## BOOK REVIEW: BIRDS OF PREY IN CONNECTICUT

## by H. Christian Floyd

Birds of Prey in Connecticut: A Guide to Finding and Understanding Hawks, Eagles, Vultures and Owls by Gene Billings, illustrated by Julie Zickefoose. 1990. Torrington, Connecticut: Rainbow Press. 461 pages.

Although the author states that "this guide is written for amateur birders who live in Connecticut or who visit the state," one would not have to be concerned with Connecticut at all to find this book worthwhile. The highly readable text contains much general information that should be of interest to anyone for whom finding and understanding raptors has appeal. Raptor enthusiasts with particular interest in Connecticut will be additionally rewarded with both general information about the distribution of the state's raptors and a very comprehensive guide to the sites where they can be observed.

The guide is intelligently organized into major parts that begin from the most general points of view and focus finally on the species, habitats, and sites of Connecticut. Part 1 (thirty pages) is a discussion of the general ecological issues associated with raptors, with separate sections on predation, habitat, territoriality, and conservation. Particularly interesting in this part are the discussions of prey species and populations, and of how long-term habitat changes in Connecticut have affected each raptor species.

Part 2 (ninety-one pages) focuses on the general characteristics of the hawks, eagles, and vultures (the order Falconiformes). Topics include physical characteristics, hunting techniques, diet, flight, migration, and nesting. New England hawkwatchers will be pleased by the excellent extensive (forty-four pages) treatment of flight and migration that gives clear explanations of the general phenomena involved in hawk migration and then interprets those explanations specifically for the Connecticut geography. A list of 108 hawk watching locations in Connecticut is provided, organized by county, with detailed descriptions and directions easily found in Part 5.

Part 3 (forty-three pages) similarly focuses on the owls (the order Strigiformes). The same general topics are covered, but with appropriately different emphases. Migration is deemphasized because many owl species do not migrate and so little is known about the migratory behavior of those that do. On the other hand, the fascinating physical characteristics of owls are concisely but comprehensively discussed. Only the true owl expert will not learn something new in this section. This reviewer learned another reason why (in the sense of adaptive correlation) many owls have feathered tarsi and toes whereas many hawks do not. In swallowing many prey items whole, owls avoid much of the messiness around their feet occasioned by ripping prey to pieces as hawks do. The final section of this part, covering strategies for finding owls, will be

useful to many birders.

Part 4 (seventy-six pages) comprises species accounts for the twenty-four raptor species that occur regularly in Connecticut, plus brief summaries of the occurrences of seven additional species characterized as accidental. Topics covered in the accounts include range, migration, habitat, hunting behavior, diet, nesting behavior for Connecticut breeders, population both in Connecticut and generally, and suggested strategies and Connecticut locations for finding the species at various times of the year. Conveniently the locations are identified and ordered just as they are in the following Part 5.

Part 5 (154 pages) contains brief write-ups of 218 Connecticut locations where raptors may be found. These are grouped by county and then alphabetically by town within each county. Each write-up consists of a general description of the location, a list of the raptor species to look for, and directions on how to get there. The descriptions are variable and generally interesting, and cover such topics as geology, habitat, local abundance of raptors, management, access, facilities, and other public uses of the site. The species lists show occurrence for each of the four seasons. The directions are very clear and precise with road distances stated to the tenth of a mile. Where appropriate, separate directions are given for each of the major routes of approach. In addition, each county section in Part 5 begins with an overview of general information on the county.

Part 6 (thirty-two pages) contains a variety of additional general information for birders: comparisons of the major field guides, focusing on those specializing on raptors; lists of other books on raptors, ornithology, bird finding, and sites and trails in Connecticut; lists of maps useful for birding in Connecticut; lists of local, state, and national birding organizations, with extra attention to those specializing in raptors; discussions of significant bird censusing activities in the state; descriptions of rare bird alert services for Connecticut; and advice on birding optical equipment.

The sixteen sensitive drawings by Julie Zickefoose are a big plus. Accompanying each drawing is her evocative commentary, such as the one for the Red-tailed Hawk that appears on the cover: "What sky is complete without one?"

A significant disappointment in the guide is the minimal information presented in the maps. More elaborate maps would have been a valuable complement to the text in several contexts. Maps 1 and 2, which represent the fall migration routes of raptors over New England and Connecticut, respectively, do so in relation to coastline and political boundaries. How interesting it would have been to see these routes in relation to topographic features such as ridges and rivers! Instead the reader who does not have an image of the Connecticut River in his mind's eye will be puzzled by the hook in the most easterly of the north-south routes shown in Map 2. The text should be

faulted also, because it offers no explicit discussion whatsoever of the routes depicted in these maps. Likewise, a map showing the four migration data regions identified in Table 4—shore, east, west, and southwest—and the reporting sites contained in each region would have helped make meaningful this table's breakdown of species totals by region. Furthermore, the regions are not defined in the text. An enlightening complement to the habitat section of Part 1 would have been a map of Connecticut depicting the five ecological regions described in that section. The maps of the eight Connecticut counties in Part 5 have the barest utility. They show the treated locations in relation to town boundaries.

The text has some additional shortcomings. Its scientific utility is diminished by the absence of supporting references for the many interesting facts presented. There are numerous references to unidentified studies, tests, and measurements. For example, on page 53, we read, "Several studies indicate that the rate of [hunting] success varies quite widely among raptor species, and depends on a number of variables, principally the kind of prey and the method of attack." The scientifically oriented reader might be motivated to look up these studies, but they are not identified. Other examples are the nesting data provided without sources in Tables 7 and 8 for diurnal raptors and in Table 12 for owls; one would like to know the geographic extent from which the data were taken.

While the above shortcomings make the book less authoritative than it might have been, they probably do not diminish its value for most birders. It provides much enjoyable reading and much useful reference information. It is highly recommended to the New England raptor enthusiast, or to anyone planning to look for birds in Connecticut.

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