

ENDANGERED
WILDLIFE TRUST
Protecting forever, together.

Integrated Report

2020/21

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COMMUNICATION ON PROGRESS

UN GLOBAL COMPACT

This is our **Communication on Progress** in implementing the Ten Principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

IUCN



Artwork by Alice Van Jaarsveld. Her work is available to buy here. Proceeds go towards supporting the EWT's work.

Message from the Chairman





In my report last year, I quoted the line: “There is no Planet B”, relating this to our EWT slogan: “Protecting forever, together”. I am greatly encouraged that some governments have started to take this to heart as they look to address industry’s environmental impact in their countries. They are taking the threat of global warming seriously, and the incentives they are offering in this vein are encouraging. My fervent hope is that this commitment continues. It’s up to governments to lead by example and to develop enabling frameworks that encourage and incentivise innovation in the arena of sustainability and clean energy. Indications coming out of COP 26 suggest some committed initiatives to address issues affecting climate change.

Increasing public pressure is being applied to corporations and organisations to comply with better environmental practices and more sustainable operating procedures. I look forward to a time where sustainability is a key objective of all organisations, a time where they will take sustainability to heart and comply willingly, a time where they raise their standards of compliance beyond the minimum, and do so willingly. Why? Because it makes good business sense, and not because of regulatory or societal pressure.

To me, conservation has always been a calling, and I am fiercely proud of the role that the EWT plays in protecting Planet A. For many of our team, it’s not ‘just a job’. We are blessed that the EWT continues to attract and retain highly talented individuals committed to the cause and prepared to dedicate their time, energy, and effort to actioning the conservation ethos.

Conservation will play a substantial role in the economy and job creation. This calls for stronger collaboration between tourism and conservation, particularly as the world slowly returns to a sense of pre-pandemic normality. Society has been isolated for a long period, and people need to venture out again and get back to nature. We are already seeing a return of tourists coming to Africa for an authentic African experience and loving it. These tourists will encourage many more tourists to visit us and enjoy the abundance of natural resources we have to offer. This will provide a massive boost to our economy and hopefully effect a speedy recovery in the tourism and hospitality sector, which the pandemic has severely impacted.

Our government needs to support the conservation sector more and recognise the value that conservation and the environment bring to the economy. There need to be stronger consequences for conservation crimes, and the scourge of poaching needs to be eradicated. This will not happen overnight, but it is vital that there is a commitment to this and that proper processes are put in place to ensure the speedy prosecution of transgressors. In my mind, environmental crimes border on treason and ultimately cost jobs and lives.

South Africa is a water-challenged environment, and we need to be mindful of how we consume and use water. Even more important, industry needs to be considerate of the way in which it uses water, and there need to be more stringent measures to counter pollution and contamination. More effective planning and better management of the utilisation of our water resources will be critical in the coming years, particularly as our population grows, our requirements for water increase, and our encroachment on natural habitats expands. Working within the limits of this resource will be critical to our survival.

The past two years have been extremely challenging for the EWT, as they have for all elements of society. The EWT is blessed to have a management team deeply committed to the cause of conservation and who live to Protect Forever, Together. They are a tribute to the team’s excellent work and dedication to the conservation cause.

The EWT has embarked on numerous important projects over the past year, with many highlighted in this report. From growing our footprint, to conserving and protecting Endangered species, to award-winning studies, to rediscovering lost species, to finding innovative solutions to reduce animal road deaths, our people constantly identify areas of concern and then create solutions. To chair this incredible organisation is indeed an honour, and I am truly thankful to all the EWT’s people for their dedication and commitment and the fine example they set for others to follow.

Together, we certainly can protect forever.

Dirk Ackerman

#cooltoconserve

Message from the CEO



Even those who take issue with governments' approaches to tackle the outbreak of COVID-19 – including decisions to lockdown economies, ban social events, curtail travel, and enforce the application of masks and sanitisers – will certainly agree that there was no delay in their swift action and global response. As contentious as these decisions may be, there is no denying the prompt action taken by every nation on this planet. From this, one could glean that a threat to human health or life, underpinned by the threat of rapid spread with no cure, limited options for prevention and largely unknown impacts sent nations into panic mode as they essentially stopped the world in order to buy time to study this threat, finetune medical responses, and develop a vaccine.

Given all of this, you would be forgiven for believing that other threats to human life, and indeed, many forms of life on earth, would at least be taken as seriously, perhaps more so if the consequences were far more devastating in the long run. When the cause of death is a virus, the world acts. When the cause of death is human-induced climate change or biodiversity loss, the world argues, blames, delays, pretends, and denies, as our planet continues to spiral towards a potentially irreversible and cataclysmic state.

Obviously many factors distinguish a virus from human-induced climate change and the rampant destruction of biodiversity, the politics of which have polarised and complicated any hope of finding meaningful solutions. A strand of viral DNA presents a clear and present cause of death, guided by the underlying medical science, and supports clear statistical analysis. Antibodies and pathogens clarify the playing fields for scientists and doctors, and a coroner's report can subdue politicians' denials. Yet death by climate change takes less obvious forms, from drowning in floods and mudslides, famine, and water-borne diseases, to hurricanes and mutating or emerging diseases. And death by biodiversity loss may include all of these, plus the loss of all our ecosystem services, including the disappearances of medicinal plants, and the loss of food, drinkable water, clean air, and, generally speaking, life on earth.

You can count on one hand the number of governments that have taken seriously the greatest risk posed to all humanity, and yet their voices continue to be drowned out by those who continue to deny and destroy. It is evident that the politics of human wellbeing do not match the science of saving lives. Both systems are, of course, completely manmade, and it is humans who have devised the structures we rely on to document, analyse, understand, and address challenges in the world around us in a way that pits parties against each other by setting completely different rules for those with diametrically opposing agendas. Society's way of organising ourselves gives power to politicians who react to threats like global pandemics with swift, short-term action. Yet, we leave the slow, lingering specifics of what 'death from climate change' looks like to those with far more knowledge and scientific evidence but none of the power to enforce a global response and immediate action.

