

Biology  
2011-2012



# Contents

---

- |    |                                     |    |                              |
|----|-------------------------------------|----|------------------------------|
| 1  | Textbooks                           | 13 | Biomechanics                 |
| 4  | Behavior                            | 14 | Mathematical Biology         |
| 6  | Primers in Complex Systems          | 15 | Ocean & Earth Sciences       |
| 7  | Ecology                             | 16 | Princeton Primers in Climate |
| 9  | Monographs in Population<br>Biology | 18 | Field Guides                 |
| 10 | Evolution                           | 26 | General Interest             |
|    |                                     | 37 | Index/Order Form             |

Forthcoming

## Agent-Based and Individual-Based Modeling

A Practical Introduction

**Steven F. Railsback & Volker Grimm**

Agent-based modeling is a new technique for understanding how the dynamics of biological, social, and other complex systems arise from the characteristics and behaviors of the agents making up these systems. This innovative textbook gives students and scientists the skills to design, implement, and analyze agent-based models. It starts with the fundamentals of modeling and provides an introduction to NetLogo, an easy-to-use, free, and powerful software platform. Nine chapters then each introduce an important modeling concept and show how to implement it using NetLogo. The book goes on to present strategies for finding the right level of model complexity and developing theory for agent behavior, and for analyzing and learning from models.

Steven F. Railsback is adjunct professor of mathematics at Humboldt State University and a consulting environmental scientist. Volker Grimm is senior scientist in the Department of Ecological Modeling at the Helmholtz Centre for Environmental Research—UFZ in Leipzig and on the faculty of the University of Potsdam.

November 2011. 344 pages. 52 line illus. 9 tables.  
Pa: 978-0-691-13674-5 \$55.00 | £37.95  
Cl: 978-0-691-13673-8 \$99.50 | £69.95

Forthcoming

## Solid Biomechanics

**Roland Ennos**

*Solid Biomechanics* is the first book to comprehensively review the mechanical design of organisms. With a physical approach and a minimum of mathematics, the textbook introduces readers to the world of structural mechanics and sheds light on the dazzling array of mechanical adaptations that link creatures as dissimilar as bacteria, plants, and animals. Exploring a wide range of subjects in depth, from spider silks and shark skin to climbing plants and human food processing, this immensely accessible text demonstrates that the bodies of animals and plants are masterpieces of engineering, enabling them to survive in a hostile world.

Looking at practical and historical aspects of the subject, the book delves into how the mechanics of organisms might be applied to other engineering scenarios and considers the ways structural biomechanics could and should develop in the future if more is to be learned about the form and function of organisms.

Roland Ennos is a reader in ecology at the University of Manchester.

November 2011. 280 pages. 129 line illus. 3 tables.  
Cl: 978-0-691-13550-2 \$65.00 | £44.95

**TEXT** Professors who wish to consider a book from this catalog for course use may request an examination copy. For more information please visit: [press.princeton.edu/class.html](http://press.princeton.edu/class.html)

New

## Tropical Ecology

John Kricher

"Kricher does a remarkable job of bringing the wonder and diversity of tropical ecosystems together into one text, while providing a solid framework in ecological and evolutionary theory. The task of treating the tropics in one accessible book is daunting, and *Tropical Ecology* comes closer to accomplishing that goal than any book I have seen."

—Gregory S. Gilbert, University of California, Santa Cruz

This full-color illustrated textbook explains why the world's tropical rain forests are so universally rich in species, what factors may contribute to high species richness, how nutrient cycles affect rain forest ecology, and how ecologists investigate the complex interrelationships among flora and fauna. It covers tropical montane ecology, riverine ecosystems, savanna, dry forest—and more.

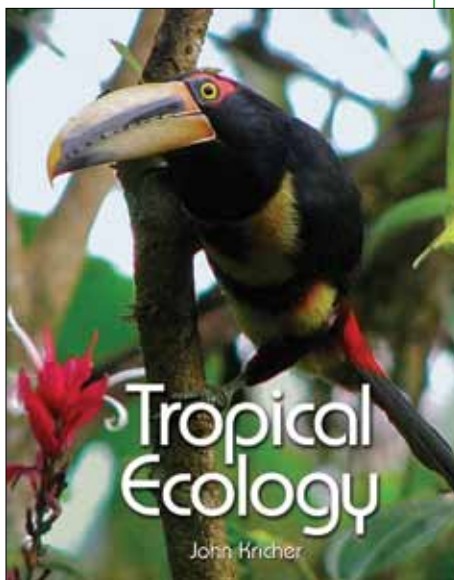
*Tropical Ecology* begins with a historical overview followed by a sweeping discussion of biogeography and evolution, and then introduces students to the unique and complex structure of tropical rain forests. Other topics include the processes that influence everything from species richness to rates of photosynthesis: how global climate change may affect rain forest characteristics and function; how fragmentation of ecosystems affects species richness and ecological processes; human ecology in the tropics; biodiversity; and conservation of tropical ecosystems and species.

Drawing on real-world examples taken from actual research, *Tropical Ecology* is the best textbook on the subject for advanced undergraduates and graduate students.

John Kricher is professor of biology at Wheaton College in Massachusetts. He is the author of *The Balance of Nature: Ecology's Enduring Myth* (Princeton). See page 34 for details.

2011. 640 pages. 732 color illus.

Cl: 978-0-691-11513-9 \$85.00 | £59.00



- ◆ Offers the first comprehensive introduction to all major aspects of tropical ecology
- ◆ Describes all the major kinds of tropical terrestrial ecosystems
- ◆ Explains species diversity, evolutionary processes, and coevolutionary interactions
- ◆ Features numerous color illustrations and examples from actual research
- ◆ Covers global warming, deforestation, reforestation, fragmentation, and conservation
- ◆ The essential textbook for advanced undergraduates and graduate students
- ◆ Suitable for courses with a field component

Forthcoming

## The Optics of Life

A Biologist's Guide to Light in Nature

Sönke Johnsen

"*The Optics of Life* provides a user-friendly introduction to the physics and measurement of light. From plant physiologists working on photosynthesis to visual scientists stimulating eyes with light, many biologists will benefit greatly from the wisdom and insight provided in this book."

—Eric Warrant, Lund University, Sweden

Optics—a field of physics focusing on the study of light—is also central to many areas of biology, including vision, ecology, botany, animal behavior, neurobiology, and molecular biology. *The Optics of Life* introduces the fundamentals of optics to biologists and nonphysicists, giving them the tools they need to successfully incorporate optical measurements and principles into their research. Sönke Johnsen starts with the basics, describing the properties of light and the units and geometry of measurement. He then explores how light is created and propagates and how it interacts with matter, covering topics such as absorption, scattering, fluorescence, and polarization. Johnsen also provides a tutorial on how to measure light as well as an informative discussion of quantum mechanics.

*The Optics of Life* features a host of examples drawn from nature and everyday life, and several appendixes that offer further practical guidance for researchers. This concise book uses a minimum of equations and jargon, explaining the basic physics of light in a succinct and lively manner. It is the essential primer for working biologists and for anyone seeking an accessible introduction to optics.

Sönke Johnsen is associate professor of biology at Duke University.

January 2012. 376 pages. 8 color illus. 24 halftones. 90 line illus. 7 tables.

Pa: 978-0-691-13991-3 \$45.00 | £30.95

Cl: 978-0-691-13990-6 \$99.50 | £69.95



## Ecological Models and Data in R

Benjamin M. Bolker

"Bolker's book is a must-buy for anyone wanting to fit data to models and go beyond hypothesis testing, but it is certainly not an 'introductory' text in the sense of 'simple'.

This book is a tour de force for anyone who studied ecology for his or her interest of nature's working."

—Carsten F. Dormann, *Basic and Applied Ecology*

2008. 408 pages. 99 line illus.

Cl: 978-0-691-12522-0 \$57.50 | £39.95

## An Introduction to Methods and Models in Ecology, Evolution, and Conservation Biology

Edited by  
Stanton Braude &  
Bobbi S. Low

"Braude and Low provide a survey of a wide variety of extended exercises in evolutionary biology, population ecology, population genetics, and statistical analysis. Individual chapters can also serve as useful supplement assignments in many introductory biology courses."

—*Choice*

2010. 288 pages. 72 halftones. 12 line illus. 80 tables.

Pa: 978-0-691-12724-8 \$29.95 | £20.95

Cl: 978-0-691-12723-1 \$65.00 | £44.95



Connect with us on Twitter @ *princetonupress*  
& Facebook @ *PrincetonUniversityPress*

Textbooks



Honorable Mention, 2008 PROSE Award for Excellence in Earth Science, Association of American Publishers

## How the Ocean Works

An Introduction to Oceanography

**Mark Denny**

2008. 344 pages. 148 color illus. 7 tables.  
Pa: 978-0-691-12647-0 \$49.50 | £34.95  
Not for sale in South Asia

## Models for Ecological Data

An Introduction

**James S. Clark**

2007. 632 pages. 163 line illus. 21 tables.  
Cl: 978-0-691-12178-9 \$78.50 | £55.00

Models for Ecological Data—Lab Manual  
2007. 152 pages.  
Pa: 978-0-691-12262-5 \$22.95 | £15.95

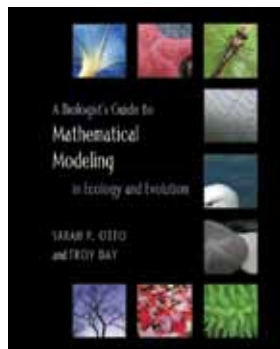
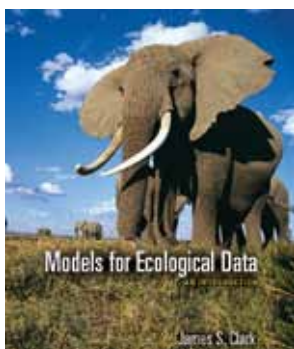
One of *Choice's* Outstanding Academic Titles for 2004

## Comparative Biomechanics

Life's Physical World

**Steven Vogel**

2003. 592 pages. 234 line illus. 33 tables.  
Cl: 978-0-691-11297-8 \$85.00 | £59.00



Honorable Mention, 2007 Award for Best Professional/Scholarly Book in Biological Sciences, Association of American Publishers

## A Biologist's Guide to Mathematical Modeling in Ecology and Evolution

**Sarah P. Otto & Troy Day**

2007. 744 pages. 207 line illus. 22 tables.  
Cl: 978-0-691-12344-8 \$78.50 | £55.00

## Physiological Ecology

How Animals Process Energy, Nutrients, and Toxins

**William H. Karasov & Carlos Martínez del Río**

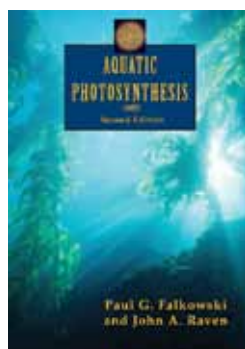
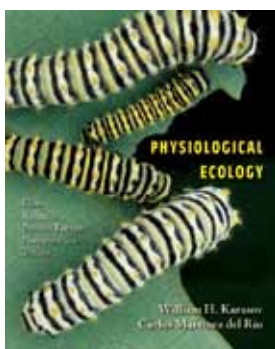
2007. 744 pages. 40 halftones. 242 line illus.  
Cl: 978-0-691-07453-5 \$78.50 | £55.00

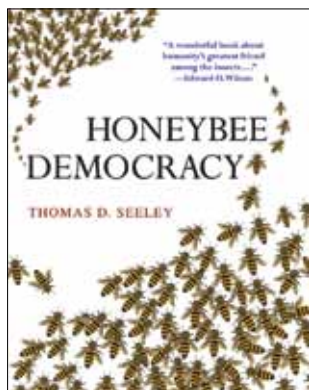
Second Edition

## Aquatic Photosynthesis

**Paul G. Falkowski & John A. Raven**

2006. 512 pages. 8 color plates. 10 halftones. 145 line illus. 22 tables.  
Pa: 978-0-691-11551-1 \$62.50 | £43.95  
Cl: 978-0-691-11550-4 \$120.00 | £82.50





"[E]ngaging and fascinating.... Seeley writes with infectious enthusiasm.... *Honeybee Democracy* offers wonderful testament to his career of careful investigation of a remarkable natural phenomenon. The breadth and depth of the studies reported in it should inspire all students of animal behavior."

—*Science*

New

## Honeybee Democracy

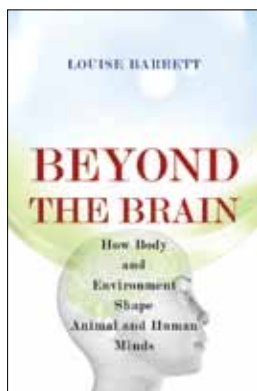
Thomas D. Seeley

Honeybees make decisions collectively—and democratically. Every year, faced with the life-or-death problem of choosing and traveling to a new home, honeybees stake everything on a process that includes collective fact-finding, vigorous debate, and consensus building. In fact, as world-renowned animal behaviorist Thomas Seeley reveals, these incredible insects have much to teach us when it comes to collective wisdom and effective decision making. A remarkable and richly illustrated account of scientific discovery, *Honeybee Democracy* brings together, for the first time, decades of Seeley's pioneering research to tell the amazing story of house hunting and democratic debate among the honeybees.

An impressive exploration of animal behavior, *Honeybee Democracy* shows that decision-making groups, whether honeybee or human, can be smarter than even the smartest individuals in them.

Thomas D. Seeley is professor of biology at Cornell University and a passionate beekeeper.

2010. 280 pages. 30 color illus. 30 halftones. 26 line illus. 1 table.  
 Cl: 978-0-691-14721-5 \$29.95 | £20.95



"This is an excellent book about comparative cognition, how minds and brains evolve, and how to think about the minds of animals."  
 —Nicola S. Clayton,  
 University of Cambridge

New

## Beyond the Brain

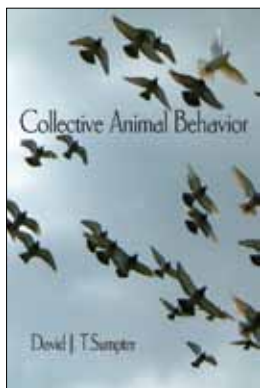
How Body and Environment Shape Animal and Human Minds

Louise Barrett

When a chimpanzee stockpiles rocks as weapons or when a frog sends out mating calls, we might easily assume these animals know their own motivations—that they use the same psychological mechanisms that we do. But as *Beyond the Brain* indicates, this is a dangerous assumption because animals have different evolutionary trajectories, ecological niches, and physical attributes. How do these differences influence animal thinking and behavior? Removing our human-centered spectacles, Louise Barrett investigates the mind and brain and offers an alternative approach for understanding animal and human cognition. Drawing on examples from animal behavior, comparative psychology, robotics, artificial life, developmental psychology, and cognitive science, Barrett provides remarkable new insights into how animals and humans depend on their bodies and environment—not just their brains—to behave intelligently.

Louise Barrett is a professor in the psychology department at the University of Lethbridge.

2011. 288 pages. 14 line illus.  
 Cl: 978-0-691-12644-9 \$29.95 | £20.95



New

## Collective Animal Behavior

David J. T. Sumpter

Fish travel in schools, birds migrate in flocks, honeybees swarm, and ants build trails. How and why do these collective behaviors occur? Exploring how coordinated group patterns emerge from individual interactions, *Collective Animal Behavior* reveals why animals produce group behaviors and examines their evolution across a range of species.

Providing a synthesis of mathematical modeling, theoretical biology, and experimental work, David Sumpter investigates how animals move and arrive together, how they transfer information, how they make decisions and synchronize their activities, and how they build collective structures. Sumpter constructs a unified appreciation of how different group-living species coordinate their behaviors and why natural selection has produced these groups. For the first time, the book combines traditional approaches to behavioral ecology with ideas about self-organization and complex systems from physics and mathematics. Sumpter offers a guide for working with key models in this area along with case studies of their application, and he shows how ideas about animal behavior can be applied to understanding human social behavior.

Containing a wealth of accessible examples as well as qualitative and quantitative features, *Collective Animal Behavior* will interest behavioral ecologists and all scientists studying complex systems.

David J. T. Sumpter is professor of applied mathematics at Uppsala University in Sweden.

