adelphia Vireo, a Connecticut Warbler, and a Lincoln's Sparrow.

HURRICANE DAVID: John O. Fussell III and Alice Allen-Grimes are summarizing records associated with this major tropical storm. Their paper is scheduled to appear in the Summer 1980 *Chat.*

BOOK REVIEWS

THE BACKYARD BIRD WATCHER

George H. Harrison. 1979. Simon and Schuster, New York. 200 photos in color and black-and-white; many drawings. 284 p. Price N.A.

This is primarily a book for the beginner or the more experienced observer who wants to make a true sanctuary of his own yard. There are detailed plans for landscaping, with specifics on plants attractive to birds as well as on construction and placement of feeders, birdhouses, and watering spots. There are helpful chapters on caring for injured birds (with a warning that "orphan" birds should often be left alone) and on bird photography. There is a list of "Organizations of Interest to Birders," which includes only two State bird clubs, as well as other lists of book publishers and of manufacturers of equipment. George Harrison is the son of the better-known Hal Harrison.—LCF

A FIELD GUIDE TO THE SEABIRDS OF BRITAIN AND THE WORLD

Gerald Tuck and Hermann Heinzel. 1978. Wm. Collins Son & Co., Ltd., Glasgow. 292 p. Illus. Index. $8.00.

Not since Alexander's *Birds of the Ocean* (1954) has any volume attempted to cover all the world's seabirds. In view of the increased interest in oceanic birds, the book reviewed here is certainly needed. Over 280 species of seabirds are described, illustrated, and mapped to indicate their breeding and nonbreeding distributions. Additionally, a short, well-organized introduction provides information on seabird characteristics and feeding habits, pointers on identification of family groups, and some common-sense discussion on treatment of injured and oiled birds. The last 25 pages compose a section on the seabirds of the British Isles by John Parslow (thus the seemingly odd title).

The descriptions are not verbatim ones from already existing guides, and they may help bird students in further sorting out possibilities of species seen at sea. However, it is possible that the additional text that is needed to distinguish all the world species of a particular bird group may in fact further compound the problems beginners must face. The difficulty is further magnified by discussions of subspecies and the use of different common names for them. It is hoped that authors and journal editors will not regularly return to subspecific distinctions based on sight or photographic identifications. Many obvious field marks are omitted (e.g. neck ring of Bridled Tern) from the text, and the illustrations are generally inferior to those found in American field guides. Indiscriminant users could come up with some rather strange seabird identifications if they rely upon the Tuck and Heinzel guide as their only reference.

Perhaps the most valuable contribution this book could have made was its inclusion of distribution maps. These allow the reader to see at a glance the worldwide distributions of each seabird, including all the recorded nesting areas. The maps would have proven extremely useful and not simply of casual visual interest if they had been carefully researched. With the wealth of literature available on seabirds, there seems

little excuse for range maps that show Black Terns nesting south to western North Carolina, Sooty Terns nesting throughout Florida, or the complete absence of breeding Sandwich Terns—but solid occurrence of breeding Double-crested Cormorants—along the entire Atlantic coast. (This list could be extended considerably.) These distributions have been known, documented, and mapped for decades. Such blatant errors make me wonder how well the breeding ranges of less familiar species are depicted. The poor representation of distribution at sea is much easier to understand, but it has been some time since we have known that Cory's Shearwaters occur regularly off the North American coast and that Northern Gannets are found south of Cape Hatteras, contrary to what the maps indicate.

Nevertheless, this book does make an excellent supplementary reference source because there is much information here that is not readily available elsewhere. This useful and needed book should prove helpful to those who recognize its shortcomings.—DAVID S. LEE

AMPHIBIANS AND REPTILES OF THE CAROLINAS AND VIRGINIA

Bernard S. Martoff, William M. Palmer, Joseph R. Bailey, and Julian R. Harrison III. Photographs by Jack Dermid. 1980. The University of North Carolin Press, Chapel Hill. 264 p. Illus. with 196 color photographs, black-and-white range maps. Glossary. Index. $14.95

Is it possible to become a bird watcher without also becoming at least casually acquainted with some of the reptiles and amphibians that inhabit the best birding places? Often we must listen closely to distinguish between the voice of the Gray Treefrog and the Red-bellied Woodpecker. Sometimes we need to identify the snake robbing a nest or the amphibian being consumed by a bird. Unfortunately, the critters we see in the field seldom look just like the illustrations in the field guides. Now we have a book that emphasizes the variations in the reptiles and amphibians found in the Carolinas and Virginia. The excellent photographs (often two or more of given species), up-to-date range maps, and well-written text make this book a joy to read whether you are looking up one particular species or spending an evening with the work. In addition to identification and range, the 159 species accounts include information on habitat preference, life history, food habits, and general biology. Technical terms are used when needed, but the text as a whole is blessedly free from jargon and confusing language. Although professional biologists will welcome this book, it is basically for the layman. A copy should be in every school and public library in the region covered as well as in the private collection of everyone who is interested in the natural history of the Carolinas and Virginia.—EFP

AUDUBON

John Chancellor. 1978. The Viking Press, New York. 16 color pages, many black-and-white illustrations. 224 p. Index. $17.95.

