

Preface

This edition, like its four predecessors, is an introduction to the field of primate behavioral ecology and its applications to primate conservation. It integrates the basics of evolutionary and ecological approaches to the study of behavior with up-to-date coverage of how different primates actually behave. Examples are drawn from the "classic" primate field studies as well as more recent studies from diverse species across the Primate Order to illustrate the vast behavioral variation that we now know exists, and the gaps in our knowledge that future studies will fill. Throughout the book, the interplay among theory, observations, and conservation issues is emphasized.

Readers will undoubtedly have different levels of familiarity with the genetics underlying evolutionary processes, primate evolutionary history, and basic behavioral ecology. For some, the background material covered in the early chapters will be an easy review, but the relevance of these areas to conservation deserves to be reinforced. Subsequent chapters are organized around some of the major research themes in the field. Most begin with an overview of theoretical approaches and then examine the comparative evidence that supports or challenges evolutionary-based predictions.

As one might expect for a field as vibrant as this, new discoveries continue to reconstruct the ways we think about primates and the theoretical perspectives upon which these perceptions are based. Increasingly, however, anthropogenic activities are negatively impacting primate populations and their habitats. Although these changes put primates at ever-greater risks, they have also stimulated widespread interest and awareness in the remarkable behavioral flexibility that many primates exhibit. This combination of attention to the variation in ecological and demographic conditions, on the one hand, and the responses of primates to these variable conditions, on the other hand, has shifted some of the focus of primate behavioral ecology away from primate evolutionary adaptations *per se*, and more toward considerations of behavioral plasticity as a part of the primates' evolutionary heritage.

All of the material carried over from the previous editions has been updated so that it tracks the new directions in which primate behavioral ecology is moving. This has resulted in some substantive enhancements and additions to nearly every chapter. Some of the highlights of this edition include:

- Thorough integration of behavioral flexibility and its implications for evolutionary and ecological theory, responses to altered habitats and climate variables, local behavioral traditions, our interpretations of cognition studies, and the ethical treatment of primates.
- New coverage of nutrient balancing, microbiomes, and ethnoprimateology.
- Expanded discussion of behavioral development, ethics, and field methods.
- Critical evaluation of insights that new life history, demographic, and genetic studies

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provide into individual behavioral flexibility, population recovery, and species extinction risks.

- More in-depth presentation of ecological communities and conservation management.
- Updated evolutionary history including new discussion of the Anthropocene, phylogeography, and a fully revised Appendix with the most accurate and current taxonomy of primates available.

Some 280 new references provide authoritative sources and additional examples. However, I have also retained most of the citations to the original studies on particular topics to provide a sense of the historical context and time-depth we have in the field. In our digital age, it is more important than ever for newcomers to the field to learn about some of the classic studies that established the field and continue to shape it, but that were often published as books or book chapters, and may therefore not be accessible online.

As with past editions, this edition benefited by help from many colleagues who answered questions, provided references, or offered feedback on the text or figures. These include (in alphabetical order): Susan Alberts, Jessica Lynch Alfaro, Jeanne Altmann, Irwin Bernstein, Michelle Bezanson, Júlio Cesar Bicca-Marques, Paulo Chaves, Robin Dunbar, John Fleagle, Agustin Fuentes, Paulette Goldweber, Michael Huffman, Tony Ives, Patricia Izar, Joanna Lambert, Jonathan Marks, Tom Martin, David Morgan, Marin Oschmann, Mary Pavelka, Anne Pusey, Erin Riley, Anthony Rylands, Crickett Sanz, Stephanie Spehar, Michael Wilson, and Toni Ziegler. Others generously provided new photos for this edition: Cristiane Căsar, Kerry Dore, Daniel Ferraz, Roland Hilgartner, Alain Houle, Amy Klegarth, Kathelijne Koops, Joanna Lambert, Marlon Lima, Brent Loke, Richard McFarland, Ian Nichols, Marino Junior Fonseca de Oliveira, Julia Ostner, Carla Possamai, Erika Patricia Quintino, Yaya Rayadin, and Fernanda Tabacow. I know how hard it is to take such great photos, and it is an honor to be able to include these here.

