Length to end of tail 19 inches, to end of claws 26, extent of wings 25; bill $2\frac{5}{8}$; tarsus $2\frac{1}{2}$, middle toe and claw $2\frac{10}{12}$; wing from flexure 7, tail $2\frac{1}{2}$. Weight 1 lb. 9 oz.

Adult Female.

The female, which is smaller, is similar to the male, but has the tints somewhat duller.

Length to end of tail 18 inches, to end of claws $22\frac{1}{2}$, extent of wings 24. Weight 1 lb. 2 oz.

Young in autumn.

The young in autumn and fully fledged resemble the female, but are duller in their colours.

THE CLAPPER RAIL, OR SALT-WATER MARSH-HEN.

†*RALLUS CREPITANS*, *Gmel.*

PLATE CCCX.—MALE AND FEMALE.

Although this species is a constant resident, and extremely abundant along the salt-marshes and reedy sea islands of South Carolina, Georgia, Florida, Alabama, and Louisiana, to the mouths of the Mississippi, and probably farther south, at all seasons of the year, it leaves these districts in considerable numbers in spring, and extends its movements along the Atlantic shores as far as the Middle States. They confine themselves entirely to the salt-marshes in the immediate vicinity of the Atlantic, the islands and the channels between them and the main shores, but are never seen inland or on fresh waters, unless when, during high tides, they remove to the margins of the main, where, indeed, during heavy gales and high seas, these poor birds are forced to take refuge, in order to escape the destructive fury of the tempest that, notwithstanding their utmost exertions, destroys great numbers of them. On all such occasions the birds appear greatly intimidated and stupified, and as if out of their proper element. Those individuals which leave the south for a season, reach the shores of New Jersey about the middle of April, and return to the Southern States about the beginning of October, to spend the winter along with their young, after which period none are to be found in

the Middle Districts. Few if any ever go beyond Long Island in the State of New York; at least I have never seen or heard of one farther east. Their migrations take place under night, and in perfect silence; but the moment they arrive at their destination, they announce their presence by a continuation of loud cacklings, meant no doubt as an expression of their joy. Having studied the habits of these interesting birds in the Jerseys, in South Carolina, and in the Floridas, on the maritime borders of all of which they breed, I shall here attempt to describe them.

In these countries, from about the beginning of March to that of April, the salt-marshes resound with the cries of the Clapper Rail, which resemble the syllables *cac, cac, cac, cac, cā, cāhā, cāhā*. The commencement of the cry, which is heard quite as frequently during day as by night, is extremely loud and rapid, its termination lower and protracted. At the report of a gun, when thousands of these birds instantaneously burst forth with their cries, you may imagine what an uproar they make. This bird seems to possess the power of ventriloquism, for, when several hundred yards off, its voice often seems to be issuing from the grass around you. At this period, the males are very pugnacious, and combats are rife until each has selected a female for the season. The males stand erect and cry aloud the least sound they hear, guard their mates, and continue faithfully to protect them until the young make their appearance. These come more under the care of the mother, who leads them about until they have attained a considerable size, and are able to shift for themselves. The nest is large, constructed of marsh plants, and fastened to the stems in the midst of the thickest tufts, above high-water mark. The materials of which it is formed are so well interlaced with the plants around them, as to prevent their being washed away by extraordinarily high tides, which, however, sometimes carry off and destroy the eggs, as well as many of the sitting birds, whose attachment to them is so great, that they are now and then drowned while endeavouring to keep them safe. The nest is very deep, so that the eggs seem placed in the bottom of a bowl or funnel. They are from eight to fifteen in number, measure an inch and a half in length by one and an eighth in breadth, and have a pale buff colour, sparingly sprinkled with light umber and purplish spots. The period of incubation is fourteen days. When undisturbed, this species lays only one set of eggs in the season; but as the eggs are in request as a delicious article of food, they are gathered in great numbers, and I myself have collected so many as seventy-two dozens in the course of a day. The nest is generally open at top, and then is very easily discovered, although sometimes the reeds are so arranged about them as to conceal them from the view. When the birds are sitting, they suffer you to approach within a few feet; but, as if aware of your intention, they glide away in silence to some