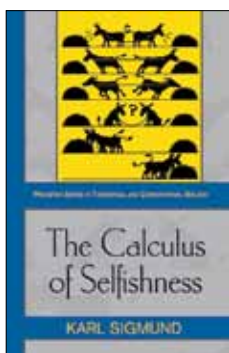
2010. 312 pages. 7 halftones. 61 line illus. 3 tables.

Pa: 978-0-691-14843-4 \$39.50 | £27.95

Cl: 978-0-691-12963-1 \$80.00 | £55.00

## The Calculus of Selfishness

Karl Sigmund



"With collaborators from Vienna, Sigmund has pioneered the development of evolutionary game dynamics. This thought-provoking book is a distillation of his many influential contributions to the field. It is a showcase of clever models and elegant mathematics, replete with sometimes

counterintuitive insights."

—*Nature*

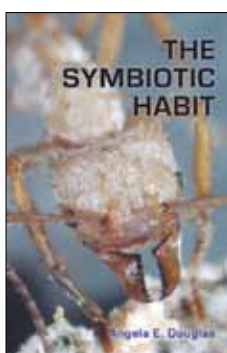
*Princeton Series in Theoretical and Computational Biology*

2010. 184 pages. 51 line illus.

Cl: 978-0-691-14275-3 \$35.00 | £24.95

## The Symbiotic Habit

Angela E. Douglas



"This is an essential volume for any reader seeking a comprehensive overview of symbiosis. Covering a wide range of topics from both ecological and evolutionary perspectives, *The Symbiotic Habit* is a pleasure to read."  
—Judith L. Bronstein, University of Arizona

2010. 216 pages. 25 halftones. 16 line illus. 7 tables.

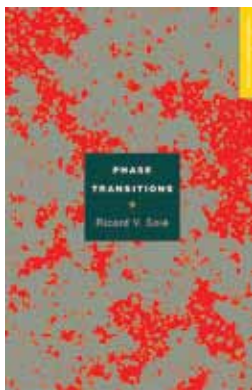
Cl: 978-0-691-11341-8 \$45.00 | £30.95

This series embodies high quality, well-focused writing on central topics in complex systems. Each book serves as a coherent primer on the topic, providing a solid, scientifically accurate introduction to the core elements, including current knowledge, practice, examples, and future frontiers. The primers are accessible to an advanced undergraduate or graduate student, or a non-specialist in the specific area of complex systems covered by the book.

Forthcoming

## Phase Transitions **TEXT**

Ricard V. Solé



Phase transitions—changes between different states of organization in a complex system—have long helped to explain physics concepts, such as why water freezes into a solid or boils to become a gas. How might phase transitions shed light on important problems in biological and ecological complex systems? Exploring the origins and implications of sudden changes in nature and society, *Phase Transitions* examines different dynamical behaviors in a broad range of complex systems. Using a compelling set of examples, from gene networks and ant colonies to human language and the degradation of diverse ecosystems, the book illustrates the power of simple models to reveal how phase transitions occur.

Written at an undergraduate mathematical level, this book provides the essential theoretical tools and foundations required to develop basic models to explain collective phase transitions for a wide variety of ecosystems.

Ricard V. Solé is ICREA research professor and head of the Complex Systems Lab at Pompeu Fabra University and external professor at the Santa Fe Institute.

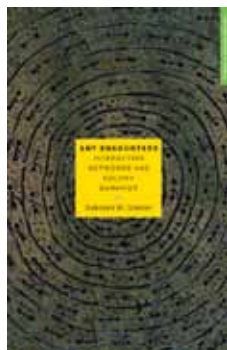
September 2011. 264 pages. 6 halftones. 67 line illus. 1 table.  
Pa: 978-0-691-15075-8 \$35.00 | £24.95

One of *Choice's* Outstanding Academic Titles for 2010

## Ant Encounters

Interaction Networks and Colony Behavior

Deborah M. Gordon



"This volume provides a well-focused review of how complex biological systems develop and function, with applications well beyond understanding ant colonies. It may compel behavioral and community ecologists, as well as other non-biologists, to consider new perspectives in understanding interacting systems."

—*Choice*

2010. 184 pages. 2 halftones. 1 line illus.  
Pa: 978-0-691-13879-4 \$19.95 | £13.95

## Diversity and Complexity

Scott E. Page



"Scott Page effectively illustrates the multiplicity of results from diverse aspects of complex systems. While all too many social scientists have tried to focus on making analysis simple, Page points out that this overlooks the great variety of relevant material in

our social worlds. I am looking forward to having my students read it in my graduate seminar and encourage others to do so as well."

—Elinor Ostrom, winner of the Nobel Prize in economics

2010. 304 pages. 19 line illus. 26 tables.  
Pa: 978-0-691-13767-4 \$19.95 | £13.95

New

## Pollination and Floral Ecology

Pat Willmer

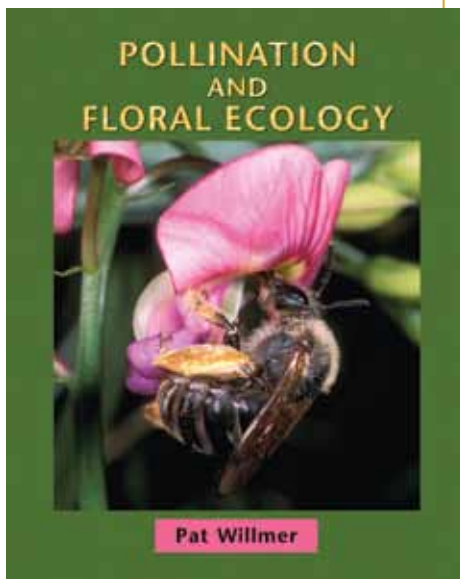
“This is an impressive and valuable contribution to pollination ecology, floral evolution, plant biology, and entomology. The book is extremely up-to-date. I am convinced it will become the central reference in the field and remain so for many years. A pleasure to read.”  
—W. Scott Armbruster, University of Portsmouth and University of Alaska, Fairbanks

*Pollination and Floral Ecology* is the most comprehensive single-volume reference to all aspects of pollination biology—and the first fully up-to-date resource of its kind to appear in decades. This beautifully illustrated book describes how flowers use colors, shapes, and scents to advertise themselves; how they offer pollen and nectar as rewards; and how they share complex interactions with beetles, birds, bats, bees, and other creatures. The ecology of these interactions is covered in depth, including the timing and patterning of flowering, competition among flowering plants to attract certain visitors and deter others, and the many ways plants and animals can cheat each other.

*Pollination and Floral Ecology* pays special attention to the prevalence of specialization and generalization in animal-flower interactions, and examines how a lack of distinction between casual visitors and true pollinators can produce misleading conclusions about flower evolution and animal-flower mutualism. This one-of-a-kind reference also gives insights into the vital pollination services that animals provide to crops and native flora, and sets these issues in the context of today’s global pollination crisis.

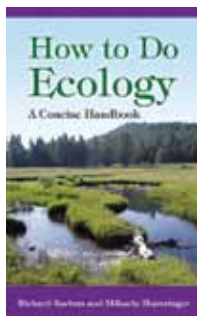
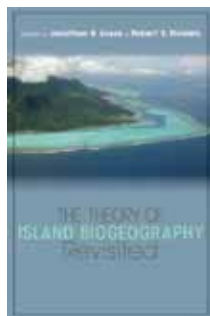
Pat Willmer is professor of zoology at the University of St. Andrews.

2011. 832 pages. 303 color illus. 308 line illus. 93 tables.  
Cl: 978-0-691-12861-0 \$95.00 | £65.00



- ◆ Provides the most up-to-date resource on pollination and floral ecology
- ◆ Describes flower advertising features and rewards, foraging and learning by flower-visiting animals, behaviors of generalist and specialist pollinators—and more
- ◆ Examines the ecology and evolution of animal-flower interactions, from the molecular to macroevolutionary scale
- ◆ Features hundreds of color and black-and-white illustrations

Explore the great scientific and technological issues afoot in the world today: <http://princetonglobalscience.org>



## The Princeton Guide to Ecology

Edited by **Simon A. Levin**

Stephen R. Carpenter, H. Charles J. Godfray, Ann P. Kinzig, Michel Loreau, Jonathan B. Losos, Brian Walker & David S. Wilcove, associate editors

“Every ecology graduate student studying for their comprehensive examination needs this book. For that matter, every practicing ecologist interested in keeping up with aspects of the field, particularly outside of their own subdiscipline, would be well served to have this book on hand.”

—*Quarterly Review of Biology*

2009. 848 pages. 25 color illus. 14 halftones. 185 line illus. 22 tables.  
Cl: 978-0-691-12839-9 \$95.00 | £65.00

## The Theory of Island Biogeography Revisited

Edited by **Jonathan B. Losos & Robert E. Ricklefs**

“This wonderful and lively book provides a fitting forty-year retrospective on MacArthur and Wilson’s seminal volume. I can easily see it on the shelf of every serious graduate student of community ecology.”

—William H. Schlesinger, Cary Institute of Ecosystem Studies

2009. 496 pages. 11 halftones. 100 line illus. 16 tables.  
Pa: 978-0-691-13653-0 \$49.50 | £34.95  
Cl: 978-0-691-13652-3 \$99.50 | £69.95

## How to Do Ecology **TEXT**

A Concise Handbook

Richard Karban & Mikaela Huntzinger

“*How to Do Ecology* contains much of the sage advice that good supervisors have been giving their postgraduate students for years.... [I]t’s absolutely correct and vital information.”

—Robyn K. Whipp, *Austral Ecology*

2006. 168 pages. 10 line illus.  
Pa: 978-0-691-12577-0 \$17.95 | £12.50

## An Introduction to Methods and Models in Ecology, Evolution, and Conservation Biology **TEXT**

Edited by **Stanton Braude & Bobbi S. Low**

“A very worthwhile contribution. The authors expose students to quantitative methods using a very hands-on approach. The exercises increase students’ comfort with data analysis and quantitative methods while also helping them to develop independent critical thinking and practical problem-solving skills.”

—Suzanne H. Alonzo, Yale University

2010. 288 pages. 72 halftones. 12 line illus. 80 tables.  
Pa: 978-0-691-12724-8 \$29.95 | £20.95  
Cl: 978-0-691-12723-1 \$65.00 | £44.95



Connect with us on Twitter @ *princetonupress*  
& Facebook @ *PrincetonUniversityPress*

Forthcoming

## Ecological Niches and Geographic Distributions

**A. Townsend Peterson, Jorge Soberón, Richard G. Pearson, Robert P. Anderson, Enrique Martínez-Meyer, Miguel Nakamura & Miguel Bastos Araújo**

"When it comes to explaining the theory and practice of niche modeling and species distribution modeling, this is the right book at the right time by the right authors. The book provides a vigorous exploration of a key concept—the ecological niche—and an equally vigorous discussion of approaches to model niches. Essential reading for novice and expert alike."

—Robert Guralnick, University of Colorado Boulder

December 2011. 336 pages. 51 line illus. 4 tables. 6 x 9.  
Pa: 978-0-691-13688-2 \$45.00 | £30.95  
Cl: 978-0-691-13686-8 \$75.00 | £52.00

New

## From Populations to Ecosystems

Theoretical Foundations for a New Ecological Synthesis

**Michel Loreau**

"Michel Loreau has bravely, and successfully, built a new unified framework that harmonizes the disparate, and often conflicting, fields of population biology, community ecology, and ecosystem ecology. This book provides an exciting stimulus for new efforts to test and verify the rich array of insights that he provides."

—Harold Mooney, Stanford University

2010. 320 pages. 19 halftones. 54 line illus. 4 tables.  
Pa: 978-0-691-12270-0 \$45.00 | £30.95  
Cl: 978-0-691-12269-4 \$99.50 | £69.95

Forthcoming

## Food Webs

**Kevin S. McCann**

"There is no equivalent book that reviews food web theory, emphasizing both dynamic aspects and biological constraints. This book will appeal to ecologists across a range of subfields, applied mathematicians, and certain physicists."

—Alan Hastings, University of California, Davis

January 2012. 256 pages. 21 halftones. 56 line illus. 2 tables. 6 x 9.  
Pa: 978-0-691-13418-5 \$45.00 | £30.95  
Cl: 978-0-691-13417-8 \$99.50 | £69.95

Forthcoming

## Adaptive Diversification

**Michael Doebeli**

"Presenting the theoretical background to evolutionary theory in the context of adaptation and speciation, this book fills an important niche and provides a versatile approach to a range of evolutionary phenomena. It will inspire a new generation of evolutionary theory students and have a significant impact on future research directions."

—Diethard Tautz, Max-Planck Institute for Evolutionary Biology

September 2011. 345 pages. 8 halftones. 52 line illus. 6 x 9.  
Pa: 978-0-691-12894-8 \$49.50 | £34.95  
Cl: 978-0-691-12893-1 \$110.00 | £75.00

New

## Resolving Ecosystem Complexity

**Oswald J. Schmitz**

"*Resolving Ecosystem Complexity* presents a modern synthesis of trophic structure and function that addresses some of the most fundamental questions raised by Darwin, Tansley, and Hutchinson. Through rigorous analysis of case studies and data, Schmitz brings to life the importance of direct and indirect interactions on the functioning of ecosystems."

—Adrien Finzi, Boston University

2010. 192 pages. 32 line illus.  
Pa: 978-0-691-12849-8 \$35.00 | £24.95  
Cl: 978-0-691-12848-1 \$65.00 | £44.95

For more information about these books and the series, please visit:

<http://press.princeton.edu/catalogs/series/mpb.html>

Forthcoming Paperback

With an introduction by Michael Ruse

## **The *Origin* Then and Now**

An Interpretive Guide to the *Origin of Species*

**David N. Reznick**

"David Reznick succeeds in producing a highly engaging and informative 'interpretive guide' to the original *On the Origin of Species* with an approach that will prove quite useful in different ways to different groups of readers."

—James T. Costa, *BioScience*

"[I]nstead of annotating the dense, Victorian prose of the *Origin* or recasting it as a popular narrative, [Reznick] paraphrases each chapter of the book, adding fascinating elaborations on why Darwin chose a certain phrase, where he turned out to be wrong, and how the intervening 150 years have changed our theories. His account is a welcome tool for those who'd like to hear evolution from Darwin himself but find the master impenetrable."

—SEED Magazine

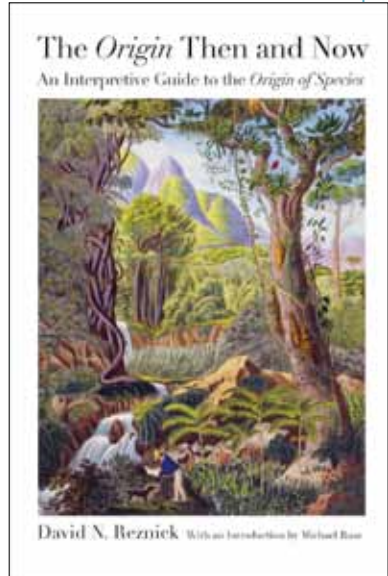
The "*Origin*" *Then and Now* is a unique guide to Darwin's complex masterwork, making it more accessible than ever before by providing chapter-by-chapter paraphrases, clear explanations of its key ideas, and illuminating commentaries. In this eye-opening guide, David Reznick shows how many peculiarities of the *Origin* can be explained by the state of science in 1859, helping readers to grasp the true scope of Darwin's departure from the mainstream thinking of his day. He reconciles Darwin's concept of species with our current concept, which has advanced in important ways since Darwin first wrote the *Origin*, and he demonstrates why Darwin's theory unifies the biological sciences under a single conceptual framework much as Newton did for physics.

David N. Reznick is professor of biology at the University of California, Riverside.

December 2011. 448 pages. 15 halftones. 17 line illus.

Pa: 978-0-691-15257-8 \$22.95 | £15.95

Cl: 978-0-691-12978-5 \$39.95 | £27.95



One of *Choice's* Outstanding Academic Titles for 2006

## **Extinction**

How Life on Earth Nearly Ended 250 Million Years Ago

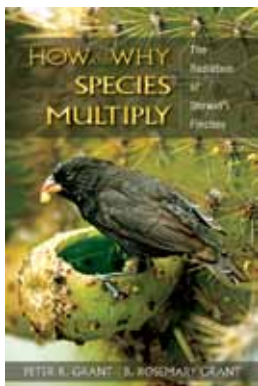
**Douglas H. Erwin**

"*Extinction* provides a great reference for researchers and the interested lay reader alike."

