Gorilla Society: Conflict, Compromise, and Cooperation Between the Sexes.

Gorillas have been in the news over recent years because of concerns about their survival. These are the magnificent animals that have been subject to the loss of habitat, the bushmeat trade, politically influenced killings, as well as decimation from the Ebola virus.

The current book is organized around the study of primate socioecology, focusing particularly on gorillas in the wild. The socioecological model examines the ways that the two sexes differentially meet the various demands of gaining food resources, avoiding predation, mating and rearing offspring, and how these differences impact societal structure. The first part of the volume presents an overview of primate socioecology in general. For those not familiar with the socioecological perspective, this part of the book is worth the price of admission by itself.

The remainder of the volume focuses on the socioecology of gorillas. In Part 2, the authors examine the biology, habitat use, and social structure of gorillas. The third part describes female strategies and Part 4 discusses male strategies. The presentation of the socioecological argument is clear and logical. The various chapters on female strategies examine female competition over food, cooperation in competition over food, the overwhelming influence of the silverback male on the females’ competition and cooperation, the antipredation and antiinfanticide value to females of joining males (not groups), and female emigration from the natal group and choice of males. The chapters on male strategies examine the influence of the environment and females and then male mating strategies. Each of the two parts on females and males has a summary chapter that discusses the socioecology of the two sexes. Part 5 suggests a variety of future questions and then concludes with a chapter on gorilla conservation.

The authors suggest that the book will typically be used as a reference, with readers “dipping in” to various parts of the volume, and therefore included some repetition. This is a useful strategy as each part of the book can stand on its own. This will be a nice addition to existing research-based publications on gorillas. It will be of great interest to researchers, zoo personnel, and gorilla aficionados.

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AQUATIC SCIENCES

Quantitative Analysis of Marine Biological Communities: Field Biology and Environment.

This book provides an overview of sampling and analytical methods relevant to the marine sciences. An impressive breadth of topics are covered, including sampling equipment, sampling strategy, univariate statistical methods, multivariate statistics, power analysis, randomization methods, species diversity indices, demographic estimates, meta-analysis, fractals, chaos, spatial pattern analysis, maximum likelihood and Bayesian statistics, mathematical modeling, and selected concepts in marine ecology. This breadth comes at a price: the coverage of topics is often superficial, which will frustrate most experienced workers in the field. The depth of coverage is somewhat idiosyncratic, reflecting the research interests of the author and his colleagues. For example, extensive discussion on the finer details of using line transects is presented, whereas sampling of gelatinous zooplankton is mentioned in only one sentence.

Overall, the book serves primarily as a menu of suggestions for how to collect and analyze data, rather than as a guide for implementing particular analyses. To this end, several references are typically presented on each topic to provide readers with an entry into the relevant literature. As the title suggests, many of the examples are derived from marine studies, but studies from other systems are also presented. Although using nonmarine examples may help to facilitate a broader reading of the literature and expose readers a wider array of potential methods, techniques are sometimes described without reference to relevant marine studies that would also serve the intended audience of marine biologists well. The book is most appropriate for early- to mid-career graduate students who are in the process of developing their thesis projects, as well as for some advanced undergraduates. Given this target audience, the price is somewhat problematic. However, it will be a useful addition to any college or university library.

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