

# MUSTELIDAE







**mustelidae - куньи**

**[mustelidae]**



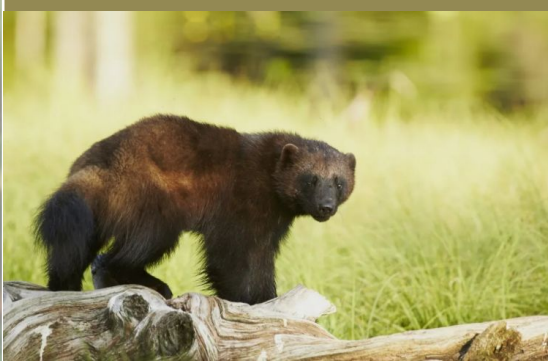
**badger - барсук**

**[ˈbædʒə]**



**тайра - тайра**

**[ˈtaɪrə]**



**wolverine - росомаха**

**['wʊlvəri:n]**



**marten - куница**

**['mɑ:tɪn]**



**sable - соболь**

**[seɪbl]**



**stoat - горноста́й**

[stəʊt]



**fisher - лесная куница**

['fɪʃə]



**grison - медоед**

['graɪs(ə)n]



**polecat - хорек**

[ˈpəʊlkæt]



**weasel - ласка**

[wiːzl]



**mink - норка**

[mɪŋk]



otter - выдра

[ˈɒtə]

## Mustelidae





The Mustelidae are a family of carnivorous mammals, including weasels, badgers, otters, ferrets, martens, minks, and wolverines, among others. Mustelids are a diverse group and form the largest family in the order Carnivora, suborder Caniformia. They comprise about 56–60 species across eight subfamilies.

Mustelids vary greatly in size and behaviour. The least weasel can be under a foot in length, while the giant otter of Amazonian South America can measure up to 1.7 m and sea otters can exceed 45 kg in weight. Wolverines can crush bones as thick as the femur of a moose to get at the marrow, and have been seen attempting to drive bears away from their kills. The sea otter uses rocks to break open shellfish to eat. Martens are largely arboreal, while European badgers dig extensive tunnel networks, called setts. Some mustelids have been domesticated; the ferret and the tayra are kept as pets (although the tayra requires a Dangerous Wild Animals licence in the UK), or as working animals for hunting or vermin control. Others have been important in the fur trade – the mink is often raised for its fur.

Being one of the most species-rich families in the order Carnivora, the family Mustelidae also is one of the oldest. Mustelid-like forms first appeared about 40 million years ago, roughly coinciding with the appearance of rodents. The common ancestor of modern mustelids appeared about 18 million years ago.

Within a large range of variation, the mustelids exhibit some common characteristics. They are typically small animals with elongated bodies, short legs, short, round ears, and thick fur. Most mustelids are solitary, nocturnal animals, and are active year-round.

With the exception of the sea otter, they have anal scent glands that produce a strong-smelling secretion the animals use for sexual signaling and marking territory.

Most mustelid reproduction involves embryonic diapause. The embryo does not immediately implant in the uterus, but remains dormant for some time. No development takes place as long as the embryo remains unattached to the uterine lining. As a result, the normal gestation period is extended, sometimes up to a year. This allows the young to be born under favorable environmental conditions. Reproduction has a large energy cost, so it is to a female's benefit to have available food and mild weather. The young are more likely to survive if birth occurs after previous offspring have been weaned.

Mustelids are predominantly carnivorous, although some eat vegetable matter at times. While not all mustelids share an identical dentition, they all possess teeth adapted for eating flesh, including the presence of shearing carnassials. One characteristic trait is a meat-shearing upper-back molar that is rotated 90 degrees, towards the inside of the mouth.

