On Stone by Wm E Hitchcock

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

Prairie Dog.

Prairie Marmot Squirrel.

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

SPERMOPHILUS LUDOVICIANUS.—ORD.

PRAIRIE MARMOT-SQUIRREL.—WISHTONWISH.—PRAIRIE DOG.

PLATE XCIX.—1. MALE. 2. FEMALE. 3. YOUNG.

S. super cervinus pilis nigris interspersis ; subtus sordide albus, ungue pollicari conico majusculo, caudâ brevi apicem versus fusco torquatâ.

CHARACTERS.

Back, reddish brown, mixed with grey and black ; belly, soiled white ; tail, short, banded with brown near the tip ; thumb-nail, rather large, and conical.

SYNONYMES

PRAIRIE DOG, Lewis and Clark's Exp., 1st vol., p. 67.

WISHTONWISH, Pike's Expedition, &c., p. 156.

ARCTOMYS LUDOVICIANUS, Ord, in Guthrie, Geog., 2d, 302, 1815.

ARCTOMYS MISSOURIENSIS, Warden, Descr. des Etats Unis, vol. 5., p. 567.

ARCTOMYS LUDOVICIANUS, Say, Long's Exped., 1st vol., p. 451.

ARCT. LUDOVICIANUS, Harlan, p. 160.

" " Godman, vol. 2, p. 114.

DESCRIPTION.

This animal in its external form has more the appearance of a marmot, than of a spermophile. It is short, thick, and clumsy, and is not possessed of the light, squirrel-like shape, which characterizes the *spermophili*. In its small cheek-pouches, however, being three-fourths of an inch in depth, and in the structure of its teeth, it approaches nearer the *spermophili*, and we have accordingly arranged it under that genus.

The head is broad and depressed ; nose short and blunt, hairy to the nostrils. Incisors, large, protruding beyond the lips ; eyes, large ; ears, placed far backwards, short, and oblong, being a mere flap nearly covered by the short fur ; neck, short and thick ; legs, short and stout. This species is pendactylous ; the rudimental thumb on the fore-feet protected by a sharp, conical nail ; nails, of medium size, scarcely channelled beneath, nearly straight, and sharp, extending beyond the hair ; tail, short

and bushy ; hair on the body, rather coarse ; under-fur, of moderate fineness. The female has ten mammæ arranged along the sides of the belly.

COLOUR.

The hair on the back is, from the roots, for one-third of its length, bluish-black, then soiled-white—then light-brown ; some of the hairs having yellowish-white, and others black, tips. The hairs on the under-surface, are at the roots bluish, and for nearly their whole length yellowish-white, giving the sides of face, cheeks, chin, and throat, legs, belly, and under-surface of tail a yellowish-white colour. Teeth, white ; moustaches and eyes, black ; nails, brown. The tail partakes of the colour of the back for three-fourths of its length, but is tipped with black, extending one inch from the end.

DIMENSIONS.

		MALE.	FEMALE.
Nose to root of tail,	- - -	13 inches	12 $\frac{3}{8}$ inches.
“ to end of tail,	- - -	16 $\frac{3}{4}$ do	15 $\frac{3}{4}$ do
Tail, vertebræ,	- - - -	2 $\frac{5}{8}$ do	2 $\frac{1}{4}$ do
“ to end of hair,	- - -	3 $\frac{1}{8}$ do	
Nose to anterior canthus,	- -	1 $\frac{1}{4}$ do	1 $\frac{1}{8}$ do
Height of ear,	- - - -	$\frac{7}{16}$ do	$\frac{7}{16}$ do
Width between eyes,	- - -	1 $\frac{1}{2}$ do	1 $\frac{5}{16}$ do
Length of fore-hand,	- - -	1 $\frac{5}{16}$ do	1 $\frac{1}{4}$ do
“ of heel and hind-foot	- -	2 $\frac{1}{8}$ do	2 do
Depth of pouch,	- - - -	$\frac{3}{4}$ do	
Diameter of ditto,	- - - -	$\frac{5}{8}$ do	

Feet slightly webbed at base.

HABITS.

The general impression of those persons who have never seen the “Prairie Dog” called by the French Canadians “*petit chien*,” would be far from correct in respect to this little animal, should they incline to consider it as a small “dog.” It was probably only owing to the sort of yelp, chip, chip, chip, uttered by these marmots, that they were called *Prairie Dogs*, for they do not resemble the genus *Canis* much more than does a common gray squirrel !

