

## THE SORA RAIL.

†ORTYGOMETRA CAROLINUS, *Linn.*

PLATE CCCVI.—MALE, FEMALE, AND YOUNG.

Not many years have elapsed since it was supposed by some of the inhabitants of those districts to which thousands of this species of Rail resort at particular periods, that the Soras buried themselves in the mud at the approach of cold weather, for the purpose of there spending the winter in a state of torpidity. Many wonderful tales were circulated to convince the world of the truth of this alleged phenomenon; but the fact was, as you will naturally anticipate, that the birds merely shifted their quarters, as no doubt they will continue to do, so long as the climate becomes too cold for them in winter. Prior to the days of WILSON, very little indeed had been published respecting the habits of our birds. Superstitious notions and absurd fancies occupied the place of accurate knowledge in the minds of people too earnestly engaged in more important pursuits, to attend to the history of the animals around them; and with respect to the Sora in particular, I have no doubt that the settlers in our original forests cared very little about them, farther than that, when well cooked, they afforded a very savoury dish. Now, however, the case is very different. Many of the enterprising and industrious sons of Columbia have attained affluence and ease, and their children receive a liberal education. The sciences and arts, those attendants on peaceful commerce, are now sources of pleasure to many of our citizens, and at the present day there are not a few individuals among us, devotedly engaged in the pursuit of zoology in all its branches. So rapid has been the progress of ornithology in particular, that I should hesitate before asserting that any American, however uncultured, now believes that Rails burrow in the mud.

Those who have studied the habits of our birds, or of those of any part of the world, no longer admit that Swallows are condemned to search for warmth under the ice; for we have proofs that these birds can with ease obtain all that is necessary for their comfortable subsistence, by removing on wing to a warmer region. The Soras and many other species of birds are similar in this respect to the Swallows. The Vulture that was supposed to scent his food from afar, has well nigh lost his olfactory powers. Geese are no longer the offspring of sea-shells; nor do Swans now chaunt their own



requiem. The Pelican, too, has ceased to tear its own breast to gorge its voracious young. Students of nature have gradually rectified the various errors into which our ancestors had fallen; and we should now just as readily expect to see a shoal of fishes issuing from beneath the plough, as to see a flock of Rails emerge from the mud, shake themselves, and fly off. This subject, then, being disposed of, I have now to relate to you the result of my observations on the habits of the Sora.

This bird, which I think might have been named the Pennsylvanian or Virginian Rail, enters the Union from the shores of Mexico, early in March, when many are to be seen in the markets of New Orleans. Some reach their northern destination by ascending along the margins of our western streams, or by crossing the country directly, in the manner of the Woodcock; while those which proceed along the coast shorten their journey as much as possible by flying across the headlands of the numerous inlets or bays of our southern districts, retiring or advancing more slowly according to the state of the weather. Thus, those which cross the peninsula of Florida, through the marshes and lagoons that lead to the head waters of the St. John's River, instead of travelling round the shores of Georgia and South Carolina, fly directly across towards Cape Lookout. It is nevertheless true, that a certain number of these birds follow the sinuosities of the shores, for I found some in the markets of Charleston, in the month of April, that had been killed in the immediate neighbourhood of that city, and I obtained others in various parts; but the number of these is very small compared with that of those which cross at once. When their passage takes place, either during calm weather or with a favourable wind, the fortunate travellers pursue their journey by entering Pimlico Sound, and following the inner margins of the outward banks of this part of the coast until they reach Cape Henry. From thence some ascend the Chesapeake, while others make for the mouth of the Delaware, and these perhaps again meet on the borders of Lake Ontario, or the waters of the St. Lawrence, after which they soon enter those portions of the country in which they breed, and spend a short but agreeable season.

