

w przedżołądkach. Jeszcze raz wraca się do anatomicznych adaptacji umożliwiających ssakom roślinożernym bytowanie w warunkach niedoborów pokarmowych, tym razem w aspekcie zagłady i zmian behawioralnych (termoregulacja, migracje, konkurencja między- i wewnątrzgatunkowa). Ogół modyfikacji w zakresie budowy i czynności narządów trawiennych, głównie zaś żołądka umożliwił tym ssakom zasiedlenie licznych nisz ekologicznych i rozległych zasięgów geograficznych. Wielopłaszczyznowe rozważania o zależnościach między anatomicznymi i fizjologicznymi zróżnicowaniami przewodu pokarmowego a uwarunkowaniami zoogeograficznymi podsumowują treść dzieła.

Omawiana książka jest zwartą monografią o charakterze przeglądowym. Pieczołowicie sporządzony spis piśmiennictwa liczy ponad 1360 pozycji, głównie anglo- i niemieckojęzycznych sięgających po 1983 r. To obszerne dzieło stanowi godny naśladowania wzór biomorfologicznego podejścia do zagadnień anatomicznych. Książka jest nadzwyczaj starannie i pięknie wydana. Liczne ilustracje oraz przejrzysty, graficzny sposób przedstawiania danych stanowią dodatkowy walor dzieła P. Langerera, które z pewnością zainteresuje specjalistów z wielu dziedzin nauk przyrodniczych.

Stanisław Pytel

M. Görner & H. Hackethal: Säugetiere Europas. Neumann Verlag, Leipzig-Redebuel, 1987, 371 pp.

Guide books with colour illustrations of plants or animals are highly appreciated not only among amateurs but also among professionals. The publication of the comprehensive field guide to identifying the mammals of Europe written by M. Görner and M. Hackethal should be welcomed with much satisfaction. It may be assumed that it will draw much interest from theriologists.

The guide "Säugetiere Europas" is amply illustrated with 247 black and white and 225 colour plates. Of particular interest is the high quality of coloured silhouettes of animals made by Wolfganag Leuck.

The authors aim at presenting the wild mammals living in Europe and within the scope of a field guide's possibilities enabling their identification. The area accepted as Europe by the authors corresponds with that determined by geographical borders. On the east, the border runs along the Ural Mts., the Ural River, the west bank of the Caspian Sea and the southern slopes of the Caucasus to the Black Sea and then along the Atlantic coast of Europe. Within this area the authors identify 209 mammal species, although they admit that the exact number of species is difficult to determine due to: (1) unexplained taxonomic status, (2) no precise determination of the occurrence area borders in Eastern Europe, (3) irregular visiting of European coasts by certain species of whales.

The taxonomic classification (orders, families, genera and species) was established by the authors according to van den Brink (1972) and Niethammer and Krapp (1978, 1982). The bibliography includes 80 positions. The only Polish study considered is the key to the identification of the mammals of Poland edited by Z. Pucek (1981). Astonishing is the omission in the bibliography of the "Atlas of Polish Mammals", edited by Z. Pucek and J. Raczyński (1983), despite the fact that the authors of this guide cited certain literature even from 1984.

In the general part of the guide the authors present a short description of the mammal classes and fauna from a zoogeographical point of view, basic concepts regarding mammal protection and instruction to using the guide.

This guide has been published as a part of the series "Beobachten und Bestimmen". It needs to be considered how its contents fit into this series. In our opinion, the authors have superficially covered the identification of mammals in the fields. The chapter devoted to this subjects is seven pages long and contains paw prints of about 30, species several shape types of excrements and several owl pellets, without any examples of browsing and barkstripping. Of course there are specialistic guides devoted to animal identification (Bang & Dahlström, 1977), but a guide to mammals should also deal extensively with field identification.

In their guide the authors have taken into consideration 29 mammal species but the criteria used to determine this list may sometimes be unclear to the reader. Very surprising is the lack of about a dozen species whose taxonomic

status is well-known and whose occurrence areas are located within Europe. The region of the Caucasus does not include: *Talpa caucasica*, *Microtus gud*, *Microtus roberti*, *Mesocricetus raddei*, *Mesocricetus brandti*, *Peromethomys saposchnikovi*, *Capra cylindricornis*, *Capra caucasica*, while the Caspian Sea region omits: *Citellus major*, *Rhombomys opimus*, *Meriones erythrourus*, *Microtus socialis*, *Felis libyca*, *Felis chaus*, *Felis manul*, *Phoca caspica*. The northeastern and eastern regions of Europe do not mention: *Mustela sibirica*, *Lemmus sibirica*.

Although the authors commented that they omitted those species whose taxonomic status is uncertain it is unexplainable why they have ignored the Siberian roe deer (*Capreolus pygargus*) which occurs in Eastern Europe and the Ural Mountains and for which species separateness has been determined for a fairly long time (Flerov, 1952; Sokolov et al., 1978; Zernale, 1980). The authors have also ignored the Barberian goat (*Ammotragus lervia*) introduced to Spain in 1970 (Pena, 1975; Ortuno & Pena, 1979).

Leaving to taxonomists the problem of determining the list of species within the family of blind mole-rats (*Spalacidae*) their description of occurrence requires some correction. Referring to *Spalax polonicus* the authors write... "bisher in Südostpolen". This mistake is a result of relying on Savic's (1982) synthetic description and not on source materials and new faunistic data. A similar case is in the presumed occurrence of *Crocidura russula* in Poland. This has not been confirmed by intensive faunistic studies (Pucek, 1981; Pucek & Raczyński, 1983).

