



**TRAINING OF TRAINERS (TOT)
CAPACITY BUILDING WORKSHOP ON
IMMOBILIZATION, RESTRAINT, RESCUE
AND REHABILITATION OF TIGERS**

21-23 FEBRUARY, 2019

PENCH TIGER RESERVE, MAHARASHTRA

A three day workshop was organized under the aegis of Wildlife Institute of India (WII) and National Tiger Conservation Authority (NTCA) at Sillari, Pench Tiger Reserve, Maharashtra from 21/02/2019 to 23/02/2019. The objective of the training was to train the participants on **Immobilization, Restraint, Rescue and Rehabilitation of Tigers**. Total number of participants was 36 (veterinarian:1, veterinary Officer: 12 , ACF:1, RFO:4, Rescue team member:1, Forester:5, RO:1, Forest Guard:1 and Police Constable:1). See Annexure for list of participants.

The details of the workshop are as follows:

Inauguration of the workshop was done by the Chief Guest Dr. Anup Kumar Nayak (ADG (PT) & MS (NTCA) along with APCCF (Protection), Maharashtra, Mr. B.S. Hooda, CCF & FD, Pench TR, Dr. Ravikiran Govekar, Forest Officers and representatives of NTCA by watering a seedling. The inaugural session was followed by welcoming of dignitaries by giving them a plant seedling. Then the chief guest Dr. Anup Kumar Nayak addressed the gathering and mentioned about key objectives of the workshop and appreciated the efforts taken by Maharashtra Forest Department along with WII and NTCA to arrange this workshop. He also discussed about the current human-animal conflict scenario across the country and how workshops like this will evolve a system to tackle such issues.



Inaugural session of workshop



CCF & FD, Pench Tiger Reserve, Maharashtra Welcoming the Chief Guests



First technical session started at 1100 hours by Dr. Vaibhav Mathur (AIG NTCA) on the topic **Overview on legalities related to capture, rehabilitation and mortality investigations with special reference to Tigers/provision of concerned SOPs**. In this session he focussed on legalities related to Wildlife Protection Act, along with SOP's of NTCA for capturing & rewilding of carnivores and disposing of carcass with pathological sampling. He also emphasised that any issue related to capturing, rehabilitation & mortality needs to be taken on paper with proper permit of the Chief wildlife warden.



Dr. Ravikiran Govekar (CCF & FD Pench Tiger Reserve) in his presentation, threw light on the topic of **Human wildlife conflict and its mitigation with special reference to large felids- case studies of Maharashtra**. He discussed about the problems local people face in Maharashtra from wild life and also told about the schemes made for local people regarding rehabilitation and compensation.

Following this Dr. Parag Nigam, Scientist- F, WII presented few case studies regarding tiger & leopard injury & recovery in nature itself. He also gave details of different trap cages, medicines and dosage required during capture. He put forth the thought of not capturing wild animals until a major injury is present.



The first day's session concluded with a movie named **"Tiger Dynasty"** which was showcased in the auditorium at Sillari. It demonstrated the life of a wild tiger and difficulties faced by tigers in the current scenario. It was based on the tiger translocation exercise carried out when tigers of Sariska tiger reserve were wiped out due to poaching.

Second day's session started with a field visit at 0600 hrs to understand the landscape and wildlife of Pench TR. The technical session was started by Dr. Parag Nigam on **Capturing Wild Felids: Options and Concerns**. He shared his experience of problems faced during capturing of large felids in fields, man power & vehicle requirement for capturing. He also facilitated a discussion in which participants shared their problems and experiences.

The session was followed by lecture on **Approach for large carnivore conservation in India** by Dr. Bilal Habib (Scientist E, WII). He also gave a presentation on the topic **Understanding conflict issues using basic understanding of movement ecology and space use**. He presented few examples of Eastern Vidarbha Landscape (EVL) for migrating tigers and told about mitigation measures that are required for proper dispersal of tigers. In the next lecture, he focussed on **Science for Management of Wildlife** in which he told about the major threats to wildlife and the measures taken to decrease this threat.



