

Current status of brown bears in the Manasalu Conservation Area, Nepal

Achyut Aryal^{1,4}, S. Sathyakumar², and Charles C. Schwartz³

¹*Ecology and Conservation Group, Institute of Natural Sciences, Massey University, New Zealand and The Biodiversity Research and Training Forum, Nepal*

²*Wildlife Institute of India, PO Box 18, Chandrabani, Dehradun 248001, Uttarakhand, India*

³*US Geological Survey, Northern Rocky Mountain Science Center, Interagency Grizzly Bear Study Team, 2327 University Way, Box 2, Bozeman, MT 59715, USA*

Abstract: Although brown bears (*Ursus arctos*) are rare in the Himalayan region, populations have been documented in alpine habitats of Pakistan and India. Brown bears were once known to exist in both Nepal and Bhutan, but current information on their numbers and distributions was lacking. We document the presence of brown bears in the Manasalu Conservation Area (MCA) in Nepal using field surveys and interviews with local people. We were able to confirm the existence of a remnant population based on finding bear scat and locations where bears excavated for Himalayan marmots (*Marmota himalayana*). Based on interviews with local people, it appeared that the presence of brown bears in the area is relatively recent and likely a result of immigration of bears from the Tibetan Autonomous Region. Interviews with local herders also indicated that livestock losses from brown bear predation amounted to approximately 318,000 Nepali rupees (US \$4,240) from February 2006 through July 2008.

Key words: brown bear, distribution, livestock depredation, Nepal, *Ursus arctos*

Ursus 21(1):109–114 (2010)

The brown bear (*Ursus arctos*) is the most widely distributed ursid in the world (Servheen et al. 1999, Schwartz et al. 2003). Historically, the species ranged across a large portion of North America, including northern Mexico, throughout Europe, Asia, the Middle East, and even across North Africa. Status

of the brown bear varies throughout the world from endangered to common; they are listed as vulnerable under criteria C2a(i) version 3.1 (<http://www.iucnredlist.org/apps/redlist/details/41688/0>) in the IUCN (International Union for the Conservation of Nature) Red List. They are also listed in Appendix II of the Convention on International Trade in Endangered Species (CITES). The species is endangered in many regions in Asia, where small, isolated populations exist mostly in remote mountainous areas (Servheen 1990, Servheen et al. 1999).

Remnant populations of brown bears are scattered across many portions of Asia; however, very little is known about numbers or connectivity. In Pakistan, there are an estimated 150–200 bears in 7 populations in the Himalaya, Karakoram, and Hindu Kush Ranges, but only one has >20 individuals (Nawaz 2007). In India, brown bears exist in 23 protected areas and 35 localities in the northern states of Jammu, Kashmir, Himachal Pradesh, and Uttarakhand, but they are regarded as common in only 2 protected areas. Nationally, there are an estimated 500–750 individuals (Sathyakumar 2001, 2006). In China, brown bears exist in poorly defined populations in the west and north-east, with estimates of 6,000 and 1,000 in each of these regions, respectively (Gong and Harris 2006).

The Himalayan brown bear (*U. a. isabellinus*), a subspecies that represents an ancient lineage of the brown bear (Gong and Harris 2006, Galbreath et al. 2007), was distributed over the Greater Himalaya region. Conservation efforts have been hindered by the lack of information about its current status (Servheen et al. 1999). This subspecies is thought to occur at very low densities in the alpine regions of the Greater and Trans Himalayan regions of India (Sathyakumar 2006). Nothing is known about the distribution and abundance of brown bears in Nepal, and the species has not been recorded in Bhutan to the east since the 1950s (S. Sathyakumar, unpublished data). The bear populations in Nepal and Tibetan Autonomous Region of the People's Republic of China (TAR) belong to a separate subspecies (*U. a. pruinosus*) not connected to the bear population in India (*U. a. isabellinus*) because of a gap in the distribution between western Nepal and India (Galbreath et al. 2007).

⁴savefauna@yahoo.com