

CATESBY'S COLONIAL FIELD GUIDE

by Richard K. Walton, Concord

A revolution of sorts took place in 1934 with the publication of Roger Tory Peterson's *A Field Guide to the Birds*. A reviewer in *The Auk* commended its young author: "On the general conception of the work and its admirable consummation we heartily congratulate him." Peterson's innovation involved the authoring of a single volume of bird plates and descriptions that stressed recognizable field characteristics of the birds inhabiting eastern North America. Armed with this small volume and a pair of binoculars (in lieu of the previously obligatory shotgun), the field birder was well equipped to identify birds for pleasure or study. Since its appearance in 1934, the "Peterson Field Guide" has been through four major revisions and more than forty printings and has sold over two million copies. Although the Peterson Guide is the paradigm, there are two other classic field guides that have been in general use during the past quarter century. In the 1950s Richard Pough and Don Eckelberry collaborated on a three-volume set, *Audubon Bird Guides*, that have become standards on the birder's bookshelf. The other much-used work, by Chandler Robbins et al., is *Birds of North America*. The latest generation of field guides includes the three volumes of *The Audubon Society Master Guide to Birding* and National Geographic's *Field Guide to Birds of North America*. Indicative of the sophistication and complexity that has evolved in the writing and production of field guides are the dozens of consultants, illustrators, and authors that were employed to complete these last two works. But what works were available before Peterson? Frank Chapman's *Handbook of Birds of Eastern North America* was first published in 1895. A number of editions and revisions, including ones illustrated by Louis Agassiz Fuertes, established this guide as the workhorse during the first part of the twentieth century. As we move backwards through the nineteenth and eighteenth centuries, we find works on American ornithology that differ significantly from present-day field guides. However, Coues, Nuttall, Audubon, and Wilson all produced books about American birds that served the birders of their times. The first comprehensive "field guide" to birds of the Western Hemisphere was Mark Catesby's *Natural History of Carolina, Florida, and the Bahama Islands*.

Mark Catesby (1682-1749) was an Englishman who made two trips to the New World, the first in 1712 to 1719 and the second in 1722 to 1726. After returning from his second voyage, he began work on his *Natural History*. Before Catesby, from the late sixteenth through the seventeenth centuries, there was very little in the way of systematic descriptions of the New World's natural resources. A few early explorers and settlers including Thomas Morton and John Josselyn of the northern colonies and Thomas Hariot and William Strachey in Virginia provided general descriptions with some references to the birdlife. Two other early visitors, John White and John Lawson, did provide Catesby with

specific information and illustrations that he would incorporate in his work.

John White made four voyages to the Carolina coast in the 1580s and 1590s. He completed over a hundred drawings of various fishes, reptiles, and arthropods as well as thirty-five bird drawings representing thirty-two New World species. Catesby apparently plagiarized several of White's drawings (four fish, a crab, and a butterfly). John Lawson, like many early American naturalists, made his living in the colonies by collecting plants and other natural oddities for European patrons. He was also in the land-promotion business and his *A New Voyage to Carolina* (1709) was essentially an advertisement for potential landowners and would-be settlers. Lawson's work included many natural history details as well as notes on American Indians. His bird list names and describes some 129 different forms. Many of Lawson's faunal descriptions, however, were based on hearsay and contained a heavy dose of folklore. Catesby was to make generous use of Lawson's work, sometimes giving credit, at other times not. In those cases where Catesby actually embellished his predecessor's fanciful accounts, the result is sensational but does little to clarify the natural history. Typical of such descriptions is Catesby's version of Lawson's devilfish (manta ray).

