BLACK-BELLIED PLOVER.

†CHARADRIUS HELVETICUS. *Linn.*

PLATE CCCXV.—MALE IN SUMMER, YOUNG, AND ADULT IN WINTER.

This beautiful bird makes its appearance on our southern coasts in the beginning of April, as I had many opportunities of observing in the course of my journey along the shores of the Gulf of Mexico, in the spring of 1837. Instead of being congregated in large flocks, as is the case during their southward migration in autumn, they are seen coming in small numbers, but at short intervals, so as almost to form a continuous line. They travel chiefly by night, and rest for a great part of the day along the margins of the sea, either reposing on the sands in the sunshine, or searching the beaches for food. After dusk their well-known cries give note of their passage, but by day they remain silent, even when forced to betake themselves to flight. On such occasions they generally wheel over the waters, and not unfrequently return to the spot which they had at first selected. I have traced this species along the whole of our eastern coast, and beyond it to the rugged shores of Labrador, where my party procured a few, on the moss-covered rocks, although we did not then find any nests, and where some young birds were obtained in the beginning of August.

Individuals of this species spend the summer months in the mountainous parts of Maryland, Pennsylvania, and Connecticut, where they breed. I found their nests near the waters of the Delaware and the Perkioming creek, when I resided in the first of these States, and in the same localities as those of *Totanus Bartramius*, as well as in ploughed fields. The nest is merely a slight hollow with a few blades of grass. The eggs are four, an inch and seven and a half eighths in length, an inch and three-eighths in their greatest breadth; their ground-colour yellowish-white, tinged with olivaceous, and pretty generally covered with blotches and dots of light brown and pale purple, the markings being more abundant toward the small end. Their form is similar to that of the egg of the Guillemot, that is, broadly rounded at the large end, then tapering, with the sides nearly straight, and the narrow end rounded. When sitting, these birds will remain until they are almost trodden upon. On being started, they fly off a few yards, alight running, and use all the artifices employed on such occasions to induce the intruder to set

out in pursuit. The young leave the nest almost immediately after they are hatched, and should one approach them the parents become very clamorous, and fly around until they are assured of the safety of their brood, when they take a long flight, and disappear for a time. Unless during the breeding season, they are exceedingly shy; but their anxiety for their young renders them forgetful of the danger which they incur in approaching man. The young, when two or three weeks old, run with great celerity, and squat in perfect silence when apprehensive of danger. When they are able to fly, several families unite, and betake themselves to the sea-shore, where other flocks gradually arrive, until at length, on the approach of cold weather, almost all of them begin to move southward. Although the great body of these Plovers pass beyond the limits of the United States, some remain on the shores of the Floridas during winter. In their habits they are more maritime than the Golden Plovers, which, when migrating, generally advance over the land.

The flight of this bird is swift, strong, and well sustained. When roaming over large sand-bars, they move in compact bodies, whirling round, and suddenly veering, so as alternately to exhibit their upper and lower parts. At this time old and young are intermixed, and many of the former have lost the black so conspicuous on the neck and breast in summer. During winter, or as long as they frequent the sea-shore, they feed on marine insects, worms, and small shell-fish; and when they are in the interior, on grasshoppers and other insects, as well as berries of various kinds, on which they fatten so as to become tolerably good eating.

This species is known in Pennsylvania by the name of Whistling Field Plover, suggested by the loud and modulated cries which it emits during the love-season. In the Eastern States, as well as in Kentucky, it is called the Bull-head; but in the South its most common appellation is Black-bellied Plover. I have seen it, though sparingly, along the shores of the Ohio, probably during its passage from the north.

As its habits agree with those of the Plovers generally, and its form is similar to that of the Golden Plover and other species, the only difference being the presence of a rudimentary hind toe, it was scarcely necessary to distinguish it generically from *Charadrius*, as many recent authors have done.

TRINGA HELVETICA and SQUATAROLA, Linn. Syst. Nat., p. 250, 252.

