Book Review

Ecosystems of Florida. Ronald L. Myers and John J. Ewel, Eds. Orlando: University of Florida Press, 1990. xviii and 756 pp., maps, diags., tables, photos, indexes, and refs. $75 cloth (ISBN 0-8130-1012-8); $29.95 paper (ISBN 0-810-1022-5).

This impressive volume owes its genesis to the Nongame Program of the Florida Game and Freshwater Fish Commission, which recognized a need for basic descriptions of the state's habitats as an aid to management. With the Commission's support, the book was planned at a workshop early in 1986. The objective that emerged from that workshop was to produce an introduction to the ecology of Florida's natural landscape that would be technically sound and up-to-date, and yet be accessible to the much larger non-scientific audience interested in the state's environments. The volume's thirty contributors were thus faced with a rather formidable task, and they are to be congratulated for their success in achieving the difficult balance between science and readability. The result of their collective efforts is a book certain to become a basic reference for the scientific community and an invaluable source of information for all who share a concern for Florida's natural environments and their preservation.

Ecosystems of Florida is organized in five parts. Part I begins with a general introduction to the book and to Florida, followed by chapters on climate, soils, and historical biogeography, essential background for understanding the diverse communities that make up the complex mosaic of the state's natural landscape. These background chapters are uniformly succinct, informative, and surprisingly readable. The chapter on soils, in particular, is something of a marvel—the authors having even managed to render transparent the often arcane vocabulary of soil science and classification.

Parts II, III, and IV represent the core of the book: detailed descriptions of thirteen ecosystems. Part II, Upland Ecosystems, includes pine flatwoods and dry prairies, scrub and high pine, temperate hardwood forests, and South Florida rockland. Part III covers Freshwater Wetlands and Aquatic Ecosystems: swamps, freshwater marshes, lakes, and rivers and springs. Part IV, Coastal Ecosystems, contains chapters on dunes and maritime forests, salt marshes, mangroves, inshore marine habitats, and coral reefs. The ecosystem chapters provide concise descriptions of the distribution, structure, and dynamics of the broadly defined ecosystems and of the often numerous sub-types included within them. The richness and diversity of these biotic communities is highlighted by extensive listings of the principal components of the flora and fauna, including special mention of threatened and endangered species. A prominent theme throughout is the importance of landscape alteration by both natural and human agency. Naturally occurring fire and the inexorable processes of biotic succession are shown to have long molded Florida's natural communities, but it has been the impact of human activities over the past two centuries that has most profoundly affected the landscape. The authors make the point repeatedly that the present-day distribution and composition of almost all Florida's ecosystems can only be understood against the background of deforestation, land clearing for agriculture, human induced fire, disruption of hydrologic regimes, and cultural eutrophication that has accompanied human settlement and development.

Another of the books recurring themes is the interrelationship between communities, with many being shown to depend for their very survival on their neighbors. The importance of these links between communities is further emphasized in the concluding section, Part V, Problems, Prospects, and Strategies for Conservation. Here the editors argue convincingly for an ecosystem-level approach to conservation, for the preservation of large tracts of the state's landscape mosaic, thereby maintaining both biotic communities and the interconnections they depend upon. Myers and Ewel also argue that although vast expanses of Florida's pre-settlement landscape have been lost, fragmented, or

dramatically altered, what remains is of great value and much of that can be saved. It is in this conservation effort, and the intensive biological management that it must surely include, that this book may make its most significant contribution. For, in *Ecosystems of Florida*, we now have a clear and comprehensive picture of the state's landscape and with it, perhaps for the first time, a view of the path to a possible future that would preserve the richness and diversity of this unique natural heritage.

The one disappointment in this otherwise outstanding volume is the uneven quality of the illustrations. The charts and diagrams are fine, clear and readable, but several maps have lost important areas of shading in reproduction, and some photographs are so dark and have so little contrast that they add nothing to the text. But these are minor annoyances that should not detract from the overall excellence of the book. Its usefulness as a source for students of Florida's landscape is greatly enhanced by nearly 2,000 references, a good general index, and separate indexes of common and scientific names. Without question, *Ecosystems of Florida* is destined to occupy a prominent place in the library of everyone, scientist and non-scientist alike, with an interest in the past, present, and future of the state's natural environment.

KEY WORDS: *ecosystems, biotic communities, Florida, conservation.*

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