



ANIMALS OF THE U.S.S.R.



STELLER'S SEA EAGLE

# ANIMALS OF THE U.S.S.R.

By

G. M. VEVERS, F.R.C.S., F.Z.S.

*Superintendent of the Zoological Gardens, Regent's Park, London, N.W.8*

*Silver Medallist of the Zoological Society of London*

*Honorary Member of the Zoological Society of Philadelphia, U.S.A.*

*Corresponding Member of the Royal Zoological Society of Ireland*

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by

ERNA PINNER



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## FOREWORD

THE animals illustrated and described in this book are only a fraction of those which are to be found in the Soviet Union, but they have been chosen as typical examples of what may be met with in the various zones, climatic and otherwise, of the Union of Soviet Socialist Republics. Some of them do not occur outside its borders. Similarly, the short description of each species does not enter into any great detail but rather is intended to give the habitat, mode of life and one or two outstanding facts of interest about each one. The reader may find this method of approach somewhat repetitive, but unfortunately it is hard to avoid when one is giving as many facts as possible in a modicum of space. It is hoped, however, that both the illustrations and the text will arouse a general interest in the fauna of a country about which, both here in Britain and abroad, there seems to be such widespread ignorance.

The area of the U.S.S.R. is  $8\frac{1}{2}$  million square miles—about one-sixth of the inhabited surface of the earth. It is not surprising, therefore, that it contains a great diversity of living creatures belonging to many different orders of the Animal Kingdom. From the Ukraine in the west to Kamchatka in the east, the distance is more than 6,000 miles, while from the mouth of the Yenesei River in the Arctic to the Kara Kum Desert and the Pamir Mountains in the south the distance is upwards of 2,000 miles. Travelling from north to south along this line, one passes through at least 6 different climatic regions, each of which has its own distinctive flora and fauna.

The Tundra region, which starts on the shores of the Arctic Ocean, has long cold winters and short summers, lasting only about 3 months, during which the temperature rarely exceeds 50 degrees Fahrenheit. The surface of the ground is frozen hard during most of the year and the subsoil is frozen permanently. In this frozen subsoil are found the remains of the Hairy Mammoth (*Elephas primigenius*), an animal which became extinct some 60,000 years ago but which is still discovered with its flesh in a perfect state of preservation. There is very little plant life in this region and that is dwarfed and stunted. A little grass grows in the far north, and towards the south—during the short summer—are Reindeer moss and some of the

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dwarf berry-bearing plants such as bilberry and cranberry. In these conditions it is not surprising that there is very little animal life. In the winter, apart from such animals as the Polar Bear and the Walrus in the extreme north, the Arctic Fox and occasionally the Snowy Owl, no living thing is seen, but in the summer a few animals from the adjoining Taiga (south of the Tundra) migrate northward, among them being the Wolf, the Ermine, the Glutton and the Brown Bear. The only domesticated animals which are able to withstand the rigours of the Tundra winter above ground are the Husky Dog and the Reindeer. In some regions of extreme cold, even the Reindeer cannot live, and the Husky Dog, which can be fed on fish, takes its place. Below the frozen snow the hardy Lemming fights for existence.

The Taiga, the largest of all the climatic regions of the U.S.S.R., stretches from Finland to Kamchatka in a broad belt varying from 500 to 1,000 miles in width, and is composed mainly of coniferous forests—actually one-third of the total area of coniferous forests in the world. Here again the summers are short, but they are warmer and the winters less severe. The whole of this Taiga belt teems with animal life, from the great Brown Bear to the tiny Chipmunk. In these forests during the winter the hunter finds his finest pelts, among them the rare Sable and the Ermine. It is here, too, that the Capercaillie, the largest of the game birds, is found. Going south, the Taiga merges gradually into a narrow band of deciduous forest, haunted by many species of birds.

South of this again is the Steppe region, the cultivated fertile band of black earth extending from the Ukraine south-eastward to north of Lake Balkash. This is the country of the Manot and the Saiga Antelope. South of the Steppes comes the desert, and here are Giant Lizards, Sand Boas, Gazelles, Jerboas and Cheetahs. In this region the climate is sub-tropical and the fauna is similar to that of the deserts of North Africa. Lastly comes the mountain region, where, in addition to magnificent Wild Goats and Mountain Sheep, are found the Snow Leopard, the Golden Eagle and the Lammergeyer.

These various regions are not, of course, sharply defined. The transition from north to south is gradual and applies not only to the climate but to the flora and fauna as well. Many of the animals migrate backwards and forwards from north to south according to the seasons.

The Soviet Government is well aware of the importance of preserving the wild animal life of its territories, and every care is taken to ensure

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that no species is wilfully exterminated. With this end in view, 47 vast sanctuaries for wild animals have been formed. These sanctuaries together cover an area of nearly 40,000 square miles, and in most of them are scientists working on problems of reproduction and the ecology of valuable species. This work is carried out under the auspices of the Academy of Sciences of the U.S.S.R. and many Universities and Institutes take part in it.

One of the most important reserves is the Caucasian State Sanctuary near Mount Elbrus in the Caucasus, where European Bison, Caucasian Deer and Chamois are preserved. Much of this sanctuary lies between 3,000 and 11,000 feet above sea level, and it is here that there is the nucleus of a herd of the Caucasian race of European Bison, which had become almost extinct after the first world war. In 1936 I visited the Institute of Acclimatisation and Hybridisation at Ascania Nova in the Ukraine and saw the beginnings of this herd of Bison, afterwards transferred to the Caucasus, and many other interesting animals which were being saved from extinction. The Ascania Nova breeding station is over 100,000 acres in extent. During the last war it was overrun by the Nazis, who slaughtered many of the animals, destroyed the Museum, and transported many valuable specimens to Germany. The Museum is now being rebuilt and the work interrupted by the war is being resumed.

Another famous animal reserve is the Sudzukinsky Sanctuary, which is in the Taiga zone some 150 miles from Vladivostok. Here are vast herds of many kinds of Deer and special attention is being paid to the breeding of the Sable, an animal which prior to 1917 had almost been wiped out in this area. The largest Sable reserve in the Soviet Union is at Osnovka on the shores of Lake Baikal. Here again, indiscriminate trapping had almost exterminated this beautiful animal, but owing to rigorous protection there are now so many Sables in this district that it has become the largest source of supply for breeding stations in Buryat Mongolia, Altai, Krasnoyarsk, Novosibirsk and elsewhere.

One of the most interesting of all the animal reserves in the U.S.S.R. is the Saiga Antelope Reserve on the island of Barsa-Kelmes, which lies in the north-western part of the Aral Sea. The island is about 120 square miles in extent and is devoted entirely to the preservation of the Saiga Antelope, which has always been much sought after by hunters because of its beautiful lyre-shaped horns. It is encouraging to know that this unique animal has been saved for posterity, for on Barsa-Kelmes there

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are now upwards of 1,000 specimens. The Director of the Barsa-Kelmes reserve is a woman, Elena Vasenko, and she has a staff of 39, including scientists and administrative personnel.

In addition to these sanctuaries, nearly every large city in the Soviet Union has its own Zoo. The oldest and most famous is the Moscow Zoo Park, with whom the London Zoo makes regular exchanges of animals. Many of the exhibits at Regent's Park and Whipsnade are the result of this friendly bartering. The large herd of Bactrian Camels at Whipsnade is a magnificent sight and all of them have been bred from 4 which came from Moscow in 1936.

The Soviet people realise that in the wild life of their country they have a great heritage. They have seen in other countries the extermination of species caused by the ignorance and greed of man, and they are determined that this wanton destruction shall not occur in the country which they love and for which they have made such heroic sacrifices.

G. M. VEVERS.

*Whipsnade, April, 1947.*



SIBERIAN CHIPMUNK

PART  
I  
INSECTIVORA

## DESMANS



The DESMANS (*Desmana moschata*), a curious little creature which measures about 18 inches in length, is half mole-half shrew. Its tail is flattened from side to side and its hind feet are shaped like paddles for swimming. It lives in burrows on the edges of streams and is only found within the confines of the U.S.S.R., mainly in the Volga and Don Basins. It has a lovely reddish brown fur which is much sought after. It leads a very retiring life and feeds mainly on shell fish, insects and water weeds. Its burrows are always entered under water and lead upwards to a dry nesting chamber where the young, 3 to 4 in number, are born naked and blind.

Two interesting species of LONG-EARED HEDGEHOGS are found in the neighbourhood of the Caspian and Aral Seas. *Erinaceus auritus* has a fairly wide distribution from the Sea of Azov north of the Caspian eastward to the Pamirs, while *Erinaceus hypomelas*, which is a slightly larger animal, is found in the Kara Kum Desert eastward to Tadjikistan. Both these hedgehogs, being warm desert species, have large ears which are analogous to the large ears of the Desert Foxes. The large size of the ears increases the body surface area, so that the animal can keep cool by radiation. An example of the opposite state of affairs is seen in the small ears of the Arctic Fox, which does not require to lose but rather to conserve body heat.



LONG-EARED HEDGEHOG



DESERT LONG-EARED HEDGEHOG

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The COMMON SHREW (*Sorex araneus*) belongs to the Order of animals known as Insectivora. The Common Shrew has a wide distribution throughout Europe and Asia. It is under 3 inches in length excluding the tail, which is shorter than the body. There is considerable variation in colour but it is generally a mousy shade. Common Shrews feed mainly on insects, worms and slugs. They possess glands which secrete a strong scent and make them repulsive to carnivorous mammals such as the cat. Cats will kill a shrew but will not eat it. Birds of prey, such as owls, however, will catch and devour them.



COMMON SHREW

The WATER SHREW (*Neomys fodiens*), which measures about 3 inches in length exclusive of its tail, is widely distributed throughout Europe as far east as the Altai Mountains and also occurs in Britain. It is an insectivore like the Common Shrew and lives mainly on freshwater shrimps, other

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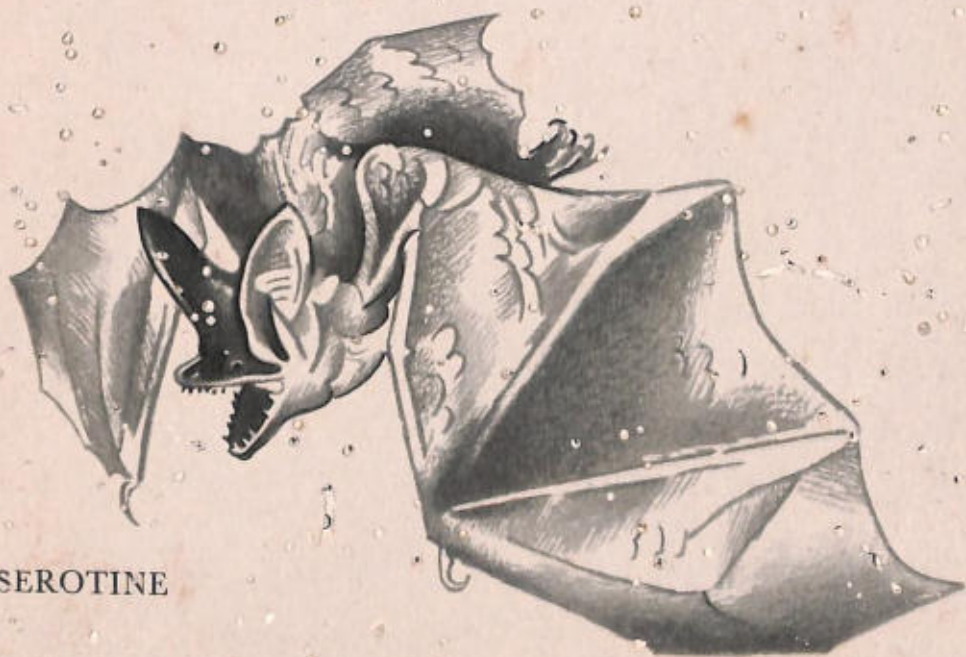
crustaceans, and insects. It is a good swimmer and its fur repels water, so that the animal appears to be perfectly dry immediately on reaching land. It lives in burrows on the banks of streams.