The occurrence maps of given species are frequently imprecise. Map 1 indicates the lack of western hedgehogs (*Erinaceus europaeus*) in Poland. From map 15 it appears, that the masked shrew (*Sorex caecutiens*) may occur in a considerable part of northeastern Poland, whereas it has so far been recorded only in the Białowieża Forest (Pucek, 1981; Pucek & Raczyński, 1983). The Mediterranean water shrew (*Neomys anomalus*) may occur in the centre of Poland (map 20) while it actually occurs in the Pomerania, Białowieża Forest, Sudetes and Carpathians. The course of the border line of two white-toothed shrews (*Crocidura leucodon* and *Crocidura suaveolens*) in Poland is incorrect. The occurrence of the beaver (*Castor fiber*) is outdated (map 72). While presenting the distribution of the root vole (*Microtus oeconomus*) its sites in southern Scandinavia (map 108) were not taken into consideration. The occurrence maps of the other species: *Myotis daubentoni*, *Microtus nivalis*, *Pitymys subterraneus*, *Ovis amon*, *Dama dama* are also imprecise. The lack of precision cannot be explained by the maps' scale.

Further shortcomings include: on page 15, incorrectly marked measurement points of the upper tooth-row in *Soricidae*; on page 176, the presented rostral part of the skull is that of *Apodemus microps* and not *Micromys minutus*; on page 223, the drawing representing three forms of M_1 in *Microtus oeconomus* is reversed and described as M_1' ; on page 277, the drawing is identified as being the skull of *Mustela lutreola* while in fact it is a skull of *Martes flavigula*. This latter mistake was made in the „Keys to Vertebrates of Poland. Mammals” edited by Z. Pucek (1981), when following after Novikov (1952), but corrected in the new Polish edition of this key (Pucek, 1984).

It would be interesting to learn where the authors obtained information on the wild European bison (*Bison bonasus*) herds in Romania. In our opinion, they paid too little attention to the Canadian beavers (*Castor canadensis*). Mentioning their introduction sites is insufficient, and a description of the diagnostic features would be desirable.

Descriptions of particular species retain a uniform composition and concentrate on extremal characteristics, including the basic linear parameters of the body weight. Biometrical data presented by the authors raise the following doubts. If they are to characterize European mammals then the given measurement ranges should determine the extremal limits of a given species, or contain a short note on the population they refer to. Also, there seems to be no reason for using different units of measurement in some cases; genus *Neomys* hind foot length is given in cm, in these of genus *Sorex* in mm. Body length measurements are given in cm, except the genus *Sicista*, where they are expressed in mm.

In conclusion, due to numerous mistakes and discrepancies this guide is of little use for identifying mammals. The lack of description of traits enabling identification in the fields (paw prints, excrements, examples of browsing and

bark-stripping) reduces its function as a typical field guide. The incomplete species list makes it a questionable synthesis of European mammals. As a result this guide is useless for a professional mammalogist. On the other hand the attractive set-up of this book, especially its good quality colour animal silhouettes can attract potential readers interested in nature. For them this book may be source of gaining knowledge on mammals, if the above mentioned mistakes are corrected.

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Sans-Coma V., Mas-Coma S. & Gosálbez J. (Eds), 1987: Mamíferos y Helminfos. Volumen homenaje al Prof. Dr. Dr. Herman Kahman en su 81 aniversario. Ketres Editora, Barcelona, 338 pp.

Hiszpanie uczcili osiemdziesiąt pierwszą rocznicę urodzin Profesora Hermana Kahmana (9 października 1987 r.), znanego niemieckiego teriologa, wydaniem jubileuszowego zbioru oryginalnych i przeglądowych prac pod ogólnym tytułem „Mamíferos y Helminfos”. Jubilat jest znany szerokiemu kręgowi teriologów przede wszystkim jako redaktor i współzałożyciel „Säugetierkundliche Mitteilungen” — jednego z poważniejszych światowych czasopism, poświęconych ssakom.

Prezentowana książka zawiera 11 referatów-prac poświęconych ssakom, 6 dotyczących ich parazytofauny złożonej z przywr i tasiemców, 1 poświęconego analogicznej faunie hiszpańskich płazów i gadów, powiększonej o nicienie i kolcogłowy i 4 omawiających stosunki pasożyt-żywieli. Interesująco przedstawia się statystyka dotycząca cytowania autorów polskich. W części teriologicznej cytowanych jest 12 publikacji 8 autorów (Adamczewska-Andrzejewska K. — 1, Borowski S. — 2, Gębczyński M. — 1, Haitlinger R. — 4, Humiński S. — 1, Skoczeń S. — 1, Świecimski J. — 1, Wodzicki K. — 1). W części helminologicznej cytowanych jest 15 publikacji 4 autorów (Grabda-Kozubska B. — 12, Kisieleska K. — 1, Sulgostowska T. — 1, Wiśniewski W. L. — 1).

Część książki poświęcona ssakom dotyczy następującej tematyki: rewizja faunistyczno-taksonomiczna — 2, bionomia — 1, zmienność morfometryczna — 4, rozród — 2, aktywność — 1, linka — 1. Tematyka badawcza odzwierciedla aktualne potrzeby teriologii hiszpańskiej, która nie weszła jeszcze w stadium intensywnego rozwoju taksonomii numerycznej i ekologii.

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