At the recent 2021 United Nations Climate Change Conference (COP 26) in Glasgow, political leaders representing more than 200 nations ended nearly two weeks of discussions still at odds around a range of issues, including financial flows to compensate developing nations for climate-driven disasters and, more worryingly, around their own commitments to divest from coal-intensive economies. The world's largest coal consumers, Russia and China, did not even attend. Global emission giants have made various statements about de-carbonising their economies but these do not provide any guarantees of adherence to meaningful plans to bring down emissions .

Meanwhile, way down south, a non-profit organisation called the Endangered Wildlife Trust has just wrapped up its 48th year of implementing decisive, effective actions to prevent and slow biodiversity loss. Alongside many remarkable partners, the EWT is saving species, conserving habitats, and benefitting people across southern Africa with no wavering commitment or confusing agenda. Our goal is clear: prevent extinction and restore natural systems to the benefit of all. Despite the enormous challenges of this past financial year, the EWT team has rallied and achieved many remarkable gains for conservation. We detail many of these gains in the pages that follow. Standout achievements include our increasing focus on diminutive and 'invisible' species in recent years, including Africa's smallest adder, the Albany Adder, and using technology to rediscover populations of De Winton's and, hopefully, Van Zyl's Golden Moles. Our focus on amphibians expanded to include the Rough Moss Frog, Moonlight Mountain Toadlet, Micro Frog, and

Artwork by Alice Van Jaarsveld.

Cape Platanna as we continue to be the only organisation actively implementing conservation actions to save these species.

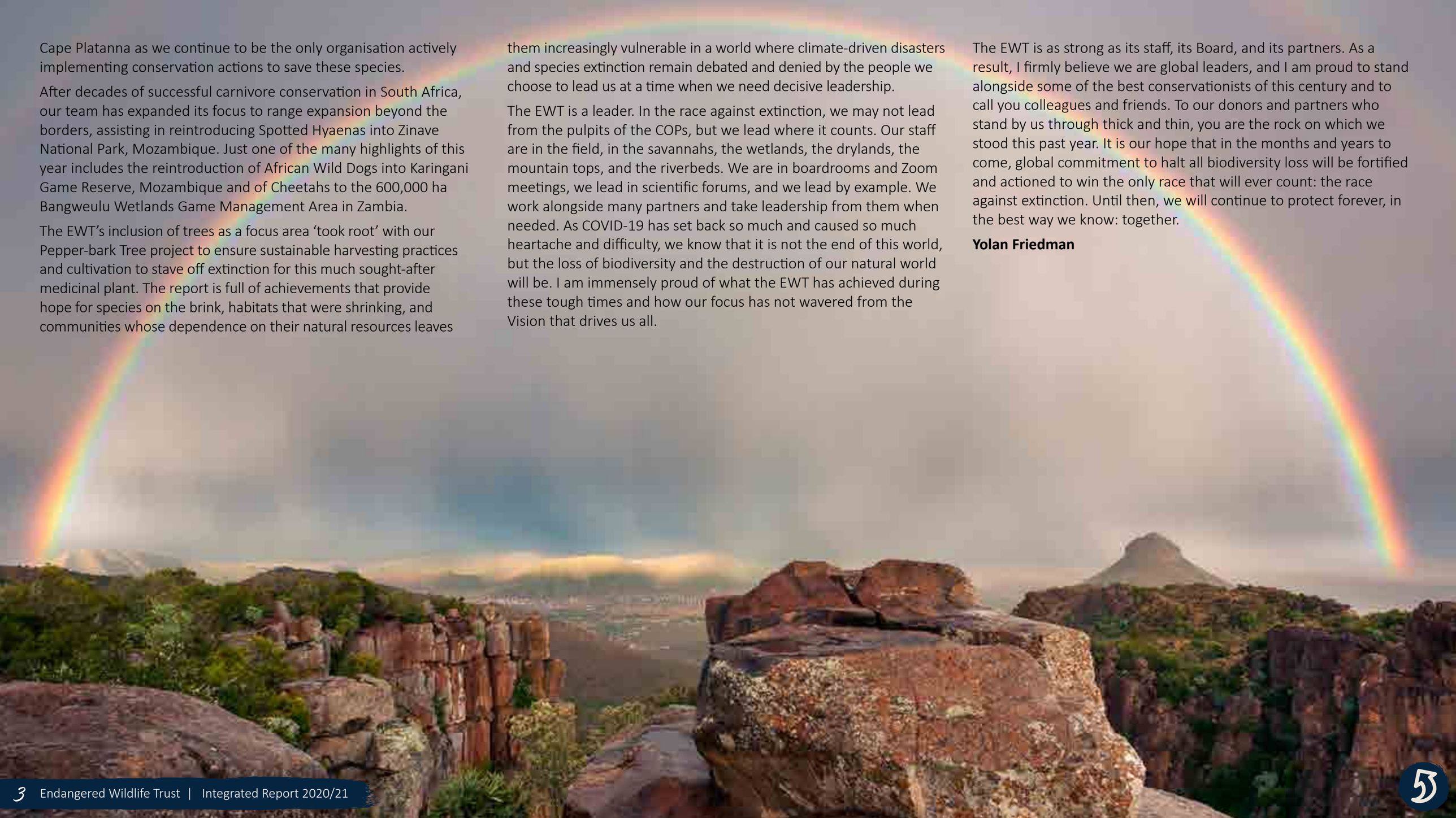
After decades of successful carnivore conservation in South Africa, our team has expanded its focus to range expansion beyond the borders, assisting in reintroducing Spotted Hyaenas into Zinave National Park, Mozambique. Just one of the many highlights of this year includes the reintroduction of African Wild Dogs into Karingani Game Reserve, Mozambique and of Cheetahs to the 600,000 ha Bangweulu Wetlands Game Management Area in Zambia.

The EWT's inclusion of trees as a focus area 'took root' with our Pepper-bark Tree project to ensure sustainable harvesting practices and cultivation to stave off extinction for this much sought-after medicinal plant. The report is full of achievements that provide hope for species on the brink, habitats that were shrinking, and communities whose dependence on their natural resources leaves them increasingly vulnerable in a world where climate-driven disasters and species extinction remain debated and denied by the people we choose to lead us at a time when we need decisive leadership.

