

NEOTOMA FLORIDANA.—SAY et ORD.

FLORIDA RAT.

PLATE IV.—MALE, FEMALE, AND YOUNG.

N. corpore robusto, plumbeo, quoad lineam dorsalem nigro mixto, facie et lateribus fusco-flavescentibus, infra albo; cauda corpore paullo curtior, vellere molli.

CHARACTERS.

Body robust, lead colour, mixed with black on the dorsal line; face and sides ferruginous-yellow, beneath white, tail a little shorter than the body; fur soft.

SYNONYMES.

MUS FLORIDANUS, Ord, Nouv. Bull. de la Société Philomatique, 1818.

ARVICOLA FLORIDANUS, Harlan, Fauna Amer., p. 142.

“ “ Godman, Nat. Hist., vol. ii., p. 69.

MUS “ Say, Long's Expedition, vol. i., p. 54.

NEOTOMA FLORIDANA, Say et Ord, Journ. Acad. Nat. Sciences, Philadelphia, vol. iv., part. 2, p. 352, figure.

NEOTOMA FLORIDANA, Griffiths, Animal Kingdom, vol. iii., p. 160, figure.

DESCRIPTION.

The form of our very common white-footed or field-mouse (*Mus leucopus*) may be regarded as a miniature of that of the present species; its body has an appearance of lightness and agility, bearing some resemblance to that of the squirrel; snout elongated; eyes large, resembling those of the common flying squirrel (*P. volucella*); ears large, prominent, thin, sub-ovate, clothed so thinly with fine hair as to appear naked; tail covered with soft hair; whiskers reaching to the ears; legs robust; toes annulate beneath; thumb, minute; in the palms of the fore-feet there are five tubercles, and in the soles of the hind-feet six, of which the three posterior are distant from each other; nails, concealed by hairs, which extend considerably beyond them; mammæ, two before, and four behind.

COLOUR.

The body and head are lead-colour, intermixed with yellowish and



Drawn on Stone by R. Trenchard

Florida Rat.

Male Female & Young of different ages.

Drawn From Nature by J. J. Audubon F.R.S., F.L.S.

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black hair; the black preuominating on the ridge of the back and head, forming an indistinct dorsal line of dark brown, gradually fading away into the brownish-yellow colour of the cheeks and sides; border of the abdomen and throat, buff; whiskers, white and black; feet, white; under surface of body, white, tinged with cream colour.

In a very young specimen, the colour is dark brown on the upper surface, and plumbeous beneath; differing so much from the adult, that the unpractised observer might easily be led to regard it as a new species.

DIMENSIONS.

Adult Male.

From nose to root of tail	-	-	-	-	-	8 inches.
Length of tail	-	-	-	-	-	$5\frac{1}{8}$ do.
From fore-claws to hind-claws, when stretched	-					$13\frac{1}{4}$ do.
From nose to end of ears	-	-	-	-	-	$2\frac{1}{2}$ do.

Weight $7\frac{3}{4}$ ounces. Weight of an old Female, 8 ounces.

Young Male.

From nose to root of tail	-	-	-	-	-	$5\frac{1}{4}$ inches.
From fore-claws to hind-claws, when stretched	-					$8\frac{1}{2}$ do.
From nose to end of ear	-	-	-	-	-	$2\frac{3}{8}$ do.
Length of tail	-	-	-	-	-	$4\frac{1}{4}$ do.

HABITS.

The specimens from which we drew the figures we have given on our plate, which represents this species in various ages and attitudes on the branch of a pine tree, were obtained in South Carolina, and were preserved alive for several weeks in cages having wire fronts. They made no attempt to gnaw their way out. On a previous occasion we preserved an old female with three young (which latter were born in the cage a few days after the mother had been captured) for nearly a year; by which time the young had attained the size of the adult. We fed them on corn, potatoes, rice, and bread, as well as apples and other fruit. They seemed very fond of corn flour, (Indian meal,) and for several months subsisted on the acorns of the live oak. (*Quercus virens*.)

They became very gentle, especially one of them which was in a separate cage. It was our custom at dark to release it from confinement, upon which it would run around the room in circles, mount the table we were in the habit of writing at, and always make efforts to open a particular drawer in which we kept some of its choicest food.

There are considerable differences in the habits of this species in various parts of the United States, and we hope the study of these peculiarities may interest our readers. In Florida they burrow under stones and the ruins of dilapidated buildings. In Georgia and South Carolina they prefer remaining in the woods. In some swampy situation in the vicinity of a sluggish stream, amid tangled vines interspersed with leaves and long moss, they gather a heap of dry sticks which they pile up into a conical shape, and which, with grasses, mud, and dead leaves, mixed in by the wind and rain, forms, as they proceed, a structure impervious to rain, and inaccessible to the wild-cat, racoon, or fox. At other times, their nest, composed of somewhat lighter materials, is placed in the fork (branch) of a tree.

About fifteen years ago, on a visit to the grave-yard of the church at Ebenezer, Georgia, we were struck with the appearance of several very large nests near the tops of some tall evergreen oaks (*Quercus aquaticus*); on disturbing the nests, we discovered them to be inhabited by a number of Florida rats of all sizes, some of which descended rapidly to the ground, whilst others escaped to the highest branches, where they were concealed among the leaves. These nests in certain situations are of enormous size. We have observed some of them on trees, at a height of from ten to twenty feet from the ground, where wild vines had made a tangled mass over head, which appeared to be larger than a cart wheel and contained a mass of leaves and sticks that would have more than filled a barrel.

