



Carnivore Nature Guide

Juha Järvenpää and Harri Norberg

Foreword

There are four large land carnivore species living in Finland: bear, wolf, lynx and wolverine. Especially the numbers of bears and lynxes have clearly increased in the 2000s, and the large carnivores have slowly spread out to new territories as far as southern and western Finland. This has increased the likelihood of encounters between people wandering in the nature and large carnivores almost in the entire country. Usually, however, man is unaware of these encounters as large carnivores avoid contact with humans to the last.

One of the starting points of this guide is the assumption that people wandering in the nature do not possess sufficient information on the large carnivores living in Finland and their behaviour or on how to avoid encountering them and how to act should that happen. It is evident that lack of information and prevailing prejudices add to the so-called “predator fear”. By distributing information on large carnivores and their behaviour, the conflicts between people and large carnivores can be minimised and possible predator fear reduced.

The purpose of this guide is to provide a compact description of large carnivores. This guide includes a brief description of the identification marks of large carnivores and information about their habits, nutrition and behaviour. This guide aims to help all people roaming in the nature recognise the traces that the large carnivores

leave in it and to provide information on how they behave and how to regard them.

This guide has been prepared in connection with the Carnivore Information project managed by the Suomussalmi municipality. The project is financed by the Rural Development Programme for Continental Finland for 2007–2013 through the Centres for Economic Development, Transport and the Environment of Kainuu and North Ostrobothnia.

The authors of the guide are Juha Järvenpää and Harri Norberg. Järvenpää operates as project manager for the Carnivore Region and Carnivore Information projects managed by the Suomussalmi municipality, and he has focused within these projects particularly on preventing the problems that may arise between large carnivores and businesses. Norberg operates as a senior planning officer in the Hunters’ Central Organisation and focuses on large carnivore issues in the reindeer herding area. He has also worked as a researcher in the Finnish Game and Fisheries Research Institute focusing on interactions between carnivores and reindeer.

Front and back cover images by Hannu Huttu
Layout and printing by Kajaanin Offsetpaino Oy, 2011
Translation by Lingoneer Oy



**SUOMUSSALMEN
KUNTA**



European Agricultural Fund
for Rural Development:
Europe invests in rural areas



Brown Bear (*Ursus arctos*)

According to the Finnish Game and Fisheries Research Institute (FGFRI), there were approximately 1,500 brown bears in Finland in 2010. Bears have spread out all over Finland, except for the Åland Islands. However, the strongest populations can be found in eastern and central Finland as well as in Lapland along our eastern border.

Brown bear's identification marks and distribution

A full-grown female can weigh up to 200 kg, whereas males can weigh over 300 kg. A bear may lose up to a third of its weight during hibernation. A full-grown bear stands 90–125 cm high at the withers and its length is 135–250 cm. The brown bear's fur is thick and its colour varies from blackish brown to tawny. The length of its tail is 5–15 cm, and the tail is partly hidden inside the fur. The ears are small and round.^{1, 2, 6}

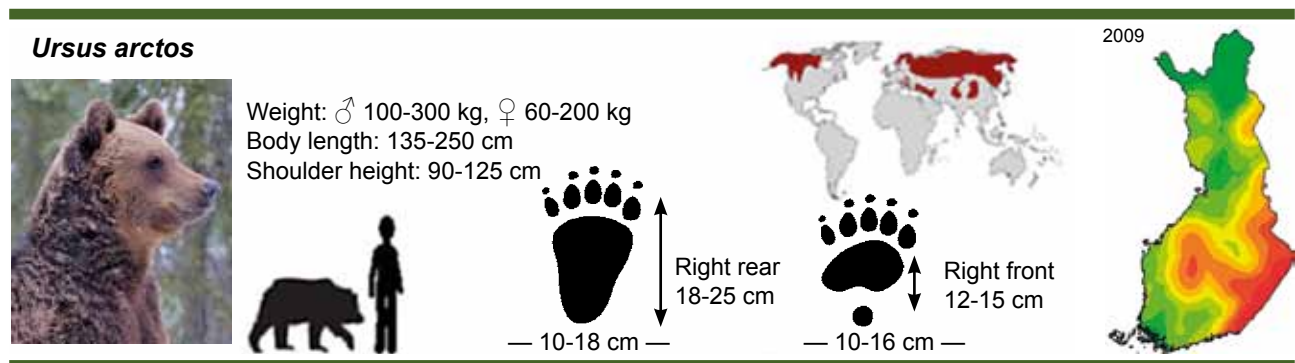
Brown bear's habits and nutrition

From October–November to March–April, the bear hibernates in a den on the ground. The den can be

burrowed under a large stub, tussock or anthill, sometimes also in a crag or under spruce branches. Even though the bear hibernates and its vital functions are minimal, it can, however, wake up several times over the winter and turn over from time to time. It remains aware of surrounding events also during winter. Therefore, if you come across a bear's winter den, you should leave the site as quickly as possible.

