

PLATES FROM JOHN JAMES AUDUBON'S BIRDS OF AMERICA

1 Wild Turkey, male *Meleagris gallopavo* Linnaeus

Originally entitled 'Great American Cock'

(PLATE 1)

'The great size and beauty of the Wild Turkey, its value as delicate and highly prized article of food, and the circumstances of its being the origin of the domestic race now generally disposed over both continents, render it one of the most interesting of the birds indigenous to the United States of America. Thus Audubon himself extols the subject which he chose as the first illustration for the Double Elephant Folio. Others have also held the Turkey in high esteem, and Benjamin Franklin is quoted as saying that he would have preferred this bird as the national symbol rather than the eagle, which he felt to be 'a bird of bad moral character'.

Large flocks of Wild Turkeys once occupied extensive wooded areas over most of North America, but even in Audubon's day their numbers were starting to be seriously depleted by hunting and loss of habitat to man. More recently, the re-stocking in the wild with birds bred in captivity has met with qualified success, as they have taken hold in some areas where the species had been extirpated. These turkeys may be distinguished from the domestic birds by their chestnut-colored tails.

Their foods include various seeds, acorns and other nuts, some fruit, as well as insects picked from the ground. As night approaches, the turkeys fly into trees to roost. The male turkey is much larger than the female, has wattles and more iridescent coloring that glints during the mating season display.

Audubon has given us a vivid description of their behaviour in courtship. 'As early as the middle of February', he writes, 'they begin to experience the impulse of propagation. The females separate, and fly from the males. The latter strenuously pursue, and begin to gobble or to utter the notes of exultation...'. At the call of the female, he continues, the males all fly to the spot, and strut pompously about, emitting at the same time a succession of puffs from the lungs, and stopping now and then to listen and look... moving with as much celerity as their ideas of ceremony seem to admit. While thus occupied, the males often encounter each other, in which case desperate battles take place, ending in bloodshed, and often in the loss of many lives, the weaker falling under the repented blows inflicted upon their head by the stronger.'

This famous engraving of a turkey-cock strutting through the cone-brake was based on watercolor probably painted in 1825 at Beech Woods Plantation, West Feliciana Parish, Louisiana, where Audubon's wife Lucy was working as a governess. Her employer later recalled how this particularly large bird '... weighed twenty-eight pounds. Audubon pinned it up beside the wall to sketch, and he spent several days lazily sketching it. The damned fellow kept it pinned there until it rotted and stunk—I hated to lose so much good eating.'

The plate was engraved in 1826 by W.H. Lizars in Edinburgh as the 'Great American Cock'. A year later in London, Robert Havell added most of the aquatint tones, and the title was changed to the present one. Audubon concluded: 'Length feet 1 inch, extent of wings 5 feet 8 inches... . Such were the dimensions of the individual depicted in the Plate, which, I need not say, was a fine specimen.'

PLATES FROM JOHN JAMES AUDUBON'S BIRDS OF AMERICA

2 Snowy Owl *Strix nyctea* Linnaeus

Now known as *Nyctea scandiaca* (Linnaeus)

(PLATE CXXI)

'This beautiful bird is merely a winter visitor of the United States,' wrote Audubon, 'where it is seldom seen before the month of November, and whence it retires as early as the beginning of February. It wanders at times along the sea coast, as far as Georgia ... in Massachusetts and Maine it is far more abundant than in any other parts of the Union.' He also found the Snowy Owl as far inland as Ohio and Kentucky, but today its appearance is limited to the most northerly States, and even then only in certain years.

A denizen of the open stretches of the Arctic tundra, the Snowy Owl ranges round the North Pole in North America, Europe and Asia. In these regions the summers are virtually nightless, so that this owl, unlike most of the species, hunts by both day and night. It feeds mainly on rodents, especially lemmings, but it will often prey upon other small mammals, birds, and even fish.

Audubon observed them catching fish beside rock-fissures at the Falls of the Ohio, near Louisville. '... they invariably lay flat on the rock,' he wrote, 'with the body placed lengthwise along the border of the hole, the head also laid down, but turned towards the water. One might have supposed the bird sound sleep, as it would remain in the same position until a good opportunity of securing a fish occurred, which I believe was never missed; for, as the latter unwittingly rose to the surface, near the edge, that instant the Owl thrust out the foot next the water, and, with the quickness of lightning, seized it, and drew it out.'

