

Project Update: January 2011

The heavy rains of the latter part of July 2010 and the unprecedented rain of September 2010 played havoc with road communication. Although the roads were intermittently open through August and the first half of September, after the downpour of September 18, 2010, road communication with the interior of Kumaon was wrecked for a month, with large sections of road washed away by rivers in spate, landslides and fallen trees. Many people died.

Data collection was therefore rather limited during this period. Work on data collected during the previous part of the project occupied much time during the rainy and cold weather.

In response to a request from Sanjay Sondhi, another Rufford Small Grant holder, I accompanied him to Arunachal Pradesh in the Eastern Himalaya to help him with moths and some difficult groups of butterflies from September 25 to October 20. We visited several Protected Areas, including Pakke, Sessa and Eaglenest. In the latter we enjoyed the hospitality of Dr. R. Athreya.

While there, we also had the opportunity to enjoy the hospitality of Mr. N.K. Vasu, Director and Dr. Arun Pratap Singh of the Rain Forest Research Institute, Jorhat, Assam, and give a brief talk, besides paying a visit to the Gibbon Wildlife Sanctuary.

In addition, I was invited to present a paper on "Himalayan Lepidoptera and climate change" at an international workshop on the subject held at the Govind Ballabh Pant Institute for Himalayan Environment and Development at Kosi, Almora in the second week of December 2010.

With the aid of literature and international museum collections, it was possible to distinguish several more undescribed moths in my collection. However, describing them will take some time, since they belong to several different families.

Of especial interest is the discovery of the larva and larval food plant of a little known moth called *Rhyptoses drepanioides* (Noctuidae), which was hitherto known from only two specimens. Now it is known from three specimens!

Among the interesting events of the year was the long-awaited discovery of the West Himalayan moth whose larva, infected by a particular type of fungus, becomes what is known as a "caterpillar mushroom", in great demand for the steroid it contains called cordycepin. 51 species were described in the genus from China and Nepal, 2 more were described in 2010 from Bhutan and now a further new species has to be described from this part of the Himalaya. I have decided to name it *Thitarodes korangai*, after its discoverer, Prithviraj Koranga. Working alone, he succeeded where several larger expeditions to discover the moth had failed over the years.

Several papers were published in 2010 and early 2011 and several which were supposed to be published was deferred. The published ones are:

- 1) 2010. Sub specific status of the Southern Indian population of *Nyctemera coleta* (Stoll) (Lepidoptera: Arctiidae). *Journal of Threatened Taxa* 2(4): 835- 836.
- 2) 2010. A new species of *Ceryx* Wallengren (Lepidoptera: Arctiidae) from the Kumaon Himalaya. *Journal of Threatened Taxa* 2 (5): 894 – 895.
- 3) 2010. The hitherto undescribed male of *Calocalpe abraxidia* Hampson (Lepidoptera: Geometridae: Larentiinae). *Journal of Threatened Taxa*. 2(8):1103-1104.
- 4) 2010. (with M. Bhakare) Two instances of inter-generic mating by Lycaenidae (Lepidoptera) in Maharashtra, India. *Journal of Research on the Lepidoptera* 43: 23-25.
- 5) 2010. Climate Change and Himalayan Lepidoptera. International Workshop on Mountain Biodiversity and Impacts of Climate Change with special reference to Himalayan Biodiversity Hotspot. G.B. Pant Institute of Himalayan Environment and Development, Kosi-Katarma, Almora. Abstract Book: 130 – 134.
- 6) 2010. *Ypthima kedarnathensis* A.P. Singh (Lepidoptera: Nymphalidae: Satyrinae) from the Kumaon Himalaya. *Journal of Threatened Taxa*. 2(13) 1390-1391.
- 7) 2011. Four new Lycaenid records from the Kumaon Himalaya. *Journal of Threatened Taxa* 3(2): 1555 – 1558.
- 8) 2011. (Ankita Gupta and Peter Smetacek) A new larval host record for *Sphingomorpha chlorea* (Cramer) (Insecta: Lepidoptera: Noctuidae) from Karnataka, India. *Journal of Threatened Taxa* 3(2): 1553 – 1554.