BLUE HERON.

†ARDEA CÆRULEA, *Linn.*

PLATE CCCLXXII.—ADULT MALE AND YOUNG.

Along with a few other Herons, this is, comparatively speaking, confined within narrow limits along our southern coast in winter. It occurs, however, in most parts of the Floridas, where it is a constant resident, and whence, at the approach of summer, vast multitudes are seen proceeding northward, in search of suitable places in which they may rear their young in security. Many, however, go southward, beyond the limits of the United States, and proceed coastwise to Texas and Mexico to spend the winter, especially the younger birds, when still in that singular white plumage which differs so much from that of the young of every other known species of this genus, except that of the Reddish Egret (*A. rufescens*). At New Orleans, where it arrives at the same period, both from Mexico and the Floridas, its first appearance in spring is about the beginning of March; at which time also multitudes leave the Floridas on their way eastward, to settle in Georgia, the Carolinas, and other States farther east, as far as Long Island in that of New York. Beyond this, I believe, no birds of the species have been met with. They rarely, if ever, proceed far inland, or leave the shores of our large rivers and estuaries. On the Mississippi, the swamps and lakes on the borders of which are so well adapted to the habits of these birds, few individuals are ever seen above Natchez. About the beginning of September, by which time the young are able to shift for themselves, they return southward.

When in the Floridas, during winter, I observed that the Blue Herons associated with other species, particularly the White Heron, *Ardea Egretta*, and the Louisiana Heron, *Ardea Ludoviciana*, all of which were in the habit of roosting together in the thick evergreen low bushes that cover the central parts of the islands along the coast. Their passage to and from their feeding places, is as regular as the rising and setting of the sun, and, unless frequently disturbed, they betake themselves every night to the same locality, and almost to the same spot. In the morning, they rise with one accord from the roosts on which they have been standing all night on one leg, the other drawn up among the feathers of the abdomen, their neck retracted,

Blue Heron.

1. With white Spring Plumage & Young second Year.

and their head and bill buried beneath their scapulars. On emerging from their retreats, they at once proceed to some distant place in search of food, and spend the day principally on the head waters of the rivers, and the fresh-water lakes of the interior, giving a decided preference to the soft mud banks, where small crabs or fiddlers are abundant, on which they feed greedily, when the inland ponds have been dried up, and consequently no longer supply them with such fishes as they are wont to feed upon.

There, and at this season, reader, you may see this graceful Heron, quietly and in silence walking along the margins of the water, with an elegance and grace which can never fail to please you. Each regularly-timed step is lightly measured, while the keen eye of the bird seeks for and watches the equally cautious movements of the objects towards which it advances with all imaginable care. When at a proper distance, it darts forth its bill with astonishing celerity, to pierce and secure its prey; and this it does with so much precision, that, while watching some at a distance with a glass, I rarely observed an instance of failure. If fish is plentiful, on the shallows near the shore, when it has caught one, it immediately swallows it, and runs briskly through the water, striking here and there, and thus capturing several in succession. Two or three dashes of this sort, afford sufficient nourishment for several hours, and when the bird has obtained enough it retires to some quiet place, and remains there in an attitude of repose until its hunger returns. During this period of rest, however, it is as watchful as ever, and on hearing the least noise, or perceiving the slightest appearance of danger, spreads its wings, and flies off to some other place, sometimes to a very distant one. About an hour before sunset, they are again seen anxiously searching for food. When at length satisfied, they rise simultaneously from all parts of the marsh, or shore, arrange themselves into loose bodies, and ascending to the height of fifty or sixty yards in the air, fly in a straight course towards their roosting place. I saw very few of these birds during the winter, on or near the river St. John in Florida; but on several occasions met with some on small ponds in the pine barrens, at a considerable distance from any large stream, whither they had been attracted by the great number of frogs.

