

# BIRDERS' BOOKSHELF

**The Atlas of Breeding Birds of Vermont**  
 Edited by Sarah B. Laughlin and  
 Douglas P. Kibbe. University Press of  
 New England, Hanover, New Hamp-  
 shire. 1985. 480 pp, maps. Hardbound  
 only \$45.

IT'S THE FIRST OF ITS KIND IN North America, and it's good! *The Atlas of Breeding Birds of Vermont* is the culmination of a monumental task—a six-year (1976–1981) study of the distribution of summer birds throughout Vermont. While looking through this publication we occasionally find ourselves forgetting the years of effort by hundreds of individuals that went into data collection for the project. The process of creating a breeding bird atlas is itself enough to make its publication remarkable.

By definition, an atlas is a volume of maps. To this end, the Vermont atlas is superb. The reader must remember, though, what each dot on those maps represents—much effort by a birder, more than likely a volunteer, either professional or amateur, contributing to a very important work. If one compares the maps in the Atlas with range maps in the prominent field guides by the

“ . . . the first in a new generation of wildlife volumes.”

National Geographic, The National Audubon Society's Master Guides, R.T. Peterson, or C.S. Robbins, one realizes immediately the clear value of the atlas project—its detail. For example, Lincoln's Sparrow does not appear to be nesting in southern Vermont according to the popular field guides, but sure enough it is.

The Vermont Atlas is much more than a volume of maps, however. “How else can it be used?” one might ask. Considering there was not a single, complete resource available about the breeding birds of Vermont, the authors

## Eastern Screech-Owl

The Eastern Screech-Owl is a tiny bundle of ferocity. Roughly 40 cm (16 in) tall, in spite of its small size it survives the rigors of the winters in the northern part of its range. This species of screech-owl breeds along the length of eastern North America northward to southern Canada, and it usually is a permanent resident within its range (Van Camp and Henry 1975). Appropriate habitat consists of old apple orchards, stream edges, woodlots, and villages. In Massachusetts, small hardwood forests were found to be a preferred habitat (Andrews and Komar 1982). Hollows in trees, old woodpecker holes, or nest boxes are a necessary both for breeding and winter roosting.

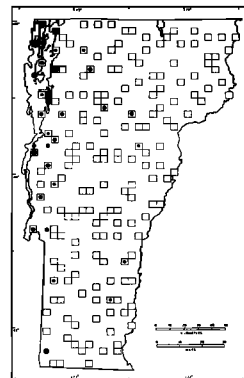
The Eastern Screech-Owl is named for its voice, which in fact resembles a trill or a quaver rather than a screech. Eastern Screech-Owls will eat what they can catch, their diet consists of small mammals—especially mice—insects, birds, amphibians, and even fish and reptiles (Ervington 1933, Bent 1938). In some areas songbirds appear to be an important part of the prey caught for the young (Allen 1944, Van Camp and Henry 1975), which may explain the intense mobbing response songbirds display at the sight of a screech-owl.

The Eastern Screech-Owl was apparently common in Vermont in the nineteenth century (Thompson 1833, Cutting 1884, Forrester et al. 1931, 6244 records). Smith (1934b) called it a fairly common resident locally at low altitudes, and uncommon elsewhere. Spear (1976) detected a population decline from the 1940s to the 1970s. Before laws protected birds of prey, the screech-owl was an easy target for snare traps because of its habit, when roosting in the open, of pulling itself up into a stiff dead-stub position, narrowing its eyes to slits, and resting its its immobility. The regeneration of Vermont's forests undoubtedly eliminated many of the small, separate woodlots used for nesting in the last century. Although insecticides have been suggested as a reason for the species'



decline, Van Camp and Henry's (1975) study of screech-owls in Ohio detected no eggshell thinning.

The Atlas Project determined that the screech-owl is presently distributed over much of its former Vermont range. The species occurs in all physiographic regions except the Northeast Highlands, and its core of abundance is the Champlain Lowlands. This distribution agrees with that indicated by *Records of Vermont Birds for 1973–83*, in which 76% of all reports received in the those 10 years were from the Champlain Valley, with concentrations in Ferrisburg, Burlington, Dead Creek, and Middlebury. Eastern Screech-Owls occur in two color phases, a gray-phase and a red-phase, which are not related to age or sex. Studies in Ohio have shown that gray-phase individuals are better able to withstand severe winters. The red-phase birds, which have significantly higher metabolic requirements in temperatures below -15°C (5°F), experienced a sharp population drop during severe winters (Van Camp and Henry 1975, Mosher and Henry 1976). From 1973 to 1981, *Records of Vermont Birds* reported only 2 red-phase birds in a North Ferrisburg cow barn on February 13, 1978, and 1 found dead in North Hartland on December 13, 1978. Eastern Screech-Owls have been recorded calling in every month of the year in Vermont (Bent, 1971–81), although calling peaks in the spring breeding season (Atlas



No. of primary blocks in which recorded 10744 (43 14%)

Possible breeding 11 (14% of total)  
 Possible roosting 10 (14% of total)  
 Confirmed breeding 11 (14% of total)

