

ORNITHOLOGY ONE HUNDRED YEARS AGO

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Although ornithology might be considered to have been in its infancy during the 1870's, this period was nonetheless one of activity and progress. Admittedly, there were few professional ornithologists in the United States at this time and education in the natural sciences was at a minimum due largely to the prevailing suspicion of "Darwinism."

A "Directory" published in 1877 by S. L. Willard of Utica, N.Y., lists eighteen ornithologists, most of them from the east. Of this number, fourteen later became founders of the American Ornithologists Union or joined in the first year. Public or institutional museums with substantial collections of birds were few, the largest being the American Museum of Natural History in New York City, the Museum of Comparative Zoology at Harvard University, and the Smithsonian Institution in Washington, D.C.

The 1870's were the heyday of the private collector with his cabinet of specimens and eggs. The activities of these men contributed much to our knowledge although the purpose in most cases was not the advancement of science. Some of the larger collections eventually found their way into museums. Bull, *Birds of New York State*, lists some thirty collectors, many of whom were active one hundred years ago. A number of journals, most of them short-lived and appealing mainly to collectors, were started during this era. Historical accounts of ornithology in the nineteenth century rely mainly on published works and rarely mention the private collector.

Many of those interested in birds did their own collecting and preparation, although there were a few professional collectors and taxidermists. Two of the better known taxidermists were John G. Bell of New York and John Krider of Philadelphia, who were approaching the end of their careers in the 1870's. Both had birds named for them: Bell's Vireo and Krider's Red-tailed Hawk. Mention should also be made of Ward's Natural History Establishment at Rochester, N.Y. Henry A. Ward founded this unique business of supplying natural history specimens to museums and educational institutions. Taxidermists were required and Ward's became a training school for specialists in the art of preparation.

The Nuttall Ornithological Club, precursor of the American Ornithologists Union, was organized at Cambridge, Massachusetts, in 1873, with the Linnaean Society of New York being formed five years later. The Nuttall Club began the publication of a quarterly in 1876. This was the first scientific periodical in the country relating

solely to ornithology, although several earlier journals included material on birds, notably the *American Naturalist* and *Forest & Stream*. Standard works of the period were Coues' *Key to North American Birds* and Baird, Brewer and Ridgway's *Birds of North America*.

Much was being learned of the distribution of birds and this is reflected in local and regional lists which appeared in increasing numbers in the 1870's. In New York State these include published reports by Roosevelt & Minot, S. L. Willard, Edgar A. Mearns, C. H. Merriam, and the Rathbun-Fowler-Wright list.

The relationship of birds to agriculture was recognized in colonial days as testified by references to "maize thieves." In the nineteenth century the part played by birds in connection with agriculture began to be appreciated. The effects were, of course, both beneficial and detrimental. Some early studies of the food habits of birds were made in the 1860's with reports coming out in the following decade. These involved an analysis of stomach contents, including identification of food items whenever possible. Pioneers in this activity include Prof. Samuel Aughey of Nebraska, Prof. S. A. Forbes of Illinois and Dr. J. M. Wheaton of Ohio. This type of work was later carried on by the United States Department of Agriculture.

The era is notable for pioneer field studies in the American west. Due largely to the influence of Spencer F. Baird of the Smithsonian Institution a steady stream of reports on western ornithology was reaching Washington, D.C. Prominent in these studies were Elliott Coues, Edgar A. Mearns, Capt. Charles Bendire and J. G. Cooper.

LITERATURE CITED

- Bull, John L. 1974, *Birds of New York State*. Doubleday/Natural History Press.
- Mearns, Edgar A. 1878-1882. A list of birds of the Hudson Highlands. Bulletin of the Essex Institute, Salem, Mass.
- Merriam, Clinton Hart. 1878-9. Remarks on some of the birds of Lewis County, N.Y. Bulletin of the Nuttall Ornithological Club, Cambridge, Mass.
- Rathbun, Frank R., Fowler, H. Gilbert, Wright, Frank S., Rathbun, Samuel F. 1879. A revised list of birds of central N.Y., Auburn, N.Y.
- Roosevelt, Theodore and Minot, H. D. 1877. The summer birds of the Adirondacks in Franklin County, N.Y.
- Willard, S. L. 1877. A list of birds of central New York. Utica, N.Y.
- 92 Clinton St., Gowenueur, N.Y. 13642