



NGO Callisto's vet, Mrs. Suzanne Riegler, giving first aid to the female bear traffic victim.

supervising company, Egnatia Odos A.E., to upgrade fence standards on the already existing fence, as well as to install a high standard bear-proof fence along the 37 km highway stretch (under completion) that "Callisto" has been monitoring for the last two years. In response, so far, Egnatia Odos has only installed a conventional fence along the newly built part of the highway. Hard times for bears and NGO's in Greece! 🐻

## The "Southwestern Balkans Bear Register": a tool in the conservation of brown bears in the southwestern Balkans

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Despite financial dire straits and ongoing political frictions between neighboring countries, 2008 has been an important year for the conservation of brown bears (*Ursus arctos*) in the Balkan Peninsula, as an international effort was launched aiming in improving knowledge over the status and promoting effective protection of the species in the area.

During spring 2008 a joint project was launched involving members of leading nature conservation NGOs from Albania (Transborder Wildlife Association), the Former Yugoslav Republic of Macedonia - FYROM (Molika) and Greece (ARCTUROS) and the Norwegian University of Life Sciences.

The project aimed at collecting baseline information on the status of brown bears in Albania and FYROM, especially in areas neighboring Greece, while strengthening cooperation between NGOs involved in brown bear conservation in the three countries and preparing a transborder management plan for the species.

In order to collect basic information on the distribution and status of brown bears field surveys were carried out. These established the permanent presence of the species throughout southeastern Albania and southwestern FYROM. In addition, 100 questionnaires were conducted in the species main distribution in southern Albania that not only verified the results of the field surveys, but also indicated significant human – bear conflicts. Killing bears still

appears to be a widely preferred and used solution to preventing livestock depredation and crop damages.

Concerned over the status of captive bears in Albania, members of TWA and ARCTUROS, travelled throughout the country in order to record the number and the conditions under which brown bears were held

in captivity, either as dancing or "photo" bears or as pet animals in restaurants. Unfortunately, the results of these actions are most disheartening; twenty one bears, including cubs of the year that have just been removed from the wild, are held in captivity, often under unacceptable conditions.

Finally, in both countries a network



Female brown bear cub held as an "attraction" at a restaurant at Voskopoje / Albania.

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of genetic sampling stations was established. Following the experience and guidelines defined within the "Hellenic Bear Register" (see also May 2008 issue of *International Bear News*) approximately 300 power poles were inspected and evaluated. From these, 40 (seven in Albania and 33 in FYROM) were chosen as sampling sites, fitted with barbed wire and inspected monthly. These poles complement the more than 300, already existing, sampling stations of the "Hellenic Bear Register". This new, and hopefully useful, tool in the conservation of the species in the area has been named the "Southwestern Balkans Bear Register" and covers the biggest part of the species main distribution in the area (Figure 1). Preliminary results of the genetic research, carried out in cooperation



Figure 1: Locations of the approximately 350 noninvasive genetic sampling stations of the “Southwestern Balkans Bear Register” project in Albania, the Former Yugoslav Republic of Macedonia (FYROM) and Greece. A buffer of 10 km has been drawn around each sampling station indicating the minimum range of the species distribution covered by the sampling network.

with the labs of Dr Paetkau at Wildlife Genetics / Canada and Dr. Paule at the University of Zvolen / Slovakia, have identified two individuals in Albania (one female, one male), four individuals in FYROM (three females, one male) and 62 individuals on the Greek side of the border (14 females, 48 males).

Future plans of the project include the continuation of field surveys in both Albania and FYROM and an expansion of genetic sampling activities to the republic of Serbia. This project has received generous financial support from Alertis fund for bear and nature conservation, WSPA, the IBA and financial and logistic support from the Greek NGO ARCTUROS. We would like to express our utmost gratitude towards John Beecham and Harry Reynolds for their help in setting up the project and the teams of TWA, Molika, and ARCTUROS for their great work in the field. 🐾

## Key Results of 2008 Genetic Monitoring of Bears in Trentino, Italy

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Using genetic techniques 27 brown bears were detected in the province of Trento and neighboring regions in 2008. Three of them died during that time. The genetic monitoring of the local brown bear population is performed by the Forest and Wildlife Service of the Autonomous Province of Trento, with technical support from the former National Wildlife Institute (now I.S.P.R.A.) and support from the Adamello-Brenta Natural Park. In 2008, hair and scat samples were collected both randomly and systematically: 57 hair traps were used in a 4x4 km cell grid covering most of western Trentino, where the bear population's core area is found. For the first time, 5 further hair traps were installed outside of the Trento province, in the bordering province of Bolzano. Since 2006, systematic monitoring is carried out every second year, with the aim of reducing time and costs. Marta de Barba (I.S.P.R.A.) analyzed the 412 samples collected during 2008 (329 randomly and 83 systematically).

27 different genotypes were identified. It is of course possible that some bears have gone undetected. The three bears that died over the year are JJ3, a 2.5 years old male, KJ2G1, a 2.5 year old female and F1, a female cub:

the minimum number of live bears at the end of 2008 is assumed to be 24. 12 of them are females and 12 males (sex ratio 1:1, n=24). In 2008 three litters were detected totalling eight cubs. Since 2002 16 different litters totalling 35 cubs have been recorded. Of the 24 bears considered to be present at the end of 2008, 11 are adults (9 females and 2 males), 6 are sub-adults (all males) and 7 are cubs (4 males and 3 females). Sub-adult males range in age from 1 to 5 years and females from 1 to 3 years. In 2008 the average age of detected bears increased from 4.0 to 4.42 years.

Also the three sons born in 2006 from the captive bear Jurka, before her removal, have been all detected in 2008. JJ5, male, was genetically identified outside Trentino, in the provinces of Bergamo and Brescia; JJ4, female, was sampled in Val Giudicarie and Val di Non; the male JJ3 roamed in Switzerland, where he was continu-



ously monitored through a radio-collar, until local authorities decided to remove him due to his problematic behavior, on 14 April 2008.

During 2008 at least 5 bears, all of them 3-4 years old males, roamed outside of the province of Trento: JJ3, JJ5 and MJ4 in Switzerland and in the province of Bolzano, DG2 in