# Badger



**Badgers are short-legged omnivores mostly in the family Mustelidae (which also includes the otters, polecats, weasels, and ferrets), but also with two species called "badgers" in the related family Mephitidae (which also includes the skunks). Badgers are a polyphyletic grouping, and are not a natural taxonomic grouping: badgers are united by their squat bodies, adapted for fossorial activity. All belong to the caniform suborder of carnivoran mammals.**

**The eleven species of mustelid badgers are grouped in four subfamilies: Melinae (four species, including the European badger), Helictidinae (five species of ferret-badger), Mellivorinae (the honey badger or ratel), and Taxideinae (the American badger); the respective genera are Arctonyx, Meles, Melogale, Mellivora and Taxidea. Badgers include the most basal mustelids; the American badger is the most basal of all, followed successively by the ratel and the Melinae; the estimated split dates are about 17.8, 15.5 and 14.8 million years ago, respectively. The two species of Asiatic stink badgers of the genus Mydaus were formerly included within Melinae (and thus Mustelidae), but more recent genetic evidence indicates these are actually members of the skunk family (Mephitidae).**

**Badger mandibular condyles connect to long cavities in their skulls, which gives resistance to jaw dislocation and increases their bite grip strength. This in turn limits jaw movement to hinging open and shut, or sliding from side to side, but it does not hamper the twisting movement possible for the jaws of most mammals.**

**Badgers have rather short, wide bodies, with short legs for digging. They have elongated, weasel-like heads with small ears. Their tails vary in length depending on species; the stink badger has a very short tail, while the ferret-badger's tail can be 46–51 cm long, depending on age. They have black faces with distinctive white markings, grey bodies with a light-coloured stripe from head to tail, and dark legs with light-coloured underbellies. They grow to around 90 cm in length including tail.**

**The European badger is one of the largest; the American badger, the hog badger, and the honey badger are generally a little smaller and lighter. Stink badgers are smaller still, and ferret-badgers smallest of all. They weigh around 9–11 kg, while some Eurasian badgers weigh around 18 kg.**

**Badgers are found in much of North America, Ireland, Great Britain and most of the rest of Europe as far north as southern Scandinavia. They live as far east as Japan and China. The Javan ferret-badger lives in Indonesia, and the Bornean ferret-badger lives in Malaysia. The honey badger is found in most of sub-Saharan Africa, the Arabian Desert, southern Levant, Turkmenistan, Pakistan and India.**

The behaviour of badgers differs by family, but all shelter underground, living in burrows called setts, which may be very extensive. Some are solitary, moving from home to home, while others are known to form clans called cetes. Cete size is variable from two to 15. Badgers can run or gallop at 25–30 km/h for short periods of time. They are nocturnal. In North America, coyotes sometimes eat badgers and vice versa, but the majority of their interactions seem to be mutual or neutral. American badgers and coyotes have been seen hunting together in a cooperative fashion.

The diet of the Eurasian badger consists largely of earthworms, insects, grubs, and the eggs and young of ground-nesting birds. They also eat small mammals, amphibians, reptiles and birds, as well as roots and fruit. In Britain, they are the main predator of hedgehogs, which have demonstrably lower populations in areas where badgers are numerous, so much so that hedgehog rescue societies do not release hedgehogs into known badger territories. They are occasional predators of domestic chickens, and are able to break into enclosures that a fox cannot. In southern Spain, badgers feed to a significant degree on rabbits.

American badgers are fossorial carnivores - i.e. they catch a significant proportion of their food underground, by digging. They can tunnel after ground-dwelling rodents at speed. The honey badger of Africa consumes honey, porcupines, and even snakes (such as the puff adder); they climb trees to gain access to honey from bees' nests.

Badgers have been known to become intoxicated with alcohol after eating rotting fruit.

# Tayra



The tayra is an omnivorous animal from the weasel family, native to the Americas. It is the only species in the genus *Eira*.

Tayras are also known as the toloomuco or perico ligero in Central America, motete in Honduras, irara in Brazil, san hol or viejo de monte in the Yucatan Peninsula, and high-woods dog in Trinidad. The genus name *Eira* is derived from the indigenous name of the animal in Bolivia and Peru, while *barbara* means "strange" or "foreign".

