longest, all free, broadly marginate, with numerous scutella. Claws small, slightly arched, compressed, rather obtuse. Plumage soft, blended, on the back distinct. Wings very long, pointed; primaries tapering, obtuse, the first longest; one of the inner secondaries very long. Tail rather short, nearly even, of twelve feathers.

BARTRAMIAN SANDPIPER.

+ TRINGA BARTRAMIA, Wils.

PLATE CCCXXVII .- MALE AND FEMALE.

The Bartramian Sandpiper is the most truly terrestrial of its tribe with which I am acquainted. It is even more inclined, at all seasons, to keep away from the water than the Kildeer Plover, which may often be seen wading in shallow pools, or searching along the sandy or muddy margins of the shores of the sea, or of fresh-water lakes and streams. Although not unfrequently met with in the vicinity of such places, it never ventures to wade into them; and yet the form and length of its legs and feet would naturally induce a person not acquainted with its habits to consider it as a wading bird.

The dry upland plains of those sections of Louisiana called Opellousas and Attacapas, are amply peopled with this species in early spring, as well as in autumn. They arrive there from the vast prairies of Texas and Mexico, where they spend the winter, in the beginning of March, or about the period of the first appearance of the Martins, *Hirundo purpurea*, and return about the first of August. They are equally abundant on all the western prairies on either side of the Missouri, where, however, they arrive about a month later than in Louisiana, whence they disperse over the United States, reaching the middle districts early in May, and the State of Maine by the middle of that month, or about the same period at which they are seen in Indiana, Kentucky, and Ohio. Some proceed as far north as the plains adjoining the Saskatchewan river, where Dr. RICHARDSON met with this species in the month of May.

It has been supposed that the Bartramian Sandpiper never forms large

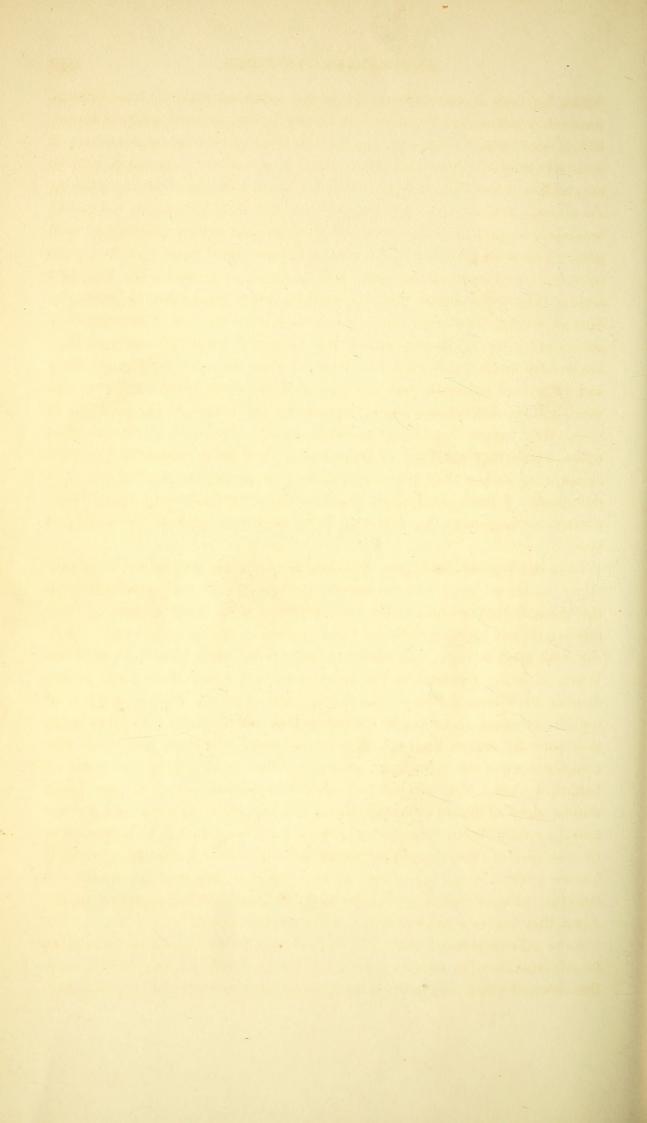


Drawn from Nature by J.J. Auduben ERS.F.L.S.

