ORNITHOLOGICAL LITERATURE

STUDIES OF TROPICAL AMERICAN BIRDS. By Alexander F. Skutch. Publications of the Nuttall Ornithological Club, No. 10, Cambridge, Mass., 1972: 6¼ × 9¼ in., vi + 228 pp., 15 photos, 2 tables. $12.00. (Obtainable from the Nuttall Ornithological Club, c/o Museum of Comparative Zoology, Harvard Univ., Cambridge, Mass. 02138.)

I am certain that future ornithologists will be heaping praises upon Alexander Skutch long after most current, fashionable research endeavors are forgotten. In our ever more restricted environment, the depletion of avifaunas, particularly in tropical forest areas, makes it incumbent upon today's ornithologists to seek out, and study birds in their natural habitats. Indeed, I know of no more important responsibility facing us. Alexander Skutch has borne this responsibility, selflessly, for many of us, by dedicating the bulk of his life to field studies of neotropical birds. Whatever faults might be found with his behavioral interpretations, and whatever the gaps may be in his studies, his efforts have proved most fruitful and we are deeply in his debt. The present volume, his fifth of this type (in addition to many articles in scientific journals), contains life history observations of more than 50 species, including some not treated in separate accounts, but mentioned within sections dealing with related species.

Dr. Skutch's writing is eminently readable and flowing. One familiar with tropical forest birds perhaps will appreciate more than others the enthusiasm, stamina, and effort of the author, barely hinted at, or not suggested at all—the sitting motionless for many hours at a stretch (as watching a kingfisher's nest entrance, p. 92, "a sort of yogic exercise in the contemplation of nothingness"!), and at times in heavy rain or burning sun—is accepted without a hint of complaint by this dedicated researcher. The results of his observations in the present volume include 28 species accounts of birds representing six non-passerine and nine passerine families. Especially interesting to this reader, either because of the depth of coverage, the lack of previous information concerning the genus involved, or special interest were: the lengthy treatment of the Pauraque, coverage of no fewer than six hummingbirds of five genera (the longest section for any family in this book), the detailed accounts of the Ringed Kingfisher and the White-fronted Nunbird, the Shining Honeycreeper section, the observations of four tanagers (three genera), and the write-up of the Black-faced Grosbeak.

We learn many details from these accounts, and facts of diverse biological interests. A case of bigamy is described in detail for *Thraupis episcopus*, and occurrence of song dialects is suggested for populations of that tanager. The sometimes successful fly-catching (!) efforts of the large toucan *Ramphastos swainsonii* after winged termites are described. Dr. Skutch mentions (pp. 126–127) some instances of predation by this toucan on various nestling birds, and eggs, and he proposes that the large, usually brightly colored bill of toucans in general serves to intimidate (as a form of "super-normal stimulus") parent birds of other species defending their nests and young against the toucan. Another "supernormal stimulus" seems to be an oropendola's nest to a Piratic Flycatcher, which utilizes such (large) nests, but is unsuccessful in raising young in them. The White-fronted Nunbirds sing in choruses composed of an adult pair, and, apparently, other adults destined to be helpers-at-the-nest, for the author found three nests involving three or four adults apiece. The rate of feeding nestling hummingbirds at various stages is summarized in tabular form for no fewer than 10 species of nine genera. Dr. Skutch argues convincingly for the strong influence of

learning of song patterns in hummingbirds, based on studies of singing assemblies among 15 hummingbird species, and other data including the singing of a song and uttering of a call of *Amazilia tzacatl* by a male *Amazilia amabilis* that over the years fashioned from the song one more like that of its own species. A 48-hour incubation cycle is documented for the Ringed Kingfisher. Interspecific aggression seems to be the rule among dacnid honeycreepers such as *Cyanerpes lucidus*, which fights over food with other honeycreepers, but not with conspecific birds. Helpers were noted at nests of several species other than the nunbird mentioned above, including the grosbeak *Caryothraustes poliogaster*—the author reemphasizes his view that helpers are much more prevalent in less territorial birds, and are uncommon in such territorial birds as finches. But I continue to stress the unusual, which could go on for some pages. Suffice to say that packed within this relatively small book are observations galore, some indeed unusual, giving us pause and perhaps forcing a reconsideration of views, and many others filling in details and extending by another species or even another genus our knowledge of the biology of various avian groups.

