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100 YEARS AGO IN THE AOU

100 years ago in the American Ornithologists' Union

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In 1915, *The Auk* featured an article about a recently extinct species, an article about a species that may now be extinct, and an article about a species that almost went extinct. The recently extinct species was the Passenger Pigeon (*Ectopistes migratorius*); the last individual, called “Martha,” died at the Cincinnati Zoo on September 1, 1914. The specimen had been promised to the Smithsonian Institution, and it arrived at the National Museum on the 4th, having been packed in ice immediately following her demise (*The Auk* 32:29–41). Charles W. Richmond (1863–1932), assistant curator of the Division of Birds, requested that R. W. Shufeldt (1850–1934) “take part in making the record of the specimen.” William Palmer was given the task of skinning the bird so that Nelson R. Wood could make a mount of the bird. After taking some photographs, Palmer and the bird traveled with Shufeldt to his house, where the bird was photographed some more and skinned by Palmer. The eyes and brain were preserved in alcohol, and after a late lunch, Palmer departed with the skin and Shufeldt started his very detailed description of the anatomy, which ran on for 7 pages in this article. Even with that, Shufeldt felt that he had made enough observations to fill “several good-sized volumes.” Shufeldt had discussed the osteology of the Passenger Pigeon in 1914 (*The Auk* 31:358–362), and he concluded this second work with the following:

If what I have thus far attempted to present of the osteology of *Ectopistes migratorius* and of the rest of the anatomy of that species,—and knowing what he already knows of the morphology of *Columba livia* and other pigeons,—will enable the ornithotomist to surmise, perhaps with more than comparative certainty, what the undescribed parts of the anatomy of *Ectopistes migratorius* would reveal upon investigation, I feel that my researches have accomplished all that I could hope for in this regard, with respect to our now extinct Passenger Pigeon, and that my labor has been well repaid.

Shufeldt was one of the leading osteologists of his time and was incredibly productive early in his career. He also was one of the first avian paleontologists. A founding member of the AOU, he was transferred to Retired Fellow in 1927. He was briefly married to Florence Audubon, granddaughter of John James Audubon, which ended in a highly public scandal involving a housekeeper, who would become his third wife, and Shufeldt's refusal to pay alimony of \$50 a month by filing for bankruptcy. The case was taken all the way to the U.S. Supreme Court, which sided with Florence and ruled that support obligations are not subject to discharge in bankruptcy, a ruling that still stands today.

The first article published in 1915 was by Frederic H. Kennard (1865–1937), concerning his search for the Ivory-billed Woodpecker (*Campephilus principalis*) in the Big Cypress of southern Florida in 1914 (*The Auk* 32:1–14). The account rambled on about their traveling by ox-drawn wagon and hunting deer and turkeys, eventually reaching an area where ivory-bills had been reported in 1908 by a friend, who gave a male specimen to Kennard as proof that they still existed in southern Florida. Eventually, the party of 3 did find a female ivory-bill, which they managed to watch, on and off, for 8 days. The female appeared as they were packing up to leave and Kennard shot her, so she would join “her mate, if mate he be, in my collection.” Examination of the female's ovaries revealed that she was not in breeding condition.

The third article concerned the plight of the Trumpeter Swan (*Cygnus buccinator*). “At the meeting of the American Ornithologists' Union held in New York City, in the fall of 1913, a number of members were discussing the rarity of the Trumpeter Swan; the general opinion being that this magnificent bird was nearing extinction; and would soon disappear forever.” With that beginning, Henry Coale (1858–1926) decided that he would summarize all the information on this species and discovered that almost nothing was known about this bird (*The Auk* 32:82–90). This swan had been discovered by the famous naturalist Sir John Richardson (1787–1865) on his

expedition into the Northwest Territories of Canada in the 1820s, but little more information had been discovered over the next 85 years. Coale determined that there were 16 extant museum specimens, but, contrary to the title of his article, he offered no conclusions concerning the current status of the swan. Once a common and widespread species, swan populations had been decimated for feathers for the European millinery trade during the 1800s. Populations dwindled in the United States in the early 20th century, but the hope was that populations were doing well in Canada and Alaska (e.g., Brooks 1926). However, when swan censusing began in the United States in 1932, only 69 birds were found (Banko 1960). Surveys are now conducted every 5 years, and the 2015 survey is underway. More than 46,000 swans were counted during the last census in 2010.

At the other end of the conservation spectrum, Charles W. Townsend (1859–1934) presented a very detailed analysis of the Rock Pigeons (*Columba livia*) in and around the Boston area (The Auk 32:306–316). Townsend contended that this species had been neglected in America because it was an escaped domesticated species that now could be considered feral. He, however, found them fascinating and wrote: “I commend it to ornithologists living in cities who lament that they have no birds to study.” And study them he did, reporting on plumages, breeding biology, behavior, and interactions with other species. Here are his final observations about birds on the Boston Common:

On Boston Common it is the custom of visitors to feed the Pigeons with bread crumbs and grain as is done at St. Marks in Venice and at various other cities. The birds flock about in great numbers and alight on the hands, shoulders, and heads of the feeders. This familiarity does not necessarily point to the former domesticated state of this bird, for in the same place grey squirrels respond to feeding by nuts in a similar manner, and fearlessly clamber over their benefactor, and investigate his pockets to the astonishment of the rustic visitor, who is familiar with the same animal only at a long gun-shot range. This and the photographs shown us by such men as [Ernest] Harold Baynes point to the millennium for the bird lover when the gun shall have vanished and live birds be treated by everybody as real friends.

The most bizarre report (The Auk 32:469–480) was of a 4-winged female Green-winged Teal (*Anas crecca*) from Minnesota (Figure 1). The specimen had been obtained by James Ford Bell (for whom the Museum of Natural History at the University of Minnesota is named) in fall of 1914, from a hunter who shot the bird just north of Minneapolis.



FIGURE 1. Four-winged female Green-winged Teal (*Anas crecca*) from Minnesota.

The report was authored by Charles Eugene Johnson, who went into great detail about the anatomy of the bird. He offered the following possible explanations for 4 wings: an atavism, or the appearance of a primitive condition; a double embryonic anlagen, whereby 2 sets of wings developed early in embryonic development; or “simply malformations or pathological growths that belong in the category of duplicate formations.” A fourth idea, that the deformation could be caused by folds or bands of the amnion, was dismissed. Johnson concluded that “The more probable view for this case, it appears to me, is that it resulted from some inherent abnormality of the anlage of the extremity, of germinal origin.” Apparently this mount is no longer extant at the Bell Museum (*vide* Robert Zink). Ironically, William Beebe (1877–1962) published his idea of the 4-wing origin of bird flight the following month (Beebe 1915), which has recently been supported by 4-winged fossils found in China (Xu et al. 2003).

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