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Re-introductions and translocations of large mammals in Southern Africa

Black Rhino Re-introduction to Zambia

The black rhinoceros, once extinct, returned to Zambia during 2003, when five animals were released in a sanctuary in North Luangwa NP (Re-introduction News 23). The first calf was born in 2005. During June 2006, 10 additional rhinos were flown in: three males and seven females from the Eastern Cape, Kruger NP and Pilanesberg NP. The local community attended a 'hand-over' ceremony, when the rhinos were given local names and ceremonial blessings. During the following weeks, each rhino was fitted with an implant radio transmitter and freed from its pre-release pen into a new, 150 km² fenced sanctuary, adjacent to the first sanctuary. Initially radio tracking was undertaken from a light aircraft or vehicle. Later, animals were tracked on foot, to determine their condition and the variety of browse eaten. Two monitoring teams were deployed. In the first sanctuary, they aimed to see and identify each rhino every month. In the new sanctuary, they aimed to hear the signal of each rhino every three days and to see each rhino every fortnight. Several rhinos initially lost condition after release. Even after being freed, some drank from a boma trough. But others found pools in the Lubonga River - although flow had ceased, pools in the river bed lasted the dry season.

A young cow that was not eating satisfactorily was the first rhino freed during 2006, because it was hoped that she would feed better in the sanctuary. She was monitored closely, but was never seen feeding. She was immobilized twice and examined by a veterinarian. However, she died a month after release. Her carcass was found quickly and a vet conducted a post mortem examination. She had a

large, closed, pus-filled abscess in the abdomen, many ulcers in the stomach mucosa and numerous bot parasites in the stomach. Probably she died primarily because of a gastrointestinal problem with gut stasis, possibly caused by stress and the change in diet, with the abscess as a contributing factor. The new sanctuary fence was broken often, particularly soon after construction, by buffalo, zebra and elephant. One rhino was pregnant when she arrived at Luangwa and she broke out of the sanctuary soon after release. After part of the fence was removed temporarily, she was herded back into the sanctuary using a helicopter. However, she broke out again and this time she was left where she was, while Zambia Wildlife Authority (ZAWA) officers were deployed nearby. During early October, they found the spoor of a baby rhino - only the second born in Zambia during the last 20 years. With the arrival of the second batch of rhinos and the training of Wildlife Police Officers in North Luangwa, ZAWA assigned 15 recruits to rhino security. Although poaching incidents in the Game Management Areas to the west, north and east of the park declined during 2006, cf. 2005, there was increased poaching by well-organized commercial gangs in the Munyamadzi corridor to the south.

This re-introduction is an international initiative between the Governments of Zambia and South Africa, under the umbrella of the SADC Regional Program for Rhino Conservation (RPRC). The implementing organizations include ZAWA, South African National Parks, the South African North West Parks Board and the Eastern Cape Parks Board, Frankfurt Zoological Society's North Luangwa Conservation Program (NLCP) and Frankfurt Zoo.

Large Mammal Re-introductions to Limpopo National Park

The establishment of transfrontier conservation areas (TFCAs) is a recent initiative in southern Africa. Their proponents hope that TFCAs will support sustainable economic development, particularly of tourism. During 2002, the Great Limpopo Transfrontier Park (GLTP) was proclaimed, with the signing of a treaty by Mozambique, South Africa and Zimbabwe. The GLTP is intended to link Limpopo NP in Mozambique, Kruger NP in South Africa and Gonarezhou NP in Zimbabwe, as well as intervening communal areas, to form a single conservation area of 35,000 km², managed as a single unit across international boundaries. Formation of the GLTP is the first phase in the establishment of a larger transfrontier conservation area that will include Mozambique's Banhine and Zinave NPs, the Massingir and Corumana areas and areas in between, as well as private and state-owned conservation areas in South Africa and Zimbabwe that border on the transfrontier park.

Development of the new Limpopo NP, formerly Coutada (hunting area) 16, is important to the development of GLTP. Limpopo NP is c.10,000 km² and immediately east of Kruger NP. For many years, it was separated from Kruger by a wildlife-proof fence. The Mozambican civil war saw the elimination of many animals from Coutada 16 and its occupation by numerous people and domestic livestock. Now the Peace Parks Foundation is assisting the National Directorate for Conservation Areas to develop this park. Activities have included de-mining, a

community development program, establishment of a 350 km² wildlife sanctuary, ranger training and deployment, and drafting tourism and management plans.

