ORNITHOLOGICAL LITERATURE

THE BIRDS OF COLORADO. Two volumes. By Alfred M. Bailey and Robert J. Niedrach. Denver Museum of Natural History, 1965: 9 × 12⅜ in., vol. 1, xxii + 454 pp., vol. 2, x + 455 pp., 124 col. pls., over 400 bl. and wh. photos, back endpaper map in each volume. Set of two volumes, $35.00.

News that another "state list" is about to appear always provokes certain expectations. It will be a monumental piece of book-making, sumptuous, an armload, and too big for the usual bookcase. It will be as much of a personal document as it is a magnum opus of its author, reflecting his style and special interests as well as his longtime dedication to the subject. Although written in popular style, it will bow to the scholarly approach in its coverage of literature. It will be handsomely illustrated with the latest and best efforts of photographers and artists. Even though underwritten by one or more benefactors, it will be too costly for the average book-buyer. Nevertheless, it will sell like hotcakes and become a boon to the rare-book market in no time at all.

Statism, like nationalism, is a fact of life these days. However ornithologists may scoff at such senselessness when carried to the point of confining treatises on birds to political boundaries, there is not an ornithologist I know who would not relish owning every work of the sort produced. I thoroughly enjoy acquiring, perusing, and reading parts of each state bird book that comes along. None have I enjoyed more than "The Birds of Colorado."

The two volumes tip the scales at twelve and one-half pounds and measure three and three-quarters inches in total thickness. On the book shelf they stand 12 and three-eighths inches tall, exceeding by an eighth of an inch Harold H. Bailey's "The Birds of Florida"—heretofore the loftiest state list. They are sturdily bound in coarsely pebbled red buckram and colorfully jacketed. Within they are in every way elegant—the paper of the finest quality, the print large and crisp, the page margins and sectional spacing generous, and the illustrations superlative.

The first 70 pages cover introductory matter, the next 676 pages contain the accounts of 439 species, and the remaining pages consist of a gazetteer, bibliography, and index to birds.

The introductory matter adheres closely to the traditional pattern for a state list, with a definition of the scope, an explanation of terms, a survey of previous ornithological work, presentations of the state's topography and climate, and outlines with summations of bird distribution and migration in the state. Where the introduction breaks with tradition is in the special discourses on the migration, orientation, and life histories of birds in general, and the effects of pesticides on birds. Also, a unique and commendable feature that I have not seen in any other state list is a classification of the typical plant associations in Colorado together with an 11-page list of common state plants and the elevations at which they may be found.

Each species account consists of the two traditional parts: (1) In small print, the summations on recognition marks, over-all range, distribution and abundance in the state, and—in the case of breeding species—the nesting data. A concerted effort has been made to include all published Colorado records with full literature citations. (2) In large print, the general discussion. From a paragraph to several pages of text depending on the commonness of the species, this contains personal observations and reflections by the senior author and others not heretofore published, material drawn from the literature, and so on. Although the accounts center on the species as they occur in Colorado, they incorporate considerable information about the species from outside

the boundaries, thereby making the two-volume work useful as a reference to birds of the western Great Plains and the Rocky Mountains from Montana into New Mexico.

The senior author came to Colorado as Director of the Denver Museum of Natural History in 1936 and the junior author has been on the staff of the museum since 1913. For both, The Birds of Colorado is their magnum opus, representing many years of ornithological work in the state. However, it is the senior author who has prepared the text and it is the character and special interests of the senior author which come through on the pages. Like the man himself, his writing is informal and unpretentious. Time and again in numerous anecdotes and digressions, it reflects his worldwide travels and his experiences with birds in distant places.

But far more than in the writing, Alfred M. Bailey comes through in the illustrative content, the truly superlative feature of The Birds of Colorado. An admirer of artistry with the brush or camera, and a master photographer himself, he was determined that all the birds should be illustrated by the best paintings and photographs that talent could provide. The result: 23 of the world's leading bird artists painted 124 plates of 420 species (700 individual birds) in full color; 36 photographers provided over 400 black-and-white photographs.

Dr. Bailey was just as determined that the reproduction of the paintings and photographs should be the best that money could provide. How well he succeeded with the paintings I cannot tell without seeing the originals, but the plates look flawless to me. They are "ganged" in small groups convenient to the applicable text. For anyone wishing to study and compare the respective techniques of our most eminent bird artists, the plates certainly provide an unparalleled opportunity. All are the same size, reproduced by the same engraver on the same kind of paper (glossy surfaced). In other words, all have been given identical treatment. As to the photographs, I cannot praise them highly enough. Indeed, the photographs are equal to the paintings in eye-appeal—and this is saying a lot when the world's best talent has gone into the paintings and no cost has been spared to reproduce them properly. Other works have been generously illustrated with both photographs and paintings, but the trick here is the excellent selection and handling of the photographs. Not one is fuzzy; not one is without pleasing contrast. Many are blown up to nearly page size. (I strongly suspect that the decision to make the volumes as big as they are was influenced by the desire for large photographs.) The scenic shots in the introduction to the work rival those of the birds in beauty, and why not. The scenery in Colorado is that way.

