Project Update: January 2023

We have only received submissions for the photo category after an open call for artwork and photographs in the Banke Bardia Complex appeared in two newspapers. Santosh Tharu, Manju Mahatara, and Anu Ram Chaudhari have each earned a position out of the photos that were submitted.

Photo 1: Tiger roaming in proximity to human settlement. © Santosh Tharu.

Photo 2: Jungle safari with tiger. © Anu Ram Chaudhari.

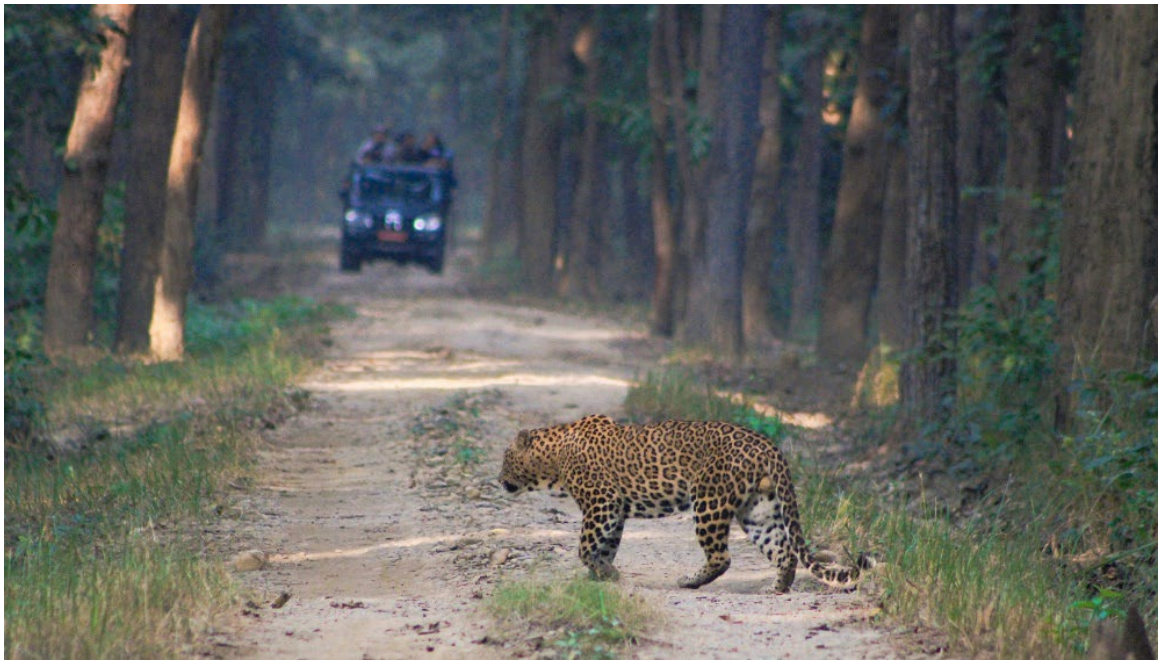

Photo 3: My favourite is Leopard.© Manju Mahatara.

Camera Trap

Based on the existing protocol (DNPWC and DFSC 2018), a camera trap survey was conducted. This was very important as it ensures that results of surveys can be compared. For example, based to national survey conducted by DNPWC and DFSC (2018), the study area was divided into a 2*2 km^2 grids, cameras were placed on trees located 2–3 m from the middle of the trail, and motion beams set to trigger at a height of 40–45 cm around the trail where felids are likely to pass (Photo 4).

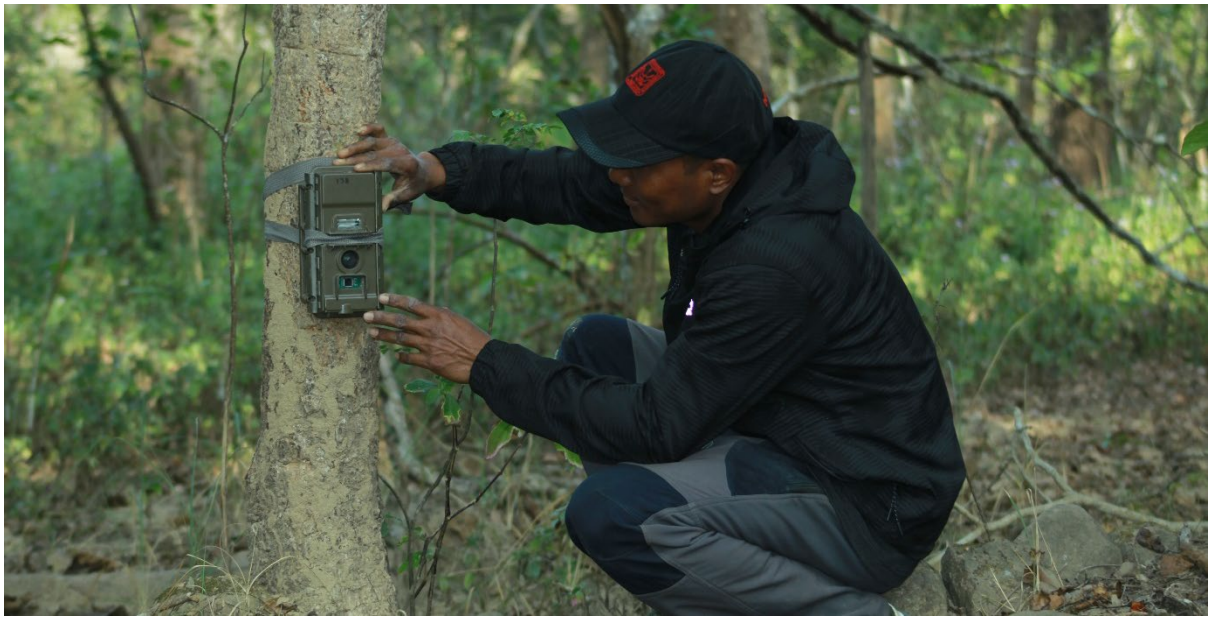

Photo 4: Camera setting to obtain occurrence point of tiger and leoaprd

The purpose of camera trap was to generate the habitat suitability model for tigers and leopards in the Banke-Bardia Complex. For this purpose, the project was support by NTNC and the collaboration of Banke and Bardia National Park.

Finally, from the camera trap data, occurrence records were assessed. For, leopard we have confirmed 128 occurrence records and 284 for tiger. And we are on the way to develop habitat suitable models for these species using MaxEnt an algorithm often used to model habitat suitability for conservation purposes. The SDM, Maxent will be used to predict the distribution of suitable habitat for tiger and leopard. Covariates will include climate, topography, and land use and proximity to human pressures (Cater et al. (2013). MaxEnt will be implemented in the R environment and follow best practices. Maps of habitat suitability will be produced.