



Drawn for Stone by W^m E. Hutton

Swift Fox

VULPES VELOX.—SAY.

SWIFT FOX. KIT FOX.

PLATE LII.—MALE.

V. gracilis, supra cano fulvaque varices, infra albus; v. fulvo minor.

CHARACTERS.

Smaller than the American red fox, body slender, gray above, varied with fulvous; beneath, white.

SYNONYMES.

KIT FOX, or small burrowing fox of the plains. Lewis and Clark, vol. i., p. 400.
Vol. iii., pp. 28. 29.

CANIS VELOX, Say. Long's Expedition, vol. ii., p. 339.

" " Harlan's Fauna, 91.

" " Godman's Nat. Hist., vol. i., p. 282.

CANIS CINEREO ARGENTATUS, Sabine, Franklin's Journey, p. 658.

" (vulpes) CINEREO ARGENTATUS, Richardson, Fa. B. Ame. p. 98.

DESCRIPTION.

This little species of Fox bears a great resemblance to our American red fox, in shape, but has a broader face and shorter nose than the latter species; in colour it approaches nearer to the gray fox. Its form is light and slender, and gives indication of a considerable capacity for speed; the tail is long, cylindrical, bushy, and tapering at the end.

The entire length from the insertion of the superior incisors to the tip of the occipital crest, is rather more than four inches and three-tenths: the least distance between the orbital cavities nine-tenths of an inch; between the insertion of the lateral muscles at the junction of the frontal and parietal bones, half an inch. The greatest breadth of this space on the parietal bones, thirteen-twentieths of an inch."—(SAY.) The hair is of two kinds, a soft dense and rather woolly fur beneath, intermixed with longer and stronger hairs.

COLOUR.

The fur on the back, when the hairs are separately examined, is from

the roots, for three-fourths of its length, of a light brownish gray colour, then yellowish brown, then a narrow ring of black, then a larger ring of pure white, slightly tipped at the apical part with black. The upper part of the nose is pale yellowish brown, on each side of which there is a patch of brownish, giving it a hoary appearance in consequence of some of the hairs being tipped with white; moustaches black; upper lip margined by a stripe of white hairs. There is a narrow blackish brown line between the white of the posterior angle of the mouth, which is prolonged around the margin of the lower lip. The upper part of the head, the orbits of the eyes, the cheeks and superior surface of the neck, back, and hips, covered with intermixed hairs, tipped with brown, black, and white, giving those parts a grizzled colour. Towards the posterior parts of the back there are many long hairs interspersed, that are black from the roots to the tip. The sides of the neck, the chest, the shoulders and flanks, are of a dull reddish orange colour; the lower jaw is white, with a tinge of blackish brown on its margins; the throat, belly, inner surface of legs, and upper surface of feet, are white. The outside of the forelegs, and the posterior parts of the hindlegs, are brownish orange. The slight hairs between the callosities of the toes are brownish. The tail is on the under surface yellowish gray with a mixture of black, and a few white hairs; the under surface is brownish yellow and black at the end.

DIMENSIONS.

	Feet.	Inches.
From point of nose to root of tail, - - -	1	8
Tail, (vertebræ,) - - - - -	0	9 $\frac{3}{4}$
“ to end of hair, - - - - -	1	0
From tip of nose to end of head, - - -	0	2 $\frac{1}{8}$
Between the eyes, - - - - -	0	1 $\frac{3}{4}$
Breadth between the ears, - - - - -	0	2 $\frac{3}{8}$

Weight 8 $\frac{1}{2}$ lbs.

Measurement of a young animal killed at Fort Union.

From point of nose to root of tail, - - -	1	0 $\frac{1}{4}$
Tail, (vertebræ,) - - - - -	0	4 $\frac{7}{8}$
“ to end of hair, - - - - -	0	5 $\frac{3}{4}$
Width at the shoulders, - - - - -	0	7 $\frac{1}{4}$
Length of head, - - - - -	0	3 $\frac{1}{2}$
Between the eyes, - - - - -	0	0 $\frac{7}{8}$
Breadth between the ears, - - - - -	0	1 $\frac{3}{4}$

HABITS.

The First Swift Fox we ever saw alive was at Fort Clark on the upper Missouri river, at which place we arrived on the 7th of June, 1843. It had been caught in a steel-trap by one of its fore-feet, and belonged to Mr. CHARDON, the principal at the Fort, who with great kindness and politeness presented it to us ; assuring us that good care would be taken of it during our absence, (as we were then ascending the river to proceed to the base of the Rocky Mountains,) and that on our return to the Mandan village, we might easily take it with us to New-York.

Mr. CHARDON informed us that this Fox was a most expert rat catcher, and that it had been kept in a loft without any other food than the rats and mice that it caught there. It was a beautiful animal, and ran with great rapidity from one side of the loft to another, to avoid us. On our approaching, it showed its teeth and growled much like the common red fox.

