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0521804515 - Eat or be Eaten: Predator Sensitive Foraging Among Primates

Edited by Lynne E. Miller

Frontmatter

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## Eat or be Eaten

### Predator Sensitive Foraging Among Primates

Predator sensitive foraging represents the strategies that animals employ to balance the need to eat against the need to avoid being eaten. Ecologists working with a wide range of taxa have developed sophisticated theoretical models of these strategies, and have produced elegant data to test them. However, only recently have primatologists begun to turn their attention to this area of research. This volume brings together primary data from a variety of primate species living in both natural habitats and experimental settings, and explores the variables that may play a role in primates' behavioral strategies. Taken together, these studies demonstrate that predator sensitive foraging is relevant to many primates, of various body sizes and group sizes and living in different environments. *Eat or be Eaten* encourages further discussion and investigation of the subject. It will make fascinating reading for researchers and students in primatology, ecology and animal behavior.

LYNNE E. MILLER is head of the program in anthropology at MiraCosta College in Oceanside, California. For over ten years, she has studied the behavior and ecology of a population of wedge-capped capuchin monkeys in Venezuela. She also chairs the Education Committee of the American Society of Primatologists and is an active member of the International Primatological Society.

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Edited by  
Lynne E. Miller  
*MiraCosta College, Oceanside, California*



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## Preface

The story of this volume is probably a common one. The book was born out of my frustration over an apparent impasse in primatology and my excitement at discovering that other ecologists had, in fact, moved beyond that obstacle. From my first year in graduate school, I was frustrated by what I perceived as a false dichotomy, the seemingly endless debate among primate socioecologists over the adaptive functions of grouping: Did primates live in groups to reduce predator pressure or to increase foraging success? Surely, I always thought, both factors could be important. Then I got out to the field and was fascinated by the variability in behavior that I was observing among capuchin monkeys. Some monkeys took risks that others avoided, and these different strategies led to differential access to food and water. Clearly, the monkeys were behaving in ways that balanced their simultaneous desires for safety and full stomachs, and the particular balance that each individual struck was based (it seemed to me) upon how vulnerable that individual was (or perceived itself to be). Upon delving into the ecological literature, I found a vast body of data pertaining to this exact balancing act: predator sensitive foraging. Countless scientists working with diverse taxa – insects, fish, birds, rodents, ungulates – were already investigating the strategies that animals use to enhance foraging success under the constraints of predator pressure. But where was the research on primates? There were some important studies, but they were remarkably few.

My enthusiasm for exploring predator sensitive foraging among primates led me to propose a symposium on the subject. I began to get in touch with friends and colleagues who were working on different aspects of primate ecology but everyone was too busy to participate in such a symposium.<sup>1</sup> Someone suggested that, instead, I put the material together as an edited volume, and I was just naive enough to try it. Here is the final product.

A project like this comes to fruition because of the diligent, cooperative efforts of many people (and how anyone ever completed such a task without email is impossible for me to imagine). First and foremost, I would like to thank the authors for their countless hours of writing, reviewing and revising manuscripts, not to mention the years and years of field and laboratory research that is presented here. I am also grateful for periodic scholarly exchange with Anthony Di Fiore, Stephen Miller, Marilyn Norconk, and Adrian Treves. I want simultaneously to thank and to curse Paul Garber for encouraging me to undertake this project in the first place. I also deeply appreciate the staff of Cambridge University Press (especially Tracey Sanderson, Sarah Jeffery, Miranda Fyfe and Nicola Stearn) for answering dozens of questions, for prodding me along, and for having faith in me and in this volume. Finally, and most importantly, I would like to thank my family. Editing this volume has taken a lot of my time, and therefore a lot of theirs, too. I would not have come so far without their constant love and support. I dedicate this volume to *all* of my family, but especially to Arthur Edward and Arthur Peterson, two great sources of inspiration.

Lynne E. Miller  
San Diego, California, May 2001

<sup>1</sup> That symposium later took place, at the Eighteenth Congress of the International Primatological Society in Adelaide, Australia, in January, 2001, but the volume was well under way by that time. However, hearing these authors present their material, back-to-back, demonstrated the importance of this body of information and provided real inspiration to complete this project. I am grateful to those who participated in that symposium: S.K. Bearder, J.C. Bicca-Marques, H.M. Buchanan-Smith, M. Cords, N.G. Caine, R.A. Hill, L.A. Isbell, M.A. Norconk, and D.J. Overdorff.