## How to avoid problems with carnivores

**Nuisance bears:** In their search for food, bears can be attracted to a variety of human-originating sources of food: refuse, campsites, beehives, orchards, etc. When seen near a hotel or cottage, a bear might look cute and seem to behave like a dog, but it is still a wild animal. Some bears which had learned to obtain food from people later injured someone and had to be shot, so please <u>never feed bears!</u> To avoid problems with bears, food and refuse must be well-secured and beehives/orchards protected with, for example, electric fences

**Predation on livestock:** Livestock lack natural anti-predator adaptations and so are easy prey for carnivores. Sheep in mountain areas are particularly vulnerable. Nevertheless, <0.3% of all sheep in Slovakia are killed by wolves and bears per year. The state pays compensation for proven damage. The level of damage to livestock is not related to the number of predators: even one wolf (or dog) can kill a lot of sheep if they are left unprotected. Good quality electric fences and/or properly raised livestock guarding dogs such as the Slovenský čuvač can reduce losses.

**Literature:** Boitani L. (2000). Action plan for the conservation of wolves (*Canis lupus*) in Europe. LCIE. Breitenmoser U. et al (2000). The action plan for the conservation of the Eurasian lynx (*Lynx lynx*) in Europe. LCIE. Hell P. and Garaj P. (2002). Nová príručka poľovníka do vrecka. Príroda, Bratislava. Linnell J. et al (2002). The fear of wolves: a review of wolf attacks on humans. NINA Oppdragsmelding 731. Okarma H. et al (2000). Status of carnivores in the Carpathian ecoregion. CEI. Salvatori et al (2002). Hunting legislation in the Carpathian Mountains: implications for the conservation and management of large carnivores. Wild. Biol. 8: 3-10. Servheen C. et al (1999). Bears. Status survey and conservation action plan. IUCN. Swenson J. et al (2000). Final draft action plan for conservation of the brown bear (*Ursus arctos*) in Europe. LCIE.

## Are carnivores dangerous to humans?

Perhaps surprisingly, there has been no single proven case of a person being killed by a bear, wolf or lynx in Slovakia for more than 100 years, although there are a few reports of fatal infection with rabies. Each year around 5-15 people are injured by bears. In many of these cases the bear is reacting in self-defence, when it is surprised by a sudden close encounter, has cubs or is defending a food source. Individuals which have learned to associate humans with food are also dangerous. Wolves and lynx are very cautious and normally avoid humans.



#### The Slovak Wildlife Society

We are a not-for-profit non-governmental organisation established in 1998. Our goal is to help ensure the long-term survival of threatened species and to conserve their habitats in Slovakia. We take an integrated approach to solutions for sustainable co-existence with people. Since 2000 we have assisted farmers to protect their livestock from carnivores using livestock guarding dogs. We run wildlife holidays to show local people that they can benefit from the presence of bears, wolves and lynx in their area.

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# Bears, wolves & lynx



Basic facts on large carnivores in Slovakia





The brown bear (*Ursus arctos*) is Europe's largest predator; adult males generally weigh 140-320 kg and females 100-200 kg. Although the bear is a carnivore, it's diet

also includes grass, berries, fruit, seeds and insects. The brown bear is not a very good hunter, but it feeds on carcasses and is able to catch small animals and sometimes fawns. It has an excellent sense of smell and good hearing. At present there are thought to be 600-800 bears in the forested mountain areas of central and northern Slovakia.

Bears breed in May-July but the young are not born until the winter, when the female is in her den. They weigh just 0.4 kg at birth. A female has 1-4 cubs per litter, which stay with her for up to 3.5 years. Bears have a low food intake in spring which increases through to the autumn in preparation for winter. Hibernation lasts 3-7 months. During this period a female with young loses up to 40% of her body weight. Brown bears can live for more than 30 years in the wild.

### • Are there too many bears in Slovakia?

Bears live mostly solitary lives (apart from females with cubs). Occasionally they gather at seasonally abundant food sources such as an orchard, maize field or hunters' feeding site. Bears are attracted to these places from long distances, so it can wrongly appear that everywhere around is full of bears!



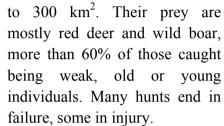
Wolf



Lynx



The wolf (*Canis lupus*) has undeservedly gained a bad reputation due mainly to fairy tales and legends. People think of it as a cruel and dangerous killer. In reality, from 2 to 8 wolves live in family-based groups and share the care of their pups. Each pack hunts in a territory of 100



Wolves' howling serves several purposes: it is a message to others that "this territory is occupied", a method to reunite the pack and a ritual. The dominant "alpha" pair usually limits the number of young in a pack to a single litter per year, which has 3-7 pups. Many do not survive their first winter. Young wolves face a choice between staying subordinate in their natal pack or dispersing to unknown lands.

### • Are wolves "over-populated"?

In the 1970s the wolf was almost eradicated from Slovakia by hunting, trapping and poisoning. Partial legal protection allowed a natural growth in population to 150-350 wolves in central and eastern areas. However, numbers have now been falling for several years and density is lower than elsewhere in the Carpathians. They are still legally hunted from 1<sup>st</sup> Nov. to 15<sup>th</sup> Jan., during which time about 90-120 are shot each year.

The Eurasian lynx (*Lynx lynx*) is the third largest predator in Europe, after the brown bear and the wolf. It is the largest native European cat. An adult lynx weighs 12-35 kg and is 60-70 cm tall at the shoulder. Roe deer form its staple diet, as well as hares, mice and birds.

The breeding season is from February to mid-April. Usually 2-3 kittens are born in late May. During the first two months the male brings food for his partner. The young stay with their mother until the next mating season. At least half of them die before reaching adulthood. Lynx can be found, like wolves and bears, mainly in extensive mixed forests and rocky mountains. This

carnivore has been little studied in our country and so we do not know much about it. There are thought to be at most 300-400 lynx in Slovakia. They are fully protected by law.



### • Did lynx cause the decline of Tatra chamois?

Predators and their prey have evolved over millions of years and the relationships between them are complex. By consistently removing weaker individuals a predator effectively improves the overall quality of its prey populations. Chamois are natural prey of lynx. There is no evidence that predation by the lynx (or wolf) caused the reduction in numbers of chamois in the Tatras.