



Photo: Christian Spenta

Thank you to all the photographers whose beautiful images we have used in this book. In a few cases we didn't know who had taken the photos but we had them in our files so assume that the photographers had already given us permission to use them.

Thanks also to Don Guy for allowing us to use his lovely rhino drawings.

Back where they belong

The story of the Black Rhino
Range Expansion Project

2003 to 2017 so far

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ADVENTURE PROVINCE
British Columbia
TRAVEL & TOURISM AGENCY



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Artwork: Dan Gup

This book is dedicated to those black rhinos who had to
leave home and set up elsewhere

"Black rhino, and rhino generally,
are under huge pressure. We
really have to fight for them.
If they don't have champions
they are doomed to disappear."

JACQUES FLAMAND

“

I would like to welcome you
all to the first ever release of
black rhino on to private land
in KwaZulu-Natal. It has been
a long journey ...

Dr Jacques Flamand
October 2004



**BLACK
RHINO
RANGE
EXPANSION
PROJECT**

There were perhaps 3500 black rhino left throughout Africa at the beginning of the 21st century. Some of them were in KwaZulu-Natal, on Ezemvelo KZN Wildlife reserves. They were well protected, but population growth was slow, possibly because the reserves were reaching ecological carrying capacity. When this happens, black rhino population growth rates tend to decline.

Every year, Ezemvelo would auction a few black rhino to reduce pressure on their reserves. This generated useful funds for conservation, but from a population growth point of view, it was not optimal. Only five or six were sold at a time and these small, isolated groups did not contribute significantly to growth of the overall South Africa population of black rhino.

Rapid population growth is essential for the survival of critically endangered species, so something better needed to be done.





Photo: Rick Moseley

Conservationists from Ezemvelo and WWF came up with a plan to stimulate black rhino birth rates by creating new populations. Experience at Madlingwe in Zululand had shown that good growth rates could be achieved where founder populations were released on to large areas with no other black rhino present.

All suitable land belonging to Ezemvelo in KwaZulu-Natal already had black rhino on it. However, there was still other excellent habitat in the province that was not state-owned. The plan was to create partnerships with the owners of that land and release founder populations of black rhino which could then grow rapidly.

Growth would be achieved in two ways: the removal of black rhino from source populations would stimulate growth in those populations and calves would be born on the new sites.

And so, in 2003, the Black Rhino Range Expansion Project began. Black rhino would be returned to as much of their historical range as possible. They would be put back where they belong.

Later, the Eastern Cape Parks and Tourism Agency joined the project as partners with WWF and Ezemvelo.

The removal of significant numbers of black rhino from protected areas such as Hluhluwe-Mfolozi Park to create new populations would also stimulate growth in those populations.

It was decided that Ezemvelo would retain ownership of the founder rhinos, but that the progeny would be shared between Ezemvelo and the landowners on a fifty-fifty basis. That way, when populations grew large enough to have removals of their own, the landowners would benefit from being able to sell black rhino themselves if they chose to.



Photo: Christian Speke

A wide-angle photograph of a savanna landscape. The foreground and middle ground are filled with lush green vegetation, including various trees and shrubs. The trees vary in size and shape, with some having flat, umbrella-like canopies. The background shows a clear blue sky with scattered, fluffy white clouds. The overall scene is bright and natural, representing a typical African savanna environment.

The most important selection criteria for choosing project sites were that the habitat should be suitable and large enough to carry a population of about 50 black rhino and that the security of the place should be adequate to contain and protect black rhino. The potential to expand and even join up with other existing black rhino populations was also important.

"While black rhino numbers showed a steady recovery throughout the late 1990s and into the early 21st century after bottoming out at about 2400 in 1995, there were still significant concerns about their long-term viability due to the fragmented nature of the remaining populations," explained Dr. Martin Brooks, former director of Scientific Services at Etosha KZN Wildlife.

"To overcome this, the IUCN African Rhino Specialist Group was steering the need for reserves to be especially focused on the few remaining genetically viable populations and, indeed, on the creation of more large populations to secure the species' long-term future. At the same time, WWF complemented the black rhino as one of its priority global species and dedicated its talent to focus support to areas where programmes were most likely to succeed. The sharing of a common vision led to the birth of the Black Rhino Range Expansion Project.

Dr Holly Dublin, amongst others, played a pivotal role in bringing the founder, WWF-Netherlands, and Etosha KZN Wildlife together to form the strong partnership necessary for success."

“

I joined WWF-Netherlands in 2005 and the first two projects I had to oversee were on tiger and elephant range in Indonesia and the Black Rhino Range Expansion Project. Two different worlds, two totally different projects: the former a newly-created state protected area, helpless against the tides of settlers despite a big project team; as opposed to the Black Rhino Range Expansion Project that offered a clear and beneficial proposition to private and community landowners, with immediate impact, despite a modest budget and only a core team consisting of Paula Sherriff for communications, and Jacqui Flanagan as project leader.

Right from take-off, the Black Rhino Range Expansion Project developed as an exemplary project: landowners responded immediately and pooled their land, groups of black rhinos were translocated, and soon, the first calves were born. I was always impressed with the professional land management by the game reserve managers, the wholehearted support and expert advice of the Etosha KZN Wildlife staff, but foremostly, the drive to make this initiative a success from the side of Inospac. He clearly was not just doing a job - his cause is the protection of the black rhino.

Wim Buisson, then International Project Manager for Species Conservation at WWF-Netherlands



Precious footprint



“

Ezemvelo KZN
Wildlife has been
very courageous.
They have ventured
into partnerships to
increase the black rhino
population at great
expense to themselves.
It is a long-term
investment because
this way we hope to
increase the black rhino
population rapidly.
Dr Jacques Flomond

”

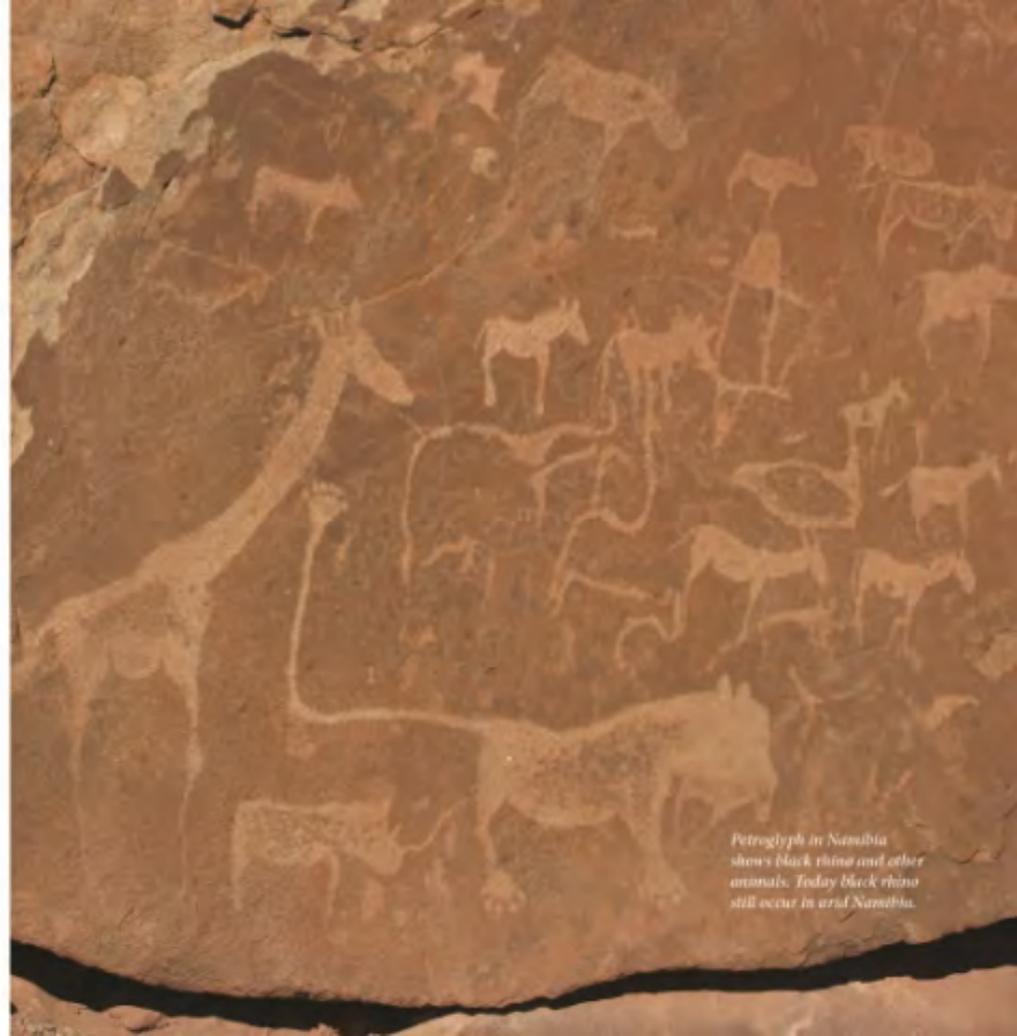
The histories of black rhino and white rhino in the 20th century were quite different. A hundred years ago, the southern white rhino was almost extinct. The species was saved by the creation of IMfolozi Game Reserve, where numbers could recover. Eventually their numbers built up and some were moved by the then Natal Parks Board to different parts of South Africa. By 2016, there were more than 20 000 white rhino.