Every person acquainted with the general movements of birds either during spring, when they pass northwards, or the autumnal months, when they are on their way to milder climes, is aware that, at the former period, their anxiety to reach the place of breeding is much greater than that which they feel at any other period. Thus, in its movement southward, the Sora, like all other Rails, when returning with its progeny, which are yet feeble and unable to undergo much fatigue, proceeds considerably slower than in spring. Hence its appearance in autumn, in multitudes, in various places, where it is enticed by an abundance of food and comparative security, to



tarry for some time, and recruit its strength. Thus, in September and part of October, the Sora is found in great numbers on the borders of our great lakes, feeding on wild oats, and on the reedy margins of the rivers of our Middle Districts. Several natural causes prevent birds of this species from following the sea-coast of the United States, while migrating either in spring or in autumn, the principal of which is the absence there of their favourite *Zizania* marshes, which are but very rarely met with to the east of the State of New York. This is probably the cause of the great rarity of this species in Massachusetts, whilst, so far as I know, none are ever found to the eastward of that State. These observations are corroborated by those of my friend THOMAS MACCULLOCH of Pictou, who never met with one of these birds during many years' residence in that part of Nova Scotia.

Having seen flocks of Soras winging their way close over the waters of the Gulf of Mexico, and between Cape Florida and the main shores of the Carolinas, in the month of April, when they were moving directly towards Cape Lookout, I have very little doubt that many return in the same track, in the end of October, when the young, well fed and strengthened, are able to follow their parents on wing, even across that large extent of water. I shall now dismiss this part of the subject, by adding, in confirmation of their capability of protracted flight, that some of these birds, when accidentally separated from their flock, have supported themselves on wing until they have met with vessels several hundred miles from land; and facts of this kind have been announced by persons of well known respectability.

During the autumnal months, a goodly number of Soras are found in the rice-fields and fresh-water marshes of the Carolinas. Sometimes also they have been shot in salt-water marshes, in spring, while on their northward migration. At this period they are very silent, until forced to fly. In those States none are seen during summer. Very few, it appears, remain in any part of the Middle Districts. My friend JOHN BACHMAN, however, was shewn some eggs of this bird, that had been found in the meadows below Philadelphia; and whilst I was in the company of my friend EDWARD HARRIS, Esq., on a Woodcock shooting expedition, my son shot some young birds scarcely fledged, and shortly afterwards an adult female. JOHN BACHMAN met with a nest on the shores of the Hudson, and I saw two in the marshes of Lake Champlain.

Fond of concealment, as all its tribe are, the Sora is rarely seen during day, although, being seminocturnal, it skulks amid the tall reeds or grasses, both by day and at night, in search of its food. Differing, however, in habit, as well as in form, from the Gallinules, it rarely abandons the retreats which it has chosen after the breeding season, and rises, when forced by tides, to the tops of the plants about it, climbing along or clinging to their stalks or



leaves, with as much ease as it walks on the floating garbage, when persons in boats can see them without any difficulty. Whenever these occurrences take place, and the country around is thickly peopled, great havoc is made among them. This particularly happens on the James and Delaware rivers, where thousands are annually destroyed during their autumnal stay. The sport of shooting Soras is much akin to that of shooting Clapper Rails, or Salt-water Marsh-hens. But WILSON having given an account of it, as pursued when Soras were much more abundant than I ever saw them, I shall transcribe his description of the manner adopted by the sportsmen on the Delaware.

“The usual method of shooting them, in this quarter of the country, is as follows:—The sportsman furnishes himself with a light batteau, and a stout experienced boatman, with a pole of twelve or fifteen feet long, thickened at the lower end to prevent it from sinking too deep into the mud. About two hours or so before high water, they enter the reeds, and each takes his post, the sportsman standing in the bow ready for action, the boatman, on the stern seat, pushing her steadily through the reeds. The Rail generally spring singly, as the boat advances, and at a short distance ahead, are instantly shot down, while the boatman, keeping his eye on the spot where the bird fell, directs the boat forward, and picks it up as the gunner is loading. It is also the boatman’s business to keep a sharp look-out, and give the word ‘mark!’ when a Rail springs on either side without being observed by the sportsman, and to note the exact spot where it falls until he has picked it up; for this once lost sight of, owing to the sameness in the appearance of the reeds, is seldom found again. In this manner the boat moves steadily through and over the reeds, the birds flushing and falling, the gunner loading and firing, while the boatman is pushing and picking up. The sport continues till an hour or two after high water, when the shallowness of the water, and the strength and weight of the floating reeds, as also the backwardness of the game to spring as the tide decreases, oblige them to return. Several boats are sometimes within a short distance of each other, and a perpetual cracking of musketry prevails along the whole reedy shores of the river. In these excursions it is not uncommon for an active and expert marksman to kill ten or twelve dozen in a tide. They are usually shot singly, though I have known five killed at one discharge of a double-barrelled piece. These instances, however, are rare.”

