

MARK CATESBY AND THE NOMENCLATURE OF NORTH AMERICAN BIRDS.

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UPON this occasion, the first meeting of the American Ornithologists' Union in the South, it seems eminently fitting that we begin our program by paying homage to the writer whose classic work on the Natural History of Carolina, Florida and the Bahama Islands forms the basis of the ornithology not only of the Southern States, but of the whole of North America—Mark Catesby.

When, some forty years ago, I became connected with the Academy of Natural Sciences of Philadelphia, there was a case in the library just beyond the door of my room, which contained, among other things, two large white parchment covered folio volumes marked 'Catesby's Carolina.' My curiosity as to their contents was aroused and I was soon enjoying my first glimpse of Catesby's quaint paintings of South Carolinian birds. Many times since then have I turned those pages and become familiar with the dead Robin, lying on its back on a stump; the brilliant Cardinal, standing painfully erect against the trunk of an oak tree and the Towhee, walking flat footed over the upright leaves of a poplar with as much apparent ease as a Jacana treading the lily pads on some tropical pond!

Catesby says of himself "I was not bred a painter and I hope some faults in perspective and other niceties may [therefore] be more readily excused." And when we learn that he carried his sheets of paper and his paints in a box, during all his travels among the Indians in the mountains of South Carolina, in order to depict his birds on the spot; and that he later learned to etch after a fashion, so that he could make his own plates and reduce the cost of his publication, we can indeed be most lenient. Even though his colors are often too intense and little details such as tail-markings and wing-bars are omitted, his plates have a charm that is all their own and almost all of them are specifically identifiable.

¹ Read at the opening session of the Charleston Meeting of the A. O. U. November 20, 1928.

His quaint text, too, printed in English and French in parallel columns, is fascinating reading, and many a time have I poured over the large type as fresh on the fine old sheets of the letter press as if printed but yesterday. Here we may read the story of the Osprey and the Eagle in probably its first presentation: "The manner of fishing of the Fish Hawk" says Catesby "after hovering a while over the water is to precipitate into it with prodigious swiftness where it remains for some minutes and seldom rises without a fish which the Bald Eagle, which is generally on the watch no sooner spies, but at him furiously he flies. The Hawk mounts, screaming out, but the Eagle always soars above him and compels the Hawk to let it fall which the Eagle seldom fails of catching before it reaches the water."

Of the Flicker he writes: "it differs from Woodpeckers in the hookedness of its bill and manner of feeding which is usually on the ground, out of which it draws worms and other insects." Catesby apparently saw the long retractile tongue of the Flicker licking up ants and took it for an earth worm while his contrasting it with the Woodpeckers led Linnaeus to place the bird in the Cuckoo genus.

In his account of the Blackbirds Catesby says that the Redwings and Grackles mingle in the same flocks and tells us that "when they are shot there mostly falls both kinds and before one can load again there will be more than before they were shot at;" a condition which recalls the miracle of the loaves and small fishes.

The Reed-bird we learn was esteemed in Carolina "as the greatest delicacy of all other birds. When they first arrive they are lean but in a few days become so excessively fat that they fly sluggishly and with difficulty." "In September," he naïvely adds "when they arrive in infinite swarms to devour the rice, they are all hens not being accompanied by any cock but early in the spring both cocks and hens make a transient visit together."

Of the gorgeous green Parakeet which was common in Carolina in those days he gives us the surprising information that "their guts is certain and speedy poison to cats."

Now Catesby was primarily a botanist and dabbled in ornithology just as some ornithologists of today dabble in botany, so

we must forgive him if he did not take more time for a detailed study of the habits of his birds and incorporated in a scientific treatise these pieces of popular belief, tradition, and folk lore, and we should rather thank him for producing at tremendous labor the first recognizable series of colored plates of American birds, each accompanied by a spray of some characteristic Carolinian tree, shrub or herbaceous plant—a plan followed nearly a century later by Audubon as well as by other bird artists.

But who, by the way, was this Mark Catesby? Not a South Carolinian; not even an American born, but a young Englishman, who at the age of thirty-two visited Virginia where he lived for seven years and later at the age of forty-two spent four years in South Carolina, landing at Charleston, spending a year in the coast district, and then some time at Fort Moore which he says was located some 300 miles up the Savannah River, whence he made journeys with the Indians into the mountains of upper Carolina. Unfortunately he left us no detailed itinerary.

