

## Project Update: June2015

According to my objectives I studied the feeding ecology of langurs living between 1500 and 2000 m. Throughout the project I will be studying the langur feeding ecology at high altitudes of their distributed in the Garhwal Himalayas and will also survey the villagers to understand the level of conflict between them and the langurs in the Garhwal Himalayas.

### Major findings:

Primate diets are known to change according to seasonal variations in the forest and according to changes in resource availability. The colobines are folivorous primates who have the capability of foregut fermentation using microbes in their sacculated stomachs. The stomachs of these colobines are specially designed to digest leaves and plant material laden with secondary metabolites, high fibre content and lignin. I studied the food selection, preference, and diet composition of central Himalayan langur during the winter season. central Himalayan langurs spent 40% of their time in feeding during winter months.

Flush leaves (31%), young leaves (19%), mature leaves (34%), unripe fruits (5%), ripe fruits (2%), flowers (5%) and root (3%) constituted the other major food items. Members of Forest Troop were observed feeding on plant foods from a minimum of 19 families, 26 genera, and 35 species and the members of Village Troop were observed feeding on plant foods from a minimum of 20 families, 29 genera, and 36 species. Plants in the Rosaceae family were widely consumed. Central Himalayan langurs often ate flush leaves of *Carpinus viminea* in the forest habitat and young leaves of *Prunus cerasoides* in the anthropogenic farm land. The overall findings of the present study indicate that the central Himalayan langur does not select their diet or food based on the abundance of the food or plant species, but rather on preferences related to other factors.



Figure 1: Central Himalayan langur, Adult male



**Figure 2: Huddling behaviour to cope with the harsh cold of winter**



**Figure 3: Troop of central Himalayan langur feeding on strawberries at 2500 m**



**Figure 4: Central Himalayan langur Adult Female with infant**