The bear has a delayed foetal development. This means that even though the bear mates in June–July, the fertilised egg attaches to the uterine wall of the sow only in December, and only then the bear foetus starts to develop. The bear normally gives birth to two or sometimes even four cubs in its winter den in January. Cubs weigh at birth only less than 300 grams.⁷ Normally, the cubs follow their mother for approximately one year, sometimes even two summers. When leaving the den in the spring, the cubs weigh approximately five kilograms. In the autumn, their weight is already between 30 and 50 kg. By the following winter, their weight has already increased to 60–75 kilograms. The bear grows in size for 10 years, and it can live up to 20 years.

The bear is an omnivore. Its diet depends on the season: bears eat what is most easily available. In the spring, they eat ants, carcasses and grass as well as easily caught deer fawns. In the spring, the bear can also kill



Images: Finnish Game and Fisheries Research Institute and Hannu Huttu (brown bear)



Image: Hannu Huttu

a full-grown reindeer or elk, and when its digestion has properly started, it can devour dozens of kilograms of meat per day. In the summer, the diet is supplemented by different plants, such as herbs, grasses and roots. The bear also likes to visit bee yards throughout the summer. The summer diet also includes easily accessible meat. In late summer and autumn, berries are the most important source of nutrition. The bear can eat berries daily in an amount equivalent up to a third of its weight, and it can cover almost half of its annual energy need with berries.

Bears are usually mobile in the evenings and early mornings. The territories of different bears partly overlap with one another. Even so, full-grown bears only meet during the mating season in May–June.

The territory of a bear boar can be up to 1,500 km². The territory of a full-grown bear sow is approximately 500 km², and when moving with cubs, the territory is about half of that. The bear can travel between 30 and 50 km in one night. When necessary, the bear is very fast: its speed can reach up to 60 km per hour. The bear is also a good swimmer and climber.

Brown bear's senses and sounds

The sense of smell and hearing of bears are highly developed, whereas sight is relatively poor. The bear can usually hear an approaching person from a distance of 200–300 metres, and it can pick up smells downwind from several kilometres away. Therefore, it can avoid the person well in advance based on its sense of smell and hearing.

The encounter experiments performed in Finland have been used to establish the reactions of bears with GPS collars to approaching persons in the nature, and it has been determined that the bear avoids a person almost always. Only once during the 50 approaching experiments the researchers caught a glimpse of the

bear. No encounter situations were experienced, even though the persons walked directly in the direction of the bear, passing it at a distance of approximately 50 metres. The work pair formed by two researchers made constant noise during the approach by conversing with each other normally. This way, it was easy for the bear to detect the approaching persons, which most certainly had a preventative influence on encounters⁷.

Bear sounds are rarely heard. Mother and cubs communicate with each other especially when a cub wants milk or the mother warns her cubs of a possible danger and orders them to climb up a tree to safety. The bear growls when it fights or is otherwise aggressive or when wounded.^{1,2,5} In nature, it is also possible to hear the whistling noise the bear makes. The sound is made when the bear breathes in scents into its nostrils while exploring its surroundings.

Factors that may lead to a dangerous encounter situation between a bear and a person:

1. Wounded or injured bear: an injured bear is always dangerous, and it will defend itself when it cannot get away.
2. Bear sow with cubs under one year of age: it is very dangerous to end up between a mother and her cubs as the mother will instinctively defend her cubs against all sources of danger.
3. Bear with a carcass: when eating a carcass, the bear may behave aggressively if surprised in order to defend its food.
4. Surprised bear: a person that has got too close may trigger a defensive reaction in an alarmed bear.
5. Bear at a den: a bear that has been awoken from its den or surprised close to it in early spring or in the autumn may be dangerous.

6. Dogs: a dog may aggravate a bear. The level of aggression depends on whether the bear has been disturbed while hunting, the bear's gender and age, the dog's behaviour, the presence of cubs or a tempting source of food nearby, etc.

7. Fed animal used to people: do not feed a bear! The more often the bear is successful in gaining food close to people, the better it will adjust to the presence of people. It may connect a person and easily accessible food to each other. If the natural sources of nutrition have become scarce in the forest, the bear may come in the proximity of human habitations to look for food. In this case, the bear may lose its innate fear of humans, and it can become dangerous to people.^{2,3,4}



Image: Hannu Huttu

How to avoid encountering a bear?

Bears are individuals that can behave differently in different situations. Some are curious and others can be aggressive, but the basic rule remains: there are no harmless bears.⁵ However, the bear normally tries to avoid encounters with humans. With the help of its excellent sense of smell and hearing, it is able to sense a person from great distance and it will hide or leave the area.

Encounters are usually the result of a bear being surprised. You should make noise when wandering in the nature so that any bears in the area can hear you coming. When you are with somebody or in a group, maintain a conversation. When travelling quietly upwind, a person can even surprise a bear. The chances are that, in this

case, both parties are equally scared of the situation and no danger is posed as the bear will run away. However, the reactions of a bear cannot be predicted.

