

Harrington, strives to explain the use of estuaries and beaches in the northeast by southward migrating shorebirds. This is a general feeding ecology study aimed at better understanding shorebird biology as well as gathering information on the importance of estuaries to the health of shorebird populations. During the summer of 1974 a 100-acre mud flat in Plymouth Harbor was surveyed so that comparisons of the feeding behavior of individually color-banded birds and potential food resources can be made. Hours of painstaking effort have been spent in identifying and quantifying the invertebrate fauna on the various flats in the estuary. Comparisons are being made between flat feeding and beach feeding. The reasons Plymouth estuary is a major staging area for migrating shorebirds in the autumn are becoming clearer.

The Forest Census, conducted by senior staff biologist Trevor L. Lloyd-Evans, is a continuing investigation of the vegetation and breeding birds originally in three twenty-acre sites of Scrub Oak-Pitch Pine forest, each in a different stage of fire recovery (two years, ten years, and thirty years). In 1974 the addition of another twenty-acre burn whose ashes were still warm and which contained white pine, red pine, and part of a housing development was a logical expansion of the study. Future progress depends on the availability of an area of natural forest on which a housing development is to be constructed. By studying the forest cover intact and following the changes in plant and bird populations from the initial clearing and construction through twenty or more stable years as a suburban community, the effects of human disturbance can be gleaned. The end of this exhaustive census should be knowledge of how plant and animal life have responded to normal fires for the past 100 years and how they can be expected to respond sub-

sequently, and the ability to predict the inescapable changes in bird life attendant with proliferating suburbs.

Mr. Lloyd-Evans is also working on the **House Finch Project**, which is a shorter study documenting and explaining molt patterns, and movement of the House Finch, which has newly established itself in the northeast.

Botanizing at Manomet has been carried out under the guidance of staff biologist Bruce A. Sorrie. More than 300 species of ferns and flowering plants have been identified on the observatory property. Over 150 species of cultivated flowers thrive on the grounds. Presently specimens of the many sedges and grasses that add to MBO's floral diversity are being located and identified. Sorrie has completed a preliminary survey of the flora of Plymouth Beach and teaches a field course in wildflower identification each spring.

A Harbor Seal Census and Behavioral Study is being conducted by staff member Frank J. Gardner. Many unclear aspects of the biology of seals and their coastline distribution prompted this investigation.

Manomet offers an internship program designed to aid a student in deciding whether he is suited to professionally pursue field biology. The intern must be especially interested in natural history, should possess some knowledge of biology (elementary college courses), and must submit a formal application to the Observatory. While at Manomet he is exposed to the rigors and trials of a field biologist and is expected to be of assistance with numerous and varied ongoing projects. At the end of his internship he comes away with a considerable fund of information and technique and, with any luck, sufficient background on which to make a lifetime decision.

A Selection of Recently Published Books

A Birder's Guide to Minnesota. — K.B. Eckert. Minnesota Ornithologists' Union, University of Minnesota, Minneapolis. 1974. 114 pp. \$3.50 (softcover). A detailed finding guide to more than 150 birding areas in the state. Includes a fine general introduction, maps of four regions, season-by-season regional guides, with explicit travel instructions — even a directory of helpful experts-in-residence. State highway map and field card included.

A Contribution to an Annotated Bibliography of North American Cranes, Rails, Woodcock, Snipes, Doves, and Pigeons. — Henry M. Reeves. U.S. Fish and Wildlife Service, Laurel, Md 1975. 527 pp. Available from National Technical Information Service, U.S. Dept. of Commerce, Washington, D.C.

(continued on pgs. 792 and 794)



Plate by John Henry Dick from
 "A Field Guide to the Birds of India."
 (Actual plate is in full color.)

Several agencies will be offering birding tours to India in 1976. How will they compare?

BIRD BONANZAS' itinerary will be the most extensive in terms of distance, areas and habitats visited. Each of our previous India tours recorded over 500 species of birds, and we expect as many on our 1976 tour.

Our tour group will be limited to eight participants. A larger group would mean that not all participants would be able to see almost every species in many of the habitats we will visit.

Some of the same agencies offering tours in 1976 to India offered them in 1975. We're happy to have you compare us with them. Ask them if they had to cancel their 1975 tour (we didn't), what is the maximum number of people they will take, and how many species they recorded on previous India tours.