Physiographic regions in which recorded

Region	1973-83	1976-81	Total
Champlain Lowlands	10	41	51
Green Mountains	1	2	3
North Central	1	1	2
Northern Highlands	1	1	2
East Central	1	1	2
Taconic Mountains	1	1	2
Eastern Townships	1	1	2

Project workers most frequently detected the species by hearing the territorial call (1) Courtesey begins in February, with the pair sitting as close together as possible and preening each other (Bent 1938). The 4 or 5 eggs (out of a range of 2 to 8) are laid in the evening hollow at intervals of 1 or 3 days, incubation begins usually with the first egg (Bent 1938; Terres 1986). The male feeds the female while she incubates, the young hatch after a 26-day incubation period (Sherman 1911), which is usually between April 15 and May 5 in Ohio (Van Camp and Henry 1975). Both parents feed the young (Allen 1944), which fledge in late May or early June in Ohio (Van Camp and

Henry 1975). The young remain dependent on the parents for food for some time afterward.

The Atlas Project established that the Eastern Screech-Owl has an apparently stable population in Vermont, especially in the Champlain Lowlands, and that it is a healthier population than many Vermont ornithologists would have predicted. The screech-owl appears to be recovering in Vermont from its decline earlier this century.

SARAH B. LAUGHLIN

Eastern Screech-Owl 133

## Sample pages from "The Atlas of Breeding Birds of Vermont."

have done an extraordinary job of collecting natural history information, nesting information (from Vermont and from other New England states and New York when none was found for Vermont), and historical information for each species. The book is invaluable

one becomes familiar with the maps, one begins to notice the areas to visit if looking for northern species, or high elevational species. Using the Atlas could certainly help in planning a fascinating summer birding expedition. But for a non-Vermont, and probably some Vermonters as well, it is impossible to determine exactly where the survey blocks are located. A transparent overlay map of county outlines is provided, but no real help is available for precisely locating blocks within counties. In the text, mention of a specific location is not very useful to those with little or no knowledge of the state. Perhaps some kind of guide to locations could be included in future atlases. A “gazetteer” might be one solution to this problem.

If one is reading this atlas to find extensive interpretations or inferences about factors which influence the distributions of Vermont's breeding birds, disappointment is in store. Although transparent overlay maps showing geographical and ecological information are provided, most species accounts offer only limited interpretations of how

to anyone interested in the natural history of birds. The references cited are impressive in number—over 700 references spanning a period from 1842 to 1984. The authors and editors are to be complimented for their thorough research into the published literature about the birds of Vermont.

The Atlas also can be used as a guide to good birding areas in Vermont, if one is willing to spend a little time with it. There are habitats identified, namely, “Unique” and “Fragile” areas, which were inventoried because of their special avifauna, or potential for it. Also, once

such factors might be important in shaping the distributions of species in Vermont, and little emphasis is given to new information that was learned about individual species, special habitats, or critical areas as a result of the atlas. The inclusion of eight outline maps on four transparent overlays is helpful for relating various geographic attributes to the distributions of birds. But the printing of two maps on each  $7\frac{3}{4} \times 6$ " overlay page is awkward, since it limits and oftentimes precludes manually overlaying certain combinations of transparencies upon a single map of breeding distribution for a species. For example, since they occur side-by-side on the same transparency, one cannot simultaneously overlay the map of Vegetation Regions with that for Drainage and Wetlands. Some readers may have sufficient background to draw conclusions from the geographic information included on the overlays, but many may not. On the other hand, there may be little direct correlation between some geographic parameters and bird distributions. It will be unfortunate if atlases published in the future include similar overlays but fail to draw conclusions from them. If nothing can be learned from them, why include them? The production of transparent overlays definitely increases the cost of publishing an atlas.

Some statements in the species accounts are puzzling. For example, it's unclear how atlas data can establish that "the Eastern Screech-Owl has an apparently stable population in Vermont" as suggested on p. 133. Also, the rather casual handling of important ecological concepts is lamentable. For example, does the statement, "the Loggerhead Shrike helps fill an ecological niche left vacant by larger raptorial species." (p. 260) really have any meaning or validity given the degree to which the feeding habits of the shrike and larger raptors differ. Rather, it reflects an inaccurate understanding of current ecological principles and really contributes little to the species account for Loggerhead Shrike. Other species accounts (e.g., thrushes, vireos, and some warblers) report rather uncritically on published "evidence" of presumed competition among species, currently an area of considerable controversy and debate among ecologists. More cautious handling of the presentation and discussion of ecological concepts like niche and

competition among species would have served the average reader better.

