#### Project

# KUVASZ GUARD PROGRAMME IN HUNGARY

# Ábrahám Szép¹, László Patkó²

<sup>1</sup> Kuvasz Guard Large Carnivore Conservation Programme, H-2730 Albertirsa, Homokrész I. Ker. 12, Hungary Contact: kuvaszor@gmail.com

<sup>2</sup> WWF Hungary, H-1141 Budapest, Álmos vezér útja 69/A, Hungary

www.kuvaszor.hu

#### 1. Introduction

Until 100 years ago, the Kingdom of Hungary encompassed the entire Carpathian Basin, including the Carpathian Mountains now in Slovakia and Romania as well as the territory of present-day Hungary. The most densely human-populated regions were in the Great Hungarian Plain. In response to frequent human-carnivore conflicts, large carnivores were gradually eradicated from these lowing lying-areas and driven back to the less densely populated Carpathian Mountains (Márkus and Szemethy, 2003a). The Kuvasz, a traditional dog breed known as '*kuvas*' in Hungarian, continued to be used as a livestock guarding dog (LGD) where there was still a risk of predation. In the Great Hungarian Plain, however, people began to use the Kuvasz as a watch dog or for personal protection.

Organized Kuvasz breeding in Hungary started in 1905 and in 1938 a national standard was agreed. In 1954, the Federation Cynologique Internationale (FCI) accepted the definitive basis for the breed (www.fci.be). The territory of Hungary was reduced by more than two thirds after the First World War, leaving the mid mountain and lowland areas with the highest density of human presence. The population of Kuvasz used for livestock protection was left outside the new borders and effectively 'lost' to Hungarian breeders. Only a few were 'rescued' and brought back from, for example, Transylvania. The Great Hungarian Plain's Kuvasz population also suffered. Here, the Kuvasz was regarded as a dangerous enemy and many of them were killed by German and Russian soldiers who plundered the area.

After the Second Wold War, Kuvasz breeding resumed with the remaining population and individuals imported from Germany. It flourished until the late 1980s, reaching a peak of 2,000 pups per year. (Hudák et al., 1996). However, due to the eradication of large carnivores, shepherds in the Carpathian Basin, even in the mid mountains, used only herding dogs at this time. During the 1990s, after the end of the communist regime, many new fashionable dog breeds such as the Caucasian Shepherd or Central Asian Shepherd were introduced into the country, further distracting attention from the Kuvasz. This resulted in a decline in Kuvasz breeding to 150-200 pups per year. Due to this, the risk of genetic erosion arose within the breed.

In this article, we present the results of recent efforts to revive the traditional use of the Kuvasz as a livestock guarding dog in order to help preserve the breed and mitigate conflicts arising as a result of the return of large carnivores to Hungary.

## 2. Recovery of large carnivores

For most of the 20<sup>th</sup> century large carnivores were extremely rare in Hungary (Márkus and Szemethy, 2003a). Thanks to the joint efforts of nature conservationists, wildlife managers and foresters, by the end of the 1990s the grey wolf (Canis lupus), brown bear (Ursus arctos) and Eurasian lynx (Lynx lynx) became re-established in Slovak-Hungarian border regions (Szabó and Gadó, 2015). All three large carnivore species are now strictly protected in Hungary. So far, there have been only a few observations of bears and lynx per year, but wolves are already present in larger numbers: around 5-6 packs, though probably less than 50 individuals in total. The North Hungarian Mountains are contiguous with the Western Carpathian Mountains of Slovakia and the genetic diversity of wolves, bears and lynx in northern Hungary is highly dependent on source populations in Slovakia (Márkus and Szemethy, 2003b).

During the period of their absence, Hungarian shepherds lost their knowledge of how to defend flocks from predators. The return of large carnivores has therefore brought a need to renew livestock protection measures. In 2007, nature conservationist Ferenc Puskás began the 7-year Kuvaszok and Large Carnivores Programme which placed Kuvaszok (the plural for Kuvasz) from Hungary at shepherd camps in Transylvania, Romania. This programme showed that even Kuvaszok from lines of watch dogs and personal protection dogs could be suitable for protecting livestock against predators if given proper training (Puskás, 2010, 2013 a, b). In 2016, stakeholders were surprised by the first press report in Hungary about depredation on livestock by large carnivores. This was the moment when it became clear that carnivore populations had increased and good practices for coexistence with them needed to be widely disseminated. Thus, the Kuvasz Guard (Kuvasz Őr) Programme was born (Box 1).