This noisy *spermophile*, or marmot, is found in numbers, sometimes hundreds of families together, living in burrows on the prairies ; and their galleries are so extensive as to render riding among them quite unsafe in

many places. Their habitations are generally called "dog-towns," or villages, by the Indians and trappers, and are described as being intersected by streets (pathways) for their accommodation, and a degree of neatness and cleanliness is preserved. These villages, or communities, are, however, sometimes infested with rattle-snakes and other reptiles, which feed upon the marmots. The burrowing owl, (*Surnia cunicularia*.) is also found among them, and probably devours a great number of the defenceless animals.

The first of these villages observed by our party, when we were ascending the Missouri river in 1843, was near the "Great bend" of that stream. The mounds were very low, the holes mostly open, and but few of the animals to be seen.

Our friend EDWARD HARRIS, Mr. BELL and MICHAUX, shot at them, but we could not procure any, and were obliged to proceed, being somewhat anxious to pitch our camp for the night, before dark. Near Fort George, (a little farther up the river,) we again found a village of these marmots, and saw great numbers of them. They do not *bark*, but utter a chip, chip, chip, loud and shrill enough, and at each cry jerk their tail, not erecting it, however, to a perpendicular.

Their holes are not straight down, but incline downwards, at an angle of about forty degrees for a little distance and then diverge sideways or upwards. We shot at two of these marmots which were not standing across their holes apparently, but in front of them, the first one we never saw after the shot; the second we found dying at the entrance of the burrow, but at our approach it worked itself backward—we drew our ramrod and put the screw in its mouth, it bit sharply at this, but notwithstanding our screwing, it kept working backward, and was soon out of sight and beyond the reach of our ramrod.

Mr. BELL saw two enter the same hole, and Mr. HARRIS observed three. Occasionally these marmots stood quite erect, and watched our movements, and then leaped into the air, all the time keeping an eye on us. We found that by lying down within twenty or thirty steps of their holes, and remaining silent, the animals re-appeared in fifteen or twenty minutes. Now and then one of them, after coming out of its hole, issued a long and somewhat whistling note, perhaps a call, or invitation to his neighbours, as several came out in a few moments. The cries of this species are probably uttered for their amusement, or as a means of recognition, and not, especially, at the appearance of danger. They are, as we think, more in the habit of feeding by night than in the day time; their droppings are scattered plentifully in the neighbourhood of their villages.

A few days after this visit to the Prairie Dogs, one of our hunters, who

had been out a great part of the night, brought in three of them, but they had been killed with very coarse shot, and were so badly cut and torn by the charge, that they were of little use to us. We ascertained that these marmots are abundant in this part of the country, their villages being found in almost every direction.

From the number of teats in the female, the species is no doubt very prolific.

On our return down the river, we killed two Prairie Dogs on the 23d of August, their notes resembled the noise made by the Arkansas flycatcher precisely.

We have received an interesting letter from Col. ABERT of the Topographical bureau at Washington City, giving us an account of the quadrupeds and birds observed by Lieut. ABERT, on an exploratory journey in the south-west, in New Mexico, &c. Lieut. ABERT observed the Prairie Dogs in that region of country, in the middle of winter; he says "our Prairie Dog (a marmot) does not hibernate, but is out all winter, as lively and as pert as on any summer day."

This is not in accordance with the accounts of authors, who have it that this animal does hibernate. We find it stated that it "closes accurately the mouth of the burrow, and constructs at the bottom of it a neat globular cell of fine dry grass, having an aperture at top sufficiently large to admit a finger, and so compactly put together that it might almost be rolled along the ground uninjured." We feel greatly obliged to Lieut. ABERT, for the information he gives us, which either explodes a long received error, or acquaints us with a fact of some importance in natural history—that changes of climate will produce so great an effect as to abrogate a provision of nature, bestowed upon some animals, to enable them to exist during the rigorous winters of the north; so that, by migrating to a warmer region, species that would, in high latitudes be compelled to sleep out half their lives, could enjoy the air and light, and luxuriate in the sense of "being alive" all the circling year! We have not been able to gather any information in relation to this subject since receiving the above-mentioned letter, but in our article on *Arctomys monax*, (vol. i., p. 20) some curious facts were related in respect to the effect of artificial heat, applied from time to time to that animal, when in a torpid state, which produced each time a temporary animation; thus shewing that a certain absence of caloric causes hibernation immediately, while its presence arouses the powers of life in a few minutes. The special construction of hibernating animals is not (as far as we have ascertained) yet explained by the researches of comparative anatomy.