The authors and all the other persons associated with the Denver Museum of Natural History, which published The Birds of Colorado, have every reason to be proud of this achievement. It has lived up to the fullest expectations.—OLIN SEWALL PETTINGILL, JR.

THE SNOW BUNTING. By Desmond Nethersole-Thompson. Oliver & Boyd, Edinburgh, 1966: 5¾ × 9 in., xii + 316 pp., 14 pls. (1. col.), 11 figs. and maps. $6.30.

The Snow Bunting is a wonderful bird; it nests the farthest north of any passerine in the world, in the bleakest of environments of snow, ice, and bitter winds; it hides its nest safely in rocky crevices; the plumage of the male is striking, and his song is rich, varied, and different in each individual. In Scotland it nests sporadically in the highest hills. Here in 1934 the author and his wife camped for 66 days and nights on the Cairngorm tops; they found five nests and watched two broods of *Plectrophenax nivalis*.

That first summer Desmond and Carrie Nethersole-Thompson lived under great hardships. "In rough weather it was almost impossible to leave the tent and go to the hill, for when we tried to do so, we were soaked within a few minutes and had no means of drying our clothes until the sun shone strongly or a wind came without mist on its wings. For sixty-six days and nights our tent stood above the 3000-foot line." Throughout their stay Carrie never had a hot meal, but her husband occasionally was fed by friends when ten miles down in the valley to replenish provisions.

The Nethersole-Thompsons never banded any of the snow birds; they distinguished the three pairs and the one unmated cock by differences in their plumage, territories, and voices. "Baldy," which never won a mate, was a strikingly handsome and vigorous bird. "He ranged over miles of scree, singing and making exquisite shuttlecock flights between display rocks in glens and corries as far as one and a quarter miles apart."

The next year no Snow Buntings were seen in the Cairngorms and none were present from 1937 through 1939; in 1941 there were a few but none the following year. From 1948 through 1952 the Nethersole-Thompsons were again watching snow birds in Scotland, and from 1957 through 1964 their son Brock took over this responsibility. In Appendix 4 there are listed 38 nests found in Scotland in 14 seasons from 1934–64 by the "N-T family"; and 29 other nests discovered in 24 seasons by 24 men from 1861–1964. Northern Scotland is on the fringe of Snow Bunting habitat; the population of this species is always sparse in this region and sometimes absent altogether.

Two chapters vividly describe the experiences of "The First Summer" and "Our Snow Birds" of 1934. The next seven deal with the life history of the species, comparing the findings in Scotland with the reports of other observers. For instance, territorial behavior in the few Scottish birds is distinctly flexible in contrast to the rigid territorialism found in the large populations in Greenland by Tinbergen (1939). By the way, the eight little sketches of displays by cock Snow Buntings reproduced from Tinbergen's notable study were drawn by Joost ter Pelkwyk, who met his death in the East Indies in May 1942.

In the chapter on "Snowflake Country" the author describes the habitat of this intrepid bird throughout the northern regions of the world. The next chapter, contributed by D. A. Ratcliffe of the Nature Conservancy, describes "The Habitat of the Snow Bunting in Scotland." He concludes as follows: "Today the snow bunting stands as a survivor of a group of plants and animals which flourish in a habitat once widespread in lowland Britain but are now banished to the highest tops and even there sadly depleted in kind and number."

The fluctuating status of the Snow Bunting in Scotland is compared with the fluctuating weather reports; during years with warmer temperatures, these birds are absent. The possible favorable role of snowfields in Snow Bunting ecology is discussed. A long chapter, "Distribution, Numbers, and Movements," is devoted to this species throughout the Northern Hemisphere; here two world maps show its Holarctic summer range and its wide winter range throughout central United States and central Europe and Asia. It has not been determined to which of the five races of this species the Scottish breeders belong.

The 15 photographs, one in color, are excellent. The bibliography, 12 pages long, shows the wide coverage of the subject by the author. Although many technical subjects are discussed, the writing for the most part is full of action, life, and eloquence. A fine book that calls attention to many subjects still needing to be explored.—MARGARET M. NICE.