After all, if you're going to invest in a tour that will take you halfway across the world, you ought to select the tour that will offer you the most.

For additional information write:

BIRD BONANZAS, INC.

12550 Biscayne Boulevard, Suite 501
 North Miami, Florida 33181

Would
 you like
 to see a
 Quetzal?



On BIRD BONANZAS' last tour to Costa Rica in April, we had eleven Quetzal sightings in four different localities, including one on a nest.

If you're dying to see what has been called "the world's most beautiful bird," we'll be happy to provide a guide to take you to our best Quetzal spot. We'll make all arrangements for you to fly down on your own. Our guide will pick you up at your hotel and take you to the spot. Cost is very reasonable. It is only about \$160 to fly to Costa Rica from Miami. While you're down there, if you want to do some additional birding, you'll find birds abundant. We saw over 400 species in two weeks.

We are trying to impress our Costa Rican friends that a live Quetzal is worth far more to them than one that has been shot.

For more information write:

BIRD BONANZAS, INC.

12550 Biscayne Boulevard, Suite 501
 North Miami, Florida 33181

A Field Guide to the Birds of Galapagos. — Michael Harris. Every resident species illustrated by Barry Kent MacKay. Taplinger Publishing Co., New York. 1975. 160 pp. \$10.95. Another welcome effort by Taplinger to fill up the field guide gaps. Should be in the kit of every visitor to the islands. Text, distribution maps, drawings, four color plates, end-paper map — all useful.

A Field Guide to the Birds of South-east Asia. — Ben F. King and Edward C. Dickinson. Ill., 64 plates by Martin W. Woodcock. Houghton Mifflin, Boston. 1975. 480 pp. \$17.50. The long-awaited, much-needed, well-executed guide to the birds (1192 species) found in Burma, Malaya, Thailand, Cambodia, Vietnam, Laos, and Hong Kong, with a list of Taiwan additions. Bibliography; end paper maps. A tremendous labor, largely by King, that will be indispensable to travelers to the parts of this region still open to foreign visitors.

An Introduction to Ornithology, Third Edition. — George J. Wallace and Harold D. Mahan. Macmillan, New York. 1975. 546 pp. \$14.95. This extensive revision of the widely-used Wallace textbook brings the knowledge up to 1972, with a few 1973 references. Pages in first edition — 443. In second — 491. Many new text figures and illustrations, much rewriting and inclusion of new knowledge help this book make a strong bid for continued leadership in its field.

Bird Life. — Jürgen Nicolai. G.P. Putnam's Sons, New York. 1974. 224 pp. \$25.00. Another oversized, lavishly illustrated general work on the world of birds, this one by the noted German behaviorist and student of Konrad Lorenz. Emphasis is on ethology; the text is clear and the illustrations (photographs in color) excellent.

The Birds of the Bahamas. — P.C.G. Brudenell-Bruce, with 93 species (31 in color) illustrated by Hermann Heinzel. Taplinger Publishing Co., N.Y. 1975. 124 pp. \$10.95. An exemplary regional field guide, updating the knowledge of Bahamian birds for residents, visitors, even useful to neighboring Floridians. Text is excellent: more comprehensive than most field guides. End-paper map of New Providence Island. The price is somewhat of a shock, however.

The Birds of New Jersey, Their Habits and Habitats — Charles Leck. Rutgers University Press, New Brunswick. 1975. 190 pp. \$12.50. This small volume used in conjunction with a good field guide will be a valuable tool for the beginning birder in New Jersey. As State Ornithologist, Dr. Leck has drawn upon his exten-

sive field knowledge in assembling a first rate "where to find specific birds" source. The bird life is organized according to habitat divisions and the habitats are geographically classified. Unfortunately the black & white photographs, seasonality tables, annotated checklist, accidental records, and aids to bird watchers appendices do not justify the inflated price.

Birds of New York State. — John Bull. Natural History Press, New York. 1974. 692 pp. \$29.95. The first for New York State since Eaton (1910-1914), bringing the greatly changed bird life up to date. Basically, an expanded annotated list, with many distribution maps, 9 color plates by 9 New York artists. A project of the Federation of New York State Bird Clubs, which fact is nowhere mentioned.

