

THE
ENCYCLOPÆDIA
OF
GEOGRAPHY:

COMPRISING A
COMPLETE DESCRIPTION OF THE EARTH.
PHYSICAL, STATISTICAL, CIVIL, AND POLITICAL;
EXHIBITING ITS RELATION TO THE HEAVENLY BODIES,
ITS PHYSICAL STRUCTURE,
THE NATURAL HISTORY OF EACH COUNTRY.
AND THE INDUSTRY, COMMERCE, POLITICAL INSTITUTIONS,
AND CIVIL AND SOCIAL STATE
OF
ALL NATIONS.

BY HUGH MURRAY, F.R.S.E.

ASSISTED IN

ASTRONOMY, &c. BY PROF. WALLACE, | BOTANY, &c. BY PROFESSOR HOOKER,
GEOLOGY, &c. BY PROF. JAMESON, | ZOOLOGY, &c. BY W. SWAINSON, ESQ.

ILLUSTRATED BY EIGHTY-TWO MAPS,
AND ABOUT ELEVEN HUNDRED OTHER ENGRAVINGS ON WOOD,
REPRESENTING THE MOST REMARKABLE OBJECTS OF NATURE AND ART
IN EVERY REGION OF THE GLOBE.
TOGETHER WITH A
NEW MAP OF THE UNITED STATES.

REVISED, WITH ADDITIONS,
BY THOMAS G. BRADFORD.

IN THREE VOLUMES.
VOL. III.

PHILADELPHIA:
BLANCHARD AND LEA.
1855.

highly probable that the ornithological features of Arctic America are confined to much narrower limits than we have here assigned; and that these limits do not extend farther south than the "Barren Grounds" and "Prairies" of the arctic navigators, those extensive plains which appear to be the chief residence of the Canadian Grouse (*Tetrao canadensis*) (fig. 938.), and other species of the family peculiar to this continent. The second volume of the Northern Zoology has put us in possession of numerous facts on the ornithological geography of these regions; although much still remains to be discovered before these facts can be generalised. In the mean time we shall avail ourselves of the valuable information already communicated by this enterprising traveller, relative to the ferine inhabitants of Northern and Arctic America.

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Canadian Grouse.

The quadrupeds of these regions, according to Dr. Richardson, are geographically distributed in the following districts, under which they will be briefly noticed:—1. The remote islands of North Georgia. 2. The shores of the Polar Sea, and the Barren Lands. 3. New Caledonia. 4. The Rocky Mountains. 5. The Prairie Lands. 6. The Limestone District. 7. The Eastern District.

(1.) In the islands of North Georgia, situated in lat. 75° north, there are only the nine following species of mammiferous animals, of which five are carnivorous and four herbivorous. The first two are only summer visitors; they arrive on Melville Island towards the middle of May, and quit it, on their return to the south, in the end of September.

Ursus montanus. Musk Ox.
Cervus tarandus. Caribou Deer.
Ursus maritimus. Polar Bear.
Gulo luscus. Wolverine.

Martes erminea. The Ermine.
Canis lupus. American Wolf.
Vulpes lagopus. The Arctic Fox.

Georchus hudsonius. Hudson's Bay Lemming.
Lepus glacialis. Polar Hare.

(2.) The quadrupeds of the shores of the Polar Sea are the same as those inhabiting the Barren Grounds. This name has been applied by the arctic voyagers to that north-east corner of the American continent bounded to the westward by the Coppermine River, the Great Slave and other lakes, to the southward by the Churchill or Mississippi River, and to the northward and eastward by the sea. The rocks of this district are primitive, rising only into low hills, with a few stunted shrubs in the valleys; but the soil in general is a dry coarse sand, so poor as to afford no other vegetation than lichens. These dreary and dangerous wastes are destitute of fur-bearing animals. The abundance of lichens supplies the favourite food of the small Carabou, or American Reindeer, and the Musk Ox, both of which animals are here common. The following quadrupeds are likewise found in the Barren Grounds:—

Ursus arctos? *americanus*. Barren Ground Bear.
Ursus maritimus. Polar or Sea Bear.
Gulo luscus. Wolverine.
Putorius ermineus. Skut, or Ermine.
Putorius vison. Vison Weasel.
Lutra canadensis. Canadian Otter.
Canis lagopus. Hare Indian Dog.
Vulpes fulgescens. Sooty Fox.

Fiber zibethicus. The Musquash.
Arvicola xanthognathus. Yellow-checked Mouse.
Arvicola pennsylvanicus. Wilson's Mouse.
Arvicola leucurus. Northern Mouse.
Georchus trizonatus. Bark's Lemming.
Georchus hudsonius. Hudson's Bay Lemming.

Georchus greenlandicus. Greenland Lemming.
Arctomys parryi. Parry's Marmot.
Lepus glacialis. Polar Hare.

The first eight on this list are more or less carnivorous or piscivorous; and prey much upon the remainder, which are herbivorous.