Tayras are long, slender animals with an appearance similar to that of weasels and martens. They range from 56 to 71 cm in length, not including a 37- to 46-cm-long bushy tail, and weigh 2.7 to 7.0 kg. Males are larger, and slightly more muscular, than females. They have short, dark brown to black fur which is relatively uniform across the body, limbs, and tail, except for a yellow or orange spot on the chest. The fur on the head and neck is much paler, typically tan or greyish in colour. Albino or yellowish individuals are also known, and are not as rare among tayras as they are among other mustelids.

The feet have toes of unequal length with tips that form a strongly curved line when held together. The claws are short and curved, but strong, being adapted for climbing and running rather than digging. The pads of the feet are hairless, but are surrounded by stiff sensory hairs. The head has small, rounded ears, long whiskers, and black eyes with a blue-green shine. Like most other mustelids, tayras possess anal scent glands, but these are not particularly large, and their secretion is not as pungent as in other species, and is not used in self defence.



Tayras are found across most of South America east of the Andes, except for Uruguay, eastern Brazil, and all but the most northerly parts of Argentina. They are also found across the whole of Central America, in Mexico as far north as southern Veracruz, and on the island of Trinidad. They are generally found in only tropical and subtropical forests, although they may cross grasslands at night to move between forest patches, and they also inhabit cultivated plantations and croplands.

Tayras are solitary diurnal animals, although occasionally active during the evening or at night. They are opportunistic omnivores, hunting rodents and other small mammals, as well as birds, lizards, and invertebrates, and climbing trees to get fruit and honey. They locate prey primarily by scent, having relatively poor eyesight, and actively chase it once located, rather than stalking or using ambush tactics.

They are expert climbers, using their long tails for balance. On the ground or on large horizontal tree limbs, they use a bounding gallop when moving at high speeds. They can also leap from treetop to treetop when pursued. They generally avoid water, but are capable of swimming across rivers when necessary.

They live in hollow trees, or burrows in the ground. Individual animals maintain relatively large home ranges, with areas up to 24 km<sup>2</sup> having been recorded. They may travel at least 6 km in a single night.

# Wolverine



The wolverine (also spelled wolverene), *Gulo gulo* (*Gulo* is Latin for "glutton"), also referred to as the glutton, carcajou, or quickhatch (from East Cree, *kwiihkwahaacheew*), is the largest land-dwelling species of the family Mustelidae. It is a muscular carnivore and a solitary animal. The wolverine has a reputation for ferocity and strength out of proportion to its size, with the documented ability to kill prey many times larger than itself.

The wolverine is found primarily in remote reaches of the Northern boreal forests and subarctic and alpine tundra of the Northern Hemisphere, with the greatest numbers in Northern Canada, the U.S. state of Alaska, the mainland Nordic countries of Europe, and throughout western Russia and Siberia. Its population has steadily declined since the 19th century owing to trapping, range reduction and habitat fragmentation. The wolverine is now essentially absent from the southern end of its European range.

Anatomically, the wolverine is a stocky and muscular animal. With short legs, broad and rounded head, small eyes and short rounded ears, it more closely resembles a bear than it does other mustelids. Though its legs are short, its large, five-toed paws with crampon-like claws and plantigrade posture enable it to climb up and over steep cliffs, trees and snow-covered peaks with relative ease.

The adult wolverine is about the size of a medium dog, with a length usually ranging from 65–107 cm, a tail of 17–26 cm, and a weight of 5.5–25 kg, though exceptionally large males can weigh up to 32 kg. One outsized specimen was reported to scale approximately 35 kg. The males are as much as 30% larger than the females and can be twice the females' weight. According to some sources, Eurasian wolverines are claimed to be larger and heavier than North American, with average weights in excess of 20 kg.

