

NATURAL HISTORY

THE GLOBE, OF MAN, OF BEASTS, BIRDS, FISHES,
REPTILES, INSECTS AND PLANTS.

FROM

THE WRITINGS OF BUFFON, CUVIER AND OTHER
EMINENT NATURALISTS.



A NEW EDITION.

WITH MODERN IMPROVEMENTS, AND FIVE HUNDRED
ENGRAVINGS.

BOSTON:

GRAY AND BOWEN.

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The Gray Ichneumon—The Fossan—The Vansire—

skins are a mixture of brown and black, which denotes a intermediate species between the white land Bear and the brown black Bear.

THE BROWN BEAR.

WE meet with the Brown Bear very frequently, and with the black Bear very rarely, on the Alps. In the forests of the northern countries of Europe and America, on the contrary, the black Bear is very common. The latter is both fierce and carnivorous; the former is only fierce, and constantly refuses to eat flesh.



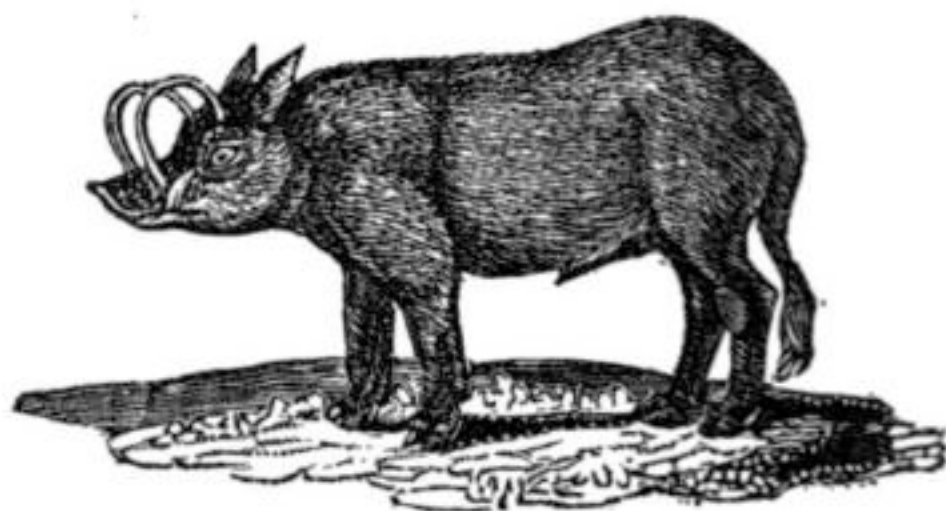
The Bear is not only a savage, but a solitary animal; he takes refuge in the most unfrequented parts, and the most dangerous precipices of uninhabited mountains. He chooses his den in the most gloomy parts of the forest, in some cavern that has been hollowed by time, or in the hollow of some old enormous tree. Thither he retires alone, and passes a part of the winter without provisions, or without ever stirring abroad. He is not, however, entirely deprived of sensation, like the dormouse or the **marmot**, but seems rather to subsist upon the exuberance of his former flesh, and only feels the calls of appetite when the fat he had acquired in summer begins to be considerably waste.

When this happens, which we are told it generally does

CHAP. XIX.

Of the Babiroussa, or Indian Hog...The Cabiai...The Porcupine...The Couando...The Urson...The Asiatic Hedgehog...The Camelopard...The Llama and Paco...The Vicuña...The Sloth...The Surikat...The Tarsier...The Phalange...The Coquallin...The Hamster...The Bobak...The Jerboa...The Ichneumon...The Gray Ichneumon...The Fossan...The Vansire...The Maki or Macauco...The White-headed Mongoose...The Bengal Loris...The Javelin Bat.

THE BABIROUSSA,
OR INDIAN HOG.