Following this Dr. Akhilesh Mishra (Veterinary Officer, Pench TR, Madhya Pradesh) presented a case study about **Rescue & Rehabilitation of Tigers** in which he shared his field experiences.

Technical session was followed by a field demonstration exercise. Before starting the field session, Dr. Parag Nigam briefed the participants about the different equipment related to rescue, restraint and tranquilization.



Three teams were made led by veterinary officers/ experts for demonstration of darting equipment and cages.



After demonstration a target practice session was carried out in which dummy targets were kept and participants were made to dart one by one.



The second day's session concluded with demonstration of Rescue Van (PTR, MP) and a briefing about the technicalities of carrying out the rescue operations by Dr. Akhilesh Mishra.

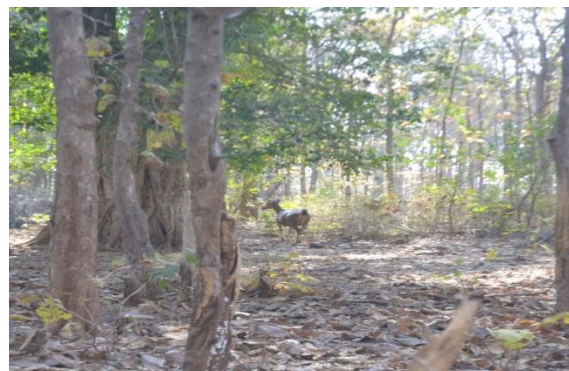


Third day's session started in the morning at 0700 hrs. by briefing the participants regarding procedure involved in immobilization of herbivores, required instruments and preparations, by Dr. Parag Nigam, Dr. Ravikiran Govekar. Participants then proceeded to the field for carrying out the tranquilization exercise.



A female Sambar (*Rusa unicolor*) was seen browsing in bamboo thicket near one of the roads. The animal was remotely darted using a combination of **Medelomidine** and **Kelimen** using Dan inject syringe projector 7m (single barrel) from a distance and animal went down after 12-14 min. Animal was left undisturbed for motion induction. The team then searched the animal by following animal trails and located the animal under tree in sternal recumbence. After accessing the level of sedation safe for handling, the animal was approached. The physiological parameters were recorded and were observed to be normal. Biological sampling, body measurements and weight was carried out and participants were given opportunity to carry out the procedure.

Then reversal was carried out using **Atepamezele** and animal was left undisturbed. The animal showed signs of recovery within 5 minutes and moved into the bushes. Animal monitoring was carried out subsequently.



Later on, a herd of Chital (*Axis axis*) was seen on a waterhole. A young adult was successfully darted from a distance of about 30 meter. The animal was seen moving into bushes following darting. The animal was approached after 15 minutes and seen in perfect plain of sedation. The animal was lifted on to a stretcher and brought into open area.

Procedure of handling, position, sampling etc. was carried out followed by drug reversal the animal revived in 5 minutes and moved into the bushes.



The teams returned to the base camp subsequently after ensuring safety of the animal. The exercise was a learning experience for all of the participants and provided good practical information and knowledge on capturing of wild animals. A debriefing session was carried out after coming to the base camp by Dr. Parag Nigam.

After field session technical session was started by Sh. Nishant Verma (DIG, NTCA) on **Managers' Perspective in Managing Wild Animal in Distress**. He focussed on the constraints of forest departments across the country and how things can be improved in upcoming future. Afterwards, Dr. Akhilesh Mishra gave a presentation about his experience regarding **Animal Translocation** in which he also discussed about the experiences from the translocation of Gaur (*Bos gaurus*) from Kanha to Bandhavgarh.



Further, a recent experience of Maharashtra forest department about practicability, field experience and problems faced during capturing of T1 cub in Pandharkawda division and successive rewilding process of cub which was captured for

reintroduction was provided by Dr. Ravikiran Govekar and Dr. Chetan Patond (Veterinary officer, Pench TR). A brief presentation was given by Mr Atul Deokar (RFO, East Pench) along with Ms Bharti Prajapati on PACE (Pratham Arora Centre for Education) centre at Sillari and its indirect role in conservation of forest and its resources. It is a centre providing basic knowledge and successive placement after hospitality training to youth of villages located near Protected Areas.