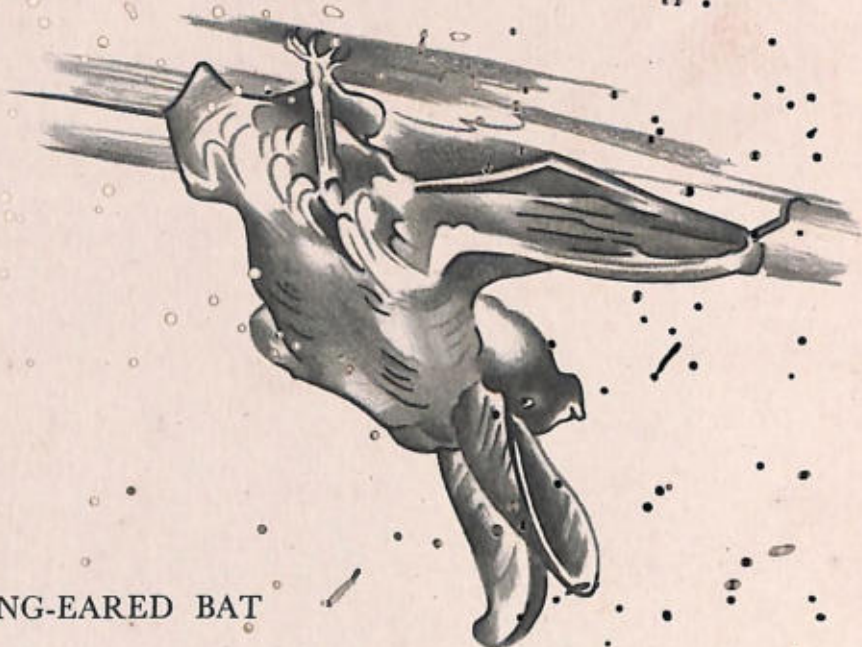
WATER SHREW



GREATER HORSE-SHOE BAT



SEROTINE



## LONG-EARED BAT

There are 39 different species of BATS in the Soviet Union, all of which, with one exception, belong to the two Families *Rhinolophidae* (Horse-shoe or Leaf-nosed Bats) and *Vespertilionidae* (typical bats). E. P. Pinner has drawn 5 species typical of these 2 Families: the LONG-EARED BAT (*Plecotus auritus*), the SHARP-NOSED BAT (*Myotis oxygathus*), HEMPRICH'S EARED BAT (*Otonycteris hemprichi*), the GREATER HORSE-SHOE BAT (*Rhinolophus ferrum-equinum*); and the SEROTINE (*Vespertilio serotinus*). Bats are distinguished from all other mammals by having their fore limbs converted into wings which are capable of sustaining rapid flight. All the bats of the Soviet Union belong to the Sub-order *Microchiroptera* or insectivorous bats. The hind feet, which are not joined to the wings, are armed with hooked claws by which the animal suspends itself upside down, its natural resting position. Only one young is born at a time and this is carried on the breast of the mother.



SHARP-NOSED BAT



HEMPRICH'S EARED BAT

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Insectivorous bats are nocturnal in habit. They spend the day hanging up in dark caves and old buildings. They are not blind, as is commonly supposed, although they do not rely on their eyes for guiding them in flight. It is their keen sense of hearing which enables them to fly through the absolute darkness of their caves. They have developed a form of radar which guides them in their flight. Their high-pitched cries, which cannot be heard by human beings, are echoed or reflected from the smallest surface and picked up by their keen sense of hearing. It will be seen that most bats have large external ears.

PART

2

LAND CARNIVORA

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The TIGER (*Felis tigris*) has a very scattered distribution in the Soviet Union. It is found from the Caucasus along the southern shores of the Caspian as far east as the southern edge of the Kara Kum Desert. Then there are three isolated localities at the southern end of the Aral Sea and Pamir Mountains, the third being just south of Lake Balkash where the Ili River flows into it. It is not found again eastward until it occurs over a wide area of the Far Eastern Republic on both banks of the Amur River. This is where the famous long-haired Manchurian race occurs. Tigers are generally found in thickets near the shores of large rivers and lakes. Unlike most other cats it is fond of water and is a strong swimmer. It feeds on all kinds of mammals, from the smallest deer to the largest oxen. 2 to 5 cubs are born after a gestation period of 4 months. Baikov states that the Manchurian Tiger only breeds once in 3 years. The Indian Tiger normally breeds every year.



TIGER

## LEOPARD



The LEOPARD (*Felis pardus*). There seem to be three races of Leopards in the Soviet Union. One is found in the Northern Caucasus and one in the Southern Caucasus which also occurs in Turkmenistan, along the side of the Kara Kum Desert, as far east as Tadjikstan. Then there is a gap of over 2,000 miles with no Leopards until they are found again in the Far Eastern Republic on either side of the Amur River where the Manchurian Tigers occur. This third race is vividly coloured and the black spots are more thickly distributed than in the two western races, which are very pale with indistinct markings. I have seen one of these Caucasian Leopards in the Moscow Zoo Park and its markings reminded me of those of a Cheetah. The gestation period of a Leopard is about  $3\frac{1}{2}$  months and, like the Tiger, 2 to 5 cubs are born. Leopards are great climbers

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and frequent trees. They live mainly on mammals and birds. In the Caucasus, Leopards have been found at over 10,000 feet.

The SNOW LEOPARD (*Felis uncia*) is found in the Pamirs and the mountains of Central Asia as far north as latitude 50 degrees. It is one of the handsomest of all the *Felidae*. Its coat is whitish grey with large dark brown spots and it has a very long bushy tail over 3 feet in length. The Snow Leopard is slightly smaller than the common Leopard and feeds

### PALLAS'S CAT



mainly on mountain sheep, goats and small rodents. They live at a very high altitude and seldom live long in captivity if they are brought down to sea level. They are very delicate and are subject to pneumonia and other lung diseases. The winter pelt of a Snow Leopard makes one of the most beautiful skins and good specimens are worth £100 or more each.

The JUNGLE CAT (*Felis chaus*) has a somewhat limited distribution in the U.S.S.R., being confined to the western shores of the Caspian, the south Kara Kum Desert, and an area south-east of the Aral Sea. It is about the size of a large domestic cat and is normally grey with dark stripes and white underparts, although it does vary considerably and in some localities is a uniform tawny colour with no visible stripes. The tail is less than one third the total length of the animal. The ears are tipped with black hairs, which suggests that it has affinities with the Lynx. There are many local races in other parts of the world and it has a wide distribution

## SNOW LEOPARD



in North Africa, Asia Minor, India and China. It is thought that *Felis chaus* was the cat held sacred by the Egyptians. Mummified remains of a similar cat have been found in many tombs.

PALLAS'S CAT (*Felis manul*) is one of the smallest of all the wild cats of the world, measuring under 2 feet in length, with a short tail 8 to 10



JUNGLE CAT

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inches long. The Manul, as it is called in Tibet, is rare in the U.S.S.R. but has been found in widely separated localities from the eastern shores of the Caspian through the Pamirs to a point south-east of Lake Baikal. Unlike most wild cats, it is not found in forests but lives amongst barren rocks on mountain sides up to 9,000 feet, in the crevices of which it rears its young. It hunts by night and lives mainly on small rodents such as the Pika and on birds. Its thick soft fur is a protection against the intense cold of its mountain habitat. Certain peculiarities of the skull separate it from all other cats. Its ears are relatively small and set low on the sides of the head, rather like those of the European Wild Cat. Unlike most cats, the pupil of the eye does not contract into a slit in strong light but is disc-like in shape.

The CHEETAH (*Acinonyx jubatus*) has a limited distribution in the Soviet Union, being confined to Turkmenistan. It is sometimes known as the Hunting Leopard because it resembles a Leopard and in Asia is trained for hunting gazelles. Over a short distance the Cheetah



CHEETAH

## COMMON WOLF.



is one of the swiftest runners in the animal world. It differs from the cats in that its claws are not fully retractile but rather more like those of the dog, and zoologists have placed the Cheetah between the *Canidae* and *Felidae* in a separate genus. The Cheetah is entirely carnivorous.

The COMMON WOLF (*Canis lupus*) is distributed throughout North European Russia and Siberia as far east as Kamchatka and Vladivostok. It also occurs in the north part of the island of Sakhalin. There are many variations, both in size and colour, according to the locality.

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The Wolf is the largest of the wild *Canidae* and is now considered to be the ancestor of all the domestic races of dog. In spring and summer Wolves are generally found in pairs, but in the winter they hunt in small packs.

The HUSKY DOG (*Canis familiaris var.*) which is trained to draw the sledges of all the peoples of the Arctic, is probably the nearest domesticated relative of the Wolf. One way in which the Husky Dog differs from the Wolf is in the carriage of the tail, which is nearly always curled forwards over the back, whereas the Wolf carries its tail low.

The CORSAC FOX (*Vulpes corsac*) is found in the large area of desert country which lies between the eastern shores of the Caspian and the Pamir Mountains. Its distribution is confined almost entirely to the territories of the U.S.S.R. It is smaller and paler in colour than the European Red Fox, with white underparts and a black-tipped bushy tail. Its food consists mainly of small desert animals.

The ARCTIC FOX (*Alopex lagopus*) is found all along the Arctic seaboard of the Soviet Union from the Kola Peninsula to Kamchatka.



ARCTIC FOX



HUSKY DOG



CORSAC FOX

## ANIMALS OF THE U.S.S.R.

It is little more than half the size of our European Red Fox and differs from it in having small round ears and, like the Polar Bear, hair between the pads of its feet. The summer coat of the Arctic Fox is bluish grey but in the autumn it develops a long pure white coat, so that the whole animal is white except for the tip of the nose, which is jet black. This change of coat is not universal, for some individuals remain a bluish colour throughout the winter. The food of the Arctic Fox is varied, consisting of eggs and young birds, small rodents, roots and lichens.

### SIBERIAN WILD DOG



The RACCOON-LIKE DOG (*Nyctereutes procyonoides*) is a native of Amurland in the Far Eastern Republic of the Soviet Union, but because of the value of its fur it has been introduced into many other parts of the U.S.S.R. It is rather like a Raccoon, with a short tail, and is about the size of a large domestic cat, with short legs. It is extremely hardy and will live on almost anything, but its favourite food is fish. Its fur, which is in great demand for making winter coats, varies in colour from dark brown to black, with a yellowish tinge round the head and shoulders. It hunts mainly at night and has been known to hibernate.



