



Zoo Partners Program

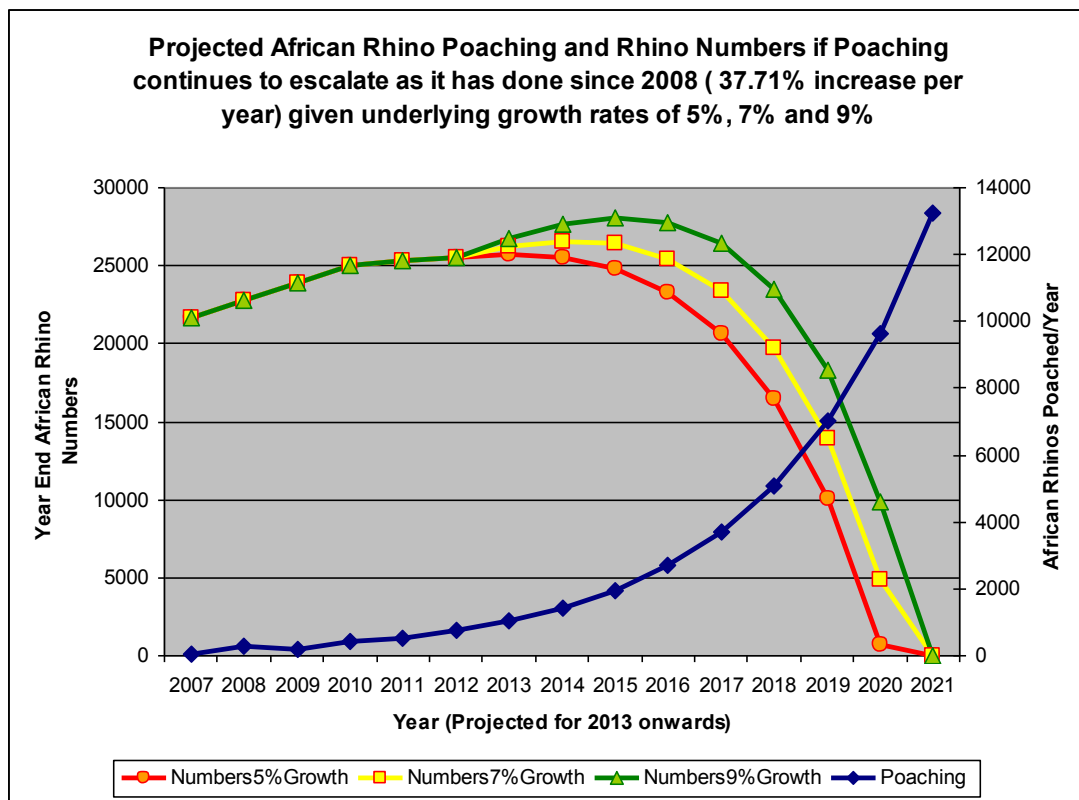


2015 Late Summer Report – Africa Programs

AFRICA

As of 21 August, the ‘unofficial’ report was that poachers in South Africa alone had killed more than 756 rhinos. At least two-thirds of the rhinos have been killed in South Africa’s best-known national park, Kruger. The South African Ministry of Water and Environment reported recently that anti-poaching efforts are being undertaken in the face of a 27% increase in poachers in the Kruger National Park. As of 30 August, there had been 1,617 identified poaching activities in the park, implying three poaching incursions per day along the park’s 620 mile (~1,000 km) shared border with Mozambique, the epicenter for poaching in the region. The Ministry reports that there are 12 active poaching groups at any given time operating in the 5 million acre (2 million ha) park, and that Kruger anti-poaching teams, as of the close of August, had made physical contact with heavily-armed poachers 95 times so far this year, close to three times a week.

Up until last year, across Africa, rhino poaching rates were ‘sustainable’ – with about 3% of the rhino population being poached, births still exceeded deaths. However, with poaching at current rates, it is likely we are at the tipping point – when births no longer outpace deaths. Sadly, poaching stands to reverse the conservation successes obtained in Africa over the past century. Despite significantly increased effort, expenditure, and cooperation between various departments on law enforcement and prosecution and handing down strong sentences, poaching continues to increase in nearly every range state in the region. The IUCN African Rhino Specialist Group compiled the data in the figure below, which shows projected rates of poaching and their effects on rhino numbers based on different growth rates (5, 7, and 9%). Even at the very highest growth rate (9%), rhino populations will not be able to keep pace with poaching at current and projected levels.