The flight of the Blue Heron is rather swifter than that of the Egret, *Ardea candidissima*, and considerably more so than that of the Great Blue Heron, *Ardea Herodias*, but very similar to that of the Louisiana Heron, *Ardea Ludoviciana*. When the bird is travelling, the motion is performed by flappings in quick succession, which rapidly propel it in a direct line, until it is about to alight, when it descends in circular sailings of considerable extent towards the spot selected. During strong adverse winds, they fly low, and in a continuous line, passing at the necessary distance from the

shores to avoid danger, whether at an early or a late hour of the day. I recollect that once, on such an occasion, when, on the 15th of March, I was in company with my friend JOHN BACHMAN, I saw a large flock about sunset arising from across the river, and circling over a large pond, eight miles distant from Charleston. So cautious were they, that although the flock was composed of several hundred individuals, we could not manage to get so much as a chance of killing one. I have been surprised to see how soon the Blue Herons become shy after reaching the districts to which they remove for the purpose of breeding from their great rendezvous the Floridas, where I never experienced any difficulty in procuring as many as I wished. In Louisiana, on the other hand, I have found them equally vigilant on their first arrival. On several occasions, when I had placed myself under cover, to shoot at some, while on their way to their roosts or to their feeding grounds, I found it necessary to shift from one place to another, for if one of them had been fired at and had fallen in a particular place, all that were in its company took care not to pass again near it, but when coming up diverged several hundred yards, and increased their speed until past, when they would assume their more leisurely flappings. In South Carolina, where they are very shy on their arrival, I have seen them fly off on hearing the very distant report of a gun, and alight on the tops of the tallest trees, where they would congregate in hundreds, and whence they would again fly off on the least apprehension of danger. But when once these Herons have chosen a place to nestle in, or reached one in which they bred the preceding year, they become so tame as to allow you to shoot as many as you are disposed to have.

While on Cayo Island, in the Gulf of Mexico, on the 10th of April, 1837, I observed large flocks of the Blue and Green Herons, *Ardea cœrulea* and *A. virescens*, arriving from the westward about the middle of the day. They flew at a considerable height, and came down like so many Hawks, to alight on the low bushes growing around the sequestered ponds; and this without any other noise than the rustling of their wings as they glided through the air towards the spot on which they at once alighted. There they remained until sunset, when they all flew off, so that none were seen there next day. This shews that although these species migrate both by day and night, they are quite diurnal during the period of their residence in any section of the country which they may have chosen for a season. It is more than probable that it has been from want of personal knowledge of the habits of these birds, that authors have asserted that all Herons are nocturnally inclined. This certainly is by no means the case, although they find it advantageous to travel by night during their migrations, which is a remarkable circumstance as opposed to their ordinary habits. In the

instance above mentioned, I found the birds remarkably gentle, which was probably owing to fatigue.

The Blue Heron breeds earlier or later according to the temperature of the district to which it resorts for that purpose, and therefore earlier in Florida, where considerable numbers remain, during the whole year, than in other parts of the United States. Thus I have found them in the southern parts of that country, sitting on their eggs, on the 1st of March, fully a month earlier than in the vicinity of Bayou Sara, on the Mississippi, where they are as much in advance of those which betake themselves, in very small numbers indeed, to our Middle Districts, in which they rarely begin to breed before the fifteenth of May.

The situations which they choose for their nests are exceedingly varied. I have found them sitting on their eggs on the Florida Keys, and on the islands in the Bay of Galveston, in Texas, in nests placed amidst and upon the most tangled cactuses, so abundant on those curious isles, on the latter of which the climbing rattlesnake often gorges itself with the eggs of this and other species of Heron, as well as with their unfledged young. In the lower parts of Louisiana, it breeds on low bushes of the water-willow, as it also does in South Carolina; whereas, on the islands on the coast of New Jersey, and even on the mainland of that State, it places its nest on the branches of the cedar and other suitable trees. Wherever you find its breeding place, you may expect to see other birds in company with it, for like all other species, excepting perhaps the Louisiana Heron, it rarely objects to admit into its society the Night Heron, the Yellow-crowned Heron, or the White Egret.

The heronries of the southern portions of the United States are often of such extraordinary size as to astonish the passing traveller. I confess that I myself might have been as sceptical on this point as some who, having been accustomed to find in all places the Heron to be a solitary bird, cannot be prevailed on to believe the contrary, had I not seen with my own eyes the vast multitudes of individuals of different species breeding together in peace in certain favourable localities.