Lewis and Clark give a very good description of the Prairie Dog, at

page 67, vol. 1. They poured five barrels of water into one of their holes without filling it, but dislodged and caught the owner. They further say that after digging down another of the holes for six feet, they found on running a pole into it that they had not yet dug half-way to the bottom ; they discovered two frogs in the hole, and near it killed a dark rattlesnake, which had swallowed one of the Prairie Dogs.

Our friend Dr., now Sir JOHN RICHARDSON, (in the *Fauna Boreali Americana*,) has well elucidated the notices of this and other species described in LEWIS and CLARK's "Expedition," but, appears not to be certain whether this animal has cheek-pouches or not, and is puzzled apparently by the following: "the jaw is furnished with a *pouch* to contain his food, but not so large as that of the common squirrel." The Dr. in a note says—"It is not easy to divine what the "common squirrel is which has ample cheek-pouches." We presume that this passage can be made plain by inserting the word *ground* so that "common *ground*-squirrel" be the reading. The "common ground-squirrel" was doubtless well known to LEWIS and CLARK, and has ample cheek-pouches (see our account of *Tamias Lysterii*, vol. 1, p. 65.) This explanation would not be volunteered by us but for our respect for the knowledge and accuracy of LEWIS and CLARK, both of whom we had the pleasure of personally knowing many years ago.

For an amusing account of a large village of these marmots, we extract the following from KENDALL's Narrative of the Texan Santa Fé Expedition, vol. 1, p. 189. "We had proceeded but a short distance, after reaching this beautiful prairie, before we came upon the outskirts of the commonwealth, a few scattering dogs were seen scampering in, their short, sharp yelps giving a general alarm to the whole community. The first brief cry of danger from the outskirts was soon taken up in the centre of the city, and now nothing was to be heard or seen in any direction but a barking, dashing, and scampering of the mercurial and excitable denizens of the place, each to his burrow.

Far as the eye could reach the city extended, and all over it the scene was the same. We rode leisurely along until we had reached the more thickly settled portion of the place. Here we halted, and after taking the bridles from our horses to allow them to graze, we prepared for a regular attack upon the inhabitants. The burrows were not more than ten or fifteen yards apart, with well trodden paths leading in different directions, and I even fancied I could discover something like regularity in the laying out of the streets.

We sat down upon a bank under the shade of a musquit, and leisurely surveyed the scene before us. Our approach had driven every one to his home in our immediate vicinity, but at the distance of some hundred yards

the small mound of earth in front of each burrow was occupied by a Dog, sitting erect on his hinder legs, and coolly looking about for the cause of the recent commotion. Every now and then some citizen, more adventurous than his neighbour, would leave his lodgings on a flying visit to a friend, apparently exchange a few words, and then scamper back as fast as his legs would carry him.

By-and-by, as we kept perfectly still, some of our near neighbours were seen cautiously poking their heads from out their holes, and looking craftily, and, at the same time, inquisitively about them. Gradually a citizen would emerge from the entrance of his domicile, come out upon his observatory, perk his head cunningly, and then commence yelping somewhat after the manner of a young puppy—a quick jerk of the tail accompanying each yelp. It is this short bark alone that has given them the name of Dogs, as they bear no more resemblance to that animal, either in appearance, action, or manner of living, than they do to the hyena.

We were armed, one with a double-barrelled shot-gun, and another with one of Colt's repeating-rifles of small bore, while I had my short heavy rifle, throwing a large ball, and acknowledged by all to be the best weapon in the command. It would drive a ball completely through a buffalo at the distance of a hundred and fifty-yards, and there was no jumping off or running away by a deer when struck in the right place; to use a common expression, "he would never know what had hurt him." Hit one of the Dogs where we would, with a small ball, he would almost invariably turn a peculiar somerset, and get into his hole, but by a ball, from my rifle, the entire head of the animal would be knocked off, and after this, there was no escape. With the shot-gun again, we could do nothing but waste ammunition. I fired it at one Dog not ten steps off, having in a good charge of buck-shot, and thought I must cut him into fragments. I wounded him severely, but with perhaps three or four shot through him, he was still able to wriggle and tumble into his hole.

