

News from Greece Brown Bear Habitat Fragmentation in Greece: monitoring the effects of the construction of the “E65” highway

Alexandros Karamanlidis
L. Georgiadis
ARCTUROS
3 Roggoti Str.
54624 Thessaloniki, Greece
Email: akaramanlidis@gmail.com
Website: www.arcturos.gr

Habitat fragmentation is a threat to the survival of large carnivores worldwide. In the case of Greece, this has been exemplified by the construction of the “Egnatia” highway, a road linking the western with the eastern part of the country, on brown bear habitat in the Pindos Mountains (Karamanlidis & Mertzanis 2003). After a long and strenuous legal battle with environmental organizations the Greek government was obliged to reassess the planned alignment of the highway and monitor the environmental impact of the construction. Since then however, and in order to cope with increasing traffic volumes in the future, a new highway that will link this time the southern part with the northern part of the country and connect to the “Egnatia” highway has been planned, thus increasing pressures on the already beleaguered habitat of brown bears in the region. As in the case of the “Egnatia” highway, the initial phase of monitoring the effects of the construction of the highway, which was completed in spring 2009, was entrusted to the experienced NGO ARCTUROS. Within the framework of this monitoring program the following actions were carried out:

- Satellite tracking of brown bears: the field team of ARCTUROS, led

by the experienced bear trapper Dr. John Beecham caught 5 bears in spring 2008. Two of the bears are still being monitored.

- Genetic monitoring of brown bears: The efforts carried out within this monitoring program in conjunction with the “Hellenic Bear Register” (Karamanlidis et al. 2008) identified more than 70 bears in the wider study area. This information will compose the baseline knowledge for the long-term protection of the species in the area.
- Systematic collection of indirect and direct bear evidence: Indirect and direct evidence of bear presence was collected throughout 2008 in order to study temporal and spatial occurrence and habitat use of brown bears in the study area.

The main aim of these actions was the assessment of the status of brown bear populations at the construction site, a preliminary evaluation of the proposed mitigation measures and the proposal for compensation measures for the more effective conservation and management of wildlife in the area. The results of this monitoring program in conjunction with the increasing numbers of fatal car accidents in the area in the past years, justify the pressure by ARCTUROS and other local NGOs towards the Greek government and the construction companies to improve the “environmental profile” of the “Egnatia” and “E65” highways.

Acknowledgments:

This monitoring program would not have been completed without the participation of numerous researchers of ARCTUROS; we thank them all. Our utmost gratitude is extended towards Dr. John Beecham (USA), Dr. Josip Kusac (Croatia) and Miguel de Gabriel Hernando (Spain) for their help during the trapping season. The help of Renee Prive and Dr. David Paetkau (Canada) and Prof. L. Paule

and Dr. M. Straka (Slovakia) was essential in completing the genetic aspects of this project.

References

- Karamanlidis, A.A. & Y. Mertzanis. 2003. Paving a new way for brown bears in Greece. *International Bear News* 12 (3): 8-9.
- Karamanlidis, A.A., M. de Gabriel Hernando, L. Krambokoukis, L. Georgiadis. 2008. Monitoring the status of Bears in Greece: The “Hellenic Bear Register”. *International Bear News*: 17(2): 16-17. ■

News from the Balkans SEE.ERA - net: strengthening brown bear conservation in the Balkans

L. Georgiadis
A.A. Karamanlidis
ARCTUROS
3 Roggoti Str.
54624 Thessaloniki, Greece
Website: www.arcturos.gr

With distribution ranges spanning usually over hundreds over square kilometers, conservation of a large carnivore is rarely just a national issue; usually cooperation of several nations is required in order to effectively protect such a species. Acknowledging this fact, an initiative named the “BALKAN NET” was set up in the early 90’s aimed at bringing together almost twenty conservation bodies and institutions in the Balkans that shared continuous large carnivore populations. In the spirit of this influential predecessor a similar scheme, the “SEE.ERA - net” was initiated in 2008, with participants from most countries in the Balkans:



Figure 1: Participants of the final SEE.ERA – net workshop at Tara National Park in Serbia

- Transborder Wildlife Association, Albania
- Faculty of Forestry, University of Sarajevo – Bosnia and Herzegovina
- SEMPERVIVA, Bulgarian Biodiversity Preservation Society – Bulgaria
- Faculty of Veterinary Medicine, University of Zagreb – Croatia
- MOLIKA – Former Yugoslav Republic of Macedonia
- ARCTUROS – Greece
- MUSTELA, Wildlife Conservation Society – Serbia

The specific aims of the project were to:

- build transborder partnership on a scientific and management level,
- improve capacity building in participating countries,
- facilitate transfer of present scientific knowledge,
- provide an updated overview of the current status of large carnivores, brown bears in particular, in SE Europe,
- establish and improve common research and management methods, and

- prepare a joint Action Plan for present and future common research and management activities that will promote the most effective conservation of endangered carnivores in the region.

