



Rubin Els, Thaba Tholo CEO.

BLACK RHINO *Translocation*

by Fiona Zerbst | Photos courtesy Thaba Tholo | Photos © Meldt van der Spuy

Rhino Files



Eastern black rhino (*Diceros bicornis* ssp. *michaeli*).



Patricia, the last Eastern black rhino in Rwanda's Akagera National Park, had no inkling of her significance. She had survived the country's brutal civil war and the incursions of poachers, but as the last remnant of a 45-year-old herd (albeit with a snare wound on one of her back legs), she represented the flickering hope of a national park that had seen too much loss. After all, rhinos were extinct in Rwanda until 1957, when four females and one male were translocated from Tanzania.

She had no notion that, in faraway South Africa, plans were afoot to bring her to South Africa, find a bull



This is bigger than any one person or the private sector. South Africa houses 85% of the world's rhino, so I really believe it's our responsibility to give back, where the animals have gone extinct.

– Rubin Els

for her, and breed up the numbers of the Eastern black rhino (*Diceros bicornis ssp. michaeli*). In 2004 – just ten years after the genocide that ripped Rwanda apart – Rubin Els, then general manager of 36 000ha Thaba Tholo game farm, visited Rwanda at the behest of Dr Claudia Schöne, the vet monitoring Patricia, with this joint venture in mind.





In 1997, when Thaba Tholo got involved with breeding Eastern black rhino, there were approximately only 500 left in the world. With great foresight, Tilman Ludin, the founding director of Thaba Tholo, and Dr Anthony Hall-Martin, then Director of Conservation and Development and Director of Parks for SANParks (and also one of the founders of African Parks), decided to move populations from SANParks and Addo Elephant National Park to Thaba Tholo to house a safe nucleus of *D. b. michaeli*. "Twenty years ago, the Thaba Tholo shareholders had the vision to acquire some of these animals knowing that, in the future, the population could be vitally important,

The decision was made by the IUCN African Rhino Specialist Group and others involved in the process that a level of 85% and above *D.b.michaeli* would be the most suitable for selection of animals to translocate in order to ensure that the founder population in Akagera would be sufficiently genetically diverse.

despite the fact that the Thaba Tholo founding population only included 27 animals, introduced by the less than ideal staggered introductions over a six-year period and a terribly biased sex ratio of male to female," said Els, when *Wildlife Ranching* visited him on the farm. "They took a risk in spite of numerous challenges and some opposition from conservation circles, because *D.b.michaeli* are an extralimital subspecies to South Africa."

However, logistical challenges beset the project to bring Patricia to South



Africa. Rwanda was reluctant to part with their only remaining rhino, and Akagera was not the best home for a founder population of rhino because it was largely unfenced and, although its eastern boundary was secured by lakes and marshes, the western boundary was grazed by cattle.

"Introducing these rare but dangerous animals to the park, without a fence between them and the villages, would have been a recipe for disaster," said Els. With the circumstances less than ideal, Els backed away from the joint venture. "Patricia died in 2007 and the black rhino went extinct in Rwanda," he said.

PLANNING FOR TRANSLOCATION

That was not the end of the story, however.

Rwandan president Paul Kagame has a long-standing relationship with philanthropist Howard G. Buffett (Buffett's foundation has invested more than \$140 million in Africa's Great Lakes region) and conservation initiatives seemed a logical part of national upliftment. In 2010, the Rwanda Development Board (RDB) and the African Parks Network entered into a 20-year renewable agreement to jointly manage Akagera, with funding provided by Buffett's foundation (as well as the People's Postcode Lottery and the Dutch government). African Parks turned the park's fortunes around in just six years – it was fenced, security was increased, and rangers were trained in preparation for the reintroduction of locally extinct species. In a bid to make Rwanda a Big Five nation again, there was a push to reintroduce lion and rhino, which was successful. The park began to flourish "Poaching is at an all-time low and tourism has increased by 550% since we first assumed management," says Andrea Heydlauff, communications director at African Parks.

It was at that point that Els was approached in order to sell a consignment of 20 *D.b.michaeli* to

Akagera. "The delay actually worked to our advantage," he said. "I would have sent five rhino initially, but in the time it took to organise sponsorship and logistics, we had more rhino to offer – one wants to be able to send meaningful numbers, to give the rhino the best possible chance of survival and breeding

success." Astonishingly, the Thaba Tholo *D.b.michaeli* had tripled their numbers in just 20 years. "This proves that we have been doing something right," said Els. "We didn't plan it – we just gave them the best possible habitat, food and security and let them get on with what they do best – breeding!"



