SCIURUS CAPISTRATUS.-Bosc.

Fox Squirrel.

PLATE LXVIII

S. magnus, colorem variens; naso auriculisque albis; pilis crassis; cauda corpore longiore.

CHARACTERS.

Size, large; tail, longer than the body; hair, coarse; ears and nose, white; subject to great variety in colour.

SYNONYMES.

SCIURUS CAPISTRATUS; Bosc, Ann. du Mus., vol. i., p. 281.

" VULPINUS? Linn. Ed. Gmel., 1788.

" NIGER; Catesby.

BLACK SQUIRREL; Bartram's Travels in North America.

SCIURUS CAPISTRATUS; Desm. Mammalogie, p. 332.

" VARIEGATUS ; Desm. Mammalogie, p. 333.

" CAPISTRATUS; Cuv., Regne Animal, vol. i., p. 139.

Fox Squirrel, Lawson's Carolina, p. 124. Sciurus Capistratus ; Harlan.

SCIURUS VULPINUS ; Godman.

DESCRIPTION.

This is the largest and most interesting species of the genus, found in the United States. Although it is subject to great varieties of colour, occasioning no little confusion by the creation of several nominal species, yet it possesses several striking and uniform markings by which it may, through all its varieties, be distinguished at a glance from any other.

The Fox Squirrel is furnished with the following teeth, viz :--

Incisive
$$\frac{2}{2}$$
; Canine $\frac{00}{00}$; Molar $\frac{4-4}{4-4} = 20$.

But although we have thus given to this species but four grinders in the upper jaw, which peculiarity applies to nearly all the specimens that may

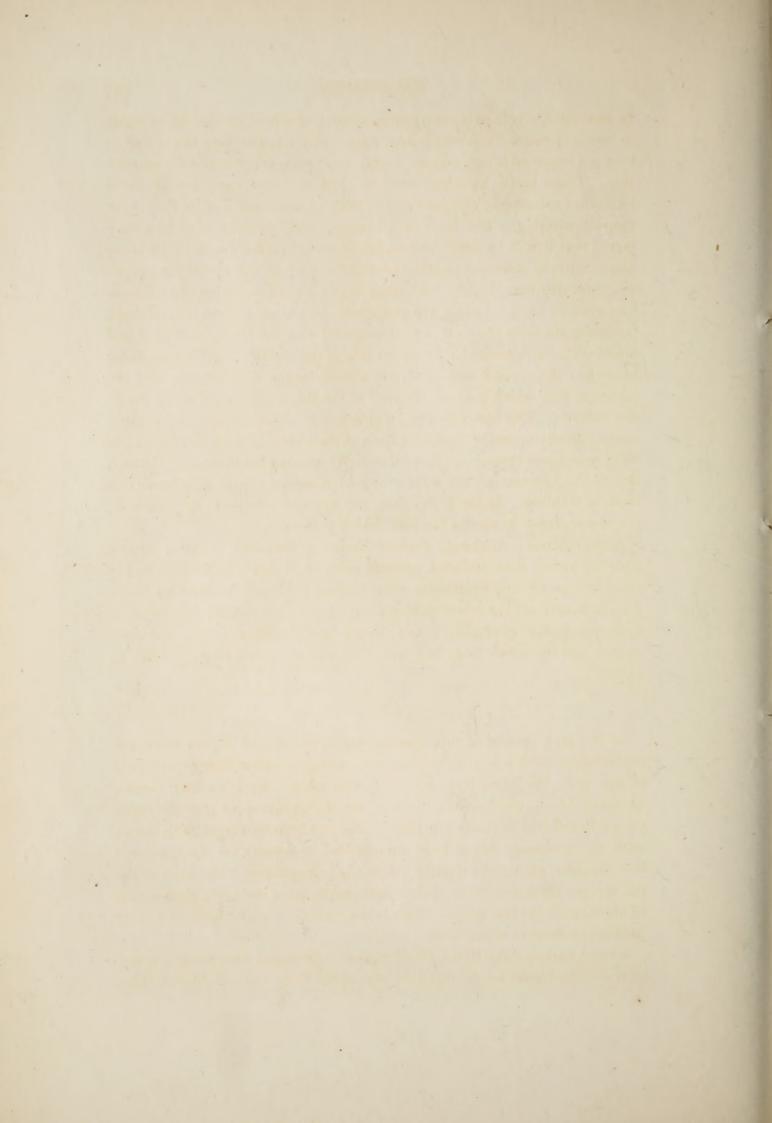


On Shore by W. K. Hitchstock

Fox Squirrel.