It is a large fish, and of great strength, as will appear by the following circumstance. A sloop of 80 ton lying at anchor in the harbor of Charles-Town, was on a sudden observed to move and scud away at a great rate; this being in view of hundreds of spectators, and it being known that nobody was on board it, caused no small consternation. At length it appeared to be one of these fish, which had entangled its horns with the cable, and carried the sloop a course of some leagues before it could disentangle itself from it, which at length it did, and left the sloop at anchor again, not far from the place he moved it from. [Feduccia, p. 160]

The final chapters to White's and Lawson's sojourns in the colonies indicate the difficulties under which these early naturalists worked. White's daughter, granddaughter, and son-in-law were all part of the ill-fated Roanoke Colony. Not a trace would be found of them, and White returned to England to live out his days. John Lawson's fate was even more tragic. In 1711, while exploring lands for a new colony, he was captured by the Tuscarora Indians. Catesby, in giving credit to Lawson for his Indian accounts, explained what happened.

I cannot but here lament the hard fate of this inquisitive traveler, who though partial in his favorable opinion of these barbarians, died by their bloody hands, for they roasted him alive in revenge for injuries they pretended to receive from him. [Ibid., p. 144]

Mark Catesby was also in the Americas under the patronage of wealthy Englishmen. In fact, in his introduction to *Natural History* he apologizes to his readers that on his first trip to Virginia he had no intention of writing a book on natural history but rather, "I chiefly gratified my inclination in observing and admiring the various productions of those countries; only sending from thence some dried specimens of plants . . . at the request of some curious friends" (ibid., p. 137). Catesby lists eleven patrons with a financial interest in his second trip. Just as the proprietary colonies of the Carolinas were economic adventures, Catesby was, to a large degree, the economic agent of his patrons. He was to send them valuable plants and seeds for practical application by their apothecaries or for inclusion in their private botanical gardens. The naturalist's job was to interpret the "productions" of nature so as to reveal their usefulness. When Catesby found areas that seemed unproductive, his comments often reflect this utilitarian perspective.

The further parts of these marshes from the sea, are confined by higher lands, covered with woods, through which, by intervals, the marsh extends in narrow tracts higher up the country, and contracts gradually as the ground rises; these upper tracts of marshland, by their advantageous situation, might with small expense be drained, and made excellent meadowland, the soil being exceedingly good. But so long as such spacious tracts of higher land remain uncultivated, and continue of no other use than for their cattle to range in, such improvements are like to lie neglected, and the marshes, which is a considerable part of the country, remain of little or no use. [Ibid., p. 141]

Catesby often recommended ways for his patrons to turn a profit. One innovative idea, expressed in a letter to Dr. William Sherard (an accomplished botanist and major fund raiser for Catesby's second trip), was the possibility of establishing an opium trade by growing Turkish poppies in Carolina. Among other practical suggestions given by Catesby in *Natural History* are recipes for pickled sturgeon and caviar. Indeed, this was a wide-ranging work covering a variety of topics. The extended title of this work makes reference to birds, beasts, fishes, serpents, insects, plants (especially trees and shrubs), air, soil, water, agriculture, and several other topics. Although the birds are mentioned first, it may well have been that Catesby saw them as supplemental to his botanical illustrations.

On his second trip Catesby spent the better part of four years exploring what is now South Carolina, Georgia, Florida, and the Bahama Islands. This was not entirely a wilderness experience. Catesby's English connections provided him with various letters of introduction to the governors of the crown colonies, and he enjoyed the comforts of their hospitality. Catesby did, however, trek through many unsettled areas as he fulfilled his contract with his patrons by collecting and sending to England seeds, plants, and animals. When Catesby returned to England anxious

to begin work on his *Natural History*, he found little or no support from his former employers. Although they had been enthusiastic about paying Catesby's way when he was returning goods directly to them, they had little inclination to go into the book business. Catesby was to spend the rest of his life struggling with the details of eighteenth century book production.

From an ornithological viewpoint, his struggles were worthwhile. Catesby's illustrations and descriptions constitute the earliest comprehensive work on North American birds. His use of associated plants and birds was an innovative idea that would be used by Audubon in the next century. Many of Catesby's bird descriptions contain useful field marks, details of distribution, and notes on seasonal occurrence - just what we might expect in a modern field guide. His Red-headed Woodpecker offers a typical example.

