



The impact of zoos on rhino conservation



REFLECTING ON THE VALUE AND RELEVANCE OF OUR ZOO PARTNERS...

Save the Rhino recently passed a significant milestone, our 25th birthday, and we used this opportunity to reflect not just on the past year, as we usually do, but on the whole span of our existence as a charity. (We also wrote a comprehensive [25-Year Impact Report](#). Do take a look.) One significant recognition during this process of reflection was the central value and relevance of the zoo community for rhino conservation, during the past quarter of a century and, most importantly, in the present day and going forward as we enter arguably the most challenging and important decade for nature.

The past 25 years have seen the slow recovery of some rhino populations, and sadly the decline of others, against the background of a growing human population (there are an additional 2.2 billion people on the planet) and the emergence of global environmental and conservation challenges – pollution of the world's oceans and atmosphere, consequent changes to the climate, and a man-made mass extinction. As I write this, the world is trying to recover from a zoonotic pandemic that has affected millions of people. Many key reports reach the same conclusion: we have 10 years in which to review and reset our relationship with our natural world.

By the end of this century, we can expect the human population to increase by another two billion, almost all in sub-Saharan Africa, where the population is forecast to treble. In a world of 10 billion humans, habitats will become more fragmented, the divisions between ex situ populations, in situ captive breeding populations, and highly managed wild populations, will become even more

blurred, and zoos' expertise in husbandry, animal welfare and meta-population management will be more vital than ever.

As more people learn to live alongside wildlife, zoos will play an essential role as one of the repositories of expertise on promoting co-existence and avoiding human-wildlife conflict.

The importance of ex situ animal populations as numerical and genetic reserves is well documented, but is of particular relevance to animals like rhinos, where poaching rather than habitat degradation is often the primary cause of loss, and therefore opportunities exist for reintroduction. Recent successful rhino reintroductions to Rwanda and Tanzania are important examples.

And lastly, at least for this short foreword, is the crucial role zoos play as an interface with people who care about wildlife and want to support conservation. Irrespective of the success of innovative financing initiatives, people who care will always be central to conservation funding, particularly in these times when ecotourism income has all but disappeared. The success of our zoo partners in raising awareness of conservation issues and in raising funds has, particularly in the current very challenging times, been remarkable.

In our view, the role of the zoo community will not only be increasingly relevant to solving the conservation challenges of the coming decades, but also essential in promoting an environmentally sustainable future to the general public.

We sincerely hope you enjoy reading this report on the rhino conservation impact of our zoo partners during the past year. We look forward to working with many of you, both old friends and new partners, to further our shared conservation goals and to secure a safe future for wild rhinos.



Jon Taylor, Managing Director, Save the Rhino International

SAVING RHINOS DURING A PANDEMIC

Today, on average, a rhino is killed for its horn every day, and poaching and habitat loss are driving already fragile rhino populations to the edge of extinction. Fewer than 29,000 rhinos are thought to remain on our planet, but recent reports suggest that the numbers might be even lower. The situation is alarming, and the Covid-19 pandemic has brought new challenges. With much of international tourism on halt, many of the field programmes with which we work have been left without a vital source of income and with extraordinary costs.

The pandemic has also had some positive impacts. We've seen a decline in poaching in countries such as Kenya, which saw no rhinos poached in 2020, the first zero poaching year in 21 years. Namibia and South Africa saw similar poaching declines, probably due to lockdowns and the restrictions placed on domestic and international movement, which affected poachers' ability to move rhino horn along the supply chain. However, as countries and travel start to re-open, we have already started to see an increase in incursions. While there is hope that the impacts of Covid-19 could bring change for wildlife

trade policies in Asia, the fear is that, once the tourism industry is back on track, poaching and the demand for rhino horn will also pick up once again.

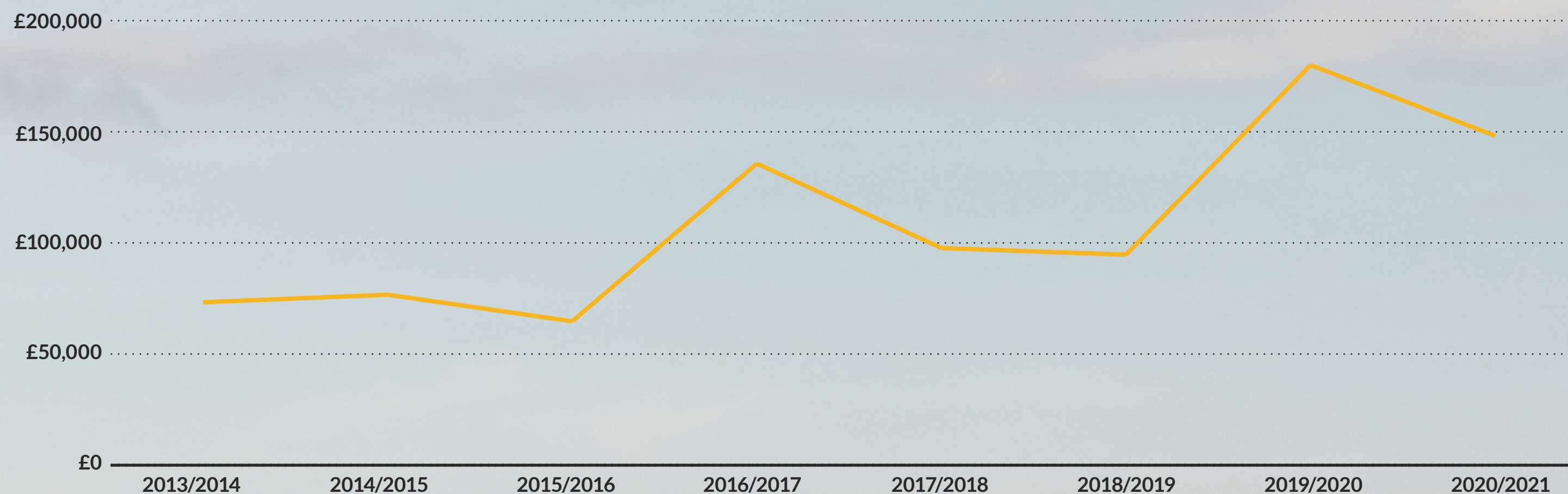
And of course, it is not only our field partners who were hit by the impacts of Covid-19 and a lack of tourism or funding. Zoos were badly affected by closures put in place because of the spread of the virus. However, despite this, our zoo partners still managed to raise funds for rhino conservation. Donations dropped slightly from £179,968 in 2019-20 to £148,180 in 2020-21, but this is still a formidable achievement given the current climate. Thanks to these generous contributions, we managed to send vital emergency funding to support our conservation partners saving who continue to protect rhinos during the pandemic.