In the foreword of *Audubon*, a biography lacking depth and literary merit, John Chancellor promises, "Readers will find that he becomes steadily more unattractive as the book progresses . . . ." Chancellor does his best to make good his promise, but in the end it is Chancellor, not Audubon, who goes down the drain.

For example: On the last day of 1820 Audubon discovered after boarding a Mississippi steamboat that a portfolio of his watercolors was missing. He wrote, "The portfolio was nowhere to be found, and I recollected that I had brought it under my arm to the margin of the stream, and there left it to the care of my friend's servants, who, in the hurry of our departure, had neglected to take it aboard." Now, watch Chancellor distort the incident: "His spirits were low because he had lost somewhere in Natchez—perhaps in a brothel or gambling den—a portfolio containing some of the drawings

which he had done since leaving Cincinnatti." Having associated Audubon with prostitutes and gamblers, Chancellor drives the point home by inserting an illustration of Natchez bearing the caption, " The town of Natchez on the Mississippi, a rough place notorious for its gambling dens and whore-houses."

In support of his nasty insinuation Chancellor cites no evidence, though certainly this axe-grinding author would document such charges if he could. I find other equally egregious examples of bias and doubtful scholarship, beginning on the first page of Chapter I where he suggests Audubon is sadistic, or at least heartless, to suffering birds. Unfortunately, dealing with all of Chancellor's perversions of history would take more space than is available for a short review. Suffice it to say, anyone who feels compelled to read this book should be on guard.

Chancellor deals carelessly with facts. He states that Audubon visited Texas in the 1831-1834 period; Audubon didn't visit Texas until 1837. He states that Audubon tried to prove that vultures find food by their sense of spell. Later, writing about the same experiment, he claims that Audubon tried to prove that vultures find food by their sense of sight. Mistakes in this book are as commonplace as House Sparrows, and without their charm.

Audubon is too costly, particularly when one considers that the text occupies only about two thirds of each page, and that many of the illustrations shed little light on the artist's life and works. But then again, we should feel grateful for the blank paper and pointless pictures; to that extent we are spared exposure to Chancellor.—JAY SHULER

RARE AND ENDANGERED BIOTA OF FLORIDA: VOLUME TWO, BIRDS

Peter C.H. Pritchard, series editor; Herbert W. Kale II, editor of Volume Two. 1978. University Presses of Florida, 15 N.W. 15th Street, Gainesville, Fla. 32603. 121 p. Illus. 7½ x 10½ inches. Paperback. $7.

Findings of the Florida Committee on Rare and Endangered Plants and Animals are being published in seven volumes. Volumes on mammals, birds, amphibians and reptiles, and fishes are now available; those dealing with plants, invertebrates, and recommendations and liaison are still in preparation.

The 74 avian taxonomic forms discussed in Volume Two are divided into seven categories: endangered (11), threatened (13), rare (11), species of special concern (29), status undetermined (5), recently extirpated (3), and recently extinct (2). The cover appropriately features a color photograph by Paul W. Sykes Jr. of the endangered Florida Everglade Kite. Introductory material provides general information on Florida birdlife and conservation problems, describes the major terrestrial and wetland habitats of the state, and defines the status categories.

Except for extirpated and extinct birds, each account includes the status, common name, scientific name, family, order, other names, description, range, habitat, life history and ecology, specialized or unique characteristics, basis of status classification, recommendations, selected references, and range map. Many accounts have black-and-white pictures of the birds or their habitat. Names of authors appear at the end of each article.

Most of the Florida birds that are in serious trouble frequent freshwater marshes and wet prairies or the immensely long coastal region, including the sandy beaches, sand and mud flats, coastal marshes, and mangrove swamps. The prairie region is the center of Florida's cattle production. Although native grasses and wet areas are being lost through pasture improvement projects, the prairie region is in no danger of being covered with buildings and parking lots. Most of the coastal strip can be made suitable for intensive development, particularly for lucrative resorts, hotels, and recreational facilities. Not only does the original construction—often involving draining, filling, and

stream channelization—destroy nesting and feeding habitat, but also the influx of people leads to much thoughtless disturbance of nearby breeding colonies by fishermen, picnickers, curious nature lovers, beach buggies, and roaming pets. Fortunately, much prime wetland habitat lies within protected areas such as Everglades National Park, Corkscrew Sanctuary, and Pelican Island, Merritt Island, and Loxahatchie National Wildlife Refuges. Unfortunately, unwise manipulation of water resources in adjacent regions can create feeding problems for birds whose nesting sites are rigorously protected. This is especially true for the Wood Stork, which continues to decline in south Florida because of consistent nesting failures since 1960 even in Everglades National Park and Corkscrew Sanctuary.

