RESEARCH NOTES
(I)

CHEMICAL CAPTURE AND TRANSLOCATION OF A LEOPARD FROM BARIPADA

On 3.4.95 morning a Leopard entered the house of BNN Ex. Asst. Field Director, which is situated on the outskirt of Baripada main town. It was suspected that the Leopard could have strayed out of Similipal due to fire and come through the adjoining forest near Manchabandha about 2 km away from the house.

Around 1000 hrs that day someone had telephoned to HSU that a Leopard was sighted in the said locality when it was crossing the road. The Leopard was first noticed in the compound when it was coming up the staircase. Later the Leopard had settled itself below the staircase in the ground floor. We (BCP and LAKS) got the message over VHF in the field and reached the spot at 1800 hrs that day. A suitable cage or the right kind of drugs for chemical capture were not available immediately. We made a thorough study of the locality and other related conditions to ascertain if the Leopard could released out of the house and directed towards the adjoining forest. The idea was later abandoned. Late in the night it was decided to use a locally available tranquilising drug, Ketamin Hydrochloride (trade name : Ketajet 50; Sterfil Lab., Ankleswar) and dart the animal with the tranquilising equipments available at Similipal Tiger Reserve.

Initial attempts were made by BNN on 4.4.95 to spray anaesthesia (Ether solution) aimed at the site where the Leopard was hiding underneath the staircase. This didn't give any result.

On 4.4.95 a cage was designed and fabricated locally under the direct supervision of the team. The cage was fitted with a vertically sliding door, remotely operable from the behind over a pulley. The length x breadth x height of the cage was 168 x 65 x 105 cm. The pulley fitted on a detachable stand stood at a height of 100 cm from the top of the cage.

On 5.4.95 at about 0400 hrs this cage was placed at one of the doors of the house in a manner that any attempt to come out through the door will trap the Leopard in the cage. This followed an intense search to locate the animal itself. At about 0900 hrs after making a hole in the wall at the height of about 50 cm the Leopard was located underneath the staircase. But the place was not suitable to use a dart. Then another hole was made by the side of it but the Leopard soon changed its position. On the wall outside three other holes were made and the Leopard was sighted. The dart was fired from one of the latter holes at 0915 hrs which hit the left shoulder of the animal. Within seconds the cat removed the dart with its teeth.

The equipments which were used to dart the animal included the following: Dist-Inject Pistol; 0-10 m cartridge to fire the dart; 5 ml aluminum dart-syringe; cartridge

for use in 5 ml syringe; 15 mm needle, drug: 250 mg of Ketamine hydrochloride in 5 ml solution; wet gunny bags to keep the animal cool after capture.

After 20 minutes it was confirmed that the Leopard had been under the full effect of the drug. Confirmation about the effect of the drug was made by observing the animal through one of the holes. The pupils got dilated. The head gradually drooped down. The ears stopped responding to sudden sounds made outside. Finally, prodding the neck with a stick resulted in no response. The animal was then covered with wet gunny bags and lifted into the cage placed close-by.

The Leopard was a healthy male with a light yellow coat and the characteristic black rosettes on the body. The spots on the head, neck and limbs were solid. It measured approx. 7ft (2.1m) in total body-tail length.

The Leopard within the cage was then shifted to Manchabandha Forest Rest House from where it was finally taken into Similipal Tiger Reserve. The animal fully recovered from the effect of Ketamine after 4½ hours. After a night halt at Upper Barha Kamuda, on the next day, i.e., 06.4.95 the cage was brought to Patabil valley. During transportation on the 5th and in the next morning dettol-water (approx. 1:1000 disinfectant solution) was sprayed over the body, particularly the head, neck and paws, of the Leopard. From the response of the Leopard it appeared that spraying had a soothing effect on the animal.

At the site of release at first a Pad Impression Pad (PIP) was laid to record the pugmark of the Leopard when it left the cage. The door was operated remotely over the pulley from a Gypsy van, and we remained in a second van to make observations on the animal.

The Leopard was released at 1100hrs. When the cage door was lifted-up the animal gave a few short leisurly leaps into the meadow and then slowly walked through the meadow towards the tributary of the West Deo, which ran within 300 m of the site of release. Thereafter the Leopard was not visible any longer.

Discussion

The Leopard is a fully-grown adult male. It is suspected to have come out of Similipal because of fire and Akhand Shikar or other such disturbances. A leech sticking to the right nostril of the cat is indicative of the fact that it belongs to some moist locality of Similipal which abound in leeches. In the past there have been at least two incidents where large cats reached the outskirts of Baripada town. One was a Tiger near Krishnachandrapur in 1953 and the other, a Leopard near Astia around 1982.

The place where our Leopard was release is rich in prey base and has ample vegetation and water. However, according to our census data this area contains overlapping territorial boundaries of 2-3 Leopards within a radius of 8 km. The Leopard has all the scope to settle down around the place of release if it is able to share the area with others. If it is not able to settle because of pre-existing Leopards, then that kind of order of the nature has to be accepted by the management. Here is a chance given to the Leopard to try for its resurvival in the wild.

With regards to the dosage of Ketamine required to tranquilise an adult Leopard

there have been various prescriptions, ranging from 5mg to 10mg per kg of body weight (Sale and Berkmuller, 1988). Some experts have suggested a dosage of upto 1800mg for an adult Leopard (Chowdhury and Malik, 1992). Considering the weight of our Leopard to be about 60kg, the dosage of 250mg administered by us is relatively low, yet it offered us enough time to shift it to the cage safely. Although full recovery from the effect of the drug was after 4½ hours it wouldn't have been safe to handle the animal outside the cage after one hour of drug administration.

Acknowledgements

We thank the people and staff of Baripada who helped during the capture and translocation, and Shri A.L. Bose, for information on past incidents.

References

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