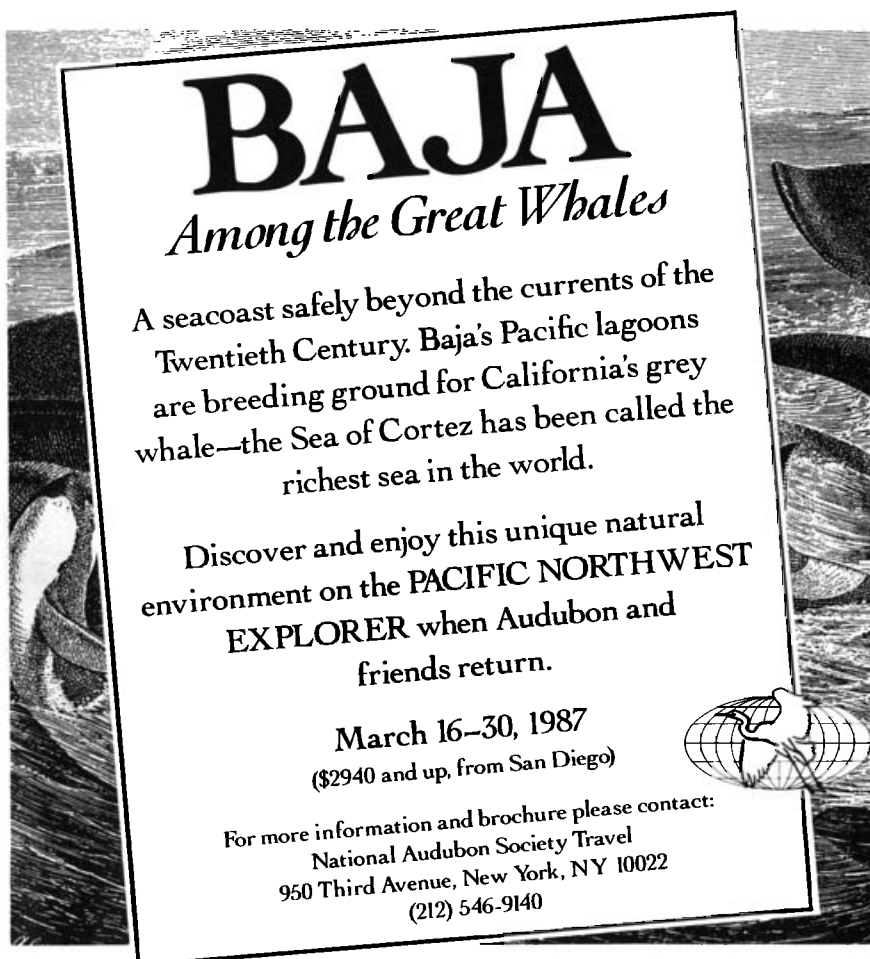
For those who have the task of producing a similar volume, a few comments are in order with regard to the Atlas's organization. The rationale for the manner in which major sections are included in either the introductory material or appendices is not clear. It would

use of the larger transparent overlays for these species impossible. For those not familiar with the maps, it would have been helpful to have the key to symbols on every map, or at least in a more visible spot than the middle of page 13. Also note that the large dot symbol used to indicate confirmed breeding does not appear on that page.

**“. . . an extraordinary job of collecting natural history information, nesting information, and historical information for each species.”**

have been more logical, for example, to have placed Appendix A, "Vermont Geography and Ecology," at the front of the text. A chapter briefly describing the ornithological history of Vermont, indicating major publications and when they appeared, would have been helpful for putting the current atlas publication into an historical context. It also would have been helpful to incorporate the section, "Species Recorded as Possible or Probable Breeders in Vermont," into the main text. The printing of smaller distribution maps for this section makes

The editors are to be commended for their careful job of editing. Except for the omission of the symbol for confirmed status on p. 13, we found few glaring typographical errors and a text generally devoid of jargon. The appearance of the word "utilize" on pp. 292 and 332 (and perhaps elsewhere) is an unfortunate blemish. Why so many modern biologists seem infatuated with "utilize" when "use" is a perfectly acceptable English equivalent (and more economical of space) is beyond our comprehension. Also, it is unfortunate,



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- No. 1** *Conservation of New World Parrots*. R. Pasquier, Ed. 1980. 485 pp. \$14. Available from Smithsonian Inst. Press.
- No. 2** *Status and Conservation of the World's Seabirds*. J.P. Croxall, Ed. 1982. 790 pp. £26.90. Avail. ICBP.
- No. 3** *Conservation of Island Birds*. Ed. P.J. Moors. 1982. 288 pp. £16.50. Avail. ICBP.
- No. 4** *Conservation of Tropical Forest Birds*. A.W. Diamond and T.E. Lovejoy, Eds. 1982. 332 pp. £18.50. Avail. ICBP.
- No. 5** *Conservation Studies on Raptors*. I Newton and R.D. Chancellor, Eds. 1982. 494 pp. £25.50. Avail. ICBP.

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Smithsonian Institution Press, Washington, DC 20560.

but the illustrations of birds are a distraction in an otherwise fine volume. They are poorly reproduced and the artists generally could have been more attentive to anatomical accuracy and the correct relative proportions of body parts for the species they portrayed.

