

# Development of a Wildlife Rescue Ambulance for Leopard-Human Conflict Resolution

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The Wildlife Rescue Ambulance is designed to address the leopard-human conflicts in Mumbai and other parts of India. This ambulance is under fabrication, and it will be launched soon on road.

With its experience in rescue operations and in rescue centers, MyVets Charitable Trust & Research Centre developed the concept of a Wildlife Rescue Ambulance. The centre also designed, planned and implemented it.

## BASIC OBSERVATIONS OF RESCUE OPERATIONS

1. The rescue team gathers at the site from different areas as per the call, which leads to communication gaps. Oftentimes items are forgotten or assumed to be included by others, which leads to disasters at the rescue operation site.
2. If the animal escapes before the rescue van arrives at the site, the van and team may be attacked and blamed for the casualty.
3. If the animal is tranquilized and captured, then it is transferred to the Rescue Centre where it may again undergo chemical tranquilizing or restraining in a squeeze cage. This can lead to stress and shock in the animal. Also, a second tranquilizing in a short span of time is not advisable as per veterinary medical guidelines.
4. Dosages for tranquilizing an animal are based on the weight of the animal, approximated by body structure and mass of an adult animal.
5. If the animal is trapped in the cage, it is eventually returned to the wild. This involves manually lifting the



MyVets Charitable Trust & Research Centre cage and releasing the animal. Loading and unloading the cage from the van is a major problem. The old style cages are difficult to lift. This leads to animal stress and can also be dangerous for the rescue team.

## AMBULANCE DESIGN

This ambulance is designed to meet the needs of the rescue operation team, the wildlife veterinarian, the animal's safety, and the education of the general public. It has the following characteristics.

1. Registration - The van is modified per the requirements for registration in the AMBULANCE, RTO Act. With this registration, the van has the status of a wildlife rescue ambulance and can rush to the site with sirens silenced.
2. Storage - The van has adequate space for all the emergency equipment required during rescue operations:
  - a. Emergency medicine
    - i. Tranquilizing equipment: Dart gun, blow pipe, dart syringe, needles, gas cylinder (for filling the dart syringe), anesthesia drugs, reversal drugs, antidotes, anti-venom, etc.
    - ii. Sample collection equipment for diagnosis: blood collection vials, syringes, needles, catheter for collection of urine, EDTA and plain vials, small sterile collection jars, spinal needles, etc.
    - iii. Basic dressing materials: Cotton, bandages, cotton gauze, plaster of Paris, hand gloves, betadine solution, tincture of benzoin (to control bleeding), hydrogen peroxide, Neosporin powder and ointment, etc.
    - iv. Vaccines for rabies, feline vaccines, tet-

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Do's and Don'ts in these circumstances and minimize casualties during man-animal conflicts.

5. Hydraulic system for lifting the animal in the cage - The major task for the rescue team is to load and unload the cage from the van. The hydraulic system reduces the need for manual lifting and minimizes the chance of injury to the rescue team. It also reduces the animal's stress during loading and unloading.

6. Inbuilt weighing machine - The hydraulic system is fitted with a weighing machine which helps determine the correct weight of an animal. This facilitates the accurate calculation of dosages for medication and/or tranquilizing.

7. Multiple use - The Wildlife Rescue Ambulance can be used for the transportation of animals.

anus injections, etc.

- v. Diagnostic kits for on-the-spot diagnosis of E. canis, Leptospirosis, C. distemper, rabies, parvovirus, etc.
- vi. Oxygen cylinder, refrigerator, defibrillator, nebulizer, etc.

b. Rescue operation equipment - The Wildlife Emergency Rescue Team consists of at least nine rescuers and one driver. The team is equipped with the following:

- i. Ropes for climbing, physical restraint of animals, or for controlling crowds at a particular point.
- ii. Batons or sticks for self-protection and to control and/or disperse crowds.
- iii. Helmets for self-protection.
- iv. Plastic shields for self-protection and to control and/or disperse crowds.
- v. Hand gloves and gum boots for self-protection, climbing, protection from insect or snake bites, etc.
- vi. Torches for illumination, night vision halogen lighting, etc.

c. Ladder - The ladder on top of the ambulance can be detached and used during the inspection/observation of an animal in a building or from above, and it can be used when tranquilizing an animal.

d. Plastic sheeting - Plastic sheeting (fiber sheet 8 mm thick, 8 feet by 5 feet in area) can be used to direct an animal towards the jungle by blocking paths to urban areas. It can also be useful for controlling crowds.

e. Water tank - Water may be needed for washing wounds, operations, cleaning an animal or providing water for an animal to drink.

3. Wildlife veterinary support - The van contains an in-built operation table made of steel. It is equipped with a lamp and a sliding trap enclosure with space for the veterinarian's hands to deliver health care. This ensures the safety of the rescue team, should an animal suddenly awake from anesthesia and try to attack.

4. Education of the general public and awareness enhancement - Before the ambulance reaches the site, an animal may escape to the jungle. In this case, the ambulance can be used to educate the general public about



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