(3.) The district of New Caledonia, on the west of the Rocky Mountains, was not visited by Dr. Richardson; but, from the notes of Mr. Harmon, its zoology presents some peculiarities. The summer is never very warm, and in winter the snow is sometimes five feet deep. This, Mr. Harmon imagines, is the reason why none of the large animals, except a few solitary ones, are to be met with. The quadrupeds are not numerous. The Moose Deer is scarce, and the Black Bear more so. The lesser species consist of Beavers, Otters, Lynxes,

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Canadian Goose.

Fishers, Martens, Minks, Wolverines, Foxes of different kinds, Badgers, Polecats, Hares, and a few Wolves. The birds are Swans, Geese, Cranes, Ducks of several kinds, and Partridges. The Canadian Goose (*Anas canadensis*) (fig. 939.) is here called a Bustard; it appears to be common, and has long been domesticated in both continents. All the lakes and rivers are well furnished with excellent fish.

(4.) The animals found on the Rocky Mountains are thus enumerated by Dr. Richardson:—

Vesperugo subulatus. Say's Bat.
Sorex palustris. American Marsh Shrew.
Ursus americanus. American Black Bear.
Ursus linnæi. Grizzly Bear.
Gulo luscus. Wolverine.
Putorius ermineus. Skut, or Ermine.
Putorius vison. Vison Weasel.
Martes erminea. Foxen, or Fisher.
Lutra canadensis. Canadian Otter.
Felis canadensis. Canadian Lynx.
Canis borealis. American Beaver.
Fiber zibethicus. The Musquash.

Arvicola riparius. Bush Meadow-Mouse.
Arvicola xanthognathus. Yellow-checked Mouse.
Arvicola leucurus. Sharp-nosed Mouse.
Georchus hudsonius. Tawny Lemming.
Neotoma dumosus. Rocky Mountain Lemming.
Mus leucurus. American Field Mouse.
Arctomys eremicus. Quebec Marmot.
Arctomys pinsoni. The Whistler.
Arctomys parryi. Parry's Marmot.
Arctomys getulius. Spotted Marmot.
Arctomys lateralis. Say's Marmot.
Tamias quadrivittatus. Four-lined Squirrel.

Tamias hudsonicus. Chickaree Squirrel.
Pteromys salicarius (alpinus). Severe River Flying Squirrel.
Hypoxys plumosus. Canada Porcupine.
Lepus americanus. American Hare.
Lepus glacialis. Polar Hare.
Lagomys princeps. Little Chief Hare.
Cervus alces. Moose Deer.
Cervus canadensis? Caribou Deer.
Cervus macrotis. Black-tailed Deer.
Ovis americanus. Rocky Mountain Goat.
Ovis montanus. Rocky Mountain Sheep.
Bos americanus. American Bison.

The country lying between the Rocky Mountains and the Pacific is in general hilly; but the wide plains on the upper arms of the Colombia are inhabited by the same kind of animals as occur on the Missouri plains. These are principally as follows:—

Ursus ferox. Grizzly Bear.
Canis latrans. Prairie Wolf.
Vulpes cinereus argenteus. Kilt Fox.

Martes leucodermis? The Bear.
Cervus macrotis var. *n.* Black-tailed Deer.

Cervus leucurus. Long-tailed Deer.
Apodisma leporinus. The Lewis.

The Bisons are supposed to have found their way across the mountains very recently; they are still comparatively few, and very locally distributed.

(5.) The fifth geographic district comprehends those extensive plains, termed Prairies, lying between the foot of the Rocky Mountains and the Limestone District subsequently noticed. These lands are in general level, and the traveller, when crossing them, must direct his course by the compass or by the stars, as an Arab would traverse the Great Desert. The soil, however, although dry and sandy, is tolerably fertile; as it supplies a thick sward of grass, which furnishes food to immense herds of the Bison. This abundance of pasture renders these plains the favourite resort of various ruminating animals, and the Buffalo and Wapiti abound. The following list will better exhibit these peculiarities:—

Ursus ferox. The Grizzly Bear.
Canis latrans. The Prairie Wolf.
Vulpes cinereus argenteus. Kilt Fox.
Arctomys ludovicianus. The Wisnomit.
Arctomys richardsoni. The Wapiti.
Arctomys franklini. Franklin's Marmot.

Arctomys hoodii. Leopard Marmot.
Geomys talpoides. The Mole Rat.
Lepus virginianus. Prairie Hare.
Lepus arizonae. The Hare.
Cervus alces. Moose Deer.

Cervus canadensis. The Wapiti.
Cervus macrotis. Black-tailed Deer.
Cervus leucurus. Long-tailed Deer.
Antilocapra americana. Prong-horned Antelope.
Bos americanus. American Bison.

The fur-bearing animals also exist in the belts of woods, which skirt the rivers flowing through the plains above-mentioned.