Frank Lore Nature build And has USCUTC

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be examined,-yet, in a very young animal, obtained on the 5th of April, in South Carolina, and which had apparently left the nest but a day or two, we observed a very minute, round, deciduous, anterior grinder on each side. These teeth, however, must be shed at a very early period; as in two other specimens, obtained on the 20th of the same month, they were entirely wanting. The teeth of all our squirrels present so great a similarity, that it will be found impossible to designate the species from these alone, without referring to other peculiarities which the eye of the practical naturalist may detect. In young animals of this species, the tuberculous crowns on the molars are prominent and acute; these sharp points, however, are soon worn off, and the tubercles in the adult are round and blunt. The first molar in the upper jaw is the smallest, and is triangular in shape; the second and third one a little larger and square; and the posterior one, which is about the size of the third, is rounded on its posterior surface. The upper incisors, which are of a deep orange colour anteriorly, are strong and compressed, deep at their roots, flat on their sides ; in some specimens there is a groove anteriorly running longitudinally through the middle, presenting the appearance of a double tooth; in others, this tooth is wanting. In the lower jaw, the anterior grinder is the smallest; the rest increase in size to the last, which is the largest.

Nose, obtuse; forehead, slightly arched; whiskers, a little longer than the head; ears, rounded, covered with short hairs on both surfaces; there is scarcely any projection of fur beyond the outer surface, as is the case in nearly all the other species; the hair is very coarse, appearing in some specimens geniculate; tail, broad and distichous; legs and feet, stout; and the whole body has more the appearance of strength than of agility.

COLOUR.

In the grey variety of this species, which is—as far as we have observed—the most common, the nose, extending to within four or five lines of the eyes, the ears, feet, and belly, are white; forehead and cheeks, brownish black; the hairs on the back are dark plumbeous near the roots, then a broad line of cinereous, then black, and broadly tipped with white, with an occasional black hair interspersed, especially on the neck and fore shoulder, giving the animal a light grey appearance; the hairs of the tail are, for three-fourths of their length, white from the roots, then a ring of black, with the tips white. This is the variety given by Bosc and other authors as *Sciurus capistratus*.

Second variety : the Black Fox Squirrel. Nose and ears, white ; a few light-coloured hairs on the feet ; the rest of the body and tail, black ; there

are, occasionally, a few white hairs in the tail. This is the original Black Squirrel of CATESBY and BARTRAM, (Sci. Niger.)

Third variety. Nose, mouth, under jaw and ears, white ; head, thighs and belly, black ; back and tail, dark grey. This is the variety alluded to by DESMAREST, (Ency. Method, Mammalogie, 333.)

There is a fourth variety, which is very common in Alabama, and also occasionally seen in the upper districts of South Carolina and Georgia, which has on several occasions been sent to us as a distinct species. The ears and nose, as in all the other varieties, are white. This, indeed, is a permanent mark, running through all the varieties, by which this species may be easily distinguished. Head and neck, black ; back, a rusty blackish brown ; neck, thighs, and belly, bright rusty colour ; tail, annulated with black and red. This is the variety erroneously considered by the author of the notes on McMURTRIE's "Translation of Cuvier," (see vol. i., Appendix, p. 433,) as Sciurus rufiventer.

The three first noted above are common in the lower and middle districts of South Carolina; and, although they are known to breed together, yet it is very rare to find any specimens indicating an intermediate variety. Where the parents are both black, the young are invariably of the same colour—the same may be said of the other varieties; where, on the other hand, there is one parent of each colour, an almost equal number are of the colour of the male, the other of the female. On three occasions, we had an opportunity of examining the young produced by progenitors of both colours. The first nest contained two black and two grey; and the third, three black and two grey. The colour of the young did not, in a majority of instances, correspond with that of the parent of the same sex : although the male parent was black, the young males were frequently grey, and vice versa.