Those specimens, however, which we procured on our journey up the Missouri river, were all caught in the hollows of trees which were cut down by the crew, as we proceeded, for fuel for our steamer. LEWIS and CLARK, in their memorable journey across the Rocky Mountains, found them nestling among clefts in the rocks, and also in hollow trees. In this region they appeared to be in the habit of feeding on the prickly pear or Indian fig, (*Cactus opuntia*.) the travellers having found large quantities of seeds and remnants of those plants in their nests. In the Floridas, Mr. BARTRAM also found this species. He says, "they are singular with respect to their ingenuity and great labour in the construction of their habitations, which are conical pyramids about three feet high, constructed with dry branches which they collect with great labour and perseverance and pile up without any apparent order; yet they are so interwoven with one another that it would take a bear or wild cat some time to pull one of these castles to pieces, and allow the animals sufficient time to secure a retreat with their young."

This is a very active rat, and in ascending trees, exhibits much of the

agility of the squirrel, although we do not recollect having observed it leaping from branch to branch in the manner of that genus.

The Florida rat is, in Carolina, a very harmless species; the only depredation we have known it to commit, was an occasional inroad on the corn-fields when the grain was yet juicy and sweet. We have seen several whole ears of Indian corn taken from one of their nests, into which they had been dragged by these animals the previous night. They appear also to be very fond of the Chinquapin (*Castanea pumila*), and we have sometimes observed around their nests traces of their having fed on frogs and cray-fish.

This species is nocturnal, or at least crepuscular, in its habits. In procuring specimens we were only successful when the traps had been set over night. Those we had in captivity scarcely ever left their dark chambers till after sunset, when they came forth from their dormitories and continued playful and active during a great part of the night. They were mild in their dispositions, and much less disposed to bite when pursued than the common and more mischievous Norway rat.

Whilst the young are small they cling to the teats of the mother, who runs about with them occasionally without much apparent inconvenience; and even when older, they still, when she is about to travel quickly, cling to her sides or her back. Thus on a visit from home, she may be said to carry her little family with her, and is always ready to defend them even at the risk of her life. We once heard a gratifying and affecting anecdote of the attachment to its young, manifested by one of this species, which we will here relate as an evidence that in some cases we may learn a valuable lesson from the instincts of the brute creation.

Our friend GAILLARD STONEY Esq., sent us an old and a young Florida rat, obtained under the following circumstances. A terrier was seen in pursuit of a rat of this species, followed by two young about a third grown. He had already killed one of these, when the mother sprang forward and seized the other in her mouth, although only a few feet from her relentless enemy—hastened through a fence which for a moment protected her, and retreated into her burrow. They were dug out of the ground and sent to us alive. We observed that for many months the resting place of the young during the day was on the back of its mother.

From three to six are produced at a litter, by this species, which breeds generally twice a year; we have seen the young so frequently in March and August, that we are inclined to the belief that these are the periods of their reproduction. We have never heard them making any other noise than a faint squeak, somewhat resembling that of the brown rat. The very playful character of this species, its cleanly habits, its mild,

prominent, and bright eyes, together with its fine form and easy susceptibility of domestication, would render it a far more interesting pet than many others that the caprice of man has from time to time induced him to select.

GEOGRAPHICAL DISTRIBUTION.

This species is very widely scattered through the country. It was brought from East Florida by Mr. ORD, in 1818, but not published until 1825. It was then supposed by him to be peculiar to Florida, and received its specific name from that circumstance. We had, however, obtained a number of specimens, both of this species and the cotton rat, (*Sigmodon hispidum*), in 1816, in South Carolina, where they are very abundant. In Louisiana, Georgia, Alabama, Mississippi, Missouri, and the former States, it is a common species. Its numbers diminish greatly as we travel eastward. In North Carolina some specimens of it have been obtained. We observed a few nests among the valleys of the Virginia mountains; farther north we have not personally traced it, although we have somewhere heard it stated that one or two had been captured as far to the north as Maryland.

GENERAL REMARKS.

On a farther examination of BARTRAM's work, which is also referred to by GODMAN (Nat. Hist., vol. ii., p. 21), we find his descriptions of the habits of this species very accurate; the first part of that article, however, quoted by Dr. GODMAN, is evidently incorrect. "The wood rat," says BARTRAM, "is a very curious animal; they are not half the size of the domestic rat, of a dark brown or black colour; thin tail, slender and shorter in proportion, and covered thinly with short hair." The error of BARTRAM, in describing one species, and applying to it the habits of another, seems to have escaped the observation of Dr. GODMAN. The cotton rat, or as it is generally called, wood rat (*Sigmodon hispidum*), answers this description of BARTRAM, in its size, colour, and tail; but it does not build "conical pyramids;" this is the work of a much larger and very different species—the Florida rat of this article.

The adoption of the genus NEOTOMA, when proposed by SAY and ORD, was met with considerable opposition by naturalists of that day, and some severe strictures were passed upon it by Drs. HARLAN and GODMAN. (See HARLAN, p. 143, GODMAN, vol. ii., p. 72.) They contended that the variations in the teeth that separated this species from *Mus* and *Arvicola*, were not sufficient to establish genuine distinctions.

More recently naturalists have, however, examined the subject calmly

and considerably. It is certain that this genus cannot be arranged either under *Arvicola* or *Mus*, without enlarging the characters of one or the other of these genera. Another species, from the Rocky Mountains, has been discovered by Dr. RICHARDSON, (*Neotoma Drummondii*,) and we feel pretty confident that the genus will be generally adopted.



Audubon, John James and Bachman, John. 1851. "Neotoma floridana — Say et Ord., Florida Rat [Pl. IV, male, female and young]." *The quadrupeds of North America* 1, 32–37. <https://doi.org/10.5962/p.322500>.

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