1. Male . 2. Fernale

Bartramian Sandp

Lith Printed & Cold by J. T. Bowen Phil.



flocks, but this is not correct, for in the neighbourhood of New Orleans, where it is called the "Papabote," it usually arrives in great bands in spring, and is met with on the open plains and large grassy savannahs, where it generally remains about two weeks, though sometimes individuals may be seen as late as the 15th of May. I have observed the same circumstance on our western prairies, but have thought that they were afterwards obliged to separate into small flocks, or even into pairs, as soon as they are ready to seek proper places for breeding in, for I have seldom found more than two pairs with nests or young in the same field or piece of ground. On their first arrival, they are generally thin, but on their return southward, in the beginning of August, when they tarry in Louisiana until the first of October, they are fat and juicy. I have observed, that in spring, when they are poor, they are usually much less shy than in autumn, when they are exceedingly wary and difficult of approach; but this general observation is not without exceptions, and the difference, I think, depends on the nature of the localities in which they happen to be found at either period. When on newly ploughed fields, which they are fond of frequenting, they see a person at a greater distance than when they are searching for food among the slender grasses of the plains. I have also thought that the size of the flocks may depend upon similar contingencies, for this bird is by no means fond of the society of man.

Like the Spotted Sandpiper, Totanus macularius, they not unfrequently alight on fences, trees, and out-houses; but whether in such situations or on the ground, they seldom settle without raising both wings upright to their full extent, and uttering their loud and prolonged, but pleasing notes. They run with great activity, stop suddenly, and vibrate their body once or twice. When earnestly followed by the sportsman, they lower their heads in the manner of Wilson's Plover, and the species called the Piping, and run off rapidly, or squat, according to the urgency of the occasion. At other times they partially extend their wings, run a few steps as if about to fly, and then cunningly move off sideways, and conceal themselves among the grass, or behind a clod. You are not unfrequently rendered aware of your being within sight of them, by unexpectedly hearing their plaintive and mellow notes, a circumstance, however, which I always concluded to be indicative of the wariness of their disposition, for although you have just heard those wellknown cries, yet, on searching for the bird, you nowhere see it, for the cunning creature has slipped away and hid itself. When wounded in the wing, they run to a great distance, and are rarely found.

Like all experienced travellers, they appear to accommodate themselves to circumstances as regards their food, for in Louisiana they feed on cantharides and other coleopterous insects; in Massachusetts on grasshoppers, on which my friend NUTTALL says, they soon grow very fat; in the Carolinas on crickets and other insects, as well as the seeds of the crab-grass, Digitaria sanguinaria; and in the barrens of Kentucky they often pick the strawberries. Those which feed much on cantharides, require to be very carefully cleaned, otherwise persons eating them are liable to suffer severely. Several gentlemen of New Orleans have assured me, that they have seen persons at dinner obliged to leave the room at once, under such circumstances as cannot well be described here. When flavoured with the ripe strawberries, on which they have fed, their flesh is truly delicious.

This species performs its migrations by night as well as by day. Its flight is rather swift and well sustained. While travelling, it generally flies so high as to be beyond reach of the gun: but if the weather be cloudy, or if it blow hard, it flies lower, and may easily be shot. It generally proceeds in straggling bands, and moves along with continuous easy beats of the wings, but sails, as it were, when about to alight, as well as during the love-season.

As long ago as 1805 and 1806, I observed this species breeding in the meadows and green-fields of my plantation of Millgrove, near the banks of Perkioming creek. Since then, I have known of its rearing broods in different parts of Pennsylvania, in the State of New York, and in various districts to the eastward as far as the confines of Maine; but I did not find it in Newfoundland or Labrador; and I have reason to believe that it does not breed to the south of Maryland.

My friend, the Rev. Dr. Bachman, has informed me that the Bartramian Sandpiper makes its appearance in South Carolina about the 15th of July, the hottest period of the year, in considerable numbers, betakes itself at once to the high grassy lands, and there remains about a month. He considers it to be then on its return from the north, and states that it is very fat and affords delicious food. His manner of shooting them is, to ride in a chair or gig over the fields which they frequent, or along the roads in their neighbourhood, by which means they can be approached near enough to enable the sportsman to shoot with almost a certainty of success, as the bird rises out of the grass. If one attempts to get near them on foot, they rise at too great a distance, then sweep in circles over the spot, and alight a considerable way off. They are seldom met with there in flocks of more than four or five individuals.