When you go to the forest, do not leave any waste or rubbish behind but take it home with you. At farms and also in sparsely populated areas, household waste should be stored in a secured place that prevents smells from spreading. The bear has a highly developed sense of smell and a good memory. The bear often returns to places where it has previously found food. It is important that the bear remains naturally afraid of humans. The bear can connect the smell of food to the smell of humans and learn to seek the company of humans in the hope of easy food.

Signs of a bear in the area

The bear sometimes breaks anthills, digs wasp nests or breaks rotten trees while searching for maggots. For example, the black woodpecker makes very similar traces

in the forest.

The bear sometimes breaks beehives when it looks for honey and tosses pieces of the hive around. Deep claw marks on a tree trunk at the height of several metres may be climbing or clawing marks of a bear. In an oat field, the bear flattens and gropes the growth into a pile.

If you see an animal carcass killed by a bear, walk away in the direction you came from. The bear may be nearby. The bear usually tries to partly cover the carcass in the ground or a fen and often returns to its hide. The bear may also “preserve” its carcass in a cold-watered brook or the deep hole of a spring, i.e., a source.

The bear’s droppings may be strikingly large. They differ from cow’s faeces in the fact that they are black inside and they usually contain bone fragments, fur, berries or leaves, depending on what the bear has been eating. Especially lingonberries and crowberries can often be distinguished as intact “pearls” on the surface of the faeces.

Image: Hannu Huttu





A bear has visited the beehives.
Image: Pekka Karoniemi



Rotten tree stump torn by a bear.
Image: Harri Norberg



Image: Harri Norberg



Paw track of a bear.
Image: Petri Piisilä

Recognise the paw track of a brown bear

The bear's paw track shows five toe and claw marks. The front paw is short and wide. The rear paw, for one, resembles a human footprint but it is slightly wider and more triangular. The bear is a plantigrade. Therefore, the press of the bear's heel is often visible on soft ground. The track is measured at the widest point of the pad. If the width of the track left by a front paw is less than 7 cm, it belongs to a bear cub born that same year. The track left by a front paw of a full-grown female is 14 cm at its widest, and that of a male is 20 cm. ^{1, 2, 5, 6}

Stampeded even-toed ungulates may also be a sign of a predator hunting for food.

What to do if

...you see a bear from your vehicle...

Stay inside your vehicle. Do not go outside to take pictures. If you hit a bear with your vehicle, do not go outside. Instead, call the general emergency number 112. If the bear is injured, warn other people on the road as necessary. Switch on the emergency flashers of the vehicle. The police will take control of the situation and call to the scene hunters specialised in large carnivore with their dogs (i.e., big game authority assistance).

...you travel in a bear area in early summer...

The mating season of bears is in May–June. During this time, the bear is particularly active even during the day and the risk of encountering a bear is at its highest. Young bear boars may travel great distances when seeking a mating partner. Young bears have just left their mothers and roam by themselves in the nature for the first time. These young, lonely bear cubs are curious, and they are not necessarily afraid of humans. If you see a bear near you, make it aware of you by talking loudly and leave calmly in the direction you came from.

...you are picking berries...

Up to half of a bear's diet is composed of berries, especially blueberries. Bears eat berries in order to get fat into their bodies for the long winter. Make a little noise at all times when walking in the forest. A bear usually detects you with the help of its good sense of smell and hearing well in advance before you arrive to the scene. If, however, you see a bear, make it aware of you by talking loudly and walk away calmly in the direction you came from.

...you see a bear resting or with a carcass...

If you surprise a bear with a carcass, stay calm. Raise yourself to your full height and make it aware of you by talking loudly. Back away from the scene calmly in the direction you came from. Never run away! Running may

trigger the bear's hunting instinct. It is impossible to outrun a bear as it is many times faster than a man. Climbing up a tree will not do you any good either, because bears are agile climbers and will follow you. In these situations, you can leave your jacket or backpack, for example, on the ground. The bear may take an interest in them and leave you alone.



Image: Hannu Huttu

...you meet a curious bear cub...

Do not try to make contact with the cub and do not stay there to take pictures. The mother bear has a strong protective instinct, and normally it is not far away from the cub. Turn around and walk away in the direction you came from. The most dangerous situation may arise if a human ends up between the mother bear and its cubs. The bear tries to prevent the danger that threatens the cubs. Its intention is not to harm you. In this kind of situation, it may make several false attacks but turns back just a couple of metres away.



Image: Hannu Huttu

...you take a dog to a bear area...

Keep your dog on a leash outside the hunting season. Pay attention to any abnormal behaviour of your dog. A dog running free increases the risk of encountering a bear. When an untrained dog encounters a bear, it may run back to its owner for safety. The bear may follow the dog and consider the owner as a threat.