“Such is the mode of Rail shooting in the neighbourhood of Philadelphia. In Virginia, particularly along the shores of James river, within the tide water, where the Rail or Sora are in prodigious numbers, they are also shot on the wing, but more usually taken at night in the following manner:—A kind of iron grate is fixed on the top of a stout pole, which is placed like a



mast, in a light canoe, and filled with fire. The darker the night the more successful is the sport. The person who manages the canoe is provided with a light paddle, ten or twelve feet in length, and, about an hour before high water, proceeds through among the reeds, which lie broken and floating on the surface. The whole space, for a considerable way round the canoe, is completely enlightened, the birds stare with astonishment, and, as they appear, are knocked on the head with the paddle, and thrown into the canoe. In this manner, from twenty to eighty dozen have been killed by three negroes in the short space of three hours!"

The flight of this little bird while migrating is low, and performed with a constant beating of the wings, as in the Coot and other birds of its kind. They pass swiftly along in compact flocks of from five to a hundred or more individuals. At times you see them rise in a long curve, as if they had perceived some dangerous object beneath them; then resume their ordinary direct flight, and are soon out of sight. On the contrary, when they are with us in autumn, they seem far from being alert on wing, flying slowly with dangling legs, and proceeding only to a short distance, when they drop among the reeds with their wings extended, as if they had been shot. If raised two or three times, it is extremely difficult to see them again; for on such occasions they will rather dive and hide under some floating weeds, keeping their bill only above the water. When walking leisurely, they throw up the tail, in the manner of Gallinules, and if they apprehend danger in consequence of any suspicious sight or sound, they run off with great speed. Their notes are shrill and short, but reiterated, like those of *Rallus crepitans*, although by no means so loud and disagreeable. When wounded they dive well at the approach of the sportsman, and sometimes cling to the roots of the grasses for a few moments, but more usually rise under the cover of the floating leaves. Some persons still believe that these birds cannot be drowned; and this notion tempted my friend JOHN BACHMAN to make the experiment. In a note of his now before me, he says:—"I once, in company with some naturalists of Philadelphia, tried two experiments upon two Soras that had been slightly wounded in the wing, to ascertain how long they could live under the water. They were placed in a covered basket, which was sunk in the river. One remained fifteen, the other eight minutes, under water; and on being taken out, they were both found dead. We placed them in the sun for several days, but, I need hardly say, they did not revive."

The most curious habit or instinct of this species is the nicety of sense by which they can ascertain the last moment they can remain at any of the feeding grounds at which they tarry in autumn. One day, you may see or hear the Soras in their favourite marshes, you may be aware of their presence



in the dusk of evening; but when you return to the place early next morning, they are all gone. Yesterday the weather was mild, to-day it is cold and raw; and no doubt the Soras were aware that a change was at hand, and secured themselves from its influence by a prompt movement under night. It is probable that these sudden removals gave rise to the idea of their diving into the mud.

RAIL, *Rallus carolinus*, Wils. Amer. Orn., vol. vi. p. 24.

RALLUS CAROLINUS, Bonap. Syn., p. 334.

CAROLINA RAIL, Nutt. Man., vol. ii. p. 208.

SORA RAIL, *Rallus carolinus*, Aud. Orn. Biog., vol. iii. p. 251; vol. v. p. 572.

Male,  $9\frac{3}{4}$ , 14.

Passes across the United States, both by the interior and along the coast. Some breed in New Jersey. Rarely seen east of Massachusetts. Extremely abundant in autumn on the Delaware, and other streams or lakes furnished with wild oats. A few reside in Florida and Louisiana in winter.

Adult Male.