The text is essentially free of errors. Each account is adequately summarized, but the writing easily entices one to read through the accounts rather than skimming the summaries. The photographs are not of excellent quality, but are satisfactory generally (figure 14 is questionably satisfactory). Only two of the photographs grace the portion of the book treating passerine families. Scientific names of extraneous species are listed after the common names of these species in the Index, which covers only bird names, and, unfortunately, no subject headings. A criticism of the publications of this series is the failure to give the price of each book, or to include the prices for previous publications in the list on the back of the title page.

I recommended this book to all interested in avian biology. Hopefully, the stimulation of reading it will encourage others to share in the responsibility of extending our knowledge of neotropical birds beyond the foundation so ably, and all too largely laid by Alexander Skutch.—LESTER L. SHORT.

COMMUNICATION AND OTHER SOCIAL BEHAVIOR IN *PARUS CAROLINENSIS*. By Susan T. Smith. Publications of the Nuttall Ornithological Club, No. 11, Cambridge, Mass., 1972: 6¼ × 9¼ in., ix + 125 pp., 2 maps, many sonagrams. $7.75. (Obtainable from the Nuttall Ornithological Club, c/o Museum of Comparative Zoology, Harvard Univ., Cambridge, Mass. 02138.)

W. J. Smith's (e.g. 1969) distinction between "message" and "meaning" brought important advances to the study of animal communication. Most previous investigators, and especially perhaps ethologists (with the notable exception of Andrew, 1951, 1961, 1972), had attempted to interpret signal movements and vocalizations in terms of major "drives" or "tendencies" such as attack, escape and sex, or in terms of conflict between them. W. J. Smith has shown, in effect, that this may involve attempts at analysis at too high a level. For instance, the "Locomotory Hesitance Vocalization" of tyrannid flycatchers is used in a wide variety of situations that involve locomotion in conflict with some other tendency, no matter whether that locomotion is likely to lead to attack or food. Many signals are used in a similar variety of situations, and the state of the sender that they describe (i.e. the "message") can be deduced only by abstracting those features of its behavior that are common to all the situations.

In interpreting this message, the recipient has available also contextual information. Thus the "meaning" varies with the context in which the signal is emitted and the nature of the recipient; for example, the response to the Locomotory Hesitance Vocalization given by the caller's mate is different from that given by a rival male. While a message can contain only about 14 different types of information (e.g. identification, location, attack, escape, frustration, etc.), each message may contain several of these, and contextual information may endow it with a more specific meaning for a recipient.

This approach is used here by S. T. Smith in a study of the vocalizations and other displays of the Carolina Chickadee. The study extended over about nine months, and was conducted in a suburban area. The author was concerned primarily with obtaining good behavioral data coupled with tape recordings suitable for sound spectrographic analysis. Her descriptions of the physical characteristics of the calls, illustrated by tracings of sonagrams, will provide useful material for other workers, especially those engaged in comparative studies. There is, however, some confusion in the terminology, since some of what she refers to as "closely stacked harmonics," "lower harmonics," and "resonance harmonics" would seem to be not harmonics but artifacts arising from the relationship between the characteristics of the calls and those of the sonagraph (see Marler, 1969).