In contrast, black rhino were plentiful in Africa until the middle of the twentieth century when their numbers plummeted to about 2500.

“

With the Black Rhino Range Expansion Project, Ezemvelo aims to achieve the kind of conservation success the then Natal Parks Board had with white rhino, which were brought back from the brink of extinction.”

Bheki Khoza,
Senior Manager:
Conservation & Parks
Ezemvelo KZN Wildlife



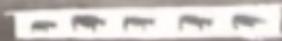
Petroglyph in Namibia shows black rhino and other animals. Today black rhino still occur in arid Namibia.



The first TEN Project SITES

Year	Project Site	No. of black rhino received
2004	Mungwarwana	20
2005	Zulaland Rhino Reserve	27
2006	Pongola	13
2007	Sonkhanda	11
2009	Mduna Royal	14
2010	Selati	17
2011	Balule	13
2012	KwaZulu	13
2013	Nambiti	12
2015	Makalala-Pidua	19

* some were 1996 or later



SITE I: MUNIYA WANA

Choosing the first site was somewhat nerve-wracking. Jacques recalls, 'Could we find an area large enough? Could it be protected adequately? Would the landowners like us to create a single large area? And how long would all this take?'

A couple of years with good black rhino habitat to Zafelani presented themselves. This was the first choice because it had excellent security, the ability to monitor and manage black rhino and had been in negotiation with their neighbours for some years about amalgamating to create a bigger conservation area. The black rhino provided Lee Corbridge and Kevin Parnham with the impetus to resolve all issues quickly, resulting in the creation of the Muniya Wana Game Reserve, named after a river nearby through it.

At first the area was 10 000 hectares, but they undertook to increase this in time, and here it is now.



The project has helped restore much damaged habitat. It was so rewarding watching fences being pulled down and cattle being removed so that natural vegetation could come back.

Dr Jacques Romard





There was a lot of excitement at the first release. Many VIPs attended. Even then at the eleventh hour the custodianship agreement hadn't been signed. The rhinos had already started arriving and Jacques got the landowners to sign literally on the bonnet of the Land Rover just before the first crate was opened.





Dr Job Lillo, WHO/FAO Director of Conservation
also in green figure, wasn't waiting for the
news...



The air was filled with excitement and
message since through the rhino transport
tracks were approaching the reserve, he was
waiting at one of the release sites equipped with a
game-drive vehicle parked at what we thought was
a sufficiently safe distance. This was particularly
necessary since the Chairman of the KZN Nature
Conservation Board, Patrick Selloko, was seated
near the left front wheel, to get the best possible view
of this historic release.

As was expected, with the well-defined release
technique, the crate was delivered, the rhino was
checked and the crate door was carefully opened
from above. All expectation was that the rhino
would exit the crate, give a few sneezes, and rush off
into the bush. Well, not to worry, their reserved
temperament, the rhino exited the crate, gave the
traditional sneeze, and raised to face the viewing
which as it to say, Who is responsible for this
incident?

The rhino then charged the vehicle, stopping just
short in a cloud of dust. Well, if that wasn't enough
to give us all heart failure at the vulnerability of the
chairman, the rhino quivered again and stuck his
horn deep into the left front tyre. This of course
was followed by a loud evacuation of air from the
tyre, and the vehicle dropped to the point that the
rhino and the chairman were eye-to-eye for a brief
moment.



“

Fortunately, the rhino considered this enough retribution and trotted off into his new home.

Photo: David Brown



“

That evening at the celebration event, the Chairman gave a complimentary address about the great achievements of the day and to our surprise and amusement ended his address with the caveat that the only thing that needed to be belated, done into was the present 'Black on Black violence'.

This was a very special day for rhino conservation in South Africa and a great step forward for conservation in general. I have the greatest respect for Jacques

Flimand and Pam Sheriff for their perseverance and application of making the Black Rhino Range Expansion Project the success that it is, especially considering the complex and trying circumstances of an initiative of this magnitude. I remain humbled by having been a part of the initiation and early operational activities of this project which I believe has helped to lift our Black rhino population against enormous odds and pressures. Rob Lohr



Photo: Ewanorb K2H/W366



Film-maker Don Guy produced the first of several films on the project from the Mun-ya-wana release. This one was featured on 50/50 and starred a rhino that rangers had named Amadodamabili ("Two Men"). This is his memory of that first release.

“

I was on the crate, Sphiso Mazibuko my cameraman/partner for the job, with the spectators in a Land Rover. The scene was set. As always there was a little tension in the air. The cameras were rolling.

Amadodamabili's site of release had been carefully chosen, away from an aggressive fellow newcomer to the game reserve, a big Tembe male. Dung had been spread around his release site, the idea being that he might recognise the site as his own domain and thereby stay put, avoiding territorial conflict.

The gate finally open, Amadodamabili clearly had ideas of his own. With a huff, a puff and a snort, his exit was to be most memorable. He headed straight for a Land Rover full of astonished onlookers. The Land Rover took a dent, Sphiso held his nerve on camera and Amadodamabili sped off at pace straight into the territory of the big Tembe male. He was on the run. We had a story!

That's our game, story-telling. Finding an angle, characters, human and animal, and voices to tell it. The music comes later when the film is being put together in the edit suite. It just so happened I'd

been asked to record a beautiful duet by pianist Christopher Duigan and a visiting Canadian clarinetist, and one of their tracks, *Dizzy Fingers*, a delightful playful instrumental, was worth saving onto my desktop.

So that was how Amadodamabili and *Dizzy Fingers* got together. Late one night, they "touched" on screen, and it worked. Call it chemistry if you like.

In my edit suite Amadodamabili had been prancing around on screen in a boma, with the remarkable Ilse Schmidt, his own personal rhino carer, giving me a commentary on camera of his comical behaviour. That's when the *Dizzy Fingers* file jumped off my desktop into the boma with the dancing rhino. In the edit, all two tonnes of Amadodamabili seemed to dance to the tune, in a kind of rhino ballet.

Now the movie edited itself. Amadodamabili had become a love story.

Back at the ranch, Mun-ya-wana Game Reserve, Amadodamabili had "crossed the line". The territory up north, old cotton lands, had been all-otted to the big Tembe male, that rhino with a reputation.

These old cotton lands are now open grassland and great for filming, especially at sundown. I must thank rhino man Simon Morgan for facilitating the concluding scenes of the Amadodamabili film. He took me there. It was just the two of us on the cotton plains that clear afternoon, and what a performance! The big Tembe male was in residence with a rhino cow, while Amadodamabili hovered around on their fringe. This was nature at its best. Two men and

a lady. What's new in the world? The pictures tell the story just who's doing the choosing is anyone's guess. This is evolution in the raw. This is what the Black Rhino Range Expansion Project is all about - spreading genes, making baby rhinos with the best combination of DNA in new contested territory.

Back in the edit suite, *Dizzy Fingers* had helped tell the story about an important breeding project and beginnings of the baby rhinos yet to be born. To top up the experience, as the sun was about to dip below the bush, I set up with a tripod on the back of the vehicle. Simon crawled under the chassis with his camera.

"He'll walk right up to us," Simon predicted. He did.

Black rhino are hot-tempered but delightful, curious, gracious and beautiful. A lasting memory will be the close-up motion shot of Amadodamabili's prehistoric feet. The camera tilts down from his bowed head, breathtakingly close. Suddenly with a snort and a puff the character of our film turns away to dance into the sunset.

Wow!



“

After a few years of animals bomb-shelling out of the crates when released, we began to drop the crate and anaesthetise the animal inside it. Just before it goes to sleep too deeply, we open the doors and let it walk out so it falls asleep just outside the crate. This allows us to put the transmitter in the horn at the release end instead of at the frantic capture end. Also all personnel and vehicles can leave while the animal is asleep, so that when it wakes up there is no disturbance.

One person stays with the animal to give the antidote once everything is quiet. The rhino mostly gets up, wanders around, then starts feeding or drinking. It rarely runs, unlike when the crate is merely opened. While changing our makes for action-packed films, it is not good for a quiet, successful release.

Dr Jacques Florouet





Spare a thought for the black rhinos out in the field right now and to those coming tomorrow and tomorrow and tomorrow. Let's hope they like their new homes and start great new populations.

Jacques Flamand



Photo: Christiaan van der Horst

SITE 2: ZULULAND RHINO RESERVE

Zululand Rhino Reserve (now Manyoni, meaning Place of Birds) is in the middle of some of the best black rhino habitat in KwaZulu-Natal. It was made up of properties belonging to 19 different landowners. Clive Vivier, one of the landowners, single-mindedly persuaded all the others to create a much larger conservation area by dropping fences between them and thereby creating an area suitable for black rhino. That was a considerable achievement. The common thread they had was a passion for conservation and the wildlife of Zululand.



The area that is now the Zululand Rhino Reserve was a core area that needed to be protected. Game is the logical thing to do. When we came to this area there was only one other game ranch in the block. Since then every single property has switched. It has been a total change back to what the Creator actually intended it to be.

Clive Vivier





The following text is from a speech Jacques made at the celebration of the Zululand Rhino Reserve release. The sentiments expressed apply equally to all other landowners and project partners.