—Andrew M. Bush, *Science*

2008. 320 pages. 32 halftones. 32 line illus.

Pa: 978-0-691-13628-8 \$23.95 | £16.95



"This is the life's work of two of evolutionary biology's greatest advocates, Peter and Rosemary Grant.... In this book they meld insights from geography, behaviour, ecology and genetics to paint a complex but compelling picture of the evolutionary process.... [A] must-have primer for any biology student."

—Henry Nicholls, *New Scientist*

Forthcoming Paperback

## How and Why Species Multiply

The Radiation of Darwin's Finches

**Peter R. Grant & B. Rosemary Grant**

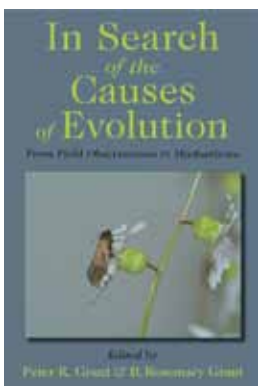
Charles Darwin's experiences in the Galápagos Islands in 1835 helped inspire his revolutionary theories of evolution and natural selection. In this concise, accessible book, Peter and Rosemary Grant explain how the same finches studied by Darwin—and named after him—have continued to provide scientists with valuable information about the origin and evolution of new species. Drawing upon their unique observations of finch evolution over a thirty-four-year period, the Grants trace the evolutionary history of fourteen different species from a shared ancestor three million years ago. They explain the various factors that drive finch evolution, including beak size and shape, geographical isolation, and climate change. Throughout, the Grants show how the laboratory tools of developmental biology and molecular genetics can be combined with observations and experiments on birds in the field to gain deeper insights into why the world is so biologically rich and diverse.

Peter R. Grant and B. Rosemary Grant are professors emeriti at Princeton University.

*Princeton Series in Evolutionary Biology*

2011. 272 pages. 31 color illus. 58 line illus. 3 tables.

Pa: 978-0-691-14999-8 \$24.95 | £16.95  
Cl: 978-0-691-13360-7 \$49.95 | £34.95



"Peter and Rosemary Grant have assembled a stellar cast of authors who, through their own work, pay tribute to the Grants' decades of research on Darwin's finches."

—Robert E. Ricklefs, University of Missouri, St. Louis

## In Search of the Causes of Evolution

From Field Observations to Mechanisms

**Edited by Peter R. Grant & B. Rosemary Grant**

Evolutionary biology has witnessed breathtaking advances in recent years. Some of its most exciting insights have come from the crossover of disciplines as varied as paleontology, molecular biology, ecology, and genetics. This book brings together many of today's pioneers in evolutionary biology to describe the latest advances and explain why a cross-disciplinary and integrated approach to research questions is so essential.

Contributors discuss the origins of biological diversity, mechanisms of evolutionary change at the molecular and developmental levels, morphology and behavior, and the ecology of adaptive radiations and speciation. Peter and Rosemary Grant provide concise introductions to each section and identify the key questions future research needs to address.

2010. 400 pages. 32 color plates. 22 halftones. 56 line illus. 4 tables.

Pa: 978-0-691-14695-9 \$49.95 | £34.95  
Cl: 978-0-691-14681-2 \$75.00 | £52.00

To receive notices about new books, subscribe for email at: [press.princeton.edu/subscribe](mailto:press.princeton.edu/subscribe)



“Bonner argues that size is a driving force for all of biology.... [H]e demonstrates convincingly [that] size dictates everything from an animal’s shape and appearance to its locomotion, speed, voice and social organization.”

—Wray Herbert, *Washington Post Book World*

## Forthcoming Paperback

One of *Choice's* Outstanding Academic Titles for 2007

### **Why Size Matters**

From Bacteria to Blue Whales

**John Tyler Bonner**

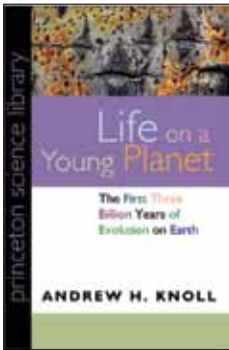
Humans have always been fascinated by things big and small. So why do scientists normally consider the size of a creature only when studying something else, such as its running speed or metabolism? In *Why Size Matters*, eminent biologist John Tyler Bonner provides a completely new perspective, arguing that size is the supreme and universal determinant of what any organism can be or do. For example, because tiny creatures are subject primarily to forces of cohesion and larger beasts to gravity, a fly can walk up a wall with considerably more ease than a human being.

John Tyler Bonner is professor emeritus of ecology and evolutionary biology at Princeton University.

January 2012. 176 pages. 35 line illus. 1 table.

Pa: 978-0-691-15233-2 \$12.95 | £8.95

Cl: 978-0-691-12850-4 \$16.95 | £11.95



Winner of the 2003 Phi Beta Kappa Book Award in Science

### **Life on a Young Planet**

The First Three Billion Years of Evolution on Earth

**Andrew H. Knoll**

“Andrew Knoll is an ideal guide through this early phase of life’s history on the Earth.”

—Stefan Bengtson, *Nature*

*Princeton Science Library*

2004. 296 pages. 33 color plates. 25 halftones. 47 line illus.

Pa: 978-0-691-12029-4 \$25.95 | £17.95



### **Forms of Becoming**

The Evolutionary Biology of Development

**Alessandro Minelli**

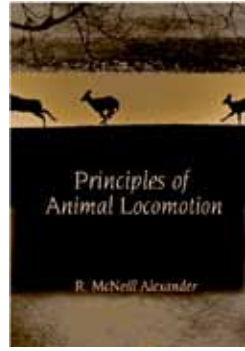
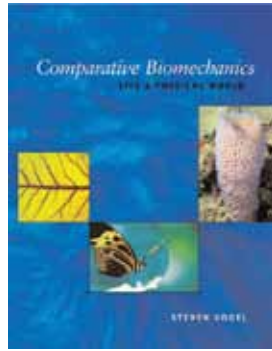
“Interesting, unique, and well-written, this book is a great read from a master of the subject.”

—Wallace Arthur, National University of Ireland

*Translation funded by SEPS—Segretariato Europeo per le Pubblicazioni Scientifiche*

2009. 248 pages. 17 line illus.

Cl: 978-0-691-13568-7 \$28.95 | £19.95



Forthcoming

## The Optics of Life **TEXT**

A Biologist's Guide to Light in Nature

**Sönke Johnsen**

See page 2 for details.

Forthcoming

## Solid Biomechanics **TEXT**

**Roland Ennos**

See page 1 for details.

## Principles of Animal Locomotion

**R. McNeill Alexander**

"This is an important work that will be appreciated by anyone interested in animal biomechanics.... Alexander is gifted in his ability to choose or create models that are sufficiently simple as to be understandable and tractable, but not so simple that they stray far from biological reality."

—Robert Josephson, *Quarterly Review of Biology*

2006. 384 pages. 105 line illus. 6 tables.

Pa: 978-0-691-12634-0 \$57.50 | £39.95

## Glimpses of Creatures in Their Physical Worlds **TEXT**

**Steven Vogel**

"If what you desire in a readable science book is food for thought, *Glimpses of Creatures in their Physical Worlds* provides a feast. Biologists, engineers, and physicists—indeed, anyone with curiosity about the natural world—will revel in this smorgasbord of biomechanical ideas."

—Mark Denny, *American Scientist*

*Glimpses of Creatures in Their Physical Worlds* offers an eye-opening look into how the characteristics of the physical world drive the designs of animals and plants. These characteristics impose limits but also create remarkable and subtle opportunities for the functional biology of organisms.

2009. 328 pages. 16 halftones. 50 line illus. 6 tables.

Pa: 978-0-691-13807-7 \$35.00 | £24.95

Cl: 978-0-691-13806-0 \$75.00 | £52.00

Also by Steven Vogel

One of *Choice's* Outstanding Academic Titles for 2004

## Comparative Biomechanics Life's Physical World

"[Vogel] is that rare animal, a biologist who is at once fluent in mathematics, conversant with physics and physical chemistry, and an accomplished practical engineer. More than that, the quality of Vogel's writing allows him to convey complex ideas clearly and make them so accessible that his books are hard to put down."

—H. C. Bennet-Clark, *Bioscience*

The field of biomechanics—how living things move and work—hasn't seen a new general textbook in more than two decades. Here a leading investigator and teacher lays out the key concepts of biomechanics using examples drawn from throughout the plant and animal kingdoms.

2003. 592 pages. 234 line illus. 33 tables.

Cl: 978-0-691-11297-8 \$85.00 | £59.00



Connect with us on Twitter @ *princetonupress*  
& Facebook @ *PrincetonUniversityPress*

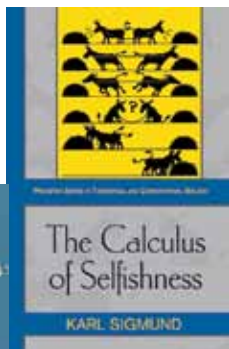
Forthcoming

**Agent-Based and Individual-Based Modeling** TEXT

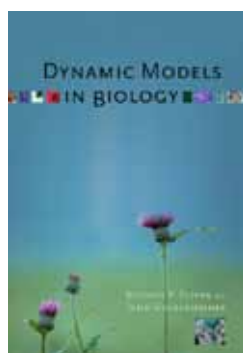
A Practical Introduction

**Steven F. Railsback & Volker Grimm**

See page 1 for details.

**The Calculus of Selfishness**  
**Karl Sigmund**

See page 5 for details.

**Dynamic Models in Biology** TEXT  
**Stephen P. Ellner & John Guckenheimer**

2006. 352 pages. 10 halftones. 90 line illus. 15 tables.

Pa: 978-0-691-12589-3 \$62.50 | £43.95

*Not for sale in South Asia***Ecological Models and Data in R** TEXT  
**Benjamin M. Bolker**

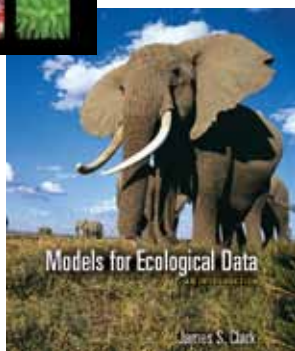
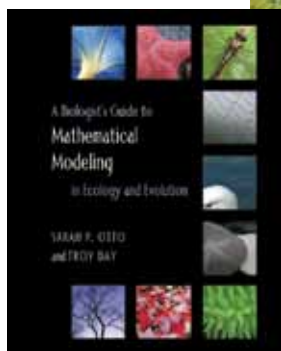
See page 2 for details.

Honorable Mention, 2007 Award for Best Professional/Scholarly Book in Biological Sciences, Association of American Publishers

**A Biologist's Guide to Mathematical Modeling in Ecology and Evolution** TEXT  
**Sarah P. Otto & Troy Day**

2007. 744 pages. 207 line illus. 22 tables.

Cl: 978-0-691-12344-8 \$78.50 | £55.00

**Models for Ecological Data** TEXT  
An Introduction  
**James S. Clark**

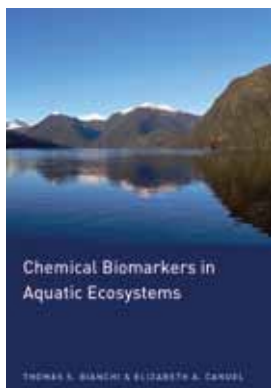
2007. 632 pages. 163 line illus. 21 tables.

Cl: 978-0-691-12178-9 \$78.50 | £55.00

Models for Ecological Data—Lab Manual

2007. 152 pages.

Pa: 978-0-691-12262-5 \$22.95 | £15.95



“This book is a great introduction to molecularly based biogeochemistry. The authors take a multidisciplinary approach, especially in bringing together the methodologies of biochemistry, microbiology, genomics, and ecology. The bibliography is extensive and up-to-date, documenting the measurement, origins, roles, and fates of all major classes of biosynthetic compounds.”  
—Geoffrey Eglinton, coauthor of *Echoes of Life*

New

## Chemical Biomarkers in Aquatic Ecosystems

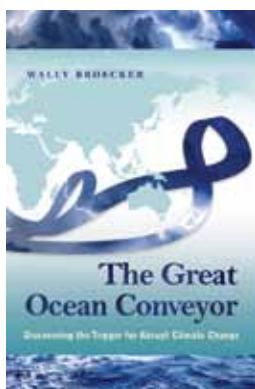
Thomas S. Bianchi & Elizabeth A. Canuel

*Chemical Biomarkers in Aquatic Ecosystems* provides a unique and thorough look at the application of chemical biomarkers to aquatic ecosystems. This timely book is appropriate for advanced undergraduate and graduate students seeking training in this area; researchers in biochemistry, organic geochemistry, and biogeochemistry; researchers working on aspects of organic cycling in aquatic ecosystems; and paleoceanographers, petroleum geologists, and ecologists.

- ◆ Provides a guide to the broad diversity of chemical biomarkers in aquatic environments
- ◆ The first textbook to be structured around the compounds themselves
- ◆ Describes the structure, biochemical synthesis, analysis, and reactivity of each class of biomarkers
- ◆ Offers a selection of relevant applications to aquatic systems, including lakes, rivers, estuaries, oceans, and paleoenvironments

Thomas S. Bianchi is professor of oceanography at Texas A&M University. Elizabeth A. Canuel is professor of marine science at the Virginia Institute of Marine Science, College of William & Mary.

2011. 416 pages. 78 halftones. 117 line illus. 26 tables.  
Cl: 978-0-691-13414-7 \$95.00 | £65.00



## The Great Ocean Conveyor

Discovering the Trigger for Abrupt Climate Change  
Wally Broecker

“Wally Broecker is one of the great pioneers of paleoclimatology, the study of past climate changes in Earth’s history. He introduced the term global warming and, in the 1980s, proposed the global ocean-circulating system, which he dubbed the Great Ocean Conveyor.... In *The Great Ocean Conveyor*, Broecker offers a history of his thinking on the topic. Relating his breakthroughs and setbacks, he portrays science as a continual struggle to understand more fully and more accurately how the world really works.”

—*Nature*

2010. 176 pages. 10 halftones. 40 line illus. 12 maps.  
Cl: 978-0-691-14354-5 \$27.95 | £19.95

*Princeton Primers in Climate* is a new series of short, authoritative books that explain the state of the art in climate-science research. Written specifically for students, researchers, and scientifically minded general readers looking for succinct and readable books on this frequently misunderstood subject, these primers reveal the physical workings of the global climate system with unmatched accessibility and detail.

“Marshall presents a comprehensive, accessible, and authoritative treatment of the cryosphere, and makes excellent use of field and model examples to illustrate key points. New metaphors and descriptions are offered for familiar topics that bring with them new insight and utility.”  
—Robert Bindshadler,  
NASA Goddard Space  
Flight Center

Forthcoming

## The Cryosphere

Shawn J. Marshall

The cryosphere encompasses the Earth’s snow and ice masses. It is a critical part of our planet’s climate system, one that is especially at risk from climate change and global warming. *The Cryosphere* provides an essential introduction to the subject, written by one of the world’s leading experts in Earth-system science.

In this primer, glaciologist Shawn Marshall introduces readers to the cryosphere and the broader role it plays in our global climate system. After giving a concise overview, he fully explains each component of the cryosphere and how it works—seasonal snow, permafrost, river and lake ice, sea ice, glaciers, ice sheets, and ice shelves. Marshall describes how snow and ice interact with our atmosphere and oceans and how they influence climate, sea level, and ocean circulation. He looks at the cryosphere’s role in past ice ages, and considers the changing cryosphere’s future impact on our landscape, oceans, and climate.

Accessible and authoritative, this primer also features a glossary of key terms, suggestions for further reading, explanations of equations, and a discussion of open research questions in the field.

Shawn J. Marshall is the Canada Research Chair in Climate Change at the University of Calgary.