Studying the individual accounts brings home to the reader a basic truth stated by Dr. Kale in his introduction: "The preservation of wildlife involves the preservation of suitable habitat. The majority of the species on the FCREPA List are not there as a result of direct persecution by man, but because of man's destruction or alteration of habitat or some critical factor in the environment of these species." This idea is further emphasized in the Southern Bald Eagle account by David W. Peterson and William B. Robertson Jr. They point out that shooting Bald Eagles is now considered socially unacceptable, but the bulldozing of unoccupied nest trees still occurs all too often. They imply that the Bald Eagle cannot long continue to nest in Florida outside public lands unless developers can be made to feel that destroying an eyrie is just as unacceptable as killing the birds outright. Are we approaching the stage when public opinion can convince a land developer that having a pair of eagles nesting in the neighborhood is a good sales point?

Certainly public awareness of the plight of endangered and threatened birds is an important aspect of the recommendations made by FCREPA. Educate children not to take owlets as pets, which is a great temptation where Burrowing Owls nest close to homes and schools. Educate ranchers to appreciate Caracaras and to preserve their habitat. Educate beach users to remain a safe distance from nesting colonies, preferably by posting sites with interpretive signs that will elicit enthusiastic cooperation. Educate foresters to leave tracts of mature pines to provide feeding areas and replacement cavity trees for Red-cockaded Woodpeckers. Educate fishermen to remove their gear from entangled birds, particularly Brown Pelicans. Educate people to report events that endanger wildlife populations.

For some taxa, the bird committee suggests relatively simple and inexpensive habitat restoration, preservation, or improvement practices. But for others, knowledge of feeding habits, nesting behavior, population trends, and habitat requirements is too scanty to permit any recommendation other than an urgent plea for further studies. The toughest problems are, of course, the ones that can be solved only through basic and widespread changes in the management of wetlands and water resources. We can only hope that publication of this report will result in positive action on the committee's many realistic, practical, and vitally important recommendations.—EFP

SOME ADAPTATIONS OF MARSH-NESTING BLACKBIRDS

Gordon H. Orians. 1960. Princeton University Press, Princeton, New Jersey. 295 p. Illus. Index. $18.00 cloth, $7.95 paper.

Professor Orians uses models derived from Darwin's theories of natural selection to predict the behavior and morphology of individual blackbirds as well as the statistical properties of their populations. This book, for the most part, is difficult reading for everyone except the professional biologist with a good background in statistics. It is mentioned here primarily to bring to the attention of advanced bird students the existence of a fine series of Monographs in Population Biology, of which the present volume is the fourteenth. Other works in the series include *The Theory of Island*

Biogeography by Robert H. MacArthur and Edward O. Wilson. *Populations in a Seasonal Environment* by Stephen D. Fretwell (formerly a graduate student at North Carolina State University), and *Food Webs and Niche Space* by Joel E. Cohen. Books such as these have a limited readership, but they may profoundly influence the thinking of the next generation of biologists.—EFP

EAGLES HAVE BAD BREATH
Or How To Identify Birds without knowing anything about them

Jack Aulis. 1980. Privately published, Raleigh, N.C. 32 p. Illustrated with woodcuts by Lois H. Aulis. Paperback. $4.00 ($4.40 postpaid with tax from Eagle's Breath, P.O. Box 5114, Raleigh, N.C. 27650).

As the title clearly indicates, this book deals with the lighter side of bird watching. Aulis describes the Eastern Bluebird as "fittingly clad in the national colors"—blue, rust, and dirty-white. Of the female House Sparrow he says, "She knows not the pill. Nor cares." His nuthatches go "Down the Up tree trunk." And why do eagles have bad breath? Well, just think about their feeding habits.

If you are looking for something to cheer the ailing naturalist, this is it. One word of caution: Don't take a copy to anyone who has had abdominal surgery until you are sure the patient can enjoy a good belly laugh.—EFP

HOW TO CONTROL HOUSE SPARROWS

Don Grussing. 1980. Roseville Publishing House, P.O. Box 8083, Roseville, Minnesota 55113. 52 p. Paperback. $3.95 ppd.