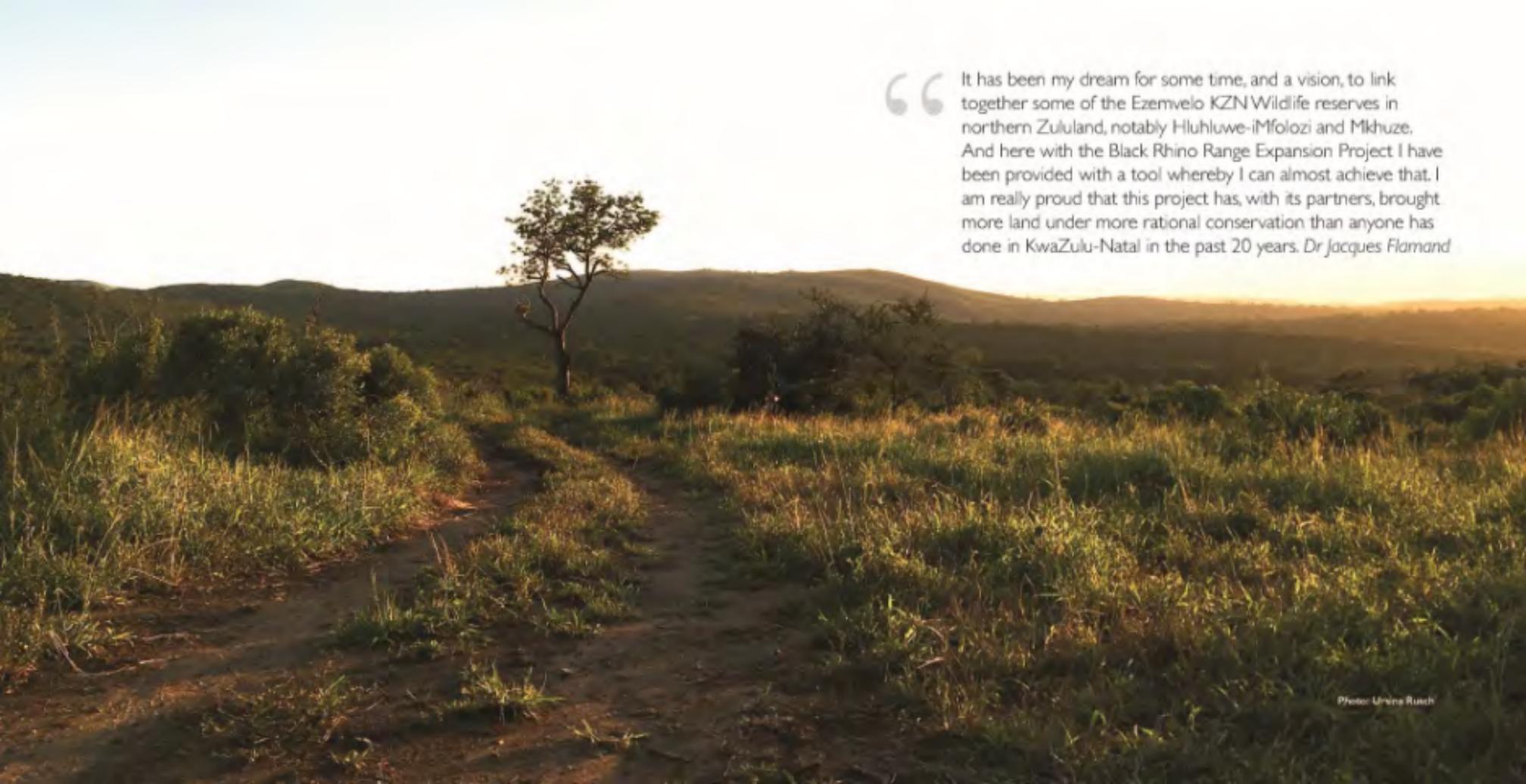
“

I know how difficult it is for two neighbours to see eye to eye on anything, let alone dropping the fence between them. Well, you have courageously dropped the fence between your properties thereby losing a considerable amount of independence and even losing many of the wild animals that you have painstakingly collected over the years on your land, as they are now free to roam over the entire area. But now you are committing your land to protecting endangered species.

This part of KwaZulu-Natal must have been a magnificent place in the past. Part of an endless continent, a vast landscape with rich biodiversity, abundant wildlife – animals, plants and people living in ecological balance. Not any more. That is history. The advent of barriers such as fences and roads put an end to all that. And yet, here we are, trying to reverse history, and in doing so, creating history itself. So, I thank and salute you landowners for your courage and your generosity of spirit in joining in this partnership. People will look back at this time and think 'thank goodness they had the vision and courage to do it then'.

This will not only benefit the Zululand Rhino Reserve and black rhino. I trust that it engages everyone in the area through the provision of additional jobs, opportunities for entrepreneurs, community conservation and, therefore, a general upliftment of people in this area of northern KwaZulu-Natal.





“

It has been my dream for some time, and a vision, to link together some of the Ezemvelo KZN Wildlife reserves in northern Zululand, notably Hluhluwe-iMfolozi and Mkuze. And here with the Black Rhino Range Expansion Project I have been provided with a tool whereby I can almost achieve that. I am really proud that this project has, with its partners, brought more land under more rational conservation than anyone has done in KwaZulu-Natal in the past 20 years. *Dr Jacques Flamand*

SITE 3: PONGOLA GAME RESERVE

The third project site was Pongola Game Reserve which adjoins the Pongolaport Dam. It has some very good black rhino habitat and was seen as a hub to link protected areas in all directions. This included a proposed trans-frontier conservation area with Swaziland and Etosha's Pongola Nature Reserve.





“

The earth does not belong to us. We belong to the earth...
We did not weave the web of life, we are merely a strand in it.
Chief Seattle





SITE 4: SOMKHANDA GAME RESERVE

“ Black rhino was the keystone species that provided a protected space for a whole suite of other animals. Prominent species like white rhino, elephant, buffalo, wild dog and lion have been re-introduced. But we are also seeing increased numbers of vultures, leopard, hyena and aardvark. Natural processes are taking place. Generally, balance is coming back into the system. Dave Gitay, Wiklandis

The Gumbi community had successfully claimed five farms west of Pongola Game Reserve. The previous owners had not wanted to participate in the Black Rhino Range Expansion Project, but after much discussion and negotiation the Gumbi community decided to devote part of their land to conservation. They created Somkhanda Game Reserve which in 2011 became the first community-owned land in KwaZulu-Natal to be formally declared a protected area.



I thought human beings and wild animals could never live together. But I was forced to think very deeply about how we could bring humans and black rhino together, and I found how it could happen by bringing benefits to my community. Nothi Gumbi





Photo: Thanda

SITE 5: THANDA AND MDUNA ROYAL

Thanda and Mduna Royal, immediately to the south of Zululand Rhino Reserve, had good black rhino habitat and offered potential for future amalgamation. The area was once the sacred hunting ground of Zulu kings. Thanda Safari is privately owned and Mduna Royal consists of land belonging to the Ingonyama Trust Board and the Zulu king.

The reserve falls within what was once the Mfletshe Game Reserve in the Hlabisa district of Zululand. It was set aside as a "Game Preserve" in 1895, proclaimed in 1897 but abolished in 1907. A hundred and twenty years later, the land was reclaimed as a protected area.

"Thanda and Mduna Royal are in the best black rhino habitat possible. My hope is that they will one day join up with Manyoni," says Jacques.





The Selati Game Reserve is a 27000ha private reserve in Limpopo, west of the Kruger Park. Selati was the first project site outside of KwaZulu-Natal. It belonged to a number of landowners and provided good habitat and protection along the Selati River.

SITE 6: SELATI GAME RESERVE

“ Participation in the Black Rhino Range Expansion Project has been a key enabler in the realisation of our vision to conserve and enhance the biodiversity of the ecosystem. Rob Snaddon



SITE 7: BALULE

“ We had always claimed to be nature conservationists. This was an opportunity to put our money where our mouth is. We formed a team which worked very hard to pull everything together. In the end over 200 individual landowners had to agree. It was an amazing feat. I've been an engineer working in the offshore oil and gas industry, so to be involved in such a pure nature conservation exercise was like a boy's dream come true. Jurgen Elbertse

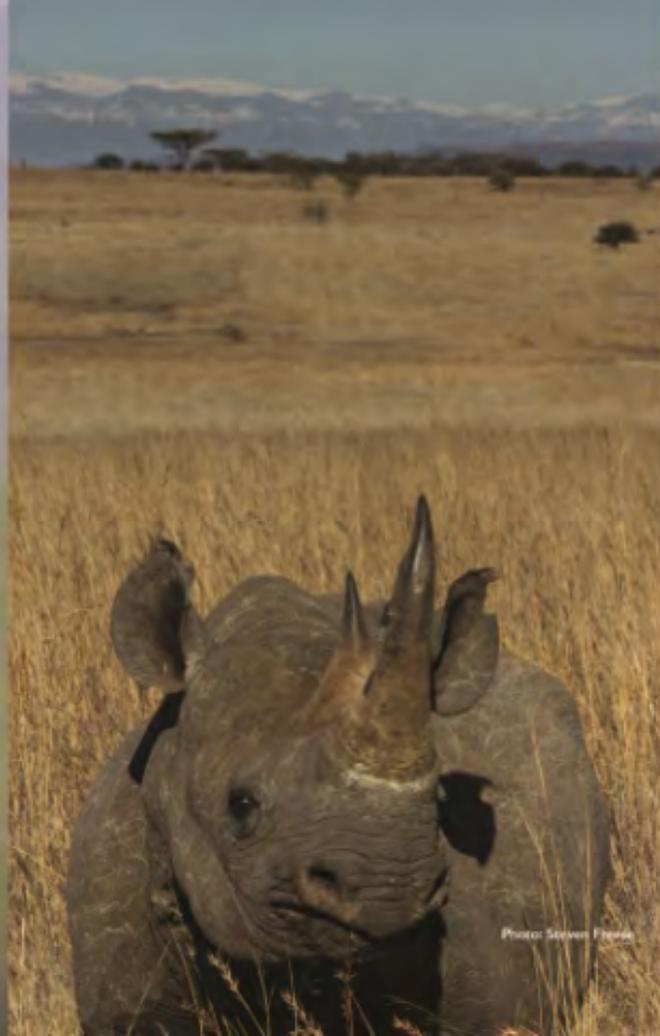
Balule, a big block of land in the extreme west of the Greater Kruger, has a railway running through part of it. In order to stop black rhino from being hit by trains, a temporary three-strand electric fence was put along the road next to the railway line. This simple, relatively inexpensive plan worked very well, even though it had to be checked and repaired twice a day after being broken by elephant, giraffe and buffalo.



