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Ecosystems of Florida

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The pair of Bald Eagles at Kanapaha Prairie apparently benefited by having Cattle Egrets as a readily available food source in a pasture near their nest. Even though a nearby 16 ha permanent wetland contained catfish (*Ictalurus* spp.) (pers. obs.), the most common prey item in nests of Bald Eagles in northern Florida (McEwan and Hirth 1980), the eagles in this study appeared to rely primarily on avian prey. McEwan and Hirth (1980) noted specialization on Cattle Egrets by Bald Eagles nesting in pastures; Cattle Egrets comprised 10% of avian prey items found in 16 nests, but all egrets came from only three nests. My observations suggest that when Cattle Egrets are an abundant and nearby food source, nesting eagles may take advantage of this by shifting to a cooperative hunting strategy.

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REVIEW

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Ecosystems of Florida.—Ronald L. Myers and John J. Ewel (editors), with forward by Marjorie H. Carr, 1990. University of Central Florida Press, Orlando. ISBN 0-8130-1022-5. Soft Cover, 765 pages, 246 text figures (136 black-and-white photographs), 34 tables and 2 text appendices. \$31.00.—Prior to the publication of this book, no single reference existed reviewing the present state of knowledge of Florida's most important ecosystems. That void is now adequately filled. The book's major strong points are: 1) the text covers physical and climatic parameters of a variety of ecosystems, their faunal and floristic composition, habitat descriptions and their productivity or significance, and anthropogenic effects, 2) the text is well illustrated with ample photographs and illustrations, 3) the text is well written, indexed and edited, easy to read, and is directed at informed

laymen, students and professional audiences, and 4) the reference section is very good, enabling a reader to more fully research any topic covered in the text. I enjoyed reading this book and I am sure that I will continue to refer to it for many years to come. I highly recommend it for every library, personal or otherwise, on the natural history of Florida.

The editors subdivided the book into five logical parts. Their author choices for individual chapters were very appropriate. Part I, the Introduction, contains chapters on the history of human settlement, ecosystem classification, climate, soils, and historical biogeography. The climate chapter discusses not only seasonal patterns but why these patterns exist. The soil chapter addresses the relationships between soil types, distribution and water table characteristics. I found the portion on mechanisms explaining historic changes in soils helpful to me. The historical biogeography chapter certainly adds an important perspective to our present knowledge of Florida ecosystems and their distributions, a perspective frequently absent from books of this nature. Readers interested in the future effects of global climate change on Florida ecosystems will find this chapter particularly interesting. My only criticism of the introduction is that a stronger and clearer tie could have been demonstrated between seasonal rainfall and surface groundwater patterns.

Ecosystems are subdivided into three groups corresponding to Parts II through IV; Upland, Freshwater and Aquatic, and Coastal ecosystems. Most chapters on individual ecosystems include sections dealing with ecosystem distribution, fauna and flora, physical environment, associations, subclassifications, ecosystem attributes and processes and threats, when appropriate. I found most chapters to be very enlightening with only a few minor exceptions: 1) In the Freshwater Marshes chapter, I would like to have seen the ecosystem function section expanded to include the functions of ground and surface water storage and fisheries production; 2) I would like to see data about southern Florida ephemeral lakes added to the otherwise excellent discussion on Florida lakes; 3) the Rivers and Springs chapter seemed to lack the ecosystem level approach of most other chapters, but it does an excellent job of classifying and describing Florida's rivers and springs, 4) the Dunes and Maritime Forests text does not address how the type and volume of sediment supply available to a system may be reflected in topography and rates of habitat changes, and 5) I found the coverage of seagrass beds very limited in scope. Most of my criticisms are ones of minor omission and in many cases may reflect our present state of knowledge. These omissions are far outweighed by the wealth of data presented for each ecosystem.

Two central themes recur throughout the descriptions of each ecosystem: 1) the spatial distribution and/or habitat quality has declined historically, usually by direct means such as land use changes or indirectly by changes in water levels, fire frequency or other natural processes associated with adjacent land use activities, 2) active ecosystem management approaches will be required in order to preserve remaining ecosystems. Certainly one of the highlights of this text is the appropriate use of photographs and illustrations to visualize points such as succession or habitat distribution.

In summary, *Ecosystems of Florida* is a very professional approach to providing a diverse group of readers an up-to-date understanding of the types and distributions of ecosystems prevalent in Florida, their unique physical requirements and associated animal and plant life, their functions, and the threats against their future survival; a very large task, well done.—**John F. Meeder**, National Audubon Society, 115 Indian Mound Trail, Tavernier, Florida 33070.