The new photos join others that were graciously provided for and carried forward from prior editions by other photographers: Susan Alberts, Thad Bartlett, Irwin Bernstein, Carla Boe, Sue Boinski, Jean Boubli, Robert Boyd, Diane Brockman, Heather Bruce, Richard Byrne, Christina Campbell, Ron and Anne Carlson, Margaret Clarke, Marina Cords, Paulo Coutinho, Irvén DeVore/Anthro-Photo, Nancy DeVore/Anthro-Photo, Luiz Dias, Robin Dunbar, Beth Erhardt, Mary Glenn, Cyril Gruenter, Sharon Gursky, David Haring, Peter Henzi, David Hill, Michael Huffman, Ellen Ingmanson, Robert Jeanne, Peter Kappeler, Minoru Kinoshita, Cheryl Knott, Melanie Krebs, Tim Laman, Phyllis Lee, Jessica Lynch now Alfaro, Katherine MacKinnon, Joe Manson, William McGrew, John Mitani, Florian Möllers, Jim Moore, Leanne Nash, Anna Nekaris, Marcello Nery, Ronald Noë, Claudio Nogueira, Maria van Noordwijk, Marilyn Norconk, John Oates, Adriana Odalia-Rímoli, Claudia Olejniczak, Deborah Overdorff, Melissa Panger, Susan Perry, Jane Phillips-Conroy, Carla Possamai, Ulrich Reichard, Melissa Remis, José Rímoli, Martha Robbins, Elizabeth Rogers, Noel Rowe, Carel van Schaik, Joan Silk, Meredith Small, Craig Stanford, Thomas Struhsaker, and Frans de Waal.

This edition would not have been possible without the many people whose encouragement and help with the content of prior editions deserves to be acknowledged, once again, here. First, I extend my enduring gratitude to those friends and colleagues and my late father, who provided extensive feedback on one or more prior editions: Irwin Bernstein, Jonathan Marks, William McGrew, Jim Moore, Sylvia Shepard, Murray Strier, and Robert Sussman. Thanks, too, to the many others for responding to my queries, offering tips and encouragement, or providing what were, at the time, anonymous reviews on earlier editions: Susan Alberts, Wendy James Aldridge, Jessica Lynch Alfaro, Jeanne Altmann, Sue Boinski, James Calcagno,

Anne Carlson, Marina Cords, Karin Enstam, Linda Fedigan, Beth Fox, David Frayer, Paul Garber, Reiko Matsuda Goodwin, Mark J. Hartmann, David Hill, Minna Hsu, Michael Huffman, Clifford Jolly, Richard Kay, Andrew Klaber, Leslie Knapp, Cheryl Knott, Andreas Koenig, Tibor Koertyleyessy, Vincent Labb, Joanna Lambert, Phyllis Lee, Robin Lee, Tom Martin, Fabiano de Melo, Sérgio Mendes, Lynne Miller, John Mitani, Russell Mittermeier, Cate Mitton, Sheri Morgenroth, Liza Moscovice, Anna Nekaris, Ronald Noë, Maria van Noorwijk, John Oates, Deborah Overdorff, Melissa Panger, Mary Pavelka, Carla Possamai, Alison Richard, Martha Robbins, Norman Rosen, Anthony Rylands, Carel van Schaik, Daniel Sellen, Hogan M. Sherrow, Richard Sherwood, Charles Snowdon, Elliott Sober, Phillip Stall, Laura Szymanski, Linda L. Taylor, Forrest D. Tierson, Matthew A. Tornow, Sarie Van Belle, Eduardo Veado, Patricia Wright, and Toni Ziegler. In addition, I thank Perry van Duijnhoven for his illustration.

Many parts of the preparation of the manuscript in its various drafts and editions were aided by others. Andreia Oliva helped with the initial bibliography and Bob Becker (Wisconsin National Primate Research Center) played a critical role in reproducing most of the photographs for the first edition. Larry Jacobsen, Ray Hamel, and staff at the Primate Center Library helped in locating essential reference material. Jennifer Jacobson, my last editor at Allyn & Bacon, was critical to the completion of the third edition. Without Jen, there would not have been a fourth edition, for which Nancy Roberts, my editor at Pearson, was essential.

With this fifth edition, my book has gained a third publisher, a consequence of the publishing business that I believe has worked to my great advantage. In moving to Routledge at Taylor & Francis Books, I have gained a remarkable new editor, Katherine Ong. From the outset, Katherine has done everything possible to smooth the book's transition, and my own. I am indebted to Katherine, as well as to her assistant, Lola Harre, for all of their help and support with this project. Lola was particularly helpful as the manuscript moved into production. I also thank marketing assistant Staci Custus, my copy editor, Cinqué Hicks, the proofreader, Helena Power, editorial assistant, Marc Stratton, and others who joined the project in its final stages. I especially thank my production editor, Anna Callander, whose care with all the final details was essential.

Other friends, family members, and graduate students have been uniformly encouraging and tolerant of my concentration on this project, and I thank them for their kindness, patience, and support. I am grateful to the students in my classes, especially those in the Primate Conservation seminar, for their stimulating discussions of recent literature, and to Katrina Larkin, Ashley Sapieja, and Kara Weiss for additional help with checking the new species names and bibliography. I am also appreciative of the University of Wisconsin-Madison and my Vilas Research Professorship, which facilitated much of the research that went into this edition. Finally, a very special thanks to Anthony Rylands (Conservation International) for once again generously sharing his evolving taxonomic lists and permitting me to include them in the Appendix, and for all of his help in clarifying taxonomic questions.

This book, like its predecessors, was only possible because of the many primates who have continued to let so many of us into their lives. I hope that by sharing what we have learned, this book will inspire a new generation of primatologists to study and conserve them.