

# STATUS AND ECOLOGY OF BROWN BEAR

## *Ursus arctos* IN IRAN

**Bagher Nezami<sup>1</sup> and Mohammad S. Farhadinia**

Corresponding author: E-mail address: Baghernezami@wildlife.ir

<sup>1</sup>Iranian Cheetah Society (ICS)

**Keywords:** Brown Bear, *Ursus arctos*, Iran, Ecological study, Database.

Recognized as *Ursus arctos syriacus* (Hemprich & Ehrenberg 1828), the Iranian brown bear exists in the north and western parts of Iran, mainly associated with Zagros Mountains, from Azerbaijan to near Shiraz in Fars and the Alborz Mountains, from Astara to eastern Golestan.

Northern forests support a larger population than the western areas of the country, ranging from western North Khorasan and Golestan through Mazandaran to western Gilan. It is thought that they have the highest abundance in Mazandaran and Golestan, particularly North Alborz Protected Area and Golestan National Park.

The present study was carried out between 2004 and 2010 in conjunction with the development of a database to store the information that we already have about the brown bear in the Iranian literature.

Although the species is supposed to exist in 21 provinces we only confirmed brown bear presence within 16 provinces of the country. The presence of bears in 5 further provinces needs to be confirmed (Fig. 1). Based on field surveys and expert interviews, a total of at least 108 areas were identified as brown bear habitat which 44 (41%) are under conservation categories of the Iranian Department of Environment.

Poaching and habitat loss are recognized as the two major threats to the survival of the brown bear in Iran. Bears are mainly poached due to conflict with local people, but they are occasionally killed to collect bear fat. Trophy hunting is also an irregular cause of bear poaching in some areas, particularly in the northern population (Fig. 1).

The Golestanak Bear Project, the first ecological study to increase knowledge about the largest carnivore in Iran, was initiated in 2005. Monitoring demographic properties of brown bear populations has been accomplished by counting annual number of females with cubs of-the-year (COYs) in the population and is central to evaluating conservation measures.

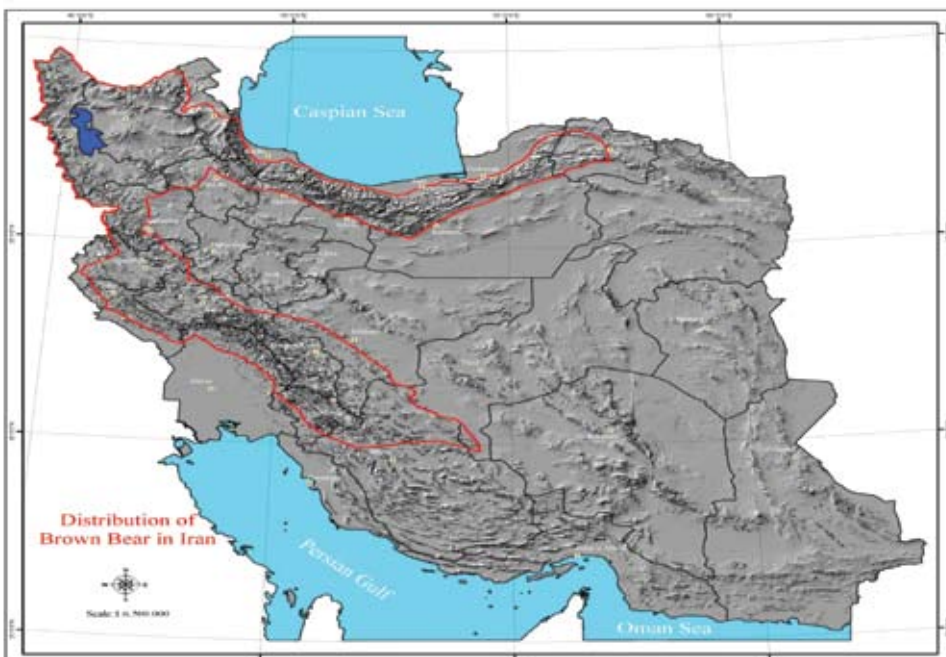


Fig. 1: Distribution of the brown bear in Iran.

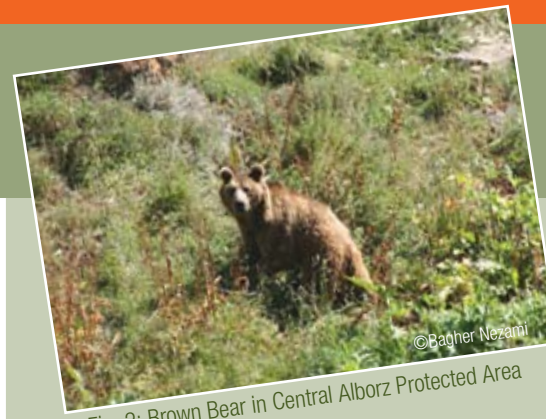


Fig. 2: Brown Bear in Central Alborz Protected Area

During the investigation, a total of 115 brown bears were sighted 45 times. Ten individual sightings occurred in spring, and the remaining 91% took place in summer. Despite continuous field surveys, we did not see animals during both autumn and winter, with only sporadic fresh tracks noted in early December. Encounters with brown bears peaked between June and August when they are highly active in upper elevations. The mean litter size of brown bears in Golestanak Reserve was calculated as 2 for COYs which is lower compared to European populations.



Fig. 3: Brown Bear in Central Alborz Protected Area  
The Iranian Cheetah Society (ICS) is producing a documentary movie about the brown bears in Iran. Moreover, in order to study movement patterns and activities of the animals, we plan to capture bears and install radio-collars which will be the first radio-telemetry project conducted on brown bears in Iran.

### Acknowledgments

We thank the Iranian Department of the Environment (DOE) and Mazandaran Provincial Office of DOE, who provided financial and logistical support for field surveys. The Dutch Zoo Conservation Fund (DZCF) partially funded the project during 2007-2009. Finally, we express our thanks to the game guards for their kind cooperation in field surveys.