Book Review


Useful books on methods to collect and to analyze behavioral data exist, but primatologists wishing also to work on genetics, endocrinology, energetics, or vocalizations, to trap subjects, or to pursue other research goals that involve more than standard observational methods have lacked comparable texts. Good information on some topics, e.g., census techniques, vegetation sampling, exists, but in scattered sources that may not deal directly with primate ecology. Otherwise, we could consult specialist colleagues, search textbooks and “methods” sections of publications for information on collecting, preserving, and analyzing samples (and then consult our specialist colleagues to learn whether the information is accurate), train in laboratories or take courses on geographical information systems or remote sensing, and scrounge among various other options. That situation has now changed, and Joanna Setchell and Deborah Curtis deserve commendation for addressing the need for a single volume that provides a practical review of a wide range of techniques and technology relevant to fieldwork on primate ecology and to the integration of field and laboratory work.

The book contains a Foreword by Robert Martin, an Introduction by the editors, and 21 short chapters on topics as diverse as tape-recording vocalizations (Geissmann); thermoregulation and energetics (Schmid); noninvasive collection, storage, and analysis of genetic material (Goosens et al.); collection of arthropods (Ozonne and Bell); trapping (Jolly et al.); and photography (Rowe and Myers). It is not without flaws, and—as is typical for edited volumes, especially any focused on the fast-evolving worlds of laboratory methods and computerized technology—some of the details will soon be outdated. Nevertheless, much of the information has more than topical value, and the $40 price for the paperback edition eases qualms about how long some of it will remain timely.
The editors “advocate the use of technology and encourage its integration with standard field techniques but are not suggesting that it can replace behavioral and ecological data” (p. 11). Some chapters are in the realm of “standards”—for example, Dew’s on seed dispersal and Ross and Reeve’s succinct and clear review of census and survey methods. Geissmann informatively reviews theory and technology for sound recording, and then usefully explains why he plans to stay with old-fashioned analogue videocassettes despite the ascendancy of digital technology (“currently popular or announced digital technologies are not an option for bioacoustic analyses”; p. 231). Ganzhorn lucidly and concisely summarizes material on habitat description and phenology that one could find in textbooks of ecological methods, but only with considerable effort, and that he usefully relates to questions about primate biology.

Chapters by Hodges and Heistermann (endocrinology) and by Goosens et al. (genetics) are particularly informative even for those who don’t intend to collect such data, and show that adding genetics and/or endocrinology to a behavioral project is not a casual matter. That holds more strongly for “handling, anesthesia, and health evaluation” (Ancrenaz et al.). The authors note that chemical immobilization of wild primates is difficult, risky, and hazardous and that only wildlife veterinarians should undertake many of the procedures they describe, but this and other chapters, e.g., Goosens et al. also stress the value of noninvasive monitoring and sampling.

Lucas et al. contributed 2 chapters on aspects of feeding ecology. That on food chemistry clearly shows how complex the relevant issues are and how little we really know about nutritional ecology. That on food physics is fascinating, but, despite their statement that several quantitative analyses have shown “the importance of food mechanics to dietary divergence and species coexistence” (p. 195), the chapter would have benefited from specific examples of how using the sometimes highly expensive equipment and techniques they describe can address questions about food choice. In fact, like many books on methods, this one suffers from a dearth of thoroughly worked-out examples. For example, illustrative research results would have improved Schmid’s otherwise excellent chapter on energetics. I suspect that space limits imposed by the press made the authors hesitate to present data, instead of just citing relevant publications. Readers can track these down, but it is unfortunate not to have more synthesis.

After that minor criticism, I will finish on 2 positive notes. Several authors discuss the critical importance of ethical issues (Curtis and Setchell; Williamson and Feistner; Jolly et al.; Ancrenaz et al.); some of this discussion could be usefully extended to debates about conservation efforts in impoverished host countries. Many authors also provide addresses for websites where one can find equipment, analytical software, more details on