This bird weighs two ounces; the bill sharp, somewhat compressed sideways, of a lead color; the whole head and neck, deep red; all the under part of the body and rump white; as are the small wing feathers; which when the wings are closed, joins to the white on the rump, and makes a broad white patch cross the lower part of the back; the upper part of which is black, as are the quill feathers and tail, which is short and stiff. In Virginia very few of these birds are to be seen in winter; in Carolina there are more, but not so numerous as in summer; wherefore I conceive they retire southward, to avoid the cold. This is the only one of the woodpeckers that may be termed domestic, frequenting villages and plantations, and takes a peculiar delight in rattling with their bill on the boarded houses; they are great devourers of fruit and grain. The hen in color differs little or nothing from the cock.
[Ibid., p. 81]

Catesby occasionally passed along folklore, perhaps to enliven his accounts. The Osprey, he claimed, having caught a fish invariably calls to the eagle who in turn often relieves the Osprey of his prey. Catesby's notion that the entrails of the Carolina Parakeet were poisonous to cats was to endure well into the following century. His account of the Ruddy Turnstone combines dry humor and exaggeration.

This bird has, in proportion to its body, a small head, with a straight tapered black bill, an inch long. All the upper part of the body is brown, with a mixture of white and black. The quill feathers of the wings are dark brown; the neck and breast are black; the legs and feet light red. In a voyage to America, in the year 1722, in 31 Deg. N. Lat. and 40 leagues from the coast of Florida, the bird, from which this was figured, flew on board us, and was taken. It was very active in turning up stones, which we put into its cage; but not finding under them the usual food, it died. In this

action it moved only the upper mandible; yet would with great dexterity and quickness turn over stones of above three pounds weight. . . [Ibid., p. 44]

In all, Catesby described and illustrated 109 species. Because his work is pre-Linnaean, many of the names Catesby used were ultimately changed. Linnaeus himself, however, made ample use of Catesby's work by describing and naming 71 species based on the text and drawings of *Natural History*. In effect, Catesby's illustrations became the original type specimens of many North American birds.

The author of *Natural History* also showed an inclination to deal with several of the larger ornithological puzzles - ones that remain to this day subjects of research. Catesby debunked the myth of hibernation in birds. "The reports of their lying torpid in caverns and hollow trees, and of their resting in the same state at the bottom of deep waters," he said, "are notions so ill attested and absurd in themselves, that they deserve no further notice" [ibid., p. 163]. As an alternative to hibernation, Catesby presented first hand evidence of migration. In the fall of 1725, Catesby recorded the movement of Bobolinks on three successive nights over the Bahamas. He suggested that many species must move to the Southern Hemisphere during the North American winter. In his attempt to explain the distribution of species, Catesby's speculations implied the idea of continental drift. "To therefore account for this extraordinary circumstance [the same species of land birds in Europe and America] there seems to remain but one more reason for their being found on both continents, which is the nearness of the two parts of the earth to each other heretofore, where now flows the vast Atlantic Ocean" [ibid., p. 163]. Another aspect of distribution that Catesby commented on was the relatively larger diversity of animals in the tropics as compared with the temperate zone.

Catesby published the first volume of his work in five parts between 1729 and 1732. In 1733 he was elected a fellow of the Royal Society. Although he was to achieve a certain amount of fame during his lifetime, fortune was not to be Catesby's lot. He struggled financially through the entire process. A second volume to his *Natural History* was completed in 1743 and ultimately an appendix in 1747 - less than two years before his death. Catesby's work would provide a benchmark for many of America's prominent naturalists including Thomas Jefferson, Alexander Wilson, and John James Audubon. In fact, all the future generations of American naturalists would look back and say with Wayne Hanley: In the beginning there was Mark Catesby.

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