

LARGE 19th CENTURY EGG AND NEST COLLECTION RECENTLY DISCOVERED

WILLIAM E. COOK

Nearly 1400 specimens from the oological collection of Albert H. Frost have been cataloged and preserved at Columbia-Greene Community College. With 5490 eggs and 306 nests identified, the collection ranks as the fifth largest in the state based on data in Drennan (1981). It is a significant addition to New York State's ornithological research and educational resources.

A. H. Frost was a furniture manufacturer whose residence and main business office was located on Canal Street in New York City during the last half of the 19th century. However, oology was his major avocation as evidenced by his 30 years of collecting and his considerable expenditures on it. For example, the price he paid for the egg of a Wandering Albatross, fifteen dollars (Lynch 1885), would have purchased a two-wheeled horse cart with leather seats, a top of the line Graphophone Talking Machine, or five bottom line brass beds (Schroeder 1971).

The specimens were collected between 1870 and 1900, mostly by natural history suppliers who wrapped each individual egg in cotton, packed them in wooden crates, and shipped them to Frost via Wells Fargo Express. The collectors were conscientious businessmen and as a rule meticulous about supplying data with each specimen. For example, the details for a Ferruginous Hawk nest from Benson County, North Dakota, (Bryant 1897) indicate the readily available materials: "A number of loose rocks laying on a hill top. Nest placed among them, of large sticks, twigs, Buffalo ribs, a whole buggy whip, lined with dry grass."

By 1980 the collection somehow had been moved to a barn in the Adirondack village of Old Forge. About that time, the owner, Doug Walker, decided to move to Florida and wanted to dispose of this mountain of crates. His attempts to donate them to various museums failed for one reason or another, and the collection allegedly was "on the way to the dump" when Region 8 Editor Dick Guthrie overheard a conversation on the matter and suggested that they be given to Columbia-Greene Community College. During the summer of 1985 I was able to devote three months (over 400 hours) to the collection, unpacking and identifying the specimens, updating the taxonomy (A.O.U. 1983), cataloging and labeling each specimen, fumigating them, designing a storage and retrieval system, typing a numerical

specimen list, arranging and storing the specimens in taxonomic order, and, finally, producing a location guide.

Although Frost purchased specimens from around the world, the collection has a definite North American flavor. Most of the 240 specimens from outside the United States are of species that occur in North America at least as accidentals. From Russia there are specimens of White-tailed Eagle, Eurasian Coot, and Little Ringed Plover. The Bahamas are well represented with specimens of Audubon's Shearwater, White-tailed Tropicbird, Greater Flamingo, Royal, Bridled, and Sooty Tern, Brown Noddy and Bahama Woodstar. Mexican specimens include Harris' Hawk, Crested Caracara, Plain Chachalaca, Inca and White-tipped Dove.

Arizona had not yet become a state when this collection was made. However, 62 specimens from the Huachuca Mountains, which still draw birders today, include Montezuma Quail, Elf and Flammulated Owls, Magnificent Hummingbird, Strickland's Woodpecker, Buff-breasted Flycatcher and Yellow-eyed Junco.

It is interesting to note that Frost acquired his European Starling and Ring-necked Pheasant egg sets from England. These species probably were not obtained as easily in North America a century ago. On the other hand he had a Short-eared Owl set from Tennessee and a Loggerhead Shrike set from Maine, areas where these species now rarely, if ever, breed. The collection includes Passenger Pigeon eggs from Texas, Louisiana and New Hampshire, although they were dwindling rapidly at the time. The collector from Texas, E. A. Pope, noted that there were 14 pairs in the breeding colony in Mobile in 1887 when he collected the eggs but "Have not seen a Passenger Pigeon since '89." As one can see, the collection offers many insights into changes in the distribution of breeding birds.