SITE 8: KWAZULU PRIVATE GAME RESERVE

KwaZulu Private Game Reserve south east of Ithala is a mixture of habitat types, from savannah grassland to steep cliffs and towering canyons. Most of the black rhino keep to the lowlands.

Some of the rhinos introduced to KwaZulu had the least stressful translocation of all. They were airlifted directly from Ithala, which took only 20 minutes from capture site to release site.



SITE 9: NAMBITI

Nambiti is a community-owned game reserve north of Ladysmith. It has excellent bushveld in the river valleys. There was concern that the area might be too cold for black rhino, but fears were allayed because kudu, which share the same browse species, were doing well.



We are really proud to be entrusted with a population of black rhino on Nambiti Private Game Reserve. It is wonderful to see them prosper and to be part of their ongoing conservation.
Clarke Smith

Photo: Steven Frenck



SITE 10. MAKALALI - PIDWA

Makalali-Pidwa is a 24 000-hectare reserve in Limpopo with good bushveld and two permanent rivers running through it. Black rhino from the Eastern Cape were released here. Though the trips were exceptionally long - 24 hours in some cases - the animals were fine and released normally.

“

It's been very satisfying knowing that you're part of a something that is making a difference, particularly given the crisis that rhinos are facing now. This is a project of doers rather than just talkers and we feel gratitude to have been involved.
Ross Kettles

Photo: Nick Haines



Photo: Grant Toller

Letter from Jacques after the epic translocation from the Eastern Cape to Mankab-Pulwa in Limpopo

Dear friends and colleagues,

I often wonder about how well so many individuals from different organisations - and even walks of life - can work together. The obvious common denominator is the passion with which we as individuals work for a cause... No effort was too great, no hardship too unbearable to endure to make the capture and translocation work.

Yes, there were setbacks, sometimes tempers got frayed, people got tired, but over and above it all hangs a sense of satisfaction and fun that is an affirmation that what we are doing is worthwhile in the end. The Black Rhino Range Expansion Project brought together people who all do what they do because they love it ... and in the end felt proud to have participated and achieved so much.

Thank you all for helping the Black Rhino Range Expansion Project, even if you did so in the background. If the project can inspire and motivate people, it makes me feel that we are on the right track. We are making a difference to black rhino conservation in South Africa.

Jacques.

During one translocation from the Eastern Cape, a record fourteen black rhino were caught and moved in one day. All the rhinos had been collared and released some weeks prior to the capture date, so they could be found quickly in the field.





SANParks Veterinary Wildlife Services assisted the Black Rhino Range Expansion Project and the Eastern Cape Parks and Tourism Agency with the captures in 2011 and 2015.



Other than Somkhanda Game Reserve, there are a number of different ways in which rural black communities are stakeholders in the Black Rhino Range Expansion Project.

In the case of Mun-ya-wana Game Reserve, for instance, two communities own the land and Beyond leases it on a renewable long-term basis. Another system is where a private landowner such as Thanda abuts community-owned land and the whole area is managed as one unit. And, as in the case of Nambiti, the community owns the land and the game on it, and are business partners with lodge-owners.



Partnerships can be very powerful. Without meaningful partnerships, the Black Rhino Range Expansion Project would not have been possible.
*Sifiso Keswa, Senior Manager:
People & Conservation, Ezemvelo
KZN Wildlife*





Humanky's impact sometimes seems untoppable, but there are ways to make it work for all of us: the people, the animals, and nature generally. It takes courage, vision, intelligence and a willingness to think differently.

Black rhino are in the hands of future generations. Without inspiring some children to have a feeling for conservation, we won't get anywhere. To address this, Pam embarked on a variety of programmes to inspire people, including publishing two Zulu newspapers *Sovethulo News*, aimed at informing the Gumbi community when Sordhanda Game Reserve was being planned and developed; and *Wild Times* for children in rural Zululand schools. We also helped fund the children's camp at Sordhanda where local children learn about nature and conservation.

How many were inspired, we probably will never know, but even if it inspired a few, that would have been worthwhile. In a survey carried out in rural schools, many kids came out with the fact that they hadn't realised that wild animals should not be killed.

Dr Jacques Flouvat









"When I joined the Natal Parks Board in 1980 the routine way to capture rhinos was to drive in an area, find a rhino and, if suitable, rush at it in a stripped-down Land Rover, dart it while standing up on the passenger side of the vehicle and then follow the rhino hell for leather through the bush so as not to lose sight of it," says Jacques. "This was at times scary work, because one might hit hazards like warthog holes, logs and terrils enroute at speed and come to a complete and sudden stop. Injuries were not uncommon. . ."

"The advent of darting from helicopters was a game-changer: it allowed for the calm selection of rhinos from the air, one could guide the rhinos to areas more accessible to vehicles, we could dart in relative comfort and with ease and, more importantly, follow the rhinos to where they finally fall from the drugs – altogether a faster and less chaotic process. We've been lucky to work with extremely dedicated pilots like Vire van Heerden for a long time."



Every single one is different. It's a wild animal. It's completely unpredictable.
Tosh Ross, airlift helicopter pilot.

For a number of years, Eastwold had removed black rhino from wilderness such as that in (Mfiziwi) by airlifting them with helicopters. Originally they were lifted in crates, but these were heavy and had poor aerodynamics. When the project began, the technique had improved and the rhinos were airlifted in nets. Then one year, Jacques saw photos of rhino in Namibia being airlifted while strapped by the ankles. He suggested that this be tried at the next project translocation and this has been the method of choice since then. Fewer people are needed on the ground because the rhino does not have to be rolled on to a net, it saves time, and it is probably kinder to the rhino, which isn't compressed uncomfortably in a net. It also needs to be unconscious for a shorter time. Rhinos that fall asleep in a difficult place, like a donga, after having been darted can more easily be lifted out by the feet. It is also easier for the pilot because the rhino generally becomes aligned with the wind like a weather-vane, improving the aerodynamics.





“

The vets who participated in the airlift using this method for the first time all agreed that this would now become their method of choice because it was quick and harmless to the rhinos – always the main concern in these operations. We all want what is best for the rhinos under our care.

There is no evidence of any ill effects. All the animals walk normally on wake-up. All started eating immediately after release, a sure sign that they were not in pain. We even had some black rhino cows give birth normally a few weeks later:

Dr Jacques Florand





Photo: David Bevan/istock

“ This is the kind of way we have yet discovered of moving a film from the field to making it film. ”
— Jacques Couillard



The pioneering work to drag and catch rhino took place in KwaZulu Natal. Because most of the reserves in the province were relatively small, the rhino is then had to be managed intensively. The Natal Parks Board and then Ezemvelo KZN Wildlife improved their handling techniques over the years. The Game Capture team today is an extremely capable unit.



GAME CAPTURE

NCS 94



Photo: Cameron / iZiN Wildlife

At the first release, Jacques was nervous because he had advocated releasing the rhinos at different points on the reserve instead of putting them into pre-release bomas. Best practice at the time was to house rhinos at the destination and let them out one at a time on successive nights. He remembered how, in the 1980s, they caught rhinos from the wild, put them in a truck, took them to Ploversberg and did hard releases straight into the field. That worked very well as long as there were no other black rhinos at the release end.

"But in the third year, the newcomers were killed by the already established black rhinos. That provided me with a clue that we could probably release black rhino in a new area without bomas if rhinos present. For this reason we embarked on a system to release all the founders within a short space of time before any of them had established a home range," said Jacques.

"We started releasing rhinos straight from the wild out of the trucks and it worked well. We still caught some animals to put in the bomas because we were never certain that we would catch sufficient animals to fill a truck in one day. The source reserves decided which individual animals were to be removed, so we had to find specific animals that could take hours to locate.

"While the rhino don't settle down quite

as quickly as they would if they are bomas-ed, they do settle down and there is a huge saving in regard to building bomas and feeding the black rhino in the bomas.

