

A HARROWING TALE OF HOW MARKHOR AND HIMALAYAN TAHR SURVIVED AND ARRIVED AT DARJEELING'S HIMALAYAN ZOO

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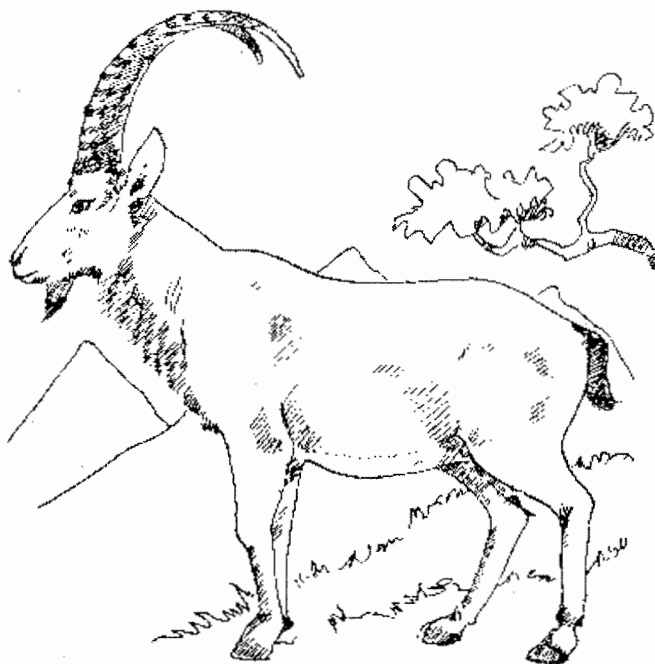
Transport of wild animals forms an important part of zoo management and of conservation breeding. If animals are not moved from one zoo to another and paired with conspecific of a different genetic background, they will become inbred. That is, if they breed at all, for many "moves" are to make pairs out of single males or single females at different zoos. Animals in captivity are under some stress at the outset, since a zoo is not their natural habitat. Most animals adjust very well but hardly any wild animal adjusts to having its routine broken, to having new people handle it and to moving even from one space to another in the same zoo. The genuine hardships brought about by making a move from one zoo to another, sometimes involving air transport, long waits and long road trips are unimaginable to us human beings, who routinely and by choice undertake all manner of travel.

Many animals find it difficult to bear the strain of a journey. Although the zoo community has developed the sensitivity and technology for successful transport, still they have to depend on others who are unmindful of the delicacy of this operation. The animals are at the mercy of their temporary captors and are the most helpless creatures during the process of transport. This article highlights the problems faced during one such transport operation. I hope this write-up will help in making improvements in future transport operations and even aid in promoting empathy for the animals which must endure the transport procedure.

Markhor (*Capra falconeri*) and Himalayan Tahr (*Hemitragus jemlanicus*) are among the endangered animals of the Great Himalayan ecosystem. Concentrated on the Western Himalaya, the markhor is easily recognised by its magnificent corkscrew shaped horns. Of all the ungulates, it is most skilled in climbing difficult and dangerous cliffs and rocks. The Himalayan tahr is found between 2500 and 4400 m altitude in the Himalaya. This animal selects the most inaccessible ground to live on.

In spite of their Indian origin, these goat-antelopes are not available in any zoo within the country. In exchange of a pair of Asiatic lions from Junagadh, courtesy of Mr. Raval, then Director there, three snow leopard (1:2), a pair of markhor and a pair of Himalayan tahr were arranged from Helsinki Zoo. The snow leopards were received in 1992 and the pair of Himalayan tahr in 1994. While the snow leopard are doing very well here and have bred to the third generation, the Himalayan tahrs did not survive long. Mr. Lief Blomqvist, Director of Helsinki Zoo, was kind enough to gift another pair Himalayan tahr.

It was decided that the animals should be flown from Helsinki via Delhi and then air lifted to Bagdogra. This would minimise the stress to the animals. Since big aircraft do not fly on the Delhi-Bagdogra route, the Finn authorities were requested to reduce the height of transport cages below 120 cm so that the animals could be brought to Bagdogra by flight. They agreed to our suggestion and promised to provide young animals.



Later on, however, they informed that the size could still not be brought less than 135 cm. Since this transport had already been postponed a couple of times, it was not possible to make further changes in view of lengthy official formalities. Consequently, an arrangement was made to further transport the animals up to Calcutta the same day and then surface transport up to Darjeeling. The road journey from Calcutta was not planned earlier in view of the past experience when the ill-fated tahrs died in 1994 due to transport complication.

The transport was scheduled to reach Delhi on 13th December 1996. After customs clearance the animals were to be booked on late Delhi-Calcutta flight to start their road journey at night. By morning the animals could have reached near the foothills when even a sudden rise of temperature would not have caused any adverse effect. This extra precaution was being taken in view of our lesser and often sad experience in case of cold loving and delicate hill animals. To ensure proper transport, Indian Airlines Cargo was contacted well in advance. The authorities insured all cooperation from their end and promised to transport the animal on 13th itself if the animal cages fulfilled the criteria as per the IATA guidelines.

During such transport a lot of confusion takes place if proper communication is not made. Therefore, all concerned were informed. In spite of this, the Finnair authorities could not give any information on the arrival of animals till 12th evening. But the Helsinki zoo, however, provided the necessary infor-

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mation. The next morning, the Finnair authorities confirmed, with a bit of surprise, of the animals boarding. They suggested to contact Air India, who handle their cargo. Air India requested to contact around 1100 hours as the unloading process would take time.

At 1100hrs, a loader was sent to bring the animals at delivery lounge. He returned and informed that the process would take some more time. On this, Air India authorities were again contacted. They immediately promised to send message and give full cooperation. Accordingly, the loader was again sent. This time he did not return. Half an hour..... an hour..... one and half hour..... and the waiting became unbearable for us as we knew the animals would have been suffering. After a long wait, information came that there was no problem in releasing the animals. Still the animals were not released. At this time, the PA to General Manager, Cargo was contacted, who immediately asked whether the papers were clear? He was told that although the papers were clear, it could not be ascertained where the animals were located and what was their condition? We also queried that even if the papers were not clear, should the animals suffer? He immediately came forward to help, but by then information came that the animals were being brought to the main lounge. Now the markhors' cages arrived in a trolley. We were horrified to see, however, that the cages of Himalayan tahrs were loaded in horizontal position, though there were clear instructions on the cages. The animals were seen struggling to adjust themselves in such an uneasy situation. The loaders were instructed to unload the cages immediately in a correct position. The Delhi Bagdogra flight was ruled out to avoid tilting during loading. But here, the animals were transported for a long distance in this position. Nobody knows what treatment the animals get where neither zoo nor forest staff is allowed, as is the case in many transport operations.

After release, at 3.30 pm the animals reached the Domestic Airport at Palam but space for the animals could not be found in the Delhi-Calcutta flight. The Indian Airlines authorities ultimately informed that the plane did not have sufficient space for these crates. They also informed that cargo space in the plane where these big crates could be taken does not have a provision to pressurize the cabin and therefore was unfit for live animals. This information came as a complete surprise, because all this had been discussed with airline authorities in detail well in advance. In fact, the animals were brought to this stage only on the condition that the Indian Airlines Authorities would extend all possible cooperation. Now, however, it was a different story. While some of the officers tried to rectify the situation, others seemed to make all arrangement to complicate it, even with inappropriate speaking.

When all possible means were exhausted, the Director of National Zoological Park, New Delhi was requested for help. The animals were ultimately brought to Delhi Zoo in the night. Although trucks are not allowed in Delhi during 6.00 pm to 8.00 pm, the policemen on patrolling duty provided full cooperation in view of living wild animals. The Zoo staff was waiting for the animals, although their duty hours were long since over. Now full attention could be given to the animals. They were thirsty and hungry. It was found that the cages did not have provision for drinking water. Moreover, all the cages

did not have windows. Only the Himalayan tahrs could be supplied drinking water after inserting tubs inside. Thus the markhors had to live without water until next morning. The cages could be opened only late in the morning, when tools were available. Since, it was suggested that feeding should be avoided during the journey, feeding arrangement were not made. The animals were supplied feed the next day.

Since the travel programme had changed so much, the mode of onward journey was not yet decided. Therefore, in the morning the animals were shifted to indoor enclosures. First the Himalayan tahrs were released. Still under tremendous stress from the air journey, they were panicked by the presence of new staff. They literally hit the ceiling of the enclosure, jumping in terror and panick when released from the transport cages. On the other hand, the markhors were relatively calm and did not show much excitement.

After discussion with Mr. Sharma and Dr. Desai from Central Zoo Authority and Mr. D.M. Singh, Director Delhi Zoo, it was decided that the animals should be transported by truck. A few months back Manipur Brow-antlered deer had been transported a long distance by road. Therefore, despite the fact that these Himalayan goat-antelopes are very sensitive to shock, the road journey was not considered too risky. In the meantime, Jet Airways authorities were also contacted who expressed their inability to help in view of shortage in cargo space. They, however, promised to transport the animals as far as Calcutta where more space was available for cargo. Even then, there was a need of reduction in the size of the cages. Transporting the animals in smaller cages from Calcutta to Darjeeling was ruled out. Transport by train was rejected because the animals there are closed in a boxcar without a keeper and secondly there is sudden very loud disturbance whenever two train cross each other.

The process had already taken a couple of days so it was decided that it would be better if the animals were moved to Darjeeling without delay. More stay in Delhi meant placing them in big, open enclosures, where it may be impossible to recapture them without danger to the animals.

Next day the cages were modified and the date for onward transport was fixed on 18th December. Mr. Dhaundyal, DFO, Darjeeling was contacted who immediately arranged to send a Range Officer to accompany the transport of the animals as a person in uniform always facilitates in road transports. The Director, Delhi Zoo was very cooperative and assigned an experienced zoo keeper and two assistants for looking after the animals during the journey.