### RACCOON-LIKE DOG

The SIBERIAN WILD DOG (*Cyon alpinus*) is found in scattered mountainous localities stretching from the Pamirs to Lake Baikal, with a break until it again occurs in the Far Eastern Republic. It is a good deal smaller than the Wolf but of much the same colouring, with a bushy fox-like tail and rounded erect ears. The Siberian Dog or Dhole, as it is sometimes called, is swift and cunning and will attack man. Domestic dogs are afraid of it and will turn away from its scent.

## SEA OTTER



The SEA OTTER (*Enhydra lutris*). A hundred years ago this animal was quite common along the coasts of the Kuriles and Sakhalin as far north as the south-east coast of Kamchatka, but it has been so mercilessly hunted by the Japanese on account of its beautiful fur that it is now one of the rarest animals in the world. It survives in the same regions in very small numbers, but prior to the war attempts were being made by the Soviet Government to transfer some specimens from Kamchatka to the White Sea where it was hoped to establish a colony of these interesting and valuable fur-bearing animals. The Sea Otter is about 4 feet long including its tail. It is distinctly seal-like in appearance, with a fat unwieldy body bigger behind than in front. Its hind legs and feet are much larger than its forefeet and are webbed for swimming. The skin of the Sea Otter provides one of the most beautiful and expensive furs in the world. It is generally dark brown in colour with silver tips. The Sea Otter feeds almost entirely on shell-fish and is very fond of sea-urchins, crabs and seaweed. It is monogamous and only one pup is born at a time.

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The **SABLE** (*Martes zibellina*), the most famous of all fur-bearing animals, is found in scattered localities throughout Siberia as far east as Kamchatka. The size of the Sable and the quality of its fur varies considerably according to its distribution. The largest Sables, measuring over 2 feet in length including the tail, are found in the Altai region and the plain of the River Ob, while the darker and more silky Sables come from the Transbaikal and Yakut districts. The most prized Sables are black above, chestnut brown on the neck and flanks, and reddish orange on the throat. The Sable inhabits mountainous forests, is nocturnal in habit, and feeds on small rodents, birds and nuts. It is very fond of berries, especially of the rowan tree. It lives in cracks in rocks and in the roots of trees. The Sable leads a solitary life except during the breeding season which occurs in July. For its size it has a long period of gestation—about 9 months.

SABLE



The young vary in number from 2 to 6 and are usually born in April. At birth they are blind and covered with thin short whitish fur which very soon turns to a greyish colour. They do not open their eyes until about the 35th day and the mother feeds them for at least 8 weeks, when they start to leave the nest. They grow rapidly and by August are fully grown but they do not breed until they are 3 years old.

The **GLUTTON** (*Gulo gulo*), which is called the Wolverine in North America, ranges from the borders of Finland in the west, across European

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Russia and through Siberia as far as Kamchatka. It also occurs in the island of Sakhalin. It extends northward beyond the Arctic Circle and southward to Lake Baikal. This ungainly animal is a member of the Weasel Family. A fully grown Glutton is about the size of a Collie dog with rather short legs. It has a short tufted tail and is generally blackish brown in colour, although some individuals have a band of chestnut

GLUTTON



running from the shoulders along the flanks to the tail on either side. The head is broad with a short pointed muzzle and the ears are small. It has short sharp claws which are nearly always greyish white in colour. Gluttons are almost entirely nocturnal and are seldom seen during the day which they spend asleep in holes in the ground or in the crevices of rocks. As its name implies, the Glutton is a voracious feeder and devours everything it can catch and overcome. It is the bugbear of the trapper as it often eats trapped animals. The Glutton does not hibernate.

The POLAR BEAR (*Thalarctos maritimus*) is found along the coasts and on the islands of the Soviet Arctic. Its coat remains white throughout the year. It has a long narrow head and the soles of its feet are hairy so that it does not slip on the ice. The Polar Bear is the largest of all the bears, measuring 10 feet in length and weighing up to 800 pounds. The next largest bear in the U.S.S.R. is the Kamchatka race of the Brown Bear. A

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particularly large race of Polar Bear is found on Wrangel Island in the Arctic Ocean. One of these was caught by the crew of the Icebreaker *Stalingrad*, the first ship to make the voyage through the Arctic Ocean from east to west. "Mischa" was presented to the London Zoo in 1935. Polar Bears feed on fish and seal and walrus flesh. In the summer time they also eat seaweed, lichen and berries. They are very fond of salmon and will often eat the flesh of a dead whale. The young, usually 2 in number, are born in a hole in the snow, where they remain until they are able to fend for themselves. At birth they are very small, naked, blind and helpless. The mother Polar Bear is a pattern of maternal solicitude and there are many stories of her devotion to her cubs. Polar Bears can overtake a running man on land, while in the water they are accomplished swimmers and divers. When roused they are very savage animals. They live about 30 years.

POLAR BEAR



BROWN BEAR



## ANIMALS OF THE U.S.S.R.

The **BROWN BEAR** (*Ursus arctos*). There are many races of the Brown Bear in the Soviet Union. The typical Russian Bear is the medium-sized dark brown form which is found in North European Russia. The Caucasian race is lighter in colour. The average size of a Brown Bear is from 7 to 8 feet in length with a height of from 3 feet to 3 feet 6 inches at the shoulder,

BROWN BEAR



## ANIMALS OF THE U.S.S.R.

but in Kamchatka there is a race of Brown Bears very much larger—in fact they are nearly as large as the famous bears of Kodiak Island in the Behring Straits, which are generally regarded as the largest of all the Brown Bears. The Brown Bear is omnivorous and will eat almost anything but he has a very sweet tooth and his favourite food is honey. Brown Bears nearly always hibernate and the young, 2 in number, are born in the winter. The cubs are nearly always born with a whitish patch or collar round the throat, but this disappears in adult life.

PART

3

PINNIPEDIA and CETACEA

## ANIMALS OF THE U.S.S.R.

The **NORTHERN SEA LION** (*Otaria stelleri*), which is found in the North Pacific, the Behring Straits, and round the shores of the Brybiloff Islands, is the largest of all the sea lions. A fully grown male may well measure 12 or 13 feet in length and weigh 1,500 pounds. When in the water, like all sea lions, their colour is a shiny black but when they are dry they are a beautiful golden chestnut brown, though their colour varies a great deal according to the season of the year. The females are lighter in colour than the males. The single young one is born during May or June and is suckled on land.

The **WALRUS** (*Odebaenus rosmarus*) is more closely allied to the sea lions than to the seals. This is evident from the structure of the hind limbs which turn forward under the body and provide an easy means of locomotion on land. It is a massive and clumsy animal, a fully grown male weighing up to 3,000 pounds. The tusks of pure ivory may measure as much as 24 inches in length, of which about 18 inches project beyond the jaw. The females have much smaller tusks. Walruses found on the coast of Kamchatka



NORTHERN SEA LION

## WALRUS.



have the longest tusks of all. Some have been found measuring nearly 3 feet in length. The Walrus has a wide range throughout the islands of the Arctic Seas, but much persecution by man has driven them farther east than in former times, when they were quite common as far west as Greenland. They are gregarious creatures and breed in the spring. One—rarely 2—young are born and these are suckled by the mother for upwards of 2 years. The Walrus feeds on molluscs of the genus *Mya*, and their teeth are specially adapted for crushing the shells of these bivalves. Only the soft parts of the mollusc are eaten. In addition, Walruses eat large quantities of seaweed and fish of all kinds. A strong leather is prepared from the thick skin of the Walrus and large quantities of oil extracted from the blubber.

The CASPIAN SEAL (*Phoca caspica*) and the BAIKAL SEAL (*Phoca sibirica*) occur in the 2 inland seas after which they are named. They are very similar to one another, and may be regarded as small forms of the RINGED SEAL (*Phoca hispida*) which has its true home in the Arctic Ocean. The Caspian Seal measures about 4 feet in length, the Baikal Seal a little less. Lake Baikal is a freshwater lake and the Caspian Sea is

## ANIMALS OF THE U.S.S.R.

only slightly salt, and it is something of a puzzle to know how these seals, apparently marine, found their way, so far inland. They are fish-eaters, comparatively rare, and smaller than any of the marine species of seals.



CASPIAN SEAL

[ 329 ]

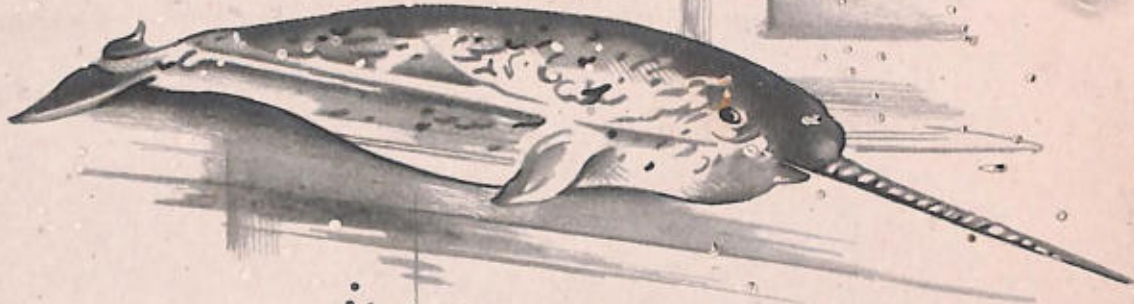
## ANIMALS OF THE U.S.S.R.

The **BLADDER-NOSED SEAL** (*Cystophora cristata*) is easily distinguished from all the other seals by the presence in the males of a large swelling on the forehead. The nose can also be inflated at will. The head swelling and nose bladder are not seen in the females. Bladder-nosed Seals are large animals, measuring up to 8 feet in length. This species is confined to the colder parts of the North Atlantic and Arctic Oceans. Their main stronghold is between Greenland and Spitzbergen. In winter they travel south but hardly ever touch land, being almost entirely pelagic. They feed upon cuttle-fish and squids and are fiercer and more dangerous to hunt than any other member of the Seal Family.

### BLADDER-NOSED SEAL



The **NARWHAL** (*Monodon monoceros*) belongs to the same Family as the Porpoises and Dolphins. It is easily distinguished from all the other members of the Family by the long spirally twisted tusk which almost invariably projects from the left side of the jaw. Only the males carry this single long tusk. The tusk on the right side is usually rudimentary, being a few inches in length. In the female both tusks are rudimentary. The tusk is formed of ivory and is always twisted clockwise. Sometimes they measure up to 8 feet in length—about half the length of the whole animal. Occasionally the right tusk is developed with the same clockwise twist. It is thought that the tusks, which are hollow for the greater part of their length, are used in battle by the males for possession of the females. Apart from the tusk, the Narwhal is toothless. They have no back fins but are provided with short



## NARWHAL

Tusk of Narwhal

wide front flippers. They are dark grey in colour above and white below, with irregular mottlings of darker grey. Narwhals are now practically confined to the Polar Seas where they occur in small "schools" which migrate periodically.