Birds of Western North America. — Ill. Kenneth L. Carlson, text Laurence C. Binford. Macmillan, New York. 1974. 223 pp. \$25.00. This outsize volume is basically a showcase for Carlson's paintings, of which there are 50 on full pages. Many of the plates are artistically pleasing, and Binford's introduction and accompanying text is a definite contribution.

The Dictionary of Birds in Color. — Bruce Campbell, (American editor: Richard T. Holmes). Viking Press, New York. 1974. 352 pp. \$22.50. Thirty pages of introduction, followed by 1008 color photographs of birds, varying from average to excellent. The text consists of accounts, in extremely condensed telegraphese, of the species depicted, arranged oddly, in alphabetical order of scientific names. An attractive book, but just how it can best serve is problematical.

Emperor Penguin, Bird of the Antarctic — Jean-Claude Deguine. The Stephen Greene Press, Brattleboro, Vermont. 1974. \$6.50. Handsomely illustrated with many color photographs, straightforward story of the largest of the penguins, the only species that breeds during the Antarctic winter.

The Ipswich Sparrow. — Ian A. McLaren and W.T. Stobo. Nova Scotia Institute of Science, Halifax, 1975. 105 pp. \$5.00. This monograph is the second supplement to Vol. 27 of the Proceedings of the N.S.I.S. It quantitatively describes territoriality, breeding, migration, and distributional aspects of the recently designated subspecies of the Savannah Sparrow. The frontispiece of a male Ipswich taken from a Lloyd Fitzgerald painting is exceptionally handsome.



1976 TOURS

INDIA & CEYLON . . . PANAMA . . .
 BELIZE, GUATEMALA & COSTA RICA
 COLOMBIA . . . CALIFORNIA . . .
 TEXAS . . . FLORIDA . . . MINNESOTA
 . . . WASHINGTON . . . NEW GUINEA
 . . . ETHIOPIA . . . ZAMBIA . . . OUR
 TOUR OF THE YEAR WILL VISIT PERU.

Our tour leaders include such outstanding birders as Ben King, Ted Parker, Dan Gibson, Terry Hall, John Edscoorn, Terry Wahl, Steve West, Bob Janssen, Dora Weyer, Steve Hilty, Rich Stallcup and Jim Tucker.

Birders with experience who have taken other tours praise BIRD BONANZAS' tours as the best:

"I've been on several organized tours in the past and yours far and away surpassed the others for showing the birds and showing them well. Virtually all the birds were seen by all the group and really seen to one's satisfaction for good lifelist identification. The leadership was superb and the group was most congenial and eager."

Dr. Robert Pittell,
Ft. Lauderdale, Fla.

"I took a fair number of birding tours with other agencies before I took my first BIRD BONANZAS tour in January, 1974. Since then I have taken five BIRD BONANZAS tours. They consistently find more birds than the others, and I recommend them to enthusiastic birders."

Norman Chesterfield
Wheatley, Ontario

If you have an enthusiastic interest in birds, there is no better way to see them than on a BIRD BONANZAS tour.

For information write —

BIRD BONANZAS, INC.
 12550 Biscayne Boulevard, Suite 501
 North Miami, Florida 33181



Bird Bonanzas TOUR OF THE YEAR 1976

PERU

June 4 — July 2, 1976

Will this be the most fantastic birding tour ever? Tour leader Ted Parker thinks it will. Ted feels that 700 species are possible on this tour, including a great number of spectacular and exotic species, some only recently discovered and known by only a couple specimens.

This will not be the ordinary nature tour to Peru, but a unique adventure designed for avid birders who want to see as much as possible when they take a birding trip. We will visit every conceivable habitat from Amazonian rainforest to tundra high in the Andes, from arid desert to open ocean. The group will be limited to a small number of participants, so that each person will have the opportunity to see all the birds.

It is a known fact, even conceded by many of our rival agencies, that BIRD BONANZAS' Tour of the Year has been the finest ornithological tour each year. If you've missed the others, you have no idea how spectacular a birding tour can be. Would you like to know more about it?