However, this may refer more specifically to areas such as Siberia, as data from European wolverines shows they are typically around the same size as their American counterparts. The average weight of female wolverines from a study in the Northwest Territories of Canada was 10.1 kg and that of males 15.3 kg. In a study from Alaska, the median weight of ten males was 16.7 kg while the average of two females was 9.6 kg. In Ontario, the mean weight of males and females was 13.6 kg and 9.9 kg. The average weights of wolverines were notably lower in a study from the Yukon, averaging 7.3 in females and 11.3 kg in males, perhaps because these animals from a "harvest population" had low fat deposits. In Finland, the average weight was claimed as 11 to 12.6 kg. The average weight of male and female wolverines from Norway was listed as 14.6 kg and 10 kg. Shoulder height is reported from 30 to 45 cm. It is the largest of terrestrial mustelids; only the marine-dwelling sea otter, the giant otter of the Amazon basin and the semi-aquatic African clawless otter are larger, while the European badger may reach a similar body mass, especially in autumn.

Wolverines have thick, dark, oily fur which is highly hydrophobic, making it resistant to frost. This has led to its traditional popularity among hunters and trappers as a lining in jackets and parkas in Arctic conditions. A light-silvery facial mask is distinct in some individuals, and a pale buff stripe runs laterally from the shoulders along the side and crossing the rump just above a 25–35 cm bushy tail. Some individuals display prominent white hair patches on their throats or chests.

Like many other mustelids, it has potent anal scent glands used for marking territory and sexual signaling. The pungent odor has given rise to the nicknames "skunk bear" and "nasty cat." Wolverine, like other mustelids, possess a special upper molar in the back of the mouth that is rotated 90 degrees, towards the inside of the mouth. This special characteristic allows wolverines to tear off meat from prey or carrion that has been frozen solid.

Wolverines are considered to be primarily scavengers. A majority of the wolverine's sustenance is derived from carrion, on which it depends almost exclusively in winter and early spring. Wolverine may find carrion themselves, feed on it after the predator (often, a pack of wolves) has finished, or simply take it from another predator. Wolverine are also known to follow wolf and lynx trails, purportedly with the intent of scavenging the remains of their kills. Whether eating live prey or carrion, the wolverine's feeding style appears voracious, leading to the nickname of "glutton" (also the basis of the scientific name). However, this feeding style is believed to be an adaptation to food scarcity, especially in winter.

# Marten



The martens constitute the genus *Martes* within the subfamily Guloninae, in the family Mustelidae. They have bushy tails and large paws with partially retractile claws. The fur varies from yellowish to dark brown, depending on the species, and is valued by trappers for the fur trade. Martens are slender, agile animals, adapted to living in the taiga, and inhabit coniferous and northern deciduous forests across the Northern Hemisphere.

Martens are solitary animals, meeting only to breed in late spring or early summer. Litters of up to five blind and nearly hairless kits are born in early spring. They are weaned after around two months, and leave the mother to fend for themselves at about three to four months of age. Due to their habit of seeking warm and dry places and to gnaw on soft materials, martens cause damage to soft plastic and rubber parts in cars and other parked vehicles, annually costing millions of euros in Central Europe alone, thus leading to the offering of marten-damage insurance, "marten-proofing", and electronic repellent devices. They are omnivorous.

## Sable





The sable is a species of marten, a small omnivorous mammal primarily inhabiting the forest environments of Russia, from the Ural Mountains throughout Siberia, and northern Mongolia. Its habitat also borders eastern Kazakhstan, China, North Korea and Hokkaidō, Japan. Historically, it has been hunted for its highly valued dark brown or black fur, which remains a luxury good. While hunting is still common in Russia, most fur on the market is now commercially farmed.