She describes also the situation in which each of 20 vocalizations is used, and makes deductions as to its message and meaning(s). The field priorities (see above) prevented the acquisition of many quantitative data, but the deductions follow convincingly from the qualitative descriptions of usage. Nearly all the vocalizations appear in conflict situations. In many of them the value of the message/meaning approach is apparent. For example, the common feature in situations in which the "Lisping Tee" is used is the presence of a tendency to associate with another chickadee in conflict with some other locomotory activity, and the message of "Broken Dee" appears to be "I am prepared to engage in appropriate bond-limited activities." Such interpretations would not easily have been reached by the earlier ethological approach. However, in other cases, and especially those calls which are interpreted as involving conflict between attack and escape or some other tendency, there seems little to choose between the author's approach and those of some ethologists, especially Andrew (op. cit.) and Blurton-Jones (1968, 1972). The author refers to a paper by W. J. Smith (in press) in which the motivational approach is "contrasted" with his own, but the issue would seem rather to be one of defining where one approach is useful and where the other. This reviewer, for one, looks forward to seeing the new paper, but if the two approaches are merely "contrasted" it would seem that both there and in the paper at present under review, an opportunity has been lost for relating the use of the message/meaning approach to recent developments of the ethological methods.

Less complete descriptions of 15 visual displays are interpreted in a similar way. This provides some interesting additional material on parid signal movements, but the treatment is somewhat less satisfactory than that of the vocalizations, in part because it is primarily in terms of their displays rather than the display components. Their interpretation would perhaps have been facilitated by reference to Stokes's (1962) work on the related Blue Tit (*Parus caeruleus*).

This monograph, the eleventh publication of the Nuttall Ornithological Club, fully maintains the high standards set by its predecessors. It also demonstrates that important scientific data can still be obtained through careful observation of common species.

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R. A. HINDE

PHILIPPINE BIRDS. By John Eleuthère duPont. Monograph Series No. 2, Delaware Museum of Natural History, Greenville, Del., 1971: 8 × 11¾ in., x + 480 pp., 85 col. pls. by George Sandström and John R. Peirce. $32.50.

In his Introduction to this book, the author acknowledges the limitations of his work and sets the objective by which it must be judged—"to present a ready identification guide to all the known Philippine birds with a colored illustration of most." Broadly, the double objective is met. This book will undoubtedly become a standard work on the area, and both author and artists deserve high praise, as do the printers for an excellent job of color reproduction.

The task which must have confronted John duPont is understated by the author himself, and although it is put in better perspective by Dean Amadon in his Foreword, it is yet worth more reflection. The Bibliography whilst listing principal earlier papers, concentrates on the period 1947–71, for which it lists 138 papers. These papers included proposals for 12 new species and 164 races; whilst the studies they contained may have helped in the task of assessing the status of many races, they did not diminish the task, for older and newer taxa alike required evaluation. Finally, the Philippines constitute an archipelago with more than 7000 islands; keeping track of the distribution records of all species even for the main islands is a major task in itself.

The author's statement of his objective contains two important adjectives—"ready" identification and "all" birds. It omits, however, a third—"field" as a qualification to identification. Indeed, the generous size of this book precludes its use in the field. Cost will prevent it from reaching a wide Filipino audience but the work will be a "must" for bird tourists despite a few other shortcomings, chiefly lack of a map, lack of data on habitat, and lack of a measurement of overall length for each species or of a scale on the plates.

The color plates depict all except four of the 518 species; three vagrant seabirds and a rather local bulbul are omitted. Of these, 48 plates are signed by George Sandström,

13 by John R. Peirce, and the rest are composites of work by both men. The plates by Sandström are, on the whole, the better executed, and he is at his best on the Palawan Peacock Pheasant (pl. 15), terns (pl. 27), parrots (pls. 33–34), warblers (pls. 65–67), and white-eyes (pl. 83). Other difficult groups such as babblers, bulbuls, and flycatchers are also well rendered. Only his waders are somehow less pleasing. Amongst the plates by Peirce, that of the Monkey-eating Eagle (pl. 12) excels, and he seems more at home with hornbills (pl. 47) and pittas (pl. 49) than with the smaller birds. The plates on kingfishers (pls. 44–45) are not absolutely accurate in detail but should not cause misidentifications. Some of the plates are not going to help with field identification, admittedly on difficult groups such as *Collocalia* swiftlets and *Cuculus* cuckoos. In hardly any of the plates do shapes or stances seem wrong.