The nest of the Snowy Owl is merely a depression in the top of some small eminence on the ground, lined with moss and feathers. There are usually five to eight creamy white eggs, which the female incubates while the male defends the nest and feeds his mate. The eggs are laid over an extended period, the number and spacing depending on the food supply. Each hatches after a month's incubation so that the young can vary considerably in size and age. At hatching they are fluffy white balls of down; later they develop a thick coat of gray down through which the heavily marked feathers of the young fledglings eventually emerge.

The setting that Audubon chose is very unusual for Snowy Owls and probably harks back to one he specially noted near Louisville: 'It was perched on a broken stump of a tree in the centre of a large field; and, on seeing us, flew off, sailed round the field, and alighted again on the same spot. It evinced much impatience and apprehension, opening its wings several times as if intending to fly off...'

In straight flight this owl is strong and silent, while over its prey it hovers intricately. It utters resounding barking calls and whistles. Altogether, with its robust physique and wintry camouflage, this fine bird provides an appropriate ornithological symbol for the great open spaces of the Far North.

The painting for this plate, a particularly rich example of Robert Havell's aquatint, was probably done on the East Coast in 1829. The male owl is shown above the more heavily marked female.

PLATES FROM JOHN JAMES AUDUBON'S BIRDS OF AMERICA

3 Canada Goose *Anser canadensis* Vieillot

Now known as *Branta canadensis* (Linnaeus)

(PLATE CCI)

This lively composition was based on a watercolor completed by Audubon in February, 1833, though it incorporates an earlier study for the male bird by itself made some twelve years previously. The 'Canada Goose' became the initial plate for the third of the four volumes of *Birds of America*, and thus stands almost half way through the total number published.

By the time this and the other later plates were being issued (including the 'Great White Heron'), Audubon's descriptions in his *Ornithological Biography* were tending to become less anecdotal and very much more technical than in his earlier essays. For the 'Canada Goose', for instance, the only general information he imparts is that the male bird here depicted was presented to him 'by Dr. T. M. Brewer of Boston'. Then follow three pages packed exclusively with anatomical detail: 'The duodenum curves at the distance of 8 inches, and there are formed 12 folds by the intestine, which is ten feet in length...'. Unfortunately he offers documentation neither of habit nor habitat. So, despite Audubon's customary dramatic presentation of his subject in the print, the ingenuous enthusiasm that so enlivened his former literary portrayals of birds is in this case lacking.

Nevertheless, the Canada Goose is a highly significant bird, especially in the skies of northern North America where V-shaped formations of honking geese are perhaps the most eloquent signs of the return of spring.

Most widespread and familiar of North American geese, this species is often held in captivity, while escaped birds have colonized areas even in parts of Europe. The black-stocked head and neck with its conspicuous white patch is diagnostic for the species. Except for size (males are somewhat larger) the sexes are alike. Paired birds tend to remain mated until one dies, and they stay together even in the large winter flocks. There is much variation geographically in the size of these geese, for the largest subspecies averages three times the weight of the smallest.

The Canada Goose nests rather early, often before the snow has melted in the north. Pairs select a site under a bush, on a bank, or preferably on an island in a pond or lake or marsh, where a nest made of leaves and grass is lined with down to receive the three to seven eggs laid by the female. While she incubates the eggs, the male swims or strides nearby, always on guard as Audubon shows him so vividly in this engraving. Both adults vigorously defend the nest, driving off potential predators, including humans.

The eggs hatch in twenty-four to twenty-eight days, and the downy young soon follow the parents to the nearest water. They feed in the water on various sedges and other plants, or graze in grassy areas. Later in the year they eat fallen grain in stubble fields. As the young reach adulthood and can fly well, the family joins other groups of geese, and flocks begin to form. They seldom breed until they are two or more years of age.

Each population has its traditional migratory pathways and wintering grounds, and some even have special areas where they retire to molt, remaining flightless for a month. In the north-eastern United States there exists a new, suburban adapted population built up from feral and captive Canada Geese of several subspecies—though the subspecies that once inhabited the region at the time of European colonization was regrettably wiped out by the early settlers.

