BioOne COMPLETE

100 YEARS AGO IN THE THE AMERICAN ORNITHOLOGISTS' UNION

Source: The Auk, 121(2) : 629-630

Published By: American Ornithological Society

URL: https://doi.org/10.1642/0004-8038(2004)121[0629:YAITAO]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

100 Years Ago in The American Ornithologists' Union



The Auk 121(2):629–630, 2004

In 1904, 32 major articles were published in *The Auk* (new series vol. 21, old series vol. 29), as well as the lengthy "Report of the A. O. U. Committee on the Protection of North American Birds for the Year 1903" (21:97–208), the Thirteenth Supplement to the AOU Check-List (21:411–424), and the report of the 21st Congress held in 1903.

The opening article was a memorial by A. K. Fisher for Thomas McIlwraith, one of the founding members of the Union. Born in Scotland, he had immigrated to Canada in 1853, where he was a successful businessman in Hamilton, Ontario. In 1887, he published *The Birds of Ontario, being a concise account of every species of bird known to have been found in Ontario: with a description of their nests and eggs, and instructions for collecting birds and preparing and preserving skins: also, directions how to form a collection of eggs*. That volume apparently was so well received that a second, revised edition was published in 1894. He died at age 78 and was survived by seven children, his wife having died two years earlier. One daughter, Jean, was a prolific writer on the history of Canada.

Notable articles published in this volume were "On the habits of the Laysan Albatross" by Walter K. Fisher (21:8–20), which included a picture of the rookery, showing albatrosses as far as the eye could see; a two-part piece on the nesting habitats of herons and egrets in Florida by A. C. Bent (21:20–29, 259–270); "Additional notes on the birds of the Upper Pecos" by Florence Merriam Bailey (21:349–363); and Milton S. Ray's "A fortnight on the Faralones" (21:425–442). A number of regional bird lists were published, as well as the results of a "collecting expedition" into the wilds of central and southeastern Washington during summer of 1903 by Robert Snodgrass (21: 223–233). Previously unpublished parts of John James Audubon's journal were published along with correspondences between Audubon and a young Spencer F. Baird (21:255–259), who would go on to become the second Secretary of the Smithsonian.

Joseph Grinnell presented a long and rambling argument (21:364–382) on the origin of the Chestnut-backed Chickadee (now *Poecile rufescens*, but *Parus rufesces* then). His assessment was that the species probably arose from the Boreal Chickadee (*Poecile hudsonica*) through a *Parus pre-hudsonicus* to *Parus pre-hudsonicus rufescens* route. With his usual insight, Grinnell stated, "It is *isolation* [his italics], either by barriers or by sufficient distance to more than counterbalance inheritance from the opposite type, that seems to me to be the absolutely essential condition for the differentiation of two species, at least in birds." Grinnell felt compelled to italicize "isolation" because the role of isolation in speciation had come into question with the rediscovery of Mendelian genetics (see Mayr 1966:482–488). Naturalists like Grinnell were emphasizing the role of isolation as articulated by Moritz Wagner in the late 1800s (see Starr 1905 who cited many bird examples and published comments from the leading ornithologists of the time), while geneticists and experimental evolutionists like De Vries were touting the importance of mutations. It was not until the Neo-synthesis and Theodosius Dobzhansky's (1937) treatment of isolating mechanisms that evolutionists again recognized the role of isolation in the process of speciation.

P. A. Taverner, the great Canadian ornithologist, presented an essay, or as he called it "a discussion," on the origin of migration (21:322–333). Why birds migrate in the fall was obvious, he thought: there was a lack of food, so they would starve if they did not migrate south, and they would perish from the cold if they did not starve. So it was spring migration that begged an explanation. In an interesting passage, he conceded that "it seems improbable that the birds themselves realize why they migrate." He reviewed the current theories for migration: (1) birds leave the tropics to escape arboreal nest predators, (2) migration is a product of birds' tendency to disperse during the breeding season to decrease breeding densities, and (3) birds migrate out of the tropics prior to breeding in search of insects that have become rare in the tropics during the dry season. Taverner dismissed those three explanations and offered a fourth: competition for food between early-nesting species and late-nesting species in the tropics. Invoking the "Law of Malthus," he envisioned the tropics supporting the fullest numbers of birds during winter. When spring arrives, it is not possible for all birds to breed and feed young—there just is not that much food. So, increasingly later breeders would have been forced to leave and seek other areas in which to breed. During this process of looking for suitable nesting areas to the north, birds would discover the rich resources available during summer in temperate environments. Taverner referred to that as a "zoological vacuum," stating that "Nature abhors a vacuum." Movements would have been small at first, but as the glacier ice caps retreated, birds would be able to go a little farther north each summer, eventually following the

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

ice melt into the Arctic regions. Most northern movements would be of first-year breeders, wandering farther north than birds that had bred before.

The most curious article published in 1904 was "The obligations of the student of animal behavior" (21:251–255) by William Morton Wheeler, probably the first important ethologist in North America (e.g. Wheeler 1902) and leading expert on behavior of social insects (especially ants). In 1903, John Burroughs had published an *Atlantic Monthly* article attacking popular nature writers as "sham naturalists," sparking a controversy about behaviors attributed to animals by writers such as Ernest Thompson Seton, which culminated in a denunciation of the "nature fakers" by President Teddy Roosevelt in 1907 (Lutts 1990). Wheeler was concerned with those "who are feeding the American public with false animal psychology done up in tinselled English interspersed with seductive half-tones." His thesis was that "we are forever debarred from knowing what is actually taking place in the animal mind" and that there is no evidence to show that animals can reason like humans, concluding that "the very naïveté of animals—their limitations and stupidity, humanly speaking—is a fact of great interest and beauty." Summing up the current controversy, Wheeler most eloquently stated, "A moment's reflection, however, will show that until all that has been claimed for the behavior of animals has been tried by fire, till it has passed through the hot alembic of scientific criticism and the metal of truth has been separated from the slag of fiction, it shall form no part of enduring knowledge."

Literature Cited

Dobzhansky, T. 1937. Genetics and the Origin of Species. Columbia University Press, New York.

Jordan, D. S. 1905. The origin of species through isolation. Science 22:545–562.

Lutts, R. H. 1990. The Nature Fakers: Wildlife, Science, and Sentiment. Fulcrum Press, Golden, Colorado.

Mayr, E. 1966. Animal Species and Evolution. Belknap Press of Harvard University Press, Cambridge, Massachusetts.

Wheeler, W. M. 1902. "Natural History," "Oecology" or "Ethology"? Science 15: 971–976.

Date of Issue (Vol. 121, No. 2): 5 May 2004

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