

THE GREAT AUK, a large, black and white, flightless sea bird of the North Atlantic became extinct in 1844, thus making an unenviable record as being the first North American species to become extinct in historical times. It was followed into oblivion in 1875 by the Labrador Duck (one shot on Long Island), in April, 1904 by the Carolina Parakeet (last seen at Taylors Creek, Florida), and by the Passenger Pigeon (Martha, the last bird, died in the Cincinnati Zoo in 1914). Any self-respecting museum with a collection of North American birds needs examples of all these. The Field Museum already had specimens of the last three, but not the Great Auk.

The chances of ever getting a specimen seemed remote, since the Great Auk had already been extinct for about 50 years when the Field Museum was founded in 1893, and there were only about 80 specimens in existence. Most of them were in European museums, with 9 in America, and museums do not lightly part with such material. Then, in 1966, a colleague of ours, Mr. James Baillie of the Royal Ontario Museum, Toronto, wrote us that they had finally received a Great Auk for their Museum. It was formerly at Vassar College, and was the one Audubon purchased in London before 1836, and painted for his *Birds of America*. More important to us than the transfer of a Great Auk from Vassar to Toronto was Baillie's news that in Brussels the *Institut Royal des Sciences Naturelles* wanted a representative series of North American birds, and might be willing to exchange one of their two Great Auks for it.

We wrote Dr. A. Capart, Director of the Royal Institute, and found he was favorably inclined to such an exchange. We sent him a fairly complete series of strictly North American birds, males, females and young, and received in exchange the Great Auk.

The first news of the arrival of our bird was a telephone call from Chicago customs that they had a penguin for us. An awful thought came to mind. Had they opened the packing case and had it identified by a local bird watcher as a penguin, which a Great Auk superficially resembles? Was it, indeed, a penguin? A man was dispatched, posthaste. My fears were groundless. The case was intact, but the "*Facture pro forma*" was in French and listed the contents as a *Pinguin*. Of course! In modern French texts auks are called *pingouins* and penguins are called *manchots*. As an early historian of the Great Auk wrote, it was known by different names in different places. Anatole France's *Penguin Island* was really inhabited by auks. In nineteenth century England, the name great auk vied with garefowl for popularity, the latter name based on the icelandic *geirfugl*, the gaelic *gearfhul*. The "geir" or "gare" of the name referring to the spear-like bill, while auk is an old English name for the related razor bill.

Our Great Auk, as we now call it, the only one in the United States west of the Atlantic, is a magnificent bird.

Standing upright on its toes, it is about 27 1/2 inches high.



THE GREAT

Zoology Chief Curator
acquisition of on



The blade-like bill that gives the bird one of its names has curious grooves across the end and the nostril opens in a slit. The head has a big white patch in front of the eye, but is otherwise black, as are the sides of the neck and all the upperparts except for narrow white tips to the inner flight feathers of the absurdly small wings. The underparts are white, which color ends in a sharp point on the upper neck. The tail is short and the three front toes fully webbed, as in other auk species.

Evidently, it is an adult in summer plumage. As the sexes are externally alike we can't tell if it is male or female. Along with name and number, our specimen has "De. E. de Selys" on the label. It is the specimen that Baron de Selys-Longchamps wrote of in "Ibis" in 1870. During his travels in Italy he saw four specimens in collections there, and also purchased the present specimen in 1840 in Turin, from a M. Verany with whom it had been left for sale, on commission, by M. Verreaux. For a time, the Baron kept it at his place, Longchamps, near Warenne, Belgium, and later gave it to the Brussels Museum. Now it is in the Field Museum in Chicago. Its earliest history we can only deduce. No specimens of undoubted American origin are known and as the chief student of Great Auk history, Alfred Newton, wrote that most of the specimens extant are known to have come from Eldey Island, Iceland, in the period 1830-1844, we can as-

sume this is the origin of our Great Auk. There is one minor corroborating detail. A superficial examination of the specimen suggests that it has been skinned through a cut across the lower abdomen between the legs, in the same manner as Icelandic foxes and other specimens prepared by Icelanders. (Another method for auks was to make a slit under the right wing and stuff the skins with fine hay.)

