BioOne COMPLETE

The Carolina Parakeet: Glimpses of a Vanished Species.

Author: Wright, Timothy F.

Source: The Auk, 123(1) : 291-292

Published By: American Ornithological Society

URL: https://doi.org/10.1642/0004-8038(2006)123[0291:TCPGOA]2.0.CO;2

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Downloaded From: https://complete.bioone.org/journals/The-Auk on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

high-quality recordings and sound spectrogram images, this book will make a valuable addition to the library of any bird enthusiast who is interested in gaining a deeper appreciation of bird vocal behavior.—Jill A. Soha, *Borror Laboratory of Bioacoustics, Department of Evolution, Ecology and Organismal Biology, The Ohio State University, Columbus, Ohio 43210, USA. E-mail: soha.1@osu.edu*

The Auk 123(1):291–292, 2006
© The American Ornithologists' Union, 2006.
Printed in USA.

The Carolina Parakeet: Glimpses of a Vanished Species.—Noel F. R. Snyder. 2004. Princeton University Press, Princeton, New Jersey. xii + 153 pp., 2 color plates, 35 black-and-white photographs, 2 tables. ISBN 0-691-11795-0. Cloth, $29.95.—The Carolina Parakeet (*Conuropsis carolinensis*) was once widespread and abundant across much of the eastern United States. Like the Passenger Pigeon (*Ectopistes migratorius*) and Ivory-billed Woodpecker (*Campephilus principalis*), the Carolina Parakeet went into decline in the 19th century and was believed to have gone extinct in the early part of the 20th. The recent electrifying news of the rediscovery of the Ivory-billed Woodpecker (Fitzpatrick et al. 2005) has raised hopes that other bird species long believed to be extinct may in fact await rediscovery. In this context, a volume reviewing the history and biology of the Carolina Parakeet is timely indeed.

As an ornithologist studying parrots, my thoughts of the Carolina Parakeet are always accompanied by a sharp pang of regret that temperate North America's only native parrot was gone before anyone thought to undertake systematic study of its natural history. In the absence of such primary data, the best we can hope for is an authoritative species account that synthesizes fragmentary and scattered material to draw a comprehensive picture of the vanished species. Snyder attempts such a synthesis here, and it is a strong effort; the occasional unevenness of coverage in the volume seems more a reflection of the shortcomings of the source material than those of the author.

The book can be divided into two parts that differ in approach and style. The first is a lively historical account of the decline of the species and the personalities associated with its last known wild populations, many of which were ignored by the ornithological authorities of the day. This portion is based on a review of historical records, augmented by interviews of elderly residents of central Florida and field investigations by the author. Snyder builds a convincing case that populations of the Carolina Parakeet persisted in central Florida's Okeechobee swamp into the late 1920s and in the lower Santee River of South Carolina into the late 1930s. These reports considerably postdate the generally accepted extinction date of 1914, based on the demise of a captive pair held in the Cincinnati Zoo. The text here is enlivened by photographs of people, objects, and locales discussed, including pictures of a controversial last-recorded nest and the eggs collected from it.

The conclusion that wild populations persisted into the middle of the 20th century provides a distressing subtext to the remainder of the book, which synthesizes available data on the biology of the Carolina Parakeet and discusses probable causes for its extinction. Here, Snyder is forced to sift through historical accounts, many of which were previously compiled by Daniel McKinley in a series of state-by-state records of the species (e.g. McKinley 1985). This section represents no mean scholarly feat by Snyder, for despite the abundance of this species before its decline, historical accounts from such well-known naturalists as Audubon, Wilson, Nuttall, and Brewster are striking in their patchwork nature and conflicting content. Snyder does his best to fill in the resulting gaps with extrapolations from the biology of other parrot species, based on personal knowledge gleaned from extensive fieldwork. Despite this effort, chapters on habitat preferences, feeding habits, and breeding biology raise as many questions as they answer regarding the degree to which the Carolina Parakeet relied on virgin primary forest, the relative importance of different food items, whether this species was toxic to its predators, the social structure of flocks, the timing of the breeding season, and whether it nested exclusively in cavities or also constructed twig nests.

