

## BOOK REVIEW

### BIRD MIGRATION

Thomas Alerstam (Univ. of Lund, Sweden); translated by D. A. Christie. 1990 (1982 in Swedish) Cambridge University Press, New York, 10011. Hardback, 391 pp + bibliography & index; \$105.00.

This book is an excellent study of the ecological factors which lead to speciation within a given community of birds, and how the individual species with similar foraging techniques have evolved their own peculiar migration strategies, whether truly annual or irruptive, so as to optimize the individual survival rate within each species, and thereby contribute to that species' survival.

To do this, the author, in the first portion of the book, selects one or more examples of each group of birds, defined by their foraging techniques (surface feeders, divers, grazers, raptors, seed-eaters, etc.), to discuss how this particular food source leads to either regular or irregular migration patterns, with either constant (seed-eaters) or variable (frugivores) wintering areas. Among sea birds, since diving birds take most of their food from deeper waters, where temperature constancy leads to a more constant level of prey availability, they need to move only far enough south to assure ice free water in winter. In contrast, surface water feeders, whose prey tends to disperse as surface waters become chilled, must find bodies of water of sufficient temperature to support an adequate concentration of prey species.

The second portion of the book devotes itself to the mechanics of migration, methodology of studies, speed, weather factors, altitude, flocking, etc. While very complete, this section suffers occasionally by the fact that the original text appeared in 1982, with most data being limited to the period prior to 1980. The author recognizes this drawback in the preface to the English edition, and where possible, some updating has been included in both text and tables, very smoothly and unobtrusively.

Of special interest to a falcon devotee, like myself, is a small section devoted to two old world species, the beautiful Eleonora's Falcon and the Sooty Falcon. These two falcons have developed specialized breeding cycles and hunting techniques, to take advantage of the fall passerine migration, over the Mediterranean and Gulf of Cadiz (Eleonora's) and the Arabian and Libyan deserts (Sooty). Both species lay eggs at the end of July into early August. When the eggs hatch in late August, the fall migration has started and ample food is available through the nestling period into early October. The Eleonora's Falcon, which is a colonial island nesting species, has even developed group hunting techniques where all the males in a given colony set up picket screens to intercept passerines traveling over a wide front, and at different altitudes. These techniques vary from colony to colony, to satisfy local geographic conditions, and the distance from mainland jumping off points of the prey.

The translation is excellent, and the narrative style of the author flows well making this book far easier to read than most other technical volumes. As a whole, very worthwhile, with only the \$105 price a major drawback to its addition to a home library.— Peter Worthington