## 3. The Kuvasz Guard Programme



The Programme started on 14<sup>th</sup> February 2016 with the placing of two Kuvasz pups from the Programme leader's kennel on a farm in Karancskeszi, Hungary. A

good working relationship was established with the Bükk National Park Directorate (NPD) and a cooperation agreement was drafted with the Hungarian Kuvasz Breeding Association (MKFE) to reintroduce, after a century of absence, the Kuvasz breed into its original livestock guarding role.

The main aims of the Programme are:

- 1. *Carnivore conservation*: to help achieve relatively problem-free coexistence between humans and large carnivores in rural regions of northern Hungary;
- 2. *Dog breeding*: to re-establish the Kuvasz in its original role and function as a livestock guarding dog as a way to save the breed from the risk of extinction;
- 3. *Research*: to provide researchers with opportunities to study interactions among wolves, dogs and live-stock in Hungary.

#### Box 1



Abraham Szep with one of his puppies (Photo: Lili Szép)

#### The face behind the Programme

Kuvasz Guard was established in 2016 by dog breeder and wildlife conservationist Ábrahám Szép. Ábrahám was born in Transylvania, Romania, where he learned the 'rules' of coexisting with carnivores during his childhood. He expanded his knowledge and experience of the hunting world as a gamekeeper after settling in Hungary. In 2009, Ábrahám graduated from Szent István University, Gödöllő, as a wildlife and game manager. His motto is: "Large carnivores are not to be toyed with; they can easily become dangerous for humans. Nevertheless, it is my strong conviction that we do not have the right to exterminate them. Predators are essential, key species in the wild." Many Kuvasz breeders have voluntarily given pups to farmers, the process being coordinated by the Kuvasz Guard Programme. Breeders usually join the Programme because they want to show that the Kuvasz is still a good working dog and therefore a viable option to protect flocks. This is helping to maintain Hungary's Kuvasz population as well as aiding in mitigating conflicts between farmers and conservationists.

The Kuvasz Guard Programme also supports the introduction of other non-lethal conflict management methods such as light and sound deterrents, fladry, electric fences and continual human presence. We also seek to participate in and promote the elaboration of a prevention and compensation system in Hungary. For example, in 2018, a meeting was organized at the headquarters of the Hungarian Sheep and Goat Breeders' Association (MJKSZ) in Budapest with the participation of Bükk NPD, WWF Hungary and the Kuvasz Club in order to issue a joint call for the Ministry of Agriculture to elaborate damage prevention and compensation systems. Unfortunately, there is still no compensation system in Hungary, but the Ministry supports the use of prevention methods by giving electric fences to Bükk and Aggtelek NPDs for distribution among affected farmers.

## 4. Methods

Bükk NPD investigates all suspected cases of large carnivore depredation and suggests the Kuvasz Guard Programme to farmers as a good prevention method. The Hungarian Kuvasz Breeding Association (MKFE) assists in finding breeders with available pups. Livestock farmers are provided with Kuvasz pups on a one-year contract etween the farmer and dog breeder, which commits them to take care of the pups and train them properly. Usually two pups of the same age



**Fig. 1.** Locations in Hungary where the Kuvasz Guard Programme operates.



 Fig. 2 Younger Kuvaszok are allowed to sleep in the barn with the flock.
 (Photo: Kuvasz Guard Programme)

are provided: either an unrelated male and female or two pups of the same sex from the same litter (so they are tolerant of each other). Farmers who are inexperienced with LGDs receive one pup initially and the second is added after a few months. The Programme leader regularly visits in order to assist farmers with training, documenting each visit in a log. After one



**Fig. 3** When the flock is in the night enclosure outside, Kuvaszok lie nearby to guard.

(Photo: Kuvasz Guard Programme)

year, if there have been no serious difficulties and the dogs are in good health and working well, the farmer takes over their ownership.

Currently, the Kuvasz Guard Programme operates in 13 locations where large carnivores occur (Fig. 1–5). Eight of them have sheep, two have cattle, one has horses and two have sheep, cattle, buffalo, horses and poultry Most of them are in the mountains of northern Hungary, but one is in the Great Hungarian Plain, where golden jackals (*Canis aureus*) are common.