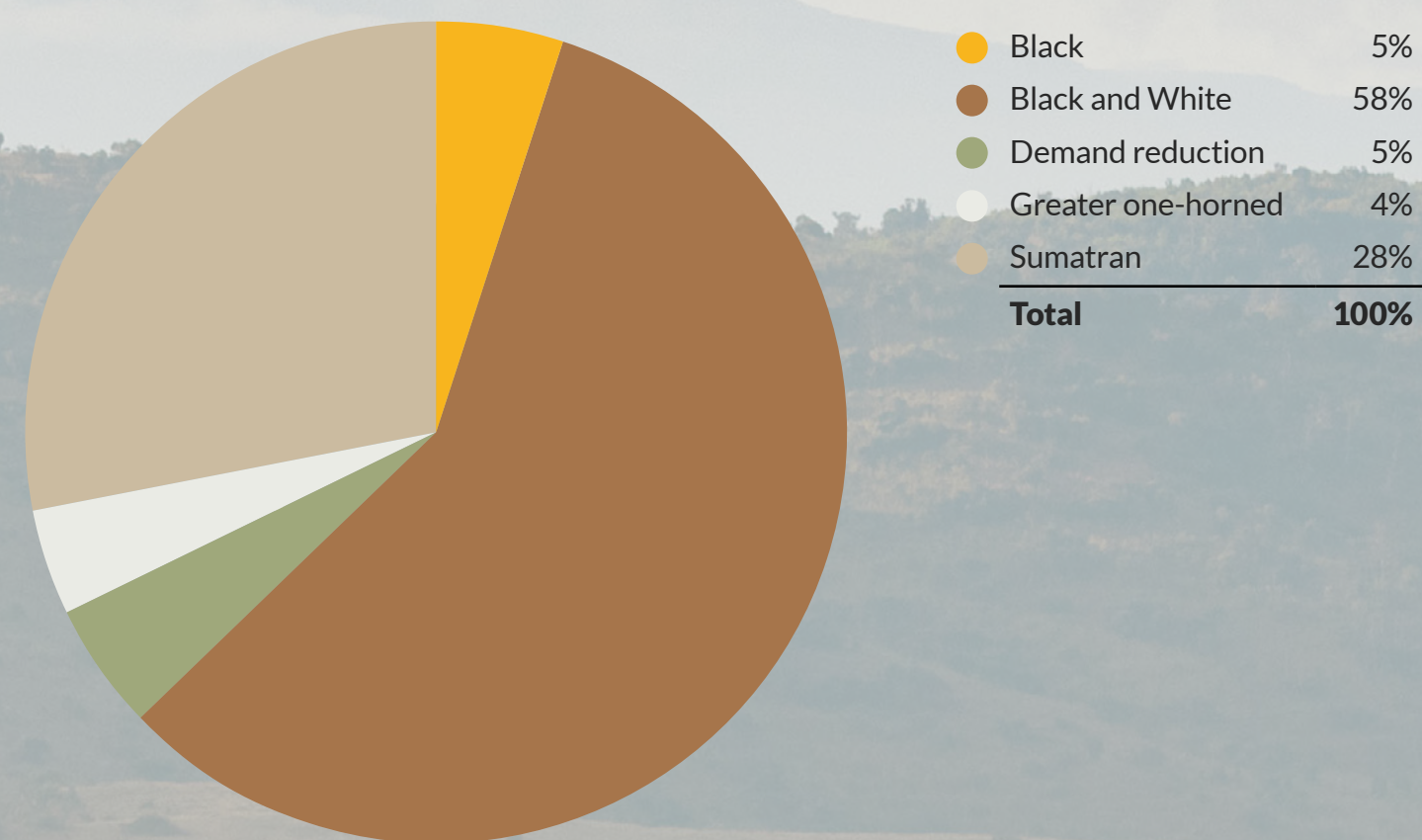
Greater one-horned rhino at Kaziranga National Park, India, 2020. © Instagram: @sohailinzaman

Between April 2020 and March 2021, our zoo partners contributed a phenomenal £148,180 for rhino conservation efforts, supporting ten different field programmes in Africa and Asia.