The EWT is a leader. In the race against extinction, we may not lead from the pulpits of the COPs, but we lead where it counts. Our staff are in the field, in the savannahs, the wetlands, the drylands, the mountain tops, and the riverbeds. We are in boardrooms and Zoom meetings, we lead in scientific forums, and we lead by example. We work alongside many partners and take leadership from them when needed. As COVID-19 has set back so much and caused so much heartache and difficulty, we know that it is not the end of this world, but the loss of biodiversity and the destruction of our natural world will be. I am immensely proud of what the EWT has achieved during these tough times and how our focus has not wavered from the Vision that drives us all.

The EWT is as strong as its staff, its Board, and its partners. As a result, I firmly believe we are global leaders, and I am proud to stand alongside some of the best conservationists of this century and to call you colleagues and friends. To our donors and partners who stand by us through thick and thin, you are the rock on which we stood this past year. It is our hope that in the months and years to come, global commitment to halt all biodiversity loss will be fortified and actioned to win the only race that will ever count: the race against extinction. Until then, we will continue to protect forever, in the best way we know: together.

Yolan Friedman



Who we are



The EWT is among South Africa's largest and most established national non-governmental conservation organisations. Founded in 1973, we are a non-profit organisation with an expanding footprint throughout southern and East Africa, focussing on the conservation of threatened species and ecosystems. We achieve this by implementing target-driven research and conservation action programmes, implementing projects that address the threats facing species, and supporting sustainable natural resource management.

As a public benefit organisation, the EWT communicates the principles of sustainable living through awareness programmes to the broadest possible constituency for the benefit of all. We have developed a unique operational structure to achieve our Mission and objectives – meeting our conservation goals through specialist, thematic programmes designed to maximise impact in the field and enhance the development of skills and capacity.

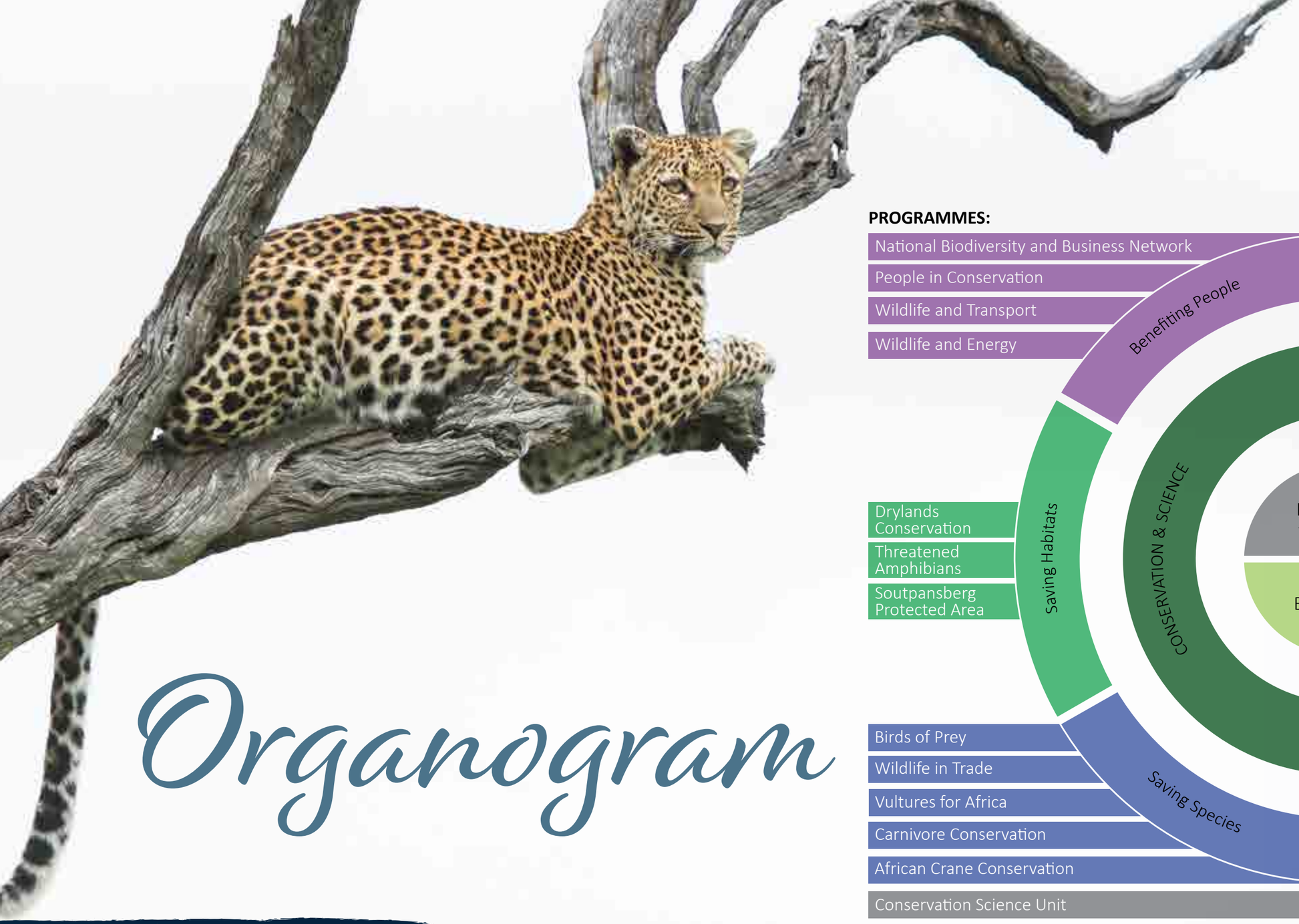
Our conservation programmes form the organisation's backbone, harnessing the talent and enthusiasm of a dynamic team of individuals whose unique expertise and motivation provide them with the tools to respond to the challenges they face in pursuit of saving our most threatened species and ecosystems. These programmes work with multiple stakeholders, using their diverse but relevant skills to catalyse inclusive actions to address environmental action. Stakeholders include national and provincial government, other NGOs, landowners, local communities, farmworkers, conservancies, academia and industry. The EWT also acts as a public watchdog, taking government and industry to task for decision-making that does not meet sustainability criteria.

OUR VISION

A HEALTHY PLANET AND AN EQUITABLE WORLD THAT VALUES AND SUSTAINS THE DIVERSITY OF ALL LIFE.

