

local communities, however, smaller and biologically rich wetlands need to be brought under the Protected Area Network.

- (ix) While developing livelihood options for local communities the possibilities of making use of aquatic weeds for income generation schemes such as preparation of compost, biogas and other domestic and ornamental use should be explored.
- (x) Formulate and implement ecotourism strategies for identified wetlands through multi-stakeholder partnerships involving public agencies, local communities, and investors. **Contact: hussain@wii.gov.in.**

Two-day training workshop on "Strengthening Wildlife Enforcement: Issues related to Illegal Wildlife Trade and Wildlife Crime Investigation", Dehradun, May 13-14, 2008. The training workshop was organized by TRAFFIC-India in collaboration with Wildlife Institute of India. Eleven trainee officers from the Department of National Parks and Wildlife Conservation and Department of Forests, Govt. of Nepal participated in the workshop. The aim of the workshop was to provide training to officers about Wildlife Forensics and tools and techniques needed for strengthening conservation. Trans-border co-operation in curbing illegal wildlife trade was also discussed. **Contact: goyalsp@wii.gov.in**



The trainee officers were taught about the latest advances in the Wildlife Forensics.

WII in the Field

Ranthambore Tigers find new home in Sariska National Park

- Parag Nigam

Ranthambore National Park (RTR) situated on the junction of Aravalis and the Vindhyas in Rajasthan holds a considerable population of Tigers (*Panthera tigris*). Contrary to Ranthambore, Sariska Tiger Reserve (STR) had been depleted of tigers since 2004, though good potential tiger habitat still existed. In an effort to build population of tigers at STR, Govt. of India entrusted responsibility on Wildlife Institute of India and Rajasthan Forest Department for the re-introduction operation. This was based on report entitled "Assessment of Status of Tigers (*Panthera tigris*)" in Sariska Tiger Reserve, Rajasthan by Wildlife Institute of India in 2005 and subsequent 'Recovery Plan (Revised)' developed by the Field Director, Sariska Tiger Reserve. In this context, a team comprising WII faculty Dr. K. Sankar, Dr. Parag Nigam, Dr. P.K. Malik, Shri Qamar Qureshi, and researchers Shri Randeep Singh, Shri Kuldeep Bharwal, Shri Peter Prem Chakravarthi and Shri Vinod Thakur under the leadership of Shri P.R. Sinha, Director proceeded to Ranthambore to carry out the translocation operation.

The course of action for carrying out the operation was to capture the tiger through chemical sedation, put satellite

collar and shift the animal to Sariska by air. Alternatively, other possibility of travel by road was also worked out.

As the operation was first of its kind ever attempted by any tiger range country, due concern was given to every procedures involved starting from selection of individuals to immobilization drugs and equipment, collars, transport cages and its design, loading and off-loading techniques and the ultimate release of animal into the wild.

Prior to the main operation, three tigers (two females and one male) were chemically immobilized and radio-collared. This gave opportunity in animal handling and provided necessary experience and confidence in managing animal and predicting animal responses, necessary for management of animal in an immobilized state.

28th June 2008

Before the operation, two sub-adult male and female aged between 3-4 years were identified in RTR for final translocation. Fortunately, on 28th June early morning, the identified male was located on a kill in a forest patch near Anaptura Chowki (Bagda in Kundera range) and provided good opportunity for darting from the distance of about 10 m from the vehicle.

The Hellabrun mixture (HBM) comprising Xylazine hydrochloride and Ketamine hydrochloride was remotely injected employing Tel-inject Mod 4V.310 equipment. As the animal had



Tiger container being loaded inside the helicopter.



Cage being offloaded at Sariska and shifted to the enclosure site.



Male tiger soon after release inside the enclosure. Animal was calm, fully recovered and alert.

just made the kill, it was empty stomached and came down on sternal recumbency by 14 minutes. After ensuring that the animal was in the perfect plane of anaesthesia, suitable for handling, it was approached. The physiological parameters including temperature, pulse and respiration were checked. After ensuring normalcy, the ARGOSE satellite radio-collar was fixed. The animal was then shifted on to a stretcher and carried on the Gypsy towards Canter (with transport cage) placed on the main link road. The tiger was then shifted into the transport cage and the vehicle moved to the helipad. The helipad had been created inside the park and was about 3.5 kms from the site. Due to heavy rains, the vehicle got stuck on the kucha forest road and even after much effort, it could not be taken

out, the cage was offloaded and shifted to a tractor trolley and taken to the helipad. Due to inclement weather the Indian Air Force helicopter (MI-17) that was stationed outside the Park at Sherpur helipad could not take off and the animal had to be further maintained under sedation at the field helipad. It was after about 4 h following darting that the helicopter finally landed. The cage was secured inside the helicopter and the journey to Sariska commenced. The flight time was around 45 minutes and the helicopter touched Sariska by noon. The cage was off-loaded from the helicopter and shifted to the small truck (Cantar) to be taken to the enclosure site at Nayapani.