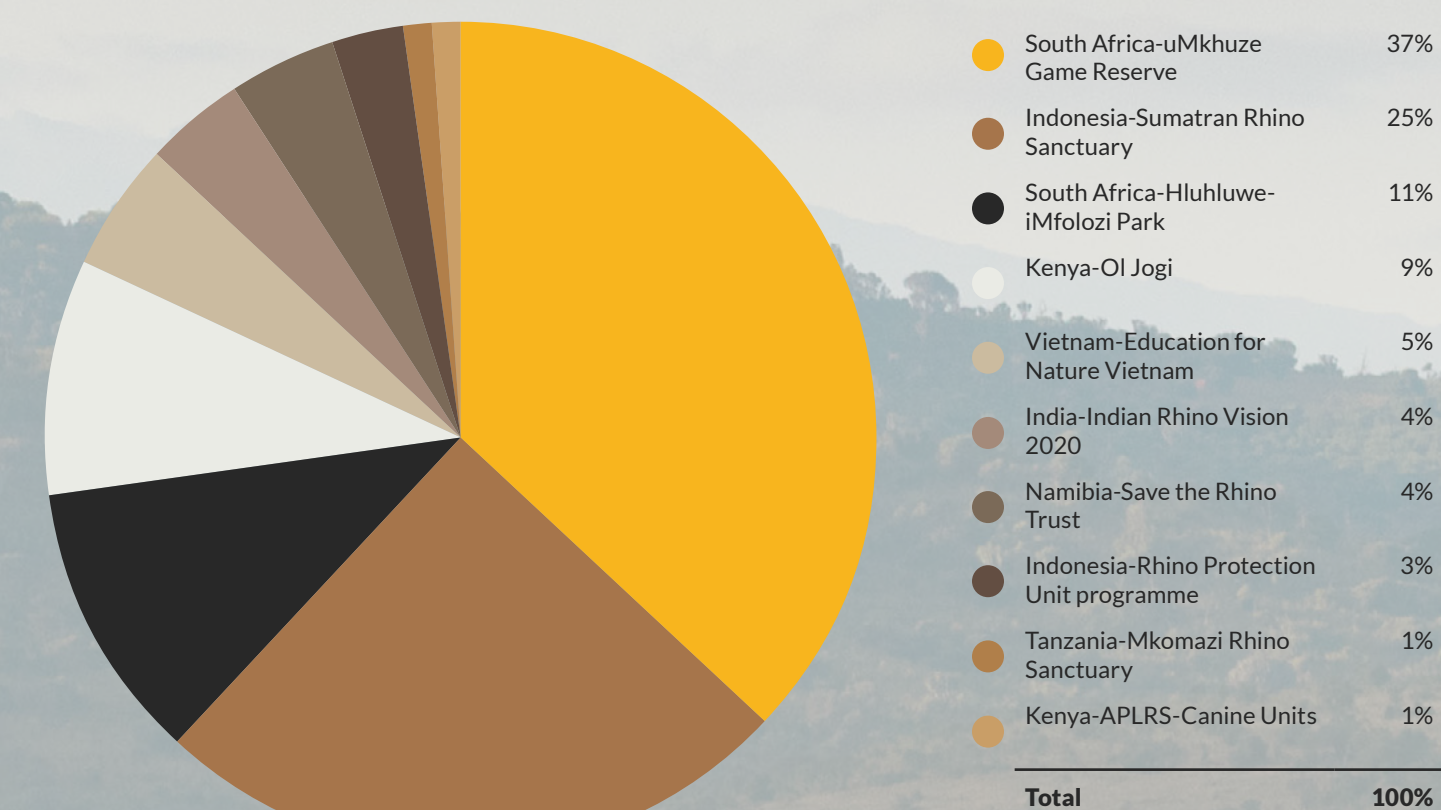
Field programmes supported by our zoo partners through restricted grants in 2020-2021



Rhino species supported by our zoo partners through restricted grants in 2020-2021



Field programmes supported by our zoo partners through restricted grants in 2020-2021



MAKING CONSERVATION A PRIORITY

The Covid-19 pandemic has affected everyone and the consequences of the control measures put in place have changed all of our lives. Zoos are one of the sectors that have been especially hard hit, as they have been forced to close their gates to the paying public for long periods of time; when permitted to allow visitors, the numbers have been severely capped to ensure social distancing. For the private

and charity zoos that are totally self-funded by attracting visitors, rather than receiving state or government funding, it has been a particularly tough eighteen months. Compounding the loss of income, zoos, unlike many businesses, can't simply close operations and furlough staff to save money. Managing an animal collection is costly, requiring full-time care staff, vets, security and administration, which means that although the income has dried up, the costs continue.

The huge financial losses of income reported by EAZA member zoos makes the contribution to Save the Rhino especially impressive, with an incredible £145,000 donated between April 2020 and March 2021, directly supporting 10 rhino conservation programmes in seven countries across Africa and Asia.

This is tremendous news and shows that EAZA zoos are stepping up and delivering on their conservation messages and demonstrating their confidence in the work of Save the Rhino International even in these challenging times.

We have seen some very encouraging news that rhino poaching has significantly decreased in many range countries during the pandemic, and we are all very hopeful that this is the case and continues. It is extremely important, however, that EAZA zoos continue to prioritise rhino conservation

despite the pandemic. The full consequences of the Covid-19 pandemic, including the laying off of rangers and the suspension of their protection activities, will not be fully understood until we see them return to the field and resume their rhino monitoring. It is the hope of all EAZA zoos that the news continues to be positive and that we can continue to make a real impact on rhino conservation, now and in the future.

Mark Pilgrim PhD, EAZA Black rhinoceros EEP Co-ordinator, International Zoo Consultant



Black rhino at Chester Zoo, UK, 2010. © Save the Rhino International

RENEWED RELEVANCE OF ZOOS

2020 was a tough year. Members of the British and Irish Association of Zoos and Aquariums (BIAZA), so dependent on their visitor-generated income, were closed for 207 days, saw a 42% drop in visitor numbers and an average income loss of £2m per organisation. Conservation spending reduced by 38%, research projects reduced by 57%, and education spend was just one fifth of that seen in 2019.

The pandemic has provided a glimpse of what we'd stand to lose if we lost our good zoos and aquariums – the opportunities to inspire and educate, to carry out critical science and research and to motivate world-leading conservation action, turning visitor spend directly into conservation funding. There were silver linings though. Our zoos and aquariums came together like never before. They forged new and stronger relationships with their public, who unable to visit, engaged with our exciting and innovative virtual events. Stronger relationships were also established with politicians and decision-makers, who saw what was at stake, and stepped up to offer their support. The resilience of our partner organisations, who



White rhino at Colchester Zoo, UK, 2019. © Save the Rhino International

made sure that longer-term projects and efforts could continue wherever possible was also a source of inspiration. And against all the odds, we are proud our zoos were still able to make such a significant contribution to the future of rhinos.

So, as we recover from the pandemic, it is with a renewed relevance, and with an opportunity to capitalise on society's heightened appreciation for nature and the need to act for our planet. Our long-term partnership with Save the Rhino is a powerful example of that work, resulting in meaningful conservation impacts for rhinos in the wild. We are exceptionally proud of our zoos' participation in SRI's amazing work, and look forward to many fruitful years of collaboration ahead.

**Nicky Needham, Senior Manager,
British and Irish Association of Zoos and
Aquariums (BIAZA)**

MAKING A DIFFERENCE THROUGH CONSERVATION PARTNERSHIPS

Like every sector that's involved in animal care and tourism, it has been an especially challenging year for French zoos. For a total of 13 months zoos were closed, whilst still having significant expenses to ensure all animals remained cared for.

Yet, despite this worrying time, supporting long-term conservation partners remained important for our zoos. All of us knew that Covid-19 had also been extremely difficult for conservation NGOs, and we did not want to fail in front of urgent issues. Indeed, due to the sanitary and economic crisis, there were fewer donations, less funding from ecotourism and fewer education programmes, but conservation had to continue. Especially for endangered species such as rhinos.

We are always proud to help Save the Rhino's work and join them in their mission to ensure all rhino species thrive.

Over the coming months, we'll be continuing to talk about our joint work to support rhino conservation. Please join us in Hall 3 – C18 during the IUCN World Nature Congress to find out more. At the Congress, we will organize a workshop for the public on the theme of "The stakes of international species trafficking, from the African rhinoceros to the French eel", and a photo exhibition of animal species listed on the IUCN Red List, which have been reintroduced in France and worldwide through the help of French zoos.

We truly believe that together we can make a huge difference for our natural world, and we're delighted that French zoos are working alongside Save the Rhino International to ensure that rhinos are around for future generations.

Cécile Erny, Executive Director, Association Française des Parcs Zoologiques (AFdPZ)



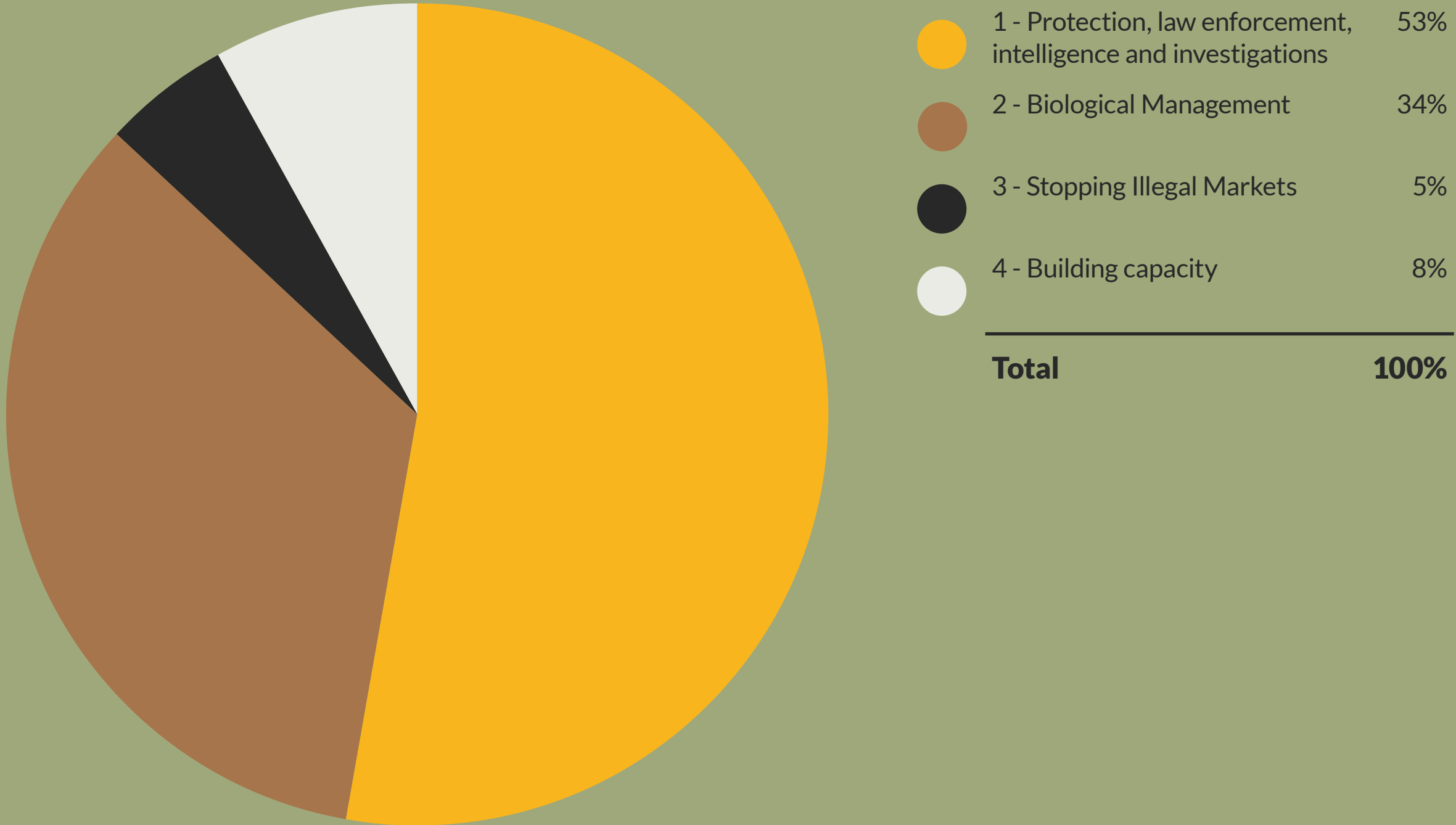
Goliath finishing off his birthday cake, Safari de Peaugres, France, 2013. © Safari de Peaugres

WORKING TOGETHER FOR RHINOS

Our aim is to focus on conserving viable populations of Critically Endangered rhinos, with the long-term goal of each species being down-listed to a lower category of threat on the IUCN Red List. To achieve this, our efforts are focused on tackling the threats faced by rhinos, as well as protecting and growing their populations. Our zoo partnerships contributed to the following four pillars underpinning our conservation work:

- 1. Protection, law enforcement, intelligence, and investigations
- 2. Biological management
- 3. Stopping illegal markets
- 4. Building capacity

Save the Rhino’s strategy areas supported by restricted zoo grants in 2020-2021



PROTECTION, LAW ENFORCEMENT, INTELLIGENCE, AND INVESTIGATIONS

One of our main priorities is to keep rhinos safe from poachers so that their populations can grow and thrive. This is done through law enforcement, intelligence gathering and investigations to pre-empt and prosecute poaching and trafficking of rhino products.

