

Leaders in Animal Behavior

The Second Generation

Animal behavior, as a discipline, has undergone several key transitions over the last 25 years, growing in both depth and breadth. Key advances have been made in behavioral ecology and sociobiology; in the development of studies integrating proximate and ultimate causation; in the integration of laboratory and field work; and in advances in theoretical work in areas such as sexual selection, foraging and life-history traits. Thus it is appropriate to relate the individual stories of those who have had significant impacts on the field as we know it today. *Leaders in Animal Behavior: The Second Generation* is a collection of autobiographies from 21 individuals who have been peer selected, and have provided unique and important contributions to the field in the past 25 years.

LEE DRICKAMER received a Ph.D. in zoology from Michigan State University and is Regents' Professor Emeritus at Northern Arizona University where he teaches introductory biology and classes in animal behavior, ornithology, and behavioral ecology. He is currently the Animal Behavior Society historian and his research interests include population and conservation biology and the behavioral ecology and reproductive traits of rodents and prairie dogs.

DONALD DEWSBURY is Professor Emeritus of Psychology at the University of Florida. His primary interests are in the history of psychology; primarily comparative and experimental psychology and related parts of the biological sciences. He serves as historian and archivist for Divisions 1 and 26 of the American Psychological Association, and is past president of Divisions 1 (Society of General Psychology) and 26 (History of Psychology) and of the Animal Behavior Society. For much of his early career he worked in reproductive and social behavior in various animal species.

LEADERS IN ANIMAL BEHAVIOR

The Second Generation

Edited by

Lee C. Drickamer
Northern Arizona University

Donald A. Dewsbury
University of Florida



CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom
 One Liberty Plaza, 20th Floor, New York, NY 10006, USA
 477 Williamstown Road, Port Melbourne, VIC 3207, Australia
 314-321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi - 110025, India
 103 Penang Road, #05-06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9780521517584

© Cambridge University Press 2010

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2010

First paperback edition 2022

A catalogue record for this publication is available from the British Library

Library of Congress Cataloging in Publication data

Leaders in animal behaviour : the second generation / edited by Lee Drickamer,
 Donald Dewsbury.
 p. cm.

Summary: "Animal behavior, as a discipline, has undergone several key transitions over the last 25 years, growing in both depth and breadth. Key advances have been made in behavioural ecology and socio-biology, in the development of studies integrating proximate and ultimate causation, in the integration of laboratory and field work, and in advances in theoretical work in areas such as sexual selection, foraging and life-history traits.

Thus it is appropriate to relate the individual stories of those who have had significant impacts on the field as we know it today. Leaders in Animal Behavior: The Second Generation is a collection of autobiographies from 21 individuals that have been peer selected, and have provided unique and important contributions to the field in the past 25 years" – Provided by publisher

ISBN 978-0-521-51758-4 (hardback)

1. Ethologists – Biography. 2. Animal behavior. I. Drickamer, Lee C.
 II. Dewsbury, Donald A., 1939– III. Title.

QL26.L426 2009

591.5092'2–dc22

2009038902

ISBN 978-0-521-51758-4 Hardback

ISBN 978-0-521-74129-3 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

Contents

	<i>Preface</i>	<i>page vii</i>
1	Understanding ourselves <i>Richard D. Alexander</i>	1
2	Motherhood, methods, and monkeys: an intertwined professional and personal life <i>Jeanne Altmann</i>	39
3	Coming together <i>Patrick Bateson</i>	59
4	My life and hard times <i>Jerram L. Brown</i>	83
5	Individuals, societies and populations <i>Tim Clutton-Brock</i>	109
6	Birds, butterflies and behavioural ecology <i>Nicholas B. Davies</i>	143
7	King Solomon’s herring gull’s world <i>Marian Stamp Dawkins</i>	165
8	Growing up in ethology <i>Richard Dawkins</i>	189
9	A passion for primates <i>Frans B. M. de Waal</i>	219
10	Taking my cues from nature’s clues <i>Stephen T. Emlen</i>	241
11	A most unlikely animal behaviorist <i>Bennett G. Galef</i>	279
12	Watcher: the development of an evolutionary biologist <i>Patricia Adair Gowaty</i>	309
13	Myths, monkeys, and motherhood: a compromising life <i>Sarah Blaffer Hrdy</i>	343
14	Luck, chance and choice <i>John R. Krebs</i>	375

vi	<i>Contents</i>	
15	My life with birds <i>Gordon H. Orians</i>	405
16	Reflections before dusk <i>Geoff A. Parker</i>	429
17	An improbable path <i>Michael J. Ryan</i>	465
18	Birds, babies, and behaving <i>Meredith J. West</i>	497
19	A brief just-so story of my life (a few of the reminiscences that are fit to print) <i>Mary Jane West-Eberhard</i>	527
20	A bird in the hand <i>John C. Wingfield</i>	561
21	Living with birds and conservation <i>Amotz Zahavi</i>	593

Preface

The original volume, *Leaders in the Study of Animal Behavior*, was published in 1985. Since then, a number of significant developments have occurred in animal behavior. As the field grows and matures, several threads have emerged. The biggest of these developments has been behavioral ecology, along with sociobiology, which began in earnest in the 1970s. Another thread involves studies of animal cognition and culture; a third thread includes the use of new technologies and methods to explore problems in animal behavior. A fourth thread is the development of evolutionary psychology, and a final thread is the re-emergence of integrating studies of proximate and ultimate causation of behavior. In the summer of 2006, one of us (LCD) approached the other (DAD), who had edited the first volume, with the notion that a second volume, covering these developments in animal behavior over a 20–25 year period, was warranted. We agreed to work together to produce this volume of autobiographies of the second generation of leading individuals in animal behavior.

The initial question we faced, as was the case for the earlier volume, was the matter of selecting potential participants. We discussed this together and with colleagues to develop a thorough procedure that would provide the opportunity for wide consideration of individuals who have contributed to animal behavior during a period extending from the 1960s to the present time. The time period includes a portion of the chronology that was used for the first book; we did this because the contributions of many individuals to our field of study were not recognized by the early 1980s. Their work has become quite significant during the ensuing decades and they thus deserved consideration.

Our selection process involved three steps. First, we developed a panel of 15 judges. We attempted to gather a wide diversity of panel members, including individuals from 6 countries and representing all subfields of modern animal behavior. Second, each judge was asked to nominate up to 10 individuals, without ranking them. We compiled the list of nominees and elected to place the top 43 names on the ballot. Third, we sent ballots to all members of the panel and asked them to rate their top 10 choices in rank order; all individuals who were nominees could not vote for or rank themselves. When that information was compiled, a list of 25 names emerged as the top choices. We contacted all of these individuals to ask them to write an autobiography. Several declined the opportunity to write an autobiography, either for time reasons, or because they had previously published a similar essay. These included John Garcia, Jane Goodall, Robert Trivers, and Fernando Nottebohm.

The present volume includes autobiographical essays from 21 leading figures in the second generation of those who led animal behavior down some new avenues and advanced our knowledge of and methods for obtaining information about all aspects of animal behavior. We reviewed the initial submissions and made minor content and editorial suggestions. We elected not to be heavy-handed in terms of editing, believing that the individual styles of the various authors should remain, as they are representative of different approaches to writing and organization of materials pertaining to their own scientific lives.

We believe that this new book, covering a second generation of those who have led the field of animal behavior, should serve several useful functions. First, it will make an excellent book for seminar discussions pertaining not just to the history of our discipline, but also as a set of windows on how different individuals approached the study of animals. Examining the various influences that affected these scientists and exploring the progression of their individual careers can provide significant insight for students and, indeed, those of us already working in animal behavior. Second, the book serves as a reference and record of what occurred in animal behavior during the last quarter of the twentieth century and early years of the twenty-first century. As a discipline, animal behavior is currently undergoing significant changes, both in terms of the coverage of different topics, as in the renewed focus on integrating proximate and ultimate factors, and also with respect to using new technologies to explore problems in ways that had heretofore not been possible. This latter includes such methods as analyzing hormones and other body chemistry from urine or feces collected in the field. It also includes the use of DNA technology to define relationships between individuals in animal societies and the ability to dissect the developmental processes underlying particular behavior traits.

We appreciate the good work of our panel of experts that aided in the selection process. This group included: Chris Barnard; Michael Beecher; Gordon Burghardt; Hugh Drummond; Jeff Galef; Patricia Gowaty; Felicity Huntingford; Jeff Lucas; Douglas Mock; Chuck Snowdon; Judy Stamps; Michael Taborsky; and Meredith West. We thank Martin Griffiths at Cambridge University Press for genial, enthusiastic, and rapid handling of all phases of the book's production. We thank Patrick Bateson for aiding in making the connection to Cambridge University Press as a potential publisher. Sarah Hrdy deserves our appreciation for providing the title for this volume.

Dewsbury, D. A. (Ed.). (1985). *Leaders in the Study of Animal Behavior: Autobiographical Perspectives*. Lewisburg, PA: Bucknell University Press and Dewsbury, D. A. (Ed.). (1989). *Studying Animal Behavior: Autobiographies of the Founders* Chicago: University of Chicago Press (Paperback edition).