The GREENLAND WHALE (*Balaen mystecetus*) is characterised by the enormous size of its head, which is almost half the length of the entire animal. This is the whale from which the best whalebone is obtained. In a large specimen the whalebone plates measure 10 to 12 feet in length and there may be upwards of 400 on each side of the mouth. The object of these whalebone plates is to strain out the water so that the small marine





GREENLAND WHALE

## ANIMALS OF THE U.S.S.R.

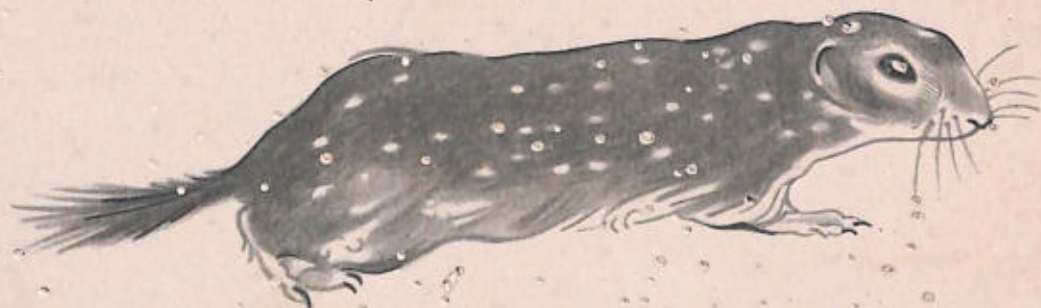
animals upon which these colossal animals feed are retained in the mouth. When feeding, whales travel along just below the surface of the water with their huge mouths wide open. They breathe through a hole in the top of the head and blow several times when they come to the surface. They usually remain under water for about 15 minutes. The single young one is born in the spring after a gestation period of about 14 months and is suckled for about a year. The maternal instinct in the whale is very highly developed.

PART  
4  
RODENTIA

## ANIMALS OF THE U.S.S.R.

The SIBERIAN CHIPMUNK or GROUND SQUIRREL (*Eutamias sibiricus*), an allied species of which occurs in North America, has 4 light coloured and 5 black stripes on the body. Chipmunks are smaller than ordinary squirrels and have cheek pouches in which they store food. The Chipmunk's tail is also much shorter and is flattened and spread out. The Siberian Chipmunk has a wide range from the Urals eastward across Siberia to Kamchatka. It feeds on all kinds of nuts, insects, grain and roots. These little Ground Squirrels generally live in holes among the roots of trees, in which they lay up a large store of food for the winter.

Closely allied to the Chipmunks are the SOUSLIKS. EVERS-MANN'S SOUSLIK (*Citellus evermanni*), of which there are several varieties, inhabits the eastern half of Siberia, from Lake Baikal northward



EVERSMANN'S SOUSLIK

to the Behring Straits and southward into Kamchatka and the Far Eastern Republic. They are about the same size as ordinary squirrels, with short tails and very small ears. Sousliks live in colonies in deep burrows mainly on open plains. They hibernate and breed in these burrows. Their chief food consists of roots, seeds, berries and occasionally small mice, birds and eggs. They are very good to eat.

SIBERIAN CHIPMUNK or GROUND SQUIRREL



## ANIMALS OF THE U.S.S.R.

The BOBAK MARMOT (*Marmota bobak*) was originally widespread from the steppes of Hungary to the Irtysh, but to-day it survives only in separate colonies in the Ukraine, the Don Bas and the Middle and Lower Volga districts. On the other side of the Urals it occurs as far east as Kazakstan. Marmots are large Ground Squirrels with short tails. Bobaks measure about 15 inches from the nose to the root of the tail. They live in large colonies and dig burrows in which they hibernate. They are strictly diurnal in habit and their food is entirely vegetarian. They are very good to eat.

BOBAK MARMOT



Three of the smaller species of HAMSTERS found in the Soviet Union are illustrated: the MONGOLIAN HAMSTER (*Phodopus songarus*) from Southern Central Asia, the MIGRATORY HAMSTER (*Cricetulus migratorius*) from the steppes of the Ukraine and West Central Asia, and BRANDT'S GOLDEN HAMSTER (*Mesocricetus auratus brandti*) from the Caucasus. These engaging mouse-like animals live in burrows and are vegetarian in habit.



MONGOLIAN HAMSTER



MIGRATORY HAMSTER

BRANDT'S GOLDEN HAMSTER



## ANIMALS OF THE U.S.S.R.

The MOLE VOLE (*Ellobius talpinus*) has a wide distribution from the Black Sea north of the Caspian as far as the northern end of the Pamirs. The Russians call this animal "Slepushonka," which means "little blindling". It inhabits the dry steppes and deserts, the grassy slopes of mountains, cultivated grassland, allotments and gardens, and spends the whole of its life underground, digging complicated burrows. These are made in 2 layers—higher and lower tunnels. The lower ones lead to the nests, the upper ones to the roots and bulbs on which the animal feeds. Like the Mole Rat or "Slepets", it does great damage to crops. It is allied to the voles and lemmings.



MOLE VOLE

The ASIATIC BANDICOOT RAT (*Nesokia indica*) has a limited distribution in the U.S.S.R. in the Caspian-Aral region as far east as Turkmenistan. They resemble ordinary rats in appearance but are larger and have more powerful teeth. They measure about 12 inches from the tip of the nose to the root of the tail and weigh over 3 pounds. They are vegetarians and live in burrows.

The MOLE RAT (*Spalax micropthalmus*). The Russians call this animal the "Slepets", which literally means "blind being". It is a rodent which is entirely adapted to subterranean life. The body is cylindrical or



ASIATIC BANDICOOT RAT



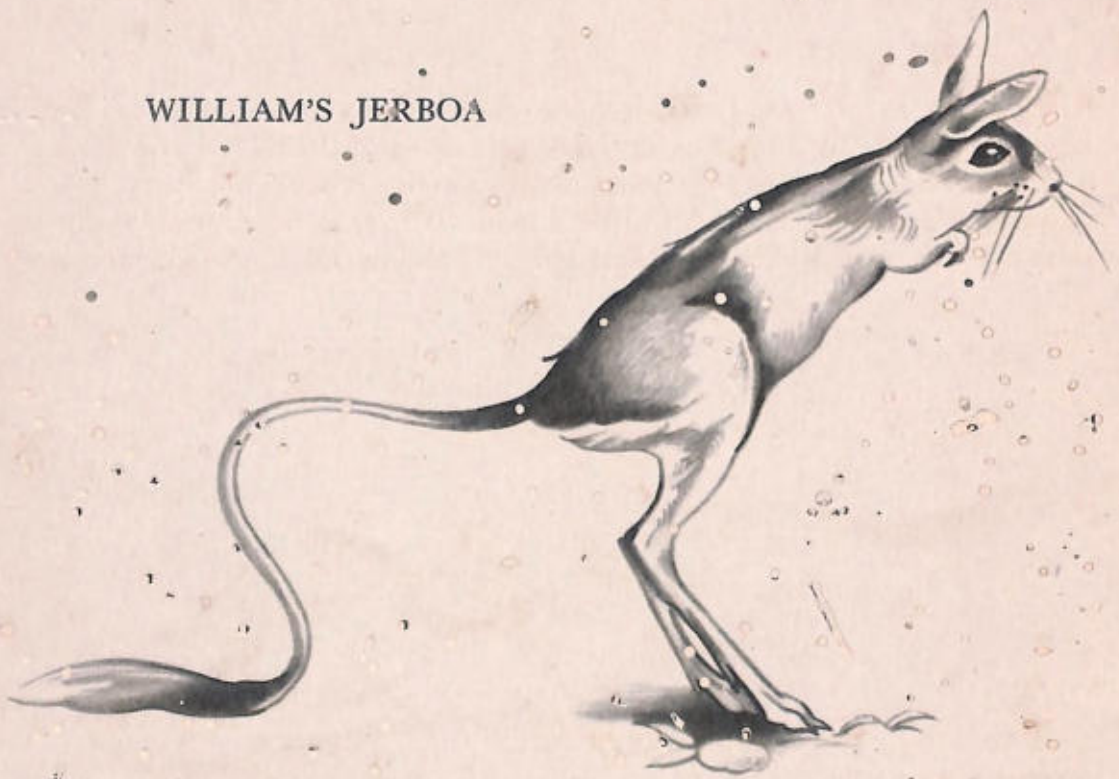
MOLE RAT

## ANIMALS OF THE U.S.S.R.

mole-like and covered with the same kind of fur as that of the mole. It has no tail and the head, which is wedge-shaped, merges into the body without any trace of neck. There are no visible eyes or ears and the feet are adapted for burrowing. Mole Rats live almost entirely underground in complicated burrows, feeding on roots and bulbs. The "Slepets" is found in a concentrated area stretching from the Ukraine north of the Black Sea as far as the western bank of the Volga. It stops short north of the Caucasus in the south, and has a sharply defined northern line of distribution through Chernigov, Tula and Ulyanovsk. Throughout this region it has become a pest and in many places does considerable damage to crops in gardens and allotments.

There are upwards of 17 different species of JERBOAS in the U.S.S.R. Most of these belong to the genus *Allactaga*. In 1778 Pallas, the famous Russian zoologist, gave the scientific name of *Allactaga jaculus* to the large jerboa which has a wide distribution from the Caspian Sea to the

WILLIAM'S JERBOA



## SIBERIAN JERBOA.



River Irtysh in Siberia, but this name had already been given to the Egyptian Jerboa by Linnaeus in 1758, so that the SIBERIAN JERBOA is now known as *Allactaga major major*. It lives in desert areas but strays into pastures and does damage to cultivated land. It lives in burrows along the sides of roads, rather like the rabbit. It hibernates during the winter and is



## SHORT-EARED JERBOA

## ANIMALS OF THE U.S.S.R.

nocturnal in habit. It has 1 or 2 litters a year and 1 to 4 young are born at a time. WILLIAM'S JERBOA (*Allactaga williamsi*) is found in the Caucasian region between the Black and Caspian Seas, while the SHORT-EARED JERBOA (*Dipus sagitta*) is mainly found in the Kara Kum Desert, in the Aral Sea region, and eastward to the Pamirs.

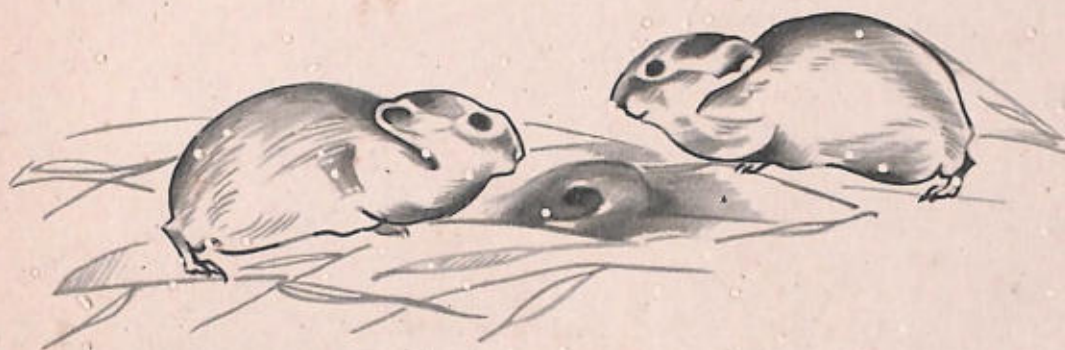


MANCHURIAN HARE

The MANCHURIAN HARE (*Lepus manchuricus*) is confined to Manchuria and Korea. It is closely related to the Mountain Hare (*Lepus timidus*) of Northern Europe and Asia. Hares differ from rabbits in that their young are born above ground, covered with hair and with their eyes already open. Rabbits are born below ground and are blind and hairless at birth.