For additional details write:

BIRD BONANZAS, INC.
 12550 Biscayne Boulevard, Suite 501
 North Miami, Florida 33181

The Life of Birds. — Jean Dorst. Columbia University Press, New York. 1974. 2 vols. 718 pp \$35.00. The eminent French ornithologist has written a lucid, highly readable survey of bird biology and ecology. Volume 1 is concerned mainly with biology: anatomy, physiology, life cycle, evolution, classification, distribution. Volume 2 covers the various major environments and their bird life, migration, and man's influence on bird life. Together they constitute a valuable modern text that includes the latest (to 1971) addition to the knowledge in these fields.

Literature Review of Twenty-three Selected Forest Birds of the Pacific Northwest 1975. — Siri Jackson, J. Michael Scott. Region 6, U.S. Forest Service. 382 pp. A useful, if incomplete survey which, if implemented, could help minimize disturbance of these species in forest habitat.

Minnesota Birds, Where, When, and How Many. — Janet C. Green and Robert B. Janssen. University of Minnesota Press, Minneapolis. 1975. 217 pp. \$9.95. Ill. one color plate by W.J. Breckenridge, photos, 103 species range maps. An update of the monumental 1932 Roberts tome, with emphasis on current status of the 374 species presently on the Minnesota list. Includes state lists for 6 categories of abundance, selected bib-

liography. With this and the Eckert guide, Minnesota is now up-to-the-minute.

Montana Bird Distribution. — P.D. Skaar. Published by the author. Bozeman, Montana. 1975. 56 pp. \$2.50. A preliminary mapping by latilong of the 357 species on the state list (10 additional hypotheticals). Much information here, highly condensed, with an extensive Montana bibliography.

Naturalist's Color Guide and Supplement. — Frank B. Smithe. American Museum of Natural History, New York. 1975. 22 pp. (guide), 229 pp (supplement). Together \$12, guide \$9, supplement \$5. The guide is a looseleaf binder with 86 selected color patches, electrophoretically measured for uniformity. The supplement is a comprehensive description of the origin of each selected color, with citations of its use from Ridgway, *Birds of North and Middle America*. If widely adopted, should be of great value to descriptive ornithology.

Ocean Wanderers. — The Migratory Sea Birds of the World. — R.M. Lockley. Stackpole Books. Harrisburg, Pennsylvania. 1973. David and Charles, Great Britain. 1974. 168 pp. \$15.00. This clearly organized, effectively written compendium on ocean-dwelling and sea-wandering birds adds substantially to existing pelagic bird literature. Nine color plates, 28 black and white photographs, 22 breeding and distributional maps, a bibliography of sea bird classics and scientific papers and the pleasing line drawings of Robert Gillmor aid materially in fulfilling the author's aim: "... to enable the reader to understand something of their [sea birds] very remarkable adaptations to ocean-going, their breeding ecology and their interlocking migrations, even as he admires their graceful forms and skill in air and water." Unfortunately, there are a number of errors and omissions.

Summer of a Million Wings, Arctic Quest for the Sea Eagle. — Hugh Brandon-Cox. Taplinger Publishing Company, New York. 1975. 184 pp. \$8.95. An extremely readable account of the author's search for the elusive and remote eyrie of the Sea Eagle, with 21 line drawings and 28 photographs by the author. One of the features of this volume is the lucid manner in which the author shares his numerous insights into the migratory, courtship, nesting and feeding behavior of so many seabirds, gained from his lengthy visits to their northern islands breeding colonies. It will be a mine of information to those unacquainted with the ledge-breeding habits of puffins, gull-lemots, razorbills, cormorants, and kittiwakes

This Fall at The New School:

Ornithology of the New York Area

A course by

JOHN BULL

of the American Museum of Natural History

How to find, identify and watch birds in the New York area. The common and uncommon birds of the region; migration and breeding. The location and distribution of birds; how to attract birds; bird-banding and nesting studies. Fundamentals of basic ornithology—classification and systematics. Field trips to the Jamaica Bay Wild Life Refuge; the Museum of Natural History; other areas.

4 sessions, plus 4 half-day field trips.
Thursdays, 5:55-7:25 P.M.
beginning September 25. \$55.

The New School
America's First University for Adults

66 WEST 12 ST. NEW YORK 10011 741-5600

