BioOne COMPLETE

Extinct Birds (Revised edition) & Hope is the Thing with Feathers: A Personal Chronicle of Vanished Birds

Author: Leonard, Jr., David L.

Source: The Auk, 119(2) : 575-577

Published By: American Ornithological Society

URL: https://doi.org/10.1642/0004-8038(2002)119[0575:EBREHI]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://bioone.org/journals/The-Auk on 28 Mar 2024
Terms of Use: https://bioone.org/terms-of-use

The Auk 119(2):574–577, 2002

Extinct Birds (Revised edition).—Errol Fuller. 2001. Cornell University Press, Ithaca, New York. 400 pp., 200 color and 104 black-and-white illustrations. ISBN 0-8014-3954-X. Cloth, $49.95.

Hope is the Thing with Feathers: A Personal Chronicle of Vanished Birds.—Christopher Cokinos. 2000. Warner Books, New York, New York. 374 pp., 45 black-and-white figures. ISBN 0-446-67749-3. Paper, $13.95.—Extinct species are a source of won-

Downloaded From: https://bioone.org/journals/The-Auk on 28 Mar 2024
Terms of Use: https://bioone.org/terms-of-use

derment and they invoke a sense of loss, both of science and spirit. As a child, I remember reading about Dodos (*Raphus cucullatus*), Passenger Pigeons (*Ectopistes migratorius*), and Ivory-billed Woodpeckers (*Campephilus principalis*). I was affected by those species and the fact that they were gone, and even then I pondered the peculiarities of their lives.

Two informative books fill in some of the gaps in our knowledge of the extinction of birds. The revised edition of *Extinct Birds* provides an overview of most of the birds that have gone extinct since 1600. *Hope is the Thing with Feathers* provides life-history details and fascinating accounts of the history and politics of the extinction of six North American birds. Neither are strictly scientific works. Both books are important, however, not only because they document the history of species' extinctions, but also because they provide often grueling accounts (especially *Hope is the Thing with Feathers*) of the rapacious nature of humans in a style that is accessible to the general (voting) public. Increasing the awareness of the masses may be the only thing that will preclude the writing of similar books in the future.

Fuller's richly illustrated book chronicles 85 species of birds that have gone extinct in the last 400 years. Editorial errors are rare (e.g. inconsistency between number of extinct Drepanids given in text [p. 298] and subsequently listed in a table [p. 299]). The bibliography was short and somewhat dated, with only 36 citations published in or after 1975. The book begins with a thoughtful, but somewhat brief, introduction in which the author informs the reader of the difficulties of deciding whether or not a bird is extinct as well as examples of species that were included in the first edition that have been ''rediscovered'' since its publication (e.g. Four-colored Flowerpecker [*Dicaeum quadricolor*]), and species included in this edition that still may be extant (e.g. Bachman's Warbler [*Vermivora bachmanii*]). A discussion on the causes of extinction follows. I was puzzled to read that hunting by human has little effect on populations, especially because the author mentions hunting pressure in 27 of the species accounts, and there is little question that hunting by humans caused the extinction of birds prior to 1600 (see papers by S. Olson and D. Steadman). Also included in the introduction is a short but interesting discussion on geographic and taxonomic biases of extinction, as well as a paragraph on reconstructing extinct species using ''DNA technology.'' I believe suggesting that resurrecting extinct species as a possibility is dangerous, as naïve readers may not see the need for the continuation of ''traditional'' conservation. This paragraph also fails to mention that without appropriate habitat, resurrected species would be confined to captivity.

Chapters are arranged taxonomically although in one case ''common'' family names are presented in a different order than Latin ordinal names (i.e. swifts, mousebird and trogons, hummingbirds, kingfishers, woodpeckers and related birds). Chapter introductions contain inconsistent bits of information and are highly variable in their length and information content. For example, the introduction for the parrots is eight pages, whereas the introduction for swifts, mousebirds, trogons, hummingbirds, kingfishers, woodpeckers, and related birds is less than two pages. I was somewhat surprised by Fuller questioning whether Ratites are monophyletic and whether or not they evolved from flying ancestors. Molecular evidence suggests they are monophyletic (Sibley and Ahlquest 1990, Haddrath and Baker 2001), and Feduccia (1996) states that ''the evidence is pervasive that all flightless birds have been derived from flying predecessors.'' Each chapter also includes a list of rare, endangered, threatened, or rarely seen birds represented in each chapter. Several expected species are missing from these lists (e.g. Short-tailed Albatross [*Phoebastria albatrus*]). In other cases, such lists are missing for entire orders (e.g. only rare hummingbirds were mentioned in the chapter covering Apodiformes to Piciformes). Information about these rare or rarely seen birds is provided, although the content is variable.