"But the main reason I wanted not to bomas was to reduce stress after capture for the rhinos. After capture, black rhino in bomas tend to lose condition. They take about six weeks to get back to normal weight. I wanted to send animals that were fit and in good condition, and which could survive comfortably, even if it took them a few days to adapt to unfamiliar vegetation. That stood up in good stead. For example, animals from the Eastern Cape were carried to Limpopo which has completely different dry bushveld. They adapted very quickly to the new browse plants.

"Another reason to get away from bomas at the release site was that some of the animals had already spent six weeks in bomas at the capture end. To bring them to new bomas with different sounds, smells, handlers and food was an added stress for the animals, as well as expensive and time-consuming.

"I really appreciated the cooperation and acceptance of these ideas by Quentin Rochat and Jeff Cooke from Ezenzelo's game capture team, who were willing to try whatever worked best for the black rhino under their care."



"The release of black rhinos is nowadays a relatively calm, smooth and predictable operation," said Loukes. "We used to merely open the crate doors, but this had unpredictable consequences – either the rhino would bombshell out and over the horizon, or it would hang around the crate and attack it or try to get to the people perched on top or attack attendant vehicles.

The release is now much easier, but there is still some trepidation on the part of the vet and capture officers responsible, as the rhinos have sometimes travelled a very long way without food or drink and are likely to be exhausted and dehydrated.

The first thing one does on arrival is offload the rhino crate. This involves placing the crate on the ground in a place that has been chosen for proximity to cover, food and water, a lack of hazards, shade and visibility from a distance so that one can check that the rhino gets up normally. One of the team goes on top of the crate and impacts the rhino with a dose of the narcotic – the same drug used for capture.

About five minutes later, the rhino may lean on a side or against the front of the crate. A rope noose is put on one of the back feet through a hatch at the back of the crate. This is to help slow the rhino down should it be too awake later. The state of drowsiness of the

rhino is gauged by testing its reactions to being prodded. If it reacts little and seems sleepy enough, a towel is thrown over the face to cover the animal's eyes and the doors are opened. Two teams of people, ready on either side of the crate doors with a strong rope between them, will slow the rhino down if necessary. We open the door before the rhino is completely out because we don't want it to fall asleep inside the crate and have to pull it out.

With the doors opened, the rhino literally stumbles out because it is half asleep. The rope is put against its chest so that it slows down, falls and goes to sleep.

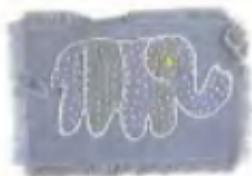
Then it is a busy time looking after a rhino. Pulse and respiration must be monitored, the animal kept cool, wounds treated and transmitters fitted on the animal. We usually take a bit of its dung and smear that around the nostrils to mask the human smell. Once everyone and all the trucks have gone, one person will stay to administer the antidote to the rhino and move away before the rhino awakes. To see the rhino rise and most often start to eat is such a satisfying feeling and relief, because until that moment, one doesn't know how that animal has taken the trip. Feeding is a sure sign that everything is likely to be fine. We then leave the rhino for the monitors to pick up the transmitter signal later."





In the early years of the project experiments were done using rhinos' dung to see if it would help them settle in their new home. Dr Wayne Lindater from New Zealand was the proponent of this. In these early years the rhinos were all held in bomas at Hlathlathwe (Mikotzi) Park before being translocated. They were put in bomas next to animals they would be released close to. Dung was collected from each animal and distributed close to where they would be released. The idea was that the familiar smell of their own dung and that of their boma neighbours would make them feel at home and help them settle. In subsequent years rhino dung was placed at random throughout the habitat.

"The dung proved of interest to rhinos of the opposite sex but it didn't really seem to affect how they chose their settling-down site," said Jacques. "What affected that most was where we released them. Invariably the rhino explored the whole reserve but more than 90% of them returned to their release sites. We don't understand why, but I like to think it is because we have chosen well in terms of cover, food, and proximity to water."





Monitoring is an important aspect of the post-release period and beyond. Every rhino is fitted with a transmitter, so if one leaves the reserve, monitors can detect it immediately, and the animal can quickly be located and brought back.

One black rhino at the Nambiti reserve ended up on a major tar road. It had been running through grassland and eventually just stopped on the road, exhausted. "We had to stop traffic on both sides," Jacques recalled. "People were very good-natured about it, even though some were in a hurry. The rhino pushed some lady's car, then eventually ran back towards Nambiti and stood in the shade of a reservoir. Fortunately the helicopter was near by and the rhino could be darted and trucked back to Nambiti. It eventually settled."



"The black rhino population in the Great Fish River Nature Reserve in Eastern Cape Province is very well known, down to the individual rhino. The managers and monitors of the reserve, particularly Brad Pike, Gavin Shaw and Cathy Dreyer, felt the animals that knew each other could be released together to save time after a long, tiring trip," said Jacques. "This is what we did, usually releasing the animals in twos. It worked well, with the animals often staying together for the first few hours. We do this for cows and calves released together, so that they remain together. It doesn't always work, as we experienced in Nambiti when a cow and calf got separated and had to be recaptured to re-unite them.

"After one particularly long trip, we decided to release five of them together in one place, all facing in different directions. When all was ready and all the vehicles and people gone, the vets gave a signal to give the antidote simultaneously so that we could get away in a waiting vehicle and the rhinos would hopefully all get up together. This is what happened and it was a wonderful sight to see seven black rhino standing in a row. They quickly moved off in separate directions."



Photos this page: Markos Fokmayr







The releases are not the end of it. Now the real work and commitment begins – monitoring and protecting the rhinos.

Photo: Chris Kelly





“ Apparently, you can run around a tree just as quickly as a black rhino. This was one of the first pieces of information given to me as a rookie black rhino monitor.

Dr Steven Morgan tells of one of his more interesting rhino monitoring experiences.

I had started off doing my guide training at Phinda Private Game Reserve, undergoing an in-depth four-month training course where we were taught everything from tracking elephant, identifying birds by their calls and pairing fine wines with food at dinner – all new and exciting stuff for a boy from the burbs. Important to note, we learnt nothing about a charging black rhino – there was none in the reserve at that time.

On completion, we trainees thought we had a more handle on all things wild, so I bravely side-stepped my all-too-tame guiding responsibilities to monitor a newly released population of 15 black rhino onto Phinda. The other guides, specifically the older crew, took bets on how long I would last. So began the adventures of a newbie ranger into a boiling pot of black rhino, determined to survive against the betting odds of my doomsayer peers.

Initially Zarn, Thomas and I were in constant show-showing matches as we scrambled up many a tree from



charging black rhino. However, with five or six encounters on foot a day, every day, we thought we had it figured out after a few years. We would hardly spend any more time up trees as we started to learn more about our specific cohort of black rhino at Phinda. We definitely found some individuals appreciated us following them around a lot less than others, and we slowly learnt the skill of patience – all too often it is just a waiting game with black rhino. Then came the call to help train some new black rhino monitors on Southkanda.

Game Reserve, the latest recipients of the Black Rhino Range Expansion Project. Armed with a kazooberie and a telemetry set (a device used to track the VHF units we installed in the rhino horn), I set off with the two new monitors after their newly introduced black rhino on Southkanda. These two guys were really big-eyed and worried about what was expected of them at their new jobs. I told them not to worry too much and went through the paces with them, explaining how if they followed the rules they would be just fine. Respect the rhino.

At all times. And add an extra dash of respect during the few weeks after they have just had a dart in their hind, been put into a big metal box, bumped across the countryside and released into a space that is not home.

At the same time there was quite a bit of media attention around the release, since this was a first – a community had reclaimed some of their ancestral land and had designated a piece of the land as a game reserve and were now custodians of a group of black rhino. Given the testy nature of a recently-

“ She walked into the clearing, stopped, sniffed, huffed and started walking purposefully straight towards us and my spindly bush cover:

released black rhino, I politely declined the responsibility of dragging a cameraman along for our monitoring and training sessions, for fear of having to elbow him out of my way and on to a rhino horn... but I graciously accepted his fancy video camera and promised to come back with some of the first footage of these historic rhino.

Kneeling on the ground and leaning over a bit, I was able to get a first glimpse, through the undergrowth, of a female rhino yet to be seen since her release – so she was high on our list of rhino to see and assess. I knew this would make great footage if she would just keep on walking towards a little clearing about 50m away – Nat Geo staff I was sure. I whispered to the two new monitors, still looking a bit big eyed, to check our wind. They noted a slight breeze blowing our scent towards the clearing where she was going.

This is where I lost The Respect... Nat Geo was calling! We moved as far as we could without risking her bearing us and I got the guys to each stand at some cover about five metres behind me. I left the cover of my spindly tree, about as thick as my thigh, and crept up to a small bush to set up The Shot. Her being in the clearing would give us a great opportunity to see her and assess her condition (and for me to get that footage), but I also knew that she would probably pick up our scent about halfway across this little clearing and that she would run – which way is always a bit of a gamble. She walked into the clearing, stopped, sniffed, huffed and started walking purposefully straight towards us and my spindly bush cover.

This is where I treated her like she hadn't recently been



uprooted into a new home, but more like one of our well-settled and trusted black rhino on Phinda. I put the camera down (recording still), took a step out from my cover and clapped my hands to send her on her way and to show the new guys that all would be okay. It was not. She had smelt me, now heard me and decided to raise me a few and came hurtling straight at me. I let loose with my trusty knobkerrie in her general direction with zero effect and turned and hauled it back to my thigh-thick tree.

