

Protection of Livestock and Conservation of Large Carnivores in Slovakia

Livestock guarding dogs (LGDs) have been raised for millennia to protect domesticated animals from wild predators, stray/feral dogs and thieves. Their use has declined in many regions for several reasons. Some breeds are rare, others have been bred for show, crossbred or misused in ways that have weakened their working ability. Nevertheless in parts of Italy, Romania and elsewhere the LGD tradition survives largely intact. In other countries systematic efforts are being made to increase the use of LGDs to support large carnivore conservation. LGDs have also been successfully introduced in several countries where they are not traditional, including Norway, Namibia and the USA.

Livestock guarding dogs are especially appropriate when rare, endangered and legally protected carnivores are causing damage to livestock, such as wolves and bears in the West Carpathian mountains of Central Europe. Many LGD projects therefore operate in conjunction with carnivore conservation initiatives that, when funding and assistance can be provided, help offset farmers' start-up costs. One such initiative is the Protection of Livestock and Conservation of Large Carnivores project, running in Slovakia since 2000. Traditional use of LGDs in Slovakia was gradually abandoned in the first half of the 20th century, at a time when large carnivores were almost extirpated. Losses of sheep, goats and cattle to wolf (*Canis lupus*) and European brown bear (*Ursus arctos*) subsequently increased as their populations naturally recovered. Hostility due to livestock depredation, especially to wolves, is greater than recorded losses, which remain relatively low in Slovakia (<0.3 % of all sheep p.a. costing <30,000 Euros for wolf and bear combined) and affect a minority of farms, so effective prevention measures such as the use of LGDs might help reduce conflict and increase acceptance of large carnivores.

The Slovak Wildlife Society

The Slovak Wildlife Society is a not-for-profit NGO established in the UK in 1998. Our goal is to help ensure the long-term survival of endangered species in Slovakia through an integrated approach to solutions for sustainable co-existence with people. So far, we have:-

- Developed an ambitious project to resolve conflicts between large carnivores, people and livestock, using livestock guarding dogs.
- Participated in and helped fund long-term research on wolf *Canis lupus* food habits, home range and movements (using radio-telemetry).
- Conducted and part-funded research on brown bear *Ursus arctos* food habits.
- Conducted and funded surveys of the endangered Tatra mountain chamois *Rupicapra rupicapra tatrica* as well as marmots *Marmota marmota* in Nízke Tatry National Park.
- Developed The B.E.A.R.S. (Bear Education, Awareness and Research in Slovakia) Project to mitigate increasing bear-human conflicts.
- To raise funds and to provide field assistance SWS organises and hosts working holidays and runs low impact, sustainable wildlife holidays, which also aim to show local people that protecting wildlife can benefit them.

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Livestock Guarding Dogs and Carnivore Conservation



A new role for an old tradition

What are livestock guarding dogs?

Livestock guarding dogs (LGDs), rather than helping herdsmen move their stock as do herding dogs such as the Hungarian Puli, Scottish Border Collie and German Shepherd, protect the animals from external threats such as wolves and bears. They are usually large (often 70 cm at the withers and >45 kg) and appear independent, stubborn and intelligent. They have calm dispositions and do not show the typical predator-type behaviour (stare, stalk and chase) of herding dogs which move livestock. Most LGD breeds have a large head and pendant, rather than pricked, ears. Many are white.

A successful LGD is **attentive** (stays with the animals it is to guard), **trustworthy** (does not harm them) and **protective** in the face of danger. Not all breeds of dogs make good LGDs; inappropriate breeds are likely not to show enough of the required behaviour patterns and/or will show too much undesirable behaviour, such as chasing sheep. Traditional LGD breeds include the Polish Owczarek Podhalański, Caucasian sheepdog, the Kuvasz and Komondor from Hungary, the Great Pyrenees, the Italian Maremmano-Abruzzese and the Slovak čuvač.



How to train livestock guarding dogs

Achieving good adult LGDs showing the three required behavioural traits (attentive, trustworthy and protective) depends on a combination of genetics and the method of raising. Once a suitable breed has been chosen, pups should be kept with, brought up with, socialised with and



bonded with the stock they are going to protect.

“If the dog isn’t with the sheep it isn’t where it’s supposed to be.”

The critical period for domestic dogs to form social attachments is between 2-4 and 12 weeks of age. During this period they can form strong social attachments to other species, including sheep; it is this phenomenon which is exploited in raising LGDs. Social attachment becomes difficult after 16 weeks and so it is essential to begin the training of LGDs as pups. However, pups should not be separated from their mother too early as they may later show fear of dogs. The best time to start is when the pups are around 7-8 weeks of age.

The key points to successfully rear a livestock guarding dog can be summarised as follows:-

- Select a suitable breed and reputable breeder.
- Rear pups singly from 8 weeks of age with sheep, minimising human contact (probably the most critical ingredient for success).
- Monitor the dog and correct undesirable behaviours (but never beat the dog).
- Encourage the dog to remain with or near the livestock.
- Ensure the dog’s health and safety.
- Manage the livestock in accordance with the dog’s age and experience (e.g. use smaller pastures while the dog is young and inexperienced).
- Be patient and allow plenty of time for training. Remember that a guarding dog may take 2 years or more to mature.

Livestock guarding dogs are not a perfect anti-predator defence system, and in the first one or two years patience is required to deal with common problems such as the dogs wanting to play with sheep or wandering away from the flock. Nevertheless most dogs can be trained (or grow out of) such behaviour and numerous studies have demonstrated that livestock guarding dogs can reduce losses to large carnivores substantially.

For more information, the following review is available as a pdf file on the internet:

Rigg R. (2001). Livestock guarding dogs: their current use world wide. IUCN/SSC Canid Specialist Group Occasional Paper No 1 [online] URL: <http://www.canids.org/occasionalpapers>