ALL naturalists have regarded this animal as a kind of hog, though it has neither the head, shape, bristles, nor tail of a hog. Its legs are longer and its muzzle shorter. It is covered with soft and short hair like wool; and its tail, which tapers to a fine point, is terminated by a tuft of hair the same; its body is likewise not so thick and clumsy as that of the hog; its ears are short and pointed; its skin is black, and furrowed with wrinkles and creases; but its most remarkable character, and what distinguishes it from all other animals, are four enormous tusks, or canine teeth; the two shortest of which shoot out

THE COQUALLIN.

AN animal was sent from America, by the name of the *orange-coloured Squirrel*. It is, however, not a squirrel, though sufficiently resembling it by the shape of the body; for it not only differs by many external characters, but also by its nature and manners.

The Coquallin is much larger than the squirrel; it is a beautiful animal, and very remarkable for its colour, its body being of a fine yellow, and its head as well as body covered with white, black, brown, and orange; it covers its back with its tail, like the squirrel, but has not, like that animal, small brushes of hair at the tips of the ears: it never climbs up any trees, but dwells in the hollows and under the roots of trees, like the garden squirrel. In such places, it builds its nest, and rears up its young; it likewise stores its little habitation with corn and fruit, to feed during the winter; it is a jealous and cunning animal, so exceedingly wild, that it is impossible to be tamed. The Coquallin is only found in the southern parts of America; the white and orange coloured squirrels of the West Indies are much smaller, and their colours uniform. These are true squirrels, which climb up trees, and produce their young on them; while the Coquallin, and the American *suisse*, burrow under ground, like rabbits, and have no other affinity with the squirrel, than a resemblance in the external form. M. Frederic Cuvier considers it as nothing more than a variety of the *sciurus capensis*.

THE HAMSTER RAT.

AN animal, which is also called the German *Marmot*, is about the size of the brown rat, but much thicker. Its colour is reddish brown above, and black beneath; there are

three large oval white spots on each side of the body. The ears are somewhat large. But the peculiarity which distinguishes it is, that there are two pouches or receptacles for food on each side of its mouth. These are not visible externally when empty; but, when distended, they resemble a pair of tumid bladders, with a smooth veiny surface, which the fur of the cheeks conceals. The pouches of one which Dr. Russel dissected were found stuffed with French beans, arranged lengthways, in such compact and accurate order, that it was exceedingly difficult to conceive how they had been so placed. When loosely laid on a table, they formed a heap thrice the bulk of the animal's body. Austria, Silesia, and some parts of Germany, are their native places.



The Hamster is one of the most famous and most pernicious rats that exist. We have fed one of these animals for many months, says Buffon, and afterwards had it dissected, and observed, that the Hamster resembled more the water rat, than any other animal; it resembled it also in the smallness of its eyes, and the fineness of its hair; but its tail is not so long as that of a water rat; but, on the contrary, it is much shorter than that of the short-tailed mouse. All these animals live under the earth, and seem to be animated with the same instinct; they have nearly the same habits, and particularly that of collecting corn, &c. and making great magazines in their holes.

The habitations of the Hamsters are different, according to their sex and age, and also to the quality of the land they inhabit. That of the male Hamster is an oblique

, and at the entrance is a portion of earth thrown a distance from the entrance, there is a single which descends in a perpendicular manner to the or cavities of the habitation. There is no hil-earth near that hole ; which makes us presume, oblique entrance is made hollow from the outside, the perpendicular hole, by which they come out, and withinside, from the bottom to the top.

habitation of the female has also an oblique passage with two or three, and even eight perpendicular by which the young ones may come in and go out. The male and the female have each their separate abode : the female is deeper than that of the male.

perpendicular hole is the common passage for coming and going out. By the oblique road, they throw earth they scratch up. This passage also has a declivity into some of the cavities, and another more to others, which serve for a free circulation of the air in his subterraneous habitation. The cavity where the female breeds her young contains no provision, but is lined with straw or grass. The depth of the burrow is very different. The young Hamster, of a year makes its burrow only a foot deep, while the old animal hollows it to the depth of four or five feet. All the burrows communicate together in one habitation, which is eight or ten feet in diameter.