Those of us who are directly involved with breeding bird atlas projects are very fortunate to have the Vermont Atlas available as a guide. Laughlin and Kibbe have provided us with an excellent example to follow. Even better though, they have been more than willing to share their experiences, good and bad, and their expertise. Anyone contemplating organizing an atlas or just beginning an atlas should pay special attention to Appendix D, "Northeastern Breeding Bird Atlas Conference Recommendations." And the Foreword by Chandler S. Robbins is the strongest and most succinct statement of the value of breeding bird atlas information yet published.

This atlas is a significant contribution to the ornithology of Vermont. In addition, the thoroughly researched and carefully referenced species accounts would be useful to anyone studying the birds of the northeastern United States or of southeastern Canada. We recommend it as a good reference source for information on the breeding birds of those regions. To quote from Chan Robbins' Foreword, "You are holding in your hands the first in a new generation of wildlife volumes . . ." and an excellent beginning at that. The Vermont atlas has set a high standard for other state and provincial atlases to follow. And as reviewers, we must remember that it is easy to be critical of the work of others, but to do a better job is not always possible.

Begin making room on your bookshelf next to your field guides of breeding bird atlases. It would be nice if publications from other states and provinces could cost less, but we are willing to start saving our pennies. We have begun our North American breeding bird atlas collection with *The Atlas of Breeding Birds of Vermont*. We encourage you to do the same.—S.M.S. and C.R.S.

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## Status and Conservation of the World's Seabirds

Edited by J.P. Croxall, P.G.H. Evans, and R.W. Schreiber. International Council for Bird Preservation, 219c Huntingdon Road, Cambridge CB3 0DL, England. 1984. 779 pp. Paperback £24.90 plus £2 postage and packing.

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**T**HIS LARGE TOME IS ONE OF A SERIES of International Council for Bird Preservation publications dealing with bird conservation issues worldwide. It is based on proceedings of the International Council for Bird Preservation Seabird Conservation Symposium that was held in Cambridge, England, in August 1982. The book has obvious appeal as a survey of worldwide seabird-conservation issues, but it offers much, much more; indeed, for any and all seabird enthusiasts, it is a primer on worldwide seabird distribution and seabirding dreams.

Forty-seven papers are presented, offering analyses of most of the world's seabird breeding sites. There is a wealth of information, with relatively few gaps in coverage (not covered are parts of Arctic North America, Mexico and Central America, the Brazilian mainland, India and mainland southeast Asia, Micronesia and the Philippines, Papua New Guinea, and the Antarctic Continent). The Editors' Introduction keenly summarizes the scope and content of the book, and sets forth a valuable, systematic listing of the 282 seabirds covered in the book, with specific references to the papers mentioning each species. (In making choices for their systematic checklist, as well as the

**“ . . . extensive references neatly summarize a century of seabird research.”**

book's editing, the editors took the position that birds of inland seas and marshes were not seabirds, *per se*; thus, only sea-going gulls and terns are included, and only some of the world's cormorants and pelicans.)

For those students and seabirders



Cover art for "Status and Conservation of the World's Seabirds."  
© ICBP. Illustration/Trevor Boyer/Linden Artists.

**“ . . . for any and all seabird enthusiasts.”**

who wish to escalate their interest beyond listing and into the realm of seabird breeding biology, feeding ecology, and behavior, this book is an invaluable reference. As may be expected, some of the papers cover well-known breeding areas like Alaska, northeastern North America, the Caribbean, Galapagos, Peru, the Mediterranean, the tropical Indian Ocean and the Antarctic Peninsula. Unexpected delights, however,

bird conservation issues (for example, predation by introduced animals, human exploitation, incidental gillnet mortality).

Each paper is supported by a long list of references, and I believe that the authors and editors should be commended, especially, for this effort. By maintaining (insisting) on complete lists of sources, the editors have produced a book that will be a wonderful resource for future literature searches. The extensive references neatly summarize a century of seabird research.

One hope is that the International Council for Bird Preservation, with this volume and with others in the series, will have the wherewithal and resources to update these efforts periodically. As with all research, and certainly with respect to all bird conservation efforts, it would be nice to narrow the knowledge gaps that still exist, and to continue the monitoring of those populations found already to be *in extremis*.—R.N.

are summaries of the status and conservation of seabirds in little-known or infrequently visited places like the USSR, the Ecuadorian coast, the coasts of Iran and Arabia, and the French subantarctic islands. In addition, there are separate papers on particular sea-

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**Birds of the Indiana Dunes**

Kenneth J. Brock, *Indiana University Press, Bloomington, Indiana. 1986. 7 maps, diagrams, bibliography, and index. 178 pp. Paperback \$7.95. Hardbound \$25.00.*

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LOCATED AT THE EXTREME SOUTHERN end of Lake Michigan, the beaches, dunes, and woodlands of the Indiana Dunes support a large and varied nesting bird population and serve as a migratory funnel for dozens of species moving up and down the lake. This volume is an excellent guide to what birds to see and when and where to see them.

