the registered species!) of intended monograph and preliminary version of data for the “Atlas of European Mammals”.

This volume can not replace any handbook of mammalian field techniques, but is a good collection of examples of different methods used in current ecological studies of mammals in Germany.