

## **Livestock Depredation by Large Predators: Patterns, Perceptions and Implications for Conservation and Livelihoods in Karakoram Mountain Ranges**

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**Abstract :** Livestock depredation has greater significance in pastoral societies like Himalaya-Karakoram-Hindu Kush mountain ranges. The dynamics of depredation by large predators (snow leopard and wolf) and its implications for conservation and livelihoods of local people was investigated by household surveys in Hushey valley of Central Karakoram National Park, Pakistan. We found that, during five years (2008-12) 90% of the households in the valley had lost their livestock to snow leopard and wolf, accounting for 4.3% of the total livestock holding per year. On average each household had to bear a loss of 0.8 livestock head per year, equivalent to Pak Rupees 9,853 (US\$ 101), or 10% of the average annual cash income. Majority of the predation incidences occurred during late summer in alpine pastures, mostly at night when animals were not penned properly. The prey animals in most of the cases were females or young ones. Of the total predation incidences, 60% were attributed to snow leopard, 37% to wolf, while in 3% the predator was unknown. The fear of snow leopard is greater than that of wolf. As immediate response on predation, majority of the local people (64%, n=99) preferred to report the case to their village conservation committee, 32% had no response while only 1% tended to kill the predator. The perceived causes of predation were: poor guarding practices (77%); reduction in wild prey (13%) and livestock being the favourite food of predators (10%). The most preferred strategies for predator management, according to the respondents were improved and enhanced guarding of livestock (72%), followed by increasing wild prey (18%) and lethal control (10%). To strike a balance between predator populations and pastoral livelihoods, better animal husbandry practices should be promoted including: improved guarding through collective hiring of skilled shepherds; corral improvement and use of guard dogs.

**Keywords :** Panthera unica, Canis lupus, Karakoram, human-carnivore conflict, predation

**Conference Title :** ICWERC 2016 : International Conference on Wildlife Ecology, Rehabilitation and Conservation

**Conference Location :** Los Angeles, United States

**Conference Dates :** April 05-06, 2016