The IUCN African Rhino Specialist Group will convene in February, and numbers will be updated.

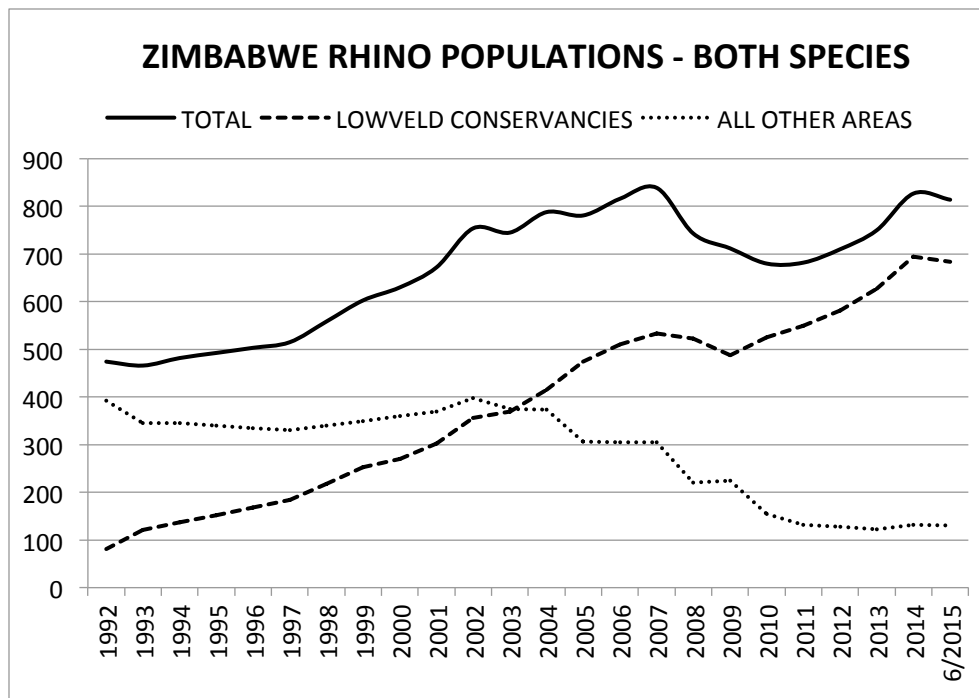
IRF’s partners and grantees in Zimbabwe, South Africa, and Swaziland have their hands full with this poaching crisis, which shows no sign of abatement, and **your support for these programs is more important than ever.**

Zimbabwe’s Lowveld Rhino Trust

For more than a decade, IRF’s major investment in Africa has been with our partner, the Lowveld Rhino Trust (LRT), working in the southeast portion of Zimbabwe. The Lowveld conservancies had confirmed populations of 441 black rhinos and 255 white rhinos at end June 2015, with three significant black rhino populations present in Save Valley, Bubye Valley, and Malilangwe Conservancies. In addition to direct involvement in the monitoring, management and protection of rhinos in Save Valley and Bubye Valley, LRT coordinates with Malilangwe on rhino conservation needs that require joint efforts, and works with the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) and Frankfurt Zoological Society (FZS) towards creating a new rhino sanctuary in Gonarezhou National Park.

The Lowveld rhino conservation program has built up the black rhino population in that region from 4% of the national total in 1990 to 89% at end June 2015 (about 8% of the continental total). This has been achieved through biological management, strategic translocations of rhinos, support for anti-poaching, informer systems, legal actions against poachers, etc. Much credit for this effort is due to conservancy members and their staff, operating under difficult economic and political conditions. Unplanned settlement under Zimbabwe’s “fast-track” resettlement program has resulted in significant loss of rhino habitat in the conservancies but nonetheless the available range remains sufficient to carry more than twice the current populations of both rhino species.