Image: Ilpo Kojola

...encounter a bear while hunting...

A hunter waiting quietly in one place has a greater risk of encountering a bear than a moving person. If the bear has not detected you, you must make it aware of your presence by clapping your hands or making noise in another manner. Most accidents resulting from encounters between hunters and bears have occurred when a wounded animal has attacked a hunter. A wounded bear is dangerous. A bear standing on its rear feet is not necessarily aggressive. It is just analysing the surprising situation and is feeling insecure or curious.

...despite all things, the bear is behaving in a threatening manner...

Back away calmly. Watch the bear's behaviour while talking in a normal voice. Avoid eye contact, for it is a sign of challenge for the bear. Do not run! If the bear makes a false attack, stay put or back away very slowly. Normally, the bear will run away or stop. Stay calm and talk to the bear. Put your bucket of berries, fishing gear, etc. in front of you in order to attract the bear's attention away from yourself. Show that you are not a threat to the bear by slowly backing away. If the bear attacks you, lay on the ground on your stomach or in foetal position and

play dead showing that you are not a threat to the bear. Cover your neck and head with your hands. A backpack on your back is a good protection. Do not climb a tree, because the bear is a better climber than you. ^{1, 4, 5}

Wolf (Canis lupus)

Wolf's identification marks and distribution

The largest wolf populations are in eastern Finland. Roaming and even nesting wolves live almost everywhere in Finland, except for the Åland Islands. The wolf population of Finland grew steadily until 2006, when there were approximately 250 wolves. According to the population estimates of the Finnish Game and Fisheries Research Institute, there were 150–160 wolves in Finland in the autumn of 2010. The number of known packs was 14–16.

The body length of the wolf is 90–140 cm. Its tail is longish, straight and bushy. The largest wolves killed in Finland have been over 60 kilograms. However, weights vary greatly. The weight of a male wolf varies between 30 and 65 kg, and that of a female wolf between 20 and 45 kg. A full-grown male wolf stands 70–90 cm high at the withers and a female a little less than that. The wolf becomes full-grown already during the first year of its life.

The wolf resembles a large dog with upright ears. In

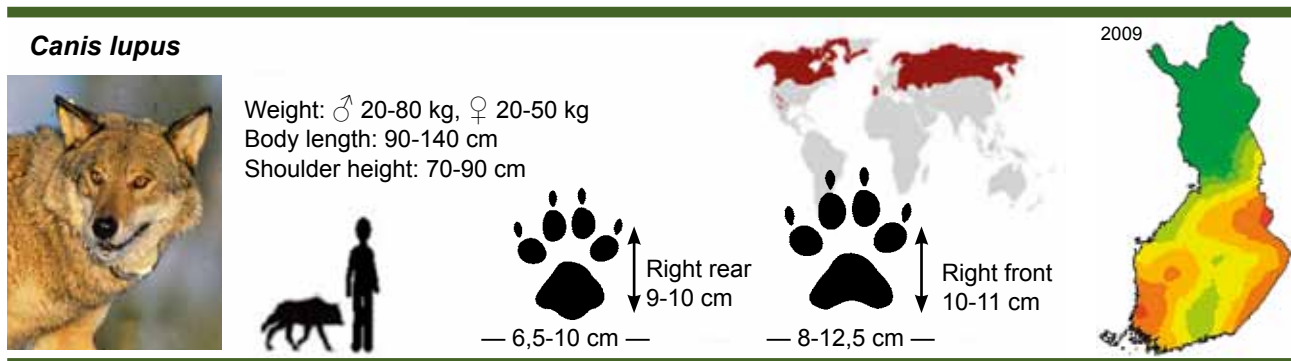
contrast to dogs, the wolf's tail hangs straight. The wolf is slant-eyed, and its fangs are longer and larger than those of a dog.

The overall colour of the wolf is greyish yellow. Black guard hairs can be found on the upper back, shoulders and tail. The stomach side is lighter. There may be light spots on the cheeks. The ground colour of the feet is grey, while the front side of the front legs may have a black line. The colouring varies somewhat according to the seasons; the winter fur is lighter and greyer than the summer fur.^{6,8,9}

Wolf's habits and nutrition

A pack of wolves is a family community usually formed by the so-called alpha pair, i.e., a full-grown male and female, and their offspring. In Finland, there are on average seven individuals per a pack of wolves.¹⁰

The wolf's mating season is once a year in February–March. The alpha pair travels alone close to the rest of the pack. After the mating season, the wolf seeks a suitable den site for the upcoming litter. A wolf's den can be located under a fallen tree or a rootstock. As its den site, the wolf can also accept, for example, an old fox den that the wolf expands to its liking. The wolf's gestation period



Images: Finnish Game and Fisheries Research Institute and Ilpo Kojola (wolf)



Image: Hannu Huttu

is 60–63 days. By mid-May, the female will generally give birth to 3–6 pups in one of the dens that it has dug just prior to giving birth. The female feeds the pups for approximately eight weeks, during which time the female remains close to its pups. The rest of the pack brings food for the nursing female.