Males measure 38–56 centimetres in body length, with a tail measuring 9–12 centimetres, and weigh 880–1,800 grams. Females have a body length of 35–51 centimetres, with a tail length of 7.2–11.5 centimetres. The winter pelage is longer and more luxurious than the summer coat. Different subspecies display geographic variations of fur colour, which ranges from light to dark brown, with individual coloring being lighter ventrally and darker on the back and legs. Japanese sables (known locally as kuroten) in particular are marked with black on their legs and feet. Individuals also display a light patch of fur on their throat which may be gray, white, or pale yellow. The fur is softer and silkier than that of American martens. Sables greatly resemble pine martens in size and appearance, but have more elongated heads, longer ears and proportionately shorter tails. Their skulls are similar to those of pine martens, but larger and more robust with more arched zygomatic arches.

Sables inhabit dense forests dominated by spruce, pine, larch, cedar, and birch in both lowland and mountainous terrain. They defend home territories that may be anything from 4 to 30 square kilometres in size, depending on local terrain and food availability. However, when resources are scarce they may move considerable distances in search of food, with travel rates of 6 to 12 kilometres per day having been recorded.

Sables live in burrows near riverbanks and in the thickest parts of woods. These burrows are commonly made more secure by being dug among tree roots. They are good climbers of cliffs and trees. They are primarily crepuscular, hunting during the hours of twilight, but become more active in the day during the mating season. Their dens are well hidden, and lined by grass and shed fur, but may be temporary, especially during the winter, when the animal travels more widely in search of prey. Sables are omnivores, and their diet varies seasonally. In the summer, they eat large numbers of hare and other small mammals. In winter, when they are confined to their retreats by frost and snow, they feed on wild berries, rodents, hares, and even small musk deer. They also hunt ermine, small weasels and birds. Sometimes, sables follow the tracks of wolves and bears and feed on the remains of their kills. They eat molluscs such as slugs, which they rub on the ground in order to remove the mucus. Sables also occasionally eat fish, which they catch with their front paws. They hunt primarily by sound and scent, and they have an acute sense of hearing. Sables mark their territory with scent produced in glands on the abdomen. Predators of sable include a number of larger carnivores, such as wolves, foxes, wolverines, tigers, lynxes, eagles and large owls.

## Stoat



The **stoat** or short-tailed weasel, also known as the ermine, is a mustelid native to Eurasia and North America. The name ermine is used for species in the genus *Mustela*, especially the stoat, in its pure white winter coat, or the fur thereof.

Introduced in the late 19th century into New Zealand to control rabbits, the stoat has had a devastating effect on native bird populations. It was nominated as one of the world's top 100 "worst invaders".

The stoat is entirely similar to the least weasel in general proportions, manner of posture, and movement, though the tail is relatively longer, always exceeding a third of the body length, though it is shorter than that of the long-tailed weasel. The stoat has an elongated neck, the head being set exceptionally far in front of the shoulders. The trunk is nearly cylindrical, and does not bulge at the abdomen. The greatest circumference of body is little more than half its length. The skull, although very similar to that of the least weasel, is relatively longer, with a narrower braincase. The projections of the skull and teeth are weakly developed, but stronger than those of the least weasel. The eyes are round, black and protrude slightly. The whiskers are brown or white in colour, and very long. The ears are short, rounded and lie almost flattened against the skull. The claws are not retractable, and are large in proportion to the digits. Each foot has five toes. The male stoat has a curved baculum with a proximal knob that increases in weight as it ages. Fat is deposited primarily along the spine and kidneys, then on gut mesenteries, under the limbs and around the shoulders. The stoat has four pairs of nipples, though they are visible only in females.

The dimensions of the stoat are variable, but not as significantly as the least weasel's. Unusual among the Carnivora, the size of stoats tends to decrease proportionally with latitude, in contradiction to Bergmann's rule. Sexual dimorphism in size is pronounced, with males being roughly 25% larger than females and 1.5-2.0 times their weight. On average, males measure 187-325 mm in body length, while females measure 170-270 mm. The tail measures 75-120 mm in males and 65-106 mm in females. In males, the hind foot measures 40.0-48.2 mm, while in females it is 37.0-47.6 mm. The height of the ear measures 18.0-23.2 mm in males and 14.0-23.3 mm. The skulls of males measure 39.3-52.2 mm in length, while those of females measure 35.7-45.8 mm. Males average 258 grams in weight, while females weigh less than 180 grams.

