Drawn on Stone by R. Trembly

Forster's Rocky Mountain Hare
Male & Female

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

Printed by Nagel & Weingartner N.Y.

GENUS LEPUS.—LINN.

DENTAL FORMULA.

$$\text{Incisive } \frac{4}{2}; \text{ Canine } \frac{0-0}{0-0}; \text{ Molar } \frac{6-6}{5-5} = 28.$$

Upper incisors in pairs, two in front large and grooved, and two immediately behind, small; lower incisors square; molars, with flat crowns, and transverse laminæ of enamel. Interior of the mouth and soles of the feet furnished with hair; ears and eyes large; fore-feet with five toes; hind-feet with only four; hind-legs very long; tail short; mam-mæ, from six to ten.

The word *Lepus* is derived from the Latin, *lepus*, and Greek Eolic, λεπρις, (*leporis*,) a hare.

There are about thirty known species of this genus, of which rather the largest number (perhaps sixteen or seventeen species) exist in North and South America; while the remainder belong to the Eastern continent.

LEPUS TOWNSENDII.—BACH.

TOWNSEND'S ROCKY MOUNTAIN HARE.

PLATE III.—MALE AND FEMALE.

L. magnitudine, L. Americano par; auribus, cauda, cruribus tarsisque longissimis; supra diluti cinereus, infra albus.

CHARACTERS.

Size of the Northern hare, (L. Americanus :) ears, tail, legs, and tarsus, very long; colour above, light gray; beneath, white.

SYNONYMES.

LEPUS TOWNSENDII, Bach., Journal Acad. Nat. Sciences, Philadelphia, vol. viii., part 1, p. 90, pl. 2, (1839,) read Aug. 7, 1838.

DESCRIPTION

Body, long and slender; head, much arched; eyes large; ears, long; tail very long, (compared with others of the genus,) in proportion to the size of the animal; legs long and slender; tarsus very long. The whole conformation of this animal is indicative of great speed.

COLOUR.

Crown of the head, cheeks, neck, whole upper parts, and the front of the ears and legs, externally, gray; with a faint cream-coloured tinge. Hair, on back and sides, whitish, or silver gray, at the roots, followed by brownish-white, which is succeeded by black, subdued gradually to a faint yellowish-white, and finally tipped with black, interspersed with long silky hairs, some of which are black from their roots. On the chin throat, under surface, interior of legs, and the tail, (with the exception of a narrow dark line running longitudinally on the top,) the hair is pure white from the roots. Irides light hazel; around the eyes white; back part of the tips of the ears black; external two-thirds of the hinder part of the ears white, running down to the back part of the neck, and then blending with the colour of the upper surface; anterior third of the outer portion of the ear, the same gray colour as the back, fringed on the edge with long hairs, which are reddish fawn colour at the roots and white at the tips; interior of the ear very thinly covered with beautiful fine white hairs, being more thickly clothed near the edge, where it is grizzly-black and yellowish; edge, fringed with pure white, becoming yellowish toward the tip, and at the tip black. Moustaches for the most part white, black at the roots, a few hairs are pure white, others wholly black.

The specimen which was described and first published in the Transactions of the Academy of Natural Sciences of Philadelphia, was a female, procured by J. K. TOWNSEND, Esq., on the Walla-Walla, one of the sources of the Columbia river.

Another specimen now in our possession, the dimensions of which are given below, is in summer pelage, having been obtained on the 9th June. There is scarcely a shade of difference in its general colour, although the points of many of the hairs are yellowish-white, instead of being tipped with black, as in the specimen obtained by Mr. TOWNSEND. There is also a white spot on the forehead. The young is a miniature of the adult. We observe no other differences than that the colour is a little lighter, and the tail pure white.

DIMENSIONS.

Adult Male, (killed on the Upper Missouri river.)

From nose to root of tail	-	-	-	-	-	21½ inches.
Tail (vertebræ)	-	-	-	-	-	3½ do.
Do., to end of hair	-	-	-	-	-	4¾ do.
Height of ear, posteriorly	-	-	-	-	-	5½ do.
Length of head in a direct line	-	-	-	-	-	4⅝ do.
“ “ following the curvature	-	-	-	-	-	5¼ do.
“ from heel to end of claw	-	-	-	-	-	5⅝ do.

