

FERAL CATTLE : A MANAGEMENT PROBLEM

Sushant Chowdhary

Increasing feral cattle population (*Bos indicus*) is a serious threat to the ecosystem of the Keoladeo National Park as their severe grazing pressure creates food resource scarcity for wild ungulates such as chital, sambar, black-buck and nilgai. Viewing this management problem the park authorities decided to try out certain effective methods by which the population of the feral cattle can be controlled in the park. The strong religious sanctity attached to the cattle especially the cow as 'sacred' animal by the local people militates against any administrative or political decision to eliminate them.

According to the Forest Department the feral cattle population is around 800-900 animals but this figure must be much higher as village cattle from nearby areas pushed into the park is difficult to differentiate from feral ones. Villagers from nearby area often surreptitiously let loose their domestic cattle into the park for grazing by breaching the rubble wall fence erected around the park. The fence around the park was erected in the year 1982 for controlling unauthorized grazing.

Because of the various problems the park management decided to control the population of feral cattle by castration/sterilization of the bulls which are 2.5 times less in number than the females (sex ratio 1 male : 2.5 female). As castration/sterilization requires capture, chemical immobilization was selected as

the method of choice.

Wildlife Institute of India was contacted and help was sought by the park authorities to take up this work. Although the proposal sounded well theoretically but its practical application was viewed doubtful. Doubts were raised on the capture of such large number of animals in one go, as continuous capture will force the animals to maintain a long flight distance. Difficulties in finding animals within required shooting range may result in improper aiming and drug loss. The other problem was that partial castration and loss of libido in bulls will allow the young males to take over breeding very rapidly which instead of controlling will augment the population.

Bearing all these problems in mind we proceeded to Keoladeo National Park to immobilize and castrate animals in the month of Sept.'89. In our attempt to standardize drug dose we successfully captured two bulls by using Xylazine and Ketamine hydrochloride mixture, 900 mg and 200 mg/ml respectively. After 10-15 minutes animal usually comes down. Requisite supporting drugs were given to maintain the respiratory and circulatory activities of the immobilized animals.

Animals were castrated by using 'Burdizzo' (a large clamp that is used to crush blood and nerve supply to the testes). The local veterinary officer and his assistant came to perform the castration. Castration took hardly 5

minutes with the help of the burdizzo. The crushing of blood and nerve supply ultimately degenerates the testicles. Crushing does not leave any open wound and was done twice to insure positive castration. As per the literature available burdizzo is not a 100% efficient method, some animals may escape castration often if burdizzo is not properly adjusted.

Our doubts came true when after capture and castration of two bulls the animals panicked and spread through out the park. Further, despite our best effort we could not find a single animal in the next few days within the desired shooting range. We had to abandon the work.

In the meantime the park authorities were informed by the Ministry of Environment and Forests that the National Institute of Immunology, Delhi had developed a drug named 'Talsur' which on administration sterilizes the animal. The National Institute of Immunology claims that the drug upon

administration in the cauda epididymis in testicular region causes castration. The drug was considered useful as the very purpose of the bull management was to maintain libido in the male so that competition among males should continue.

Once again the Institute was called upon to immobilize the feral bulls and try out the drug 'Talsur'. In the month of April 1990 I went and successfully immobilized four bulls by using the same drug dose tried earlier. The scientists from National Institute of Immunology Dr. Suri and his colleague administered 5-7 ml of Talsur injection in the cauda epididymis of both the testicles for sterilization of the animals. Animals were marked for identification. It is for the park authorities to monitor the animals and evaluate the success of this operation. The Research officer/ACF of the park was trained in this process. We have advised them to initiate the procurement of drugs and equipment. After this arrives they can continue this operation slowly on a long term basis.