Species accounts also are variable in length and detail, but that is likely a result of variation in the availability of information. The accounts appeared accurate and meticulously researched. Upon reading more detailed works, I found some omissions (e.g. the historical abundance of Labrador Ducks [*Camptorhynchus labradorius*] is not clear; Chilton 1997). For certain species, alternative causes of extinction were omitted or only briefly mentioned. For example, Askins (2000) suggested that Passenger Pigeons could not survive without a continental expanse of forest to supply their immense demand for mast. That hypothesis seems likely given the species nomadic behavior and the asynchronous nature of mast production. Askins (2000) presents convincing arguments why hunting alone can not explain the species extinction, yet Fuller only devotes part of one sentence to that hypothesis and fully blames hunting as the cause of extinction. Alternatively, I was pleased that he included the infrequently cited possibility that Ivory-billed Woodpeckers originally inhabited pine forests of the southeastern United States, and the cutting of those forests may have been the first nail in their coffin (see Short 1982). Given that the Imperial Woodpecker (*Campephilus imperialis*) and the Cuban Ivory-billed Woodpecker inhabited pine forests, that is a plausible idea. Less convincing was the argument that foraging competition with Pileated Woodpeckers (*Dryocopus pileatus*) may have contributed to the Ivory-billed Woodpecker's extinction.

Criticisms aside, *Extinct Birds* is an important book. It provides a window to the history of human influences on an integral part of the natural world, a window that many ignore or rationalize. The won-

Downloaded From: https://bioone.org/journals/The-Auk on 28 Mar 2024
Terms of Use: https://bioone.org/terms-of-use

derful illustrations contained in *Extinct Birds* serve to remind its readers of what has been lost in the blink-of-an-eye in geological time (400 years) and challenges its readers to learn from, not ignore, the past.

For those who want more details of the life history and extinction of a subset of birds from North America, *Hope is the Thing with Feathers* provides them. Editorial errors were rare and although only a selected bibliography was provided, the author states that he will provide the complete bibliography upon request. Why Cokinos decided to write about the six birds that he did is not mentioned in the introduction. I wondered why he did not include Bachman's Warbler, Eskimo Curlew (*Numenius borealis*), or the Dusky Seaside Sparrow (*Ammodramus maritimus nigrescens*), while including the Heath Hen (*Tympanuchus cupido cupido*), a subspecies of the Prairie Chicken. Although extraordinarily detailed, well written, and full of great imagery, this book is not a scientific work; it does, however, contain a wealth of life-history details. In Cokinos' own words ''. . . unlike a professional historian and more like the poet I have been. . . '' Despite that, *Hope is the Thing with Feathers* is full of information for both the ornithologist and the conservationist. It will introduce the layperson to myriad causes of extinction, cloning, reintroductions, inbreeding depression and genetic drift, and the importance of fire to maintaining communities. Perhaps most important are the numerous examples of the rapacious nature of humans. I found the accounts of the slaughter of Passenger Pigeons and Great Auks (*Alca impennis*) particularly haunting and those passages leave little doubt of the destructive nature of humans. When it comes to conservation, perhaps words that affect the heart can be more effective than those trying to appeal to logic. If so, Cokinos hit the nail on the head. Some may languish in the author's preoccupation with detailing the history of where the last wild individual was shot and who did the shooting. I must admit I found the account (at 29 pages) of ''Buttons,'' the last Passenger Pigeon to be shot in the wild a bit much.

