

Summary of All India Estimation of Tigers, other predators and their prey

05/03/06

From the 20th February to the 6th March I visited India to act as an international observer for the Project Tiger Census of tigers and related wildlife. During this time, I went to the states of Rajasthan and Uttaranchal and visited Ranthambhore N P, Rajaji N P, Corbett N P and the Ramnagar Forests Reserve. I also met with Dr Gopal, at Project Tiger (Delhi) and with Dr Jhala and colleagues at the Wildlife Institute of India, Dehradun.

Overall my impression is that the data for this census are being collected honestly and generally to a good standard. I also felt that as an observer I was allowed open access to watch data being collected, to view data sheets and to assess the management of the census. The methodology used was shown to me by members of WII and Project Tiger and I was given time to discuss the strengths and weaknesses of the survey design and I felt there was a genuine willingness on the part of these organisations to openly discuss their plans and objectives and where possible to adopt improvements to their methodology.

At a primary level, the Forest Guards and Foresters were very hard working and had a good knowledge of wildlife and flora. The methods used in the survey are new to them however, and they do not have a good understanding of how these data will be used in the census. It is particularly important, therefore, that they have sufficient training so that they can confidently memorise survey procedures. Some of the staff I met will need additional training and there were consistent minor problems with estimates of proportional estimates of plant cover. I also felt that given their low rank, Forest Guards and Foresters had difficulty asking questions when the methods were not clear. This may be particularly important during training, and efforts should be made to have Range Officers rather than higher level staff (e.g. CFs) train beat level staff.

Overall the data sheets were clear but I think they could be simplified further and the use of percentage estimates should be made more consistent. There may be too much detail required in some sections the data sheets and some fields need further clarification. However, the problems with data entry were in most cases minor.

This census is being conducted on a massive scale and steps need to be taken to ensure that data entry is done consistently across Divisions. I recommend that WII staff oversee and assist data entry at the Division level. A sub-sample of original data sheets should be examined against the entered data by WII to make sure that information is being correctly entered. WII should prioritize the information within the forms and allow certain sections to be incomplete if this runs the risk of causing major delays in obtaining the rest of the data.

I have had only limited experience in Territorial Divisions, but these regions appear to be less successful at conducting the surveys because of lower levels of training and support. I recommend that these Divisions repeat the survey on a yearly basis (on the same schedule as the tiger reserves), to update and improve information for wildlife management and to maintain beat staff skills in the survey techniques.

The scientific expertise of members of WII involved in the survey is of a high international standard and Dr Jhala and Dr Qureshi with the help of Dr Gopal at Project Tiger, have carefully considered and developed their survey design and methodology. The methodology in Phase I is suitable for a study which aims to have an extremely wide coverage but which relies on staff with limited technical skills and equipment. The plans for integrating Phases I, II and III should lead to a far greater understanding of tiger (and related wildlife) distributions in India. This census will allow estimates of the following: 1) presence/absence of these species according to geography, climate and habitat, 2) relative abundance within major landscapes, and (given sufficient calibration with Phase III surveys) 3) an approximation of overall tiger abundance. I am concerned, however, the process of linking data from Phase I with Phase III. Considerable thought and further analysis will be needed to identify how habitat characteristics and environmental variables affect the indexes obtained from Phase I. This information will be needed to categorize the different landscapes and calibrate results from Phase I with estimates from Phase III. With this in mind, I think there will need to be more Phase III studies than currently planned to increase the chance of obtaining a statistically robust calibration of the Phase I indexes. I would therefore, recommend continuing the Phase III surveys for another year.

Overall this survey represents a monumental effort which is of national and international importance for the conservation of tigers, their prey and other carnivores. The methodology seems to me to be appropriate given the scope and levels of training of staff. A key challenge in the next few months will be completing the data entry and making sure this is done consistently across divisions. From what I have witnessed, the process seems to be conducted properly and openly and I would expect further improvements in the data collection during the next survey in January-February 2007.

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