(6.) The sixth district is a very flat limestone deposit, bounded by a remarkable chain of rivers and lakes, among which are Lake Winnipeg, Beaver Lake, and the middle portion of the Mississippi River, &c., all to the southward of the Methy Portage; while its northern confines are marked by the Elk River, Great Slave Lake, Marten Lake, &c. The whole of this district is well wooded, and yields the fur-bearing animals in abundance; the following are found in this tract:—

Vesperugo pinus. Hairy Bat.
Sorex palustris. American Marsh Shrew.
Sorex personatus. Person's Shrew.
Coedipus longicauda (South parts only). Long-tailed Shrew.
Ursus americanus. American Black Bear.
Gulo luscus. The Wolverine.
Putorius virginicus. Common Weasel.
Putorius ermineus. Stoat, or Ermine.
Putorius vison. Vision Weasel.
Mustela martes. Pine Marten.
Mustela canadensis. Pekan, or Fisher.

Myiophotis americana. Hudson's Bay Skunk.
Lutra canadensis. Canadian Otter.
Felis canadensis. Canadian Lynx.
Castor fiber americanus. American Beaver.
Fiber zibethicus. The Muskrat.
Arvicola xanthognathus. Yellow-checked Mouse.
Arvicola pennsylvanicus. Wilson's Meadow Mouse.
Microtus leucurus. American Field Mouse.
Meriones leucoderis. Labrador Jumping Mouse.
Arctomys campestris. Quebec Marmot.

Arctomys hoodii. Leopard Marmot.
Sciurus hystrix. The Hares.
Sciurus quadrivittatus. Four-banded Pouched Squirrel.
Sciurus hudsonicus. The Chickaree.
Sciurus niger. Black Squirrel.
Hesperomys gilvipes. Canada Pigeon.
Lepus americanus. American Hare.
Cervus alces. Moose Deer.
Cervus tarandus (sylv.). The Wood Caribou Deer.
Bos americanus. American Bison.

Those marked thus* are but partially distributed. To this list must be added different varieties of the American Wolf, named the Gray, the Black, the Dusky, and the Pied; together with three varieties of Fox; namely, the Common American, the Cross, and the Black or Silver.

(7.) The seventh or eastern district is formed by a belt of low primitive rocks, extending from the Barren Grounds to the northern shores of Lake Superior. It is about 200 miles wide, and, as it becomes more southerly, it recedes from the Rocky Mountains. It differs from the Barren Grounds principally in being clothed with wood. It is bounded to the east by a narrow stripe of limestone, beyond which there is a flat, swampy tract, forming the western shores of Hudson's Bay: its western limits are the limestone deposit last mentioned, and its native animals are these:—

Sorex palustris. American Marsh Shrew.
Sorex personatus. Person's Shrew.
Scalops (sp. ignota). An unknown species.
Ursus americanus. American Black Bear.
Ursus maritimus. Polar Bear.
Gulo luscus. The Wolverine.
Putorius virginicus. Common Weasel.
Putorius ermineus. Stoat, or Ermine.
Putorius vison. Vision Weasel.
Mustela martes. Pine Marten.

Mustela canadensis. Pekan, or Fisher.
Myiophotis americana. Hudson's Bay Skunk.
Lutra canadensis. Canadian Otter.
Felis canadensis. Canadian Lynx.
Castor fiber americanus. American Beaver.
Fiber zibethicus. The Muskrat.
Arvicola xanthognathus. Yellow-checked Mouse.
Arvicola pennsylvanicus. Wilson's Mouse.
Geomys hudsonicus. Hudson's Bay Lemming.

Microtus leucurus. American Field Mouse.
Meriones leucoderis. Labrador Jumping Mouse.
Arctomys campestris. Quebec Marmot.
Sciurus hystrix. The Pouched Squirrel.
Sciurus hudsonicus. The Chickaree Squirrel.
Pteromys volutus. Severn River Flying Squirrel.
Lepus americanus. American Hare.
Cervus alces. The Moose Deer.
Cervus tarandus (sylv.). The Wood Caribou.

To these must be added several varieties of the American Wolf, with the four races of Foxes, called the Arctic, American, Cross, and Black. There seems, also, to be an undetermined species of Badger. The Polar Bear does not go farther inland than about 100 miles over the swampy land which skirts the coast.

To the remaining tribes of the animal kingdom, as the birds, insects, fish, &c. of Northern America, we can devote but little space. It will be sufficient to observe, that most of the European Arctic birds occur in the same latitudes in the American seas. Some, however, are found in these regions which are altogether peculiar to the New World.

Among these latter birds may be noticed the American Tufted Duck (*Anas rufitorques*) (fig. 940.), which much resembles the crested duck of Europe: the head, neck, breast, and upper parts are black, and there is a chestnut collar round the neck. The Ruddy Duck (fig. 941.), so called from its reddish-brown colour: the crown and neck above is black, the