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## Rescue and Rehabilitation of Wild Animals

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### *Abstract*

Rescue of wild animals in the current scenario requires co-ordination and co-operation between people from different backgrounds and different agencies. Different approaches and management techniques are required for different species of animals. It is one of the most challenging and difficult tasks to rescue a wild animal and it is equally tough to rehabilitate the rescued animals. Restraining wild animals is also a difficult job, both physical and chemical restraining methods are used.

India is the 7th largest country in world with diverse geographical areas, climatic condition and vegetations. There are more than 350 species of mammals, 1224 species of birds, and 408 species of reptiles. India is one of the richest countries in the world in terms of natural heritage and biodiversity. There are 4 biodiversity hotspots in India namely the western ghats, sundaland, Himalayas and the Indo-Burma region. In these biodiversity hotspots there are many endangered mammals, birds, reptiles, fishes and amphibians are found. The list of endangered animals is too long to incorporate



Degrading Forest is the major cause of rescue of wild animals

here, some of which are endemic to India, like the Asiatic lion, Indian rhino, nilgiri tahr, swamp deer, Sangai etc. Some of the other endangered animals like Royal Bengal tiger, Asian elephants, Asiatic black bear, Red panda, Hoolock gibbons, mouse deer, clouded leopard, pangolins, king cobra, black softshell turtles etc.

As there are diverse wild animal species in India, it is bound to happen that one or many of these wild animals will have health issues like injury and wounds, diseases, orphan animals, conflicts with human which might lead to loss of lives on both sides, straying of animals from protected areas to human settlements etc. In all the above circumstances there may be a need for human interventions. Human interventions include driving a stray animal back to the protected area, treating the sick animals, husbandry care of the orphan and old animals, chemical restraining of animals which become a threat to human lives as well as its own life, trapping of animals etc.

Man animal conflict is increasing every day due to several factors like loss of habitat, fragmentation of habitat, loss of animal corridors, unavailability of feeds due to grazing pressure of domestic animals, old age etc. Stray cases of wild animals mainly happen due to the inter and intra species conflict for establishing supremacy or dominance, injury, old age etc. These interventions require expert persons, logistics and other resources. Coming to the specific concern of rescue and rehabilitation of wild animals, it involves a lot of management and a team of experts. The rescue team members must be in good health condition both physically and mentally.

Wild animal rescue usually happens in a non ideal situation for handling drugs and animal. A team for rescue operation of wild animals must include: Forest officials, One or more expert veterinarian, Animal keepers and handlers Biologist/zoologists, Sociologists, Civil administration and Local leaders.



1. **Forest officials:** The principal chief conservator of forests (wildlife) and chief wildlife warden must be in team as he is in-charge of overall wildlife. Even though he may not be in

the field but he must be in the loop and necessary permissions must be taken from him for undertaking and executing any rescue operation.



**Team after successful rescue operation of an Orphan Asian elephant calf**



**Team after successful tranquilization and treatment of Wild Asian elephant**

**2. One or more expert veterinarian :** It is always important to have an experienced veterinarian in wild rescue operations. Also, it is suggested that a team for rescue operation should have more than one veterinarian. Veterinarian must be prepared and acquainted with the work being undertaken, know the drugs and doses, tranquilizing equipments and the safety measures. It is very important to make it clear about the drug effect to the rescue team and nearby people as there had been many instances where just after firing of the tranquilizing dart, people approach the animal and get injured or killed. Drug of choice, accuracy of dose, darting platform, species of animal and distance of target are some of the most important factors during tranquilizing and rescue operations.

**3. Animal keepers and handlers:** They play a very important role in every rescue operation of wild animals. They need to follow the orders of the managers or the veterinarian. Their role starts from helping in the tracking of animals and after tranquilizing. Their role includes locating the tranquilized animal, help the veterinarian in covering the eyes of the sedated animal and to make sure that there is no blocking of the nostrils and air ways, hydrate the animal by pouring water in the body, physical restraining of the animal for putting the animal into the cage, locking the doors of the cage, lifting and loading the cage onto the truck, observe the animal during transportation, feeding and watering of the animals if needed, unloading the cage from the truck, releasing the animal by opening the door of the cage and finally post release monitoring. It is also important to mark the animals for physical observation if radio collaring for monitoring is not possible.





**An animal keeper taking a Lesser Adjutant Stork for release in its natural habitat**

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**An animal keeper feeding a rescued orphan Asiatic black Bear cub**

**4. Biologist/zoologists:** They also play an important role in a rescue operation by helping in tracking and locating the animals, post release monitoring and help in studying the behaviour of the animal.

**5. Sociologists:** Sociologists are the persons who work directly with the community, in case of stray animals, their role is very crucial as it is of utmost importance to keep the local people informed and to make people aware about the situation arising out of straying animal, its capture and rescue operation. There are many a situations where local people get agitated and there is a conflict with the rescue team, in such a situation, a sociologist can play an important role, also they can help in doing awareness campaigns regarding wildlife and its conservation.

**6. Civil administration:** It includes magistrates and other civil servants serving in that area, their role is critical in rescue operation of stray animals. Maintaining law and order situation is very important for the safety of the rescue team, local people as well as for the safety of the animal. Police and defence personals maybe called for crowd control and maintaining of the situation.

