## ABOUT THE COVER: AUDUBON'S GATLING OF WOODPECKERS



The collective noun, or noun of assemblage, for woodpeckers is "gatling," presumably derived from the similarity in sound between a woodpecker's drumming on a hollow tree and the rattle of a Gatling gun of Civil War fame. In this cover, John James Audubon presents a wide scatter of woodpecker species. Of the five species shown, three are western, one eastern, and one found continent-wide. The pair in the upper left-hand corner of the plate are Hairy Woodpeckers (*Picoides villosus*), found across North America from Alaska to the Maritime Provinces of Canada and south to Central

America. The upper right-hand pair are Red-bellied Woodpeckers (*Melanerpes carolinus*), distributed over most of the eastern United States north to the Great Lakes. These woodpeckers have recently expanded their breeding range into Massachusetts. The central pair, with open bills almost touching, are Redshafted Flickers, now considered a western race of the Northern Flicker (*Colaptes auratus*). The pair below them, clinging to the vertical trunk, are Lewis' Woodpeckers (*Melanerpes lewis*), a western, local, and unfortunately declining species. The bottom pair, facing in opposite directions, are Redbreasted Sapsuckers (*Sphyrapicus ruber*), a bird of the west coast from Alaska to Mexico.

Audubon was born in 1785 in what is now Haiti, but was taken by his father, a French naval officer, to France at age six, and sent to the United States twelve years later. Always an outdoorsman with an interest in birds, he tired of unsuccessful business ventures and in 1820 began his monumental work painting life-size the birds of the United States and territories. The project took him to Europe for subscribers to his rather expensive project, and for suitable engravers to produce the prints from his watercolor paintings. By 1827 Audubon had settled on Robert Havell, Jr., of London as an engraver, and his ambitious project progressed rapidly. Audubon traveled extensively in North America, painting from freshly shot bird models and making extensive observations and notes on the natural history of living birds. He also received specimens and observational notes from travelers to areas that he could not reach.

Ultimately he produced 433 paintings, mostly watercolors, from which 435 copper plates were etched. They depict 489 of what Audubon considered bird species (by today's nomenclature, more than 450 species because some of his species were reduced to subspecies, a few birds were actually females, young birds, or hybrids, and several ephemeral or apocryphal birds remain unidentified

to this day). The "double elephant folio" (reflecting the gigantic size of the prints) was issued in parts between 1827 and 1838, and five volumes of text were published between 1831 and 1839. With one exception the first 352 plates illustrated a single species, but after that Audubon sometimes increased the number of species per plate, apparently to speed up completion of the work. The cover picture, plate 416, was one of two plates with five species illustrated, and there were two plates with six species each.

The plates were made by Havell by an etching process in which a copper plate was coated with an acid-resistant waxy substance, and a drawing made from the watercolor was cut through the wax with a metal tool, exposing the copper surface. The plate was then dipped in acid, which etched the copper wherever it was exposed. The etched lines were inked, and paper pressed on the plate producing the black-and-white print of the subject. The prints were then hand colored, using the original watercolor as a model (see Susanne M. Low, An Index and Guide to Audubon's Birds of America, 1988, New York: Abbeville Press, for more details of this complicated process and other aspects of Audubon's work).

Havell did not always follow the composition of the watercolor when etching a plate. He sometimes put birds onto different plates and often changed backgrounds. In the cover print, for example, he replaced the large branch coming in from the right with a new branch from the main trunk, and moved the female Hairy and Red-bellied woodpeckers up so that they were more directly facing their mates.

Between 1840 and 1844 an octavo edition was published, and the plates, now rearranged so that there was one species per plate, were integrated with text. The species accounts consisted of extensive measurements and plumage descriptions, together with life history material, often including a bird's range, migratory behavior, habitat, clutch size, number of broods, and food and foraging habits, drawn when possible from his own observations.

Of the five woodpecker species pictured on the cover, Audubon was personally familiar with only two. Audubon wrote in the octavo edition of one bird's habitat: "Lively, noisy, and careless of man, the Hairy Woodpecker is found at all seasons in orchards, among the trees of our cities, along the border of plantations, on the fences, or on the trees left in the field, as well as in the deepest forest." He wrote of the Red-bellied Woodpecker's behavior: "It is a lively and active bird, fond of rolling its tappings against the decayed top-branches of trees, often launching forth after passing insects, and feeding during winter on all such berries as it can procure." The Lewis' Woodpecker had been first described by Audubon's predecessor, Alexander Wilson, in 1811 from specimens brought back from the Lewis and Clark western expedition. Audubon acknowledged Wilson's contribution in his own species account. With no personal experience with the living bird, he quoted letters from Thomas Nuttall

and John Kirk Townsend on the habits of the Lewis' Woodpecker. For the Redbreasted Sapsucker (which he called the Red-breasted Woodpecker), he relied on notes from Townsend, and for the Red-shafted Flicker (his Red-shafted Woodpecker) notes from Nuttall.

Audubon's art is stunning in its dynamic and artistic qualities, and he made contributions to the burgeoning science of ornithology. But perhaps his greatest contribution was the interest in birds and conservation that his great artwork and writings engendered, and as the inspiration for the many societies that bear his name.

W. E. Davis, Jr.

## **AUDUBON EXHIBITION: FEBRUARY 9-APRIL 10, 1994**

An extraordinary collection of ninety rarely seen watercolor paintings by Audubon will be the focus of *John James Audubon: The Watercolors for The Birds of America* at the Museum of Fine Arts in Boston from February 9 through April 10, 1994. Organized by The New-York Historical Society, the exhibition will also include a dozen engravings made by Robert Havell, Jr., after the originals. The watercolors are drawn from the Society's 431 surviving original watercolors for *The Birds of America* which have been a part of their collection since 1863. According to the Society's spokesperson, "The works have been allowed limited exposure due to the inherent fragility of the watercolor medium. In preparation for the exhibition, the watercolors have received their first comprehensive conservation treatment. Following the exhibition's tour, these ninety works will not be displayed again for several years and then only in limited numbers to visitors to the Society."

The exhibition includes a variety of birds both familiar and strange. Birds included in the exhibition are the Atlantic Puffin, Mallard, Bobolink, Summer Tanager, Pileated Woodpecker, and Great Gray Owl. The exhibition will be accompanied by a major fully illustrated catalogue.

Three lectures will also be conducted at the Museum of Fine Arts in conjunction with the exhibition. On March 2, Theodore E. Stebbins, Jr., John Moore Cabot Curator of American Paintings at the museum, will talk on "Archetypes of the Wilderness: John James Audubon and *The Birds of America*." On March 9, Stephen Jay Gould, Alexander Agassiz Professor of Zoology at Harvard University, will talk on "Art, Science, and Iconography." Finally on March 16, Roger Tory Peterson will talk on "The Evolution of Wildlife Art Since Audubon." All lectures are at 7:30 P.M. Admission is \$9.00 for each lecture or \$21 for the series (nonmembers), or \$7.50 each lecture or \$18 for the series (members). For further information, contact The Museum of Fine Arts, Public Programs, 465 Huntington Avenue, Boston, MA 02115.