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RECENT ADVANCES IN PRIMATOLOGY. *Volume One (Behaviour) and Volume Three (Evolution)*.

(1) Edited by D. J. Chivers and J. Herbert; (3) edited by D. J. Chivers and K. A. Joysey. *Academic Press, London and New York*. (1) \$37.50; (3) \$30.65. (1) xxv + 980 p.; (3) xviii + 509 p.; both vols. ill.; neither with index. 1978.

These volumes are the Proceedings of the Sixth Congress of the International Primatological Society held at Cambridge, England, in 1976. They are literally enormous, including over two hundred papers on every major taxon of primate by workers from all over the world. The papers vary widely in scope and length, but each seems well suited to its task. They evidence a better developed theoretical awareness than has often characterized the primate literature in recent years. These volumes certainly belong in any up-to-date collection of literature on primates.

NICHOLAS S. THOMPSON, *Psychology, Clark University*

RECENT ADVANCES IN PRIMATOLOGY. *Volume Two: Conservation*.

Edited by D. J. Chivers and W. Lane-Petter. *Academic Press, London and New York*. \$20.50. xiii + 312 p.; ill.; no index. 1978.

This volume presents papers from three sessions of the Sixth Congress of the International Primatological Society held at Cambridge University in August of 1976.

Section I reviews current problems in primate conservation. Richard Thorington served as the section chairman and edited the fourteen papers. In his introduction, Thorington quite clearly points out major trends and their probable outcomes: the unchecked exploitation of tropical forests will in the next few years reduce all primate habitats to remnants. The problem is not the conservation of one or two rare species, but the preservation of viable ecosystems throughout the tropics. Tomas Struhsaker offers some practical thoughts concerning the philosophy and design of forest conservation projects. A round-table discussion concludes this portion.

The second section, chaired and edited by R. E. Hackett, deals with the supply and trade of wild primates. Four papers pinpoint trends of exploitation in Southeast Asia and India. The remaining papers deal with the practical matters of transport, import levels, and the economics of maintaining primate laboratories.

The final section (21 papers) deals with the propagation of captive primates. The editors, W. R. Dukelow and W. Lane-Petter, included papers concerned with basic research on propagation and pa-

pers dealing with the practicalities of breeding primates for biomedical research.

For all biologists interested in understanding the complexities and conflicts surrounding the conservation of primates, this selection fairly covers the range of opinions and the proposed solutions to a worldwide problem.

J. F. EISENBERG, *National Zoological Park, Smithsonian Institution, Washington, D.C.*

THE EVOLUTIONARY ECOLOGY OF ANIMAL MIGRATION.

By R. R. Baker. *Holmes & Meier Publishers, New York*. \$85.00. xxi + 1012 p.; ill.; geographical, subject, and taxonomic indexes. 1978.

The subject of animal movements is vast and complex, and it is time for an overview to order the enormous collection of data. In his Brobdingnagian book, Baker attempts such a synthesis.

The first of three parts is an exceptionally verbose set of definitions and rhetoric on what is and what is not migration. It takes 34 pages to find out that migration is "the act of moving from one spatial unit to another." By Baker's definition, the small-scale random daily movements of (say) aphids is the same phenomenon as the seasonal movements of trout or Arctic terns. This is not merely a matter of scale, but as we surprisingly discover in part II, it is a result of natural selection for or against movement. The definition blurs the interesting biological differences between various kinds of animal movements, and leads to problems and ambiguities in sections II and III. Many have gone to great lengths to distinguish migration from dispersal (Andrewartha, C.C. Johnson, Pielou, for example). Baker admits the difference, but calls it "calculated" and "non-calculated" migration. He does point out, however, that there is a smooth gradation between the various kinds of "migration," a point worth making.

Many readers will be confused by Baker's use of "dispersal." He uses the word in the sense of the spatial pattern produced by movements; it is thus equivalent to the conventional meaning of "dispersion." Dispersal is usually taken to mean the movement or diffusion of organisms rather than their spatial pattern (e.g., see Andrewartha, C.C. Johnson, Pielou). In many other places we find similar problems; one has to be constantly on the alert to ensure that the author's meanings are the same as the reader's.

The central part of the book is summarized completely on the second page of Part II (p. 37): "Migration is an advantage when the realisation of potential reproductive success achieved on the way to and in the spatial unit to which an individual animal migrates is greater than the realisation of potential reproductive success that would have been achieved during the same period if the animal had remained in the spatial unit vacated." In plain English, migration