In the footage of these events from the camera I had placed on the ground, you can initially hear some clapping, a shout, some rather loud snorting and then suddenly see my two legs come flitting past the camera, followed in close succession by four pounding rhino legs making a lot of noise. As I reached the tree she reached me. I turned back and pushed off her head with my right hand using that momentum to swing me around the tree – and so began the test of whether a mega-

herbivore can run around a tree as quickly as a human with a massive amount of adrenaline coursing through his veins. I kept the tree in front of me while shuffle-running around it, while continuing to hit her on the head/horn with my right hand, while on the other side of the tree I was slapping her rump and letting out a series of loud, panic-stricken "HEY!... HEYYYY!", all the while staring down into her upturned eye, the whites of which I will never forget.

After at least four or five full turns around the tree (which she could quite easily have just run over instead of around!) she felt like she had proven a point, or perhaps I had (!), and she turned out of her chase and headed off to seek out the newbies.

I looked past my tree and saw she had found one. She was standing half a metre in front of a petrified, still very large-eyed, new rhino monitor who had only managed to get up a single metre into the fork of a tree. She could so easily have

plucked him out of that tree, but after giving him a good once over and a huff, she decided to seek out number two and give him a revving too. He was just a few metres away and also only a metre up his tree, another easy skewering option on eye level with her, but again she saw fit to spare the newbie and spun off in a huff.

By this stage I was gathering my wits, but somehow couldn't get my right leg to stop shaking uncontrollably, even while leaning over and holding it while I shouted manic instructions at the newbies. We managed to pull ourselves together and, although a few shades lighter than before, got back to our vehicle and haven of safety. Proudly, both rhino monitors stayed on and continued their duties, albeit very warily and with large doses of respect.

I learnt yet another lesson about respect and now happily tell new rhino monitors, 'You can run around a tree as quickly as a black rhino.'



Transmitters are placed in rhinos' horns before release but the batteries only last about eighteen months. Camera traps are an effective way of locating rhino when their horn transmitter batteries have died. They often provide the first sighting of a new calf, for example, the one peering out from behind its mother in the photo on the bottom of the opposite page.

Post-release guidelines for landowners

The black rhino is a solitary species, which, at the best of times, is a nervous sort, and really needs to be left alone and to peace, particularly after its release. A successful operation will only become apparent months after the actual release date. In the intervening period, much can go wrong and these guidelines help to minimise the chances of that. Most rhinos will tend to move a bit in the beginning, as they search for cover, food and water in a strange new place, thereby increasing the chances of encounters and conflict with one another. So we do not want to encourage any unwanted movement other than that which they would do on their own. A vehicle noise or person's smell, for example, could easily chase a rhino towards a passing train or towards another rhino, resulting in conflict.

After release, the watchword for black rhinos must be to 'leave well alone'!

Any track through the reserve should preferably be well away from the release sites and visitors and people should avoid re-visiting the release sites.

If there is a choice of routes to track within the reserve, rather choose one on the outside of the reserve. If you have to use inside routes, use the same one repeatedly rather than a different one each time.

Limit any track on foot to essential trips. The smell of people disturbs rhinos.

Foot patrols must be confined as much as possible to the boundary along the perimeter fence. Limit patrols through the middle of the reserve for fear of disturbing the rhinos while they settle.

Black rhinos do not fence, which is why they are shot killed. The fence patrols should be on the lookout for any breaches so that rhinos can be re-captured as quickly as possible after escape.

Should a black rhino be seen, back off rather than try to get a better view. However, if you can get a good view with binoculars without disturbing the rhino, note and draw accurately its ear notch pattern and note the location and give it to the rangers.





Photo: Nicky Brown

“

My favourite experience with monitoring black rhino was the first time I actually touched one. It was during an immobilisation to collar it, do ear notches and collect DNA. It's a real privilege to be involved with procedures that make them a little bit safer from poachers.
Heike Zitzer





Supporting the Black Rhino Range Expansion Project has been one of WWF Netherlands' most gratifying projects, says Christiaan van der Horst, International Projects Manager for Species.

"There are few projects where our support is so concrete and where this support can actually directly be linked to population increase. If it weren't for the Black Rhino Range Expansion Project, black rhino would be far worse off."

“

We've made over 50 rhino films. The best thing about the Black Rhino Range Expansion Project is that it's the only good news rhino story we've ever told. *Film-maker Michael Raimondo from Green Renaissance.*



Photo: Christiaan van der Horst

Black rhino were first released on to a Black Rhino Range Expansion Project site in 2004. By 2017, more than 160 black rhinos had been translocated, and there were over 80 surviving calves across ten project sites. One site had 21 surviving calves.

"Recruitment rate – ie how many calves survive to adulthood – is important, because little black rhinos in the wild face serious hazards and not all are overcome. Predators such as lion and hyena take small calves, and if a mother dies, then a little calf will usually succumb, unless it is rescued and raised as an orphan," explains Jacques.

Recruitment rate of black rhino has also improved in the big source reserves such as Hluhluwe-Imfolozi Park. The concept of the project relied on removing black rhino from existing populations whose growth rate had slowed. It has stimulated growth, illustrating the importance of removing a certain percentage of the population each year.

"The sustained growth of KwaZulu-Natal's black rhino population over ten years continued despite the region experiencing one of the longest droughts on record. Similar droughts during the late 1990s precipitated a crash in the Hluhluwe-Imfolozi Park population of black rhino," said Dr Pete Goodman. "In essence, range expansion is currently the only means whereby Ezemvelo can meet its obligations with respect to South Africa's National Biodiversity Management Plan for black rhino."

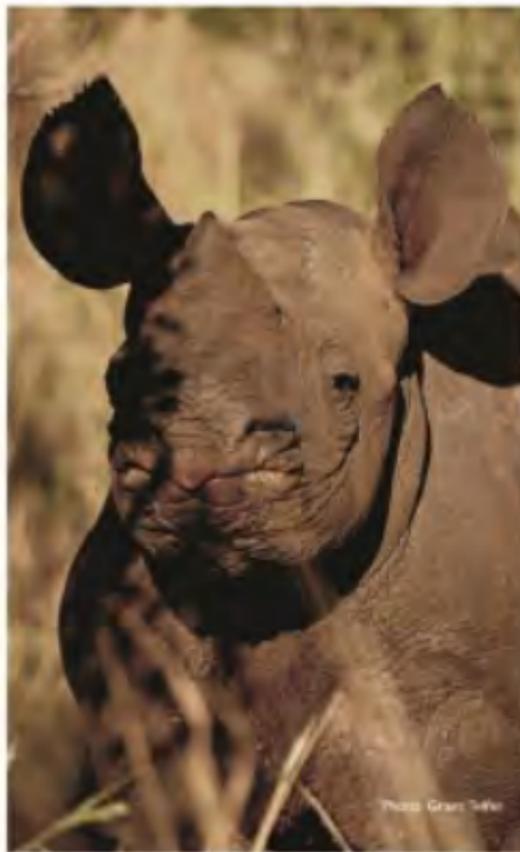
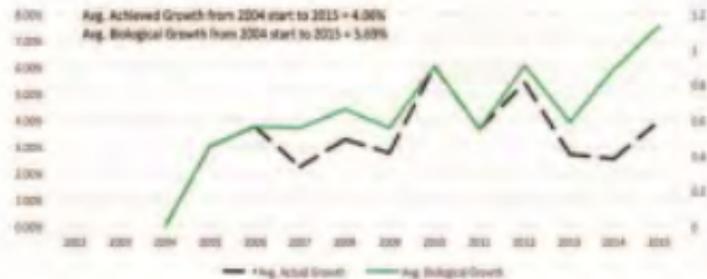


Photo: Grant Toller



BRREP RESERVES - Successive 3-Year Mean Black Rhino Growth Rates from 2004 to Nov. 2015



Source: Richard Emdin, IUCN African Rhinos Specialist Group

* Black Rhino
Range Expansion Project

* BRREP facts
and figures
2017

as of June

- 🐘 Total new black rhino habitat: 220000 ha
- 🐘 No. of black rhino on BRREP sites: 186
- 🐘 No. of black rhino on KZN BRREP sites: 152
- 🐘 Total births: 115 of which 81 surviving
Of those, 34 are 5+ years old.

🐘 Growth rate of black rhino across KZN since start of the project in 2005: 20%

🐘 Growth rates across project sites: varied

Longstanding sites like Manyoni, Sankhanda, Munyawana + Thanda have overall average growth rates between 30-37% since their respective inception dates; "younger" sites have minimal (<10%) or no growth.

🐘 30% of KZN ^{black} rhinos are on BRREP sites

🐘 Between 9.2 and 10.2% of South Africa's black rhino are on BRREP sites.

(Compiled by Melissa Rusch who joined the project in 2016)

Mark Coetzee from Escravado designed the project logo to reflect the goal of population growth using the colours of WWF's panda logo. Mark died tragically a few years later in a plane crash to Mozambique. The project logo is a beautiful reminder of his talent and love of wildlife.