The stoat has large anal scent glands measuring 8.5 mm - 5 mm in males and smaller in females. Scent glands are also present on the cheeks, belly and flanks. Epidermal secretions, which are deposited during body rubbing, are chemically distinct from the products of the anal scent glands, which contain a higher proportion of volatile chemicals. When attacked or being aggressive, the stoat secretes the contents of its anal glands, giving rise to a strong, musky odour produced by several sulphuric compounds. The odour is distinct from that of least weasels.

The winter fur is very dense and silky, but quite closely lying and short, while the summer fur is rougher, shorter and sparse. In summer, the fur is sandy-brown on the back and head and a white below. The division between the dark back and the light belly is usually straight, though this trait is only present in 13.5% of Irish stoats. The stoat moults twice a year. In spring, the moult is slow, starting from the forehead, across the back, toward the belly. In autumn, the moult is quicker, progressing in the reverse direction. The moult, initiated by photoperiod, starts earlier in autumn and later in spring at higher latitudes. In the stoat's northern range, it adopts a completely white coat (save for the black tail-tip) during the winter period. Differences in the winter and summer coats are less apparent in southern forms of the species. In the species' southern range, the coat remains brown, but is denser and sometimes paler than in summer.

# Fisher



The **fisher** is a small, carnivorous mammal native to North America, a forest-dwelling creature whose range covers much of the boreal forest in Canada to the northern United States. It is a member of the mustelid family (commonly referred to as the weasel family), and is in the monospecific genus *Pekania*. It is sometimes misleadingly referred to as a fisher cat, although it is not a cat.

The fisher is closely related to, but larger than, the American marten (*Martes americana*). In some regions, the fisher is known as a pekan, derived from its name in the Abenaki language, or wejack, an Algonquian word borrowed by fur traders. Other Native American names for the fisher are Chipewyan thacho and Carrier chunihcho, both meaning "big marten", and Wabanaki uskool.

Fishers have few predators besides humans. They have been trapped since the 18th century for their fur. Their pelts were in such demand that they were extirpated from several parts of the United States in the early part of the 20th century. Conservation and protection measures have allowed the species to rebound, but their current range is still reduced from its historic limits. In the 1920s, when pelt prices were high, some fur farmers attempted to raise fishers. However, their unusual delayed reproduction made breeding difficult. When pelt prices fell in the late 1940s, most fisher farming ended. While fishers usually avoid human contact, encroachments into forest habitats have resulted in some conflicts.



Male and female fishers look similar. Adult males are 90 to 120 cm long and weigh 3.5 to 6.0 kilograms. Adult females are 75 to 95 cm long and weigh 2.0 to 2.5 kg. The fur of the fisher varies seasonally, being denser and glossier in the winter. During the summer, the color becomes more mottled, as the fur goes through a moulting cycle. The fisher prefers to hunt in full forest. Although an agile climber, it spends most of its time on the forest floor, where it prefers to forage around fallen trees. An omnivore, the fisher feeds on a wide variety of small animals and occasionally on fruits and mushrooms. It prefers the snowshoe hare and is one of the few animals able to prey successfully on porcupines. Despite its common name, it rarely eats fish. The reproductive cycle of the fisher lasts almost a year. Female fishers give birth to a litter of three or four kits in the spring. They nurse and care for their kits until late summer, when they are old enough to set out on their own. Females enter estrus shortly after giving birth and leave the den to find a mate. Implantation of the blastocyst is delayed until the following spring, when they give birth and the cycle is renewed.