## ANIMALS OF THE U.S.S.R.

The SIBERIAN PICA (*Ochotona alpina*). The Picas are closely related to hares and rabbits. All these rodents have a pair of small incisor teeth behind the large pair which is always visible. The Siberian Pica has short ears and no tail. Picas live in colonies in burrows and rock crevices in the coldest districts of Central Asia, Siberia and Kamchatka, and have a peculiar high-pitched call. They do not hibernate but lay in stores of food for the winter. About 6 young are born, helpless and naked like rabbits. Their general colour is greyish brown above and yellow beneath. The Pica is about the size of a Guinea-pig.



SIBERIAN PICA

PART

5

ARTIODACTYLA

## ANIMALS OF THE U.S.S.R.

PREJVALSKI'S WILD HORSE (*Equus caballus przewalskii*), which is regarded by zoologists as the only living ancestor of the domestic horses of to-day, still occurs in small numbers in the Altai region. In prehistoric times this horse must have ranged right across Europe from Central Asia, as its remains are found in the cave deposits of Paleolithic man in France and Spain, and it is depicted in many wall paintings and carvings which have been found in these early habitations. Prejvalski's Wild Horse is a stockily built dun-coloured horse, about 4 feet 6 inches at the shoulder, with erect mane, no forelock and a stripe which runs down the centre of the back to the tail. The tail is semi-asinine, that is to say the long hairs do not spring from the root of the tail but several inches farther down.



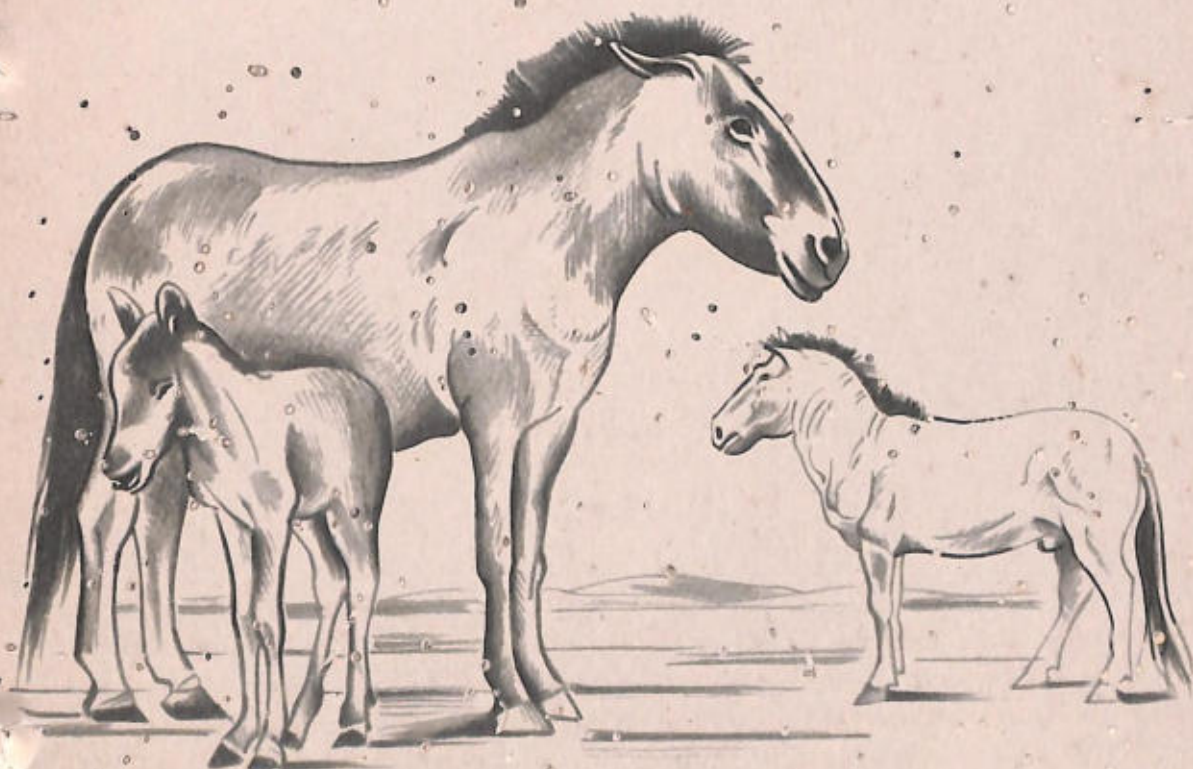
HEAD OF WILD HORSE  
Carved in Reindeer Antler  
(Paleolithic Age)

THE ASIATIC WILD ASS or KULAN (*Equus hemionus*) now survives only in the extreme south, in the Kushki region, where it is comparatively frequent, and in the south-western part of the Balkash valley where it has been seen on several occasions of recent years. Up to the end of last century it had a much wider distribution all over Central Asia. It inhabits desert plains and foothills, and in the summer is generally found in small herd

## ANIMALS OF THE U.S.S.R.

of 4 or 5 mares led by a stallion. The foals are born in the spring and towards autumn they pack into large herds of upwards of 100 head. The Kulan is an exceedingly shy animal with a keen sense of sight, hearing and smell. It is difficult to approach nearer than half a mile to a herd. They have relatively small ears and long tails. They stand about 4 feet at the shoulder and have a dark brown stripe running from the erect mane to the upper portion of the tail, which is tufted. The colour of the rest of the body varies from grey to fawn or pale chestnut, while the belly is creamy white.

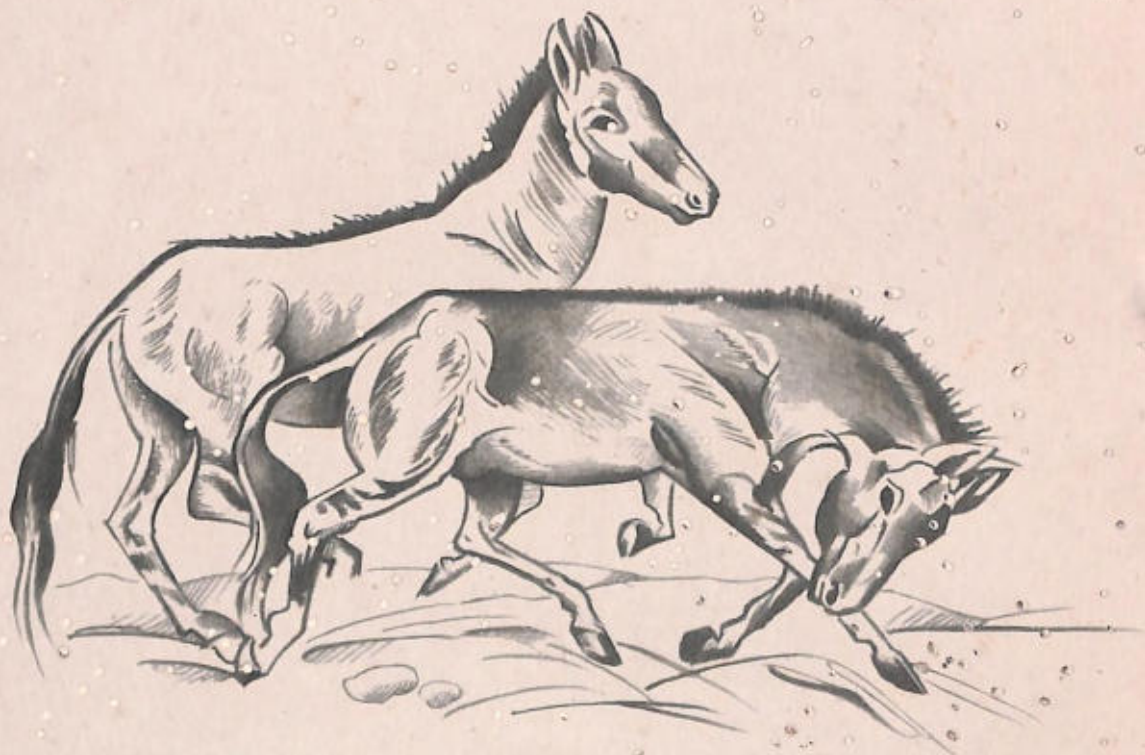
### PREJVALSKI'S WILD HORSE



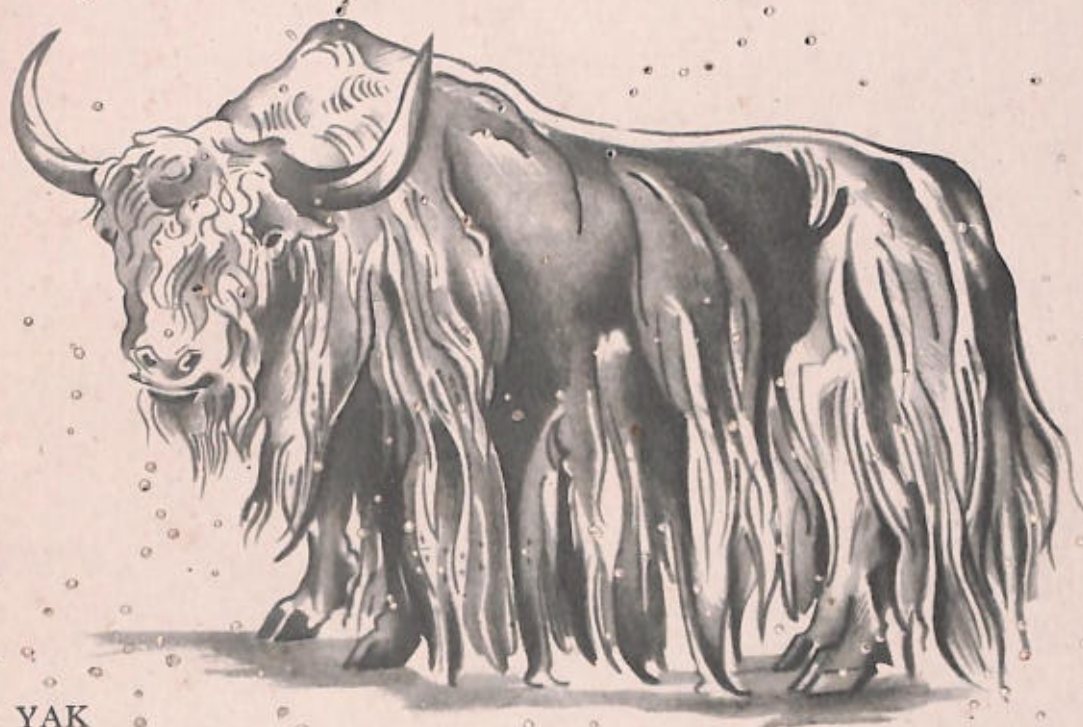
## ANIMALS OF THE U.S.S.R.

The YAK (*Poephagus grunniens*) is a native of the Tibetan plateau and the mountains of Central Asia. It is now widely domesticated and used as a beast of burden. It is also bred for its wool, meat and milk. The Yak is one of the largest and hardiest of all the oxen. Although most are black in colour, white and brindled specimens occur. Their staple food is dry grass. The Yak is sometimes known as the Grunting Ox because of the curious noise it makes.