It was believed that tourists would visit Limpopo only once there were substantial numbers of wildlife. Limpopo and Kruger have similar landscapes and vegetation and so Kruger was an obvious source of wildlife for Limpopo. There were two options. The first was to remove the fence that divided these parks and allow animals to move across the international border in their own time. However, it was thought that most species would take years to move in sufficient numbers to establish populations at densities that would attract tourists. The second option was to translocate animals from Kruger. During 2001 - 2006, 3,885 large herbivores were moved to Limpopo (*see table 1*). Initial releases were in the sanctuary, the location of which had been chosen by the local communities in order to ensure that no people were resident in it. Once community consultations and the management and tourism plans were completed, the wildlife would be allowed to move out of the sanctuary into the remainder of the park. Then the enclosure would be an intensive protection zone for rare species such as rhino, sable and roan antelope.

This multispecies program was planned to adhere to the IUCN Guidelines for Re-introductions. It started during October 2001, when 25 elephants were translocated from Kruger as a trial run. Elephants in each of three cow herds, as well as four adult bulls, were fitted with collars to track their movements. All but one of these animals headed straight back to Kruger! During 2002, >1,000 animals were translocated. Two white rhino bulls that had walked through fence breaks into Limpopo from Kruger were moved to the sanctuary to protect them from poaching. During 2004, ten more white rhinos were translocated to join them. Rhinos in the GLTP, as elsewhere, are susceptible to poaching and Mozambique has the dubious distinction of being the only country

where the white rhinoceros has twice been hunted to extinction.

The first buffaloes were moved to Limpopo during 2004. Buffalo translocations are of particular concern, because buffalo and domestic cattle share diseases such as brucellosis, foot and mouth disease (FMD) and bovine tuberculosis. Bovine tuberculosis became endemic in Kruger after being introduced by cattle, and the buffalo is a principal host there. Buffaloes can also be asymptomatic carriers of FMD. Control of animal and human diseases is a major challenge facing the development of TFCAs. The problems of the numerous people and domestic animals in Limpopo are being addressed by a voluntary resettlement program and compensation packages. During 2005, roan antelopes were translocated to Limpopo for the first time. Meanwhile, the legal movement of people between Kruger and Limpopo was facilitated by the construction of a new border post. Wildlife movements were facilitated by the removal of part of the fence along the international border. During December 2003, South African and Mozambican ministers removed a symbolic 20 m of fence and since then other sections, kilometers-long, have been dismantled. Consequently, many animals have walked from Kruger into Limpopo. The progress of these re-introductions was assessed recently when Limpopo staff used a helicopter to count large herbivores in the south-west of the park as follows: Elephant - 630, Nyala - 257, Kudu - 273, Waterbuck - 86, Zebra - 325, Giraffe - 23, Wildebeest - 358, Buffalo - 225, Impala - 496, Sable - 62, Roan - 6, Lichtenstein's hartebeest - 7, Grey duiker - 56, Ostrich - 36, White rhino - 16, Steenbuck - 12, Warthog - 48, Bushpig - 8, Bushbuck - 1, Domestic cattle - 3,142 & Domestic goat - 527. Many elephants have walked across the international border, but many more will have to follow if the creation of the TFCA is to lead to a significant reduction in the number of elephants in Kruger. And even then, the reduction in elephant density in Kruger will be relatively short-term.

Table 1. Summary of numbers of large mammals translocated from Kruger NP, South Africa, to Limpopo NP, Mozambique (data courtesy of Limpopo NP staff)

Species	Year						Species Total
	2001	2002	2003	2004	2005	2006	
Elephant	25	48	38	0	0	0	111
White rhinoceros	0	2	0	10	0	0	12
Buffalo	0	0	0	49	0	49	98
Blue wildebeest	0	264	235	98	98	64	759
Impala	0	588	273	127	369	373	1730
Zebra	0	158	366	195	205	100	1024
Waterbuck	0	15	9	0	18	6	48
Giraffe	0	4	13	15	14	15	61
Roan	0	0	0	0	25	0	25
Lichtenstein's hartebeest	0	0	0	0	7	10	17
Annual Total	25	1,079	934	494	736	617	3,885