

- The Birds of North America*, No. 711 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia.
- Jackson, J. A. 2006. *In Search of the Ivory-billed Woodpecker*. Updated edition. HarperCollins, New York.
- Jones, H. 1915. *Birds of my Boyhood*. Circleville, Ohio. Read before the Wilson Ornithological Society in 1915.
- Jones, L.E. 1903. *The Birds of Ohio; a Revised Catalogue*. Academy of Science, Columbus, OH.
- Langdon, F.W. 1879. A revised list of Cincinnati birds. *Journal of the Cincinnati Society of Natural History* 1:167-193
- Leese, B. E. In press. Scarlet scalps and ivory bills: Native American uses of the Ivory-billed Woodpecker. *Passenger Pigeon*.
- Leese, B. E. 2006. An 18th-century reference to the Ivory-billed Woodpecker (*Campephilus principalis*) in Kentucky. *Kentucky Warbler* 82(1):37-40.
- McKinley, D. 1958. Early Record for the Ivory-billed Woodpecker in Kentucky. *Wilson Bulletin* 70(4):380-81.
- McPherson, H. L. 1950. The Ivory-billed Woodpecker in Ohio. *Ohio Indian Relic Collectors Society Bulletin* 24:12-14.
- McPherson, H. L. 1951. Another Ivory-billed Woodpecker record. *Ohio Archaeologist* 1:39-40.
- Mengel, R.M. 1965. *The Birds of Kentucky*. Ornithological Monographs 3. American Ornithologists' Union, Lawrence, KS.
- Murphy, J.L. and J. Farrand, Jr. 1979. Prehistoric occurrence of the Ivory-billed Woodpecker (*Campephilus principalis*), Muskingum County, Ohio. *Ohio Journal of Science* 79(1): 22-23.
- Ohio Bird Records Committee. 2005. *Official Ohio State Checklist*. Accessed on-line on December 31, 2005 at <<http://www.ohiobirds.org/publications/OBRClst.pdf>>.
- Parmalee, P. W. 1958. Remains of rare and extinct birds from Illinois Indian sites. *Auk* 75:169-176.
- Parmalee, P. W. 1967. Additional noteworthy records of birds from archaeological sites. *Wilson Bulletin* 79 (2):155-162.
- Peterjohn, B. G. 2001. *The Birds of Ohio*. Wooster Book Co., Wooster, OH.
- Schorger, A. W. 1949. An early record and description of the Ivory-billed Woodpecker in Kentucky. *Wilson Bulletin* 61(4):235.
- Seeman, M. F. 1988. Ohio Hopewell trophy-skull artifacts as evidence for competition in middle woodland societies circa 50 B.C.-A.D. 350. *American Antiquity* 53 (3):565-577.
- Shane, O. C., III. and M.C. Barber. 1976. A preliminary analysis of vertebrate faunal remains from the Philo II site, Muskingum County, Ohio. *Pennsylvania Archaeologist* 46:1-6.
- Tanner, J. T. 1942. *The Ivory-Billed Woodpecker*. Research Report No. 1, National Audubon Society, New York. Reprinted in 1966 and 2003 by Dover Publications, Mineola, NY.
- Trigger, B. G. 1978. Early Iroquoian contacts with Europeans. In *Handbook of North American Indians*, Vol. 15 Northeast, edited by B. G. Trigger, pp. 344-356. Smithsonian Institution Press, Washington, DC.
- Wetmore, A. 1943. Evidence of the former occurrence of the Ivory-billed Woodpecker in Ohio. *Wilson Bulletin*. 55 (1): 55.
- Wheaton, J.M. 1879. Report on the Birds of Ohio. *Ohio Geol. Survey Bull.* 4:187-628.
- Wilson, A. 1828. *American Ornithology; or The Natural History of the Birds of the United States*, Vol. II, pages 9-15. Collins and Co., New York. On-line at <<http://digital.library.wisc.edu/1711.dl/DLDecArts.AmOrnWil02>>.

An Ohio Bird Specimens Database

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Aves may be the best known of the classes of animals, with nearly all its 10,000+ species taxa already described for science. Aided for centuries by the largest cohort of enthusiastic amateurs in biology, ornithologists have amassed an impressive body of knowledge about bird distributions, populations, movements, and natural history. Rare indeed is the well-informed birder without numerous opportunities to contribute to data-collection projects involving these aspects of bird study. Still, one source of knowledge largely contributed by non-professionals has withdrawn into relative obscurity: the museum collection.