Kenneth Brock, a geology professor who has birded the Dune area extensively for 16 years and has organized

innumerable Christmas Bird Counts, has kept meticulous records of all reported, verified sightings. After entering all of the records he could find into a microcomputer, including the very earliest archival notes (1913), he created three very handy schemes for sorting this information: Finding Codes (giving the odds of seeing a specific bird); His-

**“Those involved in computerizing bird population records will find this volume of special interest . . .”**

tograms (diagrams that show the number of times a bird has been reported and the numbers of birds in each sight-

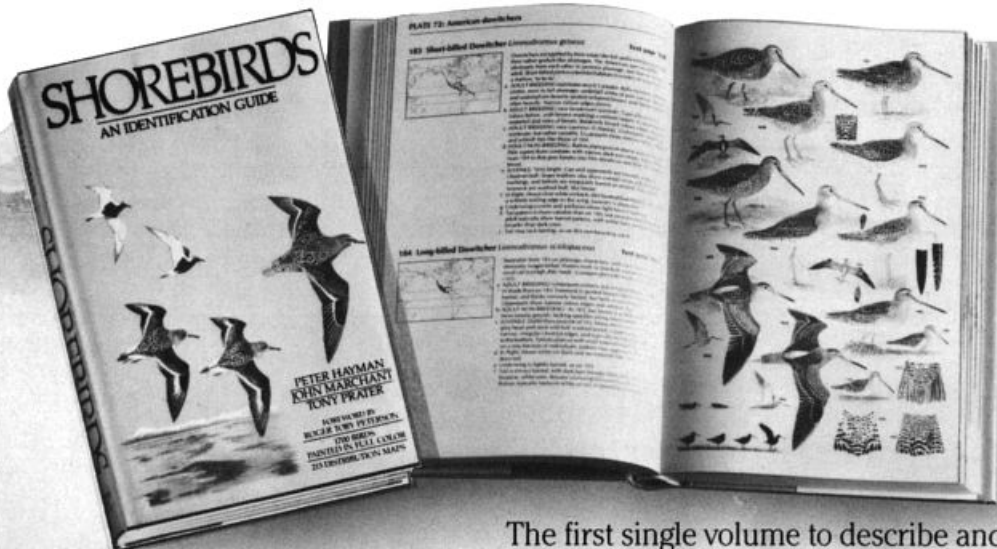
ing); and Migration Envelopes (specific arrival and departure dates). Those involved in computerizing bird population records will find this volume of special interest, whether or not they have an interest in the Dunes.

Twenty pages of maps and well-written introductory material describe the area's habitats and birding hot spots, with specific instructions on how to get there. Throughout the Species Accounts, Brock adds descriptive and analytical observations on particular species such as Peregrine Falcons and jagers.

The Field Notes Editor for the *Indiana Audubon Quarterly*, Brock has taught birding classes at the Indiana Dunes National Lakeshore. His intimate knowledge of the area and its avifauna, his retentive memory and great skill at converting voluminous amounts of computer data into accurate and easily-digested indicators, make this a most useful volume.—E.B.P.

Roger Tory Peterson hails it as

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## Bird Behavior

Robert Burton. *Alfred A. Knopf, New York. 1985. 224 pp., approximately 600 color photographs. Hardbound \$18.95.*

THIS BOOK TREATS THE SUBJECT of behavior with commendable breadth, so much so that a few decades ago it might have been titled "A Natural History of Birds." In 219 large and abundantly illustrated pages, organized into ten chapters, the author treats The Living Bird (general), Flight, Senses and Intelligence, Finding Food, Diet and Way of Life, Communication, Social Life, Courtship and Mating, Rearing the Young, and Migration (including navigation). The index covers all subjects and the English and scientific names of all birds that are mentioned. There is no bibliography. There are color photographs on virtually every page, and a few drawings and diagrams. The text is written in a readable style, without interruptions for scientific names or citations of references, and it is intended to provide up-to-date coverage of the field of bird behavior for the interested and knowledgeable layperson.

Robert Burton has done a remarkable job of searching the world scientific literature on all of the above subjects, and much of the information included is not otherwise to be found outside professional journals and review volumes. Examples are drawn from all continents although Europe and North America naturally get somewhat more coverage than other regions. The photographs illustrate a wide range of the subjects covered, and feature a number of species that will be pleasingly unfamiliar to most readers. Burton has not only gathered a great number of interesting facts and recent discoveries; his interpretations are decidedly contemporary. There are frequent references to the importance of energetics—the acquisition and conservation of energy—in determining various behavior patterns, and there is considerable stress on the theory that maximizing the propagation of one's genes (even if carried by another individual) profoundly and ultimately influences all behavior. Again, the photographs deserve special mention for their appropriateness and high technical and artistic quality.

Many of them capture bird activities that happen too fast for the eye to follow or which are rarely seen, while others are marvellously evocative of wild nature or simply beautiful—for example, the skimmers feeding at dusk (p. 94) and the ravens around a carcass in the snow (p. 108).