In addition to the North American species there are egg sets from birds that are unknown from our continent, like Waved Albatross from the Galapagos; White Spoonbill, Saker, Red-footed Falcon, Spotted Eagle, Common Redshank and Meadow Pipit from Europe; and Demoiselle Crane from Russia. Others, like Lineated Woodpecker and White-throated Towhee from Mexico, have not been found north of the Mexican border.

The list of 455 species does not reflect the numerous subspecies that are incorporated into the collection. The late 19th century was a time when many subspecies were named and much attention was paid to them. Chester Reed (1904) lists 18 subspecies of Song Sparrow; the Frost collection contains sets of Eastern, Mountain, Heermann's and Samuel's Song Sparrow. Baird's Wren from Arizona and Vigor's Wren

from California are subspecies of Bewick's Wren included in the collection, as is the Tule Wren, a race of Marsh Wren from California. Races of Solitary Vireo present in the collection are Plumbeous Vireo from Colorado, Cassin's Vireo from California, and Blue-headed Vireo from Massachusetts. Red-tailed Hawk specimens include Krider's Hawk and both light and black morphs of Western Red-tailed Hawk. These distinctions between subspecies are not without value. They made it possible to differentiate specimens of Willow and Alder Flycatcher.

Despite the impressive list there are some common eastern species missing, suggesting that the entire collection was not preserved. The eastern species apparently were collected in the 1870's but were poorly packed compared to the specimens obtained later from the western United States and abroad. Common species that are missing include Rock Dove, Eastern Phoebe, Gray Catbird, Eastern Bluebird and Red-winged Blackbird. Labels for Belted Kingfisher and Pyrrhuloxia that lack specimens also indicate that the entire collection did not survive.

About 675 specimens (49% of the collection) represent species that breed in New York, although most of these sets were taken outside the state. Frost seems to have done most of his own collecting near Malden, New Hampshire. It is likely that most of Frost's local egg sets were among the supposedly lost specimens. Only 47 (about 4%) of the surviving sets actually are from New York. However, these include Cooper's and Red-shouldered Hawk, species now of special concern in our state. Most of the New York State specimens were supplied by Benjamin Hoag, who collected in and around Stephentown, Rensselaer County.

The extant collection is a significant natural history reference tool. Egg collections of this size have not been accumulated since the 1930's, when conservation laws ended collecting without a valid purpose and permit. Columbia-Greene Community College holds federal and state salvage permits in order to build a teaching collection of study skins. It was therefore exciting to find accompanying the avian oological collection not only several reptile eggs but also about 25 study skins of birds. These study skins include some unusual species like Swainson's Warbler and Sulphur-bellied Flycatcher. They bring our modest study skin collection to a total of nearly 400 specimens of 160 species.

Anyone wishing to use the collection should make arrangements with William E. Cook, Scientific Studies Department, Columbia-Greene Community College, Box 1000, Hudson, NY 12534, (518) 828-4131. A synopsis of the collection which lists the 455 species and the number of specimens, eggs and nests for each is available upon written request.

LITERATURE CITED

- American Ornithologist's Union. 1983. *Check-list of North American Birds*. Sixth Edition. Published by the American Ornithologist's Union, Lawrence, Kansas. 877 p.
- Bryant, E. S. 1897. unpublished data. Benson Co., North Dakota.
- Drennan, Susan Roney. 1981. *Where to Find Birds in New York State*. Syracuse Univ. Press, Syracuse, NY. 499 p.
- Lynch, F. B. 1885. unpublished letter. Peacedale, Rhode Island.
- Pope. E. A. no date. unpublished letter. Mobile, Texas.
- Reed, Chester, A. 1904. *North American Bird Eggs*. Doubleday, Page and Co., New York. 356 p.
- Schroeder, Joseph J., Jr., ed. 1971. *1908 Sears Roebuck Catalogue*. DBI Books, Inc. Northfield, Illinois.

Scientific Studies Department, Columbia-Greene Community College, Box 1000, Hudson, New York 12534