

## Briefing on the Re-Introduction of LGDs in Catalonia (Spain)

by  
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In 1996, 3 adult bears arrived from Slovenia, thus strengthening the dwindling population found at that time in the Pyrenees (6 individuals). Since then, attacks on sheep have increased significantly. These 3 individuals came from a country where there were relatively few sheep, and where sheep usually grazed in the vicinity of little villages in the countryside. Whilst local bears were responsible for only 3-4 sheep kills per year, newly arrived bears MELBA, ZIVA and PYROS killed between 20 and 25 sheep annually (these figures have been revised). Furthermore, cubs born from these individuals appeared to have acquired similar alimentary habits.

Naturally, Catalanian shepherds in the area protested vehemently against the situation. Most were already opposed to the bear re-introductions sponsored by the European Union "Life Program", which also supports the re-introduction of other large mammals. The idea of capturing and relocating the problem individuals to Slovenia became increasingly popular among the local population, though lethal methods were not seriously envisaged.

In reaction to these conflicts, as members of the Spanish Great Pyrenean Club, we offered to share our knowledge on *Great Pyrenean Mountain Dogs* (GPRs) with the Department of the Environment in Catalonia. We were convinced that this breed – used effectively to prevent predation in North America, Canada, France, and Israel – could benefit both shepherds and wildlife.

Our report was ignored for two years, despite frequent calls we made to politicians. In 1998 however, we were solicited by the Endangered Species Department, who wished to implement LGD protection methods that were commonly practiced by sheep owners on the French side of the Pyrenees.

Efforts were made to put such plans into action and during the years of 1998 and 1999, twenty-nine *Great Pyrenean* puppies (all born in flocks, mainly issued from the French Pyrenees) were purchased by the administration from the Spanish Great Pyrenean Club, to be given to stockowners to protect their flocks. The speed at which these changes took place was unfortunately detrimental to the efficiency of dogs, which were handed over to shepherds with few

instructions and no funding for technical surveillance or veterinary care.

In an attempt to resolve this problem, we formed a Commission within the Spanish Great Pyrenean Mountain Dog Club. This Commission recommended that the introduction of LGDs in pastoral areas should be arrested until the program was reassessed. In a survey conducted in the fall of 2001, we found that shepherds in possession of female GPRs did not keep them under control during reproductive periods. They declined the sterilization or pharmacological control of oestrus methods, which we offered. Female GPRs were allowed to breed with virtually no intervention, and unwanted puppies were sometimes eliminated. Nevertheless, 6 of the 7 re-introduced females gave birth to puppies that were later used as livestock guarding dogs themselves. However, the pedigree and working abilities of these possibly crossbred individuals were not assessed.

The Department of Medi Ambient (Department of Environment) eventually examined the outcome of these reintroductions. Results revealed an alarming mortality rate of LGDs (21%). Moreover, 23 % of the owners showed unsatisfactory procedures, while only 3 % were qualified as excellent. However, 80 % of the LGDs showed attentive behaviors towards the flock (Carnota 2002).

We also surveyed the Val d'Aran and Ribagorça areas in order to assess awareness among the shepherds concerning LGDs and predation problems. Val d'Aran shepherds showed little interest in LGDs, although predation problems are mainly due to bears and in another extent by wandering dogs. In the opposite, Ribagorça suffered predation mainly by foxes and wandering dogs and less by bears. When asked whether they wished to introduce an LGD into their flock to protect it, 66% of Val d'Aran and 49% of Ribagorça owners were not interested at all. The difference between the two valleys may partly be explained by an article published in the local newspaper of Ribagorça on the 19th of July 2001: two LGDs faced up to Ziva and managed to drive her away from the flock!

### Present day LGD introduction methods

Since January 2001, we provide funding for the program and are in charge of decision-making processes. LGDs have been allocated at a limited ratio of 4 per year. However, we plan to distribute 8 per year between 2005 and 2008, in anticipation of the arrival of 5 new bears. Protection zones around natural reserves are a priority for LGD re-introductions,

though the total area extends to 15,000km<sup>2</sup>. This area represents the total extension of the mountain area in Catalonia where flocks have suffered predation (wild and domestic predators) and are more likely to suffer predation from bears or, more recently, wolves.

In order to ensure that the introduction of LGDs is successful, we monitor puppies and provide technical surveillance and veterinary assistance during the first year after they have been placed. Because the area we cover is large and the terrain is mountainous, each shepherd's designated veterinary is contracted him or herself to make 4 annual visits to check the LGD's sanitary status and to report critical information about its socialization with the flock and with its owner. A complete survey is carried out during each visit.

Health coverage is also provided in the first year, including medication against internal and external parasites, vaccinations and sterilization at one year of age. We also cover accidental damage. Sterilizing working animals is standard practice; it prevents the spread of large, crossbred dogs that may represent a threat to flocks, keeps males from roaming and stops out of season breeding in females. Such problems indeed developed in areas where sterilization was not made compulsory. Exceptions can be made when shepherds accept tutoring on how to select dams or sires and how to make decisions as to where to place the pups.

A survey is conducted at the end of the first year to determine the degree of acceptance, utility and effectiveness of the pre-adult LGD introduced. In general, once reared, an LGD becomes a valuable asset. Stockowners from neighboring farm exploitations tend to follow the example and frequently ask for their own LGD; their flocks suddenly might become more vulnerable when an LGD is introduced nearby.

Our puppies are issued from professional breeders belonging to the Spanish Great Pyrenean Mountain Dog Club. The sire and dam of all puppies to be introduced is screened for hip dysplasia (Grades A, B, C accepted) and must pass the Test for Natural Abilities, which takes place annually during the *Great Pyrenean* breed exhibition. Once the puppies are born, the less sociable, less dominant and most passive individual is selected to be submitted to an easy test. The breeder's opinion is often helpful. We help cover the costs of x-rays to detect hip dysplasia.

Willingness and awareness among shepherds are both crucial when dealing with LGDs. Rearing pups is costly in terms of time and effort, and owners that are poorly motivated or trained may hinder the dog's efficiency, despite its initial capabilities. Shepherds

may acquire a puppy for a 200 € fee that is refunded after the first year of rearing. For the time being, the one year-control period has not been extended, due to time and financial constraints.

### **Our Association**

The Commission has now become an independent non-profit Association. No fees are charged and new members with knowledge on and experience with LGDs are welcome to join. Some members of the Association are also part of the Board of the Spanish Pyrenean Mountain Dog Club. Technicians of the Department of the Environment are also considered to be members, as we share the aim of addressing conservation issues in and around the Natural Parks.

We also encourage shepherds to join the Association, as we believe effective project management involves many different approaches and disciplines. Please feel free to contact us with any queries at [akar@eresmas.com](mailto:akar@eresmas.com). We will soon have a new Test of Natural Abilities thanks to one of our associates (the vice-president) who is professor of Ethology at the University of Barcelona. We are also searching for funds to edit a booklet on effective LGD management.

### **References**

Carnota, A. 2002. Encuesta sobre demanda de perros de protección. Spanish Great Pyrenean Dog Club news bulletin n° 36, 1st trimester.

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