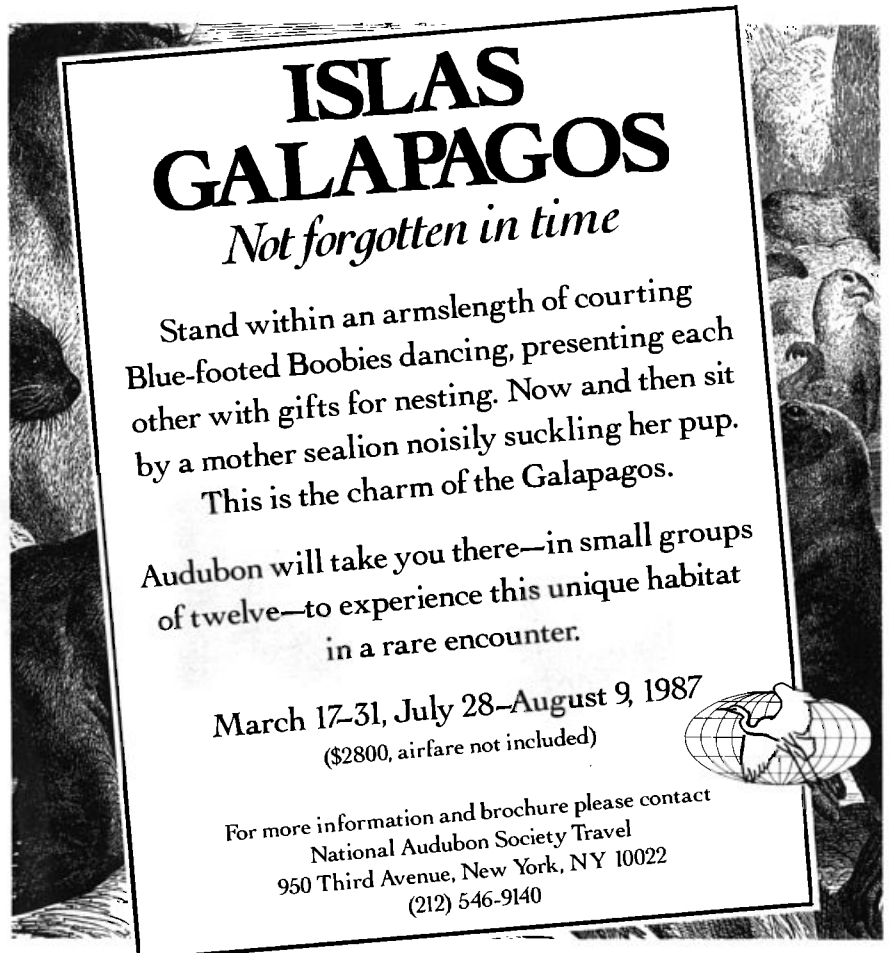
With all of these excellent qualities on display, is there anything for a reviewer to criticize without being churlish? Yes, there are some imperfections that I am obligated to mention, and I will try to do so graciously.

In a work of this scope there are bound to be some slips. The problem here is not the relatively few and inevitable minor errors of fact, but overgeneralization and lack of equivocation. Since this is a popular-scientific book, the decision was evidently made to write it in a smooth-flowing narrative style without frequent references to the uncertainties and disagreements that abound in the field of animal behavior. Thus, generalizations are often given as though there were no exceptions, or a mixed group of examples is cited to illustrate a certain type of behavior as

though they were the only ones to show it. In still other instances teleological or anthropomorphic phraseology is used, implying a level of conscious reasoning

**“ . . . a remarkable job of searching the world scientific literature . . . ”**

in birds that is doubtless unintended but which could be taken literally. These things all relate to my principal complaint, which is the lack of a bibliography or any list of references. One can agree with the decision not to interrupt the text with citations and still argue that there should be (perhaps at the end of each chapter) a list of major references on the subjects covered so that the reader could find authoritative reviews or even get to original sources. In fact, there is no mention by name of any of the researchers whose findings are described. Let me document all



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p. 173:

"All tropicbirds nest on cliff-ledges, or in cavities . . ." No so—the Red-tailed species always nests in a scrape in the sand at ground level.

p. 180:

"The brown-headed cowbird not only parasitizes many host species but mimics the egg patterns of some." The speckled eggs of this cowbird may resemble those of its more than 200 host species, but this is not sure evidence of mimicry such as that shown by some Old World cuckoos. On p. 183, the blue egg in the photo is not that of a cowbird but the speckled eggs may be.

p. 184:

". . . exchange of gases [in the embryo in the egg] has been taking place through the membrane known as the allantois that lines the shell." What is presumably meant is that gas exchange (O<sub>2</sub> and CO<sub>2</sub>) takes place through the shell, shell membranes, and the capillary blood vessels of the underlying chorio-allantoic membrane. The allantois proper is a membranous sac in which nitrogenous wastes (semi-solid uric acid) accumulate during embryonic growth.

p. 151:

"She [female bird] needs to insure that her eggs are fertilized by a male who can pass on good genetic characteristics to her offspring, and . . . who will be a good support in rearing the family. So she assesses the available males before choosing . . . It is reasonable to assume that the hen chaffinch recognizes an ardent suitor as being an older and more experienced bird, who is therefore likely to prove a capable parent for her offspring." As phrased, this suggests considerable analytical and predictive judgment by the female. I think it preferable to say, in effect, that females are more likely to respond to the most vigorously courting males, and that natural selection favors this behavior as these males are more likely to have the genetic and behavioral characters that lead to reproductive success. Burton's choice of words is less pedantic, but seems to me to risk a more anthropomorphic interpretation than intended.