November 2011. 312 pages. 34 line illus. 8 tables.  
Pa: 978-0-691-14526-6 \$24.95 | £16.95  
Cl: 978-0-691-14525-9 \$80.00 | £55.00

### FORTHCOMING IN THE SERIES

#### Paleoclimate

Michael L. Bender

#### Climate Sensitivity

Jeffrey Kiehl

#### Ecosystems and Climate

David Schimel

#### Natural Climate Change

Mark Cane

#### Abrupt Climate Change

Jonathan Overpeck

#### Terrestrial Hydrology and the Climate System

Eric F. Wood

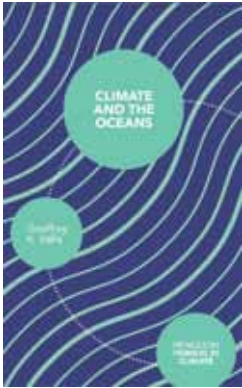
#### Planetary Climates

Andrew Ingersoll

#### Atmospheric Processes

David Randall

Explore the great scientific and technological issues afoot in the world today: <http://princetonglobalscience.org>



Forthcoming

## Climate and the Oceans

Geoffrey K. Vallis

"In this crystal-clear little book, Geoffrey Vallis masterfully explains the basics of physical oceanography and the role of the oceans in the climate system."

—Richard Somerville, Scripps Institution of Oceanography

The oceans exert a vital moderating influence on the Earth's climate system. They provide inertia to the global climate, essentially acting as the pacemaker of climate variability and change, and they provide heat to high latitudes, keeping them habitable. *Climate and the Oceans* offers a short, self-contained introduction to the subject. This illustrated primer begins by briefly describing the world's climate system and ocean circulation and goes on to explain the important ways that the oceans influence climate. Topics covered include the oceans' effects on the seasons, heat transport between equator and pole, climate variability, and global warming. The book also features a glossary of terms, suggestions for further reading, and easy-to-follow mathematical treatments.

Geoffrey K. Vallis is professor and senior scientist in the Atmospheric and Oceanic Sciences Program and the Geophysical Fluid Dynamics Laboratory, Princeton University.

November 2011. 232 pages. 32 line illus. 2 tables.

Pa: 978-0-691-15028-4 \$24.95 | £16.95

Cl: 978-0-691-14467-2 \$80.00 | £55.00

- ◆ The best primer on the oceans and climate
- ◆ Succinct and self-contained
- ◆ Accessible to students and non-specialists
- ◆ Serves as a bridge to more advanced material



New

## The Global Carbon Cycle

David Archer

*The Global Carbon Cycle* is a short introduction to this essential geochemical driver of the Earth's climate system, written by one of the world's leading climate-science experts. In this one-of-a-kind primer, David Archer engages readers in clear and simple terms about the many ways the global carbon cycle is woven into our climate system. He begins with a concise overview of the subject, and then looks at the carbon cycle on three different time scales, describing how the cycle interacts with climate in very distinct ways in each. On million-year time scales, feedbacks in the carbon cycle stabilize Earth's climate and oxygen concentrations. Archer explains how on hundred-thousand-year glacial/interglacial time scales, the carbon cycle in the ocean amplifies climate change, and how, on the human time scale of decades, the carbon cycle has been dampening climate change by absorbing fossil-fuel carbon dioxide into the oceans and land biosphere. A central question of the book is whether the carbon cycle could once again act to amplify climate change in centuries to come, for example through melting permafrost peatlands and methane hydrates.

David Archer is professor of geophysical sciences at the University of Chicago.

2010. 216 pages. 25 line illus.

Pa: 978-0-691-14414-6 \$24.95 | £16.95

Cl: 978-0-691-14413-9 \$70.00 | £48.95

- ◆ Glossary of terms
- ◆ Suggestions for further reading
- ◆ Explanations of equations
- ◆ Forward-looking discussion of open questions about the global carbon cycle

Forthcoming

## The Crossley ID Guide

Eastern Birds

Richard Crossley

“What’s so different about the *Crossley ID Guide*? Everything. Crossley has designed his guide to reflect the way we see and identify birds. We identify birds by their size, shape, structure, behavior, habitat, and field marks. We [see] birds at close range, at middle and long distances, on the ground, in flight, in trees, and on the water. . . . If you want to be a better birder you will find the new *Crossley ID Guide* to be [a] major innovation and a valuable tool.”

—Wayne Mones, *Audubon.org*

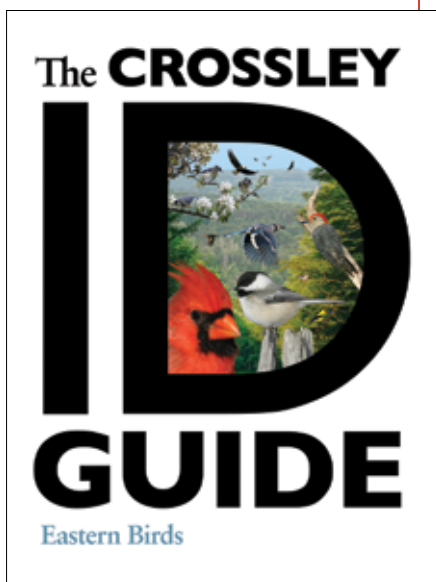
This stunningly illustrated book from acclaimed birder and photographer Richard Crossley revolutionizes birding by providing the first real-life approach to identification. Whether you are a beginner, expert, or anywhere in between, *The Crossley ID Guide* will vastly improve your ability to identify birds.

Unlike other guides, which provide isolated individual photographs or illustrations, this is the first book to feature large, lifelike scenes for each species. These scenes—640 in all—are each composed of 12–20 color images showing the bird in a wide range of views—near and far, from different angles, in various plumages and behaviors, including flight, and in the habitat in which they live. These beautiful compositions show how a bird’s appearance changes with distance, and give equal emphasis to characteristics experts use to identify birds: size, structure and shape, behavior, probability, and color. This is the first book to convey all of these features visually—in a single image—and to reinforce them with accurate, concise text. Each scene provides a wealth of detailed visual information that invites and rewards careful study, but the most important identification features can be grasped instantly by anyone.

By making identification easier, more accurate, and more fun than ever before, *The Crossley ID Guide* will completely redefine how readers look at birds. Essential for all birders, it also promises to make new birders of many people who have despaired of using traditional guides.

Richard Crossley is an internationally acclaimed birder and photographer who has been birding since age 7. He is a coauthor of *The Shorebird Guide*.

2011. 544 pages. 10,000 color images. 7 ½ x 10.  
Cl: 978-0-691-14778-9 \$35.00 | £24.95



- ◆ Lifelike scenes composed from multiple color photos of the same species—seen near and far, from different angles, and in various plumages and behaviors, including flight
- ◆ Highlights the most important identification characteristics: size, structure and shape, behavior, probability, and color
- ◆ *The Crossley ID Guide* revolutionizes birding and field guides
- ◆ Most comprehensive guide available, with 640 scenes incorporating more than 10,000 of the author’s images
- ◆ An interactive Web site that includes videos—[www.crossleybirds.com](http://www.crossleybirds.com)—helps readers further sharpen and test their identification skills



- ◆ Features architectural blueprints, step-by-step sequences, visual spreads on nest-building materials and methods, and expert commentary
- ◆ Includes 300 full-color images
- ◆ Covers more than 100 bird species worldwide

New

## Avian Architecture

How Birds Design, Engineer, and Build  
**Peter Goodfellow**

Birds are the most consistently inventive builders, and their nests set the bar for functional design in nature. *Avian Architecture* describes how birds design, engineer, and build their nests, deconstructing all types of nests found around the world using architectural blueprints and detailed descriptions of the construction processes and engineering techniques birds use.

*Avian Architecture* includes intricate step-by-step sequences, visual spreads on nest-building materials and methods, and insightful commentary by a leading expert.

Peter Goodfellow is a retired English teacher and lifelong birdwatcher.

2011. 160 pages. 300 color illus. 8 x 10.

Cl: 978-0-691-14849-6 \$27.95

For sale only in the United States and Canada

New

## The Atlas of Birds

Diversity, Behavior, and Conservation  
**Mike Unwin**

"This is a superb book on the biology of birds with a strong conservation theme that highlights the leadership programs of BirdLife International. The design and layouts are creative, attractive, and engaging, and neat factoids and statistics richly punctuate the entire book. Rarely have I seen a book of this caliber. I recommend it highly."

—Frank Gill, author of *Ornithology*

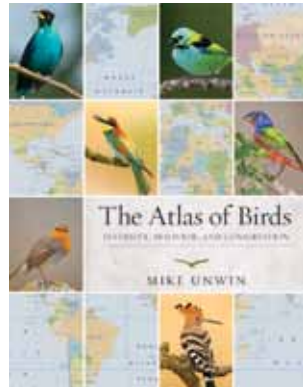
*The Atlas of Birds* captures the breathtaking diversity of birds, and illuminates their conservation status around the world.

Mike Unwin is a natural history writer and illustrator whose work has appeared in leading publications such as *Birds*, *Bird Watching*, and *Birdwatch*.

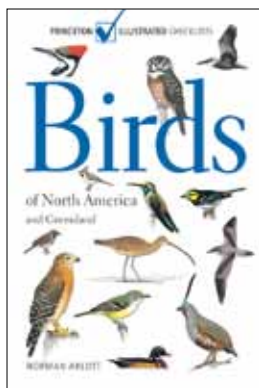
2011. 144 pages. 8 ½ x 11.

Pa: 978-0-691-14949-3 \$22.95 | £15.95

Not for sale in the Commonwealth (except Canada) and the European Union



- ◆ The premier illustrated atlas of bird diversity, behavior, and conservation
- ◆ Features full-color maps, photos, and diagrams
- ◆ Covers bird evolution, classification, and behavior
- ◆ Describes the complex relationship between birds and their habitats
- ◆ Explores the impact of human activities on species survival
- ◆ Illustrates where and why birds are most under threat—and how to protect them



Forthcoming  
**Birds of North America and Greenland**  
 Norman Arlott

The Nearctic region, which spans most of North America from Greenland to the highlands of Mexico, is home to an incredibly rich diversity of birdlife. This illustrated guide covers more than 900 bird species yet is succinct, compact, and easy to use, making it the essential companion for birders and travelers alike.

*Princeton Illustrated Checklists*

November 2011. 224 pages. 104 color plates. 900 color maps. 5 x 7 1/2.

Pa: 978-0-691-15140-3 \$15.95

For sale only in the United States, Canada, and the Philippines

- ◆ Features 104 stunning color plates that depict every species
- ◆ Includes concise species accounts and color distribution maps
- ◆ Succinct, compact, and easy to use
- ◆ Norman Arlott is one of the world's leading bird artists.

Forthcoming  
**Petrels, Albatrosses, and Storm-Petrels of North America**  
 A Photographic Guide  
 Steve N. G. Howell

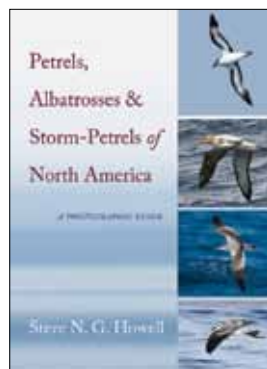
"No other text on the tubenoses begins to offer the material contained in Howell's latest book. The reader has a palpable sense, when reading it, that the author not only knows his subject and audience but also genuinely loves the ocean and its inhabitants—and relishes teaching people about them."

—Edward S. Brinkley, author of *The National Wildlife Federation Field Guide to North American Birds*

Petrels, albatrosses, and storm-petrels are among the most beautiful yet least known of all the world's birds, living their lives at sea far from the sight of most people. Largely colored in shades of gray, black, and white, these enigmatic and fast-flying seabirds can be hard to differentiate, particularly from a moving boat. Useful worldwide, not just in North America, this photographic guide is based on unrivaled field experience and combines insightful text and hundreds of full-color images to help you identify these remarkable birds.

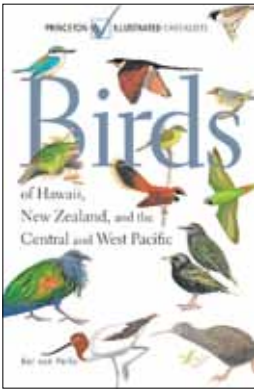
January 2012. 520 pages. 975 color photos and figs. 66 maps. 7 x 10.

Cl: 978-0-691-14211-1 \$45.00 | £30.95



- ◆ The first state-of-the-art photographic guide to these enigmatic seabirds
- ◆ Features detailed species accounts that describe flight, plumage, distribution, and more
- ◆ Provides overviews of ocean habitats, taxonomy, and conservation
- ◆ Steve N. G. Howell is an acclaimed field ornithologist and writer.

To receive notices about new books, subscribe for email at: [press.princeton.edu/subscribe](http://press.princeton.edu/subscribe)



New  
**Birds of Hawaii, New Zealand, and the  
 Central and West Pacific**  
 Written and illustrated by Ber van Perlo

This is the only comprehensive and handy pocket guide that illustrates and describes the bird species of Hawaii, New Zealand, and the Central and West Pacific.

*Princeton Illustrated Checklists*

2011. 256 pages. 95 color illus. 750 maps. 5 x 7 1/2.  
 Pa: 978-0-691-15188-5 \$29.95

*For sale only in United States, Canada, and the Philippines*

- ◆ More than 750 species illustrated on 95 color plates
- ◆ Depictions of all plumages for males, females, and juveniles
- ◆ Detailed distribution maps show where each species is commonly found
- ◆ Information on key identification features, habitat, songs, and calls
- ◆ In-depth look at flight signatures, vagrant populations, and much more
- ◆ Ber van Perlo has been traveling and living in Africa since 1981.

Winner of the 2008 National Outdoor Book Award, Nature and Environment category

Revised and Updated Edition

## **Birds of Peru**

**Thomas S. Schulenberg, Douglas F. Stotz, Daniel F. Lane, John P. O'Neill & Theodore A. Parker III**

With a foreword by Dr. Antonio Brack Egg

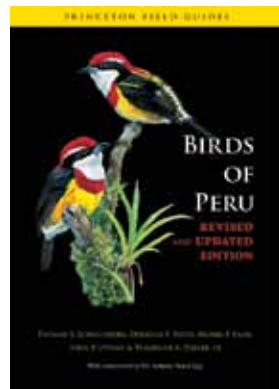
"Rarely in the history of tropical ornithology have so many waited so long and so eagerly for a field guide to appear... The end result of this long process is a spectacular addition to the literature on South American birds. The plates are superb, the guide is easy to use in the field, the range maps are informative and accurate, and the text is concise while still including essential information."

—Scott K. Robinson, *Auk*

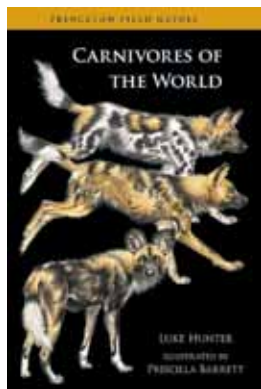
*Princeton Field Guides*

2010. 664 pages. 307 color plates. 1,805 maps. 6 x 8.  
 Pa: 978-0-691-13023-1 \$39.50 | £27.95

*Not for sale in the Commonwealth (except Canada) and the European Union*



- ◆ A comprehensive guide to all 1,817 species found in Peru—one fifth of the world's birds—with subspecies, sexes, age classes, and morphs fully illustrated
- ◆ Designed especially for field use, with vivid descriptive information and helpful identification tips opposite color plates
- ◆ Detailed species accounts, including a full-color distribution map
- ◆ Includes 25 additional species not covered in the first edition
- ◆ Features 3 entirely new plates and more than 25 additional illustrations



Forthcoming  
**Carnivores of the World**  
 Luke Hunter  
 Illustrated by Priscilla Barrett

“I don’t know of a concise global summary of carnivores like this. The illustrations cover a wide range of forms from all over the world, including many that are rarely photographed or preserved in museums.”  
 —Roland W. Kays, coauthor of *Mammals of North America*

Carnivores are among the most spectacular creatures in the natural world, and also the most feared. *Carnivores of the World* is the first comprehensive field guide to all 250 terrestrial species of true carnivores, from the majestic polar bear and predatory wild cats to the tiny least weasel. Detailed species accounts describe key identification features, distribution and habitat, feeding ecology, behavior, social patterns, reproduction and demography, status, threats, lifespan, and mortality.

