
Books

Exploring the Secrets of *Coragyps atratus*. Paul A. Stewart. 1988. Center for Promotion of Uninhibited Ornithological Research, Virgilina, Virginia. vii + 40 pp.

This booklet is available free from the author at Box 335, Virgilina, Virginia 24598 as long as supplies last to reviewers and researchers who agree to test one or more of the hypothesis(es) he raises. The booklet consists of five chapters, four of which are based on articles initially prepared for submission elsewhere.

The first two chapters provide detailed arguments and observations that suggest that Patricia R. Rabenold's various papers on Black Vulture roosts as "information centers" for food finding ignore various details of vulture behavior that indicate that communal behavior is better explained as an extension of parent-offspring bonds. These two themes are also covered in the third chapter, but its main thrust is an attack on over emphasis in recent ornithological publications on statistical tests at the expense of harder to test anecdotal observations. The final two chapters detail various conservation concerns, some of which were outlined briefly in chapter 1.

While many of Stewart's points of criticism are of general interest to all researchers, banders will be especially interested in chapter 4 in which known and probable effects of disturbance on vulture behavior are discussed and the dangers that leg bands pose to vultures are detailed (pp. 29-30). As Stewart is a prominent bander who banded 277 Black Vultures himself before realizing the hazard such bandings cause, he cannot be regarded as an anti-bander discoursing on a pet gripe, and his observations contributed to the ban in North America on leg-banding vultures. Color markers of various types are available, and help document such details of vulture biology as foraging movements of about 80 Km (p. 33), but may affect social interactions (see D. Davis, Chapter 21, pp. 322-329 in S. R. Wilbur and J. A. Jackson, eds. *Vulture biology and management*. Univ. California Press, Berkeley, 1983). In addition, the actual capture of the birds may have disruptive effects (Stewart's pp. 11-12, 39).

Although not all researchers will agree with Stewart's views on vulture biology and/or the publication process, his booklet provides a clear set of hypotheses that deserve further testing by vulture enthusiasts, and his booklet serves as a reminder that statistical tests are useful only when they are based on meaningful observations.

Martin K. McNicholl

Grand Canyon Birds. Bryan T. Brown, Steven W. Carothers and R. Roy Johnson. 1987. University of Arizona Press, Tucson. 302 pp. \$19.95.

This well-written book is a regional account of the status, distribution, and natural history of birds in the Grand Canyon of Arizona. It draws heavily on the extensive records accumulated by park personnel, a practice begun in 1926 by Glen Sturdevant, the first chief park naturalist, and continued to the present. This volume summarizes many recent changes in avian status and distribution, changes which Brown, Carothers and Johnson have documented through numerous river trips and other expeditions into the corners of the park.

The introductory material presents a history of ornithological research in the park, which included banding at several points on the rim and within the canyon during the 1930s and early 1940s. Banding was conducted under the supervision of Eddie McKee and L. L. Hardgrave. Although banding records were consulted during the preparation of the book, few banding recoveries are mentioned explicitly in the species accounts. The introductory chapters also include a description of the habitats of the canyon, and details of how the birds have responded to recent changes in the canyon, especially along the Colorado River.

The heart of the book is the 304 species accounts of birds recorded from the Grand Canyon region. These accounts include the usual information on local status, breeding and migration data, and unusual records. Brown *et al.* emphasize both what is known, and perhaps more importantly, what is still not known. Many potential projects for local or visiting banders are described within the species accounts. Do Northern Rough-winged Swallows, Sage Thrashers or Northern Mockingbirds breed within the park? Are Clark's Nutcrackers regular residents on the South Rim? Do the Scrub Jays seen along the river in spring and fall come from local populations up on the rim, or are they from more distant populations? By pointing out the gaps in our knowledge of the canyon's birds, this book becomes more than a regional checklist, and should be included in the library of all persons interested in Arizona birdlife.

John B. Dunning, Jr.