## ASIATIC WILD ASS or KULAN



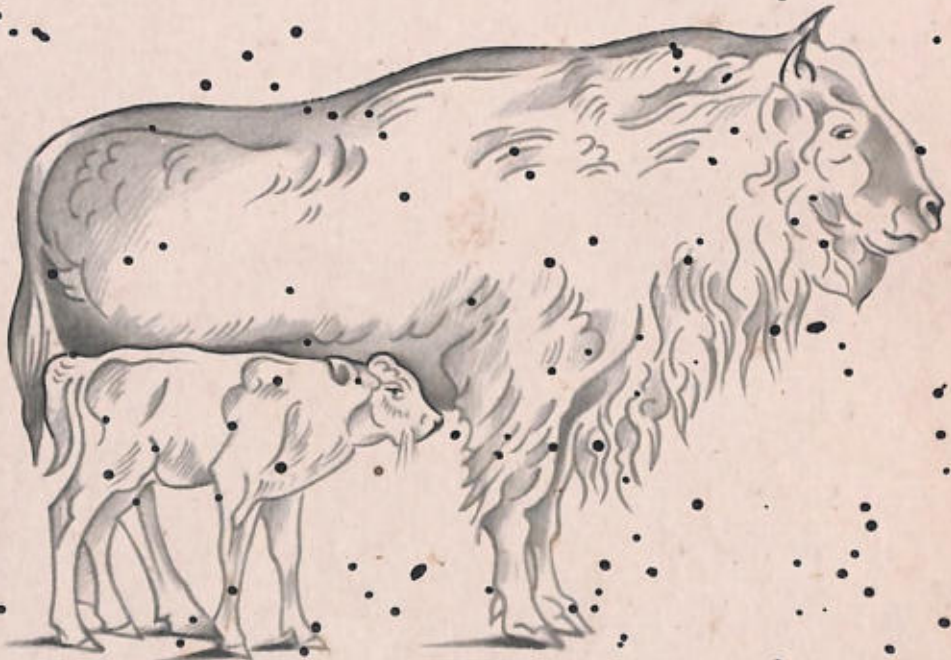
The EUROPEAN BISON? (*Bison bonasus*) was formerly spread over many parts of Europe, but during the nineteenth century it became restricted to the forests of Lithuania and the Caucasus. It was already an exceedingly rare animal at the outbreak of the second world war. Special efforts were being made at the Institute of Acclimatisation and Hybridisation at Ascaria Nova in the Ukraine to reconstitute a herd of these fine animals for release in their original Caucasian home, but unfortunately these were



YAK

## ANIMALS OF THE U.S.S.R.

exterminated when the Nazis overran the Ukraine in their advance to the east in 1942. It is doubtful whether, apart from specimens in private collections and Zoos, there are any now to be found in the wild state. The European Bison is not such a heavily built animal as the American Bison (*Bison bison*). In Paleolithic times the European Bison ranged westwards through France and Spain. Evidence of this is shown by the many drawings and wall paintings in the caves of the Vézere valley in France and Mas d'Azil in Spain.



EUROPEAN BISON  
Cow and Calf

There are many different kinds of WILD SHEEP found in the mountains of the U.S.S.R. Among the most striking are the Argali, Marco Polo's Sheep and the Kamchatkan Wild Sheep. The ARGALI (*Ovis ammon*) has a wide distribution throughout Central Asia and Mongolia and possesses heavier but shorter horns than MARCO POLO'S SHEEP (*Ovis polii*), in which species the male is characterised by having longer

EUROPEAN BISON



MARCO POLO'S SHEEP



ARGALI



KAMCHATKAN WILD SHEEP.



## ANIMALS OF THE U.S.S.R.

horns than any other sheep in the world, the record pair measuring 75 inches in length along the front angle, with a spread of 54 inches. The horns of the female are insignificant, being slender, upright and not more than 12 inches long. As in all wild species of sheep, the hair is short, close and stiff, and not at all woolly like that of the domesticated breeds. A large specimen of Marco Polo's Sheep measures 3 feet at the shoulder. This species is found at heights of 10,000 to 18,000 feet above sea level, throughout the Pamirs and extending in a north-easterly direction towards the southern end of Lake Baikal. They graze on the scanty grass below the snowline of their native mountains. The KAMCHATKAN WILD SHEEP (*Ovis nivicola*) is smaller than either of the two preceding species, and its horns are proportionately lighter and shorter. All these sheep can leap enormous distances and the Russian explorer, Prejvalski, states that he often saw them leap down from a height of 20 to 30 feet and land safely on their feet.



ARGALI SHEEP  
(Immature Male)



CAUCASIAN IBEX

MARKHOR



ASIATIC IBEX

SEVERTZOV'S TUR



## ANIMALS OF THE U.S.S.R.

The CAUCASIAN IBEX (*Capra cylindricornis*) lives in the mountains of the Caucasus. It differs from the Asiatic Ibex in having its horns flattened from side to side without any rings or bosses. The horns of the female are much smaller than those of the male which sometimes measure 3 feet in length. Ibex are true wild goats. The ASIATIC IBEX (*Capra sibirica*) is widely distributed throughout the mountains of Central Asia. The male has a long beard and heavy horns which are curved over the back with large bosses at regular intervals. In good specimens the horns may measure 4 feet long. The Ibex lives high up on the mountains near the snowline and feeds on grass and shrubs. The MARKHOR (*Capra falconeri*) differs from all the other wild goats in having spirally twisted horns, some of them straight and measuring up to almost 4 feet in length. The horns of the males vary in shape and size but all have immense manes and beards. Another species of wild goat found in the Western Caucasus is SEVERTZOV'S TUR (*Capra severtsovii*).



MARKHOR

## CHAMOIS



The CHAMOIS (*Rupicapra rupicapra*) has a wide distribution extending from the Swiss Alps southward into the Apennines of Italy, eastward into the Carpathians and the Caucasus, and westward to the Pyrenees. The horns of the Chamois are quite different from those of other goats, being round and rising vertically from the forehead before turning backwards in a hook. Chamois do not usually exceed 2 feet 6 inches in height. Their body colouring is chestnut brown with paler markings on the chin and underparts. They are usually found in herds of 12 or more and are famed for their agility and sureness of foot on the steep mountain paths and precipices of their home. They feed on alpine plants and shrubs.



ASIATIC IBEX

## ANIMALS OF THE U.S.S.R.

The SAIGA ANTELOPE (*Saiga tatarica*) is one of the rarest and most interesting antelopes in the world. Although in the eighteenth century its range extended from the Carpathians to the Altai Mountains, in the nineteenth century it retreated eastwards to the River Don, and it is now extremely rare and is strictly protected by law. Special reserves have been formed, chief of which is the one on the island of Barsa-Kelmes in the Aral Sea. There are scanty remnants of herds to the north and east of the



SKULL OF SAIGA ANTELOPE

Caspian and north of the Pamir Mountains. The Saiga does not live in the mountains but is an inhabitant of semi-desert and desert regions, where it feeds mainly on low growing shrubs and grasses. Formerly the Saiga made long migrations to the south in the autumn and to the north in the summer, but persecution by man now keeps the herds stationary. The calves, numbering 1 to 3, are usually born in May after a gestation period of about 5 months. Within a week they are able to run with their mothers and at 4 weeks they begin to nibble grass. The London Zoo has only once had a specimen of this antelope in their collection—a male which was received from the Moscow Zoo Park in November 1864.



SAIGA ANTELOPE



HEAD OF SAIGA ANTELOPE

## ANIMALS OF THE U.S.S.R.

The GAZELLE (*Gazella subgutturosa*), a graceful antelope which stands about 2½ feet at the shoulder, is common throughout the deserts of Turkmenistan and Central Asia. The males have strong lyre-shaped horns but the females are hornless. The colour of the animal is fawn above and white beneath, with a white disc round the tail. During the breeding season, the necks of the males swell until they are almost twice their normal size. Gazelles pick up a precarious living in the desert, feeding on dry grass and leaves of desert plants and seldom drinking.

GAZELLE



## ANIMALS OF THE U.S.S.R.

The MUSK DEER (*Moschus moschiferus*) has a wide distribution over the eastern half of Central Asia and Siberia. Musk Deer are usually found in the birch forests above the pine zone and like the Reindeer feed mainly on lichens. This small deer, in which the antlers are absent in both sexes, stands barely 2 feet high. The male is provided with a pair of sharp downward-pointing tusks about 3 inches long. The Musk Deer is normally covered with long rich dark brown fur mottled with grey, but sometimes the colour varies considerably. The young are born spotted. The strong-smelling musk, from which the animal gets its name, is contained in a sac-like gland on the belly of the male. Each animal produces

### MANCHURIAN SIKA



about an ounce of musk which is very valuable as it forms the basis for many perfumes.

The MANCHURIAN SIKA (*Sika manzhuricus*) has a restricted distribution in the Far Eastern Republic south of the Amur River. It is a large race of the small Japanese Sika (*Sika nippon*). The antlers of the male have no bez-tine. Manchurian Sika are slightly smaller than the British Fallow Deer and are usually dark in colour.



MUSK DEER

## ANIMALS OF THE U.S.S.R.

The MANCHURIAN DEER (*Cervus xanthopygas*). This huge animal, which is closely allied to the North American Wapiti (*Cervus canadensis*), is one of the largest deer in the world. Specimens have been found measuring 5 feet 6 inches at the shoulder and weighing up to 1,000 pounds. Their



PÈRE DAVID'S DEER

antlers, like those of the Wapiti, have a tendency to flattening and expansion of the terminal tines. Manchurian Deer are found in Amurland and extend westward towards Lake Baikal and south-westward, with breaks, to Turkmenistan, where closely allied varieties are found known as the Tien-shan or Altai Deer (*Cervus eustephanus*) and the Turkestan Deer (*Cervus bactricus*). All these deer are closely related to the European Red Deer (*Cervus elaphus*) but are very much larger in size.

PÈRE DAVID'S DEER (*Elaphurus davidianus*) does not now occur anywhere in the world in the wild state, but it is such a remarkable animal and has such a remarkable history that I am including it because I feel that at some future time, somewhere in the vast territories of the U.S.S.R.,



MANCHURIAN DEER

ELK



remains may be found which will solve the mystery of its original habitat. Very briefly, the history of Père David's Deer is this: in 1863, the French missionary, Father David, saw a small herd of these deer in the Imperial Hunting Park at Peking. Noticing that they differed from normal deer in the shape of their antlers, he bribed the keepers of the Park to give him a skin and pair of antlers. He sent these to Professor Milne Edwards in Paris, who described them as an entirely new species unlike any other existing deer. As it turned out, the herd in the Hunting Park were the last remnants of the species in the world, as they were exterminated in the Boxer Rebellion in 1901. Fortunately, the late Duke of Bedford had imported some specimens to England shortly before this, and there are now some 200 specimens alive at Woburn in Bedfordshire. Some were recently sent to America, and there is the nucleus of a herd at Whipsnade Park.

Since writing the above, Mr. Arthur de C. Sowerby tells me that sub-fossil remains of Père David's Deer dating from the Shang Dynasty (1776-1122 B.C.) have been found at An-yang in north-eastern Honan. Complete antlers and fragments associated with human artifacts have also been recovered from peat bogs east of Peking, northern Hopei. This does not preclude the possibility of similar remains being discovered in other localities.

The ELK (*Alces alces*), which is the largest of the Deer Family, has a wide distribution throughout the north of European Russia and Siberia. In Canada the Elk is known as the Moose. The Elk differs from other deer in having very long legs and a curious camel-like muzzle which is extremely flexible and is specially adapted for browsing on twigs and branches of poplar and willow, the animal's main food. It very seldom eats grass. The Bull Elk carries enormous palmate antlers which are cast every year and grow again like those of the Fallow Deer. Under the throat is a tuft of hair which is known as the "bell".

