

SOUTHERN  
ALABAMA'S SURPRISING BIODIVERSITY  
WONDER

*Published in cooperation with The Nature Conservancy*

The University of Alabama Press • Tuscaloosa

R. SCOT DUNCAN

FOREWORD BY EDWARD O. WILSON

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Tuscaloosa, Alabama 35487-0380  
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Printed in TK

Typeface: Garamond Premiere Pro

Cover photograph: The vast salt marsh of Grand Bay Savanna,  
Mobile County. Courtesy of Hunter Nichols/Hunter Nichols  
Productions.

Design: Michele Myatt Quinn

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The paper on which this book is printed meets the minimum  
requirements of American National Standard for Information  
Sciences—Permanence of Paper for Printed Library Materials, ANSI  
Z39.48-1984.

<CIP data to come>



*Research for this work was supported by the World Wildlife Fund.*



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For all who labor to protect  
and restore Alabama's biodiversity  
so future generations can enjoy  
the state's extraordinary natural heritage

The objective is to teach the student to see the land,  
to understand what he sees, and enjoy what he understands.

—ALDO LEOPOLD  
“The Role of Wildlife in a Liberal Education”  
1942

## FOREWORD

EDWARD O. WILSON

In this one book, Scot Duncan has brought to a new level the understanding and aesthetic appreciation of Alabama's living heritage. This is no ordinary descriptive work. Alabama is near the top among US states for biological diversity, a result, Duncan makes clear, of its good fortune to have both a complex geology and a benevolent climate. Given that its fauna and flora remain some of the least explored by scientists, Alabama may one day be recognized as the most biologically diverse state in America.

Duncan gives us an exciting introduction to some of the more interesting inhabitants of Alabama. Alabama Beach Mice, West Indian Manatees, Black Bear, Red-cockaded Woodpeckers, Red Crossbills, Alabama Sturgeons, Paddlefish, Pygmy Sculpins, Bull Sharks, Alabama Cave Fish, Two-toed Amphiumas, Cahaba Lilies, White-topped Pitcher Plants, Red Hills Azaleas, and Smallhead Blazing Star are among those pulled out of a very long roster by Duncan for special mention.

Many new species continue to be discovered. Duncan cites a glade along the Cahaba River which, over a few months' study, yielded eight new plant species and dozens of others that are rare and likely to be endangered. One of the latter, the Dwarf Horse-nettle, had not been seen for over 150 years.

How many species of plants and animals in all are native to Alabama? I will venture the following guess based on studies in other, better studied parts of the United States: if all plant and animal species, the latter including insects and other invertebrates, were known, the number would exceed 100,000.

Part of the reason for such a high conjecture is the extraordinary diversity of habitats in Alabama. A major strength of Duncan's review of the fauna and flora is the detailed treatment he gives of the principal ecosystems, each of which harbors its own distinctive assemblage of species. He further shows—and as decisively as has been done for

any comparable region anywhere in the world—why it is necessary to know a lot about the soils, the water, the topography, and the geological history of Alabama, and some of the basic principles of its ecology, in order to understand fully the remarkable fauna and flora the state harbors.

This is a well-written book of Americana, made even more important by being the part hitherto least studied.

## ACKNOWLEDGMENTS

I have many to thank for contributions of encouragement, knowledge, and resources. Most importantly I thank my wife, Ginger, for her unflagging support and patience. I will be forever grateful to my parents, Bob and Lucy Duncan, for inoculating me with the profound love of nature from which I drew inspiration for this work. My dear friends Ann and Dan Forster contributed generously to the Nature Conservancy in support of this project.

The Alabama Chapter of the Nature Conservancy (TNC) aided me from day one. I am especially indebted to Chris Oberholster for his leadership in building financial support for the publication. Birmingham-Southern College facilitated this project through a one-semester sabbatical and a travel grant. Travel funding was also provided by the World Wildlife Federation through its Southeastern Rivers and Streams Support Fund.

I offer special thanks to Bill Finch for several days of touring TNC preserves with me and thoughtfully answering my many questions. I'm also grateful to the many others who took me on field expeditions, including Dwight Cooley (US Fish and Wildlife Service), Jeff Gardner (US Forest Service), Mark Hains (Longleaf Alliance), Francine and Bruce Hutchinson, Jack Johnston, Jim Lacefield, and Steve Miller (US Fish and Wildlife Service). I also want to thank the many I interviewed, including Forrest Bailey, Mark Bailey, Wayne Barger, Arvind Bhuta, Dave Borland, Ruth Carmichael, Doug Fears, Brittney Hughes, Paul Johnson, Bernie Kuhajda, James Lamb, Chris Oberholster, Al Schotz, Eric Soehren, Dan Spaulding, Sierra and Jimmy Stiles, and Keith Tassin. I also appreciate the two anonymous reviewers who provided insightful comments on the draft.

Alabama's nature photographers—both professional and amateur—are crucial to increasing appreciation of the state's natural beauty. Many of them donated images to the project, and though not all could be published, I am indebted to each contributor. I offer sincere thanks to a

new group that shows great promise, the Conservation Photographers of Alabama.

Finally, I wish to thank Beth Motherwell and the rest of the staff at the University of Alabama Press. Beth's guidance and zeal were vital to the success of this project.

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