Project Update: October 2019

The project 'People, Elephants and Leopards: Synthesis of social and ecological knowledge in mitigating conservation conflicts in an Indian biodiversity hotspot' is a transdisciplinary approach to minimise human casualties due to accidental encounters with elephants and leopards. On the one hand, the project aims to empower local communities to avoid accidental encounters with leopards and elephants by sharing best practices and educating local people regarding animal behaviour. On the other hand, the project also aims to estimate leopard densities in a tea plantation landscape and map elephant movement patterns in the same region. The former is being done using trail cameras in a mark-recapture framework while the latter is being done using GPS telemetry of collared elephants.

To date there have been 39 awareness programmes across 34 villages/tea estates where more than 1500 people have participated. The participants discussed various safety measures to be followed while conducting their daily activities to avoid accidental encounters with leopards and elephants. The women workers are especially prone to encounters with leopards while plucking tea since mostly women are engaged in this particular job. Hence, all workshops ensured participation from women to discuss the safety measures to avoid leopard encounters. The details of the workshop materials and discussions can be found at our new website which is being supported by the Rufford Foundation (www.coexistenceproject.org).



Between February and April 2019, we carried out a camera trapping exercise using old trail cameras as a pilot to test if the method can be effective in a tea plantation landscape which is densely populated by people. Many of the camera traps malfunctioned and even though we got leopard images, the quality was not good enough for a rigorous estimation. However, we did not lose any of the cameras to theft or damage. Moreover, we got support from the plantation management wherever we installed the cameras and even from the local communities. Hence, we have now procured new white flash camera traps with support from the Rufford Foundation and we will start population estimation from November 2019 which will carry on until the end of January 2020. The sampling grid and trap locations have already been finalised based on field surveys.

The elephant movement monitoring is being done using GPS telemetry along with compiling records of elephant visitations in the villages. So far, we were tracking two adult females and their herds using GPS telemetry but the collars have stopped working since October 2019, we plan to install collars on two more females in the region. The collaring is being jointly carried out by the West Bengal Forest Department and Indian Institute of Science. The Rufford Foundation is supporting on-field tracking of the animals and mapping the movement routes and analysis of the data.

The recent project updates are now available at <u>www.coexistenceproject.org</u> and the website is supported by the Rufford Foundation.