OUR MISSION

WE ARE DEDICATED TO CONSERVING THREATENED SPECIES AND ECOSYSTEMS IN SOUTHERN AFRICA FOR THE BENEFIT OF ALL PEOPLE.



Organogram

PROGRAMMES:

Strategic Impact

High-level Indicators

The EWT achieves its mission by delivering our three Strategic Imperatives: Saving Species, Conserving Habitats, and Benefitting People. These broad pillars of conservation impact are supported through High-level Goals. During a strategy revision workshop held during Conservation Week in April 2021, we revised these goals from ten down to six refined programme and department objectives.

Five of the new High-level Goals speak directly to our conservation impact and we report on them through this year through the headline indicators presented on the following pages. By monitoring and reporting on our progress towards these goals, we demonstrate conservation impact and social benefit to our partners, stakeholders, funders, and the public. The sixth goal considers our leadership role within the broader conservation sector. Our various support services departments report on our progress towards this goal later on through the report. These include Human Resources, Finance and Governance, Information Technology, Fundraising, and Communication and Marketing.





"We cannot protect something we do not love, we cannot love what we do not know, and we cannot know what we do not see. And touch. And hear."

– Richard Louv, American author

GOAL 1. IMPROVED KNOWLEDGE OF SPECIES AND HABITATS AND THE THREATS THEY FACE

Knowledge about natural systems and their threats is critical for designing impactful conservation projects, making constructive decisions about natural resource management, and formulating effective laws and policies for biodiversity protection. The EWT tracks this goal through two indicators that capture its research outputs and the data it shares.

INDICATOR 1A. NUMBER OF RESEARCH OUTPUTS

The EWT produces knowledge in many different formats, from peer-reviewed papers to technical reports, conservation plans, datasets, and scientific presentations. This indicator aims to capture the breadth and depth of our robust knowledge products.

86

RESEARCH OUTPUTS

26 JOURNAL PAPERS	**22** NEW OR REVISED DATASET	**16** TECHNICAL REPORTS

9 CONFERENCE TALKS	**4** CONSERVATION TOOLS	**3** CONFERENCE SESSIONS	**3** THESES

INDICATOR 1B. NUMBER OF DATASETS SHARED

Data is a critical output of many EWT projects, and we firmly believe that it should be used to make better conservation decisions. This indicator tracks the number of datasets we shared over the reporting cycle.

35

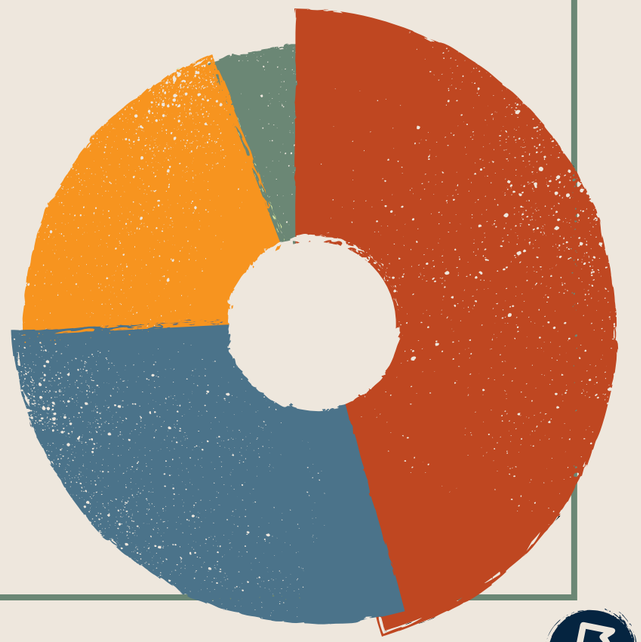
DATASETS SHARED FOR:

2 MEDIA

16 INFORMING DEVELOPMENT

7 CONSERVATION PLANNING

10 RESEARCH

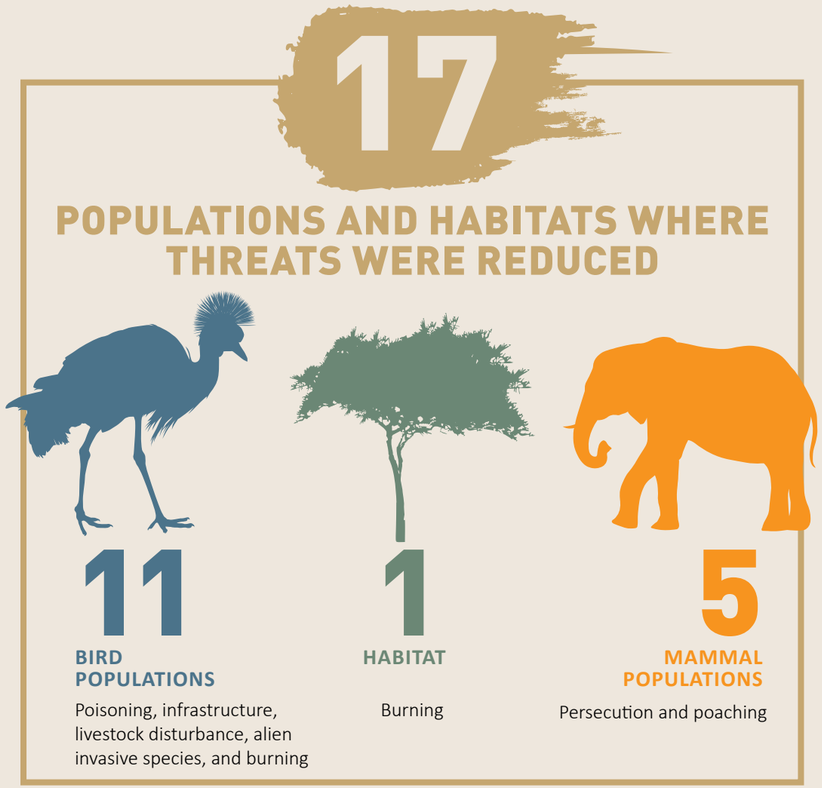


GOAL 2. TARGETED INTERVENTIONS REDUCE THE THREATS TO SPECIES AND HABITATS.