All Thaba Tholo Eastern black rhino were sampled and their genetic data analysed by the Veterinary Genetics Laboratory at the University of Pretoria as part of the RhODIS® programme.





Selecting the best animals for translocation involved a fair amount of planning. No injured animals could be sent, nor rhinos in their third trimester of pregnancy. “We wanted to send only animals in their prime (six to 12 years old), but older, wiser animals are dominant and you need that leadership. We didn’t consider any rhino older than 25, however – the risk of them adapting would have been too great,” said Els. “We also took some calves between 18 and 22 months old, for the sake of age demographics.”

Unfortunately, two males died before they could be translocated, but Thaba Tholo was able to send 10 females and eight males in two separate trips, just days apart. “Kenya was meant to send another 12 *D.b.michaeli* to Rwanda around the same time, but that did not happen

– obviously, from a metapopulation point of view, it would have been better to start with 32 rhino, but it was not to be,” said Els.

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Genetics proved a sticking point, turning the initiative into a scientific project as much as a translocation

project. Two independent studies revealed that genetic signatures of *D.b.minor* bulls that had been introduced to the *D.b.michaeli* population in the Addo Elephant National Park in 1977 to supplement the population had remained in the population that was eventually translocated to Thaba Tholo. In spite of the removal of the bulls and what was believed to be all their offspring, the presence of *D.b.minor* genetic signatures was observed in the Thaba Tholo population. The decision was made that all Thaba Tholo animals would be sampled and their genetic data analysed by the Veterinary Genetics Laboratory at the University of Pretoria as part of the RhODIS® programme, to determine the proportion of subspecies admixture that was present in each animal. Based on the recommendations of multiple experts, the



During February and March 2017, a founder population of Eastern black rhinos was carefully selected and captured. Scan the QR code or visit <https://vimeo.com/214849544> to watch a short video on the black rhino capture at Thaba Tholo: ‘African Parks – Rhinos Return to Rwanda’.



The rhino selected and captured for translocation had to be quarantined for six to 12 weeks prior to departure.



Ros-Amy and
Rubin Els

decision was made by the IUCN African Rhino Specialist Group and others involved in the process that a level of 85% and above *D.b.michaeli* would be the most suitable for selection of animals to translocate in order to ensure that the founder population in Akagera would be sufficiently genetically diverse, while maintaining the majority of *D.b.michaeli* genetics, in light of the critically endangered status of the subspecies and the significance of re-establishing an extinct

species in a former range state. Fortunately, the majority of the Thaba Tholo animals proved to be more than 85% *D.b.michaeli* with minimal *D.b.minor* influence that allowed a wide range from which to select the most suitable foundation animals. The genetic material and data from all animals translocated is now available in order to support future monitoring of the population in Akagera from the foundation stock, which is a unique asset and will allow the future

genetic monitoring of the population.

Els said the genetic tests had a positive outcome. "I don't think there's a population of wild animals distributed as a founder population where the genetics have been a known factor," he said. "It's absolutely unique. If it ever comes down to micromanagement to determine the suitability of animals for translocation – and if Kenya does get involved – everyone has to meet the same stringent criteria. It raises the bar."



LOGISTICAL CHALLENGES

Working with *D.b.michaeli* was never going to be a picnic.

"They are highly intelligent and unpredictable animals," said Els. "They are always wondering what they can chase or break, or if they can pick a fight. *D.b.michaeli* bulls weigh 1.4-1.9 tons, whereas *D.b.minor* bulls weigh around 1-1.35 tons." In short, they are a handful, and can be tricky in the boma, where they had to be quarantined for six to 12 weeks prior to departure.

"They can so easily injure themselves, or go off their food and lose condition, or go ballistic," said Els. "They had to be managed on an individual level. After a short time, however, they started eating out of my daughter Ros-Amy's hand."

The translocation, which took place in May, almost didn't happen. On the day the first batch of rhino was due to fly out from O. R. Tambo (the closest TOPS-approved airport), everything went according to plan: three vets and their teams monitored the animals, microchips and identifying characteristics were checked, animals and crates were weighed. Everyone was 90 minutes ahead of schedule – then compliance officers found some typos on the permits. "We were told the animals couldn't go anywhere," said Els.



"It was a public holiday, which necessitated frantic calls to the Rwandan ambassador and the Director-General of the Department of Environmental Affairs. Eventually Alder Chimanzi, from the CITES Management offices in Polokwane, rose to the occasion, flew back from KZN, drove to Polokwane and issued a new permit. The original permit was then flown by specially chartered plane to Midrand, where a driver collected it, to be driven and delivered to the airport, literally only minutes from the deadline time!" The tension was palpable,

since the non-refundable R1.2m for the commercial cargo flight was on the line, as well as the welfare of the rhino, having to be transported back to Thaba Tholo.