The status of rhinos in Zimbabwe over time is shown in the figure below. The apparent slight recent decline in the Lowveld populations is partly because not all rhino births in the first half of 2015 had been confirmed by mid-year, to compensate for poaching losses. Also, eight black rhinos were translocated from Malilangwe Conservancy to Botswana.



A further breakdown is:

	BLACK	WHITE	TOTAL
National total: (approximately)	494	318	812
Lowveld conservancies population:	438	242	680
Other private land in Zimbabwe:	18	13	31
State-land: (estimated)	38	63	101

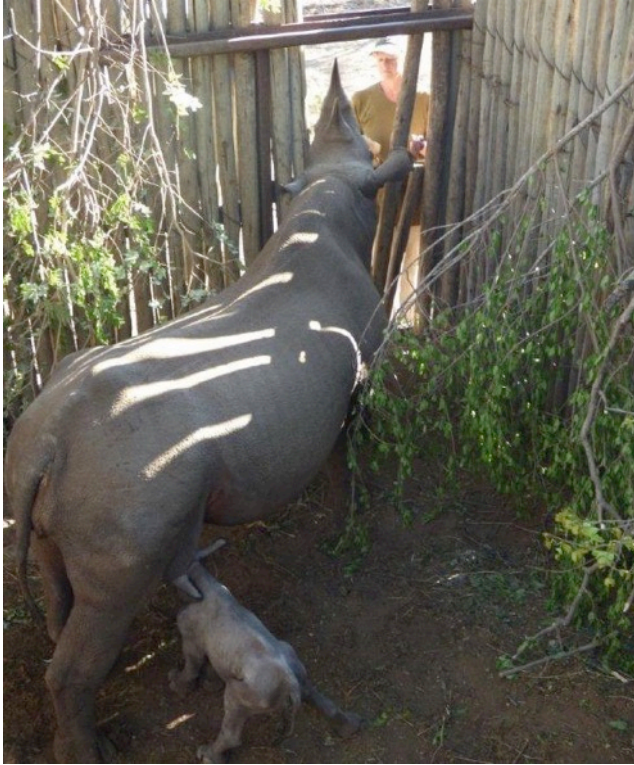
The past 8 months have been very busy for the teams on the ground. This year, LRT vets have handled emergency immobilizations, ear-notchings, de-hornings, and placed conventional horn transmitters as well as Radio Frequency Identification tags (RFIDs) into horns.

DATE	AREA	BLACK RHINOS							WHITE RHINOS							
		DRUG DARTING	EARNOTCHING	DEHORNING	TRANSMITTER IMPLANT	TRANSLOCATION	SNARE/BULLET TREATMENT	OTHER/VET TREATMENT	DRUG DARTING	EARNOTCHING	DEHORNING	TRANSMITTER IMPLANT	TRANSLOCATION	SNARE/BULLET TREATMENT	OTHER/VET TREATMENT	
29 March	Bubye Valley								1					1		
5 May	Bubye Valley	1				1		1								
17-30 May	Bubye Valley	29	17	11	11	3			4	4						
	TOTAL	30	17	11	11	4		1	5	4			1			

Emergency Interventions

Two emergency responses were required in this period. The first was for the treatment of an injured and effectively blind white rhino cow which appeared to have severe puncture wounds between the hind legs – possibly inflicted by another rhino. Tragically the cow died as the veterinarian was on his way into the field the day after she was discovered. This left her 12-month-old female calf orphaned in a high lion density area. Given that she would have stayed close to her mother’s carcass, which would attract predator attention, it was decided that the calf should be moved to a neighboring section of the conservancy that does not have lions. This calf – now 16 months old, is doing well and will be returned to the main section to rejoin the white rhino population (and the lions) when she is bigger. Heavy rains on the day the calf was captured prevented staff from returning to the mother’s carcass to do a proper post-mortem.

The second emergency action was for Squirt, the black rhino calf born to a blind mother, Mabuya, in the bomas in late 2014 (photos next page). Squirt had to be taken from his mother when he developed severe diarrhea. At 6 months of age, Squirt took a serious turn for the worse and would not feed so he was rushed to Bulawayo (155 miles/250 km away) to be attended by a specialist horse veterinarian with endoscopes in an effort to diagnose the problem. Unfortunately, no conclusive diagnosis could be made but a course of treatment for ulcers was undertaken and Squirt is now holding his own with his pal, Sabi, who was orphaned at 7 days of age and hand-reared.