p. 198:

"In temperate regions flying insects disappear in winter so that the airspace can no longer support swallows, martins, swifts, nightjars and flycatchers . . . The warblers that pluck insects from foliage are migratory, while the titmice and creepers that pick hibernating insects from crevices are sedentary." Where I reside at temperate latitude 34°N, I can find some swallows, swifts, and flycatchers on any winter's day, and rarely even a non-hibernating nightjar (poorwill). Some

Reprinted from color. "Bird Behavior" by Robert Burton. Published by Alfred A. Knopf.

these criticisms with a few specific examples.

p. 86:

"Vireos and shrikes have stouter bills, hooked at the tip, for dealing with larger insects." This applies only to the tropical vireonid genera *Vireolanus* and *Cyclarhis*, which are in a separate subfamily from the familiar *Vireo* species.

"The swifts and swallows have a short bill with a wide base . . ." (true). "A similar

bill is seen in the unrelated wood-swallows of Australia and Asia." Not so; wood-swallows have much longer, stronger bills that enable them to catch and dismember large insects, even cicadas.

p. 148:

"Hummingbirds are unusual in that the female feeds the male." This is certainly not typical of most hummingbird species and would be unusual enough to require specific documentation.

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foliage-gleaning warblers are year-round residents in the temperate zone and at least some populations of titmice (*Parus* sp.) and creepers are migratory. Unequivocal generalizations such as those above are hazardous to credibility.

p. 217-18:

"European robins kept in a windowless room continue their *Zugunruhe* fluttering in the correct direction, but when the magnetic field is changed by an electromagnet, their orientation alters accordingly. They can orient only when moving through the magnetic field, and they detect it by means of crystals of magnetite in the head. The birds . . . perceive the angle of dip, the acute angle between the lines of the Earth's magnetic field and the horizontal plane." This is evidently an attempt to simplify the results of some complex experiments by W. and R. Wiltschko in which robins were placed in an activity-recording cage surrounded by a Helmholtz coil that could produce simulated alterations of the earth's magnetic field. In this system the birds oriented with considerable scatter, but a statistical analysis of pooled results showed a prevalence of orientation according to the acute angle formed by the gravity vector (straight down) and the magnetic field vector at Frankfurt, Germany where the angle of inclination is +66°. Reversing the horizontal and vertical components of the magnetic field vector resulted, statistically, in predictable changes of the prevalent orientation. No mechanism of sensing the relation between the magnetic field and gravity vectors is known. Magnetite crystals (ferrous oxide), which respond to magnetic fields, have been found in the head (outside the brain) and neck of homing pigeons, but no nerve connections have been detected. These findings are exciting and provocative, but the interpretations are controversial and authorities disagree. I sympathize heartily with the author's wish to provide a clear and simple explanation, but present evidence does not yet allow this.

These examples all point up the problems of popular-scientific writing in which readability precludes expression of many doubts and complexities. There is no altogether satisfactory solution to these conflicting demands and Burton deserves praise for successfully resolving so many of them. I only wish that important references had been included so that the reader could check on some of the original research and critical reviews. Even a single reference such as "A Dictionary of Birds," 1985, edited by B. Campbell and E. Lack (Buteo Books), which Burton has used to good advantage, would be helpful.

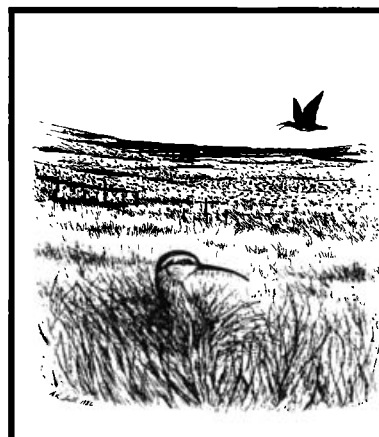


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I have nothing but praise for the photographers whose work has provided such a feast for the eyes, but I must include some criticism of the reproductions. The color fidelity of most is excellent, but a few are too pale and more are too dark. The main problem, though, is their size. Some of the best are given ample space, but others that would be superb if enlarged are so small as to lose all pictorial adequacy. For an extreme example, see the alleged flock of migrating ruffs on p. 209. The only



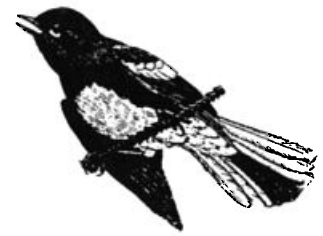
**ESKIMO CURLEW A vanishing species?**

By J. B. Gollop, T. W. Barry and E. H. Iversen

This history of the endangered New World shorebird is based primarily on its bibliography of some 600 titles. Beginning with Columbus' time, it continues through 1985 with chapters on current status, names, identification, nest searches in the 1860s and 1980s (including previously unpublished material) and life history (food, migration, habitat, breeding, voice, hunting and decline). A major section consists primarily of quotations from some 300 people in 71 countries, provinces and states, with dates and places of occurrence from Siberia to Argentina to England. 160 pp. 7 maps, 19 photos, 8 drawings. Can\$9.00. This new book is published by the SASKATCHEWAN NATURAL HISTORY SOCIETY and is available from the Society's **BLUE JAY BOOKSHOP, Box 1121, Regina, Sask., Canada S4P 3B4.** Dealer discounts.