This goal covers all of our work to reduce threats to species and habitats. It is measured through a direct reduction in a threat (Indicator 2a) or the implementation of a conservation strategy that is known to reduce threats (Indicator 2b). Direct improvements in the status of a species or habitat are captured under Goal 4.

INDICATOR 2A. THE NUMBER OF TARGET POPULATIONS AND HABITATS WHERE THREATS ARE REDUCED.

This indicator provides a count of the number of target species populations or priority habitats where the EWT has measurably reduced key threats following a targeted intervention (strategy). We implement threat reduction strategies in many other populations and habitats, but this indicator includes only those where threats are **measurably** reduced in the reporting year.



INDICATOR 2B. THE NUMBER OF PROVEN INTERVENTIONS THAT REDUCE BROAD-SCALE THREATS TO FOCAL SPECIES OR HABITATS.

This indicator accounts for broad-scale threat reduction from proven conservation interventions that cannot be attributed to specific populations.





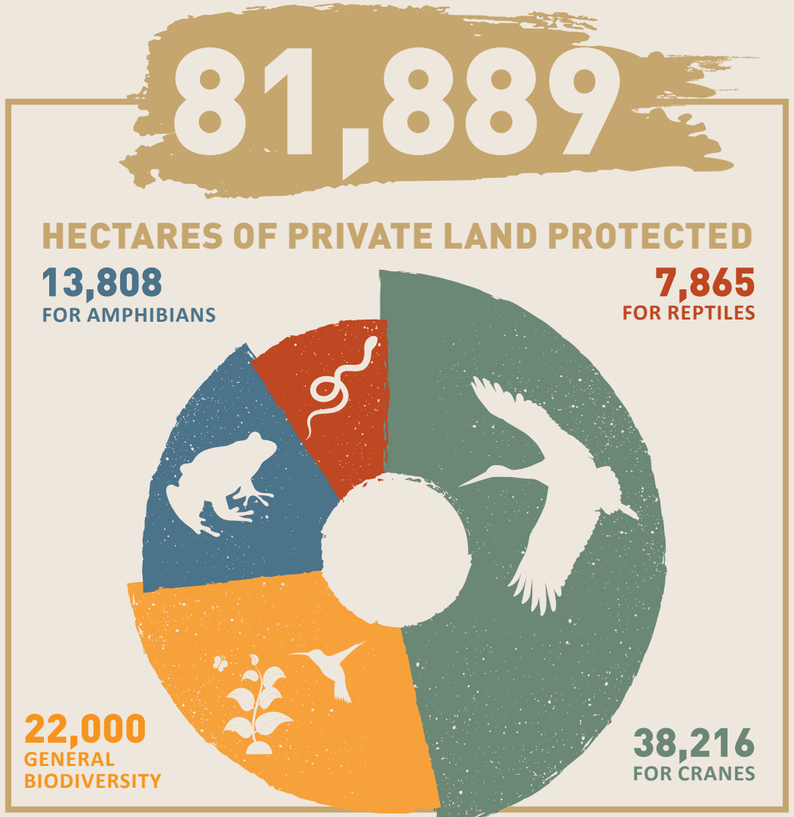


GOAL 3. FORMAL PROTECTION OF PRIORITY HABITATS

Protecting and conserving natural places is widely recognised as one of the most important strategies for combating the effects of biodiversity loss and climate change across the planet. Through this goal, the EWT contributes to national and global targets for protected area expansion and other effective area-based conservation measures.

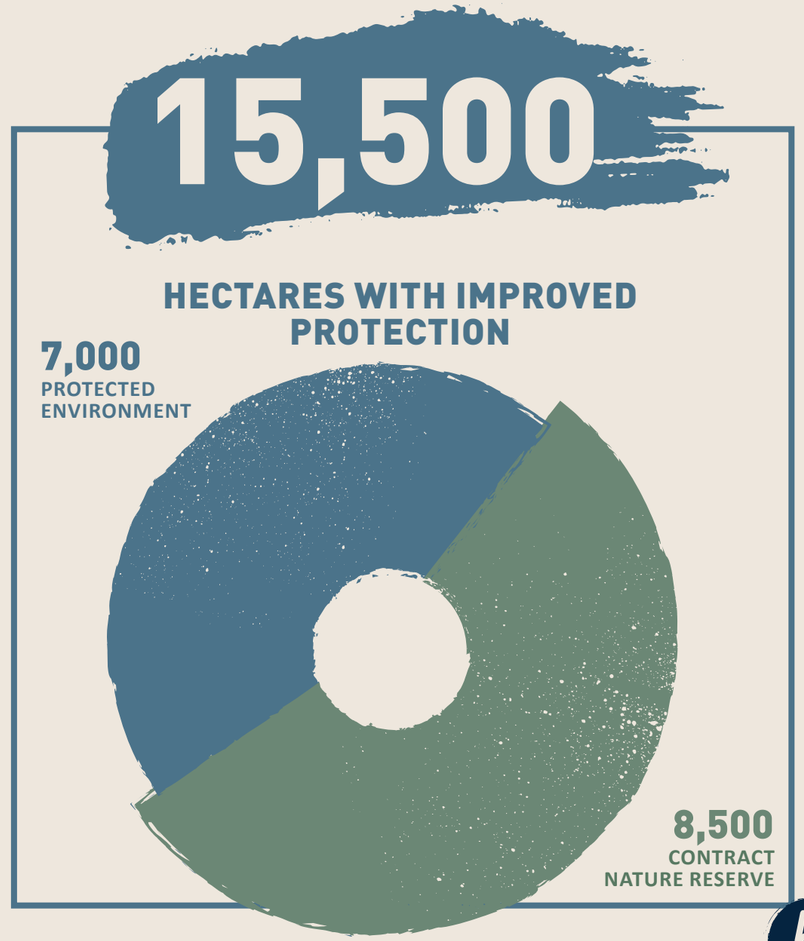
INDICATOR 3A. THE NUMBER OF HECTARES WITH LANDOWNER CONSENT TO PROCEED

This indicator measures the total land area within priority habitat where landowners have provided letters declaring their consent to proceed with proclamation of a new formally-protected area. It recognises that, as an NGO, we cannot control when a land parcel is gazetted as a protected area and acknowledges that interim milestones should also be celebrated.



