

Bears in Greece: Cars and Power Poles

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Greek Bear Mortality

Riding on the pre-Olympic construction wave, major infrastructure projects continue to pop up like mushrooms in the Greek landscape. One of the major priorities of past and present governments has been the construction of a modern road network. Unfortunately, within this developmental frenzy, nature in general and bears in particular are often the losers. Despite some encouraging measures, such as mitigating the effects on the environment by the construction of the Egnatia Highway (*International Bear News* August 2003, 12(3):8; February 2005, 14(1):21), the existing road network continues to threaten the bear population in Greece. Since the last report of a fatal bear-car collision in October (*International Bear News*, November 2004, 13(4):24) three more bears have been killed by cars, raising the toll in the last three years to at least five. Initially, this number might not seem disturbing; but considering the endangered status of the species in the country and the fact that several demographic parameters (such as annual birth, cub survival and death rate) are still poorly understood, the impact of this threat on the brown bear population could be significant. With the continuing expansion of the road network, we might be witnessing the dawn of a new mortality factor in Greece. It is too early to assess the impact, but this issue should be closely monitored.

Special thanks to Y. Mertzanis, L. Georgiadis and ET3 channel for providing relevant information.

Power Pole Marking in the Pindus Mountains



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Power pole marked by Greek brown bears

A special kind of chemistry is often required for humans to successfully interact. With brown bears in Greece it doesn't seem to be just a matter of chemistry but more a matter of electricity. One of the primary goals of the Egnatia monitoring project (*International Bear News*, February 2005, 14(1):21) has been the genetic study of brown bears in this part of the Pindus Mountain range. In the beginning of the project a working protocol for the non-invasive collection of hair

was established based on the deployment of baited hair traps. Unfortunately this method did not yield the expected results, leaving the field team in search of alternative ways to collect data. The problem was solved by a highly fortunate observation. Although bear species are well known to mark a large variety of objects throughout their range, the intensity and frequency with which brown bears display this type of behavior on power poles in this part of Greece is impressive. More than 50% of the poles inspected in the initial phase of the project in 2003

Reintroduction of Bears in France

had been marked by bears; in several instances marking intensity was so high, that poles had to be replaced by the electric company. Throughout 2003 and 2004 power poles were regularly inspected in order to gather information on this interesting marking behavior. In addition, several of the heavily used poles were fitted with barbed wire in order to facilitate the non-invasive hair sampling required by the project. As a result, a power pole monitoring protocol has been created and more than 150 hair samples have been collected and are currently being analyzed. Preliminary results of the genetic analysis indicate that the majority of power pole marking activity is being carried out by males.

In the second phase of the study which is planned for the spring and summer of 2005, and depending upon the availability of funds, all the power poles in the wider study area will be sampled and environmental and anthropogenic parameters recorded. The results of this phase will be included in a GIS database in order to model brown bear marking activity and habitat use.

This study is a Ph.D thesis of the Department of Genetics of the Aristotle University of Thessaloniki in Greece. The first part of the study has been supported by Egnatia S.A. and the NGO Arcturos while the second phase is supported by the Department itself and private funds.

Special thanks go to Y. Mertzanis for helping set up the study and K. Kendall and D. Mattson for sharing their experiences on brown bear marking behavior. The help of M. de Gabriel Hernando, S. Dalrymple, M.L. Rubio Guillamon and C. Milcent in developing the power pole monitoring protocol is greatly appreciated.

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The death of Cannelle, the last native Pyrenean female brown bear, has caused a national outcry in France (*International Bears News*, February 2005, 14(1):22).

On December 7-8, 2004, an opinion poll was conducted in all of the municipalities of the Pyrénées-Atlantiques. Four hundred people (older than 18 years) were asked for their opinion concerning the reintroduction of bears in the Pyrenees. Seventy-seven percent (81% of all people younger than 50) favored the reintroduction while 14% were opposed.

In only 1.5 months a petition in favor of the reintroduction of bears was signed by 56,288 people.

Serge Lepeltier, the Environment Minister of France, decided to double the current bear population during the next three years. Five bears will be reintroduced in autumn 2005, and up to five more in 2006, and in 2007 depending on whether any cubs are born during that period. The new bears might come from Spain, Croatia or Slovenia.

The current bear population in the Pyrenees consists of 14-18 bears in two core areas: four male bears in Béarn and 11-15 bears in the central Pyrenees.

Stockbreeders and hunters are against this initiative. Hunters are afraid of losing their hunting rights. The stockbreeders don't believe that bears and agriculture can coexist.

Jean-Mark Prim, of FDSEA (Fédération départementale des syndicats d'exploitants agricoles), is one of the opponents. He wants the bears to be released in a reservation where they can't do any damage to livestock. One farmer claimed that he lost 60 ewes to bears last year.

Livestock owners receive compensation worth 150 percent of the sheep's value and subsidies to cover the costs for guarding dogs, electric fences and shepherds (which have been shown to reduce attacks).

Still it will be very hard to convince hunters and livestock owners that a coexistence with bears is possible.

Thank you to Fapas for information (www.fapas.es).