The value placed on Great Auk specimens in the 1800's, when people of substance were stocking their cabinets with show pieces, is best appreciated by realizing that a Great Auk was a gift worthy of a king. Baron de Selys-Longchamps, once the possessor of our specimen, wrote in 1870 that the Marquis de Breme, Grand Master of the Royal Household, gave his collection of birds, including a Great Auk, to King Victor Emmanuel who housed it in the Veneria Reale, Turin. At the request of the King of Portugal, Victor Emmanuel's son-in-law, also distinguished as a patron of Ornithology, this Great Auk was presented to the Museum in Lisbon in 1867, where it is today. Later, the King of Italy was able to replace it in his collection with another, transferred to the Museo de Zoologia, Rome, in 1902, with the rest of the King's collection. As well as illustrating the value placed on such material, this illustrates how the private collections helped save early natural history material, preserving it until it flowed finally into public museums by donation or purchase.

AUK COMES TO CHICAGO

*Justin L. Rand tells about Field Museum's recent, but long-awaited
of the 78 remaining specimens of the extinct Great Auk*



Taxidermist Carl Cotton gingerly unpacks Great Auk after its passage from Brussels. Close examination revealed that the bird completed the trip unscathed. At right, Mrs. Hermon Dunlap Smith, Associate in Birds and President of Field Museum's Women's Board, who managed the difficult and time-consuming details of our exchange, and Emmet R. Blake, Curator of Birds, admire the Great Auk.

This is a trend that is still going on.

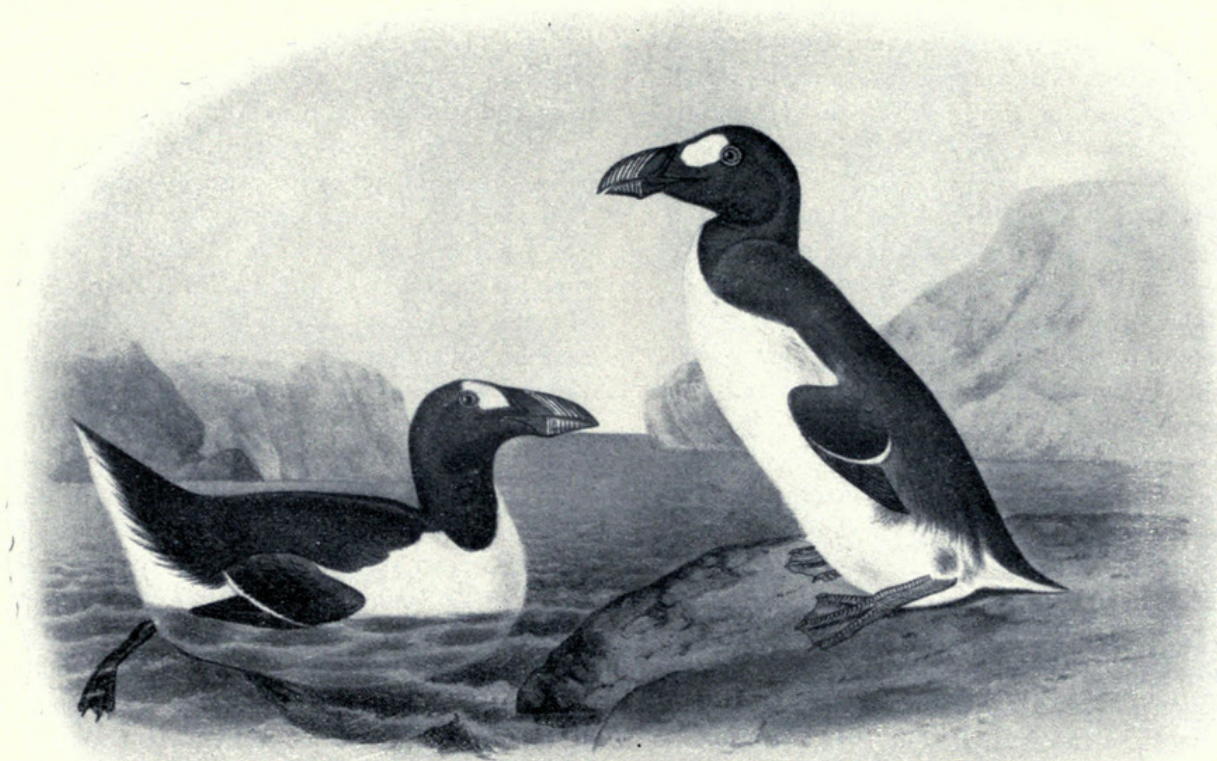
But some Great Auks did go through the market places. Priceless as they are to museums in showing the kinds of things that exist, commission merchants and traders did put a money value on them. A few examples of this may interest our readers.