It was literally a dream come true for the Black Rhino Range Expansion Project when the first calf conceived on a project site was born. Ranger Thomas Khumalo dreamed that a black rhino calf was born on a certain section of Mun-ya-wana Game Reserve. He had checked the area only a day before, so without the dream would probably not have been there for another month. But he decided to look again, and sure enough, there was a one-day old calf. The calf was named /Phupho meaning Dream.

This tiny calf was photographed on Zululand Rhino Reserve. It is rare to see such a small calf. Black rhino mothers keep their very young calves well-secured in dense bush for the first few months of their lives.

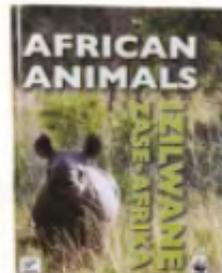


Photo: Pip Marbeck



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The Black Rhino Range Expansion Project has been one of the most successful conservation initiatives in recent history to safeguard and expand the range and numbers of the critically endangered black rhino. In KwaZulu-Natal, where the project began, the population of black rhino was stagnating at around 350 animals. By 2016, black rhino population in the province had reached the 500 milestone.
Tony Conway





Standardised black rhino age classes

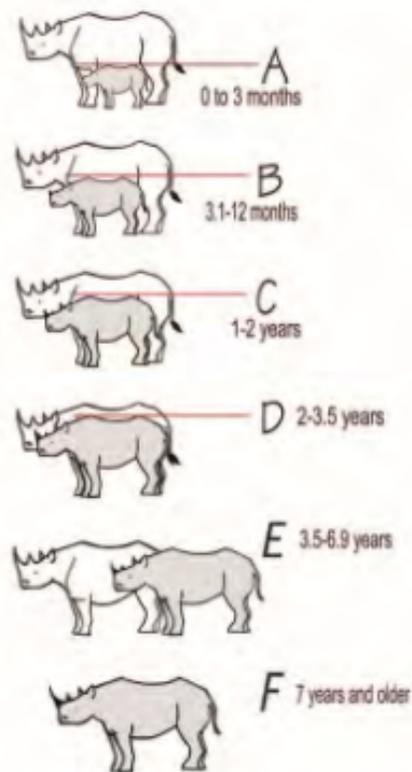




Photo: Christian Sperke

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Black rhino are difficult animals to manage. They need lots of space. It takes huge resources to protect them. Fortunately, we have worked with people who are passionate enough about conservation to have put huge amounts of money and effort into protecting them.

Black rhino are not fast breeders. Females can be expected to have one calf every three years. With eight percent growth, a population could double in ten years.

Dr Jacques Romand



We were very lucky for the first few years of the project. But then dark clouds began to appear. In 2008 poaching started to increase, and then escalated beyond anything that had been imagined. This put a serious burden on partner sites, which have had to institute much more expensive security measures. Despite this, there are still people who are keen to become project partners, because they want to participate in meaningful rhino conservation.

“

The Black Rhino Range Expansion Project is a great example of what can be achieved when we all work together. We must remain committed to addressing the underlying causes of wildlife trafficking to maintain these gains, particularly as the poaching threat spreads across southern Africa. *Dr Jo Shaw*



*Anti-poaching units in training.
Rangers defend wildlife at
great personal risk.*

Photo: Lawrence Munro

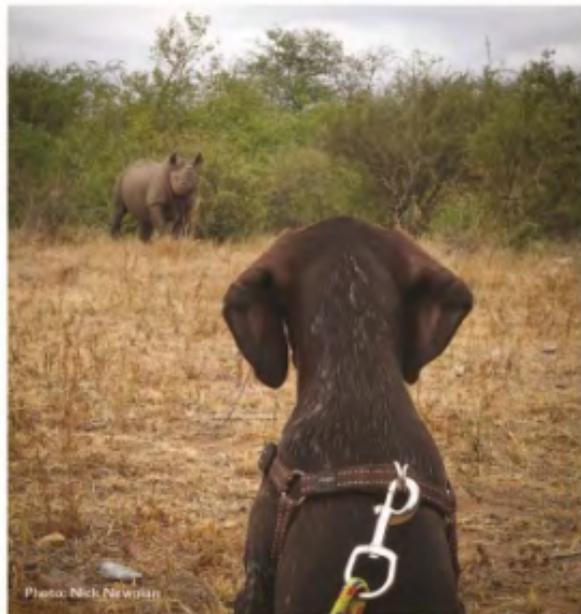


Photo: Nick Newman

German short-haired pointer Wilma is an assistant to rhino monitor Nick Newman at Makalali-Pidwa.

"From a very young age she came with me every day so she could get comfy with animals and sights and sounds. We introduced her to 'rhino experiences' wherever possible, putting her on fresh tracks and letting her see some of the friendlier black rhino on foot from a safe distance. We have slowly built from there and introduced her to tracking rhino. She is still a young dog but she is already capable of tracking fresh rhino tracks. She absolutely adores water and takes every opportunity to swim in the dams when we are out monitoring," said Nick.



Photo: Nick Newman





鹿 野 間

“

A lot of people claim the animals are grumpy but I've always put it down to them being inquisitive. If they hear something, instead of moving away, they move towards it to find out what it is. They seek it out, so you have them stalking you from bush to bush. They will carry on coming until they can figure out what you are. Often they come in to get a reaction so they can pick up what you are. Most of the time, when they see what you are, they take off. The aggressive streak is misinterpreted. It's their flight-or-fight response moving into their fight response. When you're that close, they are trying to get rid of you because you're in their space.

Dr Simon Morgan





Photo: Grant Toller

“

Black rhino are difficult animals to spend time with. But if you get it right it's quite an enlightening experience. You learn how they occupy a space. You get an insight into their lives and what they're about. They have their own characters and their own ways. When you see a black rhino it's not just a black rhino – it's black rhino so-and-so, who is very different from the next black rhino.

One old female was notorious for chasing us up trees, going after us, not leaving us after she'd picked us up. We had to tread more carefully around her. When we started black rhino walking safaris with guests, we didn't take them to see her.

Others are more relaxed. We had one that would stroll down a road and we would just walk along behind him. He would sometimes plunk himself down next to vehicles, whereas others would charge them.

Dr Simon Margin





Rhino monitor Nick Newman was about to take a photo of Yvette, this water-loving black rhino, when she just ducked her head under.





Their eyesight is appalling but they are so in tune with their sense of scent and hearing. That's how they survive and communicate with each other. It's fine in the wild, but throw in a human and they're in trouble. Persecution from man is the only reason they're endangered. *Chris Kelly*

Bee-eaters often follow black rhino through the grass hoping to pick up insects that have been disturbed.



Photo: Anthony West



“

Black rhino have their home ranges, but you frequently find them socialising. Females have overlapping territories and a cohort of females will often get together. Males also socialise with them.

They put in a lot of effort to have those encounters. You'll find them far away one day, then the next day they are together. They'll spend a day or two together, then drift apart.

When settling in a new place, animals would seek animals they knew. Of different factors affecting settling rates, the presence of the dominant male prevailed. Dominant animals settled more quickly. They defined the space, then the others settled around them.

Dr Simon Margin



Photo: Martin Harvey





Photo: Christian Spreng

“ You have to go around with the wind in your favour so the rhino can't hear you. You have to be quiet and keep enough distance between you and the rhino so that you don't disturb them when they feed. The guests are very excited about the rhinos. They love them.
Zama Ncube



His Royal Highness the Prince of Wales and Camilla, the Duchess of Cornwall, visited Phinda in 2011 to see the Black Rhino Range Expansion Project. Prince Charles had recently become president of WWF-UK.



I have long admired WWF's efforts to tackle the many threats to the world's wildlife, rivers, forests and seas ... Our natural world is the most precious asset we have.
HRH The Prince of Wales



Photo: Peter Gaudin





Photo: Nick Newman



Photo: Chris Kelly



Photo: Nick Newman

“

I often somewhat jokingly suggest, with no disrespect to the magnificent white rhino, that a visitor to our parks has only seen the Big Four-and-a-half if they have not seen a black rhino.

Rob Little



“ There are not many experiences in the wild that can beat being on foot a few metres away from a black rhino while it just carries on and does its thing.
Chris Kelly



Photo: Christian Sperl

A close-up photograph of a plant branch with numerous small, green, spherical seed pods or fruits. The pods are arranged in clusters along the stem, which has several small, pointed leaves. The background is a soft, out-of-focus green, suggesting a natural, outdoor setting.

Black rhino occur in a wide variety of habitats from desert areas in Namibia to wetter forested areas. The highest densities of rhinos are found in savannas on nutrient-rich soils and in succulent valley bushveld areas. Black rhino are browsers and favour small acacias and other palatable woody species (*Grewia*, *Euphorbiacea* etc.) as well as palatable herbs and succulents. However, because of high levels of secondary plant chemicals, much woody plant browse (especially many evergreen species) in some areas is unpalatable. Failure to appreciate this has in the past led to carrying capacities being over-estimated in some areas. Black rhino carrying capacity is also related to rainfall, soil nutrient status, fire histories, levels of grass interference, extent of frost and densities of other large browsers.