BLACK-BELLIED PLOVER, *Charadrius helveticus*, Wils. Amer. Orn., vol. vii. p. 41. Summer.

CHARADRIUS HELVETICUS, Bonap. Syn., p. 298.

GREY LAPWING, *Vanellus melanogaster*, Swains. and Rich. F. Bor. Amer., vol. ii. p. 370.

BLACK-BELLIED or SWISS PLOVER, Nutt. Man., vol. ii. p. 26.

BLACK-BELLIED PLOVER, *Charadrius helveticus*, Aud. Orn. Biog., vol. iv. p. 280.

Male, $11\frac{3}{4}$, 25.

From Texas along the coast to the northern extremity of the Continent. Breeds from Virginia northward. Not abundant.

Adult Male in summer.

Bill as long as the head, straight, somewhat compressed, stout. Upper mandible with the dorsal line straight and slightly sloping for more than half its length, then bulging a little and arched to the tip, which is rather acute, the sides flat and sloping at the base, convex towards the end, where the edges are sharp and inclinate. Nasal groove extended to a little more than half the length of the mandible; nostrils sub-basal, linear, open and pervious. Lower mandible with the angle rather long and narrow, the sides at the base erect and nearly flat, the dorsal line ascending and slightly convex, the edges sharp and involute towards the narrow tip.

Head of moderate size, roundish, the forehead much rounded. Eyes large. Neck rather short. Body ovate, rather full. Feet rather long, slender; tibia bare for a considerable space; tarsus rather compressed, covered all round with reticulated hexagonal scales; toes of moderate length, slender; the first extremely diminutive, with an equally minute claw; the second shorter than the fourth, which is much exceeded by the third; the anterior toes are rather broadly marginate, the web between the third and fourth extending to the second joint of the latter, that between it and the second smaller. Claws small, compressed, slightly arched, acute.

Plumage soft, blended, the feathers broad and rounded. Wings long and pointed, primary quills tapering, the first longest, the second a quarter of an inch shorter, the rest rapidly graduated; secondaries short, broad, obliquely rounded; the inner tapering and elongated. Tail rather short, slightly rounded, of twelve rounded feathers.

Bill and claws black. Iris and feet greyish-black. Forehead yellowish-white, the rest of the head and the hind neck greyish-white, spotted with dusky. The upper parts are variegated with black, yellowish-brown, and white, the feathers being tipped with the latter. The hind part of the rump, the upper tail-coverts, and the tail-feathers, white, transversely barred with brownish-black; the tail tipped with white, and having four dark bars on the middle feathers, and seven or eight on the outer webs of the rest. Alula, primary coverts, and primary quills brownish-black, the coverts terminally margined with white; shafts of the primaries about the middle, and part of the inner web towards the base, white; the inner six with a white patch on the outer web towards the base, and margined with white externally; the outer secondary feathers white at the base and margined with the same; the inner dusky, with marginal white triangular spots. A narrow ring round the eye, and a broad longitudinal band on the side of the neck, white; loreal

space, cheeks, fore part of neck, breast, and axillar feathers, black; the rest of the lower parts white, the lower primary coverts grey towards the end.

Length to end of tail $11\frac{3}{4}$ inches, to end of wings $12\frac{1}{2}$, to end of claws 14; extent of wings 25; wing from flexure $8\frac{1}{4}$; tail $3\frac{1}{4}$; bill along the ridge $1\frac{1}{4}$, along the edge of lower mandible $1\frac{1}{4}$; bare part of tibia $\frac{3}{4}$; tarsus 2; hind toe $1\frac{1}{8}$; middle toe $1\frac{1}{8}$, its claw $\frac{1}{4}$; outer toe and claw $1\frac{1}{8}$; inner toe 1. Weight $6\frac{1}{2}$ oz.

The female resembles the male, but has the black of the lower parts of a less deep tint.

Young about a week old.