INDICATOR 3B. AREA OF PRIORITY HABITAT WITH IMPROVED FORMAL PROTECTION

This indicator measures the total land area within priority habitat with increased formal protection and represents the final stage of securing land under protection.



GOAL 4: CONSERVATION ACTIONS LEAD TO THRIVING SPECIES, RESILIENT HABITATS, AND IMPROVED HUMAN WELLBEING

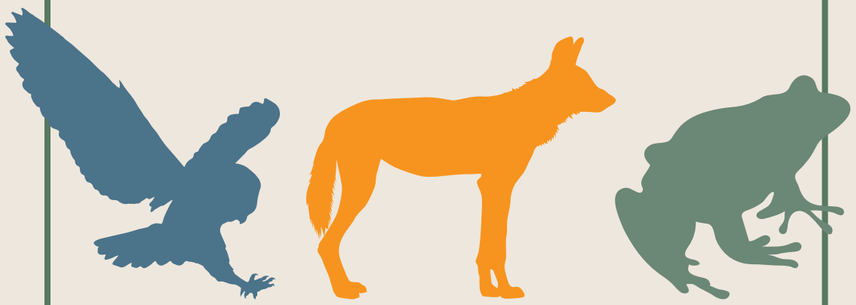
This goal is focused on improving the status of biodiversity and unlocking the benefits it brings to people. This goal is measured through three separate indicators relating to the number of populations, habitats, or people who have benefited from our actions. We are looking for real, observable changes in populations of species, habitats, and human wellbeing.

INDICATOR 4A. NUMBER OF POPULATIONS FOR WHICH ANNUAL IMPROVEMENT GOALS ARE MET.

Under this indicator, we record the number of populations of species that have experienced improvements towards their long-term persistence. These will typically be recorded by directly measuring population trends, including increases in population size, improvements in breeding success, and expanded area-based measures such as range expansion.

17

POPULATIONS FOR WHICH ANNUAL CONSERVATION GOALS WERE MET



9 BIRD POPULATIONS

6 MAMMAL POPULATIONS

2 AMPHIBIAN POPULATIONS

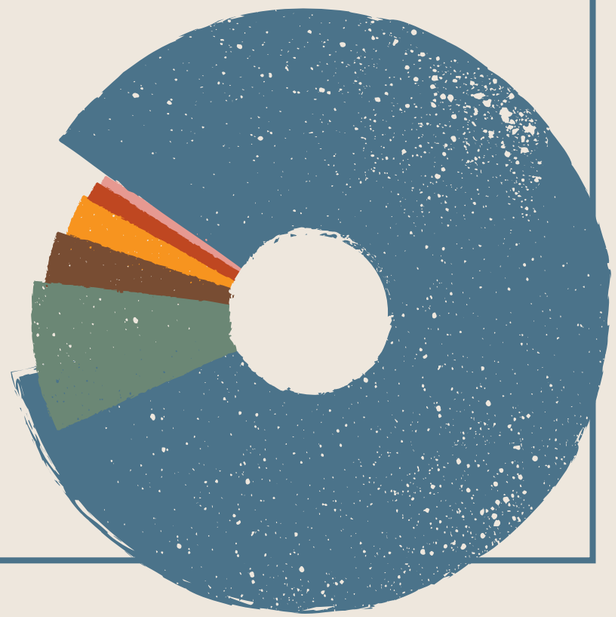
INDICATOR 4B. AREA OF LAND WITH IMPROVED MANAGEMENT.

This indicator measures the amount of land that has undergone some form of land management change, rehabilitation, or restoration process, which will lead to improved ecosystem function and health.

287,924

HECTARES UNDER IMPROVED MANAGEMENT

- **250,500** CONFLICT MANAGEMENT
- **19,810** REDUCED DISTURBANCE
- **7,839** MANAGEMENT PLANNING
- **6,735** SUSTAINABLE HARVESTING
- **3,014** ALIEN SPECIES MANAGEMENT
- **526** OTHER



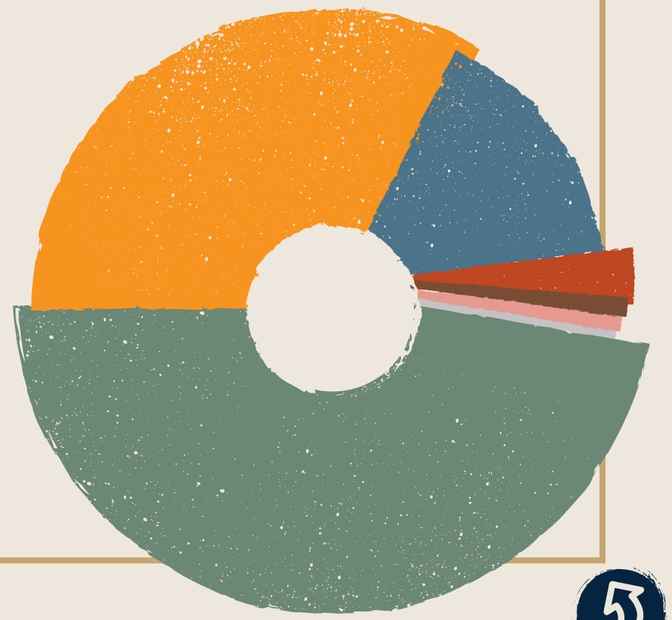
INDICATOR 4C. NUMBER OF PEOPLE WHOSE WELLBEING HAS IMPROVED.

This indicator tracks the beneficiaries of EWT activities that deliberately aim to improve the wellbeing of people. These benefits may accrue from developing biodiversity-friendly businesses or enterprises, support for improved livelihoods, or training and upskilling.

11,613

PEOPLE'S WELLBEING IMPROVED

- **5,655** TRAINING
- **3,881** COVID-19 RELIEF
- **1,829** EDUCATION
- **145** EMPLOYMENT
- **50** EQUIPMENT
- **47** LIVELIHOOD PROTECTION
- **6** BUSINESS SUPPORT



GOAL 5. INNOVATION THAT DRIVES MEANINGFUL CHANGE TO THE BENEFIT OF THE ENVIRONMENT, BUSINESS, AND PEOPLE.