# Grison



A **grison**, also known as a South American wolverine, is any mustelid in the genus *Galictis*. Native to Central and South America, the genus contains two extant species: the greater grison, which is found widely in South America, through Central America to southern Mexico; and the lesser grison, which is restricted to the southern half of South America.

Grisons measure up to 60 cm in length, and weigh between 1 and 3 kg. The lesser grison is slightly smaller than the greater grison. Grisons generally resemble a skunk, but with a smaller tail, shorter legs, wider neck, and more robust body. The pelage along the back is a frosted gray with black legs, throat, face, and belly. A sharp white stripe extends from the forehead to the back of the neck.

They are found in a wide range of habitats from semi-open shrub and woodland to low-elevation forests. They are generally terrestrial, burrowing and nesting in holes in fallen trees or rock crevices, often living underground. They are omnivorous, consuming fruit and small animals (including mammals). Little is known about grison behavior for multiple reasons, including that their necks are so wide compared to their heads, an unusual difficulty that has made radio tracking problematic.

# Polecat



The **polecat** is a species of mustelid native to western Eurasia and North Africa. It is of a generally dark brown colour, with a pale underbelly and a dark mask across the face. Occasionally, colour mutations, including albinos and erythrists, occur. Compared to minks and other weasels – fellow members of the genus *Mustela* – the polecat has a shorter, more compact body; a more powerfully built skull and dentition; is less agile; and it is well known for having the characteristic ability to secrete a particularly foul-smelling liquid to mark its territory.

It is much less territorial than other mustelids, with animals of the same sex frequently sharing home ranges. Like other mustelids, the European polecat is polygamous, with pregnancy occurring after mating, with no induced ovulation. It usually gives birth in early summer to litters consisting of five to 10 kits, which become independent at the age of two to three months. The European polecat feeds on small rodents, birds, amphibians and reptiles. It occasionally cripples its prey by piercing its brain with its teeth and stores it, still living, in its burrow for future consumption.

The polecat originated in Western Europe during the Middle Pleistocene, with its closest living relatives being the steppe polecat, the black-footed ferret and the European mink. With the two former species, it can produce fertile offspring, though hybrids between it and the latter species tend to be sterile, and are distinguished from their parent species by their larger size and more valuable pelts.

The appearance of the polecat is typical of members of the genus *Mustela*, though it is generally more compact in conformation and, although short-legged, has a less elongated body than the mink or steppe polecat. The tail is short, about  $\frac{1}{3}$  its body length. The eyes are small, with dark brown irises. The hind toes are long and partially webbed, with weakly curved 4 mm-long, nonretractable claws. The front claws are strongly curved, partially retractable, and measure 6 mm in length. The feet are moderately long and more robust than in other members of the genus. The polecat's skull is relatively coarse and massive, more so than the mink's, with a strong, but short and broad facial region and strongly developed projections. In comparison to other similarly sized mustelids, the polecat's teeth are very strong, large and massive in relation to skull size. Sexual dimorphism in the skull is apparent in the lighter, narrower skull of the female, which also has weaker projections. The polecat's running gait is not as complex and twisting as that of the mink or stoat, and it is not as fast as the mountain weasel (solongoi), stoat or least weasel, as it can be outrun by a conditioned man. Its sensory organs are well developed, though it is unable to distinguish between colours.

The polecat has a much more settled way of life, with definite home ranges. The characteristics of polecat home ranges vary according to season, habitat, sex and social status. Breeding females settle in discrete areas, whereas breeding males and dispersing juveniles have more fluid ranges, being more mobile. Males typically have larger territories than females. Each polecat uses several den sites distributed throughout its territory.

## Weasel



**Weasels** are mammals of the genus *Mustela* of the family Mustelidae. The genus *Mustela* includes the least weasels, polecats, stoats, ferrets and mink. Members of this genus are small, active predators, with long and slender bodies and short legs. The family Mustelidae, or mustelids, (which also includes badgers, otters, and wolverines) is often referred to as the "weasel family". In the UK, the term "weasel" usually refers to the smallest species, the least weasel, the smallest carnivoran species.