The nest of the Blue Heron, wherever situated, is loosely formed of dry sticks, sometimes intermixed with green leaves of various trees, and with grass or moss, according as these materials happen to be plentiful in the neighbourhood. It is nearly flat, and can scarcely be said to have a regular lining. Sometimes you see a solitary nest fixed on a cactus, a bush, or a tree; but a little beyond this you may observe from six to ten, placed almost as closely together as you would have put them had you measured out the space necessary for containing them. Some are seen low over the water,

while others are placed high; for, like the rest of its tribe, this species is rather fond of placing its tenement over or near the liquid element.

The eggs are usually three, rarely four; and I have never found a nest of this species containing five eggs, as is stated by WILSON, who, probably found a nest of the Green Heron containing that number among others of the present species. They measure an inch and three quarters in length, by an inch and a quarter in breadth, being about the size of those of *Ardea candidissima*, though rather more elongated, and precisely of the same colour.

The young bird is at first almost destitute of feathers, but scantily covered with yellowish-white down. When fully fledged, its bill and legs are greenish-black, and its plumage pure white, or slightly tinged with cream-colour, the tips of the three outer primaries light greyish-blue. Of this colour the bird remains until the breeding season, when, however, some individuals exhibit a few straggling pale blue feathers. When they have entered on their second year, these young birds become spotted with deeper blue on some parts of the body, or on the head and neck, thus appearing singularly patched with that colour and pure white, the former increasing with the age of the bird in so remarkable a manner, that you may see specimens of these birds with portions even of the pendent feathers of their head or shoulders so marked. And these are produced by *full moultings*, by which I mean the unexpected appearance, as it were, of feathers growing out of the skin of the bird coloured entirely blue, as is the case in many of our land birds. In all these stages of plumage, and from the first spring after birth, the young birds breed with others, as is equally the case with *Ardea rufescens*. You may see a pure white individual paired with one of a full blue colour, or with one patched with blue and white. | The young, after leaving their parents, remain separate from the old birds until the next breeding season. At no period can the young of this species be confounded with, or mistaken for that of the *Ardea candidissima*, by a person really acquainted with these birds, for the Blue Heron is not only larger than the latter, but the very colour of its feet and legs is perfectly distinctive. Indeed, during the time when the young Blue Heron is quite white (excepting on the tips of the outer primaries) it would be easier to confound it with the young of the Reddish Egret, *Ardea rufescens*, than with that of any other, were the feathers of its hind head and neck of the same curious curled appearance as those of that species.

My friend JOHN BACHMAN informs me, that in South Carolina, this species not unfrequently breeds in the company of the Louisiana Heron, the nests and eggs of which, he adds, are very similar. He has specimens of these birds in all the different stages which I have described. At New Or-

leans, the Blue Herons, during the transition of their plumage from white to blue, are called "Egrettes folles," or foolish Egrets, on account of their unusual tameness. My friend BACHMAN and I, shot, on the 6th and 9th of April, several specimens spotted with blue feathers, and having their crests and trains similarly mixed, although of full length; but in most of the specimens obtained, the white was still prevalent. I have shot some in Louisiana, in autumn, in the same curious dress.

This species, though larger than the Snowy Heron, *Ardea candidissima*, is considerably inferior to it in courage; and I was much amused as well as surprised, when at Galveston Bay, on the 24th of April, 1837, to see one of that species alight near a Purple Heron, attack it, and pursue it as far as I could follow them with my eyes. When the Blue Herons are on the sea-coast they not unfrequently repose on the large mud or sand bars, at some distance from the adjacent marshes; but they generally prefer roosting on trees or bushes, when there are any in their neighbourhood. The Creoles of Louisiana not unfrequently eat the flesh of this species, and although they by no means consider it equal to that of the Night Heron, some of them have assured me that it is not bad food. Like other birds of this family, they become larger with age, and the male is usually somewhat superior in size to the female; but, with this exception, no difference can be perceived in the external appearance of the sexes.

BLUE HERON, *Ardea cœrulea*, Wils. Amer. Orn., vol. vii. p. 117.

ARDEA CÆRULEA, Bonap. Syn., p. 300.

BLUE HERON, Nutt. Man., vol. ii. p. 58.

BLUE HERON, *Ardea cœrulea*, Aud. Orn. Biog., vol. iv. p. 58.

Male, 24½, 42.

Resident in Florida and Texas, where it breeds. In spring migrates as far as Long Island; up the Mississippi to a hundred miles above Natchez. Never seen far inland.

Adult Male in full plumage.

Bill much longer than the head, rather slender, very slightly decurved, compressed, tapering to a point. Upper mandible with the dorsal line nearly straight for two-thirds of its length, then slightly decurved, the ridge convex, broad at the base, gradually narrowed to the point; a groove from the base to near the end, the sides convex beneath, the edges thin and sharp, with a slight notch close to the tips. Nostrils basal, linear, longitudinal, with a membrane above and behind. Lower mandible with the angle extremely narrow and elongated, the dorsal line beyond it ascending and almost straight, the sides sloping outwards, and flattened, the edges sharp and slightly inflected, the tip acuminate.

Head rather small, oblong, compressed. Neck very long and slender. Body slender and compressed. Feet very long; tibia elongated, its lower half bare, very slender, covered all round with angular scales, of which the posterior are large; tarsus elongated, slender, compressed, anteriorly covered with numerous broad scutella, laterally and behind with angular scales. Toes long, slender, with numerous broad scutella above, flattened and reticularly granulate beneath. Claws rather long, arched, compressed, acute, that of hind toe much larger and more curved, the inner edge of that of the third finely and regularly pectinate.

Space between the bill and eye, and around the latter, bare. Plumage soft, thin, and blended. Feathers of the upper and hind part of the head very long, linear, with loose barbs; of the sides of the neck loose and inclined obliquely backwards, of its lower part much elongated, narrow, and tapering to a point; of the middle of the back extremely long, linear, acuminate, their tips projecting about five inches beyond the tail. Wings long, and very broad; primaries broad, tapering, and rounded, the first, second and third almost equal, the latter being only a twelfth of an inch longer; secondaries broad and rounded; some of the inner only half an inch shorter than the longest primary, when the wing is closed. Tail very short, small, even, of twelve rather weak feathers.

Bill ultramarine blue at the base, gradually shaded into black towards the point; the bare space between it and the eye, as well as the edges of the eyelids, ultramarine. Iris pale yellow. Legs, tarsi, toes, and claws, black. Head and neck of a rich deep purple, inclining to vinaceous; the lower part of the neck and all the other parts deep greyish-blue, the edges of the feathers lighter.

Length to end of tail $24\frac{1}{2}$ inches, to end of wings 25, to end of elongated dorsal feathers $26\frac{1}{2}$, to end of claws $30\frac{3}{4}$; wing from flexure $11\frac{1}{2}$; tail $4\frac{2}{12}$; extent of wings 42; bill along the ridge $3\frac{4}{12}$, along the edge of lower mandible 4; bare part of tibia $2\frac{2}{12}$; tarsus $3\frac{5}{12}$; first toe $\frac{1}{12}$, its claw $\frac{9}{12}$; middle toe $2\frac{1}{4}$, its claw $\frac{7}{12}$. Weight 1 lb.

The Female is similar to the male, but smaller. Weight 11 oz.

The young are at first sparsely covered with yellowish-white down. When a fortnight old, the bill is yellow, with the tips greenish-black; the feet greenish-yellow, the claws dusky, with the tips greyish-yellow. The general colour of the plumage is pure white, but the down which tips the feathers of the head is brownish-white; two of the alular feathers are tinged with dull bluish-grey, and the outer seven or eight primaries are broadly margined on both sides to the length of about an inch and a half with the same colour of a deeper tint, the extreme tip white.

When fully fledged, the bare parts at the base of the bill, and the basal

half of the upper mandible, are light greenish-blue, the rest black; the lower mandible yellow, with a patch of black an inch and a quarter in length on each side at the end. Legs, tarsi, and toes greenish-blue, the sides yellowish; claws dusky. The feathers of the head are slightly elongated; those of the back are also elongated, but much broader and shorter than in the adult. The feathers on the upper part of the head are of a faint bluish-grey; and the alular feathers and eight outer primaries are tinged with the same colour. At this period, the length to the end of the tail is 22 inches, to end of claws $28\frac{1}{2}$; bill along the ridge $2\frac{7}{8}$; wing from flexure 11; tail $4\frac{2}{12}$.

In November, when the moult is advanced. The bill is black, dull blue at the base. The feet are nearly black, as are the claws. The occipital feathers are now two inches and a half in length, and some of the dorsal feathers extend as far as the tips of the wings; those of the lower part of the neck have also a length of about three inches. The general colour of the plumage is white; the upper part of the head, the hind neck, back, anterior edge of the wing, and outer primaries at the end, of a faint bluish-grey tint; some of the elongated feathers of the back darker.

Length to end of tail 22 inches; to end of claws $29\frac{1}{2}$; bill 3; wing from flexure $11\frac{1}{4}$.

A year old. Bill nearly as in the adult; feet bluish-black, the plumage is white, with the upper parts pale greyish-blue as in November, but the whole interspersed with numerous feathers of a deep greyish-blue, similar to that of the adult; the primaries and tail being still white.

Length to end of tail $23\frac{1}{4}$; extent of wings $32\frac{1}{2}$; bill $3\frac{1}{8}$. Weight 9 oz.

At the age of a year the bird propagates, so that individuals in the white, mottled, or blue plumage, may be seen breeding together.

When only a few weeks old, the serrature of the claw of the middle toe is scarcely perceptible, exhibiting merely faint indications of points upon a very slight margin. This margin enlarges, and when the bird is completely fledged the serratures are perfectly formed.

In this bird, as in most other Herons, the crura of the lower mandible are thin, flexible, and elastic, the angle filled by an elastic membrane covered by the skin. The tongue is 1 inch long, sagittate at the base, tapering to a point. The roof of the mouth has a median prominent ridge, and two lateral lines; the palate is convex; the posterior aperture of the nares 10 lines in length. The pharynx may be dilated to $1\frac{1}{2}$ inches; the œsophagus, which is 12 inches long, is, when dilated, 10 lines in diameter at its upper part, and gradually contracts to 7 lines; at the curvature of the neck it lies directly behind, having passed down on the left side, along with the trachea. Its walls are extremely thin, contrasting in this respect with the œsophagus of the Great Northern Diver and other swimming piscivorous birds. The

proventriculus is 1 inch long, its glandules cylindrical, and extremely slender. The stomach seems as if it merely formed a basal sac to the œsophagus, its muscles being extremely thin, its tendons circular and half an inch in diameter; cuticular lining soft. The intestine is long and very narrow, 5 feet 10 inches in length, 2 lines in diameter at the upper part, $1\frac{1}{2}$ near the rectum, which is $2\frac{3}{4}$ inches long, with a diameter of $4\frac{1}{2}$ lines, and terminates in a nipple-like cœcum, projecting 3 lines beyond the entrance of the small intestine, but having no appearance of the two lateral appendages usually called cœca. In this respect, the Blue Heron agrees with others of the same family. The cloaca is about an inch in length and breadth.

The trachea, when extended, is $8\frac{3}{4}$ inches long. The rings 170 in number, are osseous and circular, so that the organ preserves its cylindrical form under all circumstances. They are, like those of all Herons, of equal breadth on both sides, not broad on one side and narrow on the other, as has been represented. The contractor muscles are very slender, as are the sterno-tracheal; the former send down a slip on each side to the first bronchial ring. The diameter of the trachea is 2 lines at the upper part, $1\frac{1}{2}$ at the lower. The bronchi are short, wide, conical, of about 13 half rings.

The right lobe of the liver is $2\frac{1}{4}$ inches long, the left lobe $1\frac{1}{2}$; the heart $1\frac{1}{4}$ in length, 8 lines broad, of an oblong conical form. The stomach contained remains of insects and crustaceous animals, together with a few seeds.

LOUISIANA HERON.

†ARDEA LUDOVICIANA, *Wils.*

PLATE CCCLXXIII.—MALE.

Delicate in form, beautiful in plumage, and graceful in its movements, I never see this interesting Heron, without calling it the Lady of the Waters. Watch its motions, as it leisurely walks over the pure sand beaches of the coast of Florida, arrayed in the full beauty of its spring plumage. Its pendent crest exhibits its glossy tints, its train falls gracefully over a well defined tail, and the tempered hues of its back and wings contrast with those of its lower parts. Its measured steps are so light that they leave no

Blue Heron.

1. With white Spring Plumage & Young second Year.

Audubon, John James. 1843. "Blue Heron, *Ardea coerulea*, Linn. [Pl. 372]." *The birds of America : from drawings made in the United States and their territories* 6, 148–156. <https://doi.org/10.5962/p.319486>.

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