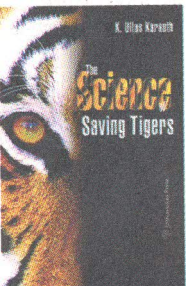


On the tiger trail



THE SCIENCE OF SAVING TIGERS
K Ullas Karanth
 Universities Press
 2011, pp 340
 ₹ 550

Tigers (*Panthera tigris*) are a troubled lot. From an estimated world population of more than a lakh about 100 years ago, their numbers have dwindled down to less than 2,500 today. Three of the 13 sub-species have gone extinct in the last 100 years alone and many are destined to follow, pushing those surviving into the IUCN's endangered 'Red List'. Almost 50 per cent of the surviving tigers, a fraction of the original, live in India and are confined to a few fragmented forest lands making their survival a challenging task. Along with poaching and degradation of habitats and decline in prey base, a major contributory factor for this is attributed to the unscientific forest management in our country.

If we have to ebb this tide of decline, a science-based approach to conservation is a must. The unreliable systems like pug mark counting should be substituted by better science-based methods where reliably observed values are compared with scientifically-obtained-model-based predictions. This has made many internationally famous wildlife researchers to enter the field. Many like George Schaller, who conducted the first ever scientific study of

tigers, followed by biologists such as John Seidensticker, Melvin Sunquist, Dale Miquelle and John Goodrich, have all tried to fill the huge gap that hitherto existed and generated new insights into tiger ecology and behaviour. Governmental institutions like the Wildlife Institute of India (WII) have also rendered yeoman service in this field.

Ullas Karanth, an engineer by profession, is an internationally recognised tiger conservationist and biologist. He is well-known for his research on Indian tigers in Nagarhole, Karnataka. He was one of the first to point out the shortcomings of counting tigers through its pug marks and tracks. This method reduced the tiger census to an unscientific exercise prone to errors, and as it turned out, outright manipulation. Unfortunately, it took a tragedy of the scale of Sariska, to bring this to light and rouse an indifferent nation. An intrepid journalist had to blow the lid off in Sariska Tiger Reserve, when it was revealed that there were no tigers in this much acclaimed tiger reserve, despite contrary census figures.

The Science of Saving Tigers is a welcome and necessary addition to the scientific literature on tigers in the subcontinent. It is a compilation of 20 significant articles that have appeared in various national and international journals on the basis of his two-decade-old research. By trying to analyse the behavioural pattern of tigers and the

prey base dynamics, the author has tried to answer two basic questions — what controls tiger population and what affects the population's persistence. These may be immensely useful for a student of wildlife science though some researchers may question the assumed probabilities in these studies which are based on obtained data in a restricted space in the Nagarhole Sanctuary.

Karanth is a big proponent of photographic sampling of tigers which relies on photographic evidence taken through a network of cameras deployed in select areas. Though a time tested method, this does have its detractors who believe the peculiarity of the habitat, the large numbers of cameras required, high cost of equipment and vulnerability to damage or theft render it a huge challenge. A senior wildlife official once shared with me his concern that a major portion of the funds allotted for tiger conservation being used up in procuring and deploying these imported and expensive equipment. A more sustainable alternative might include less costly methods like SCAT analysis and DNA marking.

In the chapters on ecology-based policy framework for human tiger coexistence and defragmentation of tiger habitats, the author deals directly with the problems faced today and comes down from the realm of research to the realm of political reality. It also gives necessary inputs to the controversial 'human-tiger coexistence' propounded by the Task Force headed by Sunita Narayan.

Nature lovers tend to enjoy reading the experiences of others like themselves who see, smell and sense the jungle. This book, alas, is for the serious tiger conservationist — scientist, official or policy maker. That said, the book is an excellent compilation and a welcome addition to the library of any serious student of tiger conservation.

NAVNITH KRISHNAN

“ THIS BOOK IS A NECESSARY ADDITION TO THE SCIENTIFIC LITERATURE ON TIGERS IN THE SUBCONTINENT