I have found the eggs of this bird laid on the bare earth, in a hollow scooped out to the depth of about an inch and a half, near the roots of a tuft of rank grass, in the middle of a meadow, and seen some nests of the same species formed of loosely arranged grasses, and placed almost beneath low bushes growing on poor elevated ridges, furnished with a scanty vegetation.

I have also heard my esteemed young friend, Dr. James Trudeau, state that he had discovered one on a high part of the bank of the Delaware river. When disturbed while on its nest, but unobserved, it runs thirty or forty yards, and then flies off as if severely wounded. Should it have young, its attempts to decoy you away are quite enough to induce you to desist from harassing it. The eggs measure an inch and five and a half eighths, by an inch and a quarter in their greatest breadth. In form they resemble those of Totanus macularius, being broadly rounded at one end, and rather pointed at the other; their surface smooth; their ground colour dull greyish-yellow, with numerous spots of light purple and reddish-brown. They are placed in the nest in the same manner as those of the Spotted Sandpiper, that is, with the smaller ends together, which is also the case with those of the Tell-tale Godwit, Wilson's Plover, and the Kildeer Plover. The young, which run about immediately after exclusion, grow rapidly, and in about a month are able to use their wings, after which, they and their parents gradually, and according to the temperature of the season, move southward.

In Massachusetts, and to the eastward of that state, this species is best known by the name of "Upland Plover," and in some other districts it is named the Field Plover. The drawing from which the plate was engraved was taken from individuals shot near Bayou Sara, in the State of Mississippi.

BARTRAM SANDPIPER, Tringa Bartramia, Wils. Amer. Orn., vol. vii. p. 63.

Totanus Bartramius, Bonap. Syn., p. 262.

Totanus Bartramius, Bartram Tatler, Swains. and Rich. F. Bor. Amer., vol. ii. p. 391.

Bartramian Tatler, Nutt. Man., vol. ii. p. 169.

BARTRAMIAN SANDPIPER, Totanus Bartramius, Aud. Orn. Biog., vol. iv. p. 24.

Male, $12\frac{1}{2}$, 22. Female, 13, $22\frac{3}{4}$.

From Texas along the coast to Nova Scotia. Breeds from Maryland northward to the Saskatchewan. In vast flocks in Louisiana, Oppelousas, and the Western Prairies, in autumn and spring. Rare in Kentucky.

Adult Male.

Bill a little longer than the head, slender, straight, slightly deflected at the end. Upper mandible with the dorsal line straight, the ridge convex, the sides grooved beyond the middle, afterwards convex, the edges inflected, the tips a little deflected, and tapering to an obtuse point. Nostrils sub-basal, lateral, linear, pervious, nearer the edge than the dorsal line. Lower mandible with the angle very narrow and elongated, beyond it the outline slightly convex, the sides sloping outwards and concave until the middle, afterwards flattened, the edges sharp, the point very narrow.

Head rather small, convex above, compressed. Neck of moderate length, slender. Body rather slender. Feet long and slender; tibia bare for about

half its length, scutellate before and behind; tarsus long, slender, having before and behind numerous scutella, the narrow lateral spaces with very small oblong scales. Toes slender, the first very short, the second much shorter than the fourth, the third and fourth connected at the base by a web; the scutella numerous; claws small, compressed, slightly arched, rather blunt.

Plumage soft, on the neck and lower parts blended; on the upper rather distinct. Wings rather long, acute, narrow; primaries tapering and rounded, the first longest, the second a little shorter, the rest rapidly graduated; secondaries obliquely rounded, the inner elongated and tapering. Tail of moderate length, much rounded, of twelve rather narrow feathers.