Weight, 6½ pounds.

Adult Female, (shot by EDWARD HARRIS, Esq., on the 27th July, 1843.)

From nose to root of tail	-	-	-	-	-	21 inches.
Tail (vertebræ)	-	-	-	-	-	3 do.
Do., to end of hair	-	-	-	-	-	4½ do.
Height of ear, posteriorly	-	-	-	-	-	5¼ do.
Between the eyes	-	-	-	-	-	2 do.
From nose to hind feet (stretched out)	-	-	-	-	-	36 do.
Height from foot to shoulder	-	-	-	-	-	13½ do.
Height to rump	-	-	-	-	-	14 do.

Young.

From nose to root of tail	-	-	-	-	-	12 inches.
Tail (vertebræ)	-	-	-	-	-	1¼ do.
Do., to end of hair	-	-	-	-	-	2⅛ do.
Height of ear, posteriorly	-	-	-	-	-	2⅝ do.
Height from claw to shoulder	-	-	-	-	-	7⅞ do.
Length of head in a direct line	-	-	-	-	-	2¾ do.
“ “ following the curve	-	-	-	-	-	3¾ do.
“ from heel to end of claw	-	-	-	-	-	3⅝ do.

HABITS.

We subjoin the following note, received from the original discoverer of this Hare, which contains some valuable information in regard to its habits:—"This species is common in the Rocky Mountains. I made particular inquiries both of the Indians and British traders, as to the changes it undergoes at different seasons, and they all agreed that it never was lighter coloured. We first saw it on the plains of the Blackfoot river, east of the mountains, and observed it in all similar situations during our route to the Columbia. When first seen, which was in July, it was lean

and unsavory, having, like our common species, the larva of an insect imbedded in its neck; but when we arrived at Walla-Walla, in September, we found the Indians and the persons attached to the fort using it as a common article of food. Immediately after we arrived we were regaled with a dish of hares, and I thought I had never eaten anything more delicious. They are found in great numbers on the plains covered with wild wormwood, (*Artemesia*.) They are so exceedingly fleet that no ordinary dog can catch them. I have frequently surprised them in their forms and shot them as they leaped away, but I found it necessary to be very expeditious and to pull trigger at a particular instant, or the game was off among the wormwood and I never saw it again. The Indians kill them with arrows by approaching them stealthily as they lie concealed under the bushes, and in winter take them with nets. To do this, some one or two hundred Indians, men women and children, collect, and enclose a large space with a slight net about five feet wide, made of hemp; the net is kept in a vertical position by pointed sticks attached to it and driven into the ground. These sticks are placed about five or six feet apart, and at each one an Indian is stationed with a short club in his hand. After these arrangements are completed a large number of Indians enter the circle and beat the bushes in every direction. The frightened hares dart off towards the net, and in attempting to pass are knocked on the head and secured. Mr. PAMBRUN, the superintendent of Fort Walla-Walla, from whom I obtained this account, says that he has often participated in this sport with the Indians and has known several hundred to be thus taken in a day. When captured alive they do not scream like the common gray rabbit, (*L. Sylvaticus*.) "This Hare inhabits the plains exclusively, and seems particularly fond of the vicinity of the aromatic wormwood. Immediately you leave these bushes in journeying towards the sea you lose sight of the Hare."

To the above account we added some farther information on our last visit to the far West. On the 8th June 1843 whilst our men were engaged in cutting wood and bringing it on board the steamer Omega, it being necessary in that wild region to stop and cut wood for fuel for the boat every day, one of the crew started a young Hare and after a short chase the poor thing squatted and was killed by a blow with a stick. It proved to be the young of *Lepus Townsendii*, was large enough to have left its dam, weighed rather more than one pound, and was a beautiful specimen. Its irides were pure amber colour and the eyes large, its hair was slightly curled. This Hare was captured more than twelve hundred miles east of the Rocky Mountains. On the next day in the afternoon one of the negro fire-tenders being out with a rifle, shot two others, both

old individuals; one of them was however cut in two by the ball and left on the spot. The hair, or fur, of this individual was slightly curled, as in the young one, especially along the back and sides, but shortly after the skins had been prepared this character disappeared. These specimens are now in our collection.