Luke Hunter is executive vice president of Panthera, the world’s leading wild cat conservation organization.

*Princeton Field Guides*

November 2011. 240 pages. 86 color plates. 400 line illus. 6 x 9.

Pa: 978-0-691-15228-8 \$29.95 | £20.95

Cl: 978-0-691-15227-1 \$75.00 | £52.00

For sale only in the United States and Canada

- ◆ Includes 86 color plates by acclaimed wildlife artist Priscilla Barrett
- ◆ Features detailed species accounts and hundreds of line drawings
- ◆ The first field guide of its kind

Second Edition  
**Mammals of North America**  
 Roland W. Kays & Don E. Wilson

“When it comes to field guides, Princeton University Press has long held a position of honor and respect among both professional and amateur naturalists for consistently providing exceptional levels of accuracy and attention to detail. With its new and updated illustrations, revised identification information, and the addition of twenty recently recognized species to its contents, the new second edition of *Mammals of North America* by Roland Kays and Don Wilson more than upholds this well-earned reputation.”

—John Riutta, *The Well-read Naturalist*

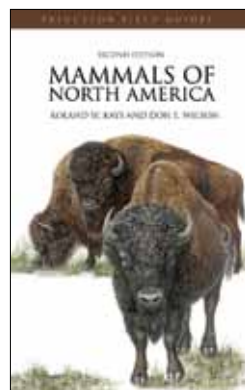
The best-selling field guide that “sets new standards” (*New Scientist*) and “makes all other field guides for mammals of the United States ... and Canada obsolete” (*Journal of Mammalogy*) is now even better. Covering 20 species recognized since 2002 and including 13 new color plates, this fully revised edition of *Mammals of North America* illustrates all 462 known mammal species in the United States and Canada—each in beautiful color and accurate detail.

*Princeton Field Guides*

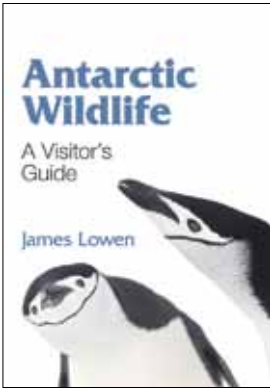
2009. 248 pages. 112 color illus. 102 line illus. 460 maps. 5 x 8.

Pa: 978-0-691-14092-6 \$19.95 | £13.95

Cl: 978-0-691-14278-4 \$45.00 | £30.95



- ◆ 112 color plates—including 13 new ones
- ◆ Key identification information—fully revised—on facing pages
- ◆ The most current taxonomy/species list
- ◆ Fully revised, easy-to-read range maps
- ◆ Illustrations of tracks, scat, and whale and dolphin dive sequences



- ◆ Features full-color photographs throughout
- ◆ Describes key identification features and gives tips on where to look
- ◆ Includes an introduction to Antarctic environments and information on Antarctic cruising

New

## Antarctic Wildlife

A Visitor's Guide

**James Lowen**

*Antarctic Wildlife* is the definitive identification guide to the birds and marine mammals of the Antarctic Peninsula, Drake Passage, and Beagle Channel. This easy-to-use photographic field guide enables visitors to this unique region of the world—newcomer and seasoned traveler alike—to identify with confidence the penguins, whales, seals, seabirds, and other stunning wildlife they encounter on their journey.

*Antarctic Wildlife* is a must-have photographic guide for travelers taking the standard cruise from Ushuaia, Argentina, to the great white continent, and for anyone interested in the diverse wildlife found in this remote part of the world.

James Lowen is a wildlife writer, photographer, and lecturer.

2011. 240 pages. 159 color photos. 6 x 8.

Pa: 978-0-691-15033-8 \$22.95

*Not for sale in the European Union or the Falkland Islands*

New

## Frogs and Toads of the World

**Chris Mattison**

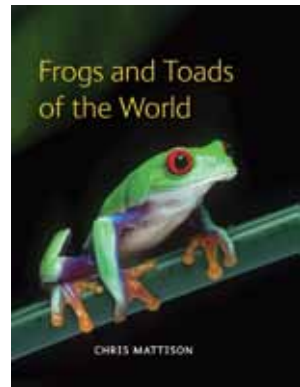
With nearly 6,000 species currently identified, frogs and toads are the most familiar and abundant amphibians on the planet. *Frogs and Toads of the World* is a comprehensive guide to the natural history of this large and diverse group of creatures. Mattison also explores frogs' interaction with humans, from modern-day collection for the meat trade, scientific research, and the trade in exotic pets to how their survival is being threatened by habitat destruction, climate change, and disease.

This indispensable guide also explores frogs' interaction with humans, from modern-day collection for the meat trade, scientific research, and the trade in exotic pets to how their survival is being threatened by habitat destruction, climate change, and disease.

2011. 192 pages. 200 color photos. 7 1/2 x 10.

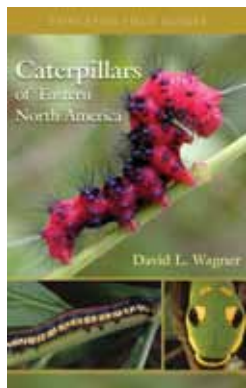
Cl: 978-0-691-14968-4 \$29.95

*For sale only in North America, Central America, South America, and the Caribbean*



- ◆ Features 200 stunning color photographs
- ◆ Covers each of the 49 unique frog families
- ◆ Describes anatomy, life cycle, habitats, survival tricks, and more
- ◆ Chris Mattison is a natural history writer and photographer who specializes in reptiles and amphibians.

Explore the great scientific and technological issues afoot in the world today: <http://princetonglobalscience.org>



Forthcoming

## Owlet Caterpillars of Eastern North America

**David L. Wagner, Dale F. Schweitzer,  
J. Bolling Sullivan & Richard C. Reardon**

This lavishly illustrated field guide features more than 800 species of the most common, interesting, beautiful, and important owlet (noctuid) caterpillars found in eastern North America.

David L. Wagner is professor of ecology and evolutionary biology at the University of Connecticut. Dale F. Schweitzer is an entomologist at the Nature Conservancy and NatureServe, and curatorial affiliate at the Yale University Peabody Museum of Natural History. J. Bolling Sullivan is research associate at the Smithsonian Institution. Richard C. Reardon is a member of the Forest Health Technology Enterprise Team at the USDA Forest Service.

November 2011. 576 pages. 2,100+ color photos. 8 x 10.  
Pa: 978-0-691-15042-0 \$29.95 | £20.95

- ◆ More than 2,100 color photographs illustrating many species for the first time
- ◆ First North American insect guide to offer hundreds of images of live moths in their natural resting postures
- ◆ Extensive information on owlet biology, natural enemies, classification, and finding and rearing owlet caterpillars
- ◆ Includes foodplant records for each species and foodplant index

Forthcoming

## Dragonflies and Damselflies of the East

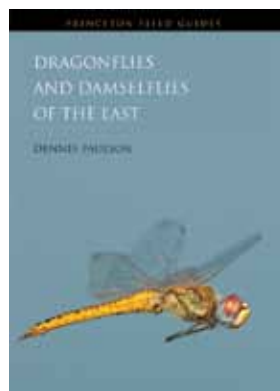
**Dennis Paulson**

This is the first fully illustrated guide to all 336 dragonfly and damselfly species of eastern North America—from the rivers of Manitoba to the Florida cypress swamps—and the companion volume to Dennis Paulson's acclaimed field guide to the dragonflies and damselflies of the West.

Dennis Paulson was director of the Slater Museum of Natural History at the University of Puget Sound.

*Princeton Field Guides*

December 2011. 576 pages. 675 color photos. 350 line illus. 333 maps. 5 ½ x 8 ½.  
Pa: 978-0-691-12283-0 \$29.95 | £20.95  
Cl: 978-0-691-12282-3 \$85.00 | £59.00

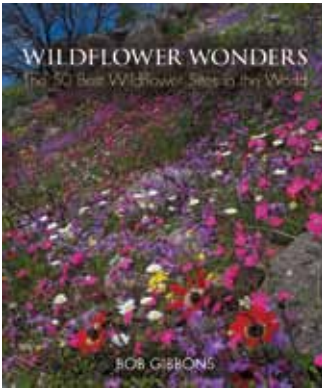


- ◆ Features hundreds of full-color photos
- ◆ Includes detailed species accounts, line drawings to aid identification, and a color distribution map for every species
- ◆ Offers helpful tips for the dragonfly enthusiast

**Also by Dennis Paulson**

## Dragonflies and Damselflies of the West

2009. 536 pages. 863 color photos. 392 line illus. 12 tables. 348 maps. 5 ½ x 8 ½.  
Pa: 978-0-691-12281-6 \$29.95 | £20.95  
Cl: 978-0-691-12280-9 \$67.50 | £46.95



Forthcoming

## Wildflower Wonders

The 50 Best Wildflower Sites in the World

**Bob Gibbons**

With a foreword by Richard Mabey

"This stunningly beautiful book provides a wealth of information about when and where to see the world's most impressive displays of wildflowers. The text is a pleasure to read and readily conveys the author's enthusiasm for his subject. Wildflower lovers will be easily seduced by the vast flower-filled landscapes and intimate portraits of individual species."

—Carol Gracie, coauthor of *Wildflowers in the Field and Forest*

- ◆ Features 200 full-color photos
- ◆ Describes noteworthy flower species, ecology, conservation status, and animal life
- ◆ Includes color maps and at-a-glance information panels

*Wildflower Wonders* showcases the most spectacular displays of wild blooms on the planet, from infrequent flowerings in the Mojave and other deserts to regular but no less stunning alpine wildflower "events" in Italy, South Africa, and Australia. A book unlike any other, *Wildflower Wonders* is a visual feast for travelers and armchair naturalists alike.

Bob Gibbons is a renowned photographer, naturalist, and tour leader.

November 2011. 192 pages. 200 color photos. 8 ½ x 10.

Cl: 978-0-691-15229-5 \$27.95

For sale only in the United States and Canada

New

## Trees of Panama and Costa Rica

**Richard Condit, Rolando Pérez & Nefertaris Daguerre**

"This book is exceptionally well organized and extremely user friendly, and the text is really good and succinct. The authors convey the excitement of learning tropical botany to successfully identify tree species, and the section on tree identification is exceptional—quite simply the best that I have ever read."

—John Kricher, Wheaton College

This is the first field guide dedicated to the diverse tree species of Panama and Costa Rica. Featuring close to 500 tropical tree species, *Trees of Panama and Costa Rica* includes superb color photos, abundant color distribution maps, and concise descriptions of key characteristics, making this guide readily accessible to botanists, biologists, and casual nature lovers alike.

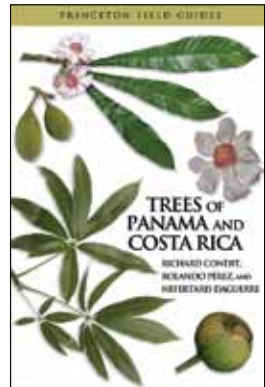
Richard Condit is a staff scientist at the Smithsonian Tropical Research Institute in Panama. Rolando Pérez is chief botanist and Nefertaris Daguerre is a forest specialist with the Center for Tropical Forest Science at the STRI.

*Princeton Field Guides*

2010. 496 pages. 438 color illus. 5 line illus. 482 maps. 6 x 9.

Pa: 978-0-691-14710-9 \$45.00 | £30.95

Cl: 978-0-691-14707-9 \$85.00 | £59.00



- ◆ 438 high-resolution color photos
- ◆ 480 color distribution maps and two general maps
- ◆ Concise and jargon-free descriptions of key characteristics for every species
- ◆ Full glossary and guide to leaf forms included

To receive notices about new books, subscribe for email at: [press.princeton.edu/subscribe](mailto:press.princeton.edu/subscribe)

## New

One of the "Best Reference Books, Science" for 2010, *Library Journal*  
 Honorable Mention, 2010 PROSE Award for Excellence in Single Volume Reference/Science,  
 Association of American Publishers

## The Princeton Field Guide to Dinosaurs

Gregory S. Paul

"World-renowned dinosaur illustrator and researcher Gregory Paul provides comprehensive visual and textual coverage of the dinosaurs in this lavishly illustrated field guide. Incorporating the latest discoveries and research that are radically transforming what we know about dinosaurs, this book is distinguished both by its scientific accuracy and the quality and quantity of its illustrations. . . . *The Princeton Field Guide to Dinosaurs* is a must-have for anyone who loves dinosaurs, from the amateur enthusiast to the professional paleontologist."

—*Prehistoric Times*

This lavishly illustrated volume is the first authoritative dinosaur book in the style of a field guide. World-renowned dinosaur illustrator and researcher Gregory Paul provides comprehensive visual and textual coverage of the great Mesozoic animals that gave rise to the living dinosaurs, the birds. Incorporating the new discoveries and research that are radically transforming what we know about dinosaurs, this book is distinguished both by its scientific accuracy and the quality and quantity of its illustrations. It presents thorough descriptions of more than 735 dinosaur species and features more than 600 color and black-and-white images, including unique skeletal drawings, "life" studies, and scenic views—illustrations that depict the full range of dinosaurs, from small, feathered creatures to whale-sized supersauropods.

Heavily illustrated species accounts of the major dinosaur groups are preceded by an extensive introduction that covers dinosaur history and biology, the extinction of nonavian dinosaurs, the origin of birds, and the history of dinosaur paleontology—and that also gives a taste of what it might be like to travel back to the time of the dinosaurs.

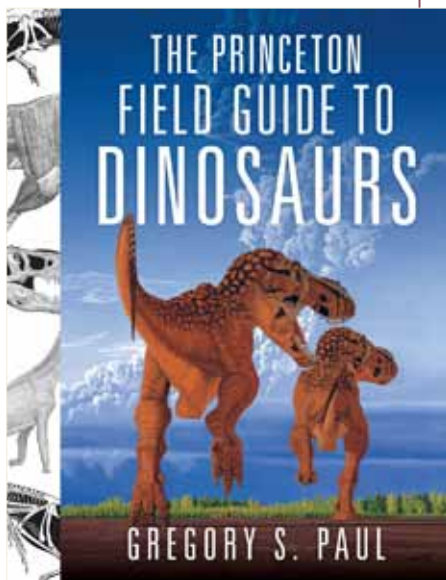
Gregory S. Paul is a leading dinosaur illustrator and researcher.

*Princeton Field Guides*

2010. 320 pages. 150 color illus. 510 line illus. 8 ½ x 11.

Cl: 978-0-691-13720-9 \$35.00| £24.95

*Not for sale in the Commonwealth (except Canada) and the European Union*



## New

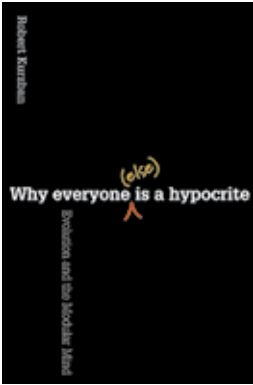
## Honeybee Democracy

Thomas D. Seeley

See page 4 for details.

Explore the great scientific and technological issues afoot in the world today: <http://princetonglobalscience.org>

General Interest



"Bolstered by recent studies and research, Kurzban makes a convincing and coherent ... case for the modular mind, greatly helped by humorous footnotes and examples. ... Taking on lofty topics, including truth and belief, Kurzban makes a successful case for changing—and remapping—the modern mind."

—*Publishers Weekly*

New

## Why Everyone (Else) Is a Hypocrite

Evolution and the Modular Mind

**Robert Kurzban**

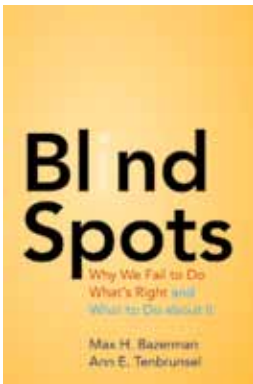
We're all hypocrites. Why? Hypocrisy is the natural state of the human mind.

Robert Kurzban shows us that the key to understanding our behavioral inconsistencies lies in understanding the mind's design. The human mind consists of many specialized units designed by the process of evolution by natural selection. While these modules sometimes work together seamlessly, they don't always, resulting in possibly contradictory beliefs, vacillations between patience and impulsiveness, violations of our supposed moral principles, and overinflated views of ourselves.