The REINDEER (*Rangifer tarandus*) has a wide distribution throughout the north of European Russia and the whole of Siberia, from the fiftieth degree of latitude to the Arctic Ocean. It has been domesticated by man and is used as a draught animal and as a source of food and clothing. The feet of the Reindeer are quite different from those of other deer, being large and spatulate so that the animal can run over the deep snow without the danger of sinking in. Reindeer are also different from other deer in that



REINDEER

ANIMALS OF THE U.S.S.R.

both sexes grow antlers. One of the tines of the antlers is larger than the others and is used as a shovel with which the animal digs away the snow to reach the mosses on which it feeds.



BACTRIAN CAMEL

The BACTRIAN CAMEL (*Camelus bactrianus*) is now no longer found in the wild state. This huge animal probably had its origin in Central

## ANIMALS OF THE U.S.S.R.

Asia and is now used as a domestic beast of burden from European Russia across the Asiatic continent to Manchuria. It is easily distinguished from its speedier cousin, the one-humped Arabian Camel or Dromedary (*Camelus dromedarius*) by the presence of two humps. The Bactrian Camel is one of the hardiest of all domesticated animals. It lives mainly on dry grass or hay and has remarkable powers of endurance.

PART.

6

BIRDS, REPTILES AND OTHERS.

## SIBERIAN<sup>o</sup> JAY



The SIBERIAN JAY (*Perisoreus infaustus*) is one of the commonest and most engaging birds of the northern parts of the Soviet Union. It differs from the common Jay both in colour and in the texture of its feathering. The Siberian Jay has a soft fluffy plumage which may well be to protect it from the severe Arctic winters. Its general colour is brown; with the rump and tail chestnut red. It has no brilliantly coloured feathers like the common Jay. It is predacious and feeds on the young and eggs of other birds as well as berries and fruits.

The GREAT EAGLE OWL (*Bubo bubo*) is found throughout the Soviet Union. It is the largest and most powerful of the Owl Family, standing 2 feet in height. The plumage is very variable and the bird has ear tufts. The Eagle Owl is exceedingly fierce and has been known to attack man.



GREAT EAGLE OWL

## ANIMALS OF THE U.S.S.R.

The SNOWY OWL (*Nyctea nyctea*) is found throughout the Arctic regions of the Northern Hemisphere. It is smaller than the Eagle Owl and hunts both by day and night. Its favourite prey is the Lemming, the little rodent which has periodic mass migrations. The Snowy Owl varies in colour from pure white to white barred and flecked with grey.

The ASIATIC LAMMERGEYER or BEARDED VULTURE (*Gypsoetus barbatus altaicus*) inhabits the mountains of Central Asia. Ornithologists used to regard the Lammergeyer as belonging to the Vulture Family but recently it has been placed among the eagles because it differs from the true vultures in having its head covered with feathers instead of being naked. The nostrils of the Lammergeyer are covered with sharp bristles and it also has a tuft of bristles under the bill which gives it the appearance of possessing a beard. It has a large hooked beak. The Asiatic Lammergeyer is distinguished from the European species by having its legs feathered down to the feet. The Lammergeyer is a most impressive bird nearly 4 feet in length with an enormous wing span.

The GOLDEN EAGLE (*Aquila chrysaetos*) is very widely distributed throughout the Northern Hemisphere. In Turkmenistan it is known as the Hunting Eagle or "Berkut" because it is trained to work for man. These trained eagles are used in the same way as falcons, being carried on the hand and hooded until the moment of release. They are chiefly used for catching the Corsac Fox, wild goats and gazelles. I once saw a band of 12 Turkmens walking through the Red Square in Moscow, each with a Golden Eagle on his wrist. It was a most impressive sight.

STELLER'S SEA EAGLE (*Thalassoaetus pelagicus*) inhabits the coastlands of North-Eastern Siberia and Kamchatka. When adult, this magnificent bird, which is the largest of all the eagles, is black and white in colour, but in young birds the white parts are brownish and do not moult out white for several years. Apart from being a giant among eagles, Steller's Sea Eagle possesses the most powerful beak of any bird of prey. This eagle attains a length of 3 feet 6 inches and has a wedge shaped tail which has 14 feathers in it instead of the usual 12 which other eagles have. It feeds on fish and small mammals which it carries away in its talons. It is interesting to note that the bones of a sea eagle, indistinguish-



SNOWY OWL



GOLDEN EAGLE

◦ ASIATIC LAMMERGEYER



## ANIMALS OF THE U.S.S.R.

able from Steller's Sea Eagle, have been found in surface deposits in Essex, which indicates that this handsome bird had a much wider distribution in comparatively recent times.

### WHOOPER SWAN

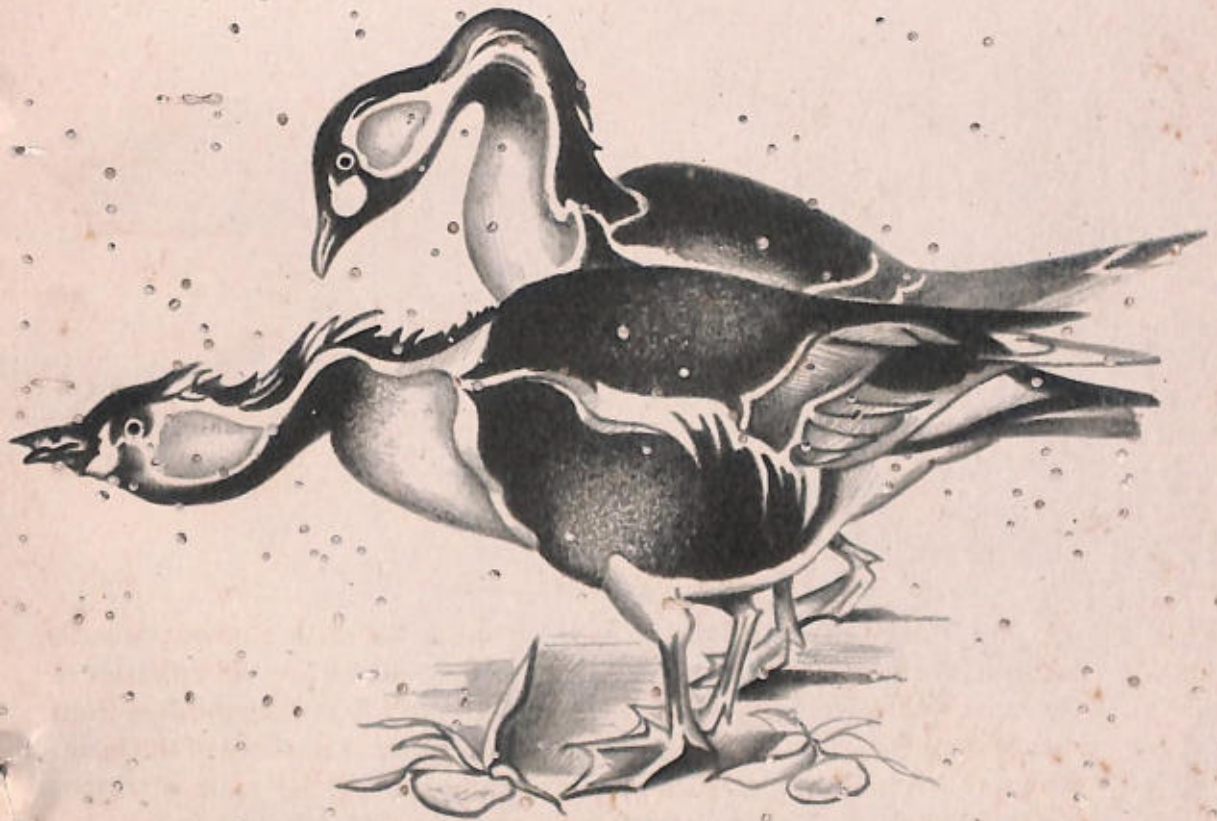


The WHOOPER SWAN (*Cygnus cygnus*) is found throughout Siberia eastward to Kamchatka. Its favourite breeding places are the estuaries of the large rivers which flow into the Arctic Ocean. It is distinguished from the common Mute Swan by the absence of the knob at the base of the beak. Whooper Swans have a loud call, especially during the mating season, when the pairs go through an elaborate courting performance.

## ANIMALS OF THE U.S.S.R.

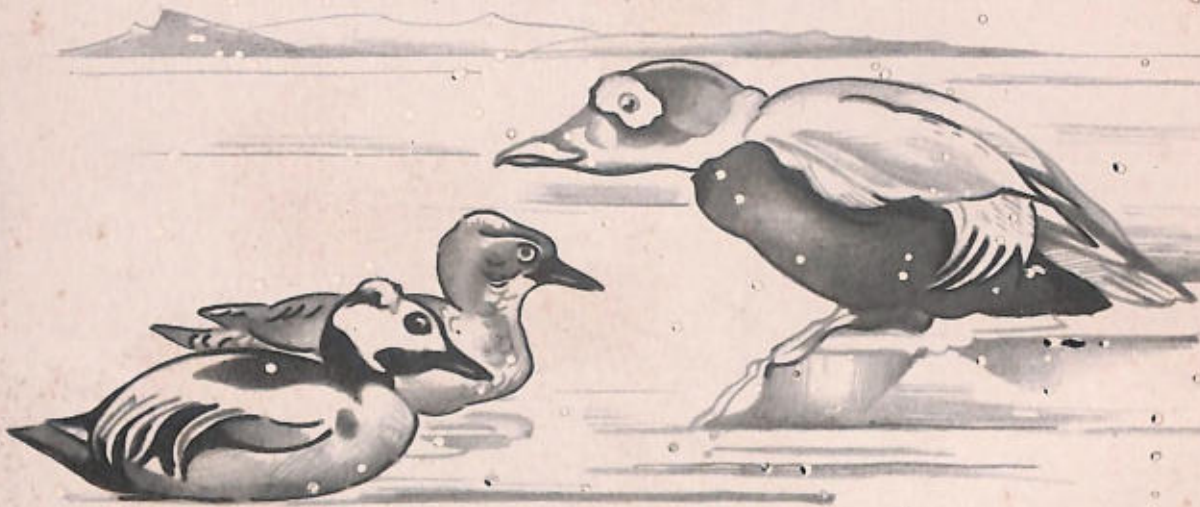
The RED-BREASTED GOOSE (*Branta ruficollis*) or the "Red-cropped Goose" as the Russians call it, is without doubt the most beautiful of all geese. It is smaller than most other species and its colour is black and chestnut red, divided into a well defined pattern by pure white bands. Its native home is the tundra of Siberia, where it breeds in the estuaries of the large rivers such as the Yenesei and the Ob. In winter time it migrates southward to the shores of the Caspian Sea and sometimes stragglers visit Europe. There are records of Red-breasted Geese being seen in the British Isles. It is possible that in prehistoric times these birds wandered farther south than the Caspian, as their pictures have been found among the wall paintings and hieroglyphs of the early Egyptians.

### RED-BREASTED GOOSE



## ANIMALS OF THE U.S.S.R.

Two of the most spectacular of the 6 species of EIDER DUCKS in the Old World are the SPECTACLED EIDER (*Somateria fischeri*) and STELLER'S EIDER (*Somateria stelleri*), both of which live and breed in the Arctic regions of the Soviet Union. All the Eider Ducks dwell on rocky coasts where they feed on shell-fish. Most of the males have emerald green markings on the head, while the scapular feathers in all the species are characteristically elongated. They are rather clumsy birds on land but are powerful on the wing and are expert divers and swimmers.



