Project Update: December 2011

Diet analysis of red panda in Rara National Park Nepal

Faecal pellet groups were collected from the sampling plots and also approximately 10 m apart from the quadrat of the sampling plots and also from 10 m close to the water sources of the transects. The faecal pellet groups were mixed and 25% was placed kept in bag and make dry. Both old and fresh faecal pellet groups were collected and kept in separate bags. In case of defecation over the old pellets both old and fresh pellets were collected separately. Number of faecal pellets on the ground, on the fallen logs, on the branch of trees etc and the distances from water sources were recorded.

Altogether 137 samples were collected 65 fresh and remaining were old and these samples were analysed at the Central department of Zoology, TU . Collected fecal pellets analyzed with the help of micro histological techniques based on microscopic recognition of indigestible plant fragments mainly epidermal features that are the distinguishing characters of different plant groups. Slides preparation includes; reference plants, preparation of reference slides with diagnostic key, fecal slides and slide interpretation where fecal samples will be prepared following the method used by Anthony and Smith (1974). Slides from fecal samples interpreted thoroughly as recommended by Holechek et al. (1982). The distinguishable histological features such as cell wall structure, shape and size of cells, hairs and trichomes, shape and size of stomata for each species will be drawn as key features to match with the fecal plant fragments.

A compound microscope at 200x magnification with an ocular measuring scale will be used to read the fecal.

Some contents need extensive work.