Not all plumages are illustrated—for example, eclipse and female plumages of ducks are omitted—and small problems could arise. Anyone seeing a member of the fork-tailed race of the Spangled Drongo might think it a Balicassiao, and anyone seeing members of the white-bellied races of the latter would have no luck in identifying them from the plates. More seriously, there are errors in lettering the plates to accord with their caption pages. The following corrections appear necessary: on plate 34 reverse D and E, on plate 42 reverse A and C, on plate 56 reverse D and E, on plate 68 reverse B and C, on plate 80 reverse C and F and also D and G, on plate 81 reverse E and F.

As regards completeness, the author has taken into account all newly proposed species and races, including two species proposed in the early 1940's which were not listed by Delacour and Mayr (Birds of the Philippines, 1946). One species listed by them, *Anthreptes rhodolaema*, has been removed from the list. In the present book, however, there appear to be two omissions, as follows: *Phylloscopus coronatus ijimae* was reported by Gilliard (Bull. Amer. Mus. Nat. Hist. 94:457–504, 1950) from Bataan; *Pycnonotus plumosus* subsp. was listed—as *P. p. plumosus*—from Calayan (*sic*) Sulu by Delacour and Mayr (1946) and—as *P. p. hackisukae*—from Cagayan Sulu by Deignan in Peters (Check-list of Birds of the World, 9:221–300, 1960). The text and plates will certainly serve as excellent tools for museum workers, though one would have liked to see ranges of measurements given instead of single averages.

There seem to be very few errors or misprints in the text. This reviewer noted "upperparts" in place of "underparts" in the text on *Puffinus leucomelas* (p. 1) and *Tringa ochrophus* for either *ocrophus* or *ochropus*, depending on the dogma of one's choice. The term "hybrid" is used in certain cases where "intergrade" would have been better.

Some points could have been added to the text with profit. For example, *Ptilinopus arcanus* is known from one specimen, a female, and the male plumage may well differ but neither the text nor the plate caption suggests this or even says "female," and few readers will pick up the comment in Dean Amadon's Foreword. The caption pages in particular could have benefited from scrutiny to ensure that the captions drew attention to species in which the sexes differ in plumage or there are color phases (e.g. *Egretta sacra*).

Finally, some of the English names are unfortunate, although all seem to have been retained from Delacour and Mayr (1946), occasionally—as with *Asiatic* Honey Buzzard—wrongly retained.

The comments above detract little from an attractively presented, thorough, concise work on the species and races of Philippine birds and their distribution through the scattered archipelago. This book cannot fail to contribute measureably to the relief of conservation problems in the Philippines, in particular local apathy and destruction of the habitat.—Edward C. Dickinson.

BIRDS OF IDAHO. By Thomas D. Burleigh. The Caxton Printers, Ltd. Caldwell, Idaho, 1972: 7 × 10 in., xiii + 467 pp., 1 map, 33 photos, 1 appendix table. $17.50.

"Birds of Idaho" is the result of eleven years of diligent field work and 14 years of preparation on the part of the author. Mr. Burleigh spent tens of thousands of hours in the field and walked thousands of miles in personally "covering the state." In the course of his studies he collected countless specimens, described nine new races and, in general, made an enormous contribution to our knowledge of the taxonomy and distribution of northern rocky mountain birds. I can't help but wonder how many ornithologists of the future will show Mr. Burleigh's drive, patience, and field skills.