DIMENSIONS.

						menes.	Lines.	
Length of	head and body	-	-	-	-	14	5	
46	tail vertebræ	-	-		-	12	4	
46	tail to tip -		-	-	-	15	2	
46	palm and middle	fore	claw	-	-	1	9	
	sole and middle h	ind o	law	-	-	2	11	
65	fur on the back	-	-	-	-		8	
Height of	ear. posteriorly	-	-	-	-		7	

HABITS.

Although there is a general similarity of habit in all the species of *Sciurus*, yet the present has some peculiarities which we have never

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noticed in any other. The Fox Squirrel, instead of preferring rich low lands, thickly clothed with timber, as is the case with the Carolina Grey Squirrel, is seldom seen in such situations; but prefers elevated pine ridges, where the trees are not crowded near each other, and where there is an occasional oak and hickory interspersed. It is also frequently found in the vicinity of rich valleys. to which it resorts for nuts, acorns and chinquepins, (castanea pumila,) which such soils produce. In some aged and partially decayed oak, this Squirrel finds a safe retreat for itself and mate ; a hollow tree of any kind is sufficient for its purpose if Nature has prepared a hole, it is occupied, if otherwise, the animal finds no difficulty in gnawing one or several, for its accommodation. The tree selected is in all cases hollow, and the Squirrel only gnaws through the outer shell in order to find a residence, which requires but little labour and skill to render it secure and comfortable. At other times, it takes possession of the deserted hole of the ivory-billed woodpecker, (Picus principalis).) The summer duck (Anas sponsa) too, is frequently a competitor for the same residence; contests for possession occasionally take place between these three species, and we have generally observed, that the tenant that has already deposited its eggs or young in such situations is seldom ejected. The male and female summer duck unite in chasing and beating with their wings any Squirrel that may approach their nests, nor are they idle with their bills and tongues, but continue biting, hissing and clapping their wings until the intruder is expelled. On the other hand, when the Squirrel has its young in the hole of a tree, and is intruded on, either by a woodpecker or a summer duck, it immediately rushes to its hole, and after having entered remains at the mouth of it, occasionally protruding its head, and with a low angry bark keeps possession, until the intruder, weary of the contest, leaves it unmolested. Thus Nature imparts to each species additional spirit and vigour in defence of its young; whilst at the same time, the intruder on the possessions of others, as if conscious of the injustice of his acts, evinces a degree of pusillanimity and cowardice.

In the vicinity of the permanent residence of the Fox Squirrel, several nests, composed of sticks, leaves and mosses, are usually seen on the pine trees. These are seldom placed on the summits, but in the forks, and more frequently where several branches unite and afford a secure basis for them. These nests may be called their summer home, for they seem to be occupied only in fine weather, and are deserted during wintry and stormy seasons.

In December and January, the season of sexual intercourse, the male chases the female for hours together on the same tree, running up one side and descending on the other, making at the same time a low gutteral noise,

that scarcely bears any resemblance to the barking which they utter on other occasions. The young are produced from the beginning of March, and sometimes earlier, to April. The nests containing them, which we have had opportunities of examining, were always in hollow trees. They receive the nourishment of the mother for four or five weeks, when they are left to shift for themselves, but continue to reside in the vicinity of, and even to occupy the same nests with, their parents till autumn. It has been asserted by several planters of Carolina, that this species has two broods during the season.

The food of the Fox Squirrel is various; besides acorns, and different kinds of nuts, its principal subsistence for many weeks in autumn is the fruit extracted from the cones of the pine, especially the long-leaved pitch pine, (Pinus palustris.) Whilst the green corn is yet in its milky state, this Squirrel makes long journeys to visit the fields, and for the sake of convenience frequently builds a temporary summer-house in the vicinity, in order to share with the little Carolina squirrel and the crow a portion of the delicacies and treasures of the husbandman; where he is also exposed to the risks incurred by the thief and plunderer: for these fields are usually guarded by a gunner, and in this way thousands of squirrels are destroyed during the green corn season. The Fox Squirrel does not appear to lay up any winter storesthere appears to be no food in any of his nests, nor does he, like the red squirrel, (Sciurus hudsonius), resort to any hoards which in the season of abundance were buried in the earth, or concealed under logs and leaves. During the winter season he leaves his retreat but seldom, and then only for a little while and in fine weather in the middle of the day. He has evidently the power, like the marmot and racoon, of being sustained for a considerable length of time without much suffering in the absence of food. When this animal makes his appearance in winter, he is seen searching among the leaves where the wild turkey has been busy at work, and gleaning the refuse acorns which have escaped its search ; at such times, also, this squirrel does not reject worms and insects which he may detect beneath the bark of fallen or decayed trees. Towards spring, he feeds on the buds of hickory, oak, and various other trees, as well as on several kinds of roots, especially the wild potato, (Apios tuberosa.) As the spring advances farther, he is a constant visitor to the black mulberry tree, (Morus rubra,) where he finds a supply for several weeks. From this time till winter, the fruits of the field and forest enable him to revel in abundance.