Weasels vary in length from 173 to 217 mm, females being smaller than the males, and usually have red or brown upper coats and white bellies; some populations of some species moult to a wholly white coat in winter. They have long, slender bodies, which enable them to follow their prey into burrows. Their tails may be from 34 to 52 mm long.

Weasels feed on small mammals and have from time to time been considered vermin because some species took poultry from farms or rabbits from commercial warrens. They do, on the other hand, eat large numbers of rodents. They can be found all across the world except for Africa (outside Egypt), the Middle East, the Indian Subcontinent, Australia, the Caribbean, Antarctica, and the neighbouring islands.



# Mink



**Mink** are dark-colored, semiaquatic, carnivorous mammals of the genera *Neovison* and *Mustela* and part of the family *Mustelidae*, which also includes weasels, otters, and ferrets. There are two extant species referred to as "mink": the American mink and the European mink. The extinct sea mink is related to the American mink but was much larger.

The American mink's fur has been highly prized for use in clothing. Their treatment on fur farms has been a focus of animal rights and animal welfare activism. American mink have established populations in Europe (including Great Britain and Denmark) and South America. Some people believe this happened after the animals were released from mink farms by animal rights activists, or otherwise escaping from captivity. In the UK, under the Wildlife & Countryside Act 1981, it is illegal to release mink into the wild. In some countries, any live mink caught in traps must be humanely killed.

American mink are believed by some to have contributed to the decline of the less hardy European mink through competition (though not through hybridization – native European mink are in fact more closely related to polecats than to North American mink). Trapping is used to control or eliminate introduced American mink populations.

The American mink is larger and more adaptable than the European mink but, due to variations in size, an individual mink usually cannot be determined as European or American with certainty without looking at the skeleton. However, all European mink have a large white patch on their upper lip, whereas only some American mink have this marking. Therefore, any mink without the patch is certainly of the American species. Taxonomically, both American and European mink were placed in the same genus *Mustela* but the American mink has since been reclassified as belonging to its own genus, *Neovison*.

The sea mink *Neovison macrodon*, native to the New England area, is considered to be a close relative or a subspecies of the American mink. It went extinct in the late 19th century, chiefly as a result of hunting for the fur trade.

Mink prey on fish and other aquatic life, small mammals, birds, and eggs; adults may eat young mink. Mink raised on farms primarily eat expired cheese, eggs, fish, meat and poultry slaughterhouse byproducts, dog food, and turkey livers, as well as prepared commercial foods. A farm with 3,000 mink may use as much as two tons of food per day.

# Otter



**Otters** are carnivorous mammals in the subfamily Lutrinae. The 13 extant otter species are all semiaquatic, aquatic or marine, with diets based on fish and invertebrates. Lutrinae is a branch of the Mustelidae family, which also includes weasels, badgers, mink, and wolverines, among other animals.

Otters have long, slim bodies and relatively short limbs. Their most striking anatomical features are the powerful webbed feet used to swim, and their seal-like abilities holding breath underwater. Most have sharp claws on their feet and all except the sea otter have long, muscular tails. The 13 species range in adult size from 0.6 to 1.8 m in length and 1 to 45 kg in weight. The Asian small-clawed otter is the smallest otter species and the giant otter and sea otter are the largest. They have very soft, insulated underfur, which is protected by an outer layer of long guard hairs. This traps a layer of air which keeps them dry, warm, and somewhat buoyant under water.

Several otter species live in cold waters and have high metabolic rates to help keep them warm. European otters must eat 15% of their body weight each day, and sea otters 20 to 25%, depending on the temperature. In water as warm as 10 °C, an otter needs to catch 100 g of fish per hour to survive. Most species hunt for three to five hours each day and nursing mothers up to eight hours each day.