The animals store their magazines with dry clover, and other grain ; beans and peas they likewise provide themselves with ; all these they are particularly careful to separate from the husk, which, with every other thing they do not make use of, they carry out of their burrow by this oblique passage.

The Hamster commonly gets in its winter provisions at the latter end of August. Its stores are not meant for a

winter supply, it being torpid at that season, but for the preceding and following period. When it has filled its magazines, it covers them over, and shuts the avenues to them carefully with earth. This precaution renders the discovery of these animals very difficult. The heaps of earth which they throw up before the oblique passage, are the only marks to trace their habitations. The most usual method of taking them is by digging them out of their holes, which is attended with much trouble, on account of the depth and extent of their burrows; however, a man versed in this business, commonly effects his purpose with good success. In autumn, he seldom fails of finding two good bushels of corn in each of their habitations; and he draws great profit from the skins of the animals. The Hamsters bring forth their young two or three times in a year, and seldom less than five or six each time. Some years there are great numbers of them to be seen, and in others, scarcely any to be met with. They multiply in great numbers when the seasons are wet, which causes a great scarcity of grain, by the devastation these animals make.

The back of the Hamster is commonly brown, and the belly black; however, there are some of a gray colour; and this difference may proceed from their age. Besides these, there are some often met with which are entirely black.

The Hamster begins to burrow at the age of six weeks, or two months; it never procreates, however, in the first year of its growth. There are numbers produced in one year, insomuch, that, in some parts of Germany, from their occasioning a dearth of corn, a reward is fixed on their heads. In one year, about eleven thousand skins, in another fifty-four thousand, and in a third year eighty thousand were produced at the Town Hall of Gotha, as vouchers to

the bearers to receive the reward. They are like-
such great numbers, that their fur is sold exceed-
heap.

olecat is a great enemy to the Hamsters, which he
s in a great number; he not only pursues them on
t follows them into their burrows, and feeds on them

Hamster itself is one of the most inveterate enemies
vn kind. His life (says a recent naturalist) is di-
etween eating and fighting. He seems to have no
assion than that of rage; which induces him to at-
ery animal that comes in his way, without in the
ending to the strength of the enemy. Ignorant of
of saving himself by flight, rather than yield he
ow himself to be beaten in pieces with a stick. If
as a man's hand, he must be killed before he will
hold. The magnitude of the horse terrifies him as
the address of the dog, which last is fond of hunt-

When the Hamster perceives a dog at a distance,
ns by emptying his cheek-pouches, if they happen
illed with grain: he then blows them up so pro-
y, that the size of his head and neck greatly ex-
at of the rest of the body. He raises himself on
legs, and thus darts upon the enemy. If he catch-
he never quits his foe but with the loss of life.
ocious disposition prevents the Hamster from being
e with any animal whatever. He even makes war
his own species. When two Hamsters meet, they
il to attack each other, and the stronger always
the weaker. A combat between a male and fe-
mmonly lasts longer than that between two males.
egin by pursuing and biting each other; then each
retires aside, as if to take breath. After a short
they renew the combat, and continue to fight till
hem falls.

THE BOBAC, AND OTHER MARMOTS.*

THE name of the *Strasbourg Marmot* has been affixed to the hamster, and that of the *Poland Marmot* to the Bobac; but, it is certain, that the hamster is not a Marmot; and it is also probable, that the Bobac is one, as it only differs from the Marmot of the Alps, by the colour of its fur, which is not quite so gray. There is a great claw, or toe, to the fore feet of the hamster, while the Marmot has only four toes to each foot; but in other respects it perfectly resembles it. It is the same with respect to the Canadian Marmot, or *Monax*, which some travellers have termed the *Whistler*.† It only seems to differ from the Marmot by the tail, which is thicker of hair.