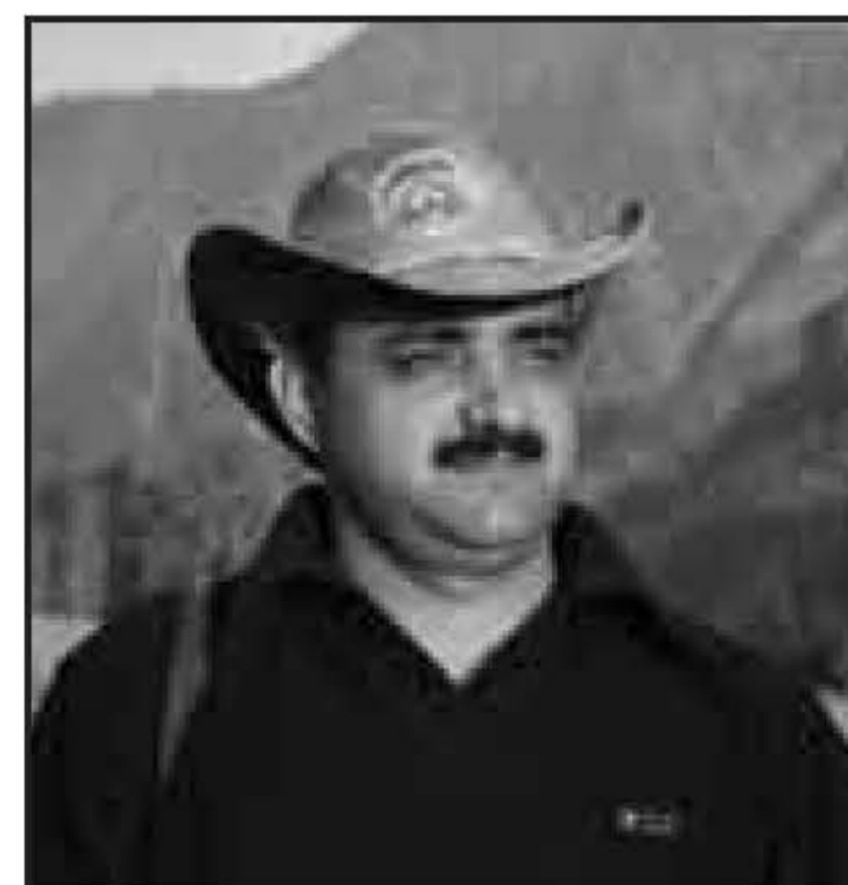
Project activities included a kick-off meeting held at the Environmental Centre of ARCTUROS in Greece, field research and a final meeting in Tara National Park in Serbia. 🐻

First PhD in India on Ecology of Himalayan Brown Bear

Dr. N.P.S. Chauhan (Scientist/ Leader)
Project on Brown Bear
Wildlife Institute of India
Post Box No. 18
Chanderbani, Dehradun, Uttarakhand
India

On 31 December 2008, Bipan Chand Rathore, a senior lecturer

in zoology in the Department of Zoology, Govt. P.G. College Chamba, Himachal Pradesh, successfully defended his Ph.D. thesis entitled “Ecology of brown bear (*Ursus arctos*) with special reference to assessment of Human-brown bear conflicts in Kugti Wildlife Sanctuary, Himachal Pradesh and mitigation strategies” at Wildlife Institute of India, Dehradun, Saurashtra University, Rajkot (Gujarat). Food habits, habitat use pattern and nomadic shepherds-brown bear conflicts of Himalayan brown bear have been studied in Kugti wildlife sanctuary during 2004-2006. We are really proud of Bipan Rathore for conducting research in rare and endangered species in rugged mountain terrain for the past 6 years and still continuing his research on conflicts issues in the Pir-Panjal Himalayan range.



Bipan Chand



Himalayan brown bear with two cubs in Kugti Wildlife Sanctuary, India 🐻