

## ➤ **Darting:**

### **Immobilizing animals by darting-**

Animals may be captured by being injected with immobilizing drugs. This method is used in the capture of rare and valuable herbivores on an individual basis. It requires great skill, scientific knowledge and experience to immobilize wild animals. Drugs are usually injected by firing a dart from a dart gun into the muscle of the animal, but can also be administered manually, for example when animals are caught in a net.

An important distinction needs to be made at this point:

- **Immobilizing drugs** are used to immobilize the animal completely, with *the animal losing consciousness*.
- **Tranquillising drugs** are used to *sedate the animal, while the animal is conscious of its surroundings*, it remains in a relaxed state with limited movement.

It is advised that the choice and handling of immobilizing drugs for capture operations be left to a wildlife manager or veterinarian with experience in this field.

### **The following principles are important in the darting of antelope and other herbivores:**

#### *-Selecting equipment*

The distance that the animal can be approached from, thickness of skin, approachability of the terrain and the method of approach being ground or air will determine which strength the dart gun should be.

The right choice of dart and needle is also very important, this being influenced by the skin thickness, size of the animal and approach distance.

#### *-Darting from a vehicle*

It is difficult to get the required approach distance from an animal on foot, so animals must usually be approached in a vehicle. Animals are often accustomed to certain vehicles, which could be an advantage. Using roads to approach the animals is more successful than driving off road, which often scares animals. Avoid driving directly at an animal or herd, as this tends to scare them off.

Be patient in selecting the animal to be darted, and shoot only if the target area (e.g. the hindquarters) is not obscured. The dart should penetrate at a 90 degree angle, which reduces chances of the dart bouncing off. Dart sites to use are the rump, hind leg, shoulder and occasionally the neck. The aim here is to have the dart penetrate into muscle tissue only. Once the dart is in the animal, the animal should be kept within sight at all times, but should not be chased at high speed. If, however, the animal does move out of sight, wait for the appropriate time for the drug to take effect, and then start tracking the animal.

#### *-Darting from a helicopter*

Making use of a helicopter for darting is often worthwhile in the capture of valuable, large or aggressive animals. An experienced helicopter pilot is of the essence. The pilot should know the habits and reactions of different game species, and be experienced in flying low and turning sharply. A strong helicopter is necessary to provide a stable platform from which to dart. Darts should be prepared in advance,

with enough to spare. There should be good communication between the pilot and the ground crew. The best time to fire is when the animal and the helicopter are moving at the same speed in the same direction. Once the dart is in the animal, try and herd the animal towards the recovery vehicle. The ground crew must be notified immediately.

### ***Signs that the drug is taking effect -***

Some or all of the following symptoms may be seen:

- An ataxic, staggering gait.
- A high-stepping knee action
- The head held high and far back, or the animal may nibble at vegetation
- Impaired vision – the animal may collide with objects
- Loss of sense of fear of people and strange objects
- The animal reacts to noise
- The ears may droop
- Some animals stay on their feet, and others may collapse

### ***Advantages of immobilizing through darting***

- The most effective and safest method to capture rare and valuable animals
- It is more economical than other methods when only single animals have to be caught
- Large and aggressive animals are manageable and can be loaded and transported while immobilized

### ***Disadvantages***

- Approach distance to dart an animal is often not adequate.
- Ruminants that collapse on their side can bloat or choke when rumen content is vomited.
- If the drug is not injected into the right muscle, or the dart does not discharge properly, the animal will not be immobilized effectively. The animal could run too far and overheat or collapse from exhaustion.
- The tracking of animals in dense vegetation or rocky areas can be difficult, and animals may not be reached in time.
- Use of a helicopter can be costly.
- Animals can injure themselves if they collide with a tree or fence.
- Over dosage could be fatal if an antidote is not administered in time.