

Birds at risk. Ralph Whitlock. Moonraker Press, Bradford-on-Avon, Wiltshire, England. Distributed in U.S.A. by Humanities Press, Atlantic Highlands, N.J. 1981. 159 pp. \$30.00.

The theme of this well-illustrated book is best described by its subtitle, "A comprehensive World-survey of threatened species." Whitlock's survey, however, is not restricted to a catalogue of species in trouble, but also examines causes of declines and adaptations that help some species escape depletion. The role of Man in accelerating losses is emphasized continuously and the author notes the important fact that every bird species is threatened to some extent. Although most of the photographs and paintings are of species generally regarded as endangered, a few (e.g. White-winged Dove, Common Raven) are abundant in some places, but rare elsewhere.

Understanding the factors, both "natural" and Man-induced, that cause declines in a species can often best be seen in hindsight, and the first two chapters deal primarily with extinct and probably extinct species. In his introduction, Whitlock poses the interesting possibility that many early extinctions, such as *Teratornis*, a giant vulture, were hastened by primitive Man. The next chapter, "Failures," catalogues species and races of birds that have been lost in historic times. The third chapter then surveys species with restricted ranges, especially those confined to islands. The next two chapters consider factors causing declines, including both direct effects of Man and such indirect effects as habitat changes, introductions of predators and competitors, and occasional natural events. Two final chapters consider adaptations which help birds avoid extinction, biological factors hastening declines, and the role of management or lack thereof in tipping the balance in either direction. The book concludes with a short bibliography and an index.

The many illustrations (photographs and paintings) suggest an appeal to the "coffee table" trade, but this book has far more substance than most books intended for that market. Its only major fault is the bibliography which contains no journal papers, and lacks many major books on this topic, such as Schorger's treatise on the Passenger Pigeon. Nevertheless, the books listed should lead the interested reader into the primary literature. As the author is British, one may expect a European slant, and indeed one finds such terms as

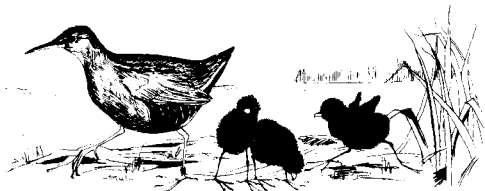
"Swallow" for *Hirundo rustica* as if the family is monospecific, Yellowshanks for yellowlegs (even in reference to North America) and "nearly related" birds, where we would use "closely related." But these examples of divergent evolution in the English language do not mean that the author is not up-to-date on North American events. The 1980 eruption of Mt. St. Helen's is mentioned, as is the recent discovery of probable breeding by Kirtland's Warbler in Ontario, outside its better-known Michigan breeding population. There are a few lapses. The Giant Canada Goose is listed as extinct in spite of the long-established and well published rediscovery of this race as the main breeding race of the northern prairies on this continent. Reference to the diet of the Dodo suggest that the author was not aware of the interesting story of the tambalacoque, or "Dodo tree," a plant whose decline has been attributed to the extinction of the Dodo whose digestive juices were apparently necessary in breaking down the hard outer coating of its seed in order for germination to take place. A few other details are also now out-of-date only because of events too recent to be included. The "less than 500" (p. 76) Dusky Seaside Sparrows have now declined to a handful of males, and the race is virtually extinct. Efforts by the Phillipine government to reduce negative attitudes toward the Monkey-eating Eagle by renaming it the Phillipine Eagle are also not mentioned.

A few statements may be either misleading or premature. While it is true that the Great Auk resembled penguins and old chronicles refer to it as such, the implication in the wording that auks were called penguins because of this similarity should be reversed — it was the resemblance of penguins to the Great Auk that resulted in the name currently applied to the penguins, and indeed the Great Auk's Latin name remains *Pinguinus*! In light of evidence that Loggerhead Shrike declines in parts of North America may relate to pesticide levels, I wonder if this factor was considered in declines of Wryneck and Red-backed Shrikes in Britain before attributing these declines to "natural" causes.

The few lapses in this book do not detract from its overall high quality. This is an excellent summary of a complex and tragic subject that should appeal to serious workers wanting a general summary of information on birds at risk and also to more casual readers not previously aware of the extent of threats to birds.

There are no direct references to banding (unless you count the bands in photographs of Flightless Cormorant, Cereopsis, and Seychelles Fody), but the subject should nevertheless be of concern to all banders — after all, we need birds to band! The price will be beyond the budget of some, but if you are considering a coffee table book as a gift to a friend, this would then seem a better buy.

Martin K. McNicholl



Freshwater Marshes: Ecology and Wildlife Management. Milton W. Weller. 1981. Univ. of Minnesota Press. Minneapolis. xv+146 pp. cloth; \$22.50, paper: \$8.00.

Milton Weller is best known for his research on waterfowl, many species of which breed in marshes. His work on ducks has been primarily ecologically slanted, and naturally led to research on marsh ecology in general. In this book, Weller has combined his own extensive marsh experience with that of his published colleagues to produce a useful summary of marsh ecology in general.

In his preface, the author states that the book is intended as an introduction for lay people, students, and professionals who work in habitats other than marshes. This is accomplished in ten chapters in which marshes are treated as a unit and various components of that unit are discussed individually. Considerable emphasis is placed on dynamics of the marsh ecosystem, interactions among species, and the importance of diversity. He treats marshes as habitat islands and underlines the importance of marshes to surrounding habitats, natural or man-made. Weller also stresses the increasing need for marsh management and the importance

of preserving the natural *instability* of marsh habitats in order to maintain their diversity. An epilogue is used as a plea to readers to become involved in marsh preservation. Two brief appendices outline elementary study techniques and management of duck hunting and furbearing areas, and a third lists scientific names of some of the taxa mentioned in the text. Unfortunately, the techniques appendix does not include capture techniques.

Weller warns that the marsh researcher may be disappointed in the elementary nature of the text, but I thought that the book provided a very useful overview of marsh ecology which can serve marsh researchers as a handy reference source. Weller's straightforward writing style helps him accomplish his main goal of introducing the basic principles of marsh ecology to novices in this field. The book is illustrated well, with both black-and-white and color photographs, as well as line drawings.

I would have preferred less emphasis on mid-western U.S. and Canadian prairie pothole marshes. While these are the areas of fresh-water marshes that Weller knows best, considerable work that has been done in Europe and elsewhere would have added to the value of the book. However, Weller's text is rarely marred by his restricted geographical emphasis. He occasionally over-generalizes, such as when he states that Leopard Frogs and American Toads dominate marsh night sounds. Night herons are depicted in the figure on p. 37 as a tree-nesting species, which they are in parts of their range, but no mention is made of their floating nests in treeless marshes. I did not detect any actual errors of fact, and also found the book almost free of typographical errors. The Latin name for Mink is mistakenly given as *Mustella vision* instead of *M. vison* on p. 123. The list of literature is not a complete bibliography, but does provide 231 references which the reader can consult, including several of the author's more technical papers.

Naturalists who do not work in marshes will find this book a pleasant introduction to marsh ecology. Marsh ecologists, including those who work in brackish areas, will find this a handy summary of basic principles. As there is no reference in the book to banding or capture techniques, its interest to banders will be confined to their related study and conservation activities.

Martin K. McNicholl