This modular, evolutionary psychological view of the mind undermines deeply held intuitions about ourselves, as well as a range of scientific theories that require a "self" with consistent beliefs and preferences. Modularity suggests that there is no "I." Instead, each of us is a contentious "we"—a collection of discrete but interacting systems whose constant conflicts shape our interactions with one another and our experience of the world.

Robert Kurzban is associate professor of psychology at the University of Pennsylvania.

2010. 288 pages. 2 halftones. 1 line illus.  
 Cl: 978-0-691-14674-4 \$27.95 | £19.95



"In this important book, Bazerman and Tenbrunsel show us how we fail to see our own immoral actions in an objective light, and the trouble that this biased view gets us into."

—Dan Ariely, author of *Predictably Irrational*

New

## Blind Spots

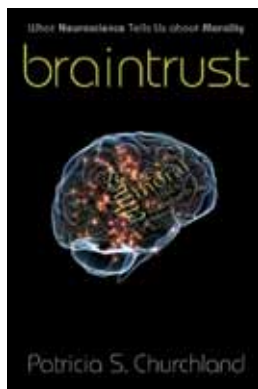
Why We Fail to Do What's Right and What to Do about It

**Max H. Bazerman & Ann E. Tenbrunsel**

When confronted with an ethical dilemma, most of us like to think we would stand up for our principles. But we are not as ethical as we think we are. In *Blind Spots*, leading business ethicists Max Bazerman and Ann Tenbrunsel examine the ways we overestimate our ability to do what is right and how we act unethically without meaning to. From the collapse of Enron and corruption in the tobacco industry, to sales of the defective Ford Pinto and the downfall of Bernard Madoff, the authors investigate the nature of ethical failures in the business world and beyond, and illustrate how we can become more ethical, bridging the gap between who we are and who we want to be.

Max H. Bazerman is the Jesse Isidor Straus Professor of Business Administration at Harvard Business School. Ann E. Tenbrunsel is the Rex and Alice A. Martin Professor of Business Ethics at the Mendoza College of Business, University of Notre Dame.

2011. 208 pages. 10 line illus.  
 Cl: 978-0-691-14750-5 \$24.95 | £16.95



New

## Braintrust

What Neuroscience Tells Us about Morality

Patricia S. Churchland

In *Braintrust*, neurophilosophy pioneer Patricia Churchland argues that morality originates in the biology of the brain. She describes the “neurobiological platform of bonding” that, modified by evolutionary pressures and cultural values, has led to human styles of moral behavior. The result is a provocative genealogy of morals that asks us to reevaluate the priority given to religion, absolute rules, and pure reason in accounting for the basis of morality.

“Patricia Churchland makes a compelling case that morality is woven into our brains, anchored in the neurobiology of attachment and bonding.... This smart, lucid and often entertaining book will give any curious mind a good overview of how the brain learns to distinguish right from wrong.”

—Ferris Jabr, *New Scientist*

A major new account of what really makes us moral, *Braintrust* challenges us to reconsider the origins of some of our most cherished values.

Patricia S. Churchland is professor emerita of philosophy at the University of California, San Diego, and an adjunct professor at the Salk Institute.

2011. 288 pages. 1 halftone. 11 line illus.  
 Cl: 978-0-691-13703-2 \$24.95 | £16.95

New

## The Brain and the Meaning of Life

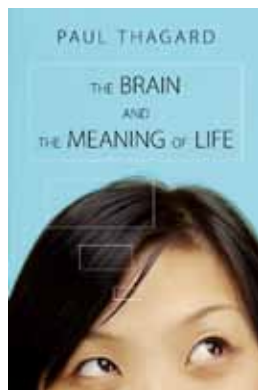
Paul Thagard

Why is life worth living? What makes actions right or wrong? What is reality and how do we know it? *The Brain and the Meaning of Life* draws on research in philosophy, psychology, and neuroscience to answer some of the most pressing questions about life’s nature and value. Paul Thagard argues that evidence requires the abandonment of many traditional ideas about the soul, free will, and immortality, and shows how brain science matters for fundamental issues about reality, morality, and the meaning of life. The ongoing Brain Revolution reveals how love, work, and play provide good reasons for living.

*The Brain and the Meaning of Life* shows how brain science helps to answer questions about the nature of mind and reality, while alleviating anxiety about the difficulty of life in a vast universe. The book integrates decades of multidisciplinary research, but its clear explanations and humor make it accessible to the general reader.

Paul Thagard is professor of philosophy, psychology, and computer science at the University of Waterloo, Canada.

2010. 296 pages. 12 line illus.  
 Cl: 978-0-691-14272-2 \$29.95 | £20.95



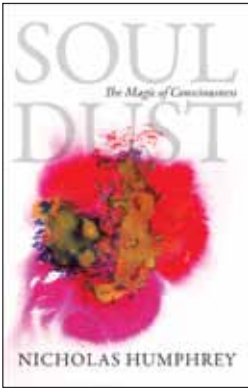
“*The Brain and the Meaning of Life* provides a highly informed account of the relevance of recent neuroscience to human life. It compellingly tells how humans, as biological creatures in a physical world, can find meaning and value.”

—William Bechtel, University of California, San Diego



Connect with us on Twitter @ *princetonupress*  
 & Facebook @ *PrincetonUniversityPress*

General Interest



New

## Soul Dust

The Magic of Consciousness

**Nicholas Humphrey**

How is consciousness possible? What biological purpose does it serve? And why do we value it so highly? In *Soul Dust*, the psychologist Nicholas Humphrey, a leading figure in consciousness research, proposes a startling new theory. Consciousness, he argues, is nothing less than a magical-mystery show that we stage for ourselves inside our own heads. This self-made show lights up the world for us and makes us feel special and transcendent. Thus consciousness paves the way for spirituality, and allows us, as human beings, to reap the rewards, and anxieties, of living in what Humphrey calls the “soul niche.”

Tightly argued, intellectually gripping, and a joy to read, *Soul Dust* provides answers to the deepest questions.

Nicholas Humphrey is professor emeritus of psychology at the London School of Economics.

2011. 256 pages. 17 halftones. 1 table.  
 Cl: 978-0-691-13862-6 \$24.95 | £16.95  
 Not for sale in the Commonwealth (except Canada)

“Humphrey, a theoretical psychologist at the top of his game, combines the romantic spirit of a Shelley or Keats with the razor-sharp intellect of a Sherlock Holmes. Here he brings his incisive mind to bear on one of the great riddles of science.”  
 —V. S. Ramachandran,  
 author of *The Tell-Tale Brain*

New

## The Recursive Mind

The Origins of Human Language, Thought, and Civilization

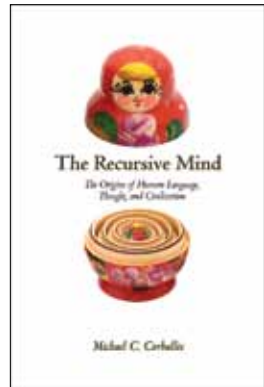
**Michael C. Corballis**

*The Recursive Mind* challenges the commonly held notion that language is what makes us uniquely human. In this compelling book, Michael Corballis argues that what distinguishes us in the animal kingdom is our capacity for recursion: the ability to embed our thoughts within other thoughts. Recursion enables us to conceive of our own minds and the minds of others. It also gives us the power of mental “time travel”—the ability to insert past experiences, or imagined future ones, into present consciousness.

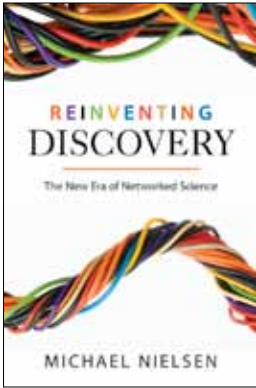
Drawing on neuroscience, psychology, animal behavior, anthropology, and archaeology, Corballis demonstrates how these recursive structures led to the emergence of language and speech, which ultimately enabled us to share our thoughts, plan with others, and reshape our environment to better reflect our creative imaginations.

Michael C. Corballis is professor emeritus of psychology at the University of Auckland in New Zealand.

2011. 304 pages. 6 halftones. 9 line illus. 2 maps.  
 Cl: 978-0-691-14547-1 \$29.95 | £20.95



“This is a wonderful book by an expert writer. Corballis tracks the importance of recursion in the context of language, theory of mind, and mental time travel, and concludes that its emergence explains much about how we became human. He proposes a novel answer to an enduring mystery.”  
 —Thomas Suddendorf,  
 University of Queensland



Forthcoming  
**Reinventing Discovery**  
 The New Era of Networked Science  
**Michael Nielsen**

In *Reinventing Discovery*, Michael Nielsen argues that we are living at the dawn of the most dramatic change in science in more than 300 years. This change is being driven by powerful new cognitive tools, enabled by the internet, which are greatly accelerating scientific discovery. There are many books about how the internet is changing business or the workplace or government. But this is the first book about something much more fundamental: how the internet is transforming the nature of our collective intelligence and how we understand the world.

This is a book for anyone who wants to understand how the online world is revolutionizing scientific discovery today—and why the revolution is just beginning.

Michael Nielsen is one of the pioneers of quantum computing.

November 2011. 280 pages. 6 halftones. 8 line illus.  
 Cl: 978-0-691-14890-8 \$24.95 | £16.95

“Science has always been a contact sport; the interaction of many minds is the engine of the discipline. Michael Nielsen has given us an unparalleled account of how new tools for collaboration are transforming scientific practice. *Reinventing Discovery* doesn’t just help us understand how the sciences are changing, it shows us how we can participate in the change.”  
 —Clay Shirky, author of *Here Comes Everybody* and *Cognitive Surplus*

New

## Strange New Worlds

The Search for Alien Planets and Life beyond Our Solar System

**Ray Jayawardhana**

Soon astronomers expect to find alien Earths by the dozens in orbit around distant suns. Before the decade is out, telltale signs that they harbor life may be found. If they are, the ramifications for all areas of human thought and endeavor—from religion and philosophy to art and biology—will be breathtaking. In *Strange New Worlds*, renowned astronomer Ray Jayawardhana brings news from the front lines of the epic quest to find planets—and alien life—beyond our solar system.

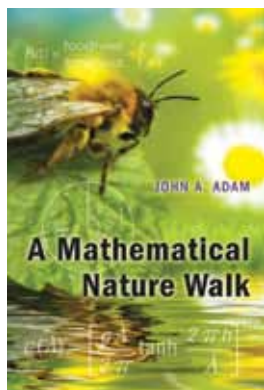
*Strange New Worlds* provides an insider’s look at the cutting-edge science of today’s planet hunters, our prospects for discovering alien life, and the debates and controversies at the forefront of extrasolar-planet research.

Ray Jayawardhana is professor and Canada Research Chair in Observational Astrophysics at the University of Toronto.

2011. 272 pages. 3 halftones. 25 line illus. 4 tables.  
 Cl: 978-0-691-14254-8 \$24.95 | £16.95  
 Not for sale in Canada



“With the seemingly endless stream of news about discoveries of alien planets, it’s easy to forget that just 20 years ago exoplanets were no more than theoretical possibilities. Now astronomer Ray Jayawardhana tells the story of how the dramatic hunt has unfolded, from the early days of stellar astronomy to present-day speculation about life outside our solar system.”  
 —*New Scientist*



"[A] snappy guide to the mathematics of the outdoors.... A sharp eye and an ingenious mind are at work on every page.... Read this book with pencil and paper in hand. Then go forth, enjoy the view, and impress your friends."  
—Laurence A. Marschall,  
*Natural History*

Forthcoming Paperback

## A Mathematical Nature Walk

John A. Adam

How heavy is that cloud? Why can you see farther in rain than in fog? Why are the droplets on that spider web spaced apart so evenly? If you have ever asked questions like these while outdoors, this book is for you. An entertaining and informative collection of fascinating puzzles from the natural world around us, *A Mathematical Nature Walk* will delight anyone who loves nature or math or both.

John Adam presents ninety-six questions about natural phenomena and then shows how to answer them using mostly basic mathematics. Many of the problems are illustrated, and the book also has answers, a glossary of terms, and a list of patterns found in nature.

John A. Adam is professor of mathematics at Old Dominion University.

October 2011. 280 pages. 17 color illus. 22 halftones. 97 line illus.  
Pa: 978-0-691-15265-3 \$18.95 | £12.95  
Cl: 978-0-691-12895-5 \$27.95 | £19.95

### Also by John A. Adam

One of *Choice's* Outstanding Academic Titles for 2004  
Winner of the 2003 Award for Best Professional/Scholarly Book in Mathematics and Statistics, Association of American Publishers

John A. Adam, Winner of the 2007 Virginia Outstanding Faculty Award, State Council of Higher Education for Virginia

## Mathematics in Nature

Modeling Patterns in the Natural World

"*Mathematics in Nature* is an excellent resource for bringing a greater variety of patterns into the mathematical study of nature."

—Will Wilson, *American Scientist*

2006. 416 pages. 24 color illus. 84 line illus. 9 tables.

Pa: 978-0-691-12796-5 \$29.95 | £20.95  
Not for sale in South Asia

## Guesstimation

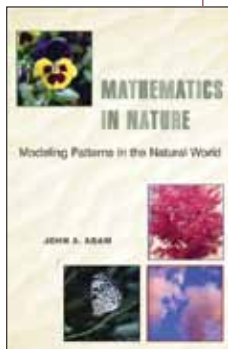
Solving the World's Problems on the Back of a Cocktail Napkin

Lawrence Weinstein & John A. Adam

"[A] delightful account of mathematical approximation, which instills the beauty and power of the back-of-the-envelope calculation. The puzzles make addictive confidence builders by breaking down tricky questions into manageable parts."

—Matthew Killeya,  
*New Scientist*

2008. 320 pages. 75 halftones.  
Pa: 978-0-691-12949-5 \$19.95 | £13.95





"Archer has perfectly pitched answers to the most basic questions about global warming while providing a sound basis for understanding the complex issues frequently misrepresented by global warming skeptics."

—Publishers Weekly

## New Paperback

Winner of the 2009 Walter P. Kistler Award, Foundation For the Future  
One of *Australian's* Best Books of 2009

# The Long Thaw

How Humans Are Changing the Next 100,000 Years of Earth's Climate

**David Archer**

Global warming is usually represented as a relatively short-term problem, with most projections ending at the year 2100. In *The Long Thaw*, David Archer, one of the world's leading climatologists, shows how a few centuries of fossil-fuel use will change the climate of the Earth dramatically for hundreds of thousands of years. The great ice sheets in Antarctica and Greenland may take more than a century to melt, and the overall change in sea level will be one hundred times what is forecast for 2100. A planet-wide thaw driven by humans has already begun, but Archer argues that it is still not too late to avert dangerous climate change—if humans can find a way to cooperate as never before.

David Archer is professor of geophysical sciences at the University of Chicago.

*This book is printed on recycled paper*

2010. 192 pages. 2 halftones. 20 line illus. 2 tables.

Pa: 978-0-691-14811-3 \$16.95 | £11.95

Cl: 978-0-691-13654-7 \$22.95 | £15.95

## New Paperback

With a new preface by the author

# Enhancing Evolution

The Ethical Case for Making Better People

**John Harris**

In *Enhancing Evolution*, leading bioethicist John Harris dismantles objections to genetic engineering, stem-cell research, designer babies, and cloning and makes an ethical case for biotechnology that is both forthright and rigorous. Human enhancement, Harris argues, is a good thing—good morally, good for individuals, good as social policy, and good for a genetic heritage that needs serious improvement.

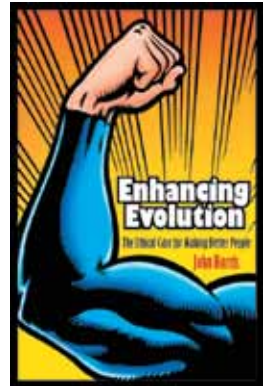
In a new preface, Harris offers a glimpse at the new science and technology to come, equipping readers with the knowledge to assess the ethics and policy dimensions of future forms of human enhancement.

John Harris is the Lord David Alliance Professor of Bioethics at the University of Manchester School of Law, joint editor-in-chief of the *Journal of Medical Ethics*, and a member of Britain's Human Genetics Commission.

2010. 272 pages.