The EWT achieves Goal 5 when it drives the application of new processes, products, and services that allow us and the people and institutions we work with to deliver greater conservation impact with the resources available. Innovations can range across a spectrum, from delivering incremental but measurable improvements in processes, products, and services that already exist, to radical systemic shifts through the adoption of totally novel approaches.

Currently, Goal 5 is tracked qualitatively through records of all relevant innovations. We are developing a system to track different innovation indices that we will use in the next reporting cycle. Some innovations to report on this year include:

EYE IN THE SKY WILDLIFE POISONING DETECTION SYSTEM



Our **Birds of Prey Programme** adopted a novel way to identify and rapidly respond to wildlife poisoning events. This warning system uses unique feeding behavioural signatures and mortality alerts in GPS-tracked vultures, enabling rapid ground-response in the event of poisoning and preventing further loss of wildlife to poisoning.

USING DRONES TO MAKE POWER LINES SAFE FOR BIRDS…AND SO MUCH MORE…



Our **drone project** made major headway this year when Eskom accepted the experimental use of drones for fitting marking devices on live power lines. This unique and innovative system will result in huge cost-savings, meaning that more lines can be made safe. It also dramatically improves safety for line operators.

IMPROVING DATA THROUGH A WIDE RANGE OF NEW APPS





The **Conservation Science Unit** facilitated accurate field data collection by EWT staff, and a wide range of external users, by developing targeted apps for tailormade purposes. There are currently 28 apps in use, monitoring everything from the breeding of cranes and frogs to wildlife collisions with electrical infrastructure or vehicles.



USING eDNA TO LOCATE CRYPTIC TERRESTRIAL SPECIES



The **Drylands Conservation Programme** teamed up with the University of Pretoria to use environmental genetic material to confirm the presence of hard-to-find terrestrial species. This method has shown promising results for golden moles along the Cape West Coast, where we have detected the DNA they leave in the sand that they "swim" through while foraging.



NEAR REAL-TIME MONITORING TO REDUCE THREATS TO WILD DOGS



Wild Dogs are regularly caught in snares used for bushmeat poaching. These animals are often unable to hunt, protect their pack, or breed effectively, so removing snares increases the pack's ability to survive. Working in partnership with Dr Louis van Schalkwyk, our **Carnivore Conservation Programme** uses movement data from collars and a real-time monitoring platform to alert field teams when packs move into high-risk areas. This platform speeds up response times, and in 2020/21, the team removed nine snares from Wild Dogs, compared to four snares in 2019/20.



The EWT's Global Impact

The EWT's work impacts conservation at a national and global level. Our achievements contribute to many conservation-related frameworks. These include South Africa's 2nd National Biodiversity Strategy and Action Plan (2015 – 2025) which identifies the priorities for biodiversity management in South Africa for this period; the International Union for Conservation of Nature (IUCN) Red List of Threatened Species, the world's most comprehensive inventory of the global conservation status of biological species, including through our staff roles among several of the IUCN's Commissions; and the Aichi Biodiversity Targets, established by the Convention on Biological Diversity (CBD) in a global effort to protect and conserve the biodiversity that underpins global food security, health, and clean water.

The Post-2020 Global Biodiversity Framework will shortly replace the Aichi Biodiversity Targets. This ambitious new biodiversity framework is needed to achieve the UN Sustainable Development Goals. We also work with the Alliance for Zero Extinction, to identify and safeguard the most important sites for preventing global extinctions, those that have threatened species restricted to just a single site in the world. And we contribute to the Convention on the Conservation of Migratory Species of Wild Animals (CMS), an international agreement that aims to conserve migratory species throughout their ranges, including on their Technical Advisory Groups and Task Forces.

WHAT ARE THE SUSTAINABLE DEVELOPMENT GOALS ?

Arguably, the EWT's most important global impact is towards achieving the Sustainable Development Goals (SDGs), a collection of 17 interlinked global goals designed by the United Nations to be a 'blueprint to achieve a better and more sustainable future for all'. The United Nations General Assembly established the SDGs in 2015, which the nearly 200-member states agreed to, with the intention of achieving them by 2030. The SDGs are a universal set of goals, targets, and indicators that UN member states should use to frame their agendas and political policies. Ambitious by nature, they are a government-led endeavour that serves to coordinate actions by United Nations agencies, businesses, non-governmental groups, and any other entities working on specific goals.

AN INTEGRATED APPROACH

The 17 SDGs have been designed to be ambitious on purpose, and address challenges everyone can agree are serious such as poverty, education, climate change, life in cities, and gender equality. Each SDG is broken down into specific targets that provide tangible paths to reach its goal. The SDGs can broadly be divided into three categories: social, economic, and environmental sustainability. Together, they represent an integrated approach to a more sustainable future, recognising that action in one area will affect outcomes in others, and that development must be balanced between different areas. **Research suggests that the two biodiversity-focused SDGs (SDG 14: Life Below Water; and SDG 15: Life on Land) are particularly important in achieving progress towards sustainability.**



SDG 15 LIFE ON LAND

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation, and halt biodiversity loss.

This goal underpins most of the EWT's work. Through our conservation programmes we work towards achieving seven of this SDG's nine targets.



Target 15.2
Conserve terrestrial and inland freshwater ecosystems



Target 15.2
Manage forests



Target 15.3
Combat desertification



Target 15.4
Conserve mountain ecosystems



Target 15.5
Prevent species loss



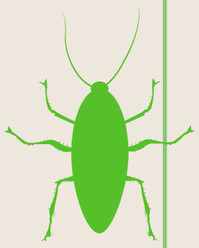
Target 15.6
Fair use of genetic resources



Target 15.7
End poaching and trafficking



Target 15.8
Reduce the impact of alien species



Target 15.9
Integrate biodiversity into planning





SDG 2 ZERO HUNGER

End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.

Our work includes: Biodiversity stewardship, sustainable land management, water-wise farming initiatives, supporting communities to grow products such as tea, seedlings, chickens, and fodder grass.

SDG 4 QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Our work includes: Cranes in the Classroom and Frogs in the Classroom educational programmes, annual Leap Day for Frogs, Guardians of the Future online education hub, Clever Rabbit and E-learning centre in the Karoo.

SDG 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns.

Our work includes: Biodiversity Disclosure Project, Vulture Safe Zones, livestock guarding dogs, Badger-Friendly Honey.