PLATES FROM JOHN JAMES AUDUBON'S BIRDS OF AMERICA

4 Wild Turkey, female and young *Meleagris gallopavo* Linnaeus

Originally entitled 'Great American Hen and Young'

(PLATE VI)

Having commenced publication with the spectacular 'Wild Turkey, male', Audubon issued this engraving in the following part a few months later. 'Here you have his mate', he wrote, 'now converted into a kind and anxious parent, leading her young progeny, with measured step and watchful eye, through the intricacies of the forest. The chickens, still covered with down, are running among her feet in pursuit of insects. One is picking its sprouting plumelets, while another is ridding itself of a tick which has fastened upon its little wing.'

The young hatch after about twenty-eight days of incubation, and, when their distinctively patterned downy plumage is dry, are able to walk about with their mother seeking food, as shown in Audubon's plate. As the young approach full size the various family parties in a locality often band together into small flocks that wander together over a large area. Young birds appear not to breed in their first year, but wait until they are at least two years old.

After mating the female seeks a secluded spot where she makes a nest in a hollow on the ground, in which she will lay from eight to sixteen eggs. Audubon noted that 'Several hens sometimes associate together, I believe for their mutual safety, deposit their eggs in the same nest, and rear their broods together. I once found three sitting on forty-two eggs. In such cases, the common nest is always watched by one of the females...'

Whenever a single hen is obliged to leave her nest to forage for food, she carefully hides her eggs under a thick covering of leaves. 'Indeed', wrote Audubon, 'few Turkeys' nests are found, unless the female has been suddenly started from them, or a cunning Lynx, Fox, or Crow as sucked the eggs and left their shells scattered about.'

Among other predators, even turkey-cocks themselves have sometimes been known to destroy the nests of females with which they may even have mated. Audubon found that the hen, when laying or sitting, never moves except when certain of discovery: 'I have frequently approached within five or six paces of a nest, of which I was previously unaware, on assuming an air of carelessness, and whistling or talking to myself, the female remained undisturbed; whereas if I went cautiously towards it, she would never suffer me to approach within twenty paces, but would run off... to a distance of twenty or thirty yards, when assuming a stately gait, she would walk about deliberately, uttering every now and then a cluck.'

Audubon's illustrations of both male and female turkey are life size, showing how very much smaller and less prominently marked is the latter bird. The plate for 'Wild Turkey, female und young ' was based on a composition painted in 1820 during the artist's voyage down the Mississippi. Like 'Wild Turkey, male', it was originally engraved by W. H. Lizars in Edinburgh in 1826, when it was entitled the 'Great American Hen and Young'. In London the following year, Audubon's subsequent studies for both the habitat and the chicks were incorporated in to plate by the Robert Havells, making his one of the most elaborate subjects in *Birds of America*.

PLATES FROM JOHN JAMES AUDUBON'S BIRDS OF AMERICA

5 Mallard Duck *Anas boschas* Linnaeus

Now known as *Anas platyrhynchos* Linnaeus  
(PLATE CCXXI)

'Look at that Mallard as he floats on the lake; see his elevated head glittering with emerald-green, his amber eyes glancing in the light!' Audubon's especial delight in the colorful males of this species inspired him to more than usual rapture in his Ornithological Biography.

'How brisk are all his motions compared with those of his brethren that waddle across your poultry-yard!' he declares, 'how much more graceful in form and neat in apparel! The duck at home is the descendant of a race of slaves, and has lost his native spirit: his wings have been so little used that they can hardly raise him from the ground. But the free-born, the untamed duck of the swamps, see how he springs on wing, and hies away over the woods.'

This duck is probably the most numerous species of waterfowl in the world, for all domestic ducks are descended from Mallards, except for those of Muscovy ancestry. Wild Mallards are widely distributed in the Americas and Eurasia, and it is a tribute to the adaptability of this hardy species that it thrives so commonly despite great annual mortality due to hunting.

Mallards interbreed with domestic ducks as well as with such close relatives as the American Black Duck, so that males exhibiting mixed plumage can often be seen. Within the species, a drake may consort with a particular hen from late winter into spring, but often breeds with a number of females during the mating season. In his most luxuriant prose, Audubon describes how at this time the males, 'like other gay deceivers', pay promiscuous court to the females, who are thus goaded to compete among themselves for 'the caresses of the feathered beau'.