Bill and feet dull greenish-brown. Iris brown. The general colour is pale brownish-yellow, mottled with dusky; a whitish ring round the eye; tail with a black band, rump whitish, primary quills dusky, the outer edges of the secondaries whitish.

The young in autumn.

Bill greyish-black; feet bluish-grey. The upper parts brownish-black, spotted with white, some of the spots yellow; the wings and tail as in the adult, but the latter tinged with grey, and having eight dark bars on all the feathers. The fore part and sides of the neck, and the sides of the body,

greyish-white, mottled with brownish-grey; axillary feathers brownish-black; the rest of the lower parts white.

Adult in winter.

The adult in winter has the upper parts light greyish-brown, the margins of the feathers much lighter; the sides and fore parts of the neck pale grey, with dark grey streaks and spots; lower parts white. In other respects the colours are as in summer.

In an adult male of this species there is a double row of papillæ on the roof of the mouth. The tongue is 1 inch long, slender, tapering, emarginate and papillate at the base, grooved above, horny on the back. The œsophagus, *a*, is 5 inches long, at its upper part $\frac{4}{12}$ in diameter, enlarged to $\frac{1}{2}$ inch on the lower part of the neck. The proventriculus, *b*, ob-

long, its greatest diameter 8 twelfths, its glandules oblong and about a twelfth in length. The stomach, *c, d, e, f*, is a very powerful gizzard of an irregular roundish form, 1 inch 5 twelfths long, 1 inch $3\frac{1}{2}$ twelfths in breadth; its lateral muscles very large and distinct, the right, *d*, 4 twelfths thick, the left, *e*, 3 twelfths, the tendons large; the epithelium thick, longitudinally rugous, and of a reddish colour. The intestine, *g, h, i*, is 2 feet 2 inches long, its diameter about 2 twelfths; the cœca 2 inches 2 twelfths long, their diameter at the base half a twelfth, toward the end 2 twelfths; the rectum 3 twelfths in diameter, and $2\frac{1}{2}$ inches long.

In the stomach were several shrimps. The lobes of the liver very unequal, the right being $2\frac{1}{4}$ inches in length, the other $1\frac{4}{12}$. No gall-bladder.

The trachea is wide, flattened, membranous, 4 twelfths broad at the upper part, gradually diminishing to 2 twelfths, its rings, which are very slender, about 100. The lateral muscles exceedingly thin, but becoming more distinct towards the lower part; the sterno-tracheal slender. Bronchi of moderate length, of about 20 half-rings.

AMERICAN GOLDEN PLOVER.

+*CHARADRIUS MARMORATUS*, *Wagler*.

PLATE CCCXVI.—ADULT IN SUMMER, WINTER, AND SPRING.

The Golden Plover spends the autumn, winter, and part of the spring, in various portions of the United States, appearing in considerable numbers both along the coast and in the interior, and not unfrequently on our highest grounds. A much greater number, however, proceed in severe winters beyond the limits of our Southern States, and the partial migrations of this species are much influenced by the state of the weather. They are more abundant along the sea shores of the Middle and Eastern Districts from the middle of April to the beginning of May, whereas in autumn they range over the interior, and more especially the western prairies. In the early part of May they congregate in immense flocks, and commence their journey toward more northern regions, where they are said to breed.

This bird moves on the ground with sprightliness. When observed, it

Black-bellied Plover.

1 Male. 2 Young in Autumn. 3 Nestling.

Drawn from Nature by J. J. Audubon. FRSTLS

Lith. Printed & Col'd by J. T. Bowen Phil.

Audubon, John James. 1842. "Black-Bellied Plover, *Charadrius helveticus*, Linn. [Pl. 315]." *The birds of America : from drawings made in the United States and their territories* 5, 199–203. <https://doi.org/10.5962/p.319428>.

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

DOI: <https://doi.org/10.5962/p.319428>

Permalink: <https://www.biodiversitylibrary.org/partpdf/319428>

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>.