In the early 19th century, Great Auks changed hands for as little as £2 and as much as £15, with prices in other currencies quoted as 200 francs, 50–200 florins and 20 thalers. In the late 1800's the prices had risen and two mentioned are 600 dollars gold and £350. The latest I've seen, 1934, in a London sale: two Great Auks from the estate of a Mr. G. D. Rowley, one priced 480 guineas, the other, 500 guineas. Our exchange, a suite of North American birds, was not cheap. Much time and effort would have gone into starting from

Auks generally bear a striking likeness to penguins. One can say that Auks in northern oceans are the ecological equivalent of the penguins of southern oceans. However, all auks, even the Great Auks, have well-developed wing quills which penguins all lack.

The Great Auk is the finest, most specialized, of the auks, notable for its flightlessness. Presumably it spent most of the year swimming, diving, and living on fish. It was tame and gullible. Fishermen were reported to have captured birds by holding out a fish to a swimming bird and enticing it to the edge of a boat so that it could be stunned with a blow of an oar. Birds captured alive were said to have survived for as long as 4 months and were fed, among other things, potatoes mashed in milk.

Only at nesting times did the birds come on land, on



John James Audubon's painting of Great Auks for his "Birds of America." Audubon purchased a Great Auk specimen in London sometime before 1836 and used it in this painting. The bird later belonged to Vassar College and is now housed in the Royal Ontario Museum, Toronto.

scratch and building up such a collection. This is not the first such exchange that has been made. In 1860, a German naturalist acquired a Great Auk specimen in exchange for the skin of an Indian Tapir.

There has been a great deal written about the Great Auk. Most of it is from the viewpoint of an antiquarian. No naturalist ever studied the living bird and what is known of its biology is collected from many scattered sources. The Great Auk, *Alca impennis* of Linnaeus, *Pinguinus impennis* of present-day ornithologists is classified in the Family Alcidae which also includes such well-known birds as razorbills, murres, dovekies, gullimots, murrelets, auklets, and puffins. All are heavy-bodied, web-footed, short-tailed, and rather short-winged sea birds which use their wings in underwater swimming. All but the Great Auk fly well.

rocky off-shore islands, to lay their single egg. In winter the black of the underside of the head was replaced by white feathers, and young birds were like the winter adults.

The Great Auk was a victim of its specialization. Living most of its life in the water, where it swam with its wings as do its relatives, the Great Auk evolved flightless. Coming ashore only on isolated islands where there were no four-footed predators such as foxes, it developed a remarkable tameness and docility. No doubt it thrived in the mid-latitudes of the North Atlantic where the relatively shallow, fish-rich waters provided its food, until man arrived. Not modern man, but Stone Age man brought the first discordant note into its elysium. From the remains in stone-age middens of north-western Europe and Indian middens from New Brunswick to Cape Cod, we know that early man found it breeding

on many off-shore islands. At least occasionally, the Great Auk visited Gibraltar where its bones were found in a cave along with those of Neanderthal man. There is evidence also, that it visited eastern Florida, where its bones have been found in Indian mounds.

By historical times the Great Auk's breeding range had been reduced to three locations. One of these was Geirfuglasker rocks, off Iceland. This colony vanished in 1830 with the island itself due to volcanic activity. Presumably, the birds transferred to Eldey Rock nearby, where the birds continued to come until June 3, 1844, when the last known individual was killed. The third locality was Funk Island, off Newfoundland. Here the birds existed in such numbers that the sailing directions of the early 1700's gave the presence of Great Auks as one of the surest evidence of the location of the Grand Banks where fishermen came for cod. These fishermen found Great Auks a welcome source of food, and killed them in large numbers.

In 1940 the species was known from but 80 collected specimens, plus some eggs and bones. But even these mute remnants of the species, even these were not safe, for during the air raids over Germany in World War II, two specimens, one in Mainz and one in Dresden, were bombed out of existence. There was no haven for even a dead Great Auk.

The attitude of early man toward animals was militant and utilitarian. Subsequent periods added commercialism. This is well illustrated by one of the historians of the Great Auk, S. Grieve, writing in 1885, "yet the bird, whilst disappearing has in so far helped to the attainment of a higher object . . . the prosecution of fishing on the banks of Newfoundland."