After 8 to 10 weeks, the pups leave the den for the first time, and after three weeks or so, they will move to another den. Wolves may use the same alternating dens year after year. Once the lactation period has ended, one member of the pack looks after the pups while the

female goes looking for food with the rest of the pack. Pup mortality can be high due to diseases, parasites and lack of nutrition.

The territory size of a wolf pack depends on the density of wolves and availability of food. In Finland, the average territory size is 1,000–1,300 km². In practice, the territory is an area of approximately 30x40 km. The wolf leaves its pack at the age of 1 to 2 years, and young wolves may travel great distances ending up hundreds of kilometres away from their birth territory when they are seeking mating partners. The majority of wolves, however, remain to nest less than 200 km away from their birth territory. ¹¹

The wolf is active at all hours of the day, but mainly when it is dark and during the night. The wolf has an exceptional endurance and it travels fast. Its hearing and sense of smell are highly accurate.

Wolves are carnivores. The availability of prey has the greatest influence on the wolf's diet. In early summer, the diet comprises the most readily available nutrition as pups need to be fed daily. In the autumn, when pups already participate in catching prey and the pack covers a wider area, the diet consists of more big game. The wolf's main prey animal is the elk, but also the wild forest reindeer and other small or medium-sized deers are part of the wolf's diet. In the summertime, wolves kill especially deer fawns. In the reindeer herding area, the most important prey animal is the reindeer. The wolf normally hunts in packs. Even a lonely wolf is capable of killing a full-grown elk, but it is more likely for the wolf to get injured than when hunting in a pack.

Like other canines, the wolf expresses itself by growling, squeaking, barking and howling depending on the situation. ^{6, 9,12,13}

Is the wolf dangerous to people?

A healthy wolf that has plenty of prey animals to catch

is not fundamentally dangerous to people. This notion is supported by the fact that wolf attacks against people have become quite rare in recent decades – also globally.

The last occasion of a wolf (or wolves) killing people in Finland was in the early 1880s near Turku. The reason for these killings remains unclear, but afterwards it has been assumed that the wolf was an ill or starved individual. The animal in question may also have been a feral dog, a cross-breed of a wolf and a dog or an individual otherwise accustomed to humans. There are also other known wolf attacks against people that happened in Finland earlier in the 19th century.^{14, 15}

What to do if you encounter a tame or aggressively behaving wolf?

The wolf is usually a fearful animal and encounters in the wild are very rare. The wolf has a good sense of smell and hearing. If you want to be sure not to encounter a wolf, make noise when wandering in the nature. However, if a wolf does not back away from the encounter, do as follows:

- Try to leave the scene calmly.
- Do not run! Running may trigger the wolf's hunting instinct, especially if you happen to fall down when running. Avoid direct eye contact. Staring into the eyes signifies a challenge for predators.
- If the wolf keeps following you despite the fact that you are backing away, stop moving and try to look as big as possible by raising up your hands, backpack, etc. At the same time, take a couple of steps towards the wolf. You can try to step onto a large rock or some other kind of elevation or climb up a tree. Wolves cannot climb.
- If the wolf attacks despite the above-mentioned precautions, do not play dead! Kick and hit the wolf as hard as you can. Do not give in! Try to injure the wolf's

eyes or throat. When faced with fierce resistance, the wolf may get scared and retreat from the situation.^{13,16}

The wolf may behave in a threatening manner towards people if

- There is a shortage of natural prey animals. When hungry, wolves may approach residential areas in the hope of easily accessible food, which may lead to threatening encounters between them and humans.
- The wolf is no longer afraid of people. Do not accustom the wolf to humans by feeding it. Handle the waste you produce appropriately! A tame wolf that has learnt to get food from humans may behave unpredictably and dangerously. Humans are not wolf prey.
- The wolf defends itself or its pups. When threatened and in a situation of no possible escape, the wolf may exceptionally behave aggressively towards humans.
- The wolf may focus its attention to the dog that follows you to the point that the wolf forgets its natural fear of humans. Especially in a hunting situation, a dog may run to its owner for safety with a wolf on its tail. The encounter may become dangerous. If you can avoid it, do not hunt with your dog in areas where wolves are known to roam.^{13,16,17}
- The wolf is seriously ill. One of the illnesses causing this kind of aggressive behaviour is rabies. A diseased animal may turn aggressive and also be dangerous to humans, who may catch a life-threatening rabies infection from a bite. However, rabies has not been found in large carnivores in Finland in a long time. The last rabies epidemic in Finland was detected in 1988–1989, when rabies was found in raccoon dogs and foxes. Even then, rabies was not found in the large carnivores that were examined at the same time.

Recognise the wolf's paw tracks

It is extremely difficult to distinguish the paw tracks of a large dog and a wolf.

