

## Project Update: May 2012

### (Nutritional Ecology of Carnivore- Prey Interaction in Nepal)

Permission has been taken from the Department of National Park and Wildlife Conservation Government of Nepal in January 2012. A field visit was conducted from the last week of January 2012 to first week of April 2012.

#### Standard Microhistological analysis:(Carnivore diet)

Altogether 75 scats of Tiger have been opportunistically collected from Chitwan and Parsa area (40 from Chitwan and 30 from Parsa), including 35 scat samples of Leopard from Parsa Area. The samples were air dried and were put in Ziploc bags with silica gel and brought to the wildlife lab at the institute of forestry, Pokhara campus for analysis. Slides of all samples have been prepared. Standard microhistological analyses to identify prey species based on the specific cuticular and medullary structure of the hairs are being performed. The preliminary results showed that Sambar deer, Chital deer, Wild boar, Barking deer, and some domestic livestock are the primary prey base for the tiger and leopard.



Scats in the lab



Chital (spotted) deer



Barking deer

#### Standard Microhistological Analysis:(Herbivore diet)

Based on the above findings, direct feeding observations were done to few of these herbivores. This was validated by collecting the Pellets of these herbivores from different habitats. The samples were dried and treated with chemicals to make the slides for micro histological analysis to identify the primary food plants. This will be accomplished through the identification and comparing the different plant epidermal derivatives with the reference slides of the plants collected from the grazing and browsing areas. The slides are still being prepared in the lab.



Pellets on the ground



Wild pig



Feeding observation by the PI from the tower

The food plants of these herbivores observed from direct observations have already been given to the nutritional lab for some macro and micro nutritional analysis.