ENJOYING BIRDS AROUND NEW YORK CITY; AN AID TO RECOGNIZING, WATCHING, FINDING AND ATTRACTING BIRDS IN NEW YORK CITY, LONG ISLAND, THE UPSTATE COUNTIES OF WESTCHESTER, PUTNAM, DUTCHESS, ROCKLAND, AND ORANGE, AND NEARBY POINTS IN NEW JERSEY AND CONNECTICUT. By Robert S. Arbib, Jr., Olin Sewall Pettingill, Jr., and Sally Hoyt Spofford for the Laboratory of Ornithology, Cornell University. Houghton Mifflin Company, Boston, 1966: 6 × 9½ in., 125 drawings, 17 maps plus endpaper map. Cloth, $4.50; paper, $2.45.

Birders in the New York metropolitan area, whether veteran or beginner, will be delighted with this book. It is a specific local "Pettingill," with detailed descriptions of more areas than are included in his and Mrs. Spofford's predecessor volume, "Enjoying Birds in Upstate New York."

A symptom of observing birds in our area, the parking problem, is acknowledged and welcome directions are given. The book benefits by the inclusion of 17 excellent maps prepared by the Linnaean Society of New York. Certain of these are credited to Richard Edes Harrison, the cartographer, but he had a hand in others and supervised them as chairman of the Society's map committee.

Bronx Park might have received more emphasis and a map. It has long been favored as a spot to catch landbird waves. The southern Nassau Christmas Count is mentioned, but not its venerable rival, Bronx-Westchester. Such, perhaps, is loyalty to one's area, though the senior author, formerly of Nassau County, now resides in the area of the Bronx-Westchester Count. The latter area was also the locality of an important published list. The very popular Riis Park perhaps deserved a map, though small and easily covered in one trip. There is a diverse bibliography of books and periodicals, and local bird clubs are listed with information on meetings; however nothing is said about their publications which include a number of comprehensive local lists. The book includes an attractively illustrated section on feeders and birdhouses.

A "Checklist and Calendar Graph" indicates habitat preferences and times of year the species may be expected. Makers of large lists will be much interested in the selection of the 300 species therein. A number of the least likely on the list, such as Whistling Swan, Blue Goose, King Rail, Acadian Flycatcher, and Boreal Chickadee might just as well be replaced by such species as Eared Grebe, European Teal, Golden Eagle, and Little Gull. It is my experience over many years of this very interesting pursuit that a considerable number of one's rarities for the forthcoming year will be even more unusual than the expectable ones. I question indication of Baird's and Buff-breasted sandpipers in spring. There is a "Calendar for a Big List of Birds" suggesting specific trips throughout the year. It would be interesting to know how a big year-list obtained in this way would differ from one achieved by following up reported rarities.

There seem to be remarkably few typos and slips. On page 115, line 4, Wassic should be Wassaic. Mianus River Gorge has been placed, unusually, in a subsection and is not in the index. Croton Point Park's specialties are to be sought in winter; this is implied but not specified. The listing of Sharp-tailed Sparrow as a breeder in Hatfield Swamp is evidently a *lapsus calami* for Swamp Sparrow; this suggests that distinction might be made in the "Key to Habitats" (p. 130) between fresh and salt water marshes. There is a 46-page section with descriptions and black-and-white illustrations of 80 familiar species. Probably no two birders would agree on the selection of these 80. With the ample availability of field guides, this section seems superfluous.

A section of acknowledgments is adequate and placed rather unusually at the end of the volume. The format and type of this book are attractive, and it is most welcome.—GEOFFREY CARLETON.

ISLAND LIFE: A NATURAL HISTORY OF THE ISLANDS OF THE WORLD. By Sherwin Carlquist. The Natural History Press, New York, 1965: 7 × 10¼ in., 451 pp., 7 col. illus., 242 bl. and wh. illus. $9.95.

Islands with their much simplified ecosystems have long fascinated biologists because of the unique and oftimes bizarre forms of life which are found on them. The classical writings of Charles Darwin and Alfred Wallace were inspired by their first-hand experience with insular life in the Pacific.

This new volume is one of several semi-popular books to be published here and abroad in recent years that treats of insular phenomena of the world's oceanic islands. From a scholarly viewpoint, Carlquist's "Island Life" is undoubtedly the best of the lot. The author, who is a botanist at the Rancho Santa Ana Botanic Garden of Claremont College, California, is perhaps best known for his important studies on plant morphology. Clearly, Dr. Carlquist's botanical interests are reflected in the examples which he has chosen, and in this respect Island Life is a most refreshing departure from other books on this subject in that it brings the reader a good balance between plant and animal considerations.