Downloaded From: https://complete.bioone.org/journals/The-Auk on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

This last question raises an interesting angle of inquiry. Nest construction is a trait found in only one other Neotropical parrot species, the Monk Parakeet (*Myiopsitta monachus*). This species is historically widespread in the temperate regions of South America and is now invading several portions of temperate North America and Europe. To what extent can the Monk Parakeet be considered an ecological replacement of the Carolina Parakeet? Do these two parrot species share similar physiological or behavioral adaptations to temperate climates? These questions are not addressed here, though Snyder suggests that *Conuropsis* and *Myiopsitta* are closely related, a hypothesis amenable to testing using ancient-DNA techniques and existing study skins.

The book concludes with chapters weighing the probable causes of extinction of the Carolina Parakeet. Here, unfortunately, Snyder is particularly hampered by the scarcity of ecological data and is consequently forced into extensive speculation. The usual suspects are all discussed, including shooting (as crop pests and for scientific collecting), capture for the pet trade, changes in food supply, competition for nest cavities from introduced European honeybees, and mortality from predators or parasites. Snyder concludes, as did McKinley before him (McKinley 1980), that many of these factors may have played a role in the parakeet's decline, but none are obvious culprits behind the species' final disappearance.

Perhaps for lack of a better explanation, Snyder turns to disease, suggesting that it played a major role in the decline of the Carolina Parakeet. This is a theme Snyder has raised before in the context of parrot conservation, and it is clearly an important consideration for many species, particularly those that are in captive breeding programs (Derrickson and Snyder 1992). In the case of the Carolina Parakeet, Snyder's argument rests on a chain of rather circumstantial evidence that includes the fondness of parakeets for the weedy cocklebur (*Xanthium* spp.), the resulting proximity to human habitations and domestic animals, a few historical accounts of "apoplexy" in captive parakeets, and the large numbers of diseases to which other parrots are susceptible. Intriguingly, the role of disease in the decline of the Carolina Parakeet is another subject identified by Snyder as amenable to further study in preserved specimens, so perhaps more data will be available in the future.

The book concludes with a brief lament that more was not done to save this fascinating animal, a sentiment I entirely share after reading the book. The glimpses of a vanished species promised in the title are more than enough to make one wish for an actual glimpse of a flock winging through a remote southern bottomland. So what are the prospects for the rediscovery of a wild population of the Carolina Parakeet? Sadly, as this book makes clear, the prospects are slim that such a brightly colored, gregarious bird with an affinity for weedy plants found near human habitations could still persist undiscovered. The notion that a captive individual tucked away in a private aviary may come to light seems only slightly less improbable. In lieu of the Carolina Parakeet itself, this volume will have to stand as the most complete record available of the biology and history of this fascinating species. As such, this book will be enjoyed by those interested in parrots as study subjects or companions, and by ornithologists interested in the history of avian conservation efforts in the United States (feeble as they were, in this case), and is a fitting addition to all university libraries.—Timothy F. Wright, *Department of Biology, New Mexico State University, Las Cruces, New Mexico 88003, USA. E-mail: wright@nmsu.edu*

Literature Cited

Derrickson, S. R., and N. F. R. Snyder. 1992. Potentials and limits of captive breeding in parrot conservation. Pages 133–163 *in* New World Parrots in Crisis (S. R. Beissinger and N. F. R. Snyder, Eds.). Smithsonian Institution Press, Washington, D.C.

Fitzpatrick, J. W., M. Lammertink, M. D. Luneau, Jr., T. W. Gallagher, B. R. Harrison, G. M. Sparling, K. V. Rosenberg, R. W. Rorhbaugh, E. C. H. Swarthout, P. H. Wrege, and others. 2005. Ivory-billed Woodpecker (*Campephilus principalis*) persists in continental North America. Science 308:1460–1462.

McKinley, D. 1980. The balance of decimating factors and recruitment in extinction of the Carolina Parakeet. Part 1. Indiana Audubon Quarterly 58:8–18, 50–61, 103–114.

McKinley, D. 1985. The Carolina Parakeet in Florida. Florida Ornithological Society Special Publication, no. 2.

Downloaded From: https://complete.bioone.org/journals/The-Auk on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use