The book includes a county map, a brief preface recounting accomplishments of various ornithologists in Idaho, species accounts, a list of birds originally described from the state, a bibliography of Idaho ornithology, as well as 12 color and 21 black and white photographs. By far the bulk of the book is devoted to the accounts of 303 fully recognized (based upon specimen collection with one exception) and 13 hypothetical species (by my count). Each species account is subdivided into General Distribution, where the total range of the species is discussed; Status in Idaho, which, after an overall statement, is discussed in detail in a very convenient north-south arrangement; and Habits, where the author recounts various points of interest regarding behavior and/or ecology. In addition, accounts of polytypic species include subspecific accounts covering the overall range of the race, its distribution in Idaho, and usually a brief mention of racial characters. The Wild Turkey (*Meleagris gallopavo*) is omitted from the book despite successful introduction along the Salmon River.

General Distribution sections are brief, accurate, and worthwhile. Sections on Status in Idaho are fairly complete summaries of Burleigh's own data together with published records of Idaho birds. Apparently the book was already well along in preparation when Oring (Murrelet, 43(3):2–12, 1962) appeared for, with the exception of two species added to the hypothetical list, species falling before Upland Plover (*Bartramia longicauda*) in the phylogenetic listing, which were mentioned in that paper, are omitted from review in the book. In most cases these omissions are of little importance, however for the following species, distributional statements should have been changed: Ring-necked Duck (*Aythya collaris*), Bufflehead (*Bucephala albeola*), Pigeon Hawk (*Falco columbarius*), Semipalmated Plover (*Charadrius semipalmatus*), and Golden Plover (*Pluvialis dominica*). In addition, the range of *Bonasa umbellus incana* should have been expanded. Judging from Burleigh's work, the report of *Dendragapus obscurus richardsonii* from Bonneville County (Oring, op. cit.) was probably in error. The consistent omission of records reported by Oring (op. cit.), falling before the Upland Plover in the species list indicates that a similar omission from Levy (Murrelet, 43(1):10–14, 1962) may have occurred. I have not checked on this.

The Habits sections are highly variable in content. In some cases such important and useful information as extreme dates of occurrence, dates of nests and/or young, flock sizes, nesting habitats, nest descriptions, and descriptions of various behaviors are included. In other cases they are not. Life history information of considerable value is included for a number of little known montane species. Statements on such subjects as palatability, wariness, hardiness, and crop damage are of questionable value as the subjects are not equally treated, even among the most appropriate species for such discussions. Most information included in this section is general and accurate, however several questionable statements were noticed:

Spotted Sandpiper (*Actitis macularia*). "Both male and female incubate and are

equally concerned with the welfare of the young." This is a false statement. Males do far more incubating and care of young than do females.

Black Tern (*Chlidonias niger*). "The food of the Black Tern in Idaho is apparently entirely insectivorous." While nearly true, in Idaho as elsewhere, females are fed small fish as well as large insects at the nest-site during nest establishment and building.

Snowy Owl (*Nyctea scandiaca*). "Where available, the preferred food is rodents, so it can be considered a beneficial species during its sojourn in the state." This infers either that they aren't beneficial elsewhere or that other predatory birds are not beneficial. Considering the demonstrated importance of predatory birds in the functioning of ecosystems, this strikes me as a naive statement at best.

I found subspecific discussions of considerable value in view of the paucity of information available on the distribution of various subspecies in the northern rockies. Personally, I would have appreciated more detailed information on gradients in subspecific characteristics in view of Mr. Burleigh's expertise in this area, and the attention he has paid to this aspect of ornithology.

Illustrations are highly variable in quality and value. Of 12 color plates, the color is of questionable quality in at least three, and six have poor definition. I found it very disturbing to look at color plates out of phylogenetic position, e.g. the Cassin's Finch (*Carpodacus cassinii*) is portrayed between discussions of mergansers. The 21 black and white photos are fair to excellent in quality and are placed in the appropriate positions among species accounts. Such captions as "A Melancholy Killdeer on its Nest in a Gravel Pit" and "A Saw-whet Owl in an Artistic Setting" provided far less useful information than space would have allowed. I found myself wondering which of the photographs were actually taken in Idaho, for while I know that many were, the photograph of a White-faced Ibis (*Plegadis chihi*) at its nest certainly was not, since there are no breeding records for the state.

