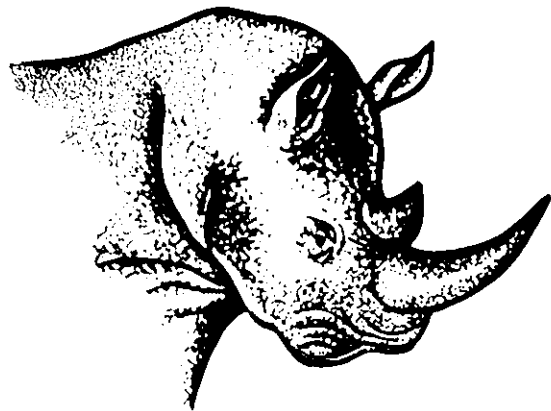


Atkinson, M. W. and Wood, P. The Re-introduction of cheetah into the Matusadona National Parks, Zimbabwe. *Re-Introduction News* 10, 7-8. 1995.

Keywords: 1ZW/Acinonyx jubatus/cheetah/National Park/reintroduction/status

Abstract: Cheetahs are distributed throughout Zimbabwe both in protected areas and on commercial farmland. Farmers made pressure to relocate some of the animals on their ground. In 1992, the government decided to relocate animals to Matusadona National Park on the southern shoreline of Lake Kariba. Four cheetahs were brought to a boma, where they spent 6-8 weeks to become acclimatised to the new area and to allow a period of veterinary surveillance.



Credit: African Wildlife Foundation

hunting. Management costs are, however, high so the opportunity to sell surplus animals to other countries will assist in maintaining the financial viability of these game ranches, and therefore benefit rhino conservation in the long-term. This principle also applies to the state-controlled protected areas, where nature conservation subsidies are not on their own always sufficient to maintain appropriate levels of management and security.

The conservation authorities in South Africa are well aware of the need to use their wildlife resources wisely, and as the issuing of CITES permits for the export of rhinos remains their responsibility, adequate controls are in place to ensure that permits are only sold to competent and appropriate institutions. Such trade will anyway be carefully monitored by the CITES Secretariat and reported on at the next CITES conference where the Parties will assess the effects of the downlisting. In the meantime, the downlisting can only benefit white rhino conservation by facilitating the spread of the subspecies and providing increased funds for effective protection and management of the wild populations. This is considered essential given the continued and increasing pressure on South Africa's rhino populations.

Contributed by Dr. Martin Brooks, Natal Parks Board, South Africa.

Translocation of Elephant Families in South Africa

The International Fund for Animal Welfare (IFAW) held a meeting in October 1994 in Johannesburg on elephant (*Loxodonta africana*) relocation. Five months previously, IFAW had funded the relocation of 144 elephants, due to be culled, from Kruger National Park to various private ranches and provincial nature reserves. IFAW paid for the transport of the animals with the view that it would provide the added incentive to relocate the elephants, thus saving them from being culled. One elephant died during the capture operation, and three were shot after breaking out of the boma they were being housed in.

The decision to fund the translocation was made by IFAW quickly and with little consultation; this was necessary because the elephants were about to be culled. There was some criticisms levelled against the organization for supporting the translocation, it was seen by some to be condoning culling. This meeting was held not only to discuss these criticisms,

but also to ascertain whether relocation has a role to play in elephant conservation in general.

A major objective of the meeting was for IFAW to consult with various elephant experts on the welfare considerations to be addressed when or if elephants are to be relocated in future. If it was thought that relocation had a role to play in management of elephant populations, then the following were needed:

- a. criteria for the evaluation of proposed relocation exercises in order to ensure and maximise benefit to elephants from both conservation and welfare perspectives. Where this is not achievable, areas of concern will have to be established which would need to be assessed on a case by case basis;
- b. the best operational practise needs defining;
- c. minimum and optimum monitoring requirements to allow the assessment of relocations undertaken need defining, and improved assessment of future relocation proposals and related operational procedures need to be developed.

The meeting concluded that, for the short-term, relocation of whole family units (but not orphans resulting from a cull) is a viable and ethical alternative to culling in Kruger National Park, and is potentially an important management tool for problem populations in other parts of Africa.

Contributed by Cynthia Moss, African Wildlife Foundation, Kenya (see page 18).

The Re-introduction of the Cheetah into the Matusadona National Parks, Zimbabwe

Cheetah (*Acinonyx jubatus*) are distributed throughout Zimbabwe, both on Parks and Wild Life Estate (PWLE) land and on commercial farm land. These populations tend to be small and widely dispersed. However, the last decade has seen significant increases in numbers of cheetah in certain commercial farming areas, particularly the south and south-east lowveld areas. The country's total population is now estimated to be at least 1300. As cheetah have CITES Appendix II status in Zimbabwe, 50 animals per year are allocated for sport hunting. However, several ranchers still have surplus animals, many of which are beginning to kill livestock, and they have expressed a desire to see these animals relocated within the PWLE. In 1992, the Department of National Parks and Wildlife Management (DNPWM) proposed the relocation of a breeding population of cheetah from these farming areas to a suitable area within the PWLE in the Zambezi Valley in the north of Zimbabwe.