He returned to England in 1726 where his great book was published and died at his home in London in his seventieth year, on December 23, 1749.

Now how does Catesby's "Carolina" affect the nomenclature of North American birds? I hesitate to mention such a subject as nomenclature at a meeting of the Union. It is likely to cause the hasty departure of part of my audience and to arouse those who claim this subject as their chief indoor sport to continued debate, but I hope I may be spared from either of these calamities. I have endeavored to lure on my audience by presenting a brief historical account of Catesby and his work and covered the bitter pill of nomenclature, as it were, with a sugar coating. Instead of starting a weary debate I shall try to propose a compromise which may be considered carefully and adopted or rejected by the members of the Committee on Nomenclature who are now laboring on the new Check-List.

Catesby tells us that he named his birds after the English birds "with an additional epithet to distinguish them" and many of his vernacular names still persist. Since he tells us that his friend and patron, Dr. Sherard, supplied Latin names for the plants it is reasonable to suppose that he performed the same service in

regard to the birds. We must remember, however, that Catesby lived before the publication of Linnaeus's 'Systema Naturae' which in 1758 laid the foundation for modern scientific nomenclature and that Catesby's names were polynomial descriptive terms quite different from the binomial system of Linnaeus. His name for the Red-winged Blackbird, for instance, was *Sturnus niger alis superne rubentibus*; his Blue Jay was, *Pica glandaria caerulea cristata* and his Robin *Turdus pilaris migratorius*.

Such names were of course not admissible under the binomial Linnaean system and had no direct bearing on nomenclature but they had a very decided indirect influence, through the work of Linnaeus.

Linnaeus was, by the way, another botanist who merely dabbled in ornithology. He gave binomial names to all of the plants, and starting on the animal kingdom named first the Swedish birds and other animals with which he was more or less familiar, while the foreign species, which he had never seen, he named from the plates in published works, and Catesby became his basis for the North American species. Moreover he often selected some descriptive word from Catesby's polynomial names in coining his own binomials, such as "*migratorius*" for the Robin; "*cristatus*" for the Blue Jay; etc.

So far so good, but in the course of time American ornithologists studied their birds more carefully and discovered that many of the wide-spread species of the eastern states were divisible into two geographic races or subspecies, a northern and southern. They usually compared specimens from Florida with those from the Middle States, which often differed markedly from one another and taking it for granted that the Linnaean names, based on Catesby, belonged to the northern form they named the Florida birds as new and so there came into our list such birds as the Florida Grackle (*Quiscalus quiscula aglaeus*), described by Prof. Baird; the Florida Redwing (*Agelaius phoeniceus floridanus*) described by Mr. Maynard etc. Specimens were then often not available from the Carolinas and Virginia, where the two forms might be supposed to merge into one another and it did not occur to these early systematists that there might be some question as to whether Catesby's plates, upon which Linnaeus based his names,

represented the southern and not the northern race. It was not realized either that many of the so-called "Florida races" extended northward along the coast as far as Charleston or even further and that Catesby might just as likely have had in hand a Florida Grackle when he painted his Purple Jackdaw, as an example of the more northern Purple Grackle. This especial case has been clearly brought out by Mr. Arthur T. Wayne, who, after Catesby, is our most notable South Carolinian ornithologist, and Mr. Outram Bangs took the question seriously under consideration when he separated the Flicker into a northern and southern race. The latter decided that the birds from about Charleston, which he considered as the type locality for Catesby's plate, were more like the southern form than the northern and consequently named the latter as new, *Colaptes auratus luteus*, the Northern Flicker, and allowed the old Linnaean name *auratus* to stand for the southern race—exactly the reverse of what Baird and Maynard had done in the case of the Grackle and Redwing.

The next step was taken by Dr. Mearns and Dr. Oberholser who in order to be consistent made Charleston the type locality for all of Catesby's birds and overthrowing the work of Baird, Maynard, Coues etc. transferred the names formerly applied to the northern races to the southern ones and renamed the former, so that *Cyanocitta cristata cristata* which a short time ago denoted the Northern Blue Jay would now denote the Florida Blue Jay, while the name *florincola* proposed by Coues for the latter disappears and a new term *bromia* is introduced for the northern bird. This is confusion worse confounded and seems the height of nomenclatural absurdity to the uninitiated, yet if we restrict all of the Catesbian-Linnaean names to the southern races there is no other recourse and Drs. Oberholser and Mearns were perfectly right and were playing the game "according to Hoyle."