This strategy area received the largest contribution from our zoo partners during the last financial year, raising a total of £49,776 towards these activities.

For the past 25 years, Rhino Protection Units (RPU) have been working to protect the Critically Endangered Sumatran rhino in Way Kambas and Bukit Barisan Selatan National Parks in Indonesia. In one year, RPU teams will walk around 15,000 km across the rainforest, noting down any signs of Sumatran rhinos (such as footprints, wallows, faeces, feeding or other signs) as well as removing traps and snares and apprehending illegal intruders. During 2020, rangers identified 644 cases of illegal activity, destroyed 46 animal traps and documented 152 poachers or encroachers into the national parks. Thanks to the incredible

efforts of these teams, there have been no recorded rhino poaching incidents for 14 years in the areas they patrol. Although 2020 was an extremely tough year, thanks to funding from our partners like **Odense Zoo**, Rhino Protection Units have been able to continue to protect Sumatran rhinos and tackle poaching safely and effectively. In India, thanks to donations from **Parc animalier et botanique de Branféré**, **Rotterdam Zoo** and **Zoological and Botanical Garden Stuttgart, Wilhelma**, we have been supporting Indian Rhino Vision 2020. The aim of the project was to increase the population and distribution of Greater one-horned rhinos in Assam by moving rhinos to new habitats, increasing security measures in protected areas, improving wildlife crime investigation and enforcement, and collaborating with local communities to promote conservation.

Despite the sad news that two Greater one-horned rhinos were poached in Kaziranga National Park during 2020, poaching has reduced by 90% in the region (decreasing from 22 incidents in 2016) and there are significantly more Greater one-horned rhinos today than there were in 2005. Our zoo partners directly contributed to this positive conservation effort. In the past year, their funding was used to conduct annual training sessions for law-enforcement officers to improve the rate of successful prosecutions for wildlife crimes in the region.



Rhino Protection Unit, Indonesia, 2018. © Yayasan Badak Indonesia and International Rhino Foundation

In South Africa, 394 rhinos were killed by poachers in 2020. This is the sixth year in a row that poaching has declined since peaking at 1,215 in 2014. However, while this is encouraging news, illegal incursions into reserves remain alarmingly high and poaching is still the key threat to rhinos.

Facing the fears and horrors of tackling wildlife poaching on a daily basis can feel overwhelming. Add to this the impact of the Covid-19 pandemic, and life for South Africa's rangers has been extremely tough. These brave men and women have often had to cope with insufficient funding for effective equipment, deal with the constant worry about the health and safety of loved ones, and work longer hours to make sure that rhinos and other threatened wildlife remain safe.

KwaZulu-Natal, the province that is home to Hluhluwe-iMfolozi Park (HiP) and uMkhuze Game Reserve, still sees significant poaching pressure. Thanks to the committed support of our zoo partners including **Parc de Lunaret - Zoo de Montpellier, Parco Natura Viva (Fondazione A.R.C.A), Safari de Peaugres** and **Zoo La Boissière du Doré**, we were able to continue providing vital funds for the anti-poaching efforts at HiP, helping to ensure rangers can continue to protect rhinos and tackle poaching through the pandemic and beyond. Generous funding from **Réserve Africaine de Sigean** also helped to buy new

quadbikes to assist with rhino monitoring and protection, and contributed to upgrading rangers' communications from a previously vulnerable, analogue radio system to a new, fully secured digital system in one section of the Park.

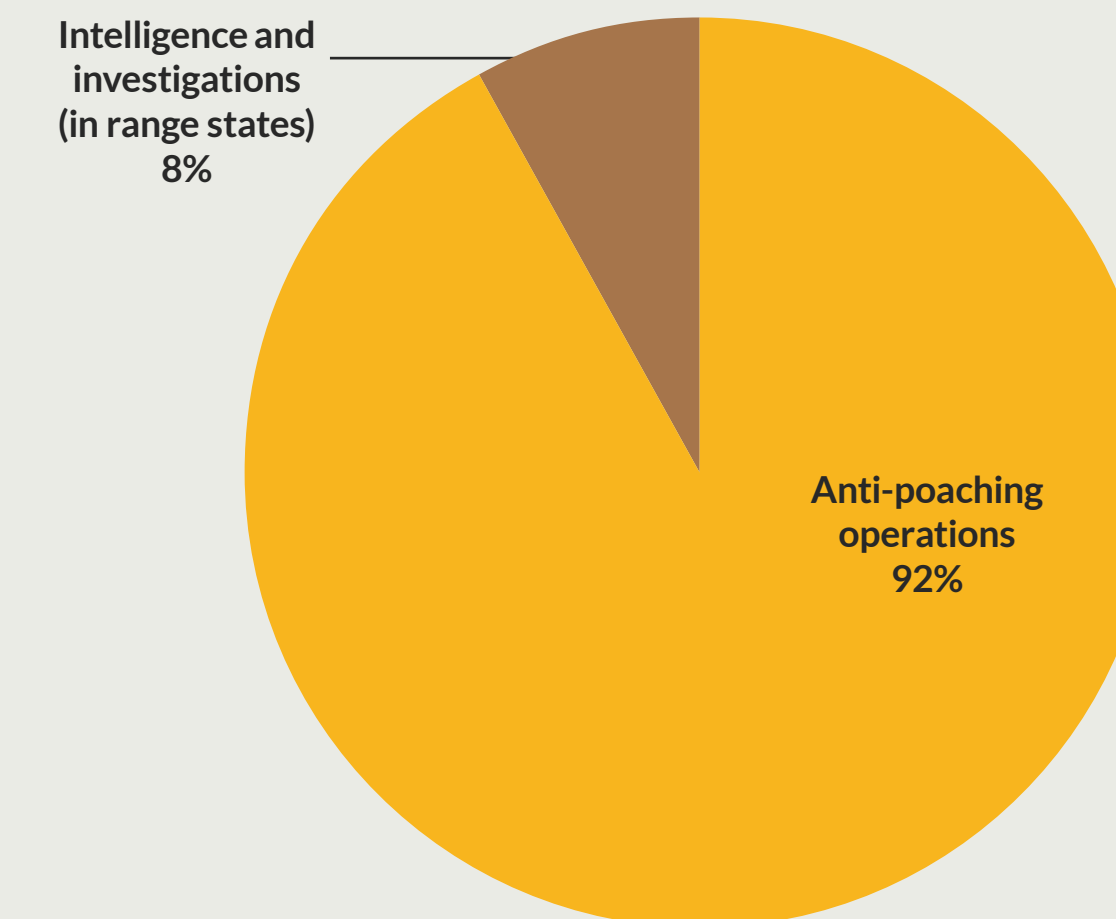
Our partnership with the **WILDLANDS Nature and Education Fund** helped uMkhuze Game Reserve pay for the construction of an aircraft hangar, pilot training for two members of staff and a drone kit to monitor the Reserve from the air. It also funded an electric vehicle to monitor the Reserve's fence line from the ground, tyres for the three law-enforcement vehicles, and new binoculars for the field rangers. With these additional layers of support, uMkhuze's rangers are better equipped to protect their important black and white rhino populations and maintain their zero-poaching status.