To judge from the extensive chapter bibliographies, the author has ferreted out the most significant contributions to island biology, thoroughly digested these, translated their contents into a clear, coherent, yet spirited, story that is as fascinating to the tyro as it is useful to the professional scientist.

Those persons beginning the study of island natural history will welcome this introductory presentation. In 16 chapters Carlquist presents a wealth of information by word and picture. Starting with a brief description of the island environment, the text moves quickly to problems of transoceanic transport of plants and animals, to disharmonic biotas, filters, and related phenomena, to adaptive radiation, with a lengthy consideration of Australian marsupials, to insular gigantism and dwarfism, to the origin of the island tree habit, to the loss of typical mainland mechanisms of plant and animal dispersal, to unique niche exploitation, to sexual selection, relictual species and the perils of insular specialization. The two concluding chapters present a general description of two insular areas of distinction, the Galápagos and Madagascar.

The important contribution of ornithology to the understanding of insular evolution is evidenced by the fact that words about birds fill over 50 pages, in addition to 9 color plates and 38 black and white illustrations. The original color illustrations are not skillfully executed and, because of the lack of fidelity in the glaring colors, give the impression of a newspaper Sunday supplement. The black-and-white illustrations have been well selected for their clarity and interest.

Especially interesting to students of birds are the popular sections dealing with flightless rails, adaptive radiation in the finches of Galápagos and the vanga-shrikes of Madagascar, sexual dimorphism in the forging habits of the extinct Huia of New Zealand, and the courtship displays of lyrebirds, birds-of-paradise, and bowerbirds. These accounts are based on the well-known writings of ornithologists, including Greenway, Rivolier, Amadon, Gilliard, Iredale, Marshall, Mayr, Lack, Bowman, Milne-Edwards, Rand among others.

Attractive in layout, literary in style, authoritative in content, and reasonable in price, Sherwin Carlquist's Island Life is a thoroughly meritorious book that will be appreciated by a wide audience of laymen and specialists for many years to come.—ROBERT I. BOWMAN.

RESTORING THE QUALITY OF OUR ENVIRONMENT. By Environmental Pollution Panel, President's Science Advisory Committee. The White House, 1965: 5⅞ × 9⅛ in., xii + 317 pp.

This monumental report is the work of 40-odd scientists who gave generously of their time and energies in serving on various aspects of the Environmental Pollution Panel. The prefacing letter by President Johnson recognizes that pollution is one of the most pervasive problems facing the nation; he closes by asking that each governmental agency report to him on ways in which corrective measures can best be taken.

The panel's view of man's role in the environment is set forth on page 5 as "Man is but one species living in a world with numerous others; he depends on many of these others not only for his comfort and enjoyment but for his life." The report is organized around the role of each of the eleven subpanels which carried out the study. The book begins with chapters on the effects of pollution, the sources of pollution, and recommendations. These chapters are areas of mutual agreement among the sub-panels.

The area of common ground covered by all of the sub-panels concludes with a statement of principles, a long list of recommended actions and a survey of research needs. Those of us concerned with wildlife conservation will be gratified to find the following statements among the general recommendations:

"All concerned should recognize the quality of human life and the presence and growth of other living things as the major values currently damaged by pollution."

"The filling-in of shallow waters essential in life cycles of fishes and shellfish be regarded as an important kind of pollution."

"The control of pest populations should increasingly depend on an integrated combination of pesticide use with wide variety of bio-environmental techniques."

"Unnecessary use of pesticides should be avoided whenever possible."

The remaining space in the volume is devoted to the details of each sub-panel's report. Some of the most interesting reading in the volume is to be found among the specifics reported by the various panels. For example, the sub-panel on climatic effect of pollution estimates that, by the year 2000, our consumption of fossil fuels will have increased atmospheric CO_2 to about 25 per cent—enough to modify the heat balance of the atmosphere and possibly bring on marked changes in climate.

While the technical quality of this publication is excellent, the work suffers from a somewhat fragmented organization which might discourage the casual reader. The use of appendix numbers in place of chapter titles at the top of each page also tends to confuse the reader who wishes to skim through the report before settling down to a perusal of selected subjects. These faults would be difficult to avoid in a report involving so many contributors; nevertheless, a more integrated format would have done much to pull the diverse materials together.

This is certainly not popular reading but for anyone concerned with the quality of his existence (who is not?), this work will serve as an invaluable reference. Perhaps one of the most important aspects of the work is recognized in the title. Ours is not a problem of preserving the quality of a relatively unspoiled environment; rather, we are faced with the task of *restoring* the quality of a seriously polluted environment.—DANIEL Q. THOMPSON