

## REVIEWS

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**Hillis, D. M., and C. Moritz (eds.).** *MOLECULAR SYSTEMATICS*. Sinauer Associates, Inc., Sunderland, Massachusetts 01375, xvi + 588 pp., illus., 1990. Price, \$37.95 (comb bound), \$65.00 (cloth).

This book is designed to provide current germane information on the molecular techniques used in systematic biology. Because technology critical to systematics is evolving so rapidly, such works are of particular importance to the taxon-oriented scientist. Not only are detailed protocols and helpful hints presented, but also considerable space is dedicated to explaining the theoretical basis for certain methods as well as for data analysis. Contributors include some of the leading experts in each of the areas covered.

This volume includes the following chapters: Chapter 1, Molecular systematics: context and controversies, written by Craig Moritz and David M. Hillis; Chapter 2, Sampling design, written by Peter R. Baverstock and Craig Moritz; Chapter 3, Collection and storage of tissues, written by Herbert C. Dessauer, Charles J. Cole, and Mark S. Hafner; Chapter 4, Proteins I: isozyme electrophoresis, written by Robert W. Murphy, Jack W. Sites, Jr., Donald G. Buth, and Christopher H. Haufler; Chapter 5, Proteins II: immunological techniques written by Linda R. Maxson and R. D. Maxson; Chapter 6, Chromosomes: molecular cytogenetics, written by Stanly K. Sessions; Chapter 7, Nucleic acids I: DNA-DNA hybridization, written by Steven D. Werman, Mark S. Springer, and Roy J. Britten; Chapter 8, Nucleic acids II: restriction site analysis, written by Thomas E. Dowling, Craig Moritz, and Jeffrey D. Palmer; Chapter 9, Nucleic acids III: sequencing, written by David M. Hillis, Allan Larson, Scott K. Davis, and Elizabeth A. Zimmer; Chapter 10, Intraspecific differentiation, written by Bruce S. Weir; Chapter 11, Phylogeny reconstruction, written by David L. Swofford and Gary J. Olsen; Chapter 12, An overview of applications of molecular systematics, written by David M. Hillis and Craig Moritz. Also included are a Glossary and a valuable section of Literature Cited.

The quality of this book is excellent and I believe that it will be of considerable value in the laboratory as a technical guide. I also envision using this book as "assigned reading" for students who are learning the technical aspects of specific molecular techniques. Certainly, this book represents a "must" for any molecular techniques or molecular systematics course, as well as a supplement for special topics courses.—**ROBERT J. BAKER**, *Department of Biological Sciences and The Museum, Texas Tech University, Lubbock, Texas 79409-3191*.

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**Happold, D. C. D.** *THE MAMMALS OF NIGERIA*. The Clarendon Press, Oxford University Press, New York, xvii + 402 pp., 66 pls., 1987. Price (hardbound), \$135.00.

The publication of a state mammal book from any continent generates considerable excitement among mammalogists, but such is especially true when one covering an African state appears. David C. D. Happold was Reader in Zoology at the University of Ibadan in Nigeria for 11 years. During that period, he traveled widely in the country and studied the mammalian fauna in the many ecologically diverse areas there. His studies have culminated in the first really in-depth treatment of the 247 species of Nigerian mammals.

*The Mammals of Nigeria* consists of major sections. A short introductory chapter on climates and vegetation, and a checklist of the species of mammals occurring in Nigeria with their distributions in each of eight vegetation zones makes up the first chapter. This is followed by 13 chapters covering the species accounts. Chapters are devoted to insectivores (26 species); bats (71 species); pottos, galagos, monkeys, and apes (21 species); pangolins (two species); hares and rabbits (two species but no rabbits!); rodents (54 species); carnivores (33 species); manatee (one species); aardvark (one species); elephant (one species); hyraxes (two species); odd-toed ungulates (one species); and even-toed ungulates (32 species). Each chapter consists of an introduction to the order, a key to families, an introduction to each family, a key to the genera and species, and an introduction to each genus. Species accounts within a genus are arranged in alphabetical order by specific epithet, but are introduced by a common name. The following headings are covered within each species account: distribution (with reference to map number found in a section at the back of the book behind the appendices), localities, status, identification, similar species, ecology, reproduction, and taxonomic note. Reference is provided to the previous page for keys throughout the species accounts in each chapter. Four external measurements, total length of skull and weight are given for each species.