Adult Female.

Bill black in the middle, dull orange at the extremities and along the edges. Iris as in the male, as are the feet. The general colour of the upper parts is pale yellowish-brown, streaked and spotted with dusky-brown. The feathers of the head narrowly streaked, of the back with the margin and a central streak yellowish-brown, the rest dark, of the scapulars similar, but with the light streak on the outer web. The wings are nearly as in the male, the speculum similar, but with less green. The lower parts dull ochre, deeper on the lower neck, and spotted with brown.

Length 22 inches. Weight from 2 lbs. to  $2\frac{1}{2}$ .

The Young acquire the full plumage in the course of the first winter.

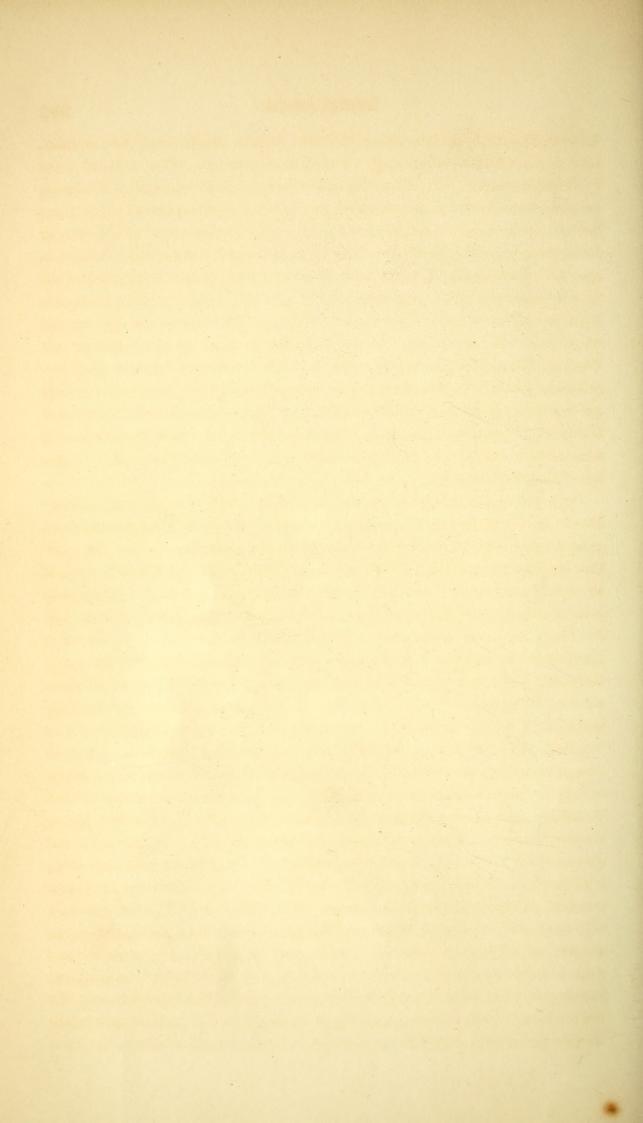
# DUSKY DUCK.

### +ANAS OBSCURA, Gmel.

# PLATE CCCLXXXVI.-MALE AND FEMALE.

This species, which is known in all parts of the United States by the name of "Black Duck," extends its migrations from the Straits of Belle Isle, on the coast of Labrador, to Texas. Strange as the fact may appear, it breeds in both these countries, as well as in many of the intermediate districts. On the 10th of May, 1833, I found it breeding along the marshy edges of inland pools, near the Bay of Fundy, and, on Whitehead Island in the same bay, saw several young birds of the same species, which, although apparently not more than a week old, were extremely active both on land and in the water. On the 30th of April, 1837, my son discovered a nest on Galveston Island, in Texas. It was formed of grass and feathers, the eggs eight in number, lying on the former, surrounded with the down and some feathers of the bird, to the height of about three inches. The internal diameter of the nest was about six inches, and its walls were nearly three in thickness. The female was sitting, but flew off in silence as he approached. The situation selected was a clump of tall slender grass, on a rather sandy ridge, more than a hundred yards from the nearest water, but surrounded by partially dried salt-marshes. On the same island, in the course of several