For three hours we remained in this commonwealth, watching the movements of the inhabitants and occasionally picking off one of the more unwary. No less than nine were got by the party; and one circumstance I would mention as singular in the extreme, and shewing the social relationship which exists among these animals, as well as the kind regard they have for one another. One of them had perched himself upon the pile of earth in front of his hole, sitting up and exposing a fair mark, while a companion's head was seen poking out of the entrance, too timid, perhaps, to trust himself farther. A well-directed ball from my rifle carried away the entire top of the former's head, and knocked him some two or three feet from his post perfectly dead. While reloading, the other boldly came

out, seized his companion by one of his legs, and before we could reach the hole had drawn him completely out of sight. There was a touch of feeling in the little incident, a something human, which raised the animals in my estimation, and ever after I did not attempt to kill one of them, except when driven by extreme hunger."

Mr. KENDALL says, further on, of these animals:—"They are a wild, frolicsome, madcap set of fellows when undisturbed, uneasy and ever on the move, and appear to take especial delight in chattering away the time, and visiting from hole to hole to gossip and talk over each other's affairs—at least, so their actions would indicate. When they find a good location for a village, and there is no water in the immediate vicinity, old hunters say, they dig a well to supply the wants of the community. On several occasions I crept close to their villages, without being observed, to watch their movements. Directly in the centre of one of them I particularly noticed a very large Dog, sitting in front of the door or entrance to his burrow, and by his own actions and those of his neighbours, it really seemed as though he was the president, mayor, or chief—at all events, he was the "big dog" of the place. For at least an hour I secretly watched the operations in this community. During that time the large Dog I have mentioned received at least a dozen visits from his fellow-dogs, which would stop and chat with him a few moments, and then run off to their domicils. All this while he never left his post for a moment, and I thought I could discover a gravity in his deportment not discernible in those by which he was surrounded. Far is it from me to say, that the visits he received were upon business, or had anything to do with the local government of the village; but it certainly appeared so. If any animal has a system of laws regulating the body politic, it is certainly the Prairie Dog."

This marmot tumbles, or rolls over, when he enters his hole, "with an eccentric bound and half-somerset, his hind-feet knocking together as he pitches headlong into the darkness below; and before the spectator has recovered from the half-laugh caused by the drollery of the movement, he will see the Dog slowly thrust his head from his burrow, and with a pert and impudent expression of countenance, peer cunningly about, as if to ascertain the effect his recent antic had caused."

Mr. KENDALL thinks that the burrowing owl, which he mentions as "a singular species of owl, invariably found residing in and about the dog towns," is on the best of terms with these marmots, and says, "as he is frequently seen entering and emerging from the same hole, this singular bird may be looked upon as a member of the same family, or at least, as a retainer whose services are in some way necessary to the comfort and

well-being of the animal whose hospitality he shares." This idea is doubtless incorrect, and we would almost hazard the assertion that these owls prey upon the young, or even the adults, of these marmots; they also, probably, devour the bodies of those which die in their holes, and thus may stand toward the animals in the light of sexton and undertaker! Mr. KENDALL is entirely correct in what he says about the rattle-snakes, which dwell in the same lodges with the Dogs. "The snakes I look upon as loafers, not easily shaken off by the regular inhabitants, and they make use of the dwellings of the Dogs as more comfortable quarters than they can find elsewhere. We killed one a short distance from a burrow, which had made a meal of a half-grown Dog; and although I do not think they can master the larger animals, the latter are still compelled to let them pass in and out without molestation—a nuisance, like many in more elevated society, that cannot be got rid of."

Mr. KENDALL and his companions found the meat of this species "exceedingly sweet, tender, and juicy—resembling that of the squirrel, only that it was much fatter."

None of these animals were seen by J. W. AUDUBON in his journey through that part of Texas lying between Galveston and San Antonio, and he only heard of one village, to the northward and westward of Torrey's Lodge; they do not approach the coast apparently, being found only on the prairies beyond, or to the westward of the wooded portions of that State. A collector of animals and birds, who has passed the last three years in various parts of Mexico, and who showed us his whole collection, had none of these marmots, and we suppose their range does not extend as far south as the middle portions of that country.

GEOGRAPHICAL DISTRIBUTION.

This species is found on the banks of the Missouri and its tributaries. It also exists near the Platte river in great abundance. It was seen by J. W. AUDUBON in limited numbers in Sonora and on the sandy hills adjoining the Tulare Valley, and in other parts of California. We do not know whether it is an inhabitant of Oregon or not.

Audubon, John James and Bachman, John. 1851. "Spermophilus ludovicianus, Prairie Dog, Prairie Marmot-Squirrel [Pl. XCIX, male, female, young]." *The quadrupeds of North America* 2, 319–326. <https://doi.org/10.5962/p.322582>.

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