In the back of the book is a useful listing of the 22 species and races of birds described from Idaho, together with the original literature citation, type locality, and present status of the name. I found this list informative and well done. The bibliography is extensive and carefully presented, the one glaring error which I noticed being that Ligon's paper is listed for 1918 rather than 1968. The combined common and Latin name index is useful but it would have been far more useful had generic names been included.

Birds of Idaho is disappointing in its very slight emphasis on the ecology of the state. No habitat photos are included nor is there a physiographic map. Neither is there any discussion of the state's biotic zones, climate, or geology. These subjects are sometimes briefly mentioned in species accounts, but there is a serious need for an introductory section on what Idaho is like. It would have been very useful, for example, if Burleigh, after having included an introductory section on the state's physiography and climate, had correlated the unique features of Idaho's avifauna with certain of the state's ecological characteristics. Isn't it fascinating to think of a state where Hawk Owls (*Surnia ulula*) and Ash-throated Flycatchers (*Myiarchus cinerascens*), Great-gray Owls (*Strix nebulosa*) and Black-throated Sparrows (*Amphispiza bilineata*) breed? Isn't it interesting that woodpeckers (10 of 11 species breed), owls (10 or 11 of 13 species breed), and hawks (13 of 19 species breed) compose such a high proportion of the state's avifauna? Why are there 42 species of fringillids and only 17 parulids known from Idaho? Do the same features which virtually eliminate the Purple Martin (*Progne subis*) from Idaho affect other species similarly? A discussion of these and similar phenomena in conjunction with an ecological discussion of the state would have greatly enhanced this book.

In summary, Birds of Idaho is a carefully prepared and pleasant work on the avifauna

of a little known part of the country. Its principal contributions are in filling gaps about our knowledge of bird distribution and taxonomy in the northern Rocky Mountain region. As such it is worth the price. It is disappointing in that so little attention is paid to the features of the state which have influenced bird distribution and which have brought about the racial variations which occur.—LEWIS W. ORING.

BIRDS OF THE LAKE TAHOE REGION. By Robert T. Orr and James Moffitt. California Academy of Sciences, San Francisco, Cal., 1971: 10¼ × 6¾ in., ix + 150 pp., 1 col. pl., 16 figs. $5.00.

Lake Tahoe is a large deep lake situated at about 6,225 feet elevation in the Sierra Nevada Mountains of California and Nevada, and is surrounded by mountains reaching from 8,000 to over 9,700 feet. Formerly the lake was a quiet place in which to spend the summer, but it has developed into a popular year-round recreational area. The combination of varied mountain habitats and a large body of water attracts a large variety of birds to the area.

This book is intended to help persons interested in the birdlife of Lake Tahoe, and provide a record of the ornithological history of the area. It consists of three sections—a historical review, a description of the major plant associations, and the species accounts. The area covered by the book is nowhere delimited (a map would have been an asset), so the reader is left to guess at the boundaries of the Lake Tahoe Basin.

The historical summary includes a list of persons who studied birds in the Tahoe Basin, from the time of its discovery in 1844. It is evident that few early ornithologists did any serious work there, and Milton S. Ray appears to be the only one to have published much more from the area. The list also includes the names of a few local residents, such as J. E. Pomin, a trapper and guide who had an interest in birds and whose observations have been used in the book. John Ward Mailliard started gathering the information presented in this book, and all his notes and manuscripts were given to his collaborator, James Moffitt, after his death. Moffitt gathered additional data to complete a study of the birds in the Tahoe region, but met an untimely death in 1943. Robert T. Orr then organized the data, added more findings, and put the book together for publication.