distance, and remain crouched among the grass until you have retired. When, on returning, the poor bird finds that her treasure has been stolen, she immediately proclaims her grief aloud, and in this is joined by her faithful mate. In a few days, however, more eggs are deposited, although, I believe, never in the same nest. This species may be called gregarious, yet the nests are seldom nearer to each other than five or ten yards. They are placed in the thickest and most elevated tufts of grass, principally near the edges of the many lagoons that everywhere intersect the sea marshes, so that a man may go from one to another, finding them with ease as he proceeds along the muddy shores. In the Jerseys, it forms almost a regular occupation to collect the eggs of this bird, and there I have seen twenty or more persons gathering them by thousands during the season; in fact, it is not an uncommon occurrence for an egger to carry home a hundred dozens in a day; and when this havoc is continued upwards of a month, you may imagine its extent. The abundance of the birds themselves is almost beyond belief; but if you suppose a series of salt-marshes twenty miles in length, and a mile in breadth, while at every eight or ten steps one or two birds may be met with, you may calculate their probable number.

During ebb, the Clapper Rail advances towards the edge of the waters as they recede, and searches, either among the grasses, or along the deep furrows made by the ebb and flow of the tides, for its food, which consists principally of small crabs, a species of salt-water snail attached to the rushes, the fry of fishes, aquatic insects, and plants. When the tide flows, they gradually return, and at high-water they resort to the banks, where they remain concealed until the waters begin to retreat. This species is by no means exclusively nocturnal, for it moves about in search of food during the whole of the day, in this respect resembling the Gallinules. Their courage is now and then brought to the test by the sudden approach of some of their winged enemies, such as a Hawk or an Owl, especially the Marsh Hawk, which is often attacked by them while sailing low over the grass in which they are commonly concealed. On such occasions, the Rail rises a few yards in the air, strikes at the marauder with bill and claws, screaming aloud all the while, and dives again among the grass, to the astonishment of the bird of prey, which usually moves off at full speed. They are not so fortunate in their encounters with such Hawks as pounce from on high on their prey, such as the Red-tailed and Red-shouldered Hawks, against which they have no chance of defending themselves. Minks, racoons, and wild cats destroy a great number of them during night, and many are devoured by turtles and ravenous fishes; but their worst enemy is man. My friend BACHMAN has shot so many as sixty in the course of four hours, and others have killed double that number in double the time.

The Salt-water Marsh-hen swims with considerable ease, though not swiftly or gracefully. While in this act, it extends its neck forward, and strikes the water with its feet, as if unwilling to move far at a time, the motion of its neck resembling that of the Gallinules. It dives well, remains a considerable time under water, and in this manner dexterously eludes its pursuers, although it certainly does not possess the power of holding fast to the bottom, as some persons have alleged. When hard pressed, it often sinks just below the surface, keeping the bill above in order to breathe, and in this position, if not detected, remains for a considerable time. If perceived and approached, it instantly dives, and uses its wings to accelerate its progress, but rises as soon as it comes to a place of safety.

Their movements on the ground, or over the partially submersed or floating beds of weeds, are extremely rapid, and they run swiftly off before a dog, the utmost exertions of which are required to force them on wing. Such an attempt by man would prove utterly futile, unless he were to come upon them unawares. When not pursued, and feeling secure, they walk in a deliberate manner, the body considerably inclined, now and then jerking the tail upwards, although by no means so frequently as Gallinules are wont to do. On the least appearance of danger, they lower the head, stretch out the neck, and move off with incomparable speed, always in perfect silence. They have thousands of paths among the rank herbage, crossing each other so often that they can very easily escape pursuit; and besides, they have a power of compressing their body to such a degree, as frequently to force a passage between two stems so close, that one could hardly believe it possible for them to squeeze themselves through. When put up, they fly slowly and generally straight before you, with their legs dangling, so that they are very easily shot by a quick sportsman, as they rarely fly far at a time on such occasions, but prefer pitching down again into the first tuft of rank grass in their way. When on their migrations, however, they pass low and swiftly over the marshes, or the water, stretched to their full extent, and with a constant beat of the wings.

