

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. They highlight the mutual dependence of organisms and their environments, and reveal the different strategies today's researchers are using in the field and laboratory to explore this interdependence. Peter and Rosemary Grant—renowned for their influential work on Darwin's finches in the Galápagos—provide concise introductions to each section and identify the key questions future research needs to address.

"In Search of the Causes of Evolution offers a bountiful sampler of what is going on in evolutionary research. Darwin's finches, which for three decades engaged Peter and Rosemary Grant's research, are there, and much, much more—all written by accomplished specialists. There is much to learn and much to enjoy in this wonderful, and at times riveting, book."

—Francisco J. Ayala, author of *Darwin's Gift to Science and Religion*

"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. Anyone wishing a thoroughly modern and readable account of evolution should start here."

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

"The Grants' gift to evolutionary biology—the characterization of evolution in action in the Galápagos finches—was enough to define extraordinary careers. Here they extend their reach by depicting the study of evolution as a process of discovery that spans levels of organization ranging from individual genes to development, adaptation, speciation, and even the origin and deep history of life. The contributors span generations of investigators who are among our best and brightest."

—David Reznick, *University of California, Riverside*

"This is a *connoisseurs'* collection of selected readings in modern evolutionary biology, molded into a synthesis by the eloquent commentaries of the Grants themselves."

—Mary Jane West-Eberhard, *Smithsonian Tropical Research Institute*

Peter R. Grant is the Class of 1877 Professor of Zoology (emeritus) at Princeton University. **Rosemary Grant** is professor emerita of ecology and evolutionary biology at Princeton. They are the coauthors of *How and Why Species Multiply: The Radiation of Darwin's Finches* (Princeton).

Cover design by Marcella Engel Roberts

Cover photo by John S. Thompson: "A *Geococcyx pallidus* male pollinating a flower of *Artemisia tridentata* while feeding his mate."

 PRINCETON
UNIVERSITY PRESS
press.princeton.edu

ISBN 978-0-691-14695-9



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