

FROM BANDIPUR TO SHIKARIPUR: CAMERA TRAPPING REVEALS SECRETS OF TIGER DISPERSAL

On 1-5-2011, Forest officials of the Shimoga Wildlife Division, had safely captured a male tiger that strayed into Gama village near Shikaripur. A decision was made by the Forest Department, based on consultation with WCS senior scientist and NTCA member Dr. Ullas Karanth, to release the tiger in Bhadra Tiger Reserve, rather than hold it in perpetual captivity. This decision was based on the fact that the tiger was estimated to be of dispersal age (about 3 years), healthy and injury free, and had no history of man-eating. A critical consideration was that unlike in most other such cases, a suitable release site was available. Bhadra Tiger Reserve at this point in time has rebounding prey numbers but lower than potential tiger numbers it can support, based on data collected by Centre for Wildlife Studies (CWS) for over a decade. Hipla Hadlu location, in the middle of Bhadra, that is remote from human disturbances and supports high prey densities, was chosen as the best possible release site.

The tiger was released at Hipla Hadlu on the evening of 7-5-2011 by Union Minister Jairam Ramesh who was accompanied by Principal Secretary Forests Kaushik Mukherjee, Chief Wildlife Warden B K Singh and Director of Project Tiger Dr. Rajesh Gopal. The release operation conducted by Forest Department officials, in collaboration with scientists of CWS/WCS and local NGO partners from Wild Cat-C. It was witnessed by senior officials and widely reported in the media: <http://www.ndtv.com/video/player/news/tiger-held-captive-for-one-week-released/198974>

Subsequently, WCS scientists tried to identify this tiger by photo-matching with the data base of camera trapped tigers available at CWS, as a result of research projects carried out for over two decades. Based on matching of stripe patterns, this animal was reliably identified as male tiger BPT-241, which was last camera trapped in Gundre area of Bandipur Tiger Reserve on February 11th and February 18th of 2010. A GIS map showed that the "straight line" distance moved by this tiger since its photo-capture from Bandipur to Shikaripur is about 280 kilometers, although the actual route taken by the tiger over past few weeks or months is likely to have been more circuitous.

This event is one of the longest scientifically recorded dispersals of wild tigers in the world based purely on camera-trapping data. CWS scientists are now intensively camera trapping Bhadra area in the hope that the animal will settle down there. Radio-tracking studies in Nepal, Russia and Madhya Pradesh have showed that young male tigers disperse out of their natal areas at about 18-24 months, searching for vacant territories to settle in. CWS scientists had earlier recorded a dispersal event. A young male tiger BDT-130 camera trapped in Bhadra in 2006, was photo-captured in Dandeli in 2008 and again in 2009. The straight line dispersal in that case was 197 km.

Such dispersing tigers move long distances, looking for suitable territories, and are highly vulnerable to mortalities from conflict with humans or with other resident tigers.

This incident has clearly shown the value of intensive annual camera trapping, which was pioneered in Karnataka by CWS/WCS in collaboration with the State Forest Department, which is reportedly going to be adopted at the national level under proposed Phase IV national tiger estimation by NTCA.

APPENDIX

Photo 1: Tiger BPT-241 photographed at point 1.8 km on Gundre-Kamala Circle Road on 11-2-2010



(Photo credit: Ullas Karanth/WCS)

Photo 2: Tiger BPT-241 photographed at point 1.8 km on Gundre-Kamala Circle Road on 18-2-2010



(Photo credit: Ullas Karanth/WCS)

Photo 3: Tiger in transportation cage showing same side Photo



(Photo credit: Krithi Karanth/CWS)

Photo 4: Tiger being released in Hipla Hadlu in Bhadra



(Photo credit: Kaushik Mukherjee)

Map showing locations of initial photo-captures of Tiger BPT-241 in Gundre (Bandipur Tiger Reserve), subsequent physical capture at Gama village, near Shikaripur and release location in Hipla (Bhadra Tiger Reserve)