**Fig. 4** A well-trained Kuvasz stays with the flock all day long, even when the shepherd changes.

(Photo: Kuvasz Guard Programme)

### 5. Results & experience

So far, 17 farmers have joined the Programme and received a total of 26 Kuvasz pups (Table 1). Only four farmers have had to return their dogs. Difficulties occurred when two farmers did not spend enough time getting their dogs used to livestock. In these cases, the dogs were given back to the breeders. Thanks to collaboration with MKFE and the help of the Kuvasz Rescue Team, they were placed with new owners. In one case, dogs left a farm where the farmer switched off the electric fence. In another case, dogs had to be taken back due to prolonged illness of the farmer.

After dogs reach maturity (at around two years old) they can be used for breeding, but only with the guidance and agreement of the Kuvasz Guard Programme, the breeder, the farmer and the MKFE. A prerequisite for breeding is a test conducted free of charge at farms by the MKFE. This test includes many elements that inform the breeding judge about the psychical healthiness of the examined individual, such as how it reacts to strange or weird noises, lights, objects and unfamiliar people and whether it is able to defend its owner. Based on our experience, the key to success is the 'human factor'. The relationship between Kuvasz and livestock depends on human attention, care, patience and education. A really important factor is early placement in the flock and bonding with livestock. For dogs to bond fully with livestock, this has to happen before they reach the age of three months.

After many discussions with shepherds participating in the Programme, we feel that their perceptions of carnivores have changed positively due to the presence of LGDs, since the Kuvasz functions like a barrier between carnivores and the flock. An example is the case of Komlóska village. During the winter of 2018, footprints in the snow showed that the Kuvaszok of a farmer participating in the Programme encountered a lone wolf. Two Kuvaszok in conjunction with a fourwire electric fence were sufficient to prevent the wolf from causing harm to the sheep flock.

The success of our bottom-up initiative has attracted the attention of the media. Newspaper articles, TV slots and radio interviews are conducted regularly to present the Programme and show the life of a working Kuvasz.

The most important milestones and activities of the Kuvasz Guard Programme so far include:

- A workshop organized in 2017 together with Bükk NPD in Romania's Selkerland region, where local wildlife experts, hunters and farmers shared their experiences about carnivores with participating Hungarian colleagues in October 2017;
- The Programme was a highlight of the 1<sup>st</sup> Hungarian Large Carnivore Summit at Felsőtárkány, Hungary;
- The Programme has worked closely with WWF since 2017 and together we have given numerous lectures during nature conservation related events as well as participating in carnivore-related field work and filming;

Sex	Number of	Outcomes			
	pups placed	Well-suited	Returned	Lost	Other
Male	17	8	6	2	1
Female	9	9	0	0	0
Total	26	17	6	2	1

Table 1 Outcomes of 26 Kuvasz pups placed with livestock farmers in Hungary by Kuvasz Guard.

- On 4<sup>th</sup> October 2017 the State Secretary for the Environment visited two Kuvasz Guard Programme localities. As a result, the Ministry asked for closer cooperation between Bükk NPD, the MKFE and the Kuvasz Guard Programme;
- We were invited to showcase good practices and results for livestock breeders at the 2<sup>nd</sup> Hungarian Large Carnivore Summit, organized by WWF Hungary;
- In 2018/19 Bükk NPD invited us on a road show to four localities in the Northern Hungarian Mountains in order to show the lay public and livestock breeders how to coexist with large carnivores;
- In 2019, the Programme won a tender announced by the Ministry of Agriculture to buy Kuvasz pups from breeders and distribute them to farmers.

# 6. Future plans and perspectives

The Ministry of Agriculture supports the work of the Programme with several important steps, which will help it develop to another level. This support covers the costs of buying pure breed Kuvasz pups; screening for hip dysplasia; a road show to schools and universities; the Programme's travel costs; and advertising.

In December 2019 the Programme was transformed into the Kuvasz Őr (Guard) Foundation. With the support of the MKFE, Bükk NPD, WWF Hungary and hopefully also the Ministry of Agriculture, the Foundation will explore additional locations to provide assistance to livestock farmers. The Foundation's website (www.kuvaszor.hu) is currently under construction.



**Fig. 5** The Programme leader accompanied by dog breeders, nature conservation students and National Park rangers while checking Kuvaszok with a sheep flock in Hungary.

(Photo: Kuvasz Guard Programme)

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