The second portion of the book describes the five principal plant associations in the area and discusses where each association occurs. Some of the commoner summer resident species of birds in each association are mentioned.

The species accounts make up most of the book, as they cover 195 species, listed in strict accordance with the A.O.U. Check-list of North American birds (5th ed.). Subspecific forms are indicated in those cases where specimens have been examined. The information given for each species varies from three lines, for stragglers recorded only once, to nine pages for the Common Merganser (*Mergus merganser*). Specific records and information follow a concise statement of status for each species. Much of the information has been taken from the notes of Mailliard and the authors, but observations by some of the early residents and published records have also been included.

This book provides a thorough record of the ornithological history for the Lake Tahoe region until about 1930, but not thereafter. It is fairly easy to determine the status of most birds in the 1920's by reading the species accounts, and the book could be helpful in determining changes in the status of birds around Lake Tahoe due to the development of the area.

On the other hand, the book may mislead persons interested in the present birdlife of Lake Tahoe because little effort has been made to consider recent records. The House Sparrow (*Passer domesticus*) is stated to be an "uncommon vagrant," citing a single bird seen in Tahoe City on 7 April 1927, and two more seen there on 1 May 1927. In reality, the species is now fairly common in all the towns along the lake shore. The Starling (*Sturnus vulgaris*), now a resident species around the lake, is not included in the species accounts, and the present status of many other species is different from that indicated in the book. Dr. Orr apparently made no effort to contact active observers around the lake as had Mailliard and Moffitt, with the result that much potential information was omitted. In addition, the records have not been carefully screened, with the result that such species as the Red-necked Grebe (*Podiceps grisegena*) and Ross' Goose (*Chen rossii*) have been included on the basis of very weak evidence. Current information on the birds of California indicates that both species are most unlikely on Lake Tahoe.

Records published since 1940 have been mostly overlooked, resulting in some inaccuracies. For instance, it is stated that "there is no evidence at hand to indicate that Willets have bred in the Tahoe region within historic times," yet William K. Kirscher (Condor, 56:361, 1954) reported finding a Willet nest at the south end of Lake Tahoe on 31 May 1954. Only one positive record is said to exist for the Flammulated Owl (*Otus flammeolus*) in the Tahoe region, but Ned K. Johnson and Ward C. Russell (Condor, 64:513–514, 1962) reported hearing some twelve birds, three of which were collected, around Martis Peak and Crystal Bay during 1960 and 1961. Additional species such as the Oldsquaw (*Clangula hyemalis*) reported by Fred G. Evenden (Condor, 57:304–305, 1955) at the mouth of the Upper Truckee River on 16 May 1955, should have been included in the species accounts.

The book is well laid out and pleasing to the eye. The print is easy to read, the paper is of high quality, and I detected no obvious editorial errors. The volume is worth the five dollars being asked. Unfortunately, it should have been published 40 years ago, for its information would then have been current.—GUY MCCASKIE.

A GUIDE TO NORTHEASTERN HAWK WATCHING. By Donald S. Heintzelman. Published privately, 1972: 5¼ × 7¾ in., 64 pp., photographs, maps, diagrams. Paper cover. $1.50 plus 25¢ postage and handling. (Order from: Donald S. Heintzelman, 35 Church Street, Lambertville, N. J. 08530.)

The sight of hawks in migration gives most birders a thrill, and this booklet can help them to have that experience. It is a guide to hawk watching in the northeastern United States, where are to be found some of the finest hawk lookouts in the world. Novices can learn much from it about migrations and weather conditions, field equipment and methods, and secrets of hawk identification. One chapter gives information about each of 21 lookouts—there *are* other places besides Hawk Mountain and Mount Tom—with maps and directions for finding them. The booklet is attractive and well-written. It should prove useful to hawk watchers, and should lure newcomers to the sport.—P.S.

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