Pa: 978-0-691-14816-8 \$18.95 | £12.95

Cl: 978-0-691-12844-3 \$27.95 | £19.95



"[Harris] makes a persuasive case that today's biotechnologies—including neuro-engineering, stem-cell research and cloning to improve bodies and brains—are on the continuum of an age-long pursuit by humans to improve themselves and therefore, he argues, are permissible and morally essential."

—Judy Illes, *Nature*

Explore the great scientific and technological issues afoot in the world today: <http://princetonglobalscience.org>



## How to Find a Habitable Planet

James Kasting

"*How to Find a Habitable Planet* will fascinate those who care about the evolution of Earth's climate and wonder about how we will eventually detect life—even simple cellular life—elsewhere."

—*Nature*

2010. 352 pages. 16 color illus. 57 halftones. 15 line illus. 4 tables.  
 Cl: 978-0-691-13805-3 \$29.95 | £20.95

## The Medea Hypothesis

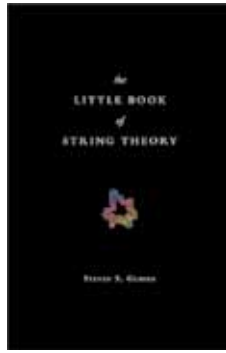
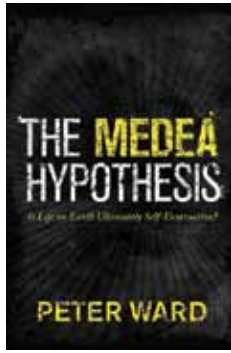
Is Life on Earth Ultimately Self-Destructive?

Peter Ward

"A provocative look at the history of our living planet. Ward offers a distinct perspective and argues strongly that the only intelligent choice is to manage ourselves and the environment. *The Medea Hypothesis* will cause anyone who cares about the environment to think differently."

—Thomas E. Lovejoy, H. John Heinz III Center for Science, Economics, and the Environment

2009. 208 pages. 11 line illus. 2 tables.  
 Cl: 978-0-691-13075-0 \$24.95 | £16.95



## The Little Book of String Theory

Steven S. Gubser

"Gubser does a masterly job of introducing string theory in simple terms and without using math. His goal is not to convert people to the cause but to help them better understand the ideas. Cars on a freeway, the vibration of piano strings, and buoys in the ocean are among the examples from everyday life used to explain difficult concepts. This concise yet clear introduction to a conceptually difficult topic is recommended for lay readers in physics and for popular science collections."

—*Library Journal*

2010. 184 pages. 21 line illus.  
 Cl: 978-0-691-14289-0 \$19.95 | £13.95

## The Great Brain Debate

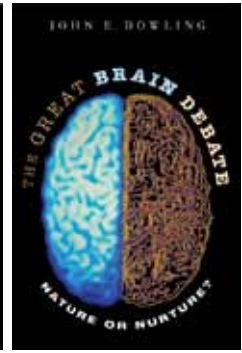
Nature or Nurture?

John E. Dowling

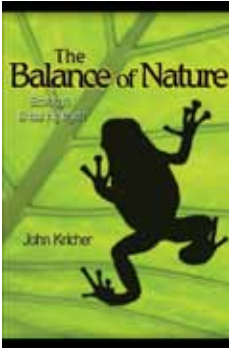
"Dowling does a masterful job. . . . His eloquent essay provides solid examples of what elements of brain development and brain function are under genetic control and which are largely guided by experience."

—Charles A. Nelson and Irving I. Gottesman, *Science*

2007. 200 pages. 1 halftone. 45 line illus.  
 Pa: 978-0-691-13310-2 \$19.95 | £13.95



To receive notices about new books, subscribe for email at: [press.princeton.edu/subscribe](http://press.princeton.edu/subscribe)



## The Balance of Nature

Ecology's Enduring Myth

**John Kricher**

"A deft and inviting tour of ecology and evolution, a book of revelation about the balance of nature that really counts, namely that between ourselves and the living planet. This is an appealing read that reveals the most important story of human history."

—Thomas E. Lovejoy, H. John Heinz III Center for Science, Economics, and the Environment

2009. 256 pages.

Cl: 978-0-691-13898-5 \$24.95 | £16.95

Also by John Kricher

New

## Tropical Ecology **TEXT**

See page 1 for details.



## All about Birds **TEXT**

A Short Illustrated History of Ornithology

**Valérie Chansigaud**

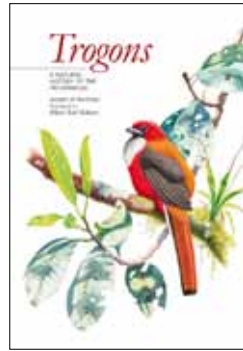
"This is the deepest and most thorough history of ornithology that I have seen. The mixture of history, biographical sketches, period illustrations, and science give it a broad appeal, and the writing is quite engaging."

—Frank Gill, American Ornithologist's Union

2010. 240 pages. 250 color illus.

Cl: 978-0-691-14519-8 \$29.95 | £120.95

Not for sale in the Commonwealth (except Canada) and the European Union



## Trogon's

A Natural History of the Trogonidae

**Joseph M. Forshaw**

Illustrated by Albert Earl Gilbert

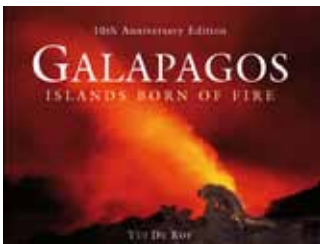
"I cannot imagine a more impressive way of presenting some of the most beautiful and impressive birds in the world."

—Eric Salzman, *Winging It*

2009. 304 pages. 75 color illus. 10 line illus.

Cl: 978-0-691-14158-9 \$150.00 | £103.00

Not for sale in the European Union



## Tenth Anniversary Edition

### Galapagos

Islands Born of Fire

**Tui De Roy**

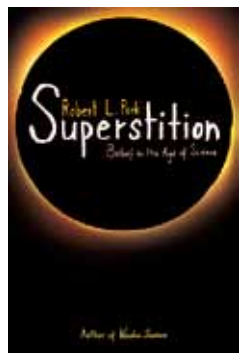
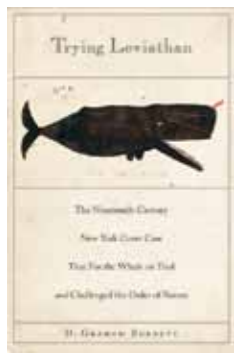
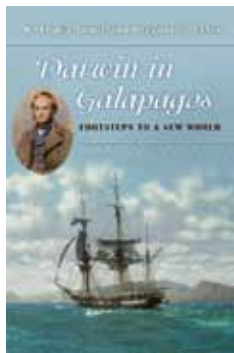
"In words and pictures, De Roy captures the ethereal, haunting quality of the islands with their cold seas and burning rocks."

—*Ocean Realm*

2010. 168 pages. 245 color illus. 1 map.

Cl: 978-0-691-14637-9 \$29.95

For sale only in the United States and Canada



One of the *New York Times* Notable Books of 1997  
With a new foreword by Carl Zimmer  
**T. rex and the Crater  
of Doom**  
**Walter Alvarez**

"[A] wonderful adventure in science."  
—Dale Russell, *Los Angeles Times Book Review*

2008. 216 pages. 8 color plates. 15 halftones. 2 line illus.  
Pa: 978-0-691-13103-0 \$16.95 | £11.95  
Not for sale in the Commonwealth (except Canada)

**Darwin in Galápagos**  
Footsteps to a New World  
**K. Thalia Grant & Gregory B. Estes**

"This book is a must for die-hard Darwin fans."  
—Walter L. Cressler, *Library Journal*

In 1835, during his voyage on *HMS Beagle*, Charles Darwin spent several weeks in Galápagos exploring the islands and making extensive notes on their natural history. *Darwin in Galápagos* is the first book to recreate Darwin's historic visit to the islands, following in his footsteps day by day and island by island as he records all that he observes around him.

Ideal for visitors to Galápagos and a delight for armchair travelers, *Darwin in Galápagos* is generously illustrated with color and black-and-white photographs and line drawings, as well as detailed maps of Darwin's island itinerary and informative box features on the archipelago's natural history.

2009. 440 pages. 122 color illus. 73 halftones. 20 line illus. 4 maps.  
Cl: 978-0-691-14210-4 \$29.95 | £20.95

Winner of the 2007 Isabelle Hermaryn Book Award,  
Bronx County Historical Society  
Winner of the 2007 New York City Book Award,  
New York Society Library

**Trying Leviathan**  
The Nineteenth-Century New York  
Court Case That Put the Whale on Trial  
and Challenged the Order of Nature  
**D. Graham Burnett**

"An unexpected page-turner."  
—*Nature*

In *Trying Leviathan*, D. Graham Burnett recounts the strange story of Maurice v. Judd, an 1818 trial that pitted the new science of taxonomy against the then-popular—and biblically sanctioned—view that the whale was a fish. What began as a seemingly mundane dispute over the regulation of whale oil soon fueled a sensational public debate in which nothing less than the order of nature was at stake.

2010. 304 pages. 16 color plates. 17 halftones.  
Pa: 978-0-691-14615-7 \$21.95 | £14.95  
Cl: 978-0-691-12950-1 \$46.95 | £32.95

**Superstition**  
Belief in the Age of Science  
**Robert L. Park**

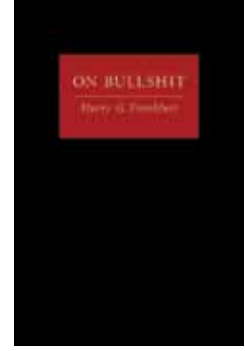
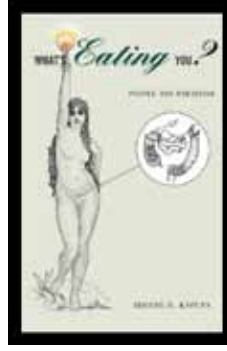
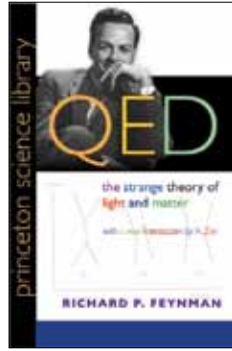
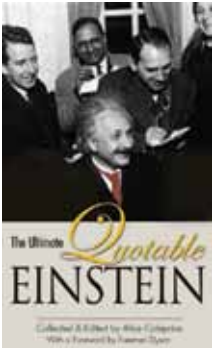
"Park writes with bemusement at human folly but also with outrage at the misappropriation of science."

—Robert A. Segal, *Times Higher Education*

2010. 240 pages.  
Pa: 978-0-691-14597-6 \$16.95 | £11.95



Connect with us on Twitter @ *princetonupress*  
& Facebook @ *PrincetonUniversityPress*



With a foreword by Freeman Dyson  
**The Ultimate Quotable Einstein**

**Collected and edited by Alice Calaprice**

"A happy man is too satisfied with the present to think too much about the future."  
 —Written at age seventeen (September 18, 1896) for a school essay in French entitled "My Future Plans." *CPAE*, Vol. 1, Doc. 22

Here is the definitive new edition of the hugely popular collection of Einstein quotations that has sold tens of thousands of copies worldwide and been translated into twenty-five languages.

2010. 608 pages, 27 halftones.  
 Cl: 978-0-691-13817-6 \$24.95 | £16.95

With a new introduction by A. Zee  
**QED**  
 The Strange Theory of Light and Matter  
**Richard P. Feynman**

*Praise for Princeton's original edition:*

"Feynman simply cannot help being original. In this quirky, fascinating book, he explains to laymen the quantum theory of light."  
 —*New Yorker*

*Princeton Science Library*

2006. 192 pages, 93 line illus.  
 Pa: 978-0-691-12575-6 \$16.95 | £11.95  
 Not for sale in the Commonwealth (except Canada)

**What's Eating You?**  
 People and Parasites  
**Eugene H. Kaplan**

"Engrossingly gross: A paean to parasites ... Kaplan is a master raconteur. What's more, he has an almost comical knack of contracting every parasitic infection going, which serves to bring his stories to life all the more vividly. This is gonzo parasitology writing at its finest."  
 —Clint Witchalls, *New Scientist*

Kaplan has spent his life traveling the globe exploring oceans and jungles, and incidentally acquiring parasites in his gut. Here, he leads readers on an unforgettable journey into the bizarre yet oddly beautiful world of parasites. In a narrative that is by turns frightening, disgusting, and laugh-out-loud funny, Kaplan describes how drinking contaminated water can cause a three-foot-long worm to burst from your arm; how he "gave birth" to a parasite the size and thickness of a pencil while working in Israel; why you should never wave a dead snake in front of your privates; and why fleas are attracted to his wife.

2010. 320 pages, 30 b&w plates.  
 Cl: 978-0-691-14140-4 \$26.95 | £18.95

Winner of the 2005 Bestseller Awards, Philosophy Category, *The Book Standard*

**On Bullshit**  
**Harry G. Frankfurt**

"Immediately, I must say: read it. Beautifully written, lucid, ironic and profound... It is a small and highly provocative masterpiece."  
 —Bryan Appleyard, *Sunday Times* (London)

2005. 80 pages.  
 Cl: 978-0-691-12294-6 \$9.95 | £6.95  
 Not for sale in South Asia

Explore the great scientific and technological issues afoot in the world today: <http://princetonglobalscience.org>