There are said to be over five million bird specimens in North American museums. Data from these organized collections of birds are permanent, verifiable, and well documented; they also provide unique historical perspectives available nowhere else. University-based researchers, and those who fund them, have increasingly tended to ignore entire organisms in their natural environments in favor of narrower aspects of their biology, often ignoring the treasure-trove of information specimens represent. Long gone are the days when most ornithological work took place among orderly trays of study skins, but however the tides of academic fashion may shift, museums should have an important role to play in biological research.

One of the authors recently learned from the curator of an Ohio museum that in recent years researchers had rarely consulted its collection of birds' eggs—one of the twenty largest in North America—except when interested in changes in the thickness of eggshells over time. This interest had doubtless been aroused by concern over the effect of DDT and related chemical contaminants on certain species. Such data were available in no other kind of setting, and this and allied research resulted in domestic bans on DDT, and consequent recoveries of raptor populations.

A largely overlooked use of museum collections involves bird records. Collections provide verifiable physical evidence of the historical occurrence of species, subspecies, age classes, and hybrids, color morphs, and other variants. They can supply extreme dates of occurrence, distributional changes over time, accidental or even first records, and ways to verify modern reports. Collections grow in importance in the current era of "splitting" because they verify the historical occurrence of newly-recognized forms (the cackling goose is an example). Identification problems that can be solved by the timing of migration and molt—among several shorebird species for example—are best studied among specimens. Regrettably, until recently most institutions had no searchable inventories of specimens to enable a ready source for such data.

Peterjohn relied upon published data for bird records for *The Birds of*

Ohio (2001), supplementing them with personal observations and certain reports submitted during his tenure as regional editor of *American Birds* between 1981 and 1992. Though few of these data had been peer-reviewed in a formal sense, taken as a whole and vetted by Peterjohn they constitute a trustworthy store of knowledge as to the overall abundance and distribution of Ohio's birdlife over the past ~175 years. Though many surprises no doubt await us, this knowledge is quite impressive compared to that we possess for most organisms.

Peterjohn was the first major describer of Ohio's avifauna whose knowledge was not founded on a study of specimens. All his predecessors collected birds extensively, and relied heavily on the study of personal and museum collections to inform their work. In earlier days, knowledge of the abundance and distribution of birds, and the phenology of their reproduction and migration, was largely documented with specimens. Until the late 19th century, with the establishment of a collection at Oberlin, specimens documenting Ohio records remained either in the cabinets of private collectors (often lacking good documentation or curation, and with most eventually consigned to the rubbish heap), or went to institutions around the world prepared to accept them. The extensive cabinet of our first ornithologist J. P. Kirtland had no stable place in Ohio to go upon his death in 1877, and was largely dispersed elsewhere, often overseas. Whether any of his many specimens remain in Ohio is unknown at present.

We estimate that over the past century tens of thousands of bird specimens collected in Ohio have come to rest in accredited museums. Well documented and properly curated specimens are the gold standard of bird records: maintained in an environment to ensure their permanence, one can examine them to confirm identification, and their documentation with attached contemporaneous tags is, while not foolproof, preferable to any other.

Peterjohn, however, apparently did not make direct use of specimen material in compiling data for *The Birds of Ohio*, relying instead upon reports of specimens in the published literature. We are not aware of any evidence, in fact, that he personally examined any specimens in preparing this work. In his account of the black-billed magpie, for example (p. 340), while he refers to extreme wear on the feathers of one specimen, this does not reflect examination of the skin (# 7425 at the Ohio State University Museum of Biodiversity [OSUMB]), but rather cites the collector's published observations. For Eskimo curlew (p. 183) he asserts no specimens are extant, but there is one at OSUMB. He states there are only sight records of burrowing owl for the state, but there is a Wood Co. specimen at Bowling Green State University. Many of the early and late migratory dates he gives, as well as odd out-of-season records, would have needed dramatic revision had data from specimens been obtained.