For the first time in 21 years, Kenya saw zero rhinos poached in 2020, thanks to the hard work of its rangers and their dog squads. Lewa Wildlife Conservancy's Joseph Piroris leads an expert canine team of five dog handlers and two dogs: Ruby and Nasuju, in a crucial role protecting black and white rhinos in the area. Dogs are increasingly being used to track scents after a poaching incident, leading rangers and enforcement authorities to suspects, or helping them understand routes used by poaching gangs. In the first six months of 2020, Lewa's canine

unit was deployed in 28 incidents, leading to four successful arrests and recovery of two weapons.

Thanks to the support of **Rotterdam Zoo**, the canine teams at Lewa Wildlife Conservancy and at nearby Ol Jogi Conservancy have been able to maintain high standards of canine training, upgrade facilities and equipment, and ensure all their dogs receive expert veterinary care so they are ready to be deployed at a moment's notice. It's no wonder they've had such great success!

Activities under this strategy supported by restricted zoo grants in 2020-2021



BIOLOGICAL MANAGEMENT

As well as protecting rhinos from poaching, it is vital to ensure rhino populations are managed effectively. This involves monitoring the species and their habitat to ensure healthy, growing populations with a strong genetic diversity.

In the last financial year, zoos contributed a total of £29,102 for these biological management activities.

Twenty-five years ago, black rhinos across Africa were on the brink of extinction: more than 95% of the 100,000 black rhinos present in 1960 had been wiped out by poachers. In Namibia, there were fewer than 400 black rhinos left. Where they once roamed in their thousands, it was now almost impossible to find them. Today, thanks to years of conservation efforts made possible by the work of Save the Rhino Trust (SRT) and other partners, the black rhino population in the region has trebled. As a result, the South-western black rhino subspecies has been reclassified by the IUCN from Vulnerable to Near Threatened, a lower category of threat.

However, the Covid-19 pandemic threatened to undo SRT's excellent work. The global lockdown halted tourism almost overnight, resulting in a huge loss of income for both rhino conservation programmes and local communities. Thanks to the support of **Zoo Krefeld** and the **American Association of Zoo Keepers**, SRT's team has been able to continue patrolling the vast Kunene Region, making sure that they have all the right kit, training and resources to keep the unique desert-adapted rhino safe.

Despite the difficulties brought on by the pandemic, OI Jogi Conservancy in Kenya continued to maintain its zero-poaching record for six consecutive years with the support of our zoo partners. A generous donation from **Stichting Wildlife** was used to procure mobile monitoring data-collection devices and complete OI Jogi's CCTV remote camera system. This has already proven to be a huge asset to OI Jogi. The new infrastructure has extended the camera system to monitor all wildlife corridors across the Conservancy, providing insight into the migration of wildlife, and, crucially, increasing the security of the rhino population.

One of the challenges in looking after the health of the rhinos at Mkomazi Rhino Sanctuary in Tanzania is the lack of a permanent water supply during the dry season (July to October). Their black rhinos not only require drinking water, but they also

