## **Books**

Cranes of the World. Paul A. Johnsgard. 1983. Indiana University Press, Bloomington, xiii + 258 pp. \$3.50

In the current era of books on various bird groups in North America or the World, Paul Johnsgard has emerged as the leading author of this genre. Cranes of the World lives up to his reputation for providing thorough coverage that is interesting to read. Eight chapters on the comparative biology of cranes provide a wholistic overview, followed by 14 chapters detailing the known life history of each extant species. A foreword is contributed by George Archibald, Director of the International Crane Foundation, and Myra Mergler Niemeier authored a section (pp. 29-34) on tracheal and syringeal development. The book ends with a list of the origins of scientific and vernacular names, a key to species and subspecies, a list of about 400 references, and a very brief index.

As might be expected in a book of such broad perspective, banding is not highlighted frequently, but some aspects of the life history of several species must have been based on banded birds. Johnsgard mentions the difficulty in determining mortality rates for most species because few have been banded in sufficient numbers (p. 35). In fact, he found that the principles of population analysis based on banding recoveries could be applied only to the Sandhill Crane, for which he provides recovery rates, survival rates by age, and life table data, with an explanation of how such data are computed (pp. 39-43). Problems posed by band wear, the long lives of cranes, and other complicating factors are mentioned, as are some specific recoveries, most notably a Siberian recovery of a New Mexico-banded Sandhill. Some recovery rates are also given for Eurasian Cranes (p. 237), and the detailed movement of a telemetred Whooping Crane is traced from Wood Buffalo National Park, N.W.T. to Arkansas National Wildlife Refuge, Tex.

Color plates, black and white photographs, line drawings, and detailed range maps all enhance the general high quality of this book. There are an unfortunate number of proof-reading errors, primarily discrepencies between literature cited and the reference list, especially in dates and spelling of authors' names. Reference to Fig. 9 on p. 235 evidently should read Fig. 8, and similarly table 14 should be substituted for table 10 on p. 222. The most amusing slip was reference to incubating cranes "painting," when panting is obviously intended (p. 22). Books of general coverage are bound to omit some details. Two such omissions that I found unfortunate were the analysis by Miller (1974, Nat. Hist. 58:62-69) indicating that Sandhill Cranes cannot survive current "management" practices, and the potential threat to Whooping Cranes of hydroelectric power lines proposed near their nesting grounds.

Johnsgard pays tribute to the 1973 monograph on the same topic by Walkinshaw. This volume, just 10 years later, is a fine tribute to the research stimulated by Walkinshaw on this jeopordized bird family.

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