To maintain rapid population growth rates and prevent potential habitat damage if the population overshoots carrying capacity, populations of black rhinos should be managed at densities below long-term ecological carrying capacity (i.e. below zero-growth densities). IUCN

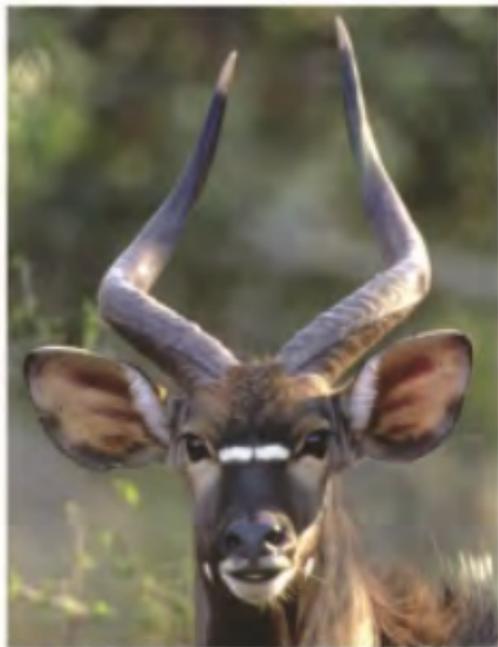


Photo: WWF/Howard Butler



Photo: WWF/Peter Chadwick

Photo: Maria Horrey



When large areas of land are protected for black rhino, other vulnerable species benefit too, for example wild dogs, cheetah, elephants, eagles, vultures and tortoises.





Every creature has its rightful place, and in its rightful place becomes beautiful.



Photo: Frans Schepers

All things wild and wonderful

This article appeared in *The Witness* near the beginning of the project in 2001. It is used to raise awareness about a particular poaching incident around the cruelty of which has now become commonplace.

People make sense of things in various ways: whether through religion, or politics, or education. Dr Jacques Flomand finds meaning in ecological principles, the 'balance of nature', which he believes is so out of kilter now because we as humans are throwing around too much weight. He's spent his career as a wildlife vet working on species whose ecological footprints are in danger of disappearing altogether.

Throughout his career, treating dogs and cats has been pretty unusual. Flomand's patients have ranged from a gibbon's arse which had been cut down to the spinal cord with a spade, through to an injured Bengal tiger which he darted from the back of an elephant. He's treated bears, buffalo, monkeys, and vultures. His food is the broken wings of eagles. Though he cares deeply about the welfare of his wild patients, Flomand is under no illusions about their feelings towards him.

Once they'd let him give the chance, although Flomand has only once been bitten, and that on the knee by a wild dog he was vaccinating. "The dogs were straight through the leather and between two toes. After that, I realised that

the process as we were doing it was too stressful for the wild dogs, so we started to use pulling them out."

"Now they break his bones. He once had an arm broken by an elephant, he believes on purpose. Young elephants were being released into the low-land forest (game forests) and before letting them go, Flomand was cutting off the ideal forest benefits around these animals."

"The last one put his back foot down on my arm, I couldn't move it. I realised then that with their protruding eyes elephants can see what's going on at their feet – that's why they walk so quietly. He knew what he was doing, he was looking at me. Eventually he stopped and I could withdraw my arm."

"These days can't walk to me away from you. Sometimes an animal that has been caught and put into captivity is not happy and won't eat. So you bring it and it runs out and you can almost see it peeing up. It's one of the most satisfying things to watch."

Flomand worked for many years as wildlife research for the Nepal Parks Board (now Environment KZN Wildlife) and has also worked in Saudi Arabia and Nepal. In Saudi

Arabia, he and his team achieved a world first when they successfully sedated TB from a herd of critically endangered Arabian oryx.

"Normal protocol to get rid of TB is to destroy the animals but in Saudi money was no problem so we basically treated the animals like human patients for nine months."

In Nepal, he set up a veterinary programme in and around Chitwan National Park as part of a drive to improve relations with people in the park's buffer zones. "In Nepal parks are not fenced, and animals including rhinos and tigers were leaving the park and eating crops or livestock. So they were getting shot or poisoned or even electrocuted by fences. People used to bring down wire from overhead powerlines into their paddy fields to kill deer that came in and ate the rice. Quite a few people got killed too."

One of his toughest tasks in Nepal was judging a pet competition. Flomand said, "A lot of children arrived clutching their pet goat or dog or chicken, and he was supposed to choose 'the best'. Not wanting to hurt anyone's feelings he started off choosing the pet of the most sensitive-looking child and ended up



In Nepal, he gave help to a dog to live and elephants, pet a rhino, and used methods of saving rhinos.



making sure that every animal seen a prize.

While with the Parks Board, Flanagan was involved with the organization's highly successful white rhino translocation programme which has been responsible for the downlisting of white rhino from "critically endangered" to "vulnerable". He estimates that he has personally handled around 2500 rhinos. In the earlier days of capture, they used to drive after the animals in landrovers or even chase them on foot to dart them. (Today helicopters are normally used.)

"It was quite like a rodeo," Flanagan said. "Sometimes we'd drive into a hole at speed and get thrown from the vehicle."

The job also involved treating animals with man-induced injuries, many from indiscriminate snaring. Flanagan recalls a rhino that had put its head through a snare set for antelope and was practically disembowelled. He had to put the animal down. Some rhinos were poached for their horns.

"In one horrific incident two white rhino had been shot and the poachers had obviously started cutting off the horn before the animals were dead. These were blood trails down into the gully. One always feels terrible anger. You wonder how people can be so uncaring for other creatures. I know that snaring and poaching happens

because people are desperate, which is why parks are working so hard to spread benefits to surrounding communities. But the rhino horn trade is driven as much by greed as by hunger."

Flanagan's current role is less hands-on but should have a far-reaching impact. He is project leader of the WWF's Ezemvelo KZN Wildlife Black Rhino Range Expansion Project which aims to increase numbers of the critically endangered animals by increasing the land available on which they can breed. The project is a useful vehicle for getting land under more rational conservation, he explained, by encouraging neighbouring landholders with good black rhino habitat to remove internal fences, "itty bitty" pieces of land can be merged into larger, more ecologically-sensible units.

His other motivation is that he's particularly fond of black rhino and doesn't want to see them disappear. "Rhino are a primitive sort of design big lumbering beasts with horns of the sort that went out with the dinosaurs. Perhaps all the perissodactyls (which include horses) are reaching the end of the evolutionary line in a sense. They're much less efficient feed converters than ruminants, say, and maybe in a few million years they would die out naturally. But I would hate it to happen through human greed and ignorance."



ABOVE: Going to work during the monsoon. MIDDLE: An injured tiger has been darted and is being transported on Jacquot's Land Rover for treatment. LEFT: Treating the domestic elephants of Clifton National Park.

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Perhaps as conservationists we're beating against thunder; this growing tide of humanity. But we do what we can with the means at our disposal in the hope that future generations can find other solutions which leave space in the world for all things wild and wonderful.

Dr Jacques Flomand



Jacques' Zulu name was iNkanga wote because he stalked through the bush on long legs with a beaked nose, like a secretary bird.



Photo: John Vogel



Jacques visited Malaya and Indonesia to advise on options for saving Sumatran rhino from extinction. This is an extract from his report after visiting Indonesia.

"We drove to an area in East Kalimantan province, from which some Sumatran rhino are to be removed. There are at least three known Sumatran rhinos in this area where logging for hardwoods has already taken place and where mining is to take place in the future. The area is destined for oil palm plantations and coal and/or gold mining.

"The usual sequence is that primary forest is logged for valuable hardwood trees. The secondary forest provides good rhino habitat, but then the area is cleared of the remaining forest for palm oil plantations. Palm oil provides two crops a year for 20 years, after which mining activities come in. Coal mining ploughs up the surface, destroying everything, though about 10% of the land is meant to be left to forest. Gold miners are obliged to detoxify their activities by flooding any shafts, but then the water quality becomes toxic with various metals, mercury in particular. The removal of any surviving Sumatran rhino from such forest is

thus hugely important if they are to be saved from poaching and disastrous habitat loss.

"We walked through forest looking for signs of Sumatran rhino in an area where camera trapping had confirmed that there were at least three individuals – all females. There was some doubt as to whether the rhino were still around, as 10 days previously a student had gone missing in this patch of forest and search parties had combed the area, creating a massive disturbance. They found the student after four days, but the Sumatran rhinos had apparently disappeared. We found plenty of old signs, but also some fresh tracks. This caused much jubilation, as there had been some concern that the rhinos might have moved out permanently. We learnt of 12 Sumatran rhino in an area of 500,000 hectares, part of which ideally should be strictly protected and where more Sumatran rhino could be released to form a larger natural population where natural breeding can take place.

"The priority for now must be growth of the population from the remaining few. I believe that this is now the only way that Sumatran rhino can be saved from extinction."



Sumatran rhino foot print



The minute one becomes aware of the plight of a key species, like the black rhino, one cannot but be motivated to try to do something if one possibly can. By achieving what we have, we've been able to contribute a little to the preservation of a magnificent species. One feels an incredible reward at having done a little bit. Looking back, we have more black rhino than we would have had if we had just left them where they were. We have increased their range. They have room to grow.
Dr. Jacques Roussard



Critically endangered
means that if you do
nothing, they will
disappear.

JACQUES FLAMAND

Thank you

... to the men, women and organisations, too numerous to name, who have lived their passions by participating in the Black Rhino Range Expansion Project. They have either given of their land, their sweat, their time or their money. We hope that this book will put their sacrifices into perspective, and bring some satisfaction at the fact that they took part in something that has contributed to the increase in black rhino in south-eastern Africa.





