of some recent experimental observations that illuminate the role of cellular and extracellular dehydration in thirst, and Section II, which contains an excellent review of the many complex problems that have arisen in experiments concerned with neuropharmacology of thirst-related mechanisms.

The problems of this book are most apparent in Section II, which presents a melange of topics ranging from neuroanatomy to computer simulation and last, and seemingly least, a discussion of thirst as a motivational process. The limited discussion of the neuroanatomical basis of thirst-related neural events becomes mired in not very novel concerns over the specificity of electrical brain-stimulation and does little to illuminate the basic issue. Kissileff's collection of brief reviews of "non-homeostatic" influences on drinking is interesting but does not, by itself, represent a sufficient treatment of thirst viewed as a motivational process. Oatley's chapter on computer-simulation, while excellent, does not provide the needed balance.

In summary, this book is a "must" for the serious student of thirst who already knows the area well and can place the individual papers into proper perspective. It is not, in my opinion, the most informative reading for the uninitiated seeking an overview of the field.

S. P. GROSSMAN, Behavioral Sciences, University of Chicago

IMAGE, OBJECT, AND ILLUSION. Readings from the Scientific American.

Introductions by Richard Held. W. H. Freeman and Company, San Francisco. \$8.00 (cloth); \$4.50 (paper). vi + 137 p.; ill.; index. 1974.

These Scientific American articles appeared over a period of several years and cover a variety of aspects of vision. As usual, the articles are well written, cleverly illustrated, and authoritative. They are pitched at the undergraduate level, but may even be suitable for advanced high school students. Even though experts usually find that articles in their own field have numerous inaccuracies, they feel that those in other fields are marvelously clear and informative. This suggests that some caution should be observed if this book is considered as a textbook or as supplementary reading for an introductory course in perception. Whether or not this book is required reading, every teacher will need to be familiar with it, if only to discuss the questions that the students find therein.

M. L. WOLBARSHT, Duke University Eye Center

THE SOCIAL LIFE OF THE LION. A Study of the Behaviour of Wild Lions (Panthera leo massaica [Newmann]) in the Nairobi National Park, Kenya.

By Judith A. Rudnai. Washington Square East, Wallingford, Pennsylvania. \$14.50. vi + 122 p. + 14 pl.; ill.; index. 1973.

This book resulted from two years of field observation

on a population of 28 lions in Nairobi National Park, Kenya. The format is that of a scientific monograph. It is illustrated with 27 photographic plates; it contains numerous figures and tables, and appendixes dealing with habitat characteristics and a useful method the author devised for identifying lions by whisker distribution. The introduction (Part I) treats the study area, its history, the animal population and the scope of the study, and presents as well some general notes on lion morphology and distribution. Parts II through VI consist of relatively short sections on population and range, activity, patterns of solitary and social behavior, and reproduction. Part VII deals with ecological and behavioral aspects of predation (20 pages); a brief section on reactions to environment constitutes Part VIII. This is followed by a discussion and epilogue in which the general ecological findings are updated with information from a two-year followup, and management recommendations are made to preserve the present emigration and disposal routes. This well-written study provides supportive data to some of Schaller's findings on the Serengeti lion. While not nearly as extensive as Schaller's treatise, the book contains some observations not seen in the Serengeti population. There are a few redundant pages such as the appended mammalian species list and previous studies section, but on the whole this book is a worthwhile contribution.

C. Wemmer, Conservation and Research Center, National Zoological Park

THE ECOLOGY OF STRAY DOGS. A Study of Free-Ranging Urban Animals.

By Alan M. Beck. York Press, Baltimore. \$9.50. xvi + 98 p.; ill.; index. 1973.

This short monograph is both a brief, dispassionate report on another species observed in the "field" and a grim revelation of the dark side of urban dog ownership. Ever wonder what your dog does when you put him out in the morning? Well, if he's like many of the dogs in Beck's study, he spends the day disseminating offal, biting children, and picking up a remarkable variety of diseases and parasites for ready transmission to you and your children. As well as reporting Beck's own observations on such matters as daily rounds, social interactions, food sources, and mortality causes, Beck's book summarizes the work of others on the economic and public health impact of urban strays. It concludes with a brief, concrete set of recommendations for public policy and private precautions to be observed with respect to urban dogs.

Beck's monograph is short, but it will have a broad and important readership. Specialists in animal behavior and ecology will find it interesting; citizens engaged in the ubiquitous squabbles over local leash laws will find it an indispensable source of fuel for their political fires; and finally, anybody who is