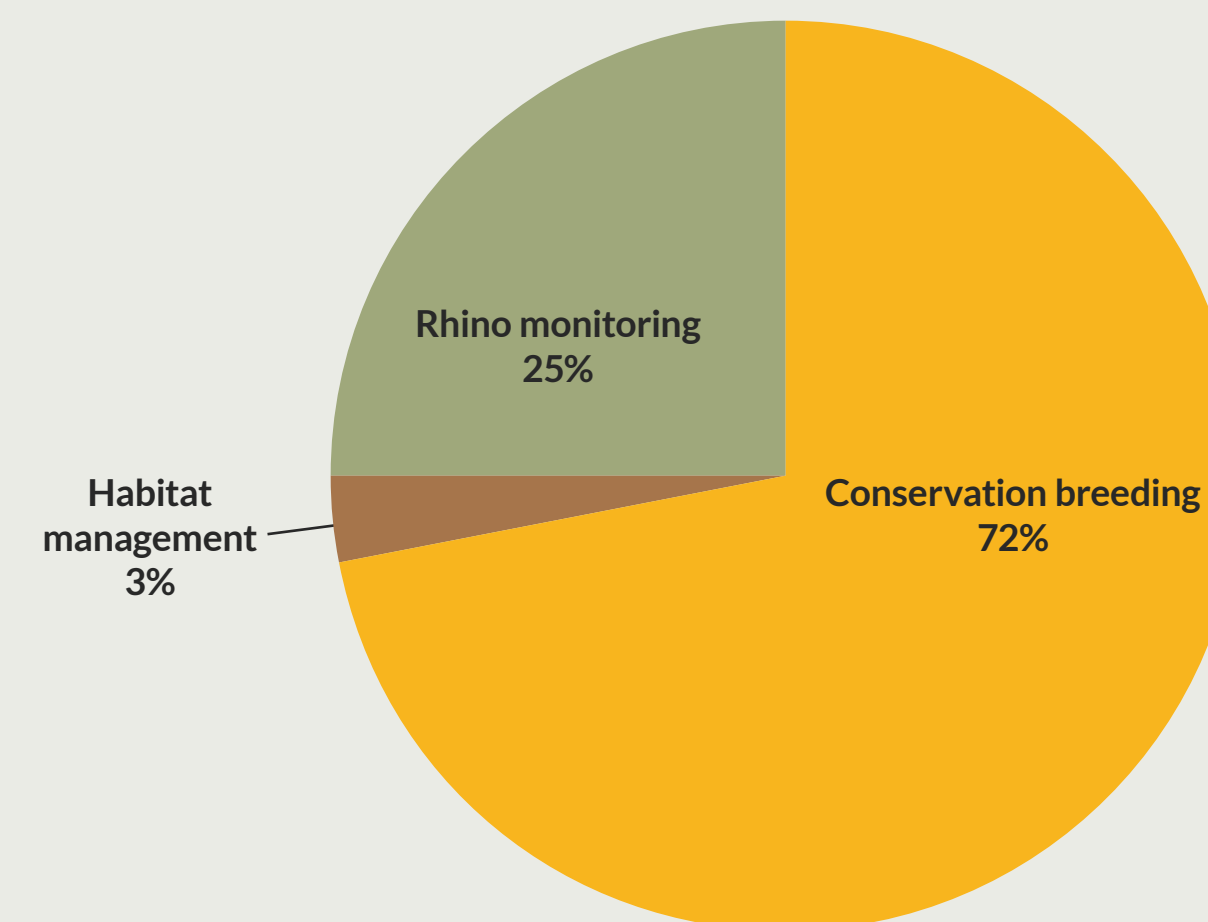
wallow in the mud to protect themselves from sunburn and insect bites. This means that the team must make daily roundtrips of 90 km by truck and a bowser to provide their rhinos with sufficient water. This was made even more challenging during the pandemic as funds were limited because of the lack of tourism revenue, just as management of the Rhino Sanctuary transitioned to the Tanzanian National Parks Authority. Thankfully, funds from **Safari Park Dvůr Králové** helped to pay for basic Sanctuary running costs, including the continued operations of the water bowser.

In Indonesia, funding from **Tallinn Zoo and Foundation Lutreola, Zoo Hodonín and Zoological and Botanical Garden Stuttgart, Wilhelma**, went towards the ambitious international effort to save the Sumatran rhino from the brink of extinction. Sumatran Rhino Rescue aims to relocate the widely dispersed rhino populations from the wild to managed conservation-breeding facilities designed specifically for their care. In addition to securing the remaining

rhino population, the effort will develop the infrastructure to care for the rhinos and grow the population in their numbers.

In 2020, search and rescue missions were delayed by the pandemic, but important steps were taken to build capacity in veterinary and husbandry care and capture and translocation operations. The team at the existing Sumatran Rhino Sanctuary in Way Kambas National Park focused on conservation breeding. Delilah, Ratu's calf born in 2016, was separated from her mother and is doing well in her new enclosure, while Ratu and male Andalas have been reintroduced and are breeding again. The team hope that a pregnancy will soon follow, continuing to grow the population of this Critically Endangered species.

Activities under this strategy supported by restricted zoo grants in 2020-2021



Delilah at the Sumatran Rhino Sanctuary, Indonesia, 2017. © International Rhino Foundation





STOPPING ILLEGAL MARKETS

To stop rhino poaching, we need to tackle its root cause: consumer demand for rhino horn. Without consumer demand, there will be no incentive for poachers or traffickers. Stopping illegal wildlife markets needs action on several fronts – strong laws need to be in place, those laws need to be enforced and, crucially, the public need to support the law rather than supporting the illegal trade. Our partner, Education for Nature-Vietnam (ENV), works on all these fronts.

The past year has been defined by the Covid-19 pandemic and, amongst many other things, has shone a global spotlight on wildlife markets in Asia and reframed both legal and illegal wildlife trade as a public health issue. The outbreak proved to be an important opportunity to improve wildlife protection in Viet Nam and neighbouring countries, making our partnership with the ENV more relevant and important than ever.

In 2020, our zoo partners donated a total of £7,117 to support the work of ENV.

Funds from **Zoo Berlin** and **Parc Animalier de la Barben** will go towards addressing wildlife consumer and internet crimes in Viet Nam by enhancing enforcement work. A consumer crime survey will be carried out in Hanoi and Ho Chi Minh City throughout 2021 and an internet wildlife crime enforcement campaign will be launched to reduce the availability of rhino horn and other wildlife products for sale via the Internet.



Sized rhino horns in Viet Nam, 2016 © Education for Nature-Vietnam

BUILDING CAPACITY

Rangers risk their lives every day to protect the world's rhino populations, and their job is becoming increasingly challenging due to the ever-present threat of poaching. It has never been more important for the rangers to be properly trained and equipped to deal with these potentially dangerous and life-threatening situations.