Above: Newborn black rhino 'Squirt' in the boma with his blind mother, Mabuya (L) and in Bulawayo for veterinary treatment (R).

Below: 'Squirt' exploring the area around his mother, who was behaviorally very in tune with his wanderings (L). 'Squirt' in the boma with his larger rhino buddy, 'Sabi', who was orphaned at 7 days of age (R).



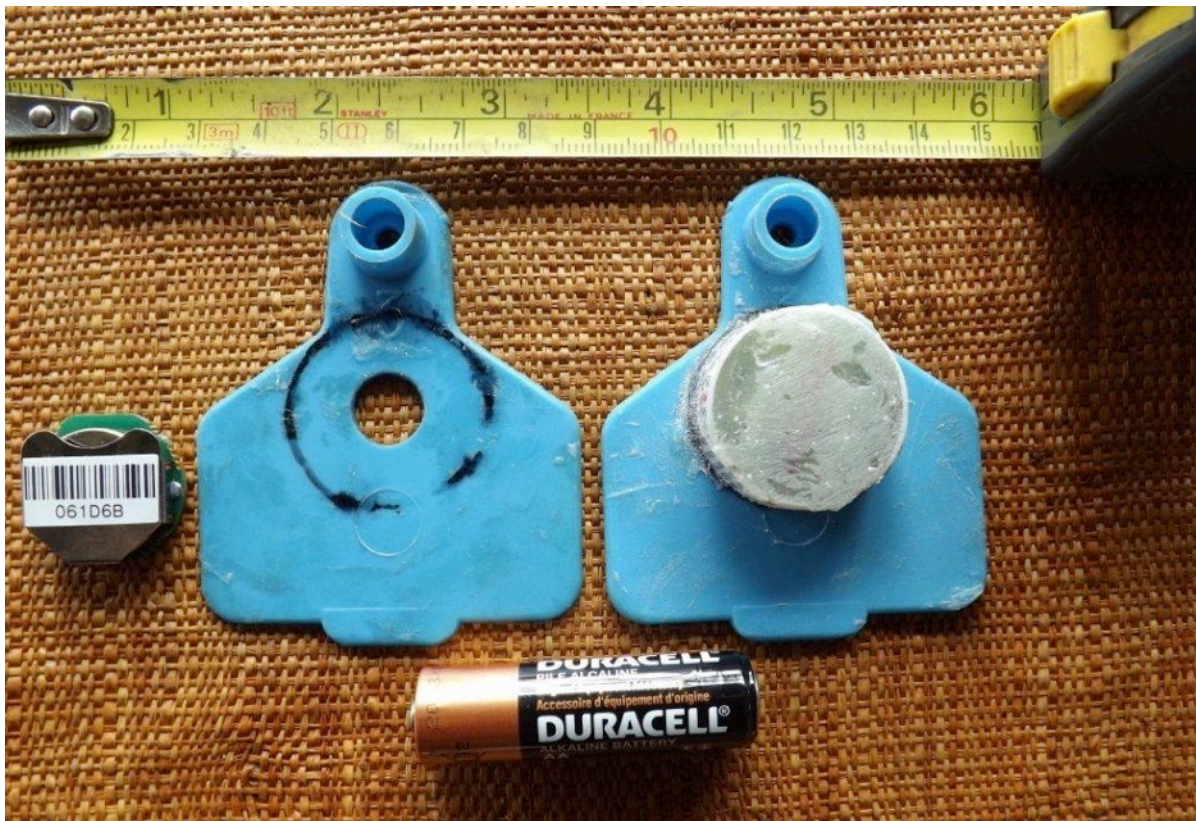
Photos Lowveld Rhino Trust.

The LRT team also translocated two young brother black rhinos out of a separately fenced section of Bubye Valley Conservancy into the main section. This was necessary as they would be reaching breeding age in the next five years and could become problematic in the smaller, lion free section that is used as a release area for orphaned rhinos old enough not to require hand raising but too young/small to be on their own in a high lion density area such as the main section of the conservancy (which is currently estimated to contain roughly 500 lions).