SDG 13 CLIMATE ACTION

Take urgent action to combat climate change and its impacts.

Our work includes: Carbon trading, protected area expansion, catchment management, spring source protection, fodder production.

African Crane Conservation Programme

In partnership with

All four of Africa's crane species are under threat from the illegal wildlife trade, power line collisions, habitat loss, and poisoning. These charismatic birds are also ambassadors for the lifegiving wetland and grassland ecosystems that provide us with essential goods and services, which too are facing threats from mining, development, and overuse.

The EWT's African Crane Conservation Programme (ACCP) works in partnership with the **International Crane Foundation** (ICF) to secure and improve the conservation status of Africa's four resident crane species by reducing threats to the wetland and grassland habitats upon which they depend. We achieve this through conservation actions that effectively reduce threats to the species and their habitats, working closely with local communities and key national and global stakeholders. We empower individuals, community groups, and organisations to manage catchments to benefit both people and cranes, ensuring that we mainstream conservation into local decision-making and practices for sustainable species and habitat conservation impacts. In South Africa, our programme works in the Western Cape, Eastern Cape, KwaZulu-Natal, Free State, and Mpumalanga. Across the rest of Africa, the programme oversees projects in Kenya, Rwanda, Uganda, and Zambia and supports work in Ethiopia and Senegal.



MADE IN AFRICA

The EWT and ICF have been strategic partners since 2005. We are happy to report that we opened our offices in Uganda and Zambia in August 2020, both registered under the ICF following the registration of the ICF in both countries. Our in-country offices will provide a solid base for our staff, strengthen funding opportunities, and provide a chance to scale up our projects and impact. In Zambia, we are recognised as a company limited by guarantee – the same status as a not-for-profit organisation but with a more robust legal standing. In Uganda, we are registered as a not-for-profit international NGO, and our office is located in Kampala. We also recruited finance and administrative officers for our Lusaka and Kampala offices, while four new field staff supported our activities in Uganda. We extend our gratitude to **NatureUganda** for hosting us until we registered in Uganda and **BirdWatch Zambia** for hosting us until we registered in Zambia.



ACCP staff counting and measuring crane eggs in Kiyanja-Kaku wetland in Uganda.

CAMPAIGNING FOR CRANES IN UGANDA

The ICF/EWT Partnership supported Lwengo District authorities and the Ugandan Ministry of Water and Environment to develop a ten-year Management Plan for Kiyanja-Kaku Wetland in south-central Uganda. At the plan's launch, we were recognised by the Ministry and district authorities as a partner of choice, signalling their intent to develop a long-term relationship with us. They also acknowledged our team for our levels of community engagement and awareness-raising about crane and wetland conservation attained in the area in less than a year. We launched a joint awareness campaign with the government, targeting the threat of crane poisoning in the area. This included a radio talk show featuring the Ministry of Tourism, Wildlife, and Antiquities, Uganda Wildlife Authority, Uganda Wildlife Conservation Education Centre, and the Lwengo District Local Government. The talk show aimed to sensitise communities about the importance of conserving cranes, health risks related to the misuse of agrochemicals, and government policies related to wildlife protection. Our messages reached at least three million people through this talk show. We also held 20 community meetings targeting farming households in poisoning hotspots in Lwengo District to sensitise people about crane poisoning and its consequences.

To help safeguard breeding cranes and raise community awareness about threats such as the capture of chicks, the need for safe space for cranes, and the importance of wetland conservation, we recruited and trained 50 community volunteers, known as Crane Custodians, across our project sites in Uganda. These Crane Custodians will also report crane-related incidents, including poisoning, power line collisions, and injury due to conflict with people over crop depredation. To date, the **Crane Custodians** have conducted six awareness campaigns against crane poisoning and have been instrumental in reporting crane poisoning and power line collision incidents to project staff, who have responded timeously, rescuing some of the cranes. The custodians also participate in monitoring important sites for crane breeding.

Finally, we conducted a rapid biodiversity baseline survey for birds, mammals, and fish at Rushebeya-Kanyabaha Wetland in southwestern Uganda and identified 56 bird, nine mammal, and seven fish species. The baseline study has given us a better understanding of species inhabiting the wetland and their conservation status, including the distribution of Grey Crowned Cranes, which will allow us to plan any conservation actions moving forwards.

This work is made possible by the Aqualia International Foundation, BAND Foundation, the Darwin Initiative, Dohmen Family Fund, Heather Henson, and Stiftung Feuchtgebiete (German Foundation for Wetlands).



A grave threat to cranes is their capture as chicks to be sold in the illegal pet trade. Pictured here are Grey Crowned Cranes being removed from their nest in the South Central Uganda Kiyanja-Kaku wetland for this purpose.

THE LEGACY OF A CRANE WARRIOR

We were deeply saddened, heartbroken, and shocked when Thabo Madlala lost his short battle with leukaemia on 22 August 2020. Thabo was our Drakensberg Community Project Officer. He joined the programme in 2013 as an EcoRanger, bringing with him his unwavering love of nature, passion for people, and an understanding that together, we can make a difference. Thabo was a humble and thoughtful man who listened attentively and spoke truthfully. His love of the Drakensberg mountains, his home, fuelled his commitment to ensuring that the youth nurtured a love of nature, the mountains, the flowing rivers, the wildflowers, and our cranes. In 2016, he established the **Mqatsheni Hiking and Environmental Solutions Club** to get youth excited about exploring the southern Drakensberg mountains surrounding their homes in Mqatsheni.

Thabo was passionate about so much, his wife and five children being his first love, his passion for running his second, and a more recent enthusiasm for beekeeping. Thabo was a wonderfully talented beekeeper and developed and mentored new beekeepers in the southern Drakensberg. Together they established the small enterprise Drakensberg Indigenous Honey. Thabo touched the lives of many and left a legacy of compassion, conservation, and conversation. We share our heartfelt condolences to his family, friends, colleagues, and anyone who feels the loss of his life gone too soon.



Thabo Madlala
A crane warrior.

CARBON CREDITS FOR CRANES

After three years of negotiations, the EWT and WeAct – a leading carbon project developer – signed an agreement in January 2020 to develop and register our first carbon trading offset project in South