

about putting whiskers on creatures that have them, and as this sketch has none, he probably intended to add them when he put the black on the ears—and never did either.

The plates and other pictures are assembled without order or continuity. The biographical essay on his life by the editor adds little, if anything, to the thirty-odd works on Fuertes' life and achievements that have been written before.

The only good I can say of the book is that Fuertes' pictures are beautifully reproduced in my copy, and his fine letters shine through the rough editing they have been given here—his daughter, Mary Fuertes Boynton, treated the letters much more completely and sensitively. Roger Tory Peterson's introduction is excellent and is, in my opinion, the only new material in the text. I wish he had edited the book too or that Dean Amadon had done so when he wrote the preface.—ELIZABETH S. AUSTIN.

Darwin's Islands/A natural history of the Galápagos.—Ian Thornton. 1971. Garden City, New York, Natural History Press. Pp. xiv + 322, many text figures and plates. Cloth. \$7.95.—“The natural history of these islands is eminently curious and well deserves attention. Most of the organic productions are aboriginal creations, found nowhere else; there is even a difference between the inhabitants of the different islands; yet all show a marked relationship with those of America, though separated from that continent by an open space of ocean, between 500 and 600 miles in width. The archipelago is a little world within itself.” Darwin wrote these words at the time of his visit to the Galápagos Islands. Two years later he was to write “In July opened first notebook on Transmutation of Species. Had been greatly struck from about the month of previous March on character of South American fossils, and species of Galápagos Archipelago. These facts (especially latter) origin of all my views.”

Most of us, as biologists, have been taught almost from the first day of our professional training about the influence Darwin's visit was to have on the impending revolution in biological thought. Still I suspect most biologists, including myself, take the significance and historical importance of the Galápagos Islands somewhat for granted, especially those of us who have yet to visit them ourselves. Some of this problem should be alleviated with the publication of Ian Thornton's book, which is probably the best compilation to date on the natural history of these islands. Yet the book is more than that—it can serve as a good example of what natural histories should be like. Thus, Thornton also provides us with a good summary of current thinking about island biogeography from an introductory level that includes general observations to the more sophisticated theory of MacArthur and Wilson (e.g., even r and K selection come in for discussion).

The first nine chapters comprise a summary of most available information on the history, geology, flora, and fauna of the Galápagos. Three chapters deal with birds, one each on seabirds, land birds, and Darwin's finches. Perhaps the first thing that impressed me about Thornton's book is that he provides specific citations for his statements. This increases the value of the book manifold, and puts it well above the level of most natural histories. This is why the book will be of importance even to the most theoretically minded scientist—documentation is readily available. In these descriptive chapters Thornton provides concise reviews of what is known about nearly all the vertebrates occurring on the islands. As far as I could tell he covers most of the important literature. A major shortcoming is that he devotes very little space to invertebrates and plants, which is somewhat peculiar for he is a specialist in insect ecology.

Despite the large amount of work on the Galápagos fauna, only a few vertebrates are adequately known in terms of their behavior and ecology. Of the birds, the seabirds (especially the boobies, petrels, and Swallow-tailed Gull) have been studied the most, whereas Darwin's finches (Geospizinae) have been subjected to comparatively little detailed behavioral and ecological analysis. Thornton's book is particularly valuable in pointing out the gaps in our knowledge of the Galápagos fauna, and it is clear much more work is needed.

Following his descriptive chapters Thornton has three chapters summarizing current opinions on island biogeography. He discusses colonization, establishment, and archipelago evolution. He does a good job in relating the general theory of various workers to the specific situation in the Galápagos. Here as elsewhere Thornton contributes very little original data or ideas; in this book his role has been that of a compiler and interpreter.

The final chapter discusses the problem of preserving the biological integrity of the Galápagos. In fact, throughout the book Thornton is quick to call attention to various matters—past and present—that have concern for conservationists. One particularly disturbing event, and one with wider, more serious ramifications, was the extinction of the entire fauna of Baltra Island (including land iguanas, Galápagos Dove, and a species of mockingbird, among others) by *bored* U.S. servicemen during World War II. A relevant question might be to what extent is this still going on? Equally disturbing is the amount of collecting for "scientific purposes," which was instrumental in exterminating some of the fauna (e.g., the Giant Tortoise on Duncan). Now that the Galápagos are a national park of Ecuador, perhaps there is reason to hope for the best. However, the presence of goats and the money of American tourists (who have remarkably similar omnivorous demands to those of their four-legged counterpart) is a big question mark.

Hopefully Thornton's excellent book will help create the awareness that is necessary to save this "birthplace of modern biology."—JOEL CRACRAFT.

Avian biology.—Donald S. Farner and James R. King (Eds.). 1971. New York and London, Academic Press. Vol. 1, pp. xix + 586, 6 × 9 in. Cloth. \$25.50.—"Avian biology" is a set of reviews of current knowledge and the edge of research in bird biology. It is labeled a descendant of Marshall's "Biology and comparative physiology of birds" of 1960. The new work is projected for three volumes, of which the first has appeared. "Avian biology" is not a revision of its forerunner (review volumes build on predecessors, but ought not "revise" them), although two chapters are, inexplicably, nearly unmodified holdovers from 1960. Thus, about 90 percent of the contents is strictly new. Most of the chapters are critical reviews and not merely summaries of literature, and some of these will be the best available starting points for pursuing ideas and literature of a number of biological subdisciplines. But I must warn you that Academic Press has done the authors, the editors, and the users a disservice: the usual heavy price for books from Academic Press is now combined with a paper cheaper than usual, and press capacity for adequate halftone reproduction has been almost completely lost (halftones appear only in one of the holdover articles, and anyone wanting adequate pictures will need to look at the Marshall volumes). But errors, real or typographical, are otherwise rare, and I feel it necessary to mention only that my friend Richard E. Johnson and I have been erroneously synonymized.

Farner and King briefly examine the merits of a set of reviews concerning a taxon-based discipline as opposed to a process-oriented one, and conclude that the volume