Then comes another move. Dr. Mearns had in accordance with the principles just explained, cancelled the name *floridanus* for the Florida Redwing and transferred to it the name *phoeniceus* formerly applied to the northern race, considering that his specimens from the Charleston region were closer to the southern form. Now Messrs. Howell and van Rossem studying again the self-same series that had been used by Dr. Mearns decide that they

are closer to the *northern* form of Redwing and the names shift back to where they were before. And so it is in other cases. We find Mr. Ridgway stating that the intermediate Blue Jays of the Carolinas are closer to the northern form while Dr. Oberholser considers them identical with the southern.

In other words South Carolina is in the middle of a broad area of intergradation and its birds are more or less intermediate between the northern and southern forms. And with Charleston fixed as the type locality of the Linnaean-Catesbian names we find that according as we draw the arbitrary line of separation north or south of Charleston the names shift back and forth. So intermediate too are the characters of the birds from this "no man's land" that their relegation to one form or the other and the location of the dividing line become wholly matters of personal opinion. Some authors claim to find in Catesby's more or less crude plates indications of one race or the other, but others as vehemently deny this possibility and it seems hopeless to reach any decision from either plate or text except in a few cases which have never been in debate, such as the Towhee, which is depicted with a red eye and *must* be referred to the northern bird which comes south in winter. From his statement that it is resident, however, it is obvious that Catesby had not distinguished the two forms, nor did he in any other case where a northern and southern race exist.

Had Mark Catesby only realized what trouble he was making for us of this enlightened age 200 years later, he would probably have landed at St. Augustine or Norfolk or somewhere else safely within the typical range of one group or the other, but no! on second thought he doubtless, like us, realized the attractions of the Charleston environment and the hospitality of its citizens and cast all other considerations to the wind!

But those of us who are burdened with the responsibility of preparing the new A. O. U. 'Check-List' and who wish to reach decisions as permanent as possible have to find some solution to problems like these, and I now offer my suggestion.

It seems very easy and consistent to fix Charleston as the Catesbian type locality for all his birds but are we justified in such action? I think not. And as it results in such unfortunate overthrows as I have cited I do not think it is desirable.

We find that we pass into the range of the northern races as we go north along the coast and we do the same as we go west toward the mountains, as it has been shown by Mr. Wayne and by Mr. Pickens that the northern races often occupy the highlands of the state. Moreover some northern races occur in winter in South Carolina even on the coast. We have no way of telling positively where in the state Catesby got all of his specimens nor at what season, while we do know that he travelled well back onto the uplands, and presumably got his specimens in winter as well as in summer (*vide* the Towhee).

Now why cannot we allow the type locality to stand at the rather indefinite statement "Carolina" just as he left it and follow the first revisor of the species as to whether the Catesbian bird represents the northern or southern race? Why make a positively definite statement which the evidence does not warrant and which overturns the good work of our predecessors?

Dr. Coues named the Florida Blue Jay *Cyanocitta cristata florincola* and left the Linnaean-Catesbian name *cristata* for the northern race, very good.

Mr. Bangs named the northern Flicker *luteus* and left the Linnaean-Catesbian name *aureus* to the southern race, very good again.

Let them both stand and forever avoid the constant difference of opinion as to which form Catesby actually had in hand. By this plan we reduce personal opinion to a minimum, we do no injustice to Catesby nor to South Carolina, and we retain for our earlier systematists credit due them for being the first to recognize the existence of the two forms of these various birds. Furthermore it makes it possible for me to once again open the classic volumes of the Natural History of Carolina and enjoy an examination of Catesby's paintings and a perusal of his quaint text without the horrible nightmare that I may discover some peculiar tint in his coloring or some hitherto overlooked word in his diagnosis that will open the way to another overturn in the names of these unfortunate birds of our south Atlantic Coast.

In conclusion I would thank my audience for bearing with me while I led them unknowingly into the mazes of a nomenclatural problem and I would assure my fellow laborers in nomenclatural

fields that I have no criticism of what they have done and have merely suggested a way out of our troubles, ever endorsing the byword of our 'Check-List', coined I believe by Dr. Elliott Coues, that "Nomenclature is a means, not an end, of Zoological Science."

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