At the end, felicitation of resource persons and participants was done by Mr Nitin Kakodkar (PCCF & Chief Wildlife Warden, Maharashtra), Sh. Nishant Verma (DIG NTCA), Dr. Ravikiran Govekar (CCF & FD, PTR), Dr. Parag Nigam (Scientist- F, WII). Mr Amlendu Pathak, Deputy Director, Pench Tiger Reserve conducted the proceedings of the entire workshop. The three day workshop finally ended with a vote of thanks by Mr Atul Deokar, RFO, East Pench, Sillari, followed by a high tea.



Felicitation of Resource Persons, Participants & Dignitaries

Annexure:**List of participants:**

Training of Trainers (ToT) Capacity Building Workshop on Immobilization, Restraint, Rescue and Rehabilitation of Tigers		
Sr.no.	Name	Designation
1.	Dr. P. K. Chandan	Veterinarian Kanan Pendari Zoo, Bilaspur
2.	Dr. Ravikant Khobragade	Veterinary Officer CF & FD , TATR
3.	Dr. Chetan Patond	Veterinary Officer CCF & FD , PTR, Nagpur
4.	Dr. Vaibhav Hagone	Veterinary Officer APCCF & FD, MTR, Amravati
5.	Dr. Subodh Nandagawali	Veterinary Officer APCCF (Wild Life) East, Nagpur
6.	Dr. Aditi Sharma	Sr. Veterinary Officer Rajaji T.R., Dehradun
7.	Dr.Vimal Raj P. Govindan	Veterinary Officer Haldwani
8.	Dr. Amit Dhyani	Sr. Veterinary Officer Haridwar Forest Division, Chidiyapur
9.	Dr. Rakesh Kumar Nautiyal	Veterinary Officer Deharadun zoo, Deharadun
10.	Dr. Abhay Sengar	Veterinary Officer, Sanjay Tiger Reserve
11.	Dr. Akhilesh Mishra	Veterinary Officer PTR, Seoni, (M.P.)
12.	Dr. Kishore Chandra Sahoo	Veterinary Asst. Surgeon Satkosia Tiger Reserve
13.	Shri. Shanti Prakash Khesh	ACF, Palamau Tiger Reserve
14.	Shri. M.M. Tate	RFO , CCF & FD , PTR, Nagpur
15.	Shri. Karanti Jhaariya	RFO, Kanha Tiger Reserve, Mandla
16.	Shri. Virendra K. Joyotishi	RFO, Bandhavgarh Tiger Reserve, Umariya
17.	Shri. Anil Kumar Shah	RFO, Dhaurhra, Dudhwa Tiger Reserve
18.	Ramcharan Kundan	Rescue Team, Panna Tiger Reserve
19.	Mr. Yashwant Kumar Shyamale	Forester, ATR
20.	Mr. Kuldeep Singh	Forester, Gurughasidas NP
21.	Rameshwar Lal Mahar	Forester, Sitanadi Tiger Reserve
22.	Shri. Jiten Kisku	Forester, Rairangpur
23.	Shri . Umesh Kumar Debey	Forester, Palamau Tiger Reserve
24.	Tukaram Dawkore	Forest Guard, STPF, NNTR
25.	Mr. Bholu Ram Sahu	Forest Guard, Boramdev, WLS
26.	Mr. Jame Ekka	Forest Guard, Tamorpingla, WLS
27.	Shri. Udyamani Singh Parihar	Forest Guard, Panna Tiger Reserve, Panna
28.	Shri. Kamlesh Kumar Nanda	Forest Guard, Bandhavgarh Tiger Reserve, Umariya
29.	Shri. Sanjay Mohanty	Forest Guard, Balasore (WL)
30.	Shri. Ananta Charan Parida	Forest Guard, Keonjhar (WL)
31.	Shri. Abhishesk Kumar	Forest Guard, Palamau Tiger Reserve
32.	Amol Gawner	Forest Guard, Amravati (Maharashtra)
33.	Shri. Ajay Marathe	Police Constable, CF & FD , TATR

Glimpse of workshop:

