

Juan Carlos Reboreda

Vanina Dafne Fiorini · Diego Tomás Tuero
Editors

Behavioral Ecology of Neotropical Birds

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Juan Carlos Reboreda 
Facultad de Ciencias Exactas y Naturales
University of Buenos Aires
Ciudad Autónoma de Buenos Aires,
Argentina

Vanina Dafne Fiorini 
Facultad de Ciencias Exactas y Naturales
University of Buenos Aires
Ciudad Autónoma de Buenos Aires,
Argentina

Diego Tomás Tuero
Facultad de Ciencias Exactas y Naturales
University of Buenos Aires
Ciudad Autónoma de Buenos Aires,
Argentina

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Preface

Behavioral ecology studies the adaptive value (or fitness consequences) of animal behavior. The discipline emerged from ethology in the 1960s and 1970s of the previous century from seminal works of Bill Hamilton, John Maynard Smith, George Williams, and Robert Trivers, among others. Its aim was to understand the behavioral patterns as a result of selective pressures from the physical and social environment in which animals have evolved.

Many studies in behavioral ecology have been conducted in birds, probably because birds are ubiquitous, mostly diurnals, conspicuous, and therefore easy to observe and to study. Thus, birds had a high impact on the development of behavioral ecology, and behavioral ecology has been equally important in the advance of ornithology, as shown in the indexes of the main ornithological journals.

The majority of the studies on bird behavioral ecology have been conducted in the Palearctic and Nearctic biogeographical regions. These regions are relatively poor in bird diversity, with approximately 1000 and 750 species, respectively. On the contrary, relatively few studies on bird behavioral ecology have been conducted in the Neotropical region, which has the richest avifauna of the world, with about 3000 bird species and more than 30 endemic families.

This strong bias toward studies in Palearctic and Nearctic bird species reflects the marked differences in the number of behavioral ecologists and ornithologists working in Europe and North America and those working in South and Central America, likely as a result of the differences in investment in science and technology in developed countries (those in the Palearctic and Nearctic regions) and developing countries (those in the Neotropical region).

One of the consequences of this asymmetry is a north temperate perspective in formulating hypotheses to explain behavioral patterns in birds, hypotheses that in some cases do not provide suitable explanations for the patterns observed in other regions.

The aim of this book is to present studies conducted in the Neotropical region on different aspects of the behavioral ecology of birds. Although our sample is not complete, it includes studies conducted in different groups of birds (i.e., hummingbirds, wrens, swallows, flycatchers, tanagers, cowbirds, cuckoos, and cormorants,

among others), at different latitudes (from 58° South to 15° North) and on different subjects, covering social and genetic mating systems, sexual selection, cooperative breeding, brood parasitism, visual and vocal communication, migration, sibling competition, fruit-taking behavior, and foraging and cognition.

We would like to thank all the authors, who not only wrote the chapters but also reviewed other chapters, and João Victor Pildervasser from Springer International Publishing AG, who invited us to edit this book. We also thank Pedro Blendinger, Victor Cueto, Jordan Herman, Bettina Mahler, and Spencer Sealy for reviewing some of the chapters.

We hope that the number of studies on behavioral ecology of Neotropical birds increases in the near future and that the results of these studies provide general explanations for the behavioral patterns observed in birds.

Ciudad Autónoma de Buenos Aires, Argentina

Juan Carlos Reboreda
Vanina Dafne Fiorini
Diego Tomás Tuero

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