The next problem was recapturing the animals. If they were nervous during release, what should be case during recapture. Although, CZA officials had reservations about tranquillising the animals in view of many cases of death in the past, I felt this the safest method as manually capturing the animals could lead to shock. At the same time, recovery after tranquillization could provide mild sedation during the journey. I would, however, advocate against such method if there are safe and easy natural means available. Seeing the enthusiasm and sincerity of Dr. Pannirselvam, the Veterinarian of Delhi Zoo, I felt more confident to go ahead with the process. The available literature also could not throw much light on the

amount of doses required for tranquillization. The medicine used in Helsinki for capture was not available nor was its constitution known. There, the young markhor were caught manually. However, the doses were calibrated on the basis of past experience and their suggestion. It was planned that first an attempt should be made to capture the animals manually. The Zookeeper himself was against this idea and emphasised tranquillization if the animals were to reach Darjeeling alive.

First, the attempt was made on the male, who showed a lot of excitement and could not be darted properly -- he became extremely excited, moving and jumping about. In the meantime, the female markhor was tranquillized successfully. By the time the male was tranquillized, the female had begun recovering from the drug. Therefore, the staff were sent inside immediately where they captured the animals which were not in a position to resist much as a result of the tranquilliser drug.

The Himalayan tahrs had yet to be caught and since they were more sensitive, the doses of tranquillizer were increased. Due to this overdose, however, the tahrs went into coma and severe cardio-respiratory depression was noted. Their heart-beat became very slow. Seeing the condition of the animals, the atmosphere in the zoo enclosure became extremely gloomy. Everyone was in sympathy with the animals and anxious to complete this task with no fatality. Artificial respiration was given with the keeper holding the horns to keep the head high to avoid choking. After a long time, the animal jumped suddenly, but could only raise its hind portion as the horns were held firmly. Simultaneously, there was a sigh of relief in the enclosure and everyone literally rejoiced. The female also recovered with a bit of effort.

The animals were loaded in the truck and the truly tedious part of the journey began. The first day of the road trip was quite uneasy due to the overdoses of the tranquilliser. Extra care was needed in the case of Himalayan tahrs. The following day, however, they were quite fit and there was no problem after that. The speed of the truck was reduced to a very slow pace to minimise bumping and stress and the animals reached Darjeeling only on 23rd afternoon. After reaching and leaving the truck, the animals were given rest for some time and were not released into the enclosure immediately. This precaution was taken because the animals were under stress for a long period in the journey due to confinement. Immediate release could have made the animals impatient to run freely in the unfamiliar enclosures where the danger of an accident was very high. Presence of the new staff also increases stress. These stresses combined with fatigue can be fatal.

Even with such precaution, after release the animals were panicky and began dashing around their enclosures. Immediately, everybody was moved out of the enclosures along with the cages and the animals were left in total quiet. This calmed down the animals and they settled down in their new home.

With this, two new rare species have been added in India at Padmaja Naidu Himalayan Zoological Park, Darjeeling without having to take any animal from the wild. The arrival of these animals safely in Darjeeling was practically a miracle,

considering the many things which went wrong. Hopefully this detailed story of the transport will alert people at every stage of this tedious journey to the lacunae in their part in the process.

Editor's Note : This article was sent to our office soon after the events, on 16th April 1997, but did not come to the attention of the Editor until a few days before this publication. It has not been sent for review in view of the unconsciousable length of time it was kept in the file but has been edited as is by the Editor. This article is the kind of article we want from zoo managers. There is MUCH to be gained from telling the story of difficult procedures and in being forthright about mistakes and problems faced, even if offense is given. Clearly a better transport protocol needs to be put in place all over the world and agreements with airlines need to be taken in detail in writing. Drug dosages for very rare species need to be ascertained. The airlines remain a problem -- for years in India airlines have refused to transport animals, condemning them to long road journeys in often horrible conditions.

Considering the value of such animals, a special air transport facility in their cargo hold by some airline desirous of both good public relations and doing a good turn for wild animals does not seem out of the question. Our experience with Jet Airways has been excellent in terms of consistency and correctness of service provided and willingness to give concessions for conservation. This airline does not seem to be as overburdened with hierarchical constraints that decisions at every level are impossible. Probably this is the only airline in India which could take up this task as a special project and try to provide one or two appropriate aircraft with facilities that could be utilised for animal transport.

We at Zoo Outreach Organisation call for discussions between Jet Airways (or any interested airline) and the Central Zoo Authority to come up with a device which could be put in place to prevent horror stories such as this one from occurring.

There were other lacunae, even from the side of Helsinki, which we hope will be rectified in future transports.

Further, a special training workshop in transport of animals should be held with demonstrations, hands on practice sessions and follow-up. A crack team of specialist animal handlers could be created who can be called in to attend to difficult transport situations and to teach handlers at different zoos how to construct transport cages, restrain animals, care for them during transport and release them into their final station.