The cage was again off-loaded adjacent to the enclosure gate and after ensuring

that the animal had regained reflexes, the door of the cage was opened. The tiger leaped out of the cage and walked into the thicket. The entire episode took around 6 hrs. The animal had recovered fully from sedation and made a kill on the same day in the evening. Tiger movements inside the enclosure were monitored intensively. As the animal was quite active, it was finally released from the enclosure on 6th July 2008 into the wild.

4th July 2008

On the similar plans, the identified tigress popularly known as Lakardah female was located on the Hi-point near Lakardah chowki in the early morning of 4th July 2008. The tigress was darted with HBM mixture, radio-collared, shifted to the transport cage and taken



Animal sighted post-release in the forest on 7th July 2008 relaxing in a mud pool.



Darted tigress at Hi-point near Anaptura chowki.



A satellite collar being placed on Tigress.



Tigress cage being shifted to small truck for transportation to release site at Sariska National Park.



Tigress moving into the enclosure soon after release.



Tigress being loaded into a transport cage.



Tigress cage being positioned inside the helicopter.

to the Sherpur helipad from where she was flown to Sariska. The animal landed in Sariska by noon and released into the enclosure. The animal behaviour was monitored for another three days inside the enclosure and was finally released into the forest on 7th July 2008.

Both the animals are being monitored jointly by the WII research team and Forest Department team and it is heartening to know that the animals have adjusted well to the new home. The introduction of Tigers in Sariska is a beginning of new era in the field of reintroduction and lot of efforts need to be made for the long-term survival of the animals in the new home.

The coordinated efforts put in by the Forest Department officials especially Shri R.N. Mehrotra, Chief Wildlife Warden; Shri R.S. Shekhawat; Shri Someshekar; Shri Rajesh Gupta; Shri Sudarshan Sharma; Shri Sedu Ram, and field staff and crew of the 107 Helicopter unit of the Indian Air Force were extremely important for the entire operation and without a synchronized teamwork such an operation would not have been possible. Efforts put in by Dr. Rajesh Gopal, Member Secretary, National Tiger Conservation Authority in shaping the entire project were commendable. **Contact: nigamp@wii.gov.in**

On the Move

2008 NAI International Conference, Sokcho city, Korea, May 11-15, 2008.

Bitapi C. Sinha from the Institute participated in this International Conference. The Conference had nearly 100 concurrent sessions. A day's field trip was also organized to the Seoraksan National Park. She presented a paper titled "Evaluating effectiveness of interpretive facilities in Tiger Reserves in India".

Bitapi received the NAI scholarship for the third time in a row. Her travel was supported by the Wildlife Institute of India. Bitapi was also invited by the Suncheon University, Korea to be a guest speaker in the one-day Symposium on "Regional Culture and Utopian Society". She presented a paper titled "Empowering youths, living around protected areas, how to provide meaningful interpretation for enhanced visitor experience". **Contact: bcs@wii.gov.in**

National Conference on "Climate Change and Impact on Health", New Delhi, May 22-23, 2008.

Dr. Pranab Pal, Field Technical Officer participated in the conference, which was held at India International Centre, New Delhi. This National conference was jointly organized by International Development Centre Foundation; Centre for Occupational and Environmental Health; Ministry of Earth Sciences; Department of Science and Technology; Council of Scientific and Industrial Research; and Central Pollution Control Board. The theme of the conference was "Global climatic changes due to the large scale environmental degradation". More than 50 participants shared their views and discussed various issues related to the theme.

Dr. Pal presented a paper on "Establishing Extension Set-up for Biodiversity Conservation & Ecosystem Management in Kaziranga National Park, Assam". **Contact: ppal@wii.gov.in.**