Soon after we left Fort Clark, between the western shore of the Missouri river and the hills called the "Trois mamelles" by the Canadian and French trappers, on an open prairie, we saw the second Swift Fox we met with on this journey. Our party had been shooting several buffaloes, and our friend Ed. HARRIS, Esq., and ourself, were approaching the hunters apace. We were on foot, and Mr. HARRIS was mounted on his buffalo horse, when a Swift Fox darted from a concealed hole in the prairie almost under the hoofs of my friend's steed. My gun was unfortunately loaded with ball, but the Fox was chased by Mr. HARRIS, who took aim at it several times but could not draw sight on the animal ; and the cunning fellow doubled and turned about and around in such a dexterous manner, that it finally escaped in a neighbouring ravine, and we suppose gained its burrow, or sheltered itself in the cleft of a rock, as we did not see it start again. This slight adventure with this (so called) Swift Fox convinced us that the accounts of the wonderful speed of this animal are considerably exaggerated ; and were we not disposed to retain its name as given by Mr. SAY, we should select that of Prairie Fox as being most appropriate for it. Mr. HARRIS, mounted on an Indian horse, had no difficulty in keeping up with it and overrunning it, which caused it to double as just mentioned. Had our guns been loaded with buck shot we should no doubt have killed it. It is necessary to say, perhaps, that all the authors who have written about this fox (most of whom appear to have copied Mr. SAY's account of it) assert that its extraordinary swiftness is one of the most remarkable characteristics of the animal. GODMAN observes that the fleetest antelope or deer,

when running at full speed, is passed by this little Fox with the greatest ease, and such is the celerity of its motion, that it is compared by the celebrated travellers above quoted, LEWIS and CLARK and Mr. SAY, "to the flight of a bird along the ground rather than the course of a quadruped."

There is nothing in the conformation of this species, anatomically viewed, indicating extraordinary speed. On the contrary, when we compare it with the red fox or even the gray, we find its body and legs shorter in proportion than in those species, and its large head and bushy tail give it rather a more heavy appearance than either of the foxes just named.

Dr. RICHARDSON informs us that the Saskachewan river is the most northern limit of the range of the Kit Fox. Its burrows he says are very deep and excavated in the open plains, at some distance from the woody country. LEWIS and CLARK describe it as being extremely vigilant, and say that it betakes itself on the slightest alarm to its burrow.

On our return to Fort Union after an excursion through a part of the adjacent country, we found at some distance from the stockade a young Swift Fox which we probably might easily have captured alive; but fearing that its burrow was near at hand, and that it would soon reach it and evade our pursuit, Mr. HARRIS shot it. This was the last specimen of this Fox that we were able to observe during our journey; we have given its measurement in a former part of this article. On our return voyage, we found on arriving at Fort Clark that the living Swift Fox given us by Mr. CHARDON was in excellent condition. It was placed in a strong wooden box lined in part with tin, and for greater security against its escape, had a chain fastened to a collar around its neck. During our homeward journey it was fed on birds, squirrels, and the flesh of other animals, and finally safely reached our residence, near New-York, where it was placed in a large cage box two-thirds sunk beneath the surface of the ground, completely tinned inside, and half filled with earth. When thus allowed a comparatively large space and plenty of earth to burrow in, the Fox immediately began to make his way into the loose ground, and soon had dug a hole large enough to conceal himself entirely. While in this commodious prison he fed regularly and ate any kind of fresh meat, growing fatter every day. He drank more water than foxes generally do, seemed anxious to play or wash in the cup which held his supply, and would frequently turn it over, spilling the water on the floor of the cage.

The cross fox which we described in our first volume does not appear to require water, during the winter months at least, when fed on fresh meat; as one that we have had in confinement during the past winter would not

drink any, and was not supplied with it for two or three months. Probably in a wild state all predatory animals drink more than when in confinement, for they are compelled to take so much exercise in the pursuit of their prey, that the evaporation of fluids, by perspiration, must go on rapidly; besides which, they would probably often try to appease the cravings of hunger by drinking freely, when unable to procure sufficient food.

GEOGRAPHICAL DISTRIBUTION.

The Swift Fox appears to be found on the plains of the Columbia river valley, as well as the open country of the region in which it has generally been observed, the extensive prairies of the eastern side of the Rocky Mountains.

It does not appear to be an inhabitant of New Mexico, Texas or California, as far as our information on the subject extends.

GENERAL REMARKS.

Our esteemed friend, Sir JOHN RICHARDSON, (*Fauna Boreali Americana*, p. 98,) has supposed that SCHREBER's description of *Canis cinereo argenteus*, applied to this species, and hence adopted his specific name, to the exclusion of SAY's name of *C. Velox*. In our first volume, (p. 172,) we explained our views on this subject. In the descriptions of *C. Virginianus* of SCHREBER, and *C. Argenteus*, ERX., they evidently described mere varieties of the gray fox, (*V. Virginianus*); we have consequently restored SAY's specific name, and awarded to him the credit of having been the first scientific describer of this animal.



Audubon, John James and Bachman, John. 1851. "Vulpes velox, Swift Fox [Pl. LII, male]." *The quadrupeds of North America* 2, 13–17.

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