The young, which are at first covered with down of a black colour, obtain their full plumage before the winter arrives, and after this undergo little change of colour, although they increase in size for a year after. In the Eastern States, this species is not held in much estimation as an article of food, perhaps in a great measure on account of the quantity of Soras met with there during early autumn, and which are certainly more delicate; but in the Southern States, especially during winter, they are considered good for the table, and a great number are killed and offered for sale in the markets. Numbers are destroyed by torch light, which so dazzles their eyes, as to enable persons fond of the sport to knock them down with poles

or paddles during high tides. It is by day, however, that they are usually shot, and as this kind of sport is exceedingly pleasant, I will attempt to describe it.

About Charleston, in South Carolina, the shooting of Marsh-hens takes place from September to February, a few days in each month during the spring-tides. A light skiff or canoe is procured, the latter being much preferable, and paddled by one or two experienced persons, the sportsman standing in the bow, and his friend, if he has one with him, taking his station in the stern. At an early hour they proceed to the marshes, amid many boats containing parties on the same errand. There is no lack of shooting-grounds, for every creek of salt-water swarms with Marsh-hens. The sportsman who leads has already discharged his barrels, and on either side of his canoe a bird has fallen. As the boat moves swiftly towards them, more are raised, and although he may not be ready, the safety of the bird is in imminent jeopardy, for now from another bark double reports are heard in succession. The tide is advancing apace, the boats merely float along, and the birds, driven from place to place, seek in vain for safety. Here, on a floating mass of tangled weeds, stand a small group side by side. The gunner has marked them, and presently nearly the whole covey is prostrated. Now, onward to that great bunch of tall grass all the boats are seen to steer; shot after shot flies in rapid succession; dead and dying lie all around on the water; the terrified survivors are trying to save their lives by hurried flight; but their efforts are unavailing,—one by one they fall, to rise no more. It is a sorrowful sight, after all: see that poor thing gasping hard in the agonies of death, its legs quivering with convulsive twitches, its bright eyes fading into glazed obscurity. In a few hours, hundreds have ceased to breathe the breath of life; hundreds that erst revelled in the joys of careless existence, but which can never behold their beloved marshes again. The cruel sportsman, covered with mud and mire, drenched to the skin by the splashing of the paddles, his face and hands besmeared with powder, stands amid the wreck which he has made, exultingly surveys his slaughtered heaps, and with joyous feelings returns home with a cargo of game more than enough for a family thrice as numerous as his own. How joyful must be the congratulations of those which have escaped, without injury to themselves or their relatives! With what pleasure, perhaps, have some of them observed the gun of one of their murderers, or the powder-flask of another, fall overboard! How delighted have they been to see a canoe overturned by an awkward movement, and their enemies struggling to reach the shore, or sticking fast in the mud! Nor have the mink and racoon come off well, for notwithstanding the expertness of the former at diving, and the cunning of

the latter, many have been shot, and the boatmen intend to make caps of their fur.

In the Carolinas there are some most expert marksmen, of whom I know two who probably were never surpassed. One of them I have seen shoot fifty Marsh-hens at fifty successive shots, and the other, I am assured, has killed a hundred without missing one. I have heard or read of a French king, who, on starting a Partridge, could take a pinch of snuff, then point his gun, and shoot the bird; but whether this be true or not I cannot say, although I have witnessed as remarkable a feat, for I have seen a Carolinian, furnished with two guns, shoot at and kill four Marsh-hens as they flew off at once around him! On speaking once to a friend of the cruelty of destroying so many of these birds, he answered me as follows:—"It gives variety to life; it is good exercise, and in all cases affords a capital dinner, besides the pleasure I feel when sending a mess of Marsh-hens to a friend such as you."

