## The Secret Lives Of Himalayan Wolves: Diet, Predation & Movement in High Elevation Himalaya

Salvador Lyngdoh<sup>\*1,2,3</sup>

<sup>1</sup>Salvador Lyngdoh (Scientist) – Dept of Animal Ecology Conservation Biology, Wildlife Institute of India, India

<sup>2</sup>Y V Jhala (Scientist) – Dept of Animal Ecology Conservation Biology, Wildlife Institute of India, India

<sup>3</sup>S Shrotriya (Researcher) – Dept of Animal Ecology Conservation Biology, Wildlife Institute of India, India

## Abstract

The Himalayan wolf was only recently distinguished as one of the most basal lineages within *Canis lupus*. However, little is known about its ecology and behaviour. We investigated the diet of wolves in the western Himalayan region of Spiti above 4000 a.m.s.l and compared the diet and prey preferences of the wolves through available literature (n =20). We also, investigate the ranging and movement pattern of wolves in the region (n=3). We also conducted a social survey based on open and close ended questions (n = 200) to assess depredation and perceptions of local communities towards wolves as well as other large carnivores in the area.

Wolves primarily relied on large domestic prey. GLM showed that prey choice of wolves was significantly related to length and home range. Cattle (Jacob's Index = 0.8) was the most utilized prey (n=41), while poultry was the least preferred. NMDS analysis (k=5, Stress = 0.025) showed regional prey preferences in wolves showed wolves utilised domestic, small ranging, medium to large prey in Quinghai Tibet region while in the Central Asia and Himalayan region preferred wild prey as well. Himalayan wolves were perceived to be a large threat to local agro-pastoral livelihood though respondents reported fewer encounters with the species.

GPS satellite telemetry showed, Himalayan wolf movement was restricted to elevations of of 3000-5000 m. Movement of Himalayan wolves showed greater distances traversed during winter periods than warmer summer movements. Individuals ranged well beyond national boundaries traversing linearly along the valleys and but probably rendezvoused close to human dominated patches in the valley. In Spiti, the survival of the species has depended largely on socio-religious settings of the region but future efforts must strive for a coordinated trans boundary strategy to sustain wolf populations and their prey.

<sup>\*</sup>Speaker