We are aware of numerous Ohio specimens in reputable collections whose tag data add considerably to our current knowledge of our avifauna. Because the baseline data for *The Birds of Ohio* were collected prior to its first edition in 1989, well before specimen data were easily available in electronic form, most were difficult to obtain. Who would have known that scores of early nineteenth-century specimens from Kirtland's cabinet had ended up in Stockholm, or that literally thousands of Ohio warblers lay in drawers in Pittsburgh? How could one go through the tens of thousands of Ohio specimens just in the state's institutions to find extraordinary records, such as a January

specimen of a wood thrush (Ohio University Museum), or the chuck-will's-widow found as a window kill in February (Cincinnati Museum Center [CMC])?

Museum collections grow much more slowly now than in the old days, and slower still is the acquisition of Ohio specimens, which has diminished to a trickle consisting mostly of salvaged window-kills and the like. The wholesale collection of birds is no longer in fashion, nor is it as often deemed necessary, principally because we have carefully preserved so many specimens from the past. Today specimen collection nevertheless continues, on the part of professionals with permits, in pursuit of focused studies of certain aspects of ornithology. To give but one example, it would be foolish to have extensive data about the thickness of raptors' eggshells before the banning of DDT without knowing how the data have changed since.

Other changes have made available enormous new resources to give us a much more richly detailed picture of our bird life. Museums are at last producing inventories of their specimen data and making them available on the internet to researchers. So much records information is becoming available from museum collections that we may not only be able to better understand the fringes of our knowledge---the rare species, the extreme dates, the out-of-range occurrences---but we may also be able through the sheer force of numbers to see overall abundances and distributions more clearly. Foppe has to date secured information on over 10,000 Ohio specimens in 64 collections around the world (37 additional collections reported no Ohio specimens), including 17 in Ohio. Fourteen other Ohio collections have yet to report or be explored. Ohio's three largest bird collections---the CMC, the OSUMB, and the CMNH---are now preparing electronic databases of their specimens, and the enormous collection at the Smithsonian Institution is promised in on-line form soon. Thirty-five other collections are networked in searchable form on the web at ornisnet.org. There is every reason to expect that within a few years all these databases will have been completed, and available for public study.

As is the case elsewhere, ornithologists have a body of information for Ohio, along with a historical perspective, envied by other biological disciplines. Students of Ohio birds will have the luxury of devoting effort to refinements at the frontiers of well-established knowledge. We will be able to afford to seek out the rare because we have a firm grasp of the common. In addition, with some relatively huge numbers of records we can increasingly achieve local population-scale views.

One example is the development of the official state list. Over 20% of its 419 species have 10 or fewer Ohio records, and 40% of these in turn derive from single records. To have so many satisfactorily documented rarities bespeaks a large and reliable record extending over a considerable period. It is possible a complete inventory of Ohio specimens may reveal new species for the list, add records of rarities, and increase our understanding of the distribution of many common species. The data becoming available establish numerous early and late records for arrivals and departures of migrants, unseasonal occurrences, unusual nesting records, etc. In some cases, such as an unpublished study of thousands of specimens from casualties at a television tower site in Ohio, interesting generalizations may be derived: surely the record of six Connecticut warblers from this small site on a single night during migration offers an unprecedented glimpse at its real local abundance. Among so many verified and

previously unexplored records, many interesting discoveries will be made.

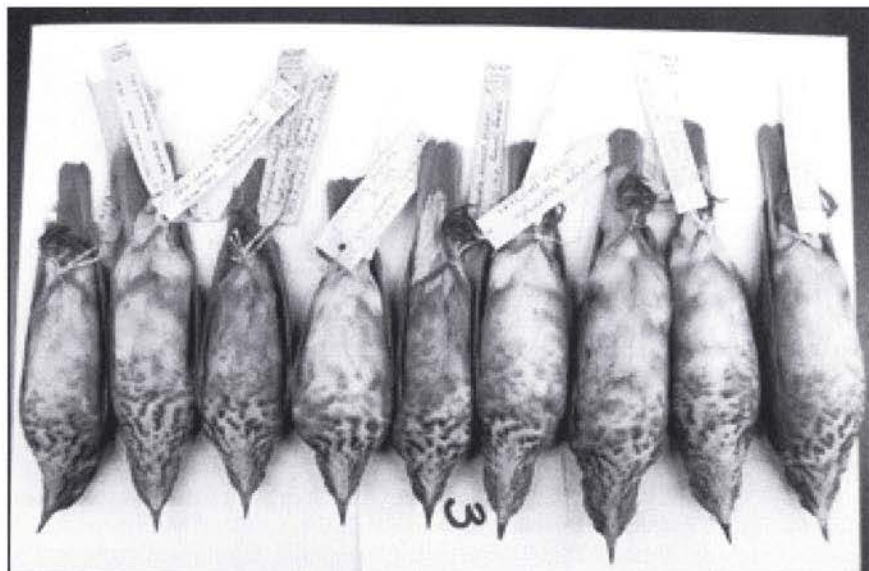
Foppe will compile an Ohio Bird Specimens Database from these and other collections, and when projects among the major collections are complete it will be made available to scholars on the OOS web site. There could be as many as 100,000 sets of data available, derived from Ohio material found around the world: species, locations, dates, name of collector at a minimum, and in many cases complete tag data. We plan to publish an article summarizing new finds, discoveries that will alter the historical and record and in some cases improve the current understanding of Ohio's birdlife. We also commend similar projects to researchers in other states and provinces, so that a still more accurate picture of our bird life will emerge, as well as an enormous continent-wide database of specimen records available to all.