Bill shorter than the head, rather stout, deep, compressed, tapering. Upper mandible with the dorsal line nearly straight, being slightly convex towards the end, the ridge flattish for a very short space at the base, very slightly extended on the forehead, narrow in the rest of its extent; the sides convex towards the end, the edges sharp, inflected, with a slight sinus close to the tip. Nasal groove broad and extending to two-thirds of the length of the bill; nostrils linear, lateral, submedial, pervious. Lower mandible with the angle long and narrow, the sides erect, the dorsal line sloping upwards, the edges inflected, the tip narrowed, the gap-line straight.

Head rather small, oblong, compressed. Neck of moderate length. Body rather slender, much compressed. Feet of moderate length, rather stout; tibia bare a short way above the joint; tarsus of ordinary length, compressed, anteriorly covered with broad scutella, posteriorly with smaller, and on the sides reticulated. Hind toe very short and slender, middle toe longest and longer than the tarsus, fourth considerably shorter than third, and a little longer than second; toes free, scutellate above, much compressed, with an inferior sharp margin. Claws rather long, exceedingly compressed, slightly arched, tapering to a fine point, flat and marginate beneath.

Plumage rather stiff, but blended, slightly glossed above. Feathers of the forehead with the shaft enlarged and slightly extended beyond the tip. Wings short and broad; alula large; primaries curved, broad, tapering, but rounded, second longest, third scarcely shorter, first equal to sixth; secondaries broad and rounded. Tail extremely short, much rounded, of twelve



feeble rounded feathers; the upper and lower tail-coverts nearly as long as the tail-feathers.

Bill yellow at the base, dusky towards the end. Iris bright chestnut. Feet yellowish-green; claws light brown. A broad band surrounding the base of the bill, the central part of the crown, the chin, and the fore neck in its whole length, brownish-black. Ear-coverts olive-brown; a band over the eye, the cheeks, and the sides of the neck, ash-grey. Sides of the crown, the hind neck, and the rest of the upper parts, olive-brown; the feathers brownish-black in the centre, those on the back with two marginal lines of white. Smaller wing-coverts of a lighter brown; secondary coverts margined with black and white markings; quills dusky olive-brown, as is the tail. Middle of breast and abdomen greyish-white; sides barred with brownish-black and greyish-white, as are the lateral feathers of the rump, those of the abdomen reddish-yellow.

Length to end of tail  $9\frac{3}{12}$  inches; to end of wings  $8\frac{3}{4}$ , to end of claws 12; extent of wings 14; wing from flexure  $4\frac{8}{12}$ ; tail 2; bill along the ridge  $\frac{10}{12}$ , along the edge of the lower mandible  $\frac{10}{12}$ ; tarsus  $1\frac{3}{12}$ ; middle toe  $1\frac{7}{12}$ , its claw  $\frac{4\frac{1}{2}}{12}$ . Weight 7 oz.

#### Adult Female.

The female differs considerably from the male in colouring. The naked parts and iris are similar, as are the upper parts generally; but the black around the base of the bill, on the head, and fore neck is wanting, the fore part of the head being light brown, the chin whitish, the sides of the neck light greyish-brown. The white lines of the back are duller, and the dark bands of the sides of a lighter tint.

#### Young Male.

The young male, after its first moult, is intermediate in colouring between the adult male and the female, but more like the latter, the black on the head and fore neck appearing in spots, and the sides of the neck being nearly as in the female.





*Sora Rail.*

1. Male. — 2. Female. — 3. Young. —

Drawn from Nature by J. J. Audubon. ENGRAVED

Lith. Printed & Col<sup>d</sup> by J. T. Bowen Philad<sup>a</sup>





Audubon, John James. 1842. "The Sora Rail, *Orthygometra carolinus*, Linn. [Pl. 306]." *The birds of America : from drawings made in the United States and their territories* 5, 145–151. <https://doi.org/10.5962/p.319420>.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/124982>

**DOI:** <https://doi.org/10.5962/p.319420>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/319420>

**Holding Institution**

Smithsonian Libraries and Archives

**Sponsored by**

Biodiversity Heritage Library

**Copyright & Reuse**

Copyright Status: NOT\_IN\_COPYRIGHT

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>.