**7. Local leaders:** It is very important to involve the local leaders of the locality in rescue operations. They must be kept in loop of the happenings around the area and necessary decisions must be communicated to them, it is important because people have a direct relation with the people and people tend to listen to them and obey them. Also, it is observed that rescue of large herbivores like Indian rhinoceros, Asian elephants, Indian gaur or wild buffalo require lot of people, more than the rescue team members in such a situation local leaders can play an important role by selecting some people who could help in the rescue operations.

### **Transport cages and other Logistics**

It is very important to have cages which are specially designed for specific species of animals for easy handling and ease of transport and to reduce the chances of injury. Transport cages should be designed in such a way that there are minimum chances of injury and there is ample space for standing to lie down. It should also be kept in mind that cage should not be too large and the animal should not get space for turning. It should have facility for ventilation, Adequate ropes, nets, water buckets, tyres, inflatable tubes, ramps, machete, spade, axe etc are also required.



A sedated rhino on a ramp before pushing it inside transport cage

Ropes are required for securing of the animal, nets for physical restraining and in certain cases lifting of animals and stretchers for carrying of animals. Ramp is an important tool in a rescue operation as it helps in bringing an animal near to the transport cage or the vehicle in cases where the sedated animal moves far away to places where vehicles cannot reach. Usually, for large herbivores ramps are very important. Bamboo poles and wooden battens are also sometimes required for manoeuvring the cage or the ramp. Vehicle is also very important for any rescue operation. The vehicles selected for rescue operations are required to be in good running conditions. Vehicles like JCB or Hydra are also required for loading and unloading of the cages onto the vehicle and for pulling the ramp into the cage. Vehicles meant for rescue operation should always be checked and maintained well, preferably it should be four wheel



drive. A very important factor is that the vehicle ant for rescue operation should only be used for that purpose and it should be available at all ties during emergency.



### **Challenges of rescue operation**

Rescue team- mobilize the required persons at the required time is a challenging task as in most cases staffs get busy with their activities in their respective jobs. It is very important there is a dedicated rescue team or rapid response teams whose primary work is to do rescue operations. There has to be more than one veterinarian, adequate animal keepers, driver and forest officials.

Drugs and medicines- it is very important to study the wildlife found in a particular area, type of conflicts as it helps in understanding of the problems and devising solution to these problems. It is of utmost importance that adequate drugs and

medicines are available which are fresh and good quality. Drug of choice is very important in terms of chemical immobilization as different drugs have different effect on different species of animals. Veterinarians and forest officials must make sure that all the drugs and medicines are available for emergency use.

**Equipments:** It mainly includes tranquilizing equipments like the tranquilizing gun and its accessories. The guns must be examined at regular interval and testing sould be carried out with practice darts to keep it in good condition. Darts of different capacities (1 ml, 2 ml, 3 ml, 5 ml, 7ml and 10 ml) and material (plastic and metal) must be available along. Cartridge, syringe charger, cartridge holder, barrel cleaner, forceps must be available for Dist inject guns and pressure pump and gas for Dan inject and pneumatic guns etc. Needle of different types(barbed, plain) and different sizes (16 mm, 18 mm, 20mm, 22mm, 23mm, 24 mm and 25mm). A minimum of two guns must be available for carrying out rescue operation depending upon the use.

**Logistics** - Mobilizing the resources which are anticipated to be used in a rescue operation is very important. Before proceeding for any rescue operation it is important to know some details about the animals so as to prepare and carry necessary things to be used in a rescue operation.

**Crowd control** – It is one of the most important aspect of rescue operation. Crowd gathers around places where wild animals take shelter mainly for two reasons

#### **To see the animal**

To observe and see the rescue operation. Successful rescue operations depend on efficient and effective crowd control. For crowd control forest department alone is not enough, involvement of civil administration, police and para military forces are required for effective crowd control. Public addressal systems should be used. Absence of unwanted crowd and people near rescue sites helps in better management of rescue work.

#### **Care and Precaution During Tranquilization**

Suitable drug with appropriate dose should be used. Animals should never be tranquilized near a water body or in a hilly terrain. Darts should never be fired unless there is a clear view of darting region of the body. Any obstruction should be removed or cleared. After darting, the animals should always be tracked and monitored for its movement. Blind fold should be used in the sedated animals. Air passage or nostrils should always be clear and there should be no blockage. Transport cage and necessary securing articles must be ready before undertaking any rescue operation.



**Sedated oversized rhino inside a cage**



## Rehabilitation of rescued animals

Rescuing the animal is one part and the other part is the rehabilitation which is equally important. Releasing or taking the rescued animal to a place where there is a threat to its life or there is shortage of feed and water, conflict with resident animals might lead to failure of rescue operation. The rescued animals should be released in place where there is no jeopardy or less risk for its survival. Many a times rescued animals are taken to the zoo which is like putting the animals into confinement, also many a times zoos may not have adequate housing facility for the rescued animals.



Sedated wild Asian elephant translocated across flooded Brahmaputra River in a country

So, it is suggested that proper facility be developed for housing the rescued animals. Rescued animals should be released back into the wild unless there is a threat to its life or it becomes a threat to people's lives.

One thing should always be kept in mind that in spite of all the precautions and care in management, there will be challenges and problems which will be beyond imagination. For tackling and overcoming such unforeseen situations an innovative and a positive mind is required. There are many times when there will be failure of the equipments, drugs, breaking of ramp, cages, tearing of ropes and vehicle damage, which all can be managed with positive attitude and out of the box ideas.