successive days, we saw many of these Ducks, which, by their actions, shewed that they also had nests. I may here state my belief, that the Gadwall, Blue-winged Teal, Green-winged Teal, Mallard, American Widgeon, and Spoon-billed Duck, all breed in that country, as I observed them there late in May, when they were evidently paired. How far this fact may harmonize with the theories of writers respecting the migration of birds in general, is more than I can at present stop to consider. I have found the Black Duck breeding on lakes near the Mississippi, as far up as its confluence with the Ohio, as well as in Pennsylvania and New Jersey; and every one acquainted with its habits will tell you, that it rears its young in all the Eastern States intervening between that last mentioned and the St. Lawrence, and is of not less frequent occurrence along the margins of all our great lakes. It is even found on the Columbia river, and on the streams of the Rocky Mountains; but as Dr. RICHARDSON has not mentioned his having observed it in Hudson's Bay or farther north, we may suppose that it does not visit those countries.

On arriving in Labrador, on the 17th June, 1833, we found the Dusky Ducks in the act of incubation, but for nearly a month after, met with no young birds, which induced me to suppose that this species does not reach that country at so early a period as many others, but lingers behind so as to be nearly four weeks later than some of them. At the end of four weeks after our arrival, all the females we met with had young broods, which they led about the fresh-water ponds, and along their margins, either in search of food, or to secure them from danger. None of these broods exceeded seven or eight in number, and, at this early period of their life, we found them covered with long soft down of a deep brown colour. When alarmed they would dive with great celerity several times in succession, but soon became fatigued, made for the shore, ran a few feet from the water, and squatted among the grass, where they were easily caught either by some of our party, or by the Gulls, which are constantly on the look-out for such dainty food. At other times, as soon as the mother apprehends danger, she calls her young around her, when the little things form themselves into a line in her wake, and carefully follow her in all her movements. If a Hawk or a Gull make a plunge towards them, she utters a loud cry of alarm, and then runs as it were along the surface of the water, when the young dive as quick as lightning, and do not rise again until they find themselves among the weeds or the rocks along the shores. When they thus dive, they separate and pursue different directions, and on reaching the land lie close among the herbage until assured, by the well-known voice of their parent, that the danger is over. If they have often been disturbed in one pond, their anxious mother leads them overland to another; but she never, I believe, conducts

them to the open sea until they are able to fly. The young grow with remarkable rapidity, for, by the middle of August, they almost equal their parents in size; and their apprehension of danger keeps pace with their growth, for at the period of their southward migration, which takes place in the beginning of September, they are as wild and as cunning as the oldest and most experienced of their species. Each brood migrates separately; and the old males, which abandoned the females when incubation commenced, set out in groups of eight or ten. Indeed, it is not common to see birds of this species assemble in such flocks as their relatives the Mallards, although they at times associate with almost all the fresh-water Ducks.

The males, on leaving the females, join together in small bands, and retire into the interior of the marshes, where they remain until their moult is completed. My young friend COOLEDGE brought me a pair shot on the 4th of July, in Labrador, in so ragged a state that very few feathers remained even on the wings. On his approaching them, they skimmed over the surface of the water with such rapidity, that when shot at they seemed as if flying away. On examining these individuals I found them to be sterile, and I am of opinion that those which are prolific moult at a later period, nature thus giving more protracted vigour to those which have charge of a young brood. I think, reader, you will be of the same opinion, when I have told you, that on the 5th of July I found some which had young, and which were still in full plumage, and others, that were broodless, almost destitute of feathers.

As many of the nests found in Labrador differed from the one mentioned above, I will give you an account of them. In several instances, we found them imbedded in the deep moss, at the distance of a few feet or yards from the water. They were composed of a great quantity of dry grass and other vegetable substances; and the eggs were always placed directly on this bed without the intervention of the down and feathers, which, however, surrounded them, and which, as I observed, the bird always uses to cover them when she is about to leave the nest for a time. Should she be deprived of her eggs, she goes in search of a male, and lays another set; but unless a robbery of this kinds happens, she raises only a single brood in the season. But although this is the case in Labrador, I was assured that this species rears two broods yearly in Texas, although, having been but a short time in that country, I cannot vouch for the truth of this assertion. The eggs are two inches and a quarter in length, one inch and five-eighths in breadth, shaped like those of the domestic fowl, with a smooth surface, and of a uniform yellowish-white colour, like that of ivory tarnished by long exposure. The young, like those of the Mallard, acquire the full beauty of their

spring plumage before the season of reproduction commences, but exhibit none of the curious changes which that species undergoes.