					UK								UK				
QTY.	ISBN	Author: Title	Page	Price	Price	QTY.	ISBN	Author: Title	Page	Price	Price	QTY.	ISBN	Author: Title	Page	Price	Price
___ Pa:	15265-3	<b>Adam:</b> Mathematical Nature Walk	31	\$18.95	£12.95	___ Cl:	14254-8	<b>Jayawardhana:</b> Strange New	30	\$24.95	£16.95	___ Cl:	14254-8	<b>Jayawardhana:</b> Strange New	30	\$24.95	£16.95
___ Cl:	12895-5			27.95	19.95	___ Pa:	13991-3	<b>Johnsen:</b> Optics of Life	2	45.00	30.95	___ Cl:	13991-3	<b>Johnsen:</b> Optics of Life	2	45.00	30.95
___ Pa:	12796-5	<b>Adam:</b> Mathematics in Nature	31	29.95	20.95	___ Cl:	13990-6					___ Cl:	13990-6				
___ Pa:	12634-0	<b>Alexander:</b> Principles of Animal	13	57.50	39.95	___ Cl:	14140-4	<b>Kaplan:</b> What's Eating You?	36	26.95	18.95	___ Cl:	14140-4	<b>Kaplan:</b> What's Eating You?	36	26.95	18.95
___ Pa:	13103-0	<b>Alvarez:</b> <i>T. rex</i> and the Crater	35	16.95	11.95	___ Cl:	07453-5	<b>Karasov/del Rio:</b> Physiological	3	78.50	55.00	___ Cl:	07453-5	<b>Karasov/del Rio:</b> Physiological	3	78.50	55.00
___ Pa:	14414-6	<b>Archer:</b> Global Carbon Cycle	17	24.95	16.95	___ Pa:	12577-0	<b>Karban/Huntzinger:</b> How to Do	8	17.95	12.50	___ Pa:	12577-0	<b>Karban/Huntzinger:</b> How to Do	8	17.95	12.50
___ Cl:	14413-9			70.00	48.95	___ Cl:	13805-3	<b>Kasting:</b> How to Find a Habitable	33	29.95	20.95	___ Cl:	13805-3	<b>Kasting:</b> How to Find a Habitable	33	29.95	20.95
___ Pa:	14811-3	<b>Archer:</b> Long Thaw	32	16.95	11.95	___ Pa:	14092-6	<b>Kays/Wilson:</b> Mammals of North	22	19.95	13.95	___ Pa:	14092-6	<b>Kays/Wilson:</b> Mammals of North	22	19.95	13.95
___ Cl:	13654-7			22.95	15.95	___ Cl:	14278-4					___ Cl:	14278-4				
___ Pa:	15140-3	<b>Arlott:</b> Birds of North America	20	15.95		___ Pa:	12029-4	<b>Knoll:</b> Life on a Young Planet	12	25.95	17.95	___ Pa:	12029-4	<b>Knoll:</b> Life on a Young Planet	12	25.95	17.95
___ Cl:	12644-9	<b>Barrett:</b> Beyond the Brain	4	29.95	20.95	___ Cl:	13898-5	<b>Kricher:</b> Balance of Nature	34	24.95	16.95	___ Cl:	13898-5	<b>Kricher:</b> Balance of Nature	34	24.95	16.95
___ Cl:	14750-5	<b>Bazerman/Tenbrunsel:</b> Blind	27	24.95	16.95	___ Cl:	11513-9	<b>Kricher:</b> Tropical Ecology	1	85.00	59.00	___ Cl:	11513-9	<b>Kricher:</b> Tropical Ecology	1	85.00	59.00
___ Cl:	13414-7	<b>Bianchi/Canuel:</b> Chemical	15	95.00	65.00	___ Cl:	14674-4	<b>Kurzban:</b> Why Everyone (Else)	27	27.95	19.95	___ Cl:	14674-4	<b>Kurzban:</b> Why Everyone (Else)	27	27.95	19.95
___ Cl:	12522-0	<b>Bolker:</b> Ecological Models	2	57.50	39.95	___ Cl:	12839-9	<b>Levin:</b> Princeton Guide to Ecology	8	95.00	65.00	___ Cl:	12839-9	<b>Levin:</b> Princeton Guide to Ecology	8	95.00	65.00
___ Pa:	15233-2	<b>Bonner:</b> Why Size Matters	12	12.95	8.95	___ Pa:	12270-0	<b>Loreau:</b> From Populations	9	45.00	30.95	___ Pa:	12270-0	<b>Loreau:</b> From Populations	9	45.00	30.95
___ Cl:	12850-4			16.95	11.95	___ Cl:	12269-4					___ Cl:	12269-4				
___ Pa:	12724-8	<b>Braude/Low:</b> Introduction	2	29.95	20.95	___ Pa:	13653-0	<b>Losos/Ricklefs:</b> Theory of Island	8	49.50	34.95	___ Pa:	13653-0	<b>Losos/Ricklefs:</b> Theory of Island	8	49.50	34.95
___ Cl:	12723-1			65.00	44.95	___ Cl:	13652-3					___ Cl:	13652-3				
___ Cl:	14354-5	<b>Broecker:</b> Great Ocean Conveyor	15	27.95	19.95	___ Pa:	15033-8	<b>Lowen:</b> Antarctic Wildlife	23	22.95		___ Pa:	15033-8	<b>Lowen:</b> Antarctic Wildlife	23	22.95	
___ Pa:	14615-7	<b>Burnett:</b> Trying Leviathan	35	21.95	14.95	___ Pa:	14526-6	<b>Marshall:</b> Cryosphere	16	24.95	16.95	___ Pa:	14526-6	<b>Marshall:</b> Cryosphere	16	24.95	16.95
___ Cl:	12950-1			46.95	32.95	___ Cl:	14525-9					___ Cl:	14525-9				
___ Cl:	13817-6	<b>Calaprice:</b> Ultimate Quotable	36	24.95	16.95	___ Cl:	14968-4	<b>Mattison:</b> Frogs and Toads	23	29.95		___ Cl:	14968-4	<b>Mattison:</b> Frogs and Toads	23	29.95	
___ Cl:	14519-8	<b>Chansigaud:</b> All about Birds	34	29.95	20.95	___ Pa:	13418-5	<b>McCann:</b> Food Webs	9	45.00	30.95	___ Pa:	13418-5	<b>McCann:</b> Food Webs	9	45.00	30.95
___ Cl:	13703-2	<b>Churchland:</b> Braintrust	28	24.95	16.95	___ Cl:	13417-8					___ Cl:	13417-8				
___ Cl:	12178-9	<b>Clark:</b> Models for Ecological Data	3	78.50	55.00	___ Cl:	13568-7	<b>Minelli:</b> Forms of Becoming	12	28.95	19.95	___ Cl:	13568-7	<b>Minelli:</b> Forms of Becoming	12	28.95	19.95
___ Pa:	12262-5	<b>Clark:</b> Models—Lab Manual	3	22.95	15.95	___ Cl:	14890-8	<b>Nielsen:</b> Reinventing Discovery	30	24.95	16.95	___ Cl:	14890-8	<b>Nielsen:</b> Reinventing Discovery	30	24.95	16.95
___ Pa:	14710-9	<b>Condit, et al.:</b> Trees of Panama	25	45.00	30.95	___ Cl:	12344-8	<b>Otto/Day:</b> Biologist's Guide	3	78.50	55.00	___ Cl:	12344-8	<b>Otto/Day:</b> Biologist's Guide	3	78.50	55.00
___ Cl:	14707-9			85.00	59.00	___ Pa:	13767-4	<b>Page:</b> Diversity and Complexity	6	19.95	13.95	___ Pa:	13767-4	<b>Page:</b> Diversity and Complexity	6	19.95	13.95
___ Cl:	14547-1	<b>Corballis:</b> Recursive Mind	29	29.95	20.95	___ Pa:	14597-6	<b>Park:</b> Superstition	35	16.95	11.95	___ Pa:	14597-6	<b>Park:</b> Superstition	35	16.95	11.95
___ Cl:	14778-9	<b>Crossley:</b> Crossley ID Guide	18	35.00	24.95	___ Cl:	13720-9	<b>Paul:</b> Princeton Field Guide	18	35.00	24.95	___ Cl:	13720-9	<b>Paul:</b> Princeton Field Guide	18	35.00	24.95
___ Cl:	14637-9	<b>De Roy:</b> Galapagos	34	29.95		___ Pa:	12283-0	<b>Paulson:</b> Dragonflies	26	29.95	20.95	___ Pa:	12283-0	<b>Paulson:</b> Dragonflies	26	29.95	20.95
___ Pa:	12647-0	<b>Denny:</b> How the Ocean Works	3	49.50	34.95	___ Cl:	1282-3					___ Cl:	1282-3				
___ Pa:	12894-8	<b>Doebeli:</b> Adaptive Diversifications	9	49.50	34.95	___ Pa:	13688-2	<b>Peterson, et al.:</b> Ecological Niches	9	45.00	30.95	___ Pa:	13688-2	<b>Peterson, et al.:</b> Ecological Niches	9	45.00	30.95
___ Cl:	12893-1			110.00	75.00	___ Cl:	13686-8					___ Cl:	13686-8				
___ Cl:	11341-8	<b>Douglas:</b> Symbiotic Habit	5	45.00	30.95	___ Pa:	13674-5	<b>Railsback/Voker:</b> Agent-Based	1	55.00	37.95	___ Pa:	13674-5	<b>Railsback/Voker:</b> Agent-Based	1	55.00	37.95
___ Pa:	13310-2	<b>Dowling:</b> Great Brain Debate	33	19.95	13.95	___ Cl:	13673-8					___ Cl:	13673-8				
___ Pa:	12589-3	<b>Ellner/Guckenheimer:</b> Dynamic	14	62.50	43.95	___ Pa:	15257-8	<b>Reznick:</b> <i>Origin</i> Then and Now	10	22.95	15.95	___ Pa:	15257-8	<b>Reznick:</b> <i>Origin</i> Then and Now	10	22.95	15.95
___ Cl:	13550-2	<b>Ennos:</b> Solid Biomechanics	1	65.00	44.95	___ Cl:	12978-5					___ Cl:	12978-5				
___ Pa:	13628-8	<b>Erwin:</b> Extinction	10	23.95	16.95	___ Pa:	12849-8	<b>Schmitz:</b> Resolving Ecosystem	9	35.00	24.95	___ Pa:	12849-8	<b>Schmitz:</b> Resolving Ecosystem	9	35.00	24.95
___ Pa:	11551-1	<b>Falkowski/Raven:</b> Aquatic	3	62.50	43.95	___ Cl:	12848-1					___ Cl:	12848-1				
___ Cl:	11550-4			120.00	82.50	___ Pa:	13023-1	<b>Schulenberg, et al.:</b> Birds of Peru	21	39.50	27.95	___ Pa:	13023-1	<b>Schulenberg, et al.:</b> Birds of Peru	21	39.50	27.95
___ Pa:	12575-6	<b>Feynman:</b> QED	36	16.95	11.95	___ Cl:	14721-5	<b>Seeley:</b> Honeybee Democracy	4	29.95	20.95	___ Cl:	14721-5	<b>Seeley:</b> Honeybee Democracy	4	29.95	20.95
___ Cl:	14158-9	<b>Forshaw:</b> Trogons	34	150.00	103.00	___ Cl:	14275-3	<b>Sigmund:</b> Calculus of Selfishness	5	35.00	24.95	___ Cl:	14275-3	<b>Sigmund:</b> Calculus of Selfishness	5	35.00	24.95
___ Cl:	12294-6	<b>Frankfurt:</b> On Bullshit	36	9.95	6.95	___ Pa:	15075-8	<b>Solé:</b> Phase Transitions	6	35.00	24.95	___ Pa:	15075-8	<b>Solé:</b> Phase Transitions	6	35.00	24.95
___ Cl:	15229-5	<b>Gibbons:</b> Wildflower Wonders	25	27.95		___ Pa:	14843-4	<b>Sumpter:</b> Collective Animal	5	39.50	27.95	___ Pa:	14843-4	<b>Sumpter:</b> Collective Animal	5	39.50	27.95
___ Cl:	14849-6	<b>Goodfellow:</b> Avian Architecture	19	27.95		___ Cl:	12963-1					___ Cl:	12963-1				
___ Pa:	13879-4	<b>Gordon:</b> Ant Encounters	6	19.95	13.95	___ Cl:	14272-2	<b>Thagard:</b> Brain and the Meaning	28	29.95	20.95	___ Cl:	14272-2	<b>Thagard:</b> Brain and the Meaning	28	29.95	20.95
___ Cl:	14210-4	<b>Grant/Estes:</b> Darwin in Galápagos	35	29.95	20.95	___ Pa:	14949-3	<b>Unwin:</b> Atlas of Birds	19	22.95	15.95	___ Pa:	14949-3	<b>Unwin:</b> Atlas of Birds	19	22.95	15.95
___ Pa:	14999-8	<b>Grant/Grant:</b> How and Why Species	11	24.95	16.95	___ Pa:	15028-4	<b>Vallis:</b> Climate and the Oceans	17	24.95	16.95	___ Pa:	15028-4	<b>Vallis:</b> Climate and the Oceans	17	24.95	16.95
___ Cl:	13360-7			49.95	34.95	___ Cl:	14467-2					___ Cl:	14467-2				
___ Pa:	14695-9	<b>Grant/Grant:</b> Search of the Causes	11	49.95	34.95	___ Cl:	15188-5	<b>van Perlo:</b> Birds of Hawaii	21	29.95		___ Cl:	15188-5	<b>van Perlo:</b> Birds of Hawaii	21	29.95	
___ Cl:	14681-2			75.00	52.00	___ Cl:	11297-8	<b>Vogel:</b> Comparative Biomechanics	13	85.00	59.00	___ Cl:	11297-8	<b>Vogel:</b> Comparative Biomechanics	13	85.00	59.00
___ Cl:	14289-0	<b>Gubser:</b> Little Book of String	33	19.95	13.95	___ Pa:	13807-7	<b>Vogel:</b> Glimpses of Creatures	13	35.00	24.95	___ Pa:	13807-7	<b>Vogel:</b> Glimpses of Creatures	13	35.00	24.95
___ Pa:	14816-8	<b>Harris:</b> Enhancing Evolution	32	18.95	12.95	___ Cl:	13806-0					___ Cl:	13806-0				
___ Cl:	12844-3			27.95	19.95	___ Pa:	15042-0	<b>Wagner:</b> Owllet Caterpillars	24	29.95	20.95	___ Pa:	15042-0	<b>Wagner:</b> Owllet Caterpillars	24	29.95	20.95
___ Cl:	14211-1	<b>Howell:</b> Petrels, Albatrosses	20	45.00	30.95	___ Cl:	13075-0	<b>Ward:</b> Medea Hypothesis	33	24.95	16.95	___ Cl:	13075-0	<b>Ward:</b> Medea Hypothesis	33	24.95	16.95
___ Cl:	13862-6	<b>Humphrey:</b> Soul Dust	29	24.95	16.95	___ Pa:	12949-5	<b>Weinstein/Adam:</b> Guesstimation	31	19.95	13.95	___ Pa:	12949-5	<b>Weinstein/Adam:</b> Guesstimation	31	19.95	13.95
___ Pa:	15228-8	<b>Hunter:</b> Carnivores of the World	22	29.95	20.95	___ Cl:	12861-0	<b>Willmer:</b> Pollination and Floral	7	95.00	65.00	___ Cl:	12861-0	<b>Willmer:</b> Pollination and Floral	7	95.00	65.00
___ Cl:	15227-1			75.00	52.00												

Princeton's ISBN prefix is 978-0-691-



Many of the books in this catalog are now being made available as ebook editions that can be purchased from online booksellers. For more information, please visit our Web site at [press.princeton.edu](http://press.princeton.edu).

## U.S. & CANADA

### SEND ORDERS TO

Princeton University Press  
 c/o California/Princeton Fulfillment Services, Inc.  
 1445 Lower Ferry Road  
 Ewing, New Jersey 08618

### ORDER TOLL-FREE

Telephone **1-800-777-4726**  
 (8:30 a.m. – 7:00 p.m., EST, weekdays)  
 FAX **1-800-999-1958** (24 hours)  
**orders@cpfsinc.com**

**WEB [press.princeton.edu](http://press.princeton.edu)**

### SALES TAX

\*NJ 7%; CA 9.25%; Canada GST 5%; Shipping charges to NJ: Add 7% sales tax. Princeton University Press remits GST to Revenue Canada. Your books will be shipped from inside Canada and you will not be assessed Canada Post's border handling fee.

### SHIPPING & HANDLING

\*\*Please add \$4.00 for the first book and \$1.00 for each additional book.

*Please allow 3 weeks for shipping; publication dates of new books are identified and they will be shipped as soon as they are available.*

BOOKS SUBTOTAL \_\_\_\_\_

Sales tax subtotal\* \_\_\_\_\_

Shipping and handling\*\* \_\_\_\_\_

**TOTAL** \_\_\_\_\_

### PAYMENT METHOD

Enclosed please find my check made payable to:  
 California/Princeton Fulfillment Services

Please charge my:  Visa  MasterCard

*California/Princeton Fulfillment Services, Inc. does not accept American Express.*

### SEND MY ORDER TO

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Bookstores may order using the contact information above or may contact Princeton University Press's sales department:

609 258 4877 (phone)  
[sales@press.princeton.edu](mailto:sales@press.princeton.edu)

609 258 1335 (fax)

## U.K., EUROPE, AFRICA & the MIDDLE EAST

### POST ORDERS TO

Princeton University Press  
 Customer Service Operations  
 c/o John Wiley & Sons, Ltd.  
 1 Oldlands Way, Bognor Regis  
 West Sussex, PO22 9SA United Kingdom

### PHONE ORDERS

Telephone Dial-Free (UK only) **0800 243407**  
 (Overseas orders) **+44 1243 843294**  
 FAX **+44 (0) 1243 843296**  
**cs-books@wiley.co.uk**

BOOKS SUBTOTAL \_\_\_\_\_

Please add the following to your order to cover delivery of your books\*:

Surface Mail	Air Mail	UK _____
£3.70	n/a	
£5.35/€8.00	£12.75/€19.00	Europe _____
£7.75/\$13.95	£14.95/\$26.95**	ROW _____

**TOTAL** \_\_\_\_\_

*\*Delivery time is dependent on country of destination. Delivery will be arranged by John Wiley & Sons Ltd. Alternatively, you may collect your orders by prior arrangement. We can also quote for delivery by courier (please email [cs-books@wiley.co.uk](mailto:cs-books@wiley.co.uk) for details).*

*\*\*Dollar cost applies to Rest of World (ROW) for those customers invoiced in dollars.*

### PAYMENT METHOD

Enclosed please find my cheque made payable to: John Wiley & Sons

Please charge my:

Visa  MasterCard  American Express

Credit Card # \_\_\_\_\_

Card Security Code \_\_\_\_\_

Exp. Date \_\_\_\_\_

Signature \_\_\_\_\_

Telephone \_\_\_\_\_

### BILLING ADDRESS (if different)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Prices are subject to change without notice.