Although it is generally agreed now that the last Great Auk died in 1844, English naturalists continued to search for the auk for several decades, and Alfred Newton, writing in 1861, said he believed a few still existed. However, the nearest he came to first hand evidence when he was in Iceland in 1858 was as follows: An old man named Erlendur Gudmundsson showed him the gun with which he shot a Great Auk in 1809. Reports, all suspect, dwindled and disappeared by mid-century. However, in the late 1930's circumstantial accounts of sightings of Great Auks in the Loftan Islands were so convincing that an English naturalist investigated and found that they were based on introduced King Penguins. In 1936 the Norwegians had introduced 9 birds, 2 of which survived until 1944.

The Great Auk has joined the ranks of some 45 bird species (and another 43 subspecies) that have become extinct within the last 300 years, as summarized by J. C. Greenway in his book, *Extinct and Vanishing Birds*. It is significant that 41 of these 45 species lived on islands, and that of 12 more species probably extinct, all were island birds.

Not a single species is known to have become extinct in this period in continental Europe, Africa or South America. In North America there are two species (Carolina Parakeet and Passenger Pigeon); in Asia, one (Crested Sheldrake); and in Australia, one (Scrub-bird).

Island birds, living only on islands, or living in the sea and nesting only on islands, seem particularly vulnerable to

the forces of extinction.

But what are those forces of extinction? In some cases, the factors that killed the last individual specimen of a species are known. The killing of the last Great Auk was by a man on June 3, 1844 as mentioned above. The Stephen Island Wren was discovered and exterminated by a lighthouse keeper's cat in 1894 and the last Passenger Pigeon died of old age in a zoo in 1914.

In other cases the introduction of cats, rabbits, goats, mon-gooses or pigs is thought to have wiped out species, or the converting of the natural landscape to cultivated fields has eliminated a species habitat, and with it, the species. Greenway gives a chart showing the general inverse relationship in the West Indies between the number of acres forested on an island and the number of species of birds that have become extinct there. The fewer forested acres the more birds that have disappeared.

But no hard and fast rules will explain all cases. It seems that if we must generalize, the most valid generalization is that certain birds and other animal species are incompatible with the changed environment wrought by man. Imagine what it would be like to have herds of buffalo roaming the wheat and corn fields of the Midwest, or wolves and grizzly bears prowling about through the suburbs of Chicago. To be sure of saving many species it will be necessary to establish preserves.

Island species seem especially vulnerable. Examples from the 41 species mentioned above that come to mind are the Dodo of Mauritius, 10 species of honey creepers of the Hawaiian Islands, a sandpiper of Tahiti, a macaw of Cuba, and a kingfisher of the Riu Kiu Islands. Such birds live on islands where the fauna is impoverished, competitors are few, and predators are scarce. In this splendid isolation they develop no tolerance for changed conditions. It is probably no accident that the world's largest living turtles evolved on islands like those of the Galapagos, where they were isolated. They have no adaptability to survive when overtaken by change. The very isolation that produced them was their undoing when change came.

About 1900 Alfred Newton wrote, "As on the death of an ancient hero myths gathered around his memory as quickly as clouds around the setting sun, so have stories, probable as well as impossible, accumulated over the true history of the species." This of course is material for a gifted writer to weave into tales, either with or without a moral. One lesson from the Great Auk's history was drawn by the late Will Cuppy in his collection *How to Become Extinct*: "Under conditions prevailing in the civilized world, any bird that can't make a quick getaway is doomed, and more so if it is good to eat, if its feathers are fine for cushions, and if it makes excellent bait for Codfish when chopped into gobbets. Such a bird, to remain in the picture, must drop everything else and develop its wing muscles to the very limit. It does seem as though that should be clear even to an Auk."

For those who would read more of the Great Auk, I suggest pages 271 to 294 of *Extinct and Vanishing Birds of the World* by J. C. Greenway, and for a dramatization, the first part of the Signet book, *The Great Auk* by A. W. Meckert.



Rand, Austin Loomer. 1967. "The Great Auk Comes to Chicago." *Bulletin* 38(2), 10–13.

View This Item Online: <https://www.biodiversitylibrary.org/item/25545>

Permalink: <https://www.biodiversitylibrary.org/partpdf/374648>

Holding Institution

University Library, University of Illinois Urbana Champaign

Sponsored by

University of Illinois Urbana-Champaign

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the Chicago Field Museum.
For information contact dcc@library.uiuc.edu.

Rights Holder: Field Museum of Natural History

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.