Radio Frequency Identification (RFID) Tags

For the past few years, the LRT has conducted a project to determine the effectiveness of RFID tags for rhino. When the study was initiated, there were no existing applications of RFID technology in rhino conservation, other than very short-range (within a few inches/centimeters) use of microchips for identification coding of rhinos and their horns.

The LRT project has raised regional interest and technical collaboration in this technology, especially through the initiation of a similar project in Namibia. Within Zimbabwe, successful field trials were undertaken in the Bubye Valley Conservancy. The first of these trials served as a precursor to the larger Namibian project; technical lessons learned at Bubye Valley enabled refinements by African Wildlife Tracking, providing prototype devices for both projects.



RFID device which sits in an eartag placed on the rhino (photo Lowveld Rhino Trust).

The LRT project has evolved towards cheaper, more 'off-the-shelf' systems, with smaller, longer-lasting tags rather than the more complex, customized AWT tags developed for the Namibian application. Simple tags with longer functional periods (3-7 years) but shorter ranges (about 55 yards/50 meters) were found to be appropriate for the LRT monitoring functions. It is possible to affix these small RFID tags to standard cattle eartags of the type routinely fitted to rhinos, and to get readings from these when the tagged rhinos visit waterpoints. The outcomes have clearly confirmed that long-range RFID tags are useful and cost-effective aids for rhino monitoring.

Botswana Black Rhino Reintroduction

The Southern Africa Development Community (SADC) is a regional political and economic block that includes key rhino range states of Zimbabwe, Namibia and South Africa, as well as other countries in which rhino restocking projects recently have been initiated (Botswana, Zambia, and Malawi) or in which small, relict populations still survive (Tanzania and possibly Mozambique). Throughout the SADC region, more and more emphasis is being placed on creating more, large, viable populations of black rhino as a means to enhance their long-term survival. From March through May last year, the IRF funded and collaborated with Wilderness Safaris to move 20 black rhinos to the Moremi Game Reserve. With the exception of one bull lost to fighting, all animals are doing well, and are fitted with radio transmitters and tracked regularly.



Photo: Deon de Villiers

In June, five more rhinos were translocated from Malilangwe Conservancy to Moremi, bringing the population total to 24. All parties are thrilled to see these rhinos finally on the ground in Botswana. A calf was recently born to one of these females (photo above) – the first birth for the program, about which we are thrilled! This translocation represents an important component in the conservation of this critically endangered species, which now numbers only around 5,500 worldwide and is under constant threat.

Rhino Conservation Botswana www.rhinoconservationbotswana.com was recently launched. The idea is to grow these initial translocations into a more inclusive rhino conservation effort, reinforcing the ongoing government and private sector collaboration to monitor and manage the country's growing rhino population.

The Botswana black rhino translocation project has received generous support from the Tiffany & Co. Foundation, as well as the Houston Zoo, Taronga Conservation Society Australia, Cleveland Metroparks Zoo, and a number of private donors. Visit https://www.youtube.com/watch?v=647B_LMeabY to see a brief video about the project.

Rhino Research Grants

An integral part of IRF's mission is to support research that aids in the survival and management of rhino populations, both *in situ* and *ex situ*. In May 2014, we issued a request for research proposals. Grant amounts range from \$5,000 to \$35,000 per year up to two years. For the first time, we also solicited student project grants to provide seed money for students entering the field of rhino conservation research. Student project costs requested from IRF were not to exceed \$5,000, and the student project proposals were reviewed separately from the proposals submitted by established scientists.

Our panel of 14 established scientists evaluated proposals on: quality, soundness of science, feasibility, likelihood that the results will lead to progress in resolving the challenges, effectiveness of the budget, and importance to the overall effort of maintaining healthy, self-sustaining populations of rhinos. We have awarded the following research grants:

We have awarded \$203,048 in grants to the following projects:

Mike Bruford, Cardiff University

Assessing the Genetic Health of the Southern Black Rhinoceros Populations Using Genomic Tools

Mary Beth Manjerovich, Lincoln Park Zoo

Investigating Important Factors Affecting Health and Reproduction Ex Situ

Dmitri Petrov, Stanford University

Genetic Studies Relevant to Management of Black Rhinoceros Populations

Budhan Pukazhenth, Smithsonian Conservation Biology Institute

Role of Gut Microbiota in Health and Disease Sensitivity of the Black Rhinoceros

Alan Roca, University of Illinois

Developing Effective Markers for Censusing of Sumatran and Javan Rhinos by Local Researchers

World Rhino Day & Team Rhino

Tuesday, September 22nd, was World Rhino Day! IRF officially launched Team Rhino last year on World Rhino Day, drawing attention to the need for greater public awareness and partnerships to save the world's five threatened rhino species. Team Rhino has a number of key folks on the field, including Dr. Jane Goodall (right). Go to <http://teamrhino.org/> to learn more.