Pursuing our journey up the tortuous and rapid stream, we had not the good fortune to see any more of these beautiful animals until after our arrival at FORT UNION near the mouth of the Yellow Stone river, where we established ourselves for some time by the kind permission of the gentlemen connected with the fur trade.

On the 29th of July on our return from a buffalo-hunt, when we were some forty or fifty miles from the fort suddenly a fine hare leaped from the grass before us and stopped within twenty paces. Our friend, EDWARD HARRIS, Esq., was with us but his gun was loaded with ball and ours with large buck-shot intended for killing antelopes; we fired at it but missed: away it went, and ran around a hill, Mr. HARRIS followed, and its course being seen by Mr. BELL, who observed "Pussy" stealing carefully along with her ears low down trying to escape the quick eyes of her pursuers, the former gentleman came up to and shot her.

This species, like all others of the same family, is timid and fearful in the extreme. Its speed, we think, far surpasses that of the European hare, (*L. timidus*.)

If the *form* is indicative of character, this animal, from its slender body long hind legs and great length of tarsus must be the fleetest of the hares of the West.

These hares generally place or construct their forms under a thick willow bush, or if at a distance from the water-courses on the banks of which those trees grow, or when they are in the open prairie, they place them under the edge of some rock, or seek the shelter of a stone or large tuft of grass.

The Rocky Mountain Hare produces from four to six young in the year. As far as we have been able to ascertain it has but one litter. The young suck and follow the dam for about six weeks after which she turns them off and leaves them to provide for themselves. The flesh of this species resembles in flavour that of the European hare, but is white, instead of dark-coloured, as is the case with the latter.

GEOGRAPHICAL DISTRIBUTION.

Although the entire geographical range of this species has not been well defined, yet it must be very considerable. It is found in great numbers, long ere the western traveller has passed the prairies, on the

shores of the lower Missouri, and has a range of fifteen hundred miles east of the great Rocky Mountain Chain.

According to Mr. TOWNSEND it is common on the Rocky Mountains and exists in considerable numbers on the western side of that great chain; and if travellers have not confounded it with other species it extends southwardly as far as Upper California.

The period may arrive when civilization shall have drawn wealth and a large population into these regions. Then will in all probability this poor hare be hunted by greyhounds followed by gentlemen on horseback; and whilst the level plains of our vast prairies will afford both dogs and horsemen every opportunity of rapid pursuit, the great swiftness of this species will try their powers and test their speed to the utmost.

GENERAL REMARKS.

We have, since this species was first described had some misgivings in regard to its being entitled to the name by which we have designated it.

We had previously (Journ. Acad. Nat. Scien., vol. vii., part. 2, p. 349, and vol. viii., part 1, p. 80) described a species from the West, in its white winter colour, under the name of *L. campestris*. We had no other knowledge of its summer dress than that given us by LEWIS and CLARK. Being however informed by Mr. TOWNSEND, who possessed opportunities of seeing it in winter, that the present species never becomes white, we regarded it as distinct and bestowed on it the above name. We have been since assured by the residents of Missouri, that like the Northern hare, *Lepus Townsendii* assumes a white garb in winter, and it is therefore probable that the name will yet require to be changed to *L. campestris*. As, however, another hare exists on the prairies of the West, the specific characters of which have not yet been determined, we have concluded to leave it as it stands, supposing it possible that the white winter colour may belong to another species.

Audubon, John James and Bachman, John. 1851. "Lepus townsendii — Bach., Townsend's Rocky Mountain Hare [Pl. III, male and female]." *The quadrupeds of North America* 1, 25–30. <https://doi.org/10.5962/p.322475>.

View This Item Online: <https://www.biodiversitylibrary.org/item/108513>

DOI: <https://doi.org/10.5962/p.322475>

Permalink: <https://www.biodiversitylibrary.org/partpdf/322475>

Holding Institution

Duke University Libraries (archive.org)

Sponsored by

Duke University Libraries

Copyright & Reuse

Copyright Status: Not provided. Contact Holding Institution to verify copyright status.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.