Like in other canines, the wolf's front paw tracks (10–11 cm) are larger than those of rear paws (9–10 cm). When measuring the paw tracks of a wolf, the claws are not taken into account.

Wolf faeces: Wolf faeces are approximately 2.5–3 cm thick, elongated lumps that have a strong, bad smell. They slightly resemble dog faeces. Wolf faeces usually contain fur and bone fragments. The blacker the wolf faeces are, the richer in meat its diet has been.

The presence of a wolf can also be stated by the bloody urine traces it leaves on snow during the mating season. Partly devoured carcasses of animals may indicate that a wolf roams the area. However, the animal may also have been killed by some other large land carnivore. An expert is often needed to determine which of our large carnivores has killed the animal or which animal has left the traces. ⁸



Image: Vilho Pesonen



Image: www.suurpedot.fi



Image: Harri Norberg



Image: Ilpo Kojola

Wolverine (*Gulo gulo*)

Identification marks and distribution

The wolverine is the biggest representative of the weasel family in Finland. Its length is 69–83 cm, and it stands 40–45 cm high at the withers. The tail is 16–25 cm long. A female weighs on average 8–12 kg, and a male 8–28 kg.

The wolverine has a strong and well-built body. The overall colour of the wolverine is dark brown or brownish black. It has a light stripe on its side all the way to the base of its bushy tail. Its forehead and cheeks are lighter in colour. It may have light spots on its neck and chest. Its muzzle, tail and limbs are black. The wolverine changes its fur twice a year: in May–June and September–October. Its small, tawny-rimmed ears are almost completely covered by the shine fur.

The wolverine lives mainly in eastern Finland and Lapland.

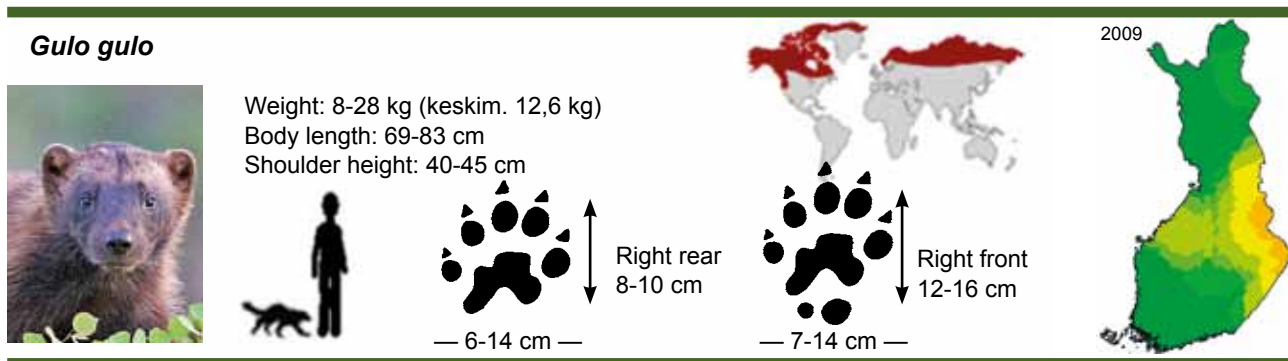


Image: Hannu Huttu


Habits and nutrition

The wolverine is a curious, solitary animal that is constantly on the move. It can travel determinedly – leaping peculiarly – several dozens of kilometres in one day. The wolverine does not stand its fellow creatures on its territory, which may be up to 2,000 km² for a male wolverine and considerably smaller for a female. The wolverine marks its territory with faeces, urine and secretions from its anal glands. Based on the marking, other wolverines know to avoid roaming in the area.

The below wolverine distribution map does not present its distribution in Northern Finland.



Images: Finnish Game and Fisheries Research Institutes and Hannu Huttu (wolverine)

A wide-angle photograph of a snowy landscape. The ground is covered in a thick layer of snow, with a distinct path of tracks leading from the foreground towards the background. The tracks are formed by pairs of paws, characteristic of a wolverine. The background shows a line of trees and a bright, hazy sky, suggesting a winter or early spring setting. The overall tone is soft and wintry.

With the help of its large paws, in comparison to its overall size and weight, the wolverine has adapted to moving well in snow. In soft snow, the wolverine moves by leaping in the manner of other weasels. The wolverine is an agile climber despite its rather graceless structure.

The wolverine is an omnivore carcass eater. If given the opportunity, it may also kill animals. In the winter, when snow is soft and squashy, it may kill several reindeers without stopping. It is typical of weasels to kill and then store the carcass for later. The wolverine often hides its catch under snow, in rock holes or on tree branches, and it often returns to these hiding places. The wolverine has a highly developed sense of smell, which helps it to find a carcass easily even from under a metre of snow. In the summertime, the wolverine also eats small mammals, birds and berries.