Bill yellowish-green, the tip dusky, the edges towards the base yellow. Iris dark hazel. Legs and tarsi light yellowish-grey, toes rather darker, claws brownish-black. Upper part of the head dark brown, with a median pale yellowish-brown line, the margins of the feathers also of that colour, which prevails along the sides of the head and the back of the neck, which are streaked with dusky; the eye surrounded with yellowish-white. Throat yellowish-white, without spots; fore-part and sides of the neck, with a portion of the breast and sides of the body, cream-coloured, with dusky lines, which gradually become arrow-shaped on the breast, forming a double transverse band; the feathers on the sides barred; the rest of the lower parts yellowish-white, the lower tail-coverts rich cream-coloured. Axillar feathers and lower wing-coverts white, banded with brownish-black. On the upper parts the feathers are dark brown, glossed with green, with rich creamcoloured margins; the rump darker. On the margins of the scapulars, within the pale edge, is a series of dusky spots, which towards the end become continuous. Alula, primary coverts, and primary quills blackishbrown, the inner webs crossed by white bands until about an inch from the end, the shaft of the first quill white, those of the rest dusky. Secondaries greyish-brown, their outer margins pale brown, with dusky spots; the inner darker. The two middle feathers of the tail are dark olive, tinged with grey, transversely barred with black, the last bar arrow-shaped, the margins light cream-colour: the next feather on each side lighter, and tinged with yellowish-red; the rest gradually lighter, the outer white, all barred with black.

Length to end of tail $12\frac{1}{2}$ inches, to end of wings $11\frac{1}{8}$, to end of claws $13\frac{1}{2}$; extent of wings 22; wing from flexure 7; tail $3\frac{3}{4}$; bare part of tibia $\frac{9}{10}$; tarsus $1\frac{1}{12}$, first toe $\frac{4}{12}$, its claw $1\frac{1}{12}$; middle toe 1, its claw $\frac{2\frac{1}{4}}{12}$; bill along the ridge $1\frac{2}{12}$; along the edge of lower mandible $1\frac{3}{12}$. Weight 6 oz.

Female.

The female is a little larger, and weighs 7 oz., but resembles the male in

colour. The individual of which the weight is here given was very fat, but I have never met with any that weighed three-fourths of a pound, as described by Wilson!

Length to end of tail 13 inches, to end of claws 14, extent of wings 223/4. In an adult bird of this species, the tongue measures seven-twelfths of an inch in length, and is sagittate at the base, with conical papillæ, of which the outermost is much larger, then contracted, being deeper than broad, and tapering to a very acute compressed point. Aperture of the glottis 2 long, with numerous papillæ behind, the middle two largest. The œsophagus is $5\frac{1}{4}$ inches long, of uniform diameter, measuring about $\frac{3}{12}$ across, and passing along the right side of the neck, along with the trachea. Proventriculus oblong, $\frac{8}{12}$ in diameter, its glandules extremely numerous, oblong, half a twelfth in length. The stomach is a strong gizzard of an oblong form; an inch and a twelfth long, nine-twelfths in breadth, its lateral muscles of moderate thickness, the right $\frac{2\frac{1}{4}}{12}$, the left $\frac{3\frac{1}{4}}{12}$, the central tendons oblong, $\frac{3}{12}$ in diameter. The cuticular lining is tough, of moderate thickness, longitudinally rugous, the grinding plates scarcely thicker than the rest. The intestine is 18 inches long, its diameter generally $\frac{3\frac{1}{2}}{12}$. The rectum $2\frac{1}{4}$ inches long; the cœca $2\frac{2}{12}$, very slender, their greatest diameter being only $\frac{12}{12}$; the cloaca globular, about ½ inch in diameter. The stomach was filled with remains of grasshoppers, of a deep red colour, with which the inner coat was tinged, together with the head of a libellula. No gravel or other hard substances.

The trachea moderately extended is $3\frac{10}{12}$ inches long, its transverse diameter $\frac{2^{\frac{1}{2}}}{12}$, diminishing to $\frac{1^{\frac{1}{2}}}{12}$. The rings are unossified and extremely thin, 105 in number; the contractor or lateral muscles feeble; the inferior larynx simple, with a single pair of tracheali-bronchiales, and the usual sterno-tracheales; the bronchi of about 15 half rings.

This individual presented a very remarkable accumulation of fat over the abdominal and pectoral muscles, and especially about the furcula.



Drawn from Nature by J.J. Auduben ERS.F.L.S.

1. Male . 2. Fernale

Bartramian Sandp

Lith Printed & Cold by J. T. Bowen Phil.



Audubon, John James. 1842. "Bartramian Sandpiper, Tringa bartramia, Wils. [Pl. 327]." *The birds of America : from drawings made in the United States and their territories* 5, 248–253. https://doi.org/10.5962/p.319440.

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

DOI: https://doi.org/10.5962/p.319440

Permalink: https://www.biodiversitylibrary.org/partpdf/319440

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.