

Preface

Primates and primate evolution have changed considerably in the two and a half decades since the first edition of *Primate Adaptation and Evolution* was written. Like all other areas on knowledge, our knowledge of these subjects has increased dramatically, and the published literature manyfold. There are more species, more sites, more studies, more techniques, more analyses, more articles, more journals, and, hopefully, more understanding. But there is also more evidence of just how limited our current knowledge actually is, and how much it is likely to change in the future. This, like every other book, is perhaps best viewed as a progress report rather than a synthesis.

In this edition, every chapter has been revised and rewritten, some much more than others. All of the tables have been redone; there are many new figures; and most of the references are new. Some of these changes deserve further explanation.

The number of recognized primate species has risen dramatically in the past decade. There are many reasons for this. Partly it reflects an extensive increase in fieldwork in remote parts of the world that has generated a greater appreciation of the details of primate biogeography and diversity. In addition, the increasing influence of molecular systematics has generated new insights into the genetic diversity among primate populations. Finally, the widespread use of the Phylogenetic Species Concept has had a major effect on the abilities and willingness of systematists to describe and diagnose new or forgotten taxa. In general, I have used the IUCN Red List website in creating the tables of extant species in this volume. However, this increase in recognized primate species has created problems in the use of older literature for retrieving information about the behavior, ecology, body mass or limb proportions of individual taxa. For example, data that in previous decades, or previous editions of this book, were attributed to the single species of woolly lemur, *Avahi laniger*, may well have been derived from one of several other species now recognized as distinct in that genus. Readers should thus view the data in the tables especially as only rough estimates for the purpose of broad comparisons, not detailed analyses.

In previous editions, I tried to provide body mass estimates from most species of fossil primates derived from a single regression formula based on molar tooth dimensions. However, in the current edition I have relied more on

estimates of the size of fossil species from a wide variety of sources in the literature, based on many different parameters. Thus many estimates across taxa are not methodologically comparable. They are meant to give the reader a general appreciation for the size of extinct taxa in a general sense and are not meant to be suitable for detailed analyses.

As in previous editions, I have included two types of references for each chapter. There are general references which provide broad reviews of the topics covered in that chapter. These are designed to provide more detailed documentation and discussion, and in some cases, alternative views on the material discussed in that chapter. In addition, there are numerous citations within the text of each chapter that are listed as cited references at the end of the chapter. These are not meant to provide a comprehensive or even representative documentation for the contents of the chapter. Rather they are meant to provide the readers with an entry into the literature regarding particular facts and ideas that I found interesting and/or significant. In particular, I have cited relatively recent publications that may not appear in the larger General references. However, in the early part of the twentieth century, I fully expect any reader will be able to find numerous additional references to any topic in this book through an online search.

This edition of *Primate Adaptation and Evolution* contains many additional illustrations. As with previous editions I have limited these to line drawings and black and white photos with an emphasis on comparisons rather than documentation and description. Nevertheless, I appreciate that these do not capture the remarkable beauty and diversity of living primates or the details of morphology that are available in various other media, including videos and 3-dimensional figures. Readers are urged to look more widely for additional illustrative materials, and I especially recommend *All the World's Primates* (www.alltheworldsprimates.org).

This edition has benefitted from the generous advice, assistance and expertise of many people. The efforts and contributions of those listed in previous editions are still greatly appreciated. For help with this edition, I thank the following people, in no particular order: Alfred Rosenberger, Todd Disotell, Callum Ross, Colin Groves, Richard Kay, James Rossie, Tim Smith, Chris Kirk, Mark Coleman, Stephanie Maoilino, Doug Boyer, Steve Leigh, Andreas Koenig, Carola Borries, Charles Janson, Tim

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As with previous editions, the heart of this book is the illustrations. Most of these are the due to the longterm efforts and unfailing patience of Stephen Nash and Luci Betti-Nash. In their talented hands even the most muddled ideas are somehow transformed into illustrations that are crisp and understandable.

Several people were especially helpful in the production of this edition. Mary Silcox provided the classification of plesiadapiforms. Stevie Carnation, Amanda Kingston, Rachel Jacobs, and Ian Wallace contributed herculean efforts in the construction and ordering of tables, figures, and references. Amanda and Ian were invaluable in correcting the proofs. Rachel wrote all of the teacher aids. Most of all, this edition owes its existence to the sustained efforts of Dr. Andrea Baden, whose scientific knowledge and judgment, editorial, graphic and photographic skills, and overall organizational abilities pulled it all together into a coherent volume.