The wolverine's mating season is in June–July. Similarly to the bear, it has a delayed foetal development. The wolverine gives birth to one to three kits in a den it has burrowed under snow in March–April. The den hole can measure several dozens of metres and it may have many exits. When disturbed, the wolverine moves the kits into

a safer place. The young often follow their mother until the next litter is born.¹⁹

Signs of a wolverine in the area

The look of wolverine faeces varies according to its current diet. After eating meat, its faeces are dark. The faeces may contain bone fragments and fur. Wolverine faeces are often sausage-like, spiral and tapering at one end. The thickness of wolverine faeces is approximately 2.5 cm.¹⁹

When the wolverine advances by leaping, tracks are formed in pairs. In a rhythmic canter, the paw tracks are formed in groups of three in a slant line.

The wolverine rarely makes any noises. It may sometimes growl and hiss when hunting or in distress.

The wolverine has not been found dangerous to humans. Few biting incidents are known to have occurred, but these cases have happened in hunting or capture situations or involved sick individuals.

If you encounter a wolverine, leave the scene calmly in the direction you came from.¹⁹

Lynx (Lynx lynx)

Identification marks and distribution

The lynx is the only member of the cat family found in the wild in Finland. Its body length is approximately 70–140 cm, and its weight is 6–28 kg. The lynx stands 60–75 cm high at the withers. Males are slightly bigger than females. The fur colour of the lynx is grey or reddish brown. Its winter fur is lighter than the summer fur. On the stomach side, the lynx is always light in colour. The fur often has dark spots or stripes. The lynx has a black-tipped tail (15–25 cm long) and tufts of hair on its ears, which are light in colour on the back. Its paws are large and round. The eyes are yellow. Compared to the domestic cat, the feet of lynxes are longer. The lynx can retract its claws in the way of other felines. Only on hard and slippery surfaces the paws are exceptionally spread and the claw marks of four toes can be distinguished from the tracks that are otherwise round. On snow, especially the shape of rear paw tracks is pear-like, while front paw tracks are more round. The mating season of the lynx is in February–March. The lynx gives birth within 68–73 days from mating, i.e., in

Habits and nutrition

The lynx is a solitary animal that prefers craggy and difficult terrain. It moves and preys most actively during darkness and twilight. It is very silent and supple in its movements. Like other felines, it can easily climb trees or boulders, where it will lay in ambush for its prey. The lynx is a carnivore. It hunts especially hares and fowls for food but also larger mammals, such as white-tailed deer and roe deer. In the reindeer herding area, also reindeer is a part of the lynx's diet. The lynx locates its prey with the help of its excellent hearing and sight. Catching is based on surprise, and the lynx can leap several metres to attack its prey. The lynx kills its prey by biting it on the throat in the way of other great feline predators. Its teeth are ill-adapted to eating frozen food. Thus, it usually cannot eat carcasses in the winter and has to continuously hunt for new, fresh food.

The mating season of the lynx is in February–March. The lynx gives birth within 68–73 days from mating, i.e., in

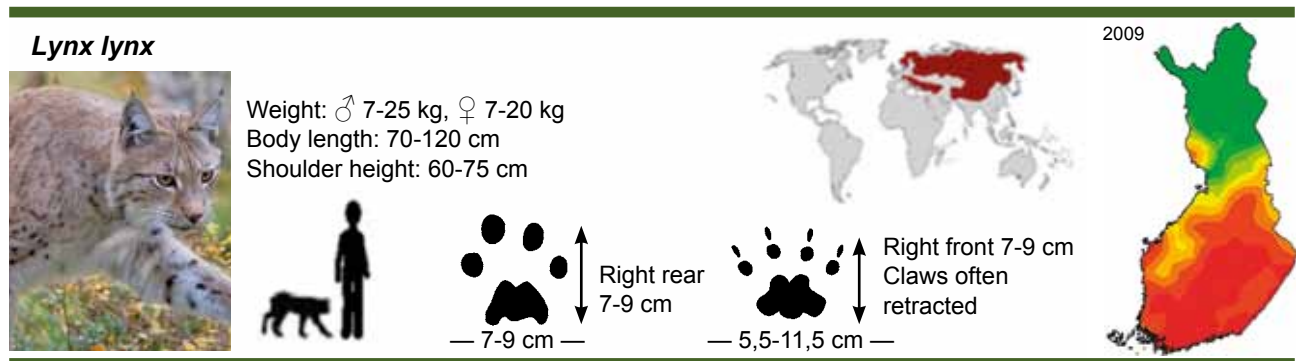


Image: Finnish Game and Fisheries Research Institute and Hannu Huttu (lynx)



Image: Hannu Huttu

May–June, to 2–3 kittens, which will follow their mother until the following spring. The territory of a lynx varies according to population and prey density. The distance a lynx travels in one night can be less than 1 km at its shortest and over 20 km at its longest. During the mating season, the territory of a male lynx can be over 1,000 km². The territory of a female, especially when roaming with kittens, is considerably smaller.²⁰

Signs of a lynx in the area

The most common lynx tracks are walking tracks with a pace length of 80–110 cm. The lynx also trots, often dragging its feet. When trotting, the pace length of the

lynx is 130–150 cm, and sometimes even more. In this case, there are two parallel track grooves on the snow between the tracks, and the lynx steps into the same track with its front and rear paw. The line of lynx tracks on soft snow can resemble greatly that of a wolf, especially if snow has fallen on the tracks and the track pattern is no longer clearly visible. In this case, measuring the pace length and following the tracks can provide more information on the animal that has made the tracks.