STELLER'S EIDER

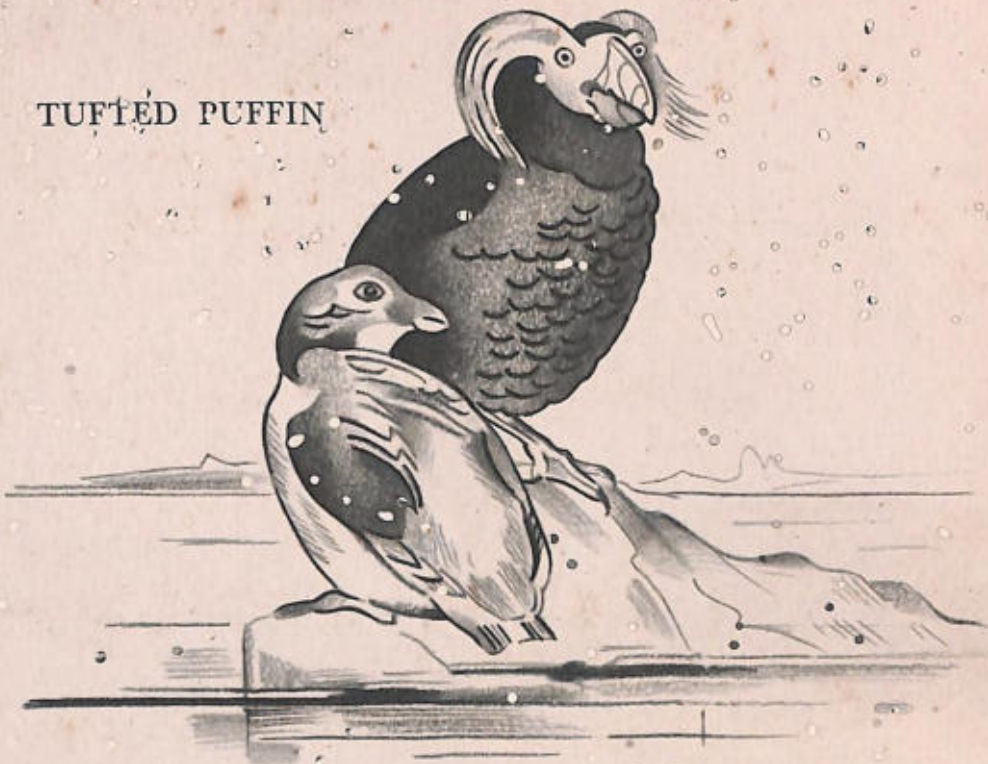
SPECTACLED EIDER

The MANCHURIAN CRANE (*Megalornis japonensis*) is found in Eastern Siberia and Korea. It is usually about 4 feet in height and has a tuft of red feathers on the top of the head. The rest of the adult plumage is black and white. When the young are hatched (usually 2 in number) they are buff in colour and do not change to the adult plumage until they are about a year old. The Manchurian Crane is frequently depicted in Chinese and Japanese paintings and other works of art. These cranes live entirely on the ground and feed mainly on insects and the seeds of grass.



MANCHURIAN CRANE

## TUFTED PUFFIN



Of all the PUFFINS, the TUFTED or WHISKERED PUFFIN (*Lunda cirrhata*) is perhaps the most grotesque. It frequents the coasts of Kamchatka and the adjoining islands. Like the common Puffin of our coasts, it has a large parrot-like bill with grooves and a small casque on the upper mandible. The lower mandible is not grooved. The most distinguishing feature of this extraordinary little bird is the crest of feathers which hangs down the back of the head. The Puffin is a fish eater.

The BLACK-THROATED DIVER (*Colymbus arcticus*) which lives and breeds in the Arctic regions of Northern Europe and Siberia, is smaller than the Great Northern Diver (*Colymbus glacialis*). This handsome bird has a black and white striped gorget and two bands of white with crossed stripes of black along the back, while the wing coverts are speckled with white. Divers feed exclusively on fish and remain at sea throughout their lives except during the nesting period when they resort to inland lakes. They are found in isolated pairs. They can remain under water for almost 10 minutes at a time. They lay 2 eggs and both sexes take a share in hatching them out.



BLACK-THROATED DIVER



CAPERCAILLIE

## ANIMALS OF THE U.S.S.R.

The CAPERCAILLIE (*Tetrao urogallus*) is the largest of all the Grouse tribe. It has an exceedingly wide distribution throughout Northern and Central Europe to Turkmenistan and the Altai region. There are two other species in the U.S.S.R., *Tetrao parvirostris* in Siberia and *Tetrao kamschaticus* in Kamchatka. Both of these have smaller bills than their western relatives and their scapular feathers are tipped with white. The Capercaillie, which usually lives in pine forests, is polygamous. In Russia it is esteemed as a table bird and is called "Woodcock" on the menu, which comes as a surprise to English visitors.

## TURKESTAN GECKO



The TURKESTAN GECKO (*Teratoscincus scincus*) is found in the Kara Kum Desert and feeds on flies and other insects. This rare and interesting little lizard is not a true gecko and its feet are more lizard-like than the geckos, which have sucker-like pads on their fingers.



GREY MONITOR

## ANIMALS OF THE U.S.S.R.

The GREY MONITOR (*Varanus griseus*) is found in the U.S.S.R. from the Caspian Sea to the Indian frontier. This species of Monitor Lizard differs from the others in having slitted nostrils and a cylindrical tail. In other species the nostrils are round and the tail is flattened from side to side. These large lizards sometimes attain a length of over 4 feet. They are greyish in colour with brown bands across the back and tail. Monitor Lizards have long forked tongues which can be extended far out of the mouth and are used as exploratory tasting organs. They lap water with these tongues like a dog and are very fond of eggs. They are entirely carnivorous, feeding on other lizards, snakes, mammals and birds.

The ASIATIC SAND SNAKE or SAND BOA (*Eryx miliaris*) occurs in the deserts of Turkmenistan and the surrounding country. Its bite is not poisonous and it kills by constriction. It is distinguished from the other boas by the way in which the head merges into the body without any constriction at the neck. It spends most of its time half buried in the sand, on the look out for its prey which consists of lizards and small desert mammals.



ASIATIC SAND SNAKE or SAND BOA

## ANIMALS OF THE U.S.S.R.

DAUDIN'S VIPER (*Vipera lebetina*) is also found in the Kara Kum Desert. It is about 3 feet in length, greyish in colour, and highly poisonous. It preys on small desert animals such as jerboas, hamsters, mice and lizards.

DAUDIN'S VIPER



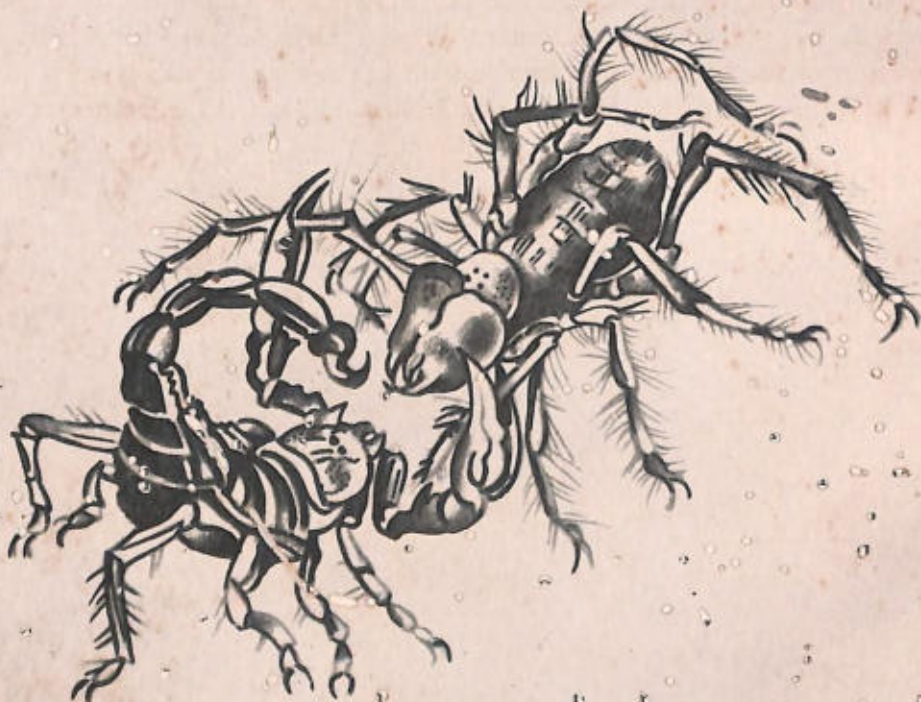
The STURGEON (*Acipenser sturio*), from whose roe the famous Russian caviare is prepared, is mainly a marine fish which enters rivers to spawn. Other species, such as the sturgeon which are found in the Caspian and Aral Seas, are restricted to comparatively fresh water all their lives. They are distinguished from all other fish by having a snout with four barbels in front of the mouth. Along the body are 5 lines of bony plates, each bearing a spine. There are about 30 different species of sturgeon, the largest of which grow to 24 feet in length and may weigh 1,500 pounds. They are bottom-feeders and their food consists mainly of water insects. The flesh of the sturgeon, as well as the roe, is highly esteemed as food and the most important fisheries are those round the Black and Caspian Seas. The finest caviare comes from the sturgeon known as the BELUGA STURGEON (*Acipenser beluga*).

STURGEON



## ANIMALS OF THE U.S.S.R.

GALEODES FIGHTING A SCORPION. The picture shows a fight between a scorpion (*Palomnæus*) and a "False Spider" of *Galeodes*. Although superficially resembling a spider, *Galeodes* belongs to quite a different group of animals. The abdomen is divided into segments and they have no spinning glands. They appear to have five pairs of legs but the front pair are really feelers. They have very powerful mandibles and in the fight shown in the drawing—which was taken from an actual film—the *Galeodes* killed the scorpion in spite of the latter's poisonous sting and powerful claws. These voracious little creatures prowl at night and are attracted by light, so that they often wander into the tents of travellers and cause considerable consternation. The bite of some species of *Galeodes* is reputed to be poisonous.



GALEODES FIGHTING A SCORPION

ACKNOWLEDGMENTS

The following drawings are based on illustrations by C. Flerov, N. Kondakov, and N. Janshinov in the book *Mammals of U.S.S.R.* (Moscow, 1944), by N. Bobrinskoy, B. Kuznetzov and A. Kuzyakin:

Desmans (page 3); Long-eared Hedgehog (page 4); Desert Long-eared Hedgehog (page 4); Water Shrew (page 6); Sharp-nosed Bat (page 9); Hemprich's Eared Bat (page 9); Jungle Cat (page 15); Siberian Wild Dog (page 20); Mongolian Hamster (page 41); William's Jerboa (page 44); Short-eared Jerboa (page 45); Manchurian Hare (page 46); Saiga Antelope (page 63); and Musk Deer (page 67).

The drawing of the Golden or Hunting Eagle (page 80) is based on an article by the Russian scientist George Dementiev (1937), and the illustration of the 8 feet long Narwhal tusk (page 34) is based on a photograph by Maynard Owen Williams of a Narwhal killed by Eskimos (1940).

