Marine birds and mammals of Puget Sound. Tony Angell and Kenneth C. Balcomb III. 1982. Washington Sea Grant Publication, University of Washington, Seattle. xiii + 145 pp. \$ 14.50.

The Puget Sound area of northwestern Washington, with its juxtaposition of heavily forested mountains and marine waters, is a region of immense beauty and with a rich flora and fauna. Its diversity of resources has attracted a variety of human uses, resulting in various strains on a delicately balanced ecosystem. This book is one of a series of Washington Sea Grant publications designed to educate the public as to the sensitivity of this environment, and, as pointed out by Paul R. Ehrlich in his foreword, should go a long way in instilling a conserving attitude in residents of the Puget Sound area.

The book begins with a series of introductory sections describing the natural history of the area in general, specific habitats, and both natural and human factors affecting bird and mammal populations in the area. The bulk of the text treats marine birds and mammals that normally occur in the area, each family treated in a general account followed by a brief summary for each species of local distribution and "food and critical habitat." The main text is followed by an appendix of maps and summary charts, a reference list, and an index.

Although co-authored as a whole, the birds and mammals were obviously authored independently, as Angell's accounts of birds refer frequently to "I" and once even to Balcomb "and I." The writing styles are also different. Angell's bird accounts usually start with a picturesque description of a personal experience involving some member(s) of the family involved, then deal in more general terms with their biology in Puget Sound and elsewhere. Balcomb's accounts are less personal and his local information more often includes adjacent parts of British Columbia. Both authors write well, however, and the slight difference in style does not detract from the book. I detected no factual errors, although the statement that Snowy Owls are cyclic in numbers is perhaps too general and the claim that male phalaropes do all nest building, incubation and care of the young is slightly over generalized. Similarly, the evolutionary path to Pinnipeds is stated as fact rather than best available theory.

Banding as such does not figure prominently, although banding returns are mentioned in reference to longevity of Ospreys and the return of an Arctic Tern to its nesting grounds 22 years after initial capture. Both authors discuss the biology of each species in general, but stress local conditions and potential man-induced hazards. The literature cited and personal communications indicate that they have researched their topics thoroughly, using both published sources and unpublished theses and local reports.

Angell's drawings of birds and mammals in action enhance the text. None of his subjects are in a rigid pose, but rather are shown sleeping, displaying, diving, pursuing prev, etc. Apart from a few with a confusing two-dimensional appearance, most are pleasing to the eve. The nomenclature is mostly up to date except for a few lapses (e.g. Marsh Hawk) and redundancies (e.g. Pintail Duck). Although many ornithologists now consider the Northwestern Crow as a race of the American species, this change has not to date been accepted by the American Ornithologists' Union, and its treatment as a race in a book of this sort, intended for the layman, is potentially confusing. Typographical errors are few (I found only four), and only two references are incorrectly cited in the text - one (Gardner 1979) cited repeatedly, but not listed in the literature. The actual citations are somewhat inconsistent in style and some contain minor errors (such as listing Dover as the publisher of Bent's volumes instead of as a reprinter) or are slightly incomplete, but all would be easy to look up as cited.

The few errors and inconsistencies in this book are minor. As an introduction to seabirds and marine mammals in northwestern Washington and southwestern British Columbia, it can be recommended highly.

Martin K. McNicholl



Books

The Kingfisher. David Boag. 1982. Blandford Press, Poole, Dorset, U.K. viii + 120 pp. \$17.95.

In this volume, David Boag has continued the fine British tradition of publishing books on single species or closely-related groups of species, based on long-term intimate studies on the birds. Unlike previous works on wrens (Armstrong), Robins and swifts (Lack), the European Blackbird (Snow), Greenshanks and crossbills (Nethersole-Thompson), and several others, however, Boag's contribution is written in "popular" essay style with little quantitative background material or reference to previous work. The title refers to the species of kingfisher that occurs in Britain, not the family as a whole. I would be remiss if I did not point out that the author is a British naturalist and not the ornithology professor, David A. Boag, of the University of Alberta.

A brief introductory chapter describes a day in the life of a kingfisher through the eyes of the bird. Six chapters then detail the life history of the species, based partly on studies by others observers, but primarily on 17 years of close study by the author. Chapter headings are: Description and distribution; territory and aggression; courtship and nest-building; eggs and young; foods and feeding habits; and mortality. A final brief chapter outlines myths and legends associated with kingfishers. An appendix documents Boag's photographic techniques, including details of blinds and methods of inducing the birds to feed in artificial pool situations. A brief "bibliography" and a three page index complete the book.

Boag's enthusiastic and clear writing style will place this book among those known for fine nature writing, but his superb color photographs of kingfishers at every stage of life are the strongest feature of this volume. The book appears to be free of both factual and typographic errors.

Although the quality of the book as natural history writing is high, its use as a scientific authority on the species is limited. Boag's knowledge of the species cannot be doubted, but he provides very little quantitative data and sometimes his general statements do not distinguish his own data from those in the literature. For example, he provides a record of an 18-day incubation period from his own observations, but gives neither the sample size nor authority (whether himself and/or others) for the stated usual period of 19 to 20 days. Similarly, in discounting the notion that kingfishers pair



for life, he mentions cases in his own experience of both re-mating by the same birds in consecutive years and of matings to new birds, but gives the reader neither sample size nor proportion of each situation. The book is based on a combination of 17 years of observations in the wild, raising young birds in captivity, and a few experiments, and one hopes that Boag will work up all these data for technical presentation elsewhere. The "bibliography" consists of only 11 titles, of which only 3 are specifically on kingfishers, none of which treat other species or the family as a whole. Inclusion of at least a few general works on the family, such as Thomson's article in the bird dictionary or Fry's excellent summary in the 1980 issue of *Living Bird*, would have at least guided the reader to other sources.

European banders will be interested in Boag's statements on age-related differences in plumage and sexrelated differences in bill color. Data from the British Trust for Ornithology's ringing scheme show that nestling dispersal movements are greater than those of adults, from which 85% of recoveries are within 48 km of banding site, and even such close countries to England as France and Belgium provide examples of extreme movements. Boag's own data on ringing recoveries indicate a 75% death rate per year in adults and a similar high rate in nestlings from which 16 of 21 recoveries were from the year of hatching and only one bird reached its third year. These data and seasonal variation in recovery rates are given primarily as percentages without total numbers banded.

In brief, then, The Kingfisher is a fine piece of nature writing and beautifully illustrated, but researchers will have to wait for publication elsewhere of the detailed data on which it is based.

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