# Translocations

### Background

Having suffered catastrophic declines in their range and numbers, rhinos tend to live in relatively small, isolated populations that need to be actively monitored and managed to ensure their persistence. In nature, animals may at times migrate between centres of population or expand their range. This helps to avoid inbreeding, allows a population to grow, or allows individuals to find sufficient food and water resources if these are scarce. However, as habitats are limited in extent and there are now great distances between rhino populations and barriers to their movements such as human habitation, the process needs to be helped artificially.

The "translocation" or assisted movement of rhinos between different areas has become a necessary and ongoing component of conservation which helps address the problems associated with these discrete populations. This process is known as meta-population management and it takes into consideration the overall status of all the combined, isolated groups of rhinos.

### **Genetic management**

Small populations may suffer from inbreeding, which can have negative consequences for individual animals and the population. The solution is to swap rhinos between centres of population and thus ensure gene flow amongst the meta-population. This also helps to increase genetic diversity in a population, which means that it is more likely to be able to adapt and cope with natural catastrophes such as disease.

## Safe havens

Sometimes, despite the best efforts of conservationists and land managers, the illegal poaching of rhinos occurs and this continues to be the greatest threat to these species. In extreme cases, where anti-poaching measures have either not been effective or are difficult to implement, the only option is to translocate remaining rhinos to safer havens elsewhere in the country. This safeguards the individuals and means that they can continue to contribute to broader conservation goals.

#### **De-stocking and reintroduction**

If rhinos are well protected and their numbers increase, it is possible that the population reaches carrying capacity in a given area. If this happens, there may be insufficient food and water resources to sustain the population and bulls may compete to breed, which can result in fighting, injuries and even death. Ideally, before these problems occur, it is best to de-stock the area to reduce the rhino population to below the ecological and social carrying capacity.

Rhino populations also tend to grow quicker if they are maintained below carrying

capacity. This means that individuals are available to re-establish populations in areas where they have become locally extinct, or be moved to augment numbers in an existing small population. This all helps to achieve the goal of increasing numbers of rhinos and returning them to their former ranges.

#### The translocation process

Translocations are carefully planned operations that involve capturing and moving rhinos with minimal stress. This requires an expert team of vets and other support staff. Depending on the size of the area, vegetation and terrain, the team may be able to get close enough to the rhino on foot or with four-wheel-drive vehicles to capture it. Alternatively, where conditions are more challenging, a fixed-wing aircraft may be used to spot the rhino and a helicopter used to get the vet close enough to dart the rhino. The drugs used to sedate rhinos and the veterinary care given during capture operations have been specially developed and researched over many years to ensure the animals are in safe hands.

As rhinos are such large and strong animals, but also need to be treated with great care, they are transported in specially designed crates on very robust trucks. A lifting crane is often needed to help the process of loading and unloading the rhino in its crate.

At the recipient site, translocated rhino are often kept in an acclimatisation enclosure known as a boma before release. This allows the vet to make sure that the rhino has suffered no ill effects from the journey and is strong and healthy enough to fend for itself before being set free into its new home.

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