The Bobac constructs burrows obliquely in the ground, of the depth of two, three, or four yards, and consisting of several galleries. Where the soil is hard or rocky, thirty or forty animals work in concert. Towards the approach of winter, they fill their burrows with the finest hay. They are good-natured and timid, but when driven to defend themselves they bite severely. It is easy to tame them.

The Canadian *Monax*, the Poland Bobac, and the Alpine Marmots, are, indeed, probably all the same kind of animal, under different denominations. As this species prefers the coldest and highest mountains in Poland, Russia, and other parts of the north of Europe, no wonder it is found in Canada, where it is only somewhat less than in Europe.

The Siberian animal also, called by the Russians *Jerrus Chka*, is a kind of Marmot, still less than the Canadian *Monax*.

* See Vol. I. p. 414.

† See Vol. I. p. 421.

it serves as a purveyor to the latter, which follows in its pursuit of animals, and often deprives it of its prey before it has devoured it, or, at least, partakes of the moment the Glutton approaches, the isatis, to its destruction itself, leaves what remains, for the Glutton to feed on. Both these animals burrow in the ground; every other habit they are different. The isatis moves in flocks, while the Glutton moves alone, or goes with its female: they are often found together in burrows. The fiercest dogs are fearful of attack by the Glutton, which defends itself with its teeth and claws, and often mortally wounds them.

The flesh of the Glutton, like that of every other voracious animal, is very bad food. It is only hunted after for its skin, which makes an exceedingly good and beautiful garment, inferior to the sable and black fox. It is also said that when properly chosen and well dressed, it has a more excellent gloss than any other skin, and even has the beauty of a rich damask. The Kamtschadales esteem it so highly, that they say the heavenly beings wear garments of no other fur. The women ornament their hair with the skin of white paws.

THE LEMMING RAT,

OR LAPLAND MARMOT,

The shape of a mouse, but has a shorter tail: its body is about the length of five inches, covered with fine hair of various colours. Those of Norway are of the size of a rat; but those of Lapland are scarcely as large as the former. The former are variegated with black and tawny on the upper parts; the sides of the head and the under parts are white. The legs are grayish, and the under parts of the body of a dull white. In some there are many red

hairs about the mouth resembling whiskers, six of which are longer and redder than the rest. The mouth is small, and the upper lip is divided like the squirrel's. The remains of the food in the throat of this animal incline to imagine it ruminates. The head is large, short, thick; the neck short; and the body thick. The eyes small and black; the ears round, and inclining towards the neck; the legs before are short, and those behind longer which gives it a greater degree of swiftness; the feet are clothed with hair, and armed with five very sharp and crooked claws; the middle claw is very long, and the fifth is like a little finger, or the spur of a cock, sometimes placed very high up the leg. This animal, therefore, whose legs are very short, runs very swift. It generally inhabits the mountains of Norway and Lapland, but descends in such great numbers in some years, and in some seasons that the inhabitants look on their arrival as a terrible scourge from which there is no possibility of deliverance. They move, for the most part, in a square, marching forward by night, and lying still by day. Thus, like an animal torrent, they are often seen more than a mile broad covering the ground, and that so thick, that the hinder touches its leader. It is in vain that the inhabitants try to stop or attempt to stop their progress; they still keep on forward; and though thousands are destroyed, they are seen to succeed and make their destruction incalculable: they generally move in lines, which are about ten feet from each other, and exactly parallel: their motions always directed from the north-west to the south-east, and regularly conducted from the beginning. When their motions are turned, nothing can stop them directly forward, impelled by some strange power. From the time they at first set out, they never stop or treating. If a lake or a river happens to intervene,