Although the author freely admits that there is no quick and easy solution to the problem of excessive House Sparrows and Starlings, he indicates that diligent application of one or more of his suggested control methods will greatly reduce the local population of these troublesome birds. Grussing points out that improperly maintained martin houses can become sparrow slums and suggests ways to keep House Sparrows from competing with Purple Martins. He says that certain foods (e.g. millet, cracked corn, breadcrumbs) attract House Sparrows and are not preferred by native songbirds. Just switching to sunflower seeds may discourage House Sparrows from dining at your feeder. If the relatively simple control methods do not work, some of the more aggressive techniques may be effective. Two traps are illustrated, and trapping methods are discussed in detail. Use of guns and poisons is mentioned, but discouraged because the dangers to neighbors, pets, and protected birds generally outweigh the benefit of destroying a few House Sparrows and Starlings. In the long run, the most satisfactory methods seem to involve making the neighborhood unsuitable for the feeding, nesting, and roosting of the unwanted species. For city dwellers this kind of program frequently requires the tactful education of neighbors who "love the birds" but can't tell one species from another. Indeed, there is no quick and easy solution, but a thoughtful reading of Grussing's booklet may improve your chances for success in the war against House Sparrows.—EFP

ENDANGERED AND THREATENED WILDLIFE OF KENTUCKY, NORTH CAROLINA, SOUTH CAROLINA, AND TENNESSEE

Warren Parker and Laura Dixon. 1980. U.S. Fish and Wildlife Service and the Cooperative Extension Service of the four state departments of agriculture. 116 p. Illus. Glossary. Paperback. Available free of charge from county extension agents, state extension service, state game and fish agency, or U.S. Fish and Wildlife Service, Asheville, N.C.

The list of endangered and threatened mammals, birds, fishes, reptiles and amphibians, mollusks, and plants is said to be correct as of October 1979. For each species there is a color photograph or drawing and text having the following topic headings: status, description, distribution, habitat and characteristics, and remarks. Where appropriate, there is a regional range map. A very helpful scale in inches and millimeters is provided for the photos of mussel shells. Seven endangered avian species are included: Peregrine Falcon (two races), Bald Eagle, Bachman's Warbler, Kirtland's Warbler, Brown Pelican (eastern race), Ivory-billed Woodpecker, and Red-cockaded Woodpecker. The range maps are the weakest feature in the book. For example, the range map for the Eastern Indigo Snake shows the race in extreme southern South Carolina without specifying, as does the text, that the area is in its historic range but not in its present-day range. A question mark would have been appropriate in the perfectly oval and obviously hypothetical South Carolina range of the Ivory-billed Woodpecker. Or, better yet, why not show the historic range with dots for modern sight reports? The two Peregrine Falcon range maps are at best confusing. Nevertheless, this is an attractive and informative booklet that should appeal to the general public.—EFP

CORRECTION: In a review of *Penguins* by Roger Tory Peterson (Chat 44:28), the writer inadvertently used *Arctic* where *Antarctic* obviously was intended.—ED.

BACKYARD BIRDING

(Continued from Page 38)

unafraid, and I am permitted to see behavior I would miss on a field trip. Perhaps one of the most interesting experiences is watching the behavior of juvenile birds. Once on their own, so to speak, they learn about their world. Some young birds display a great deal of curiosity. They use their mouths much as a human baby does to test things for edibility. They try out foods not normally associated with their species. They show interest in what other birds, the adults of their own or other species, are doing. I recall, for instance, watching a young Blue Jay fly up in a tree to look over a juvenile Red-headed Woodpecker that had appeared on the scene. The jay looked it over form all angles. Another time there were several Brown-headed Nuthatches making quite a fuss up in a pine. A young Cardinal flew up to investigate. Young birds play, running about and chasing each other, apparently just for fun and exercise. Once I saw a juvenile Carolina Wren watching an adult chipmunk gathering nuts and seeds. The bird made an attempt to chase the chipmunk, apparently inviting it to play. Of course the chipmunk was not interested. Another thing that has been fascinating to observe is what the young birds fear by instinct. They all appear to recognize the cat as an enemy, but ignore squirrels, chipmunks, and rabbits. Dogs cause them to get to a safe perch, but they do not scold them as they do a cat.

There is so much to see in your own backyard that I could not begin to tell the half of it. Just when one begins to tire of the same old birds doing the same old thing, the season changes—new birds come along, old ones leave, resident birds take up new activities.

If you know your everyday, garden variety of birds well, then you do not waste valuable time on a field trip (where you want to see something different, new, or unusual) tracking down a towhee or thrasher. When leaves are out on trees and thickets are dense, birding by ear makes the task so much easier and releases one to study the birds whose calls and songs are unfamiliar. Backyard birding is an excellent training ground for bird study of any kind. It can be interesting, exciting, and informative. Backyard birding is what *you* make it. So, if you haven't tried it, don't knock it!