

ZOÖLOGICAL SCIENCE
OR
NATURE IN LIVING FORMS,

ILLUSTRATED BY NUMEROUS PLATES.

ADAPTED TO ELUCIDATE THE

CHART OF THE ANIMAL KINGDOM,

BY A. M. REDFIELD,

AND

"Ask now the beasts, and they shall teach thee; and the fowls of the air, and they shall tell thee; or speak to the earth, and it shall teach thee; and the fishes of the sea shall declare unto thee. Who knoweth not in all these that the hand of the Lord hath wrought this?" (Job xii. 7.)

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one third larger than *P. volucella*. *P. alpinus*, of the Rocky Mountains, is still larger.

II. *Arctomyidae*, (Gr. *αρκτος*, *arktos*, bear; *μυς*, *mus*, mouse.)
MARMOTS.

This family is nearly allied to the Squirrels, among which Swainson places them. Sometimes they have been arranged with the RATS. They have a large and somewhat flattened head, ten molars above and eight below, heavy body, short bushy tail and short limbs. Some of the species have cheek pouches. They live in communities and all burrow and hibernate.

Spermophilus, MARMOT SQUIRRELS, sometimes ranked as a sub-genus, (Gr. *σπερμα*, *sperma*, seed; and *φιλος*, *philos*, lover.)

This includes animals so named by Cuvier from their fondness for seed, and furnished with cheek pouches. Of them there are several species. One of these is *S. ludovicianus*, (Lat. *ludo*, to sport or frisk; *vicinia*, vicinity or neighborhood,) so named because living and sporting together in large communities. This is the *Prairie Dog* of Missouri and California, an appellation which Audubon says was probably given to the animal from its yelp,—“*chip, chip, chip* ;” it is not like a dog in its form. The numbers of these animals are very great; they sit on their little mounds at the entrances of their burrows, “chirping and chattering to one another like two neighboring gossips in a village.”—(Hon. C. A. Murray.)

Arctomys, MARMOT. Of this genus there are also several species, which have the form, teeth, and habits of the preceding, but only rudimentary cheek pouches. *A. alpinus*, the ALPINE MARMOT is about the size of a rabbit, of a grayish yellow color, approaching to a brown towards the head; inhabits the mountains of Europe, particularly the Alps and Pyrenees, just below the region of perpetual snow, and feeds on insects, roots and vegetables. Living in societies, these animals post a sentinel that gives a shrill whistle if danger approaches, when they retire for safety into their ingeniously contrived burrows.

A. monax. WOODCHUCK, GROUND HOG, or MARYLAND MARMOT. This, when full grown, is of a reddish gray color and about as large as a rabbit; the young are reddish or of a uniform black; its wool is intermixed with long coarse hair; it has short ears and cheek pouches; the length is a little more than two feet, though in this respect as well as color, it greatly varies. The range of this marmot extends from Maine to California. It dwells in subterranean abodes, which are partitioned into chambers, feeds on clover and esculents, is easily tamed, and very neat and cleanly in its habits. In some places it selects forests

of pine, in others cleared lands and old pastures for its residence. The Woodchuck is awkward and slow in its movements; its safety is found in its extreme watchfulness and sharpness of hearing. When at all alarmed, it flies to its deep and long burrows, "thirty or forty of which have been seen in a field of five acres." To these its dilated cheeks carry its winter stores. Its fondness for clover often renders it an annoyance to the farmer.

3d. GERBILLIDAE, or DIPODIDAE, JERBOAS.