CLAPPER RAIL, *Rallus crepitans*, Wils. Amer. Orn., vol. vii. p. 112; but not the figure, which is that of *R. elegans*.

CLAPPER RAIL, Nutt. Man., vol. ii. p. 201.

CLAPPER RAIL OR SALT-WATER MARSH-HEN, *Rallus crepitans*, Aud. Orn. Biog., vol. iii. p. 33; vol. v. p. 570.

Male, 15, $20\frac{3}{4}$. Female, 14, $19\frac{1}{4}$.

Exceedingly abundant from Texas to New Jersey, breeding in all salt-water marshes. Few proceed eastward beyond Long Island. Constantly resident from the Carolinas southward. Not inland.

Adult Male.

Bill much longer than the head, slender, compressed, slightly curved, rather deep at the base. Upper mandible with the dorsal line almost straight until towards the end, where it is slightly curved, the ridge slightly flattened for a short space at the base, and extending a little on the forehead, narrow and convex to the end; a deep groove runs on either side parallel to the ridge for two-thirds of the whole length; the edges inflected, with a very slight notch close to the tip. Nostrils lateral, linear, direct, open and pervious. Lower mandible with the angle very long, extremely narrow, the sides erect, slightly convex, the edges inflected, the tip narrowed.

Head small, oblong, much compressed. Neck long and slender. Body slender, much compressed. Feet long; tibia bare a considerable way above the joint; tarsus of moderate length, strong, compressed, and anteriorly covered with broad scutella, posteriorly with smaller, and on the sides reticulated. Hind toe very small and slender, middle toe longest, fourth considerably shorter, and but little longer than the second; toes free, scutel-

late above, compressed, granulate beneath. Claws of moderate length, arched, slender, much compressed, acute, flat and marginate beneath.

Plumage rather stiff, compact and glossed on the upper parts. Feathers of the head and neck short and blended, of the forehead with the shaft enlarged and extended beyond the tip. Wings very short and broad; alula large; primaries curved, broad, tapering, but obtuse, third longest, second scarcely shorter, first and seventh about equal; secondaries weak, broad, rounded. Tail extremely short, much rounded, of twelve feeble, rounded feathers; the upper and lower coverts nearly as long as the tail-feathers.

Lower mandible and edges of upper yellowish-brown; ridge of upper and tips of both deep brown. Iris pale yellow. Feet pale livid grey, tinged with orange about the tibio-tarsal joint; claws dusky. Upper part of the head and hind neck dull brown, the bristle-like shafts of the frontal feathers brownish-black; a pale brownish-orange line from the bill over the eye; loreal space and sides of the head dull bluish-grey, the two sides of each feather being of the latter colour. Wing-coverts dull olive, tinged with grey, some of them with slight irregular whitish markings; alula and primaries olive-brown; secondaries and tail-feathers like the back. Chin yellowish-white, edged on either side with pale yellowish-brown; sides and fore part of the neck bluish-grey, tinged more especially before with dull pale yellowish-brown; the fore part of the breast of the latter colour. Lower wing-coverts, sides, hind part of abdomen, and middle lower tail-coverts undulated with deep greyish-brown and greyish-white, lateral tail-coverts with the outer webs white; tibial feathers similarly barred, but paler, middle of the abdomen greyish-white.

Length to end of tail 15 inches, to end of claws 20, extent of wings $20\frac{3}{4}$; bill $2\frac{5}{8}$; tarsus 2, middle toe and claw $2\frac{5}{12}$; wing from flexure $6\frac{2}{12}$; tail $2\frac{5}{8}$. Weight 11 oz.

Adult Female.

The female, which is smaller than the male, is similar in colouring, but has the tints somewhat duller.