'See that drake,' he goes on, 'how he proudly shews, first the beauty of his silky head, then the brilliancy of his wing-spots, and, with honeyed jabbering, discloses the warmth of his affection. He plays around this one, then around another, until the passion of jealousy is aroused in the breasts of the admired find flattered.' He concludes: 'Many tricks are played by ducks, good Reader, but ere long, the females retire in search of a safe place in which they may deposit their eggs and rear their young.'

As with many birds in which the sexes differ markedly in color, male Mallards have little to do with family life. 'The unnatural barbarian cares nothing about his progeny, nor has a thought arisen in his mind respecting the lonely condition of his mate', writes Audubon, for the female builds her nest by herself, on the ground, lining it with feathers plucked from her breast. She chooses secluded spots well away from water, in marshes or in woods. Seven to twelve eggs are incubated for twenty-five to thirty-one days. Shortly after hatching, the downy young follow her to water, and begin to fly after about eight weeks,

After the young have grown, ducks gather in flocks. At about this time the annual molt occurs, and adult males go through a brief 'eclipse' plumage, in which they resemble the females. Mallards feed around the edges of ponds, with tail upright, searching underwater for pondweed, rushes, as well as worms or insects. Rice and other grains are favorite foods when available. This fine composition was originally painted in Louisiana or Mississippi between 1821 and 1825.

PLATES FROM JOHN JAMES AUDUBON'S BIRDS OF AMERICA

6 Great White Heron *Ardea occidentalis* Audubon

Now known as *Ardea herodias* Linnaeus

(PLATE CCLXXXI)

The Great White Heron is the largest of all the world's white herons, sometimes attaining a height of over four feet. It is therefore a tribute to Audubon's mastery of pictorial design that he was able to depict this fine specimen at life size nevertheless.

Audubon first came upon these birds on Key West, Florida, in 1832. A view of the small town there appears in the background of this print, which was based on the watercolor painted on May 26 of that year. From South Florida, Great White Herons are found all through the West Indies to islands off the coast of Venezuela. They usually nest in mangroves close to the shore, and their large stick nests are constructed in trees by both adults, with some ceremony, during January to March in the Northern Caribbean.

Adults pair and court in small colonies, with a territory defined about the nest site. The female lays three to five eggs, but loss of eggs or young to snakes, raccoons and other predators which gather around the herons' colonies usually reduces the number of developing young to two or three birds. The young hatch after about four weeks of incubation, and are initially naked and helpless. The parents split the duties of feeding until the young are well feathered and can move about the tree, and both adults can safely be away at the same time. Feeding of the young is by regurgitation, the parent 'coughing' up the prey it has swallowed.

Hérons feed mainly on fish, but they also eat crustaceans, insects, mice and snakes. The fish in the bird's bill is probably a Sand Perch (*Diplectrum formosum*). They stalk their quarry by wading through the shallows, or they stand quietly still until the prey comes within close enough range to be seized by the rapid spearing movement typical of the heron.

They are voracious eaters. 'It was difficult... to procure fish enough for them, they swallowed a bucketful or mullets in few minutes, each devouring about gallon...'. So wrote Audubon about the several live specimens he had presented to his friend the Reverend John Bachman, of Charleston. The herons also proved to be destructive pets. 'On many occasions, they also struck at chickens, grown fowls and ducks, which they would tear up and devour. Once a cat which was asleep in the sunshine, on the wooden steps or verandah, was pinned through body to the boards, and killed by one of them.' Finally, when a heron turned on one of his young children, Buchman had to get rid of his birds.

The Great White Heron is now recognized as large white subspecies of the widespread North American Great Blue Heron (*Ardea herodias*) but Audubon considered it a full species, hence the specific name he gave it in *Birds of America*. Writing to Robert Havell Jr. on November 1, 1885, he urged the engraver to apply, 'your most especial care (to) the plate of the Great White Heron—it is a new bird of my discovery and should like to it treated in your best manner.' Six weeks later he had received Havell's initial proofs with unrestrained enthusiasm. 'I have examined, and that closely too, the Plates or *Ardea occidentalis*: the bird is perfect!' he wrote in a subsequent letter, adding a few instructions for improvements to the background, 'but take it "all in all" it is most excellent, and I feel highly gratified that you have met my wishes with it.'

Audubon writes that he received this adult male 'from Captain NAPOLEON COSTE, of the United States Revenue Cutter, the Campbell,'