The rhino were in transit for 30 hours, which was risky, and vets (headed by Dr Andre Uys and Dr Louis Greeff) had to monitor the animals around the clock. "The teams didn't sleep," Els recalled, adding that the risk of a hijacking, en route to the airport, was another cause for concern. Even when the rhino were safely ensconced in the bomas in Akagera, the teams



did not relax. "We only felt relief once they walked out of those bomas quietly and calmly," said Els. "They could have gone berserk, bumped into one another upon release, fought and perhaps caused a mortality...it was a hugely stressful time."

The Thaba Tholo team took Lucerne from the property and 'Boskos' antelope cubes to Rwanda to minimise feeding stress, but they quickly found that the habitat was ideal for the rhinos. "There is a lot of water and fantastic food – a lot of bushes and trees that are similar to those in

South Africa," said Els. "There are open areas and thickets. So far, the animals have stayed within a 5km radius of the release site, but as they feel more secure, so they will venture further. Sadly, Hungarian ecologist Krisztian Gyongyi was killed by one of the animals whilst tracking one of the released rhino bulls, which was a significant blow. "I immediately felt responsible," recalled Els. "One feels tremendous guilt. But the outcome was that we decided to give the rhinos space and let them find their feet, without monitoring them too closely."

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MAKING CONSERVATION HISTORY

Els believes the project was a ground-breaking one for a number of reasons, not least because it proved a bridge-building exercise between the governments of South Africa and Rwanda. "Rwandan people were so enthusiastic – it was a big deal for them to get *D.b.michaeli* back," he said. "They were even more committed to the success of the project than we were, because they had lost so much. We are confident Rwanda has the political will, security measures, means and ability to look after the rhinos – they're protected by an army battalion, a rhino tracking and protection team, a canine anti-poaching unit and a helicopter for air surveillance!"

The significance of this joint effort lies in the fact that the subspecies had become extinct; we have restocked not just a national park but a country.

Restocking Akagera with *D.b.michaeli* is a big deal. "There have been many large translocations of rhino before, numbers-wise; but the significance of this joint effort lies in the fact that the subspecies had become extinct; we have restocked not just a national park but a country," said Els. "Rwanda is only the fourth country in Africa that possesses *D. b.michaeli*."

He cautions, however, that the success of the project will only be measurable after decades. "We'll measure success only 20 to 40 years from now, once the animals have bred and neighbouring countries have been stocked," said Els. "Thaba Tholo's population is still small, and we don't



This translocation project was undertaken by African Parks in collaboration with the Akagera Management Company (AMC) and the Rwanda Development Board (RDB), with generous support from the Howard G. Buffett Foundation. Scan the QR code or visit <https://vimeo.com/217625845> to watch a short video on the black rhino release in Rwanda: 'Rhinos Return to Rwanda'.



have that much space. We need safe places for them to breed. We have learnt a lot from pioneers like Ian Player and his team members, who were innovative, selfless and brave enough to say, 'There are a few white rhino left – let's spread our risk, put some in Kruger, put some in private hands.' There was a lot of resistance at the time, but they persevered.

"Two governments, an NGO and a private game farm facilitated this process, which brings real hope to Rwanda. We are bringing back a species, which will generate revenue for the country and restore the nation's pride. This is bigger than any one person or the private sector. South Africa houses 85% of the world's rhino, so I really believe it's our responsibility to give back, where the animals have gone extinct."



Executive editor's comment

This project is a wonderful illustration of the contribution that private game ranchers can make (and have made) to conservation and biodiversity within our own borders and Africa as a whole. Not only has it cost Thaba Tholo's shareholders money, it has taken years of scientific endeavour, patience with the regulatory authorities and on-the-ground hard work and effort to achieve this remarkable goal. Similar largely unrecognised contributions with the southern white rhino, Cape mountain zebra, bontebok, blesbuck, to name just a few larger mammals, have mostly gone unappreciated, as have initiatives regarding the oxpecker, the leopard tortoise and the Waterberg copper butterfly. Well done to Rubin Els and Thaba Tholo!

▼ Thaba Tholo team members who were involved in this project.

At the back – from left to right: Matimba Mahani, William Khanya, Dennis Stander, Piet Monyane, Jan Myburgh, Alpheus Kobedi, Darryl de Lange.

In front – from left to right: Gavin Kriel, Anina Mortassagne, Andrien White, Ros-Amy Els, Samuel Sekoboane, Rubin Els.

Scan the QR code or visit: <https://vimeo.com/179034087> to watch the video: 'About Thaba Tholo'.



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