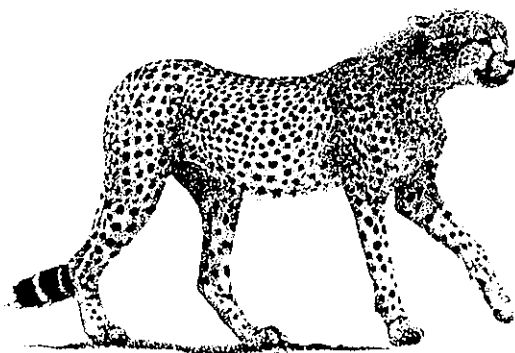
Matusadona National Park (MNP) is situated on the southern shoreline of Lake Kariba (28°E 30°S) and provides suitable habitat for cheetah. The lake was last at full supply level in 1981 and the water level has steadily declined over the years since then, fluctuating from year to year and establishing a new, radically altered ecosystem. The north-east of the park is characterised by mixed woodland and mopane scrub bordered by vast expanses of shoreline grassland which have become populated by large herds of impala and buffalo.

In May 1993, a boma was established to allow the cheetah to become acclimatised to the new area and to allow a period of veterinary observation prior to their release. The boma consists of a circular (200 m circumference) fenced area (4 m high) with both grassland and mopane scrub areas accessible to all

animals inside. A circular water trough has been constructed under shade and the entire perimeter is surrounded by three-strand electric fencing. An observation platform has been established outside the boma, adjacent to the water trough.

In May 1993, a group of four cheetah was successfully maintained in the boma and later released. One of these animals (adult male) was fitted with a radio-telemetry collar (Telonics, Arizona) allowing post-release monitoring. Another 11 animals have been subsequently held in the boma and released (in batches of three or four), six of which are currently radio collared. The cheetah were captured using helicopter and ground teams and were either transported by road in crates or by light aircraft to Matusadona. The designated founder population is 20 animals and all releases will be the result of wild-to-wild translocation.

All animals have spent introductory periods of six to eight weeks in the boma prior to release. Feeding regimes have been based on expected feeding preferences in the wild. All groups have been offered freshly killed impala every two to three days and it has been noticed that after release, impala constitute the preferred prey species. The size of the boma appears adequate for groups of three to four individuals and no stereotypic behaviour associated with boredom has been noticed. Normal diurnal activity patterns appear to have been maintained although a lack of hunting exercise has been a concern with animals gaining body fat during the boma period.



Credit: Doreen McColaugh/African Wildlife Foundation

It has been noticed, however, that after release normal activity is resumed. Lion activity around the boma has been a problem and several attempts by lions to gain access have been witnessed. None have been successful but the importance of lion-proof fencing has been highlighted.

The re-introduction project has been a valuable learning experience. It has allowed methods of cheetah capture to be designed and refined. It has allowed the establishment of veterinary health protocols including general cheetah management, feeding regimes and housing requirements. It has allowed experience to be gained in radio-telemetric device fitting and monitoring and has provided protocols for boma management and release.

Radio telemetry has provided an extremely important management option. The radio collars are tolerated well by the animals and regular tracking from both the air and the ground has provided much information on movement and social habits of individual cheetah. This means of monitoring will also be instrumental in assessing the success of the

programme. To date, one adult male cheetah has been illegally hunted in an adjacent communal farming area. This was discovered by tracking the collar to a hut where the hunter had hidden both the collar and the skin of the cheetah. One uncollared female is reported to have had cubs shortly after release from the boma: however, their status at present is unknown.

The success of this programme can only be assessed in time, once the founder population has been truly established. However, the fact that the animals translocated so far are surviving in the face of considerable predator competition and are interacting socially is an encouraging indicator of the programme's potential. This short-term success also indicated the need for a national cheetah strategy to further expand the cheetah's range and to relieve problems associated with population overgrowth in certain areas. The cheetah programme continues in 1995 with a further seven animals to be translocated.

Contributed by M W Atkinson and P. Wood, Department of National Parks and Wildlife Management, Zimbabwe.

UPDATE ON NEW ZEALAND

Invertebrate Re-introduction in New Zealand

With one exception, re-introduction of invertebrates in New Zealand for their conservation has been a recent phenomenon. The earliest successful attempt was carried out in 1977 involving the giant weta *Deinacrida rugosa* (Orthoptera: Stenopelmataidae). Forty three weta were transferred from Mana Island to Maud Island in the Cook Strait region and a large self-sustaining population was established. Other re-introductions have occurred since 1990 and involved an undescribed species of giant weta (*Deinacrida n. sp.*) and three subspecies of giant landsnail (*Placostylus ambagiosus*). These subspecies are *P. a. whareana*, *P. a. annectens* and *P. a. paraspiritus*. The reasons for the re-introductions were to increase the number of populations to two in the cases of the weta, and *P. a. paraspiritus*, and to create a protected population for each of the others. These are reported in detail in an article by the same author in 'Re-introduction Biology of Australian and New Zealand Fauna' (ed. Melody Serena, Surrey Beatty and Sons Pubs., NSW, Australia, 1994). Self-sustaining populations have not been established but transferred weta and their offspring have bred.

Interesting observations of *P. a. whareana* and *P. a. annectens* include transferencees attempting to return to the site they were collected from - a maximum distance of 66 m. Thus despite being removed from sub-optimal forest habitat (grazed, eroding, feral pig and rodent predation) to fenced and predator-free habitat within their known range, some snails have tried to return to their original locations - in one case three times. Neither of these subspecies have bred at the new sites, but *P. a. paraspiritus* has and there has been no sign of dispersal from its re-introduction area.

The undescribed weta species has been transferred to four locations with transferencees and their offspring having bred at two sites. However, it is too early to determine whether self-sustaining populations have established. The weta occurs 'naturally' at one location living in and eating the predominant woody plant there, gorse, *Ulex europaeus*, (considered a weed in New Zealand). We do not know what its original preferred habitat was but presume it was forest which occurs as a few