Length to end of tail 14 inches, to end of claws $17\frac{3}{4}$; extent of wings $19\frac{1}{4}$. Weight $7\frac{3}{4}$ oz.

In an adult male of this species preserved in spirits, the anterior part of the roof of the mouth has a prominent median ridge, and two deep grooves. The tongue is very long, remarkably slender, trigonal, canaliculate, tapering to a bristly point, its base emarginate and papillate, its length 1 inch 11 twelfths. The width of the mouth is only 4 twelfths. The œsophagus, Fig. 1, *a b c*, is 8 inches long, narrow in its upper third, where its width is four twelfths, enlarging a little at the lower part. The breadth of the proventriculus is 9 twelfths. The lobes of the liver are very unequal, the right

being 2 inches 10 twelfths, the left 2 inches in length. The stomach, *c d e*, is a remarkably muscular gizzard of a roundish form, $1\frac{1}{2}$ inches long, and of

Fig. 1.

Fig. 2.

about the same breadth; its lateral muscles very prominent, the left large, the inferior muscle well pronounced; the epithelium dense, hard, of a bright red colour, and forming two oblong flat grinding plates, with intermediate rugæ. The proventricular glands are cylindrical, 1 twelfth in length, forming a belt 9 twelfths in breadth. The contents of the stomach are fragments of small shells. The intestine, *f g h*, is $31\frac{1}{2}$ inches long; its average width $4\frac{1}{2}$ twelfths; rectum, *b c d*, Fig. 2, 3 inches long; cœca, *b e*, $3\frac{1}{4}$ inches in length, their width for an inch and a quarter, $1\frac{1}{2}$ twelfths; cloaca globular, nearly 1 inch in diameter.

The trachea is 6 inches long, flattened, its breadth at the upper part 4 twelfths, soon diminishing to 3 twelfths, and so remaining to near the end; the rings ossified, 145 in number; the last rings contracted to $1\frac{1}{2}$ twelfths. Bronchi moderate, the half rings about 20, very slender and cartilaginous.

The sternum in this, as in the other Rails and Gallinules, has the body extremely narrow, with two very deep and narrow notches at its posterior extremity, the crest moderately elevated, and extending its whole length; the furcula very narrow and slender, the coracoid bones little diverging and of moderate strength. In these respects, the sternal apparatus agrees with that of the Gallinules and Coots, and presents a strong affinity to that of the Scolopaceous Courlan, in which the body of the sternum, though much broader, is of the same form, and the crest perfectly similar. In the Rails, Gallinules, and Coots, the innutritious part of the food, whether fragments of shells, or husks of seeds, passes into the intestine, not being ejected by vomiting, in which respect the birds of this family are analogous to the Gallinaceous group, of which the cœca attain the maximum size, while in the Rails and Gallinules these organs are next in development. It is not merely a vague and distant analogy that the *Rallinæ* thus present to the Gallinaceous birds, but a direct gradation, insomuch that they might with more propriety be considered as the aquatic group of the Rasores, the Coots forming the extreme part of the series.

I found this species exceedingly abundant, and breeding along the shores of the Gulf of Mexico, from the mouth of the Mississippi to Galveston Island, in Texas.

Chapman. R. or Salt Water. Marsh. Hen.

Drawn from Nature by J. Audubon F.R.S.E.L.

1. Male. 2. Female.

Engr'd & Col'd by J. T. Bowen Phil.

Audubon, John James. 1842. "The Clapper Rail, or Salt-Water Marsh-Hen, *Rallus crepitans*, Gmel. [Pl. 310]." *The birds of America : from drawings made in the United States and their territories* 5, 165–173.

<https://doi.org/10.5962/p.319424>.

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

DOI: <https://doi.org/10.5962/p.319424>

Permalink: <https://www.biodiversitylibrary.org/partpdf/319424>

Holding Institution

Smithsonian Libraries

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>.