ress, they all together take the water and swim over fire, a deep well, or a torrent, does not turn them out of their straight-lined direction; they boldly plunge into flames, or leap down the well, and are sometimes seen coming up on the other side. If they are interrupted by a boat across the river while they are swimming, they do not attempt to swim round it, but mount directly up its side; and the boatmen, who know how vain resistance would be, calmly suffer the living torrent to pass over, without doing it any farther damage. If they meet with a stack of hay or corn which interrupts their passage, instead of going over it, they gnaw their way through; if they are stopped by a house in their course, if they cannot get through it, they continue there till they die. It is however, that they eat nothing that is prepared for human subsistence; they never enter a house to destroy the provisions, but are contented with eating every root and vegetable that they meet. If they happen to pass through a garden, they destroy it in a very short time, and give it an appearance of being burnt up and strewed with ashes. If they are interrupted in their course, and a man should immediately venture to attack one of them, the little animal is not at all intimidated by the disparity of strength, but furiously flies up at its opponent, and barking somewhat like a dog, wherever it fastens it does not easily quit its hold; at last, the leader is found out of its line, which it defends as long as it can, and is separated from the rest of the band, it sets up a plaintive cry, different from that of the others, and, as some say, gives itself a voluntary death, by hanging itself on the fork of a tree.

An enemy so numerous and destructive would quickly render the countries where they appear utterly uninhabitable, did it not fortunately happen that the same rapacity which animates them to destroy the labours of mankind, at

last impels them to destroy each other. After committing incredible devastation, they are at last seen to separate into two armies, opposed with deadly hatred along the coasts of the larger lakes and rivers. The Laplanders who observe them thus drawn up to fight, instead of considering their mutual animosity as a happy riddance of a most dreadful pest, form ominous prognostics from the manner of their engagements: they consider their combats as a presage of war, and expect an invasion from the Russians or Swedes, as the side next those kingdoms happens to conquer. The two divisions, however, continue their engagements and animosity until one part overcomes the other: from that time they utterly disappear, nor is it well known what becomes of either the conquerors or the conquered. Some suppose, that they rush headlong into the sea; others, that they kill themselves, as some are found hanging on the forked branches of trees; and others, that they are destroyed by the young spring herbage. But the most probable opinion is, that having devoured the vegetable productions of the country, and having nothing more to subsist on, they then fall to devouring each other, and having habituated themselves to that kind of food, continue it. However this be, they are often found dead by thousands, and their carcasses have been known to infect the air for several miles round, so as to produce very malignant disorders: they also seem to infect the plants they have gnawed, for the cattle often die that afterwards feed in the places where they passed. The inhabitants have an opinion, as they do not know whence such numbers proceed, that they fall with the rain.

Five or six young ones are produced at each litter, and the female brings forth several times in the course of a year. They sometimes litter while emigrating, and they

been seen carrying some of their offspring in their mouths, and others on their backs.

For the rest, the male is generally larger and more thickly spotted than the female: they go in droves on the water; but no sooner does a storm of wind arise, they are all drowned. The flesh of the Lemmings is a good food, and their skin, although covered with a beautiful fur, is of too little consistence to be service-

AMERICAN LEMMINGS.

The four Lemmings described in the succeeding pages, of them closely resemble the Lemmings of the old world, and may be described as their American representatives. Thus the TAWNY LEMMING approaches the RED LEMMING; BACK'S LEMMING represents the GRAY LEMMING; and the GREENLAND LEMMING is allied to the RINGED LEMMING of Siberia.

TAWNY LEMMING.

This animal was found by Mr. Drummond, inhabiting pine forests in latitude 56°, but he could not learn any thing of its habits. From the great similarity of its form and strong resemblance in the shape of its claws to the European Lemming, we may infer that its habits do not differ from those of that animal. It is of the size of the RED LEMMING. The fur is a reddish orange colour, in places mixed with black.—*Richardson*.

BACK'S LEMMING.

This animal was discovered by Capt. Back in latitude 65°, on St. Franklin's first expedition. On the second expedition specimens were obtained on the shores of Great Slave Lake. Here it was found in the spring, as soon as