

(VI) is a brief concluding statement emphasizing behavioral, demographic and genetic implications of the Resident Fitness Hypothesis.

The book is excellent and should be read by all population ecologists. It is very well-written, it provides a critical review of up-to-date literature on dispersal and social interactions in rodent population: it stimulates our thinking about the evolution of dispersal behaviour: it is an important contribution to the theory of population biology.

In my opinion, however, the two hypotheses: EFH and RFH, are not mutually exclusive. Anderson rightly stated that "dispersal can best be understood in a broad context that includes both, classic selection and kin selection". Benefits to residents (parents and siblings of dispersers) do not exclude benefits to dispersers, emigrating under a certain set of seasonal, spatial and social conditions. In fact, they result in gains in fitness to lineages with dispersing offspring.

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Acta Theriologica 35 (1-2): 171 - 172, 1990.

Field guide for European mammals

Observing British and European mammals. Ch. Bouchardy and F. Moutou. British Museum. Natural History, London, 1989; 240 pp.; index ISBN: 0-565-01095-6.

The popular series of zoological field guides has been recently enriched with a new item, compiled by two well-known French theriologists Ch. Bouchardy and F. Moutou. Its English version has been prepared by Jain Bishop. Curator of Mammals at the British Museum (Natural History).

The book is 240 pages long, contains 89 colour photographs (of very good quality) and 33 black and white figures. It consists of two basic parts, "Introduction" and "Taxonomic catalog", and terminates in indexes of species names (in Latin and English), "Further readings" and "Check list of species". The authors concentrate their attention on terrestrial mammals of western Europe and possibilities of visually recognized them in the field. The "Introduction" falls into 7 chapters. The first one tersely, but also in a way intelligible for amateurs, characterizes 6 mammal orders discussed in detail in the guide. The second chapter contains general information on the ecology of this animal class. While stressing difficulties of observing mammals, the authors answer in the third chapter the question of how, where, when and which species may be observed and how one should prepare him or herself for direct observations, taking photographs or shooting films of these animals. The fourth chapter concerns the methods of catching small mammals with traps for monitoring their biological peculiarities in vivarial conditions. The fifth, and longest, chapter deals with the identification of mammals in the field, employing their droppings, footprints, food remains, nests, burrowing activity, voices and carcasses. The sixth chapter advises the reader how to take notes and how to secure paw prints in a practical way. The seventh, and last, chapter briefly discusses the problems of mammal preservation and displays the role of amateurs in theriological studies.

In the taxonomic part, the authors present 120 species, 80 of which are supplied with fairly detailed descriptions. Each species has a description of its occurrence area, external, biological and ecological characteristics, field identification trails and conditions of monitoring. The description is supplemented with

a map of the occurrence area and good quality photographs of the animal, sometimes also with drawings of its silhouette and paw prints.

The evolution of the guide should begin with determining who its reader might be and what its purposes should be. The authors themselves address their book to a wide range of amateur observers of mammals in the field and this assumption seems to have affected the construction of the whole book. The specimens discussed are mainly mid- to large-sized terrestrial species, rather easy for visual identification. Less attention is paid to mammals of the orders *Insectivora*, *Rodentia* and *Chiroptera*. The non-professional nature of the book is set off by its type of "Introduction", limited presentation of possibilities of identifying the species of an animal on the basis of its feeding and the possibilities of determining its age and/or sex from the silhouette and/or paw prints (cf. *Ungulata*). A marginal reference to large-sized species (eg. sika deer, fallow deer) introduced in to Europe may make identification of virgin species, red deer or roe deer, for example, difficult for the observer.

Surprising is a lack of description of identification characteristics of some ungulate species: *Cervus axis*, *Odocoileus virginianus*, *Muntiacus reevesi*, *Hydropotes inermis*), which have been acclimatized in various parts of western Europe. In contrast, much more attention has been paid to the American hare (*Sylvilagus floridianus*) introduced into southern France.

The authors are not always consistent in restricting their scope of interest to the mammals of western Europe; they also happen to present those of northern and south-eastern Europe (*Myopus schisticolor*, *Lemmus lemmus*, mole rats, for example).

One should note also incorrectly determined ranges of many mammal species on the enclosed maps, which cannot be a result of insufficient knowledge of these areas. The occurrence areas of wolf and brown bear, which are connected with the Carpathian Range, have been shifted in related maps to mid-Poland, while those of marmot at least 200 km northeast of the Tatra Mts. for example.

Bearing in mind that the most important aim this guide is to enable visual identification of mammals, the reader will be surprised by the inclusion of dental traits only in the case of martens; collecting animal remains found in the field is a very important means of obtaining information; data on morphological characteristics would be very helpful in this respect.

There are a few spelling mistakes in the Latin names of species: *Myopus schisticolor* should be *M. schisticolor* (page 194). *Clethrionomys rutilus* should be changed to *C. rutilus* (pages 194, 239). *Pitymys duodecimostatus* should be spelled *P. duodecimcostatus* (page 239), while the name of the genus *Hydropotes* should begin in the upper case.

Despite the above mentioned remarks and mistakes, the guide may be a valuable source of information on mammals and its interesting layout will certainly contribute to increasing the number of readers among amateurs of mammal observation. I would, however, only partially agree with the latter part of the Publisher's advertisement which says that "As such it will appeal to both amateur and professional researchers..."

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ZAKŁAD BADANIA SSAKÓW PAN * BIAŁOWIEŻA

Nakład 950 + 50 egz. Obj. ark wyd. 18,48
 Podpisano do druku w lipcu 1991. Druk ukończono we wrześniu 1991r.
 Papier offsetowy IIIkl. 80 g.

Skład, łamanie, diapozytywy: własne i DTP—A. Antczak
 Druk: Białostockie Zakłady Graficzne Zam. 996/91