Team Rhino t-shirts and hoodies are particularly popular on our online store (even Jane Goodall got in on the action!). If you'd like to feature Team Rhino merchandise in your Zoo's gift shop, please contact Gloria Goeres at g.goeres@rhinos.org.



Zoo Partner Fundraising Events and Programs

IRF is humbled by all that our Zoo Partners do to enable their growing support for rhino conservation. This funding represented almost one-third of IRF revenue in 2014. Zoo Partners support the IRF through a variety of events and activities, including Quarters for Conservation, conservation grants and other fundraisers. Many American Association of Zoo Keepers (AAZK) chapters participate in annual Bowling for Rhinos and other events, while the International Rhino Keeper Association (IRKA) publishes a rhino calendar and hosts Cinco de Rhino celebrations, both groups donating proceeds to rhino conservation. More and more zoos and aquariums are hosting special Cinco de Rhino and World Rhino Day events that raise both awareness and much-needed funding.

Dr. Susie Ellis, IRF Executive Director, and several of our board members are also available for lectures and seminars at your zoo. Please email Susie at s.ellis@rhinos.org to set a date.

If your institution hasn't yet contributed to rhino conservation via IRF in 2015, please consider using the form on the last page of this report to do so. If you contributed in September, your organization will be listed in our next report.

2015 Zoo Partner Support - 1 January through 30 August 2015

Akron Zoological Foundation
American Association of Zoo Keepers
Blank Park Zoo Foundation
Brevard Zoo
Buffalo Zoo
CERZA Zoo Conservation
Chester Zoo
Cincinnati Zoo & Botanical Garden
Columbus Zoological Park Association
Dallas Zoo
Detroit Zoological Society
Disney Conservation Fund
Dublin Zoo
Erie Zoological Society
Fort Worth Zoological Association
Fossil Rim Wildlife Center
Greenville Zoo
Henry Vilas Zoo
Houston Zoo, Inc.

International Rhino Keeper Association
Jacksonville Zoological Society
Milwaukee County Zoo
Opel Zoo
Reid Park Zoo
San Diego Zoo Global
San Francisco Zoological Society
Save the Rhino
Taronga Conservation Society Australia
Tulsa Zoo
Walt Disney Co. Foundation
Wilhelma Zoo Stuttgart
Zoo Atlanta
Zoo Basel
Zoological Association of America

Thank you!

93% of your contribution goes directly to field programs.



Zoo Partners Membership Form

Contact _____ Zoo _____

Position _____ E-mail _____

Phone/Fax _____

Rhino Conservation Contribution

___ \$10,000 ___ \$5,000 ___ \$2,500 ___ \$1,000 Other (amount) _____

We encourage your institution to give an unrestricted gift so that we can put funds to work where they are needed most. If your zoo wishes to restrict its support to a particular project (or projects), please enter the name(s) from the list below:

**Operation: Stop Poaching Now (southern Africa)
Zimbabwe's Lowveld Rhino Trust
Botswana Black Rhino Reintroduction
Indian Rhino Vision 2020
Sumatran Rhino Protection Units
Sumatran Rhino Sanctuary
Javan Rhino Protection Units
Javan Rhino Study and Conservation Area**

For additional information regarding IRF programs or support opportunities, please contact: Susie Ellis (s.ellis@rhinos.org) or Alex Hausler (a.hausler@rhinos.org) or call 540-465-9595.

Membership Forms and Rhino Conservation Contributions can be mailed to:

**International Rhino Foundation
201 Main Street, Suite 2600
Fort Worth, TX 76102 USA**

www.rhinos.org