As would be expected in any book on little-known species, many life-history details presented as fact were difficult to swallow (e.g. Barred Owls [*Strix varia*] preying on Ivory-billed Woodpeckers [p. 85], and Passenger Pigeons that lost their young dying from a build-up of pigeon milk [p. 205]). The lack of citations in the text makes it more difficult to take such statements at face value. Other details could have been fleshed out more. For example, the author states that Great Auks could dive to depths of 250 feet or more (pg. 311). Based on allometric relationships, Burger (1991) suggested that maximum diving depths likely exceeded 400 feet. I found portions of some chapters to be speculative. For example, European honeybees (*Apis mellifera*) are implicated in the extinction of the Carolina Parakeet (*Conuropis carolinensis*; see McKinley 1985). As support, Cokinos repeats McKinley's evidence—Chimney Swifts (*Chaetura pelagica*) and Purple Martins (*Progne subis*) switched from hollow trees (not woodpecker cavities) to man-made structures at the same time as the parrot was declining (presumably because of cavity usurpation by bees). It is not mentioned that Purple Martins still nest in natural cavities (woodpecker cavities) in the western portion of their range (Brown 1997). Further, Cokinos states that European honeybees use hollow trees (p. 97) and not holes (I am assuming he means woodpecker holes). It is relatively common to find bees in Red-cockaded Woodpecker (*Picoides borealis*) cavities (D. L. Leonard pers. obs.) and I have seen little evidence that bees affect Red-cockaded Woodpeckers or other cavity nesters. As with Fuller's book, I was pleased that the author mentioned that Ivory-bill Woodpeckers likely inhabited the extensive old-growth pine forests of the southeastern United States. Interestingly the observation that Ivory-billed Woodpeckers spent a majority of their foraging time scaling recently killed trees (bark beetle specialist) whereas Pileated Woodpeckers mostly feed by excavating older dead wood (wood-boring beetle specialist) was mentioned (p. 94–95). Despite that, as with Fuller's book, the role of competition between the two species also was mentioned as a possible factor in the Ivory-billed Woodpecker's extinction (p. 97). Finally, I found it disturbing that Cokinos apparently wants to promulgate the idea of the ''noble savage'' (p. 317). I would argue that the only reason that Native Americans did not over-exploited the Great Auk was simply because they did not have the technology or the need—the idea of the noble savage needs to be forgotten. One only has to look at the decimation of Pacific island birds to realize that native peoples were just as ruthless in their over-hunting of birds as Europeans.

Those oversights do not detract from the fact that this book offers much to the amateur and professional ornithologist. In my opinion, *Hope is the Thing With Feathers* would be an appropriate supplemental text in a conservation biology or scientific history course, as well as a great gift. As with *Extinct Birds*, the message of this book goes beyond picky details, and challenges us to learn from the past.—David L. Leonard, Jr., *Department of Wildlife Ecology and Conservation, University of Florida, P.O. Box 110430, Gainesville, Florida 32611, USA. E-mail: dleonard@gru.net*

Literature Cited

Askin, R. A. 2000. Restoring North America's Birds: Lessons from Landscape Ecology. Yale University Press, New Haven, Connecticut.

Burger, A. E. 1991. Maximum diving depths and underwater foraging in alcids and penguins, Pages 9–15 *in* Studies of High-Latitude Seabirds. 1. Behavioural, Energetic, and Oceanographic Aspects of Seabird Feeding Ecology (W. A. Mon-

Downloaded From: https://bioone.org/journals/The-Auk on 28 Mar 2024
Terms of Use: https://bioone.org/terms-of-use

tevecchi and A. J. Gaston, Eds.). Occasional Paper, no. 68, Canadian Wildlife Service, Ottawa, Ontario.

BROWN, C. R. 1997. Purple Martin (*Progne subis*). The Birds of North America, no. 287 (A. Poole and F. Gill, Eds.) Academy of Natural Sciences, Philadelphia, and American Ornithologists' Union, Washington, D.C.

CHILTON, G. 1997. Labrador Duck (*Camptorhynchus labradorius*). The birds of North America, no. 307 (A. Poole and F. Gill, Eds.) Academy of Natural Sciences, Philadelphia, and American Ornithologists' Union, Washington, D.C.

FEDUCCIA, A. 1996. The Origin and Evolution of Birds. Yale University Press, New Haven, Connecticut.

HADDRATH, O., AND A. J. BAKER. 2001. Complete mitochondrial DNA genome sequences of extinct birds: Ratite phylogenetics and the vicariance biogeographic hypothesis. Proceedings of the Royal Society of London, Series B 268:939–945.

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

SHORT, L. L. 1982. Woodpeckers of the World. Delaware Museum of Natural History, Greenville, Delaware.

SIBLEY, C. G., AND J. E. AHLQUIST. 1990. Phylogeny and Classification of Birds: A Study in Molecular Evolution. Yale University Press, New Haven, Connecticut.

Downloaded From: https://bioone.org/journals/The-Auk on 28 Mar 2024
Terms of Use: https://bioone.org/terms-of-use