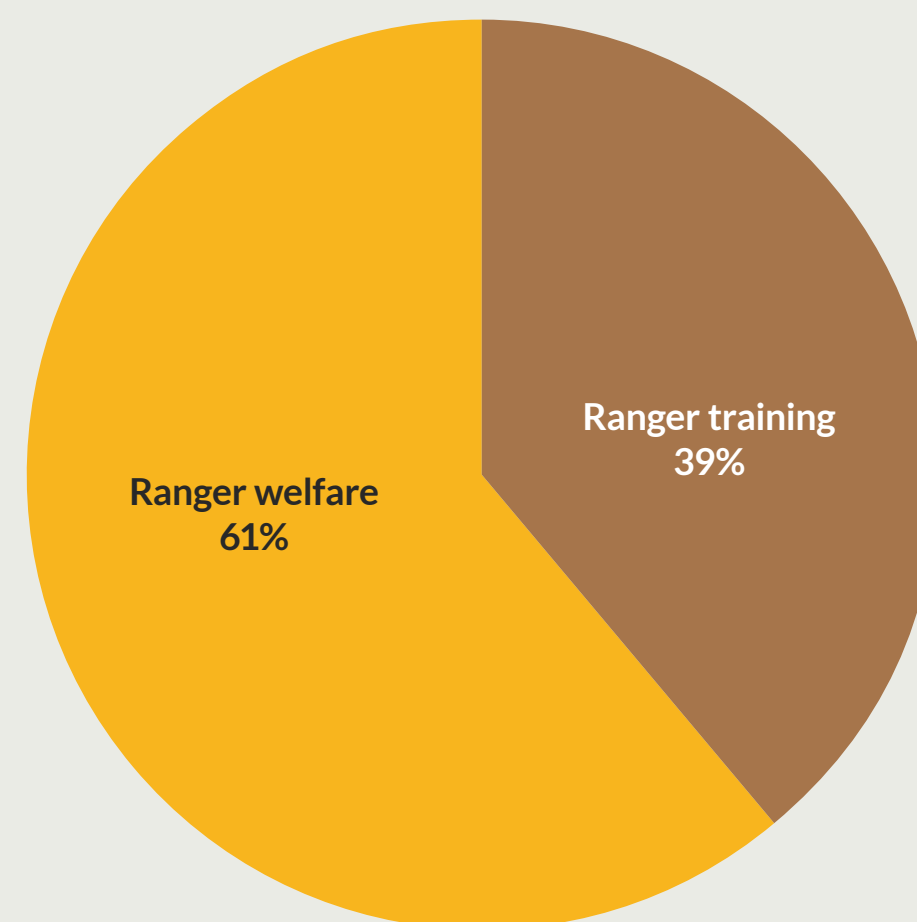
In the last financial year, a total of £11,388 was raised by our zoo partners to help build capacity.

OI Jogi Conservancy in Kenya has held a zero-poaching record since 2015 and is maintaining its reputation in detecting and deterring potential poachers. We help OI Jogi to ensure that its rangers have what they need to protect rhinos every single day. We can give rangers essential equipment such as specialist night-vision tools for its anti-poaching patrols, ensure that kennels for detection dogs are kept in the best condition and provide new, durable uniforms to every single ranger. In 2020, funding from **Erlebnis Zoo Hannover** helped to buy new uniforms for 31 rhino monitoring rangers, improving their safety and morale, and **Tallinn Zoo and Foundation Lutreola** supported the continued training and deployment of OI Jogi's tracker dog unit.

While poaching in South Africa declined in 2020, there is still significant pressure on the national and provincial parks and its rangers, demonstrating

that, whilst the latest numbers are positive, without protection, rhinos could be in far greater peril. Support from the **Association Française des Parcs Zoologiques** and **Fondation Le Pal Nature** in 2020 will help uMkhuze Game Reserve's Conservation Manager, Eduard Goosen, implement an annual ranger training programme across the Reserve to ensure that rangers are well-trained in field skills, tactics, armed contacts, as well as first aid and other essential skills. This will allow rangers to feel better prepared to face potentially life-threatening situations in the field and safely apprehend any intruders, staying one step ahead of the poachers.

Activities under this strategy supported by restricted zoo grants in 2020-2021





FINAL REFLECTION ON THE IMPACT OF OUR ZOO PARTNERSHIPS FOR RHINOS

Thanks to the incredible support of our 28 zoo partners during the financial year April 2020 to March 2021, together we directed grants totalling £148,180 to ten rhino conservation programmes in seven countries across Africa and Asia.

Additionally, zoos generously gave £10,440 in unrestricted contributions supporting the breadth of our rhino conservation efforts. Instead of supporting individual programmes and projects, funding from **Cotswold Wildlife Park and Gardens, Manor Wildlife Park, Monde Sauvage Safari Parc, Touroparc Zoo, Zoo du Bassin d'Arcachon, Zoo Schwerin and Madrid Zoo and Parques Reunidos Foundation** was used to help us respond to the most urgent funding needs during the pandemic. From buying litres of sanitizing gel and personal protective equipment for rangers in South Africa, to keeping security vehicles running in Kenya and supporting

the work of Rhino Protection Units protecting Sumatran and Javan rhinos in Indonesia, our zoo partners played a crucial role in responding to challenges of the pandemic and conserving rhinos.

We would like to say a massive 'thank you' to all the zoos, their staff, Boards and visitors, who have so generously contributed to support rhino conservation programmes across Africa and Asia. We look forward to continuing our successful partnerships to achieve our vision for a future where all five rhino species thrive in the wild.

Zoos supporting in situ rhino conservation programmes through Save the Rhino International from April 2020 to March 2021

India: Indian Rhino Vision 2020

Parc animalier et botanique de Branféré
Rotterdam Zoo
Zoological and Botanical Garden Stuttgart, Wilhelma
Indonesia: Rhino Protection Units
Odense Zoo

Indonesia: Sumatran Rhino Sanctuary

Tallinn Zoo and Foundation Lutreola
Zoo Hodonín
Zoological and Botanical Garden Stuttgart, Wilhelma

Kenya: Canine Units at Lewa Wildlife and Ol Jogi Conservancy

Rotterdam Zoo

Kenya: Ol Jogi Conservancy

Erlebnis Zoo Hannover
Stichting Wildlife
Tallinn Zoo and Foundation Lutreola

Namibia: Save the Rhino Trust

Zoo Krefeld
American Association of Zoo Keepers

Save the Rhino International: Unrestricted funds

Cotswold Wildlife Park
Manor Wildlife Park
Monde Sauvage Safari Parc
Touroparc Zoo
Zoo du Bassin d'Arcachon
Zoo Schwerin
Madrid Zoo and Parques Reunidos Foundation

South Africa: Hluhluwe-iMfolozi Park

Parc de Lunaret - Zoo de Montpellier
Parco Natura Viva (Fondazione A.R.C.A) Réserve Africaine de Sigean
Safari de Peaugres
Zoo La Boissière du Doré

South Africa: uMkhuze Game Reserve

Association Française des Parcs Zoologiques
Fondation Le Pal Nature
WILDLANDS Nature and Education Fund
Zoom Torino

Tanzania: Mkomazi Rhino Sanctuary

Safari Park Dvůr Králové

Viet Nam: Education for Nature-Vietnam

Parc Animalier de la Barben
Zoo Berlin