Acknowledgment

We owe a great debt to curators of over a hundred bird collections who were kind enough to supply us with Ohio records among their holdings, as well as to answer further questions. We are also grateful to Andy Jones, head of the Department of Ornithology at the Cleveland Museum of Natural History, who supplied valuable comments on a draft of this paper.

Literature Cited

Peterjohn, B. 2001. *The Birds of Ohio*. The Wooster Book Co, Wooster, OH.



Nine thrushes from the OSU collection laid out for comparison. Several are misidentified, but the enduring nature of specimens makes this and possible future reassessments possible.

Short Notes: Inland Nests of Great Egrets

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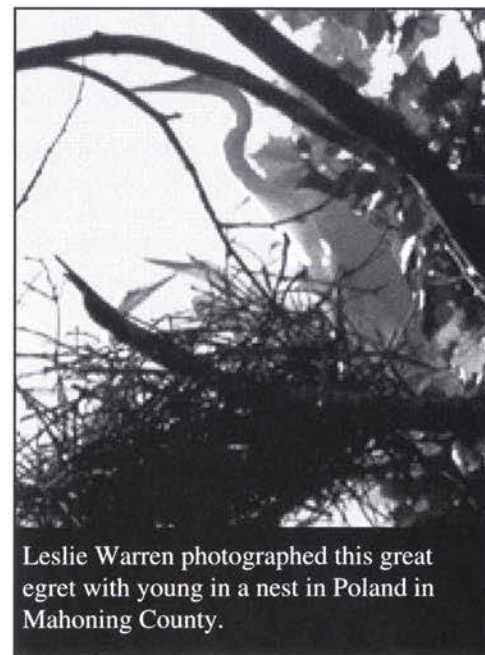
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J. P. Kirtland (1838) reported that the great egret had been "taken repeatedly in Ohio," and there are reports of nests at Grand Lake St Marys in the 1880s. After a dip in numbers corresponding to the legal slaughter of birds for the feather trade later in the century, they rebounded after 1930, staging some major post-breeding incursions into Ohio. In 1940 the first nests in the state were confirmed on the edge of Sandusky Bay, a few pairs nested at Grand Lake St Marys 1942-1944, and in 1946 the West Sister Island colony was discovered, and has flourished thereafter. No other breeding sites were confirmed away from the western Lake Erie marshes until 1996, when a nesting pair was discovered in Pickaway Co. -Ed.

MAHONING COUNTY: On July 16, 2006, I found a nest with four young great egrets, in the midst of a great blue heron rookery in Boardman Township, Mahoning County. The egrets looked almost like adults, but had a few feathers sticking up on their heads and grayish legs. The nest was in a sycamore tree, at least 50 feet high, and was much smaller than the great blue heron nests near it. There were still some herons nesting, but most had already left the rookery.

The egrets seemed to spend most of their time preening. They made no noise except when an adult flew in to give them food. Then all four began squawking loudly. On July 20, shortly after the young egrets had been squabbling over food, I heard the same noise coming from a different part of the rookery. Following the sound, I located a second great egret nest, about 200 feet away. It was also in a sycamore and about the same



Leslie Warren photographed this great egret with young in a nest in Poland in Mahoning County.