Most other species of this genus when alarmed in the woods immediately betake themselves to the first convenient tree that presents itself,—not so

with the Fox Squirrel. When he is aware of being discovered whilst on the ground, he pushes directly for a hollow tree, which is often a quarter of a mile distant, and it requires a good dog, a man on horseback, or a very swift runner, to induce him to alter his course, or compel him to ascend any other tree. When he is silently seated on a tree and imagines himself unperceived by the person approaching him, he suddenly spreads himself flatly on the limb, and gently moving to the opposite side, often by this stratagem escapes detection. When, however, he is on a small tree, and is made aware of being observed, he utters a few querulous barking notes, and immediately leaps to the ground, and hastens to a more secure retreat. If overtaken by a dog, he defends himself with great spirit, and is often an overmatch for the small terriers which are used for the purpose of treeing him.

He is very tenacious of life, and an ordinary shot gun, although it may wound him repeatedly, will seldom bring him down from the tops of the high pines to which he retreats when pursued, and in such situations the rifle is the only certain enemy he has to dread.

This Squirrel is seldom seen out of its retreat early in the morning and evening, as is the habit of other species. He seems to be a late riser, and usually makes his appearance at 10 or 11 o'clock, and retires to his domicile long before evening. He does not appear to indulge so frequently in the barking propensities of the genus as the other and smaller species. This note, when heard, is not very loud, but hoarse and gutteral. He is easily domesticated, and is occasionally seen in cages, but is less active and sprightly than the smaller species.

As an article of food, the Fox Squirrel is apparently equally good with any other species, although we have observed that the little Carolina squirrel is usually preferred, as being more tender and delicate. Where, however, squirrels are very abundant, men soon become surfeited with this kind of game, and in Carolina, even among the poorer class, it is not generally considered a great delicacy.

This species, like all the rest of the squirrels, is infested during the summer months with a troublesome larva (*Oestrus*), which fastening itself on the neck or shoulders, must be very annoying, as those most affected in this manner are usually poor and their fur appears thin and disordered. It is, however, less exposed to destruction from birds of prey and wild beasts than the other species. It leaves its retreat so late in the morning, and retires so early in the afternoon, that it is wholly exempt from the rapacity of owls, so destructive to the Carolina squirrel. We have seen it bid defiance to the attacks of the red-shouldered hawk (*Falco lineatus*), the only abundant species in the south; and it frequents high grounds

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and open woods, to which the fox and wild cat seldom resort, during the middle of the day, so that man is almost the only enemy it has to dread.

GEOGRAPHICAL DISTRIBUTION.

This species is said to exist sparingly in New Jersey. We have not observed it farther north than Virginia, nor could we find it in the mountainous districts of that state. In the pine forests of North Carolina, it becomes more common. In the middle and maritime districts of South Carolina it is almost daily met with, although it cannot be said to be a very abundant species anywhere. It exists in Georgia, Alabama, Mississippi, Florida and Louisiana.

GENERAL REMARKS.

This Squirrel has been frequently described under different names. Bosc appears to be entitled to the credit of having bestowed on it the earliest specific name. GMELLIN, in 1788, named it *S. vulpinus*. The black squirrel of CATESBY is the black variety of the present species.

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Audubon, John James and Bachman, John. 1851. "Sciurus capistratus, Fox Squirrel, [Pl. LXVIII]." *The quadrupeds of North America* 2, 132–138. <u>https://doi.org/10.5962/p.322543</u>.

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