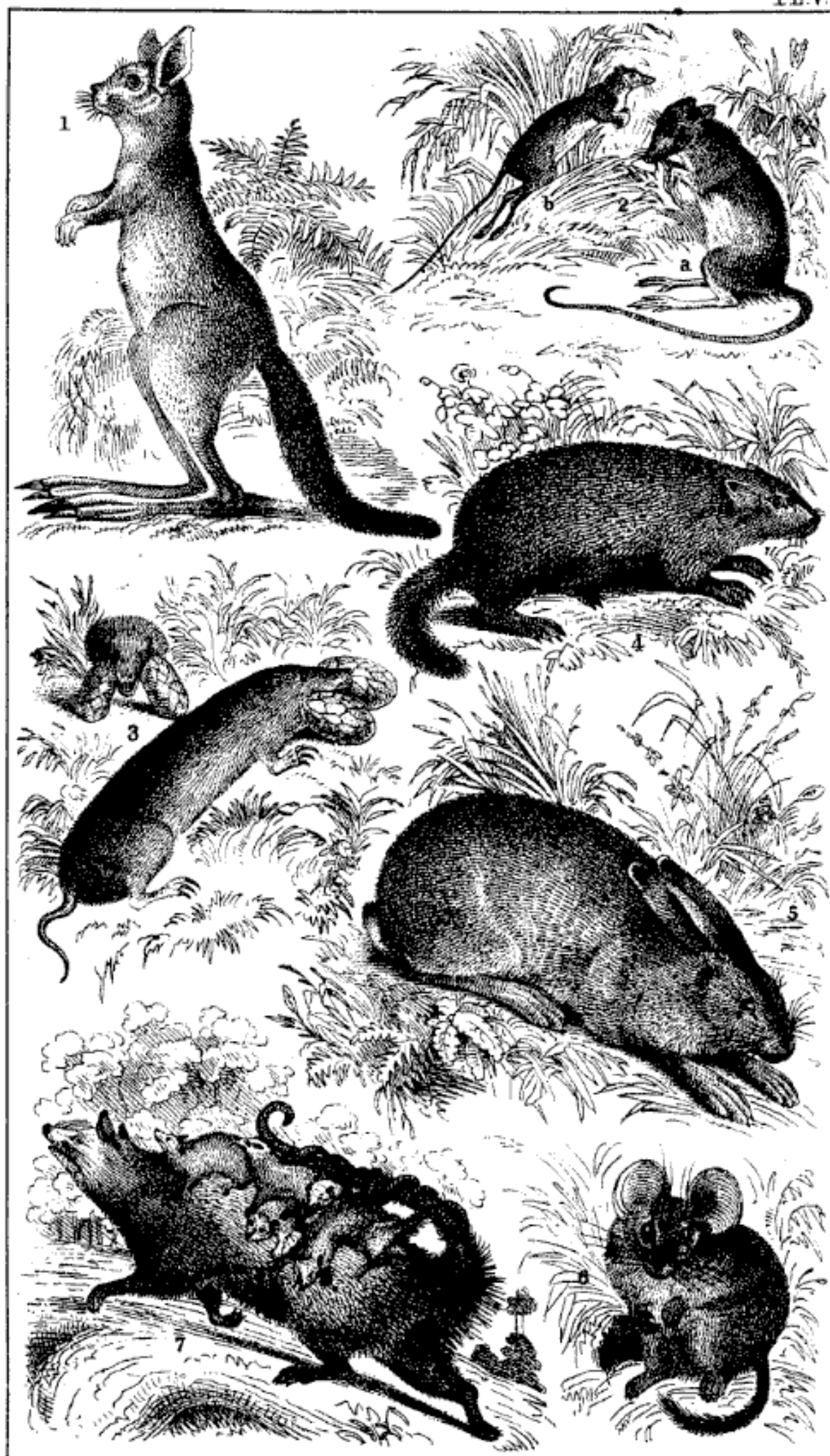
This family of the Rodents, sometimes called Jumping Mice, are apparently formed to live on prairies and sandy deserts. They have very short fore feet, and the hind ones very long, being Kangaroos in miniature; the tail is generally longer than the body, and used in leaping or walking; (Plate V. fig. 2.) the forefeet are employed in conveying food to the mouth, and seem of little or no use as organs of progression; the fur is soft; there are two cutting teeth in each jaw, the grinders simple or compounded, six or eight beneath; parts of the internal structure are bird-like. As far back as the time of Herodotus, these Rodents are alluded to as inhabiting Africa.

Dipus, (Gr. *Δις*, *dis*, two; *πους*, *pous*, foot.)

The animals of this genus have compound molars, and may be regarded as an intermediate link between the Squirrel and the Rat; but are more like the former than the latter. The fore legs are very short, and scarcely used in walking; the enormous hind legs and tail at once remind the beholder of the Kangaroo. When first seen, the animal seems supported in its rapid bounds by only two long legs; whence the name *Dipus*, two-footed. At a single bound, it moves four or five yards, and sometimes more; it feeds, sitting upon its haunches, like the Squirrel; is found abundantly in Egypt, Syria, and the north of Africa. The most common species is *D. sagitta*, (Lat. arrow,) the Gerbo, or Egyptian Jerboa, about the size of a large rat, living in large societies, and constructing burrows under ground.

Meriones. (Gr. *μηρίον*, *mêrion*, a thigh.) The animals of this genus are small, with long, slender, and nearly naked tails; they have six composite molars beneath; their fore feet have a rudimentary thumb, with a small nail. They hybernate, and are nocturnal.

M. Americanus, or *Gerbillus Canadensis*. The Deer Mouse; Jumping Mouse. This is about the size of a common mouse, and of a reddish brown color; has very short fore legs, long hind ones, and a scaly, rat-like tail. It leaps ten or twelve feet at a time; is found in Canada and farther north, and as far south as Pennsylvania, in fields of grass and grain. (Pl. V. fig. 2)



EXPLANATION OF PLATE V.

ORDER RODENTIA, FAMILY MURIDÆ, (Mice.)

Jerboas, or Jumping Mice.

1. Jumping Hare, Cape Jerboa, or Grand Jerboa, *Pedetes Capensis*, in the position in which it eats, using its small fore feet to bring the food to its mouth. With these feet it digs its burrow so expeditiously as quickly to hide itself; the hind legs are proportionally longer than in any other known quadruped. The tail is a most efficient organ; if deprived of it they can neither leap nor sit upright.
2. Labrador Jumping Mouse, *Meriones Labradorius*. a, animal sitting; b, jumping.
3. Pouched-Rat, or Sand-Rat, *Geomys*, or *Pseudostoma* (false mouth,) *bursarius*, (of skin.) The cheek pouches much resemble the thumb of a lady's glove in form and size, and hang down by the sides of the head. In the Canada Pouched Rat, or Missouri Gauffre, or Gopher, they are like pockets, extending from the sides of the mouth to the shoulders, lined with short, soft hairs, and opening on the outside of the mouth.
4. Woodchuck, Ground-Hog, or Maryland Marmot, *Arctomys monax*.

FAMILY LEPORIDÆ, (Hares.)

5. Common Hare, *Lepus timidus*, showing its long ears for collecting and conveying sounds, like an ear trumpet.

FAMILY CHINCHILLIDÆ, (Chinchillas.)

6. Chinchilla, *Chinchilla lanigera*, a woolly field mouse of S. America. It feeds in a sitting posture, conveying its food with its fore paws.

ORDER MARSUPIALIA, FAMILY DIDELPHIDÆ, (Opossums.)

7. Virginia Opossum, *Didelphis Virginiana*, showing the retreat of the young when threatened with danger, and the use they make of their prehensile tails.