Although the Dusky Duck is often seen on salt-water bays or inlets, it resembles the Mallard in its habits, being fond of swampy marshes, ricefields, and the shady margins of our rivers, during the whole of its stay in such portions of the Southern States as it is known to breed in. They are equally voracious, and may sometimes be seen with their crops so protruded as to destroy the natural elegance of their form. They devour, with the greatest eagerness, water-lizards, young frogs and toads, tadpoles, all sorts of insects, acorns, beech-nuts, and every kind of grain that they can obtain. They also, at times, seize on small quadrupeds, gobble up earth-worms and leeches, and when in salt-water, feed on shell-fish. When on the water, they often procure their food by immersing their head and neck, and, like the Mallard, sift the produce of muddy pools. Like that species also, they will descend in a spiral manner from on high, to alight under an oak or a beech, when they have discovered the mast to be abundant.

Shy and vigilant, they are with difficulty approached by the gunner, unless under cover or on horseback, or in what sportsmen call floats, or shallow boats made for the purpose of procuring water-fowl. They are, however, easily caught in traps set on the margins of the waters to which they resort, and baited with Indian corn, rice, or other grain. They may also be enticed to wheel round, and even alight, by imitating their notes, which, in both sexes, seem to me almost precisely to resemble those of the Mallard. From that species, indeed, they scarcely differ in external form, excepting in wanting the curiously recurved feathers of the tail, which Nature, as if clearly to distinguish the two species, had purposely omitted in them.

The flight of this Duck, which, in as far as I know, is peculiar to America, is powerful, rapid, and as sustained as that of the Mallard. While travelling by day they may be distinguished from that species by the whiteness of their lower wing-coverts, which form a strong contrast to the deep tints of the rest of their plumage, and which I have attempted to represent in the figure of the female bird in my plate. Their progress through the air, when at full speed, must, I think, be at the rate of more than a mile in a minute, or about seventy miles in an hour. When about to alight, they descend with double rapidity, causing a strong rustling sound by the weight of their compact body and the rapid movements of their feet by a single powerful spring, fly directly upwards for eight or ten yards, and then proceed in a straight line. Now, if you are an expert hand, is the moment to touch your trigger, and if you delay, be sure your shot will fall short.

As it is attached to particular feeding grounds, and returns to them until greatly molested, you may, by secreting yourself within shooting distance, anticipate a good result; for even although shot at, it will reappear several times in succession in the course of a few hours, unless it has been wounded. The gunners in the vicinity of Boston, in Massachusetts, who kill great numbers of these birds, on account of the high price obtained for them in the fine market of that beautiful and hospitable city, procure them in the following manner:-They keep live decoy Ducks of the Mallard kind, which they take with them in their floats or boats. On arriving at a place which they know to be suitable, they push or haul their boat into some small nook, and conceal it among the grass or rushes. Then they place their decoys, one in front of their ambush, the rest on either side, each having a line attached to one of its feet, with a stone at the other end, by which it is kept as if riding at anchor. One of the birds is retained in the boat, where the gunner lies concealed, and in cold weather amply covered with thick and heavy clothing. No sooner is all in order, than the decoy Ducks, should some wild birds appear, sound their loud call-notes, anxious as they feel to be delivered from their sad bondage. Should this fail to produce the desired effect of drawing the Wild Ducks near, the poor bird in the boat is pinched on the rump, when it immediately calls aloud; those at anchor respond, and the joint clamour attracts the travellers, who now check their onward speed, wheel several times over the spot, and at last alight. The gunner seldom waits long for a shot, and often kills fifteen or twenty of the Black Ducks at a single discharge of his huge piece, which is not unfrequently charged with as much as a quarter of a pound of powder and three quarters of a pound of shot!

The Black Ducks generally appear in the sound of Long Island in September or October, but in very cold weather proceed southward; while those which breed in Texas, as I have been informed, remain there all the year. At their first arrival they betake themselves to the fresh-water ponds, and soon become fat, when they afford excellent eating; but when the ponds are covered with ice, and they are forced to betake themselves to estuaries or inlets of the sea, their flesh becomes less juicy and assumes a fishy flavour. During continued frost they collect into larger bodies than at any other time, a flock once alighted seeming to attract others, until at last hundreds of them meet, especially in the dawn and towards sunset. The larger the flock however, the more difficult it is to approach it, for many sentinels are seen on the look-out, while the rest are asleep or feeding along the shores. Unlike the "Sea Ducks," this species does not ride at anchor, as it were, during its hours of repose.

My friend, the Reverend Dr. JOHN BACHMAN, assures me that this bird,

which some years ago was rather scarce in South Carolina, is now becoming quite abundant in that state, where, during autumn and winter, it resorts to the rice-fields. After feeding a few weeks on the seeds it becomes fat, juicy, and tender. He adds that the farther inland, the more plentifully does it occur, which may be owing to the many steamers that ply on the rivers along the sea coast, where very few are to be seen. They are, however, followed in their retreats, and shot in great numbers, so that the markets of Charleston are now amply supplied with them. He also informs me that he has known hybrid broods produced by a male of this species and the common domestic Duck; and that he had three of these hybrid females, the eggs of all of which were productive. The young birds were larger than either of their parents, but although they laid eggs in the course of the following spring, not one of these proved impregnated. He further states that he procured three nests of the Dusky Duck in the State of New York.

The young of this species, in the early part of autumn, afford delicious eating, and, in my estimation, are much superior in this respect to the more celebrated Canvass-back Duck. That the species should not before now have been brought into a state of perfect domestication, only indicates our reluctance unnecessarily to augment the comforts which have been so bountifully accorded by Nature to the inhabitants of our happy country. In our eastern markets the price of these birds is from a dollar to a dollar and fifty cents the pair. They are dearer at New Orleans, but much cheaper in the States of Ohio and Kentucky, where they are still more abundant. Their feathers are elastic, and as valuable as those of any other species.

I have represented a pair of these birds procured in the full perfection of their plumage.

DUSKY DUCK, Anas obscura, Wils. Amer. Orn., vol. viii. p. 141. ANAS OBSCURA, BONAP. Syn., p. 384. DUSKY DUCK, Anas obscura, Nutt. Man., vol. ii. p. 392. DUSKY DUCK, Anas obscura, Aud. Orn. Biog., vol. iv. p. 15.

Male, 24<sup>1</sup>/<sub>2</sub>, 38<sup>1</sup>/<sub>2</sub>. Female, 22, 34<sup>1</sup>/<sub>4</sub>.

Breeds in Texas, westward, and throughout the United States, British Provinces, and Labrador. Columbia river. Common in autumn and spring along the Middle Atlantic Districts. Abundant in the Southern and Western States in winter.

Adult Male.

Bill about the length of the head, higher than broad at the base, depressed and widened towards the end, rounded at the tip. Upper mandible with the dorsal line sloping and a little concave, the ridge at the base broad and flat, towards the end broadly convex, as are the sides, the edges soft and thin, the

VOL. VI.

marginal lamellæ about forty on each side; the unguis obovate, curved, abrupt at the end. Nasal groove elliptical, sub-basal, filled by the soft membrane of the bill; nostrils sub-basal, placed near the ridge, longitudinal, elliptical, pervious. Lower mandible slightly curved upwards, flattened, with the angle very long, narrow, and rather pointed, the lamellæ about sixty.

Head of moderate size, oblong, compressed; neck rather long and slender; body full, depressed. Feet short, stout, placed a little behind the centre of the body; legs bare a little above the joint; tarsus short, a little compressed, anteriorly with small scutella, externally of which is a series continuous with those of the outer toe, laterally and behind with reticulated angular scales. Hind toe extremely small, with a very narrow membrane; third toe longest, fourth a little shorter, but longer than the second; the scutella of the second and third oblique, of the outer transverse; the three anterior toes connected by reticulated membranes, the outer with a thick margin, the inner with the margin extended into a slightly lobed web. Claws small, arched, compressed, rather obtuse, that of the middle toe much larger, with a dilated, thin edge.

Plumage dense, soft, and elastic; on the head and neck the feathers linearoblong, on the other parts in general broad and rounded. Wings of moderate breadth and length, acute; primaries narrow and tapering, the second longest, the first very little shorter; secondaries broad, curved inwards, the inner elongated and tapering. Tail short, much rounded, of eighteen acute feathers, none of which are recurved.

Bill yellowish-green, the unguis dusky. Iris dark brown. Feet orangered, the webs dusky. The upper part of the head is glossy brownish-black, the feathers margined with light brown; the sides of the head and a band over the eye are light greyish-brown, with longitudinal dusky streaks; the middle of the neck is similar, but more dusky. The general colour is blackish-brown, a little paler beneath, all the feathers margined with pale reddishbrown. The wing-coverts are greyish-dusky, with a faint tinge of green; the ends of the secondary coverts velvet-black. Primaries and their coverts blackish-brown, with the shafts brown; secondaries darker; the speculum is green, blue, violet, or amethyst purple, according to the light in which it is viewed, bounded by velvet-black, the feathers also tipped with a narrow line of white. The whole under surface of the wing, and the axillaries, white.

Length to end of tail  $24\frac{1}{2}$  inches, to end of claws 26; extent of wings  $38\frac{1}{2}$ ; bill  $2\frac{4}{12}$  along the back; wing from flexure  $11\frac{1}{2}$ ; tail  $4\frac{4}{12}$ ; tarsus  $1\frac{6\frac{1}{2}}{12}$ ; middle toe  $2\frac{3}{12}$ , its claw  $\frac{4}{12}$ ; first toe  $\frac{5}{12}$ , its claw  $\frac{2}{12}$ . Weight 3 lbs.

Adult Female.

The female, which is somewhat smaller, resembles the male in colour, but

is more brown, and has the speculum of the same tints, but without the white terminal line.

Length to end of tail 22 inches, to end of wings  $21\frac{1}{4}$ , to end of claws 22; wing from flexure  $10\frac{1}{2}$ ; extent of wings  $34\frac{1}{4}$ ; tarsus 2, middle toe and claw  $2\frac{1}{2}$ ; hind toe and claw  $\frac{5}{12}$ .

In this species, the number of feathers in the tail is eighteen, although it has been represented as sixteen. In form and proportions the Dusky Duck is very closely allied to the Mallard. The following account of the digestive and respiratory organs is obtained from the examination of an adult male.

On the upper mandible are 43 lamellæ; on the lower, 85 in the upper, and 56 in the lower series. The tongue is  $1\frac{1}{12}$  inches long, with the sides parallel and furnished with a double row of filaments, numerous small conical papillæ at the base, a median groove on the upper surface, and a thin rounded appendage, a twelfth and a half in length at the tip. The aperture of the glottis is  $7\frac{1}{12}$  long, with very numerous minute papillæ behind. The cesophagus 12 inches long, of a uniform diameter of  $\frac{4}{12}$ , until near the lower part of the neck, where it enlarges to  $\frac{8}{12}$ , again contracts as it enters the thorax, ending in the proventriculus, which is 11 long, with numerous oblong glandules, about a twelfth in length. Gizzard obliquely elliptical,  $2\frac{1}{4}$  inches across,  $1\frac{8}{12}$  in length, its lateral muscles extremely large, the left  $\frac{10}{12}$  in thickness, the right  $\frac{9}{12}$ ; their tendons large and strong; the lower muscle moderately thick; the cuticular lining firm and rugous, the grinding surfaces nearly smooth. The intestine, which is 5 feet  $7\frac{1}{2}$  inches long, is slender and nearly uniform in diameter, measuring  $\frac{4}{12}$  across in the duodenal portion,  $\frac{3}{12}$  in the rest of its extent; the rectum  $3\frac{1}{2}$  inches long, dilated into a globular cloaca 1 inch in length, and of nearly the same diameter. The cœca are  $6\frac{1}{4}$  long,  $\frac{1\frac{1}{2}}{12}$  in diameter for 2 inches of their length, enlarged to  $\frac{3}{12}$ in the rest of their extent, and terminating in an obtuse extremity.

The trachea, moderately extended, is 10 inches long. Its lateral or contractor muscles are strong, and it is furnished with a pair of cleido-tracheals, and a pair of sterno-tracheals. The number of rings is 136, besides 12 united rings forming a large inferior larynx, which has a transversely oblong bony expansion, forming on the left side a bulging and rounded sac. There are 28 bronchial half rings on the right side, 26 on the left.





Audubon, John James. 1843. "Dusky Duck, Anas obscura, Gmel. [Pl. 386]." *The birds of America : from drawings made in the United States and their territories* 6, 244–251. <u>https://doi.org/10.5962/p.319499</u>.

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