INTRODUCTION

The translocation of wild animals involves the capture of the animals, transporting them a distance and finally settling them down in a new environment. Problems occurring during this process are nearly always related to stress, often resulting in mortalities. These problems are associated with lack of operator experience and, generally, can be prevented by appropriate management.

Successful translocation is dependent upon the operator knowing the species he is dealing with and conditions prevailing at the time. He must be aware of the climatic conditions and problems he can expect due to the terrain he is operating in. He must be able to predict all that may go wrong at every stage of the operation, managing against such possibilities until the animals are settled down at their final destination. Expertise is gained by ‘hands-on experience’ over time. It cannot be found in the literature or in discussions such as this.

Figure 15.1: Capturing delicate and easily stressed wild animals such as springbok requires experience, an understanding of the particular species and a professionally managed operation. Knowledge of the use of tranquillizers will aid in reducing stress post capture. Karoo National Park, South Africa
The greatest management focus during capture and translocation of wildlife is to prevent or minimize stress. Stress accounts for most mortalities during capture. Susceptibility to stress varies between species, and environmental factors such as ambient temperatures, time of day and type of terrain are important considerations (see Chapters 5 and 7).

15.1 FACTORS AFFECTING SUCCESS OF CAPTURE

15.1.1 Condition of animal

Animals in poor body condition (for example, during drought or at the end of the dry season, or lactating females with calves at foot) are prone to being stressed at capture. Evidence of emaciation in animals being caught should prompt postponement of the capture, if possible. During winter, in the small game park situation, supplementary feed may be offered to animals four to six weeks prior to capture to improve body condition and strength.

15.1.2 Age

Old animals are often weak and may succumb to a particularly stressful capture.

15.1.3 Ambient temperature

Capture of wild animals should be carried out during the winter months or at least during the cool hours of early morning on hot days. Tolerance to heat varies between species. For example, sable may be captured during summer, even during the heat of the day, with little apparent discomfort, whereas impala die in large numbers when temperatures exceed 37 °C. Some species sweat very little, particularly those that have evolved to conserve moisture loss. The operator must be able to determine when conditions are no longer acceptable. Remember, when obvious symptoms are noted, it is usually too late.

15.1.4 Physical terrain

Take into account the terrain over which the animals must pass during the capture. There may be reluctance in some animals to leave or enter thick bush or cross a fence. If fences need to be crossed, take the animals through a site they have used historically. Bomas should be sited accordingly. To prevent injury during transportation, minimize long, tedious journeys over difficult terrain.

15.1.5 Boma siting

Bomas should be located as close as possible to the animals due to be caught. The gate of the boma should face into the wind so the animals cannot detect the smell of human presence. Sight of the plastic sheeting of the boma is less significant. Bomas should also be set along paths used regularly.

Figure 15.2: Internal boma gate being closed after zebra have passed – good co-ordination is important. Malilangwe, Zimbabwe
while ground crews attempt to locate it. Consideration should be given to using transmitter darts and drug combinations that rapidly immobilize those species that are more prone to excitement and disperse quickly from the herd, and are then difficult to find.

15.2.2 Mass capture using the plastic boma

The plastic boma is the most widely used method of mass capture in southern Africa. This method was developed in South Africa and can be used to capture most species (from impala to buffalo, giraffe and even wild dogs). The main advantage with this method is that human/animal contact is minimized and a herd can be captured and transported as a single entity. With experienced ground crews, bomas can be sited, erected and dismantled in a single day and very large tracts of land can be covered in a short period of time. Easily stressed animals (such as kudu) can be successfully captured and transported with minimal trauma using this system. The one disadvantage of this system is that it can be difficult to select specific animals from a herd, although with experience, operators can utilize the crush and loading systems very effectively to do this.

The boma is basically a large funnel that animals are driven into by helicopter. The animals perceive the plastic walls as solid barriers and, in their attempt to escape, they run further and further down the funnel into the crush system and finally up a ramp into a large communal crate (Figure 15.4). Plastic curtains are drawn behind the animals once they enter and at strategic places down the length of the boma to encourage forward movement and to prevent animals from turning around. All species react differently during the drive towards the boma with the helicopter but species reactions tend to be predictable. Most animals are very aware of home range boundaries and may even rather challenge the helicopter than proceed towards a known danger area. The animals also tend to rely on scent rather than sight to alert them to danger and so it is extremely important to position the boma correctly.

Figure 15.4: A mass capture boma seen from the air. The boma funnels animals into a race situated by the vehicles. A transport truck and loading ramp are at the end of the race. The boma has plastic curtains that are drawn shut at the mouth of the boma and at various points within the boma. This method of capture requires skilful helicopter flying. Malilangwe, Zimbabwe
15.2.3 Net bomas

This system is useful for the capture of most species of plains game except for the largest. It is the method of choice for blesbok and bontebok, tsessebe, black wildebeest, hartebeest, lechwe, springbok and, to some extent, gemsbok. It is extremely effective for the capture of small groups of impala (up to 30 individuals). Experienced and efficient manpower is essential and there is a requirement of at least one man per animal for larger species and one man per two animals for smaller species such as impala and springbok. The animals must be blindfolded as soon as they are captured and should be tranquillized immediately after that. The net boma is usually positioned in the shape of an open box, at least as deep as it is wide. Plastic sheeting is used as the gate (the animals tend to run away from these walls toward the nets). The design should incorporate carefully positioned drop nets to prevent animal ‘pile ups’, which often result in broken limbs. The net boma should be positioned strategically (for example along an animal trail) and can be used in thick bush (for species such as impala) or open vlei/dambo areas (for species such as ostrich) depending on the species to be caught. Total physical control of the animal as soon as it is caught is of paramount importance and the use of long-acting tranquillizers is essential.

15.2.4 Net lines

Net lines are useful for the capture of species such as bushbuck, nyala and puku. Nets are concealed in thick bush and animals are driven towards them by rows of people (beaters). Lines are moved from one thicket to another as animals are captured. Nets need to be carefully concealed and helpers need to be positioned near the nets to restrain the animals as soon as they are caught (before they escape or are strangled). Prevailing winds need to be considered and captures should be coordinated by radios and so on, to improve efficiency and minimize the number of escapees.