

REVIEWS

Hinton, H. E., and A. M. Sarah Dunn. MONGOOSES. Univ. California Press, vii + 144 pp., 26 text figs., 15 pls., 1967. Price, \$6.50.

The complete title of this book is "Mongoose: their natural history and behaviour," and the authors' stated purpose in writing it is "to provide the most complete account of the natural history and behaviour of mongooses that has yet appeared." The substance of the book is gleaned from the literature on the Herpestinae, or true mongooses. It is divided into 17 brief chapters that satisfactorily classify a widely diverse and variably abundant knowledge concerning this important subfamily. The style of writing is attractive and the book is easily read.

An introductory chapter on general attributes of mongooses is followed by accounts of responses to venomous animals and their toxins, the reproductive process, development and life span, a variety of behaviorisms including communication, and experiments with color vision. Chapters X and XI describe introduction and subsequent history of *Herpestes auro-punctatus* in the West Indies and Hawaiian Islands. Additional chapters report on ancient tales about mongooses in India and Egypt, sketches of some better-known species, and diseases and parasites. Finally a reference chapter on the kinds of mongooses views some nomenclatural problems and lists 36 species and their subspecies, in 13 genera. Introductions to the chapters are often statements of principles. Those on play behavior and biological control are outstandingly good.

The authors have perhaps wisely restrained themselves in interpreting historical materials. However, they tend to accept without sufficient qualification much of what we might call "mongoose folk lore." Alleged effectiveness of introduced mongooses in rat control and plague suppression, and supposed interspecific relations of rodent and mongoose populations fall into this category. Reports on such topics often contain the subjective estimates or narrative anecdotes of casual observers and these should not be pushed toward the realm of established fact. As an example of a similar fault, the cautious inference from legitimate research that the small Indian mongoose may bear two litters per year is projected as a simple truth. There is also a regrettable perpetuation of outmoded names for commensal rats in Hawaii. Errors appear to be few, but the consistent misspelling of Doty (as Dotty) is an obvious one.

The illustrations are mainly photographs and line drawings of tamed animals, and are generally good. The text is nicely supported by a bibliography of 259 entries. All things considered, Dr. Hinton and Miss Dunn have met their objective and have produced a worthy and extremely useful review of the Herpestinae, insofar as this group is known.—P. QUENTIN TOMICH.

Hsu, T. C., and Kurt Benirschke. AN ATLAS OF MAMMALIAN CHROMOSOMES, Vol. II. Springer-Verlag, New York, 50 folios, illus., 1968. \$9.40.

This is the second volume of an annual series that presents the karyotypes of 50 mammalian species. The combined volumes show the karyotypes of two marsupials, three insectivores, six chiropterans, one edentate, three lagomorphs, 30 rodents, 22 carnivores, five perissodactyls, 19 artiodactyls, and nine primates.

As in the first volume, references are listed for each species reported, and pages of additional references for the folios of volume I are given in such a way that they can be cut out and pasted in the proper folios in sequence. This feature of keeping the references "up-to-date" deserves a glowing report as it saves researchers time and effort.

In each account, the vernacular name is given in parenthesis following the scientific name, but the authority for the scientific name is not given. Accurate locality data of specimens studied are often not available or not given, and if voucher specimens were

prepared, their place of deposition is not reported. These data would greatly enhance the value of future volumes because when variation in karyotypes of a given species are reported, the identity of specimens studied always is questioned.

These volumes are valuable to American mammalogists because they give a quick reference to foreign literature and an easy way of finding the karyological data available for various taxa. The series will prove to be a worthy asset to the workers' library.—ROBERT J. BAKER.

Stokes, Allen W., ed. ANIMAL BEHAVIOR IN LABORATORY AND FIELD. W. H. Freeman and Co., 198 pp., numerous figs., 1968. Price, \$4.75.

This manual is a collection of 42 laboratory exercises and glossary of technical terms contributed by 30 authors. Field behavior is notably lacking. Its four sections are "Introduction to the Study of Animal Behavior," "Nonsocial Behavior," "Social Behavior," and "Development and Learning." Each exercise is followed by a bibliography of pertinent references, and a useful teacher's manual is available. Individual exercises may be purchased separately.

Only eight exercises use mammals as subjects, although several other exercises refer in part to mammals or could easily be adapted to mammals. Of the eight, seven are devoted wholly or in part to *Mus musculus*. The laboratory rat and guinea pig are the other subjects. The work of King on *Peromyscus* and Wolfe on *Sigmodon* have demonstrated the feasibility of using native mammals for behavioral studies. Several exercises, especially those on social behavior, agonistic behavior, and sexual behavior in mice contain information that could easily be used to study native mammals, especially small rodents. The exercise on negative geotaxis in mice could be nicely adapted to comparative study of fossorial and nonfossorial rodents. In summary, the manual may serve as a source of ideas for those wishing to introduce behavior into mammalogy or general zoology courses.—KENNETH B. ARMITAGE.

Ryan, R. Mark. MAMMALS OF DEEP CANYON, COLORADO DESERT, CALIFORNIA. The Desert Museum, 135 E Tahquitz—McCallum Way, Palm Springs, California, x + 137 pp., colored frontispiece and 39 other illustrations, colored fold-out map, 1967. Price, \$7.00.

Basically a compilation, but with a liberal sprinkling of original data, *Mammals of Deep Canyon* provides a useful reference for students of the natural history of Southern California.

This small book is a well written account of the mammals of a restricted area, "The [Colorado] desert floor and desert face of the contiguous Santa Rosa and San Jacinto Mountains" (p. 3). Illustrated with 25 generally excellent photographs and 15 mediocre line drawings, the book includes sections on physical features, climate, faunal analysis, and accounts of species; those entitled "Life Zones and Vegetation" and "Habitats and Mammalian Communities" will be of particular interest to a wide range of biologists. An appendix includes methods of study, localities, and a table of reproductive data.

The author and the Desert Museum are to be congratulated for preparation and publication of *Mammals of Deep Canyon*; it is well printed and virtually free of major editorial and typographic errors. Nevertheless, the price strikes me as excessively high, judging from the size and composition of the book.—J. KNOX JONES, JR.