Due to a meat-based diet, lynx faeces are black and smell bad when fresh. In the manner of other felines, the lynx covers its urine and faeces with earth or snow.

During the mating season in February–March, it is possible to hear a lynx growling and yelping.

Due to the highly precise senses of the lynx, people



Image: Marko Mikkola

rarely get to see them. The lynx has no natural predators but it avoids the wolf.

There are no known incidents of a lynx posing danger to people. Few biting incidents are known to have occurred, but these cases have happened in hunting situations or involved sick individuals.²⁰



Image: Ilpo Kojola

Report your large carnivore sightings

If you encounter a large carnivore or believe to have found their marks, always report your observations. Depending on the situation, reports can be made to the local voluntary contact person for large carnivore issues, the local game association or, in emergency situations, to the police by calling 112. You can find the contact information of your closest contact person and game association online at <http://riistaweb.riista.fi/>.

The contact person for large carnivore issues will then go to check your observation and will register it into the national online TASSU (PAW) system, which is maintained by the Finnish Game and Fisheries Research Institute. Your observations provide current information about the movements of large land carnivores. In addition, the information you provide is valuable when assessing the number of individuals in Finland.

Big game authority assistance

In order to resolve conflicts involving large carnivores, a big game authority assistance organisation (SRVA) has been created in Finland. It is a collaborative effort that involves the police and game administration and local hunters. The police use patrols formed by hunters and their dogs to chase animals that have wandered too close to residential areas back to safer areas. In addition, the organisation is used to track and kill, if necessary, any large carnivores that have been injured in traffic accidents.

References:

- ¹ http://www.viltskadecenter.se/images/stories/Publikationer/If_you_encounter_a_bear.pdf
- ² Hunters' Central Organisation, 2007: section 10 Bear Instructions. <http://www.riista.fi/data/yhteiset/attachments/Karhuesite.pdf>
- ³ Olsson, J. 2001: Viltskadecenter and WWF 2001. http://www.viltskadecenter.se/images/stories/Publikationer/is_the_brown_bear_dangerous.pdf
- ⁴ Levin, M., Karlsson J. (Viltskadecenter), Brainerd S. (Norsk institutt för naturforskning), Smith M., Linnell J. (Bioforsk) 2006: Leva med björn. http://www.viltskadecenter.se/images/stories/Publikationer/friluftsliv_i_bjornomraden.pdf
- ⁵ http://www.suurpedot.fi/www/fi/suurpedot_ja_me/kohtaaminen/karhu.php
- ⁶ Norberg, H., Kojola, I. & Härkönen, S. 2010: Petovahinkojen tunnistamisopas, Hunters' Central Organisation
- ⁷ Janne Sundell, University of Helsinki: Riistapäivät 2010, A Summary of Lecture Abstracts, <http://www.rktl.fi/www/uploads/pdf/riistapaivapalautte.pdf>
- ⁸ <http://www.suurpedot.fi/www/fi/lajit/susi/tuntomerkit/index.php>
- ⁹ <http://www.tunturisusi.com/kokomitat.htm>
- ¹⁰ Management Plan for the Wolf Population in Finland: MMM 2005
- ¹¹ Ilpo Kojola, Finnish Game and Fisheries Research Institute: Riistapäivät 2010, A Summary of Lecture Abstracts. <http://www.rktl.fi/www/uploads/pdf/riistapaivapalautte.pdf>
- ¹² <http://www.suurpedot.fi/www/fi/lajit/susi/index.php>
- ¹³ http://www.viltskadecenter.se/images/stories/Publikationer/If_you_encounter_a_wolf.pdf
- ¹⁴ Lappalainen, A. 2005: Suden jäljet.
- ¹⁵ Pulliainen, E. 1984: Petoja ja Ihmisiä.
- ¹⁶ http://www.suurpedot.fi/www/fi/suurpedot_ja_me/kohtaaminen/susi.php
- ¹⁷ <http://www.tunturisusi.com/vaarallisuus.htm>
- ¹⁸ http://www.suurpedot.fi/www/fi/suurpedot_ja_me/kohtaaminen/ahma.php
- ¹⁹ <http://www.suurpedot.fi/www/fi/lajit/ahma/index.php>
- ²⁰ <http://www.suurpedot.fi/www/fi/lajit/ilves/>