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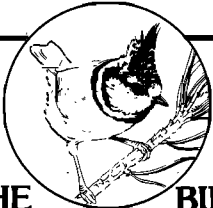
ARTEMISIA PRESS, P.O. BOX 119, LEE VINING,  
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solution would have been a much bigger and more expensive book, or fewer pictures, and presumably there had to be a compromise.

On balance, however, this is a highly informative and attractive book. The price is a moderate \$18.95. Watch out for the over-generalizations and too-inclusive or too-exclusive examples and assertions, and then relax and enjoy the wide range of coverage, the abundance of fascinating information, and the superb color photographs.—T.R.H.



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**The Trumpeter Swan**

*Text and photos by Skylar Hansen. Northland Press, Flagstaff, Arizona. 1984. 75 pp., approximately 40 color photos. Paperbound \$9.95.*

**T**HIS NARRATIVE ACCOUNT OF TRUMPETER SWAN biology is based on the author's personal observations during the nesting season as well as information gathered from authoritative sources, including government documents. The tristate flock (Montana, Idaho, Wyoming) of the Trumpeter Swan population is the subject of most of the book, with brief references to other flocks. The photos and many of the observations comprising the text are of four pairs of nesting birds from the picturesque national parks and wildlife refuges in this mountainous region.

The author does a nice job of summarizing the swans' life history. He begins with a discussion of the Trumpeter's history in North America, and continues through habitat requirements, the nesting and brood-rearing seasons to winter biology, ending with comments on the species' prospects for the future. The main purpose of this book seems to be to display the photos, which are excellent. The author/photographer has included a good selection of artistic, well-composed photos of high technical quality that beautifully illustrate all phases of the swan's life. Many are full-page, and they are interspersed throughout the text so nearly every page has a photographic accompaniment. Photogenic by nature, the swans lend themselves well to this type of photo-

essay. The photos may be the *raison d'etre* of this volume, but the text can stand on its own merits. It reads easily, but manages to incorporate a great deal of information, although sources are not always clear.

The author spends a fair amount of the text describing the lives of the four swan pairs he observed during the nesting season. From this small sample he tends to generalize about the population. This is a pitfall which is hard to avoid with species that exist in small numbers, such as this and other rare, large, long-lived birds. Nonetheless, overgeneralization is only a minor weak point in this book. Living close to a wild animal group for a long time, people can develop a personal feeling of intimacy, and it becomes easy to let that feeling influence objectivity. Hansen clearly developed this type of bond with the swans he photographed, and as a result his writing tends to be slightly anthropomorphic. This tendency to attribute human traits to the swans, how-

**“. . . an up-to-date, accurate, and attractive work.”**

ever, is not strong enough to be very detrimental to the book.

This book will be enjoyed by anyone with an interest in waterfowl as well as those who are concerned about the preservation of rare species and wild lands. Not intended as an academic or exhaustive treatment of the Trumpeter Swan's life, it is nonetheless an up-to-date, accurate and attractive work.—C.B.



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We thank the following book reviewers for their careful reading and comments. The initials at the end of each review correspond to these names: Sally Merrill Sutcliffe, Charles R. Smith, Ron Naveen, Emma B. Pitcher, Thomas R. Howell, Cheryl Boise, Douglas P. Kibbe.

### The Return of the Brown Pelican

Joseph E. Brown. Photographs by Dan Guravich. Louisiana State University Press, Baton Rouge. 1983. 118 pp. Hardbound \$24.95.

**D**ESIGNED WITH THE COFFEE TABLE in mind, this oversized volume is both a labor of love and a book with a purpose—to heighten our awareness of the plight of the endangered Brown Pelican. With barely 100 pages of text, the emphasis is clearly on the series of 105 excellent photographs, but this is far more than just another pretty picture

**“Carefully researched  
and nicely  
formatted . . .”**

book filling space in an endless flood of well-meant, but ineffective, conservation texts. Carefully researched and nicely formatted with only a few typographical or factual errors, the text provides an entertaining state-by-state overview of the pelican's past and present status. While not detailed enough to qualify as a monograph, it presents a remarkably balanced account of factors implicated in the decline of the species. I wish concerns for other endangered species and environmental issues in general received as adroit and even a treatment from the press and popular writers.

This book will make an excellent gift for anyone with more than a passing interest in this photogenic species, or seabirds, or rehabilitation. Those who find their interest aroused, however, will be frustrated by the author's failure to provide a citation list or bibliography. Despite this oversight, readers will find that this pretty picture book has a lot to say about the complex field of conservation.——D.P.K.



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