

## THE CRESTED GREBE.

†*PODICEPS CRISTATUS, Lath.*

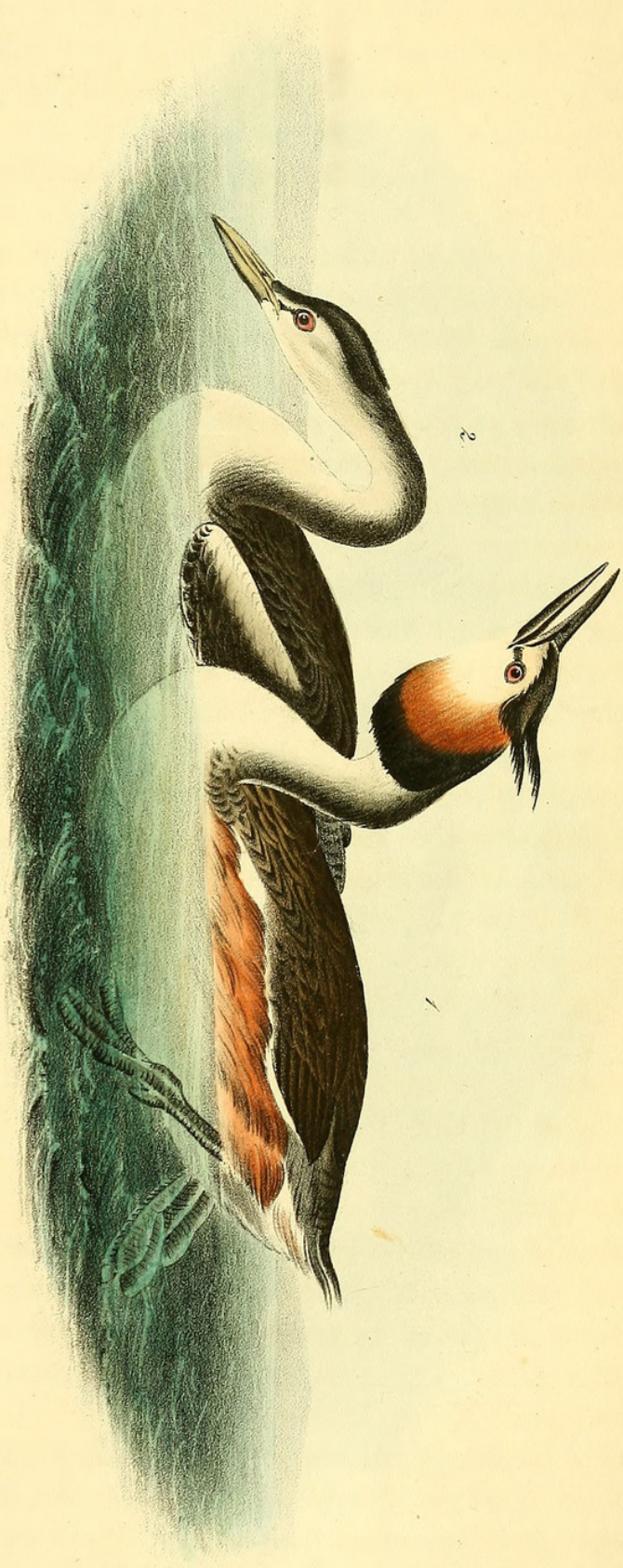
PLATE CCCCLXXIX.—MALE AND FEMALE.

This beautiful species returns from its northern places of residence, and passes over the Western Country, about the beginning of September. A few remain on the lower parts of the Ohio, on the Mississippi, and the lakes in their neighbourhood, but the greater number proceed towards the Mexican territories. They pass swiftly through the air, at a height of about a hundred yards, in flocks of from seven or eight to fifty or more, proceeding in a loose body, and propelling themselves by continued flappings, their necks and feet stretched out to their full length. I have observed them thus passing in autumn, for several years in succession, over different parts of the Ohio, at all hours of the day. On such occasions I could readily distinguish the old from the young, the former being in many instances still adorned with their summer head-dress. I never saw this species near the sea-coast, where, on the contrary, I have met with the Red-necked Grebe.

When about to alight on the water, these birds glide swiftly downward, with their wings half-closed, and produce a sound not unlike that of a Hawk stooping towards its prey. Their velocity is so great at this moment, that on alighting, they glide on the surface of the water for twenty or thirty yards, leaving a furrow in their wake. In a few moments they are all engaged in washing and cleaning themselves, after which they dive in pursuit of the fishes on which they feed, and which they secure by following them in the manner of Divers and Cormorants. They are exceedingly quick-sighted, and frequently elude by diving the shot intended for their destruction, seldom after being chased raising more than their bill above the water, but rarely making for the shore unless when nearly exhausted.

When in ponds, they may easily be caught with fishing hooks placed on lines near the bottom; but if the lines are not closely attended to, or held from a place of concealment, where you may feel that they are hooked, and at once haul them out, the birds drown in a very short time. On catching two or three in this manner, I found the pond deserted the following morning and for several days after. They very rarely fly in your presence, and they leave the ponds at night. If forced to rise on wing, they run





W. 221

*Great Grebe*

1. Adult Male in Spring & Young (first Winter)

Drawn from Nature by J. T. Audubon, F.R.S. W.L.S.

Lith. Printed & Col'd by J. T. Bowen, Phila.





paddling on the water for several yards before they rise, and fly several times round a pond of thirty or forty yards before they attain the level of the tree-tops, for they never fly through the woods. When once high in the air, they move in a direct course and with speed towards some other pond or the nearest river. I do not remember to have ever met with a bird of this species on a narrow creek or bayou, or on muddy waters; and on the Ohio's rising I have observed that they abandon the river and betake themselves to the clear ponds of the interior.

By the 1st of October, scarcely any difference can be perceived between the young and the old birds with respect to plumage, only the latter have the under surface of the wings still dashed with the reddish colour of the summer dress. I am not able to say from observation how long the young are in attaining maturity; but European writers assert that they take three or four years. When these birds leave the southern waters about the beginning of April, the old already shew their summer head-dress, but seldom have it so perfect as is represented in the plate.

The food of this species consists of fishes, aquatic insects, and small reptiles, together with the seeds of water plants. Dr. RICHARDSON states that these birds are abundant in all the secluded lakes of the mountainous districts of the Fur Countries, and adds that their nests are formed of a large quantity of grass, placed among reeds and carices, and rise and fall with the water. Mr. YARRELL has kindly furnished me with specimens of the eggs, which are generally four, measure two inches and a quarter in length by one inch and a half, have an oval form, and a smooth surface, of a uniform yellowish-white colour.

PODICEPS CRISTATUS, Bonap. Syn., p. 417.

PODICEPS CRISTATUS, *Crested Grebe*, Swains. and Rich. F. Bor. Amer., vol. ii. p. 410.

CRESTED GREBE OR GANNET, Nutt. Man., vol. ii. p. 250.

CRESTED GREBE, *Podiceps cristatus*, Aud. Orn. Biog., vol. iii. p. 595.

Male, 24, 33.

Not uncommon during autumn and early spring on all the larger streams of the Western Country, as well as on the coast of the Atlantic, from Nova Scotia to Texas. Breeds in the mountainous parts of the Fur Countries, Rocky Mountains, and high latitudes. Migratory.

Adult Male in spring.

Bill about the length of the head, straight, compressed, tapering. Upper mandible with the dorsal line straight, slightly declinate towards the tip, the ridge convex, the sides convex, the edges sharp and inflected, the tip rather sharp. Nasal groove rather wide, extending to nearly half the length of the



mandible; nostrils linear-elliptical, basal, rather small, pervious. Lower mandible with the angle long and extremely narrow; dorsal line beyond it ascending and straight, sides erect, slightly convex, tip acuminate, edges sharp.

Head of moderate size, oblong, compressed. Neck long, slender. Body long and depressed. Feet short, large, placed close to the extremity of the body; tibia feathered to the joint; tarsus extremely compressed; its anterior edge with a row of small scutella, the sides with broad scutella, behind which are some irregular scales, the posterior ridge with a double line of small prominent scales; first toe very small, with a posterior membrane, fourth longest; the toes scutellate above, connected at the base by a membrane, and having on both sides an expanded web-like margin marked with oblique lines, and having a crenated edge. Claws flat, that of third toe broadest.

Plumage very soft, blended, on the lower parts silky, on the back glossy and rather compact. Two tufts of elongated feathers on the occiput, and a large frill on the sides and anterior portion of the neck at its upper part. Wings small, acute; primaries much curved, second longest, first almost equal, the rest rapidly graduated; secondaries short, rounded. Tail a slight tuft of loose feathers.

Bill blackish-brown tinged with carmine; bare loral space dusky-green, as is the edge of the eyelids. Iris bright carmine. Feet greenish-black, the webs greyish-blue. Upper part of the head and tufts greyish-black tinged with green, as is the hind part of the ruff, its anterior part being brownish-red; side of the head and the throat white; fore neck white tinged with brown; breast silvery white, sides reddish-brown with dusky streaks; the upper parts are brownish-black, the feathers edged with lighter, the sides of the neck tinged with reddish, as is the rump. Wing-coverts greyish-brown, primary quills brownish-black, tips of the inner white, the middle secondaries white.

Length to end of tail 24 inches, to end of wings 21, to end of claws 29; extent of wings 33; wing from flexure  $7\frac{1}{2}$ ; bill along the ridge 2, along the edge of lower mandible  $2\frac{7}{12}$ ; tarsus  $2\frac{1}{2}$ ; third toe  $\frac{3}{4}$ , its claw  $\frac{1}{4}$ . Weight 2 lbs. 9 oz.

Adult Female in spring.

The female has the occipital feathers a little elongated, but wants the ruff on the neck. Bill dusky-green; bare loral space, edges of eyelids, and iris, as in the male. Upper part of head and hind neck blackish-grey; back and wings as in the male, but more tinged with grey; lower parts silvery white, the sides under the wings dusky.

Length to end of tail  $19\frac{1}{2}$ , to end of claws  $24\frac{1}{4}$ ; extent of wings 30; bill



along the back  $2\frac{1}{4}$ , along the edge of lower mandible  $2\frac{3}{4}$ ; tarsus  $2\frac{1}{4}$ ; third toe  $2\frac{1}{2}$ , its claw  $\frac{1}{4}$ . Weight 1 lb.  $6\frac{1}{2}$  oz.

The following account of the digestive organs of this species was taken from an adult male.

The œsophagus is nine and a half inches long; at its commencement, and for an inch and a half, it has a diameter of half an inch, for the next two inches only two-twelfths, towards the lower extremity four-twelfths; this, however, in the contracted state, the specimen having been kept in spirits. The mucous coat is raised into numerous longitudinal folds.

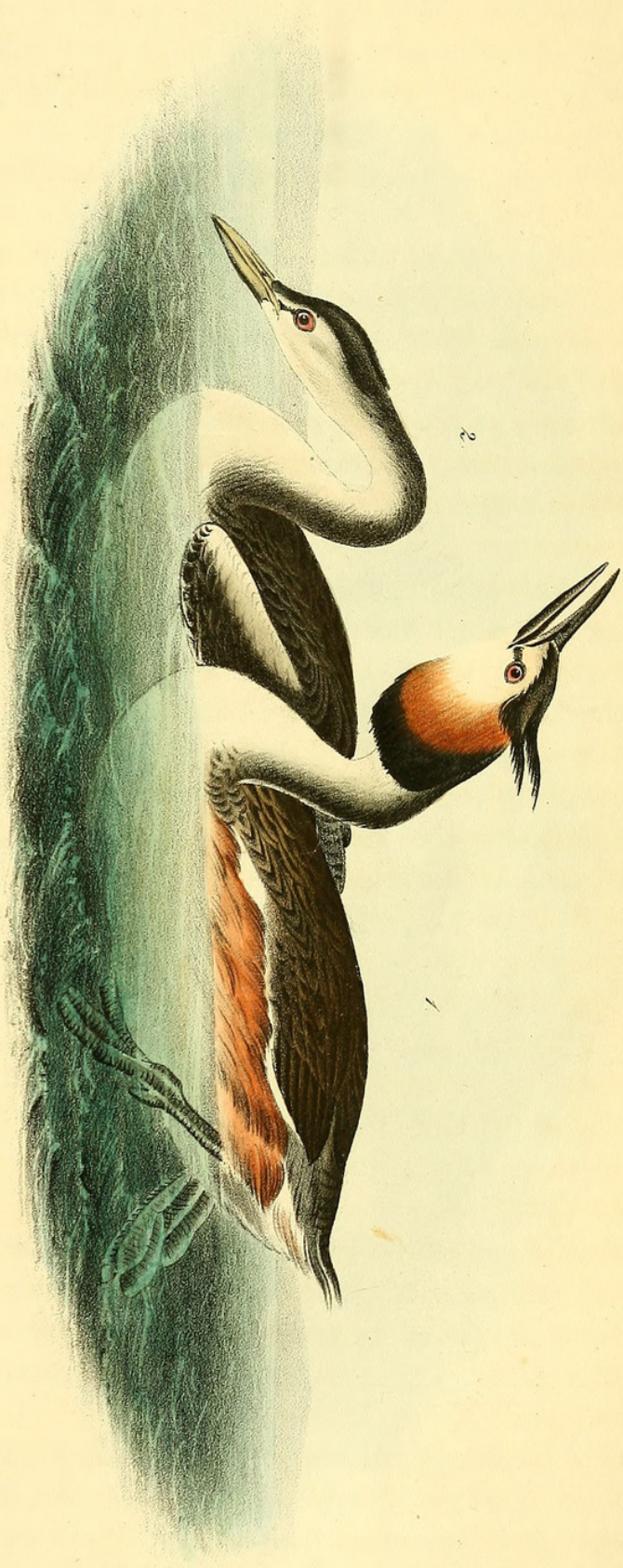
The walls of the proventriculus are extremely thick, the glands cylindrical, generally about a quarter of an inch long, and one-twelfth in diameter. The stomach is roundish, compressed, the muscular coat very thick, being that of a true gizzard, the tendons nearly half an inch in diameter; the inner coat thick, the cuticular lining very thick and rugous.

Between the orifice of the œsophagus and the pylorus is a rounded lobe, from the lower part of which the intestine comes off. The pylorus has no valve, but a thick marginal rim. The intestine, immediately after its commencement, dilates to the diameter of half an inch, and continues of that size for twelve inches, then gradually contracts for about six inches, when its diameter is four-twelfths, and again within six inches of the cœca becomes enlarged. The cœca come off at the distance of two inches from the anus, and are an inch and a half in length, a little enlarged towards their extremity, and rounded. The rectum is half an inch in diameter, the cloaca one inch. The entire length of the intestine is forty-two inches.

The heart is conical, rather pointed, and slightly curved. The trachea is flattened, of uniform diameter, the rings complete, 167 in number, its transverse diameter two inches and half a twelfth, contracted at the bifurcation to two-twelfths.

The tail of the Grebes is usually described as a small tuft of feathers; but on carefully removing the coverts and downy parts, the tail may be satisfactorily traced. In this species there are 14 feathers, on each side 7 arranged in a semicircular manner. The two middle feathers are separated to the distance of about  $\frac{2}{12}$ , and the two outer or lateral approach each other below, leaving an interval of about the same space. When the feathers are broken across near their bases, which they frequently are, there is thus produced the appearance of a small circular tuft. When perfect, they are about  $1\frac{1}{2}$  inches long, arched, with loose barbs, downy at their extremities.





W. 221

*Great Grebe*

1. Adult Male in Spring 2. Young (first Winter)

Drawn from Nature by J. T. Audubon, F.R.S. W.L.S.

Lith. Printed & Col<sup>d</sup> by J. T. Bowen, Phila.



Audubon, John James. 1844. "The Crested Grebe, *Podiceps cristatus*, Lath. [Pl. 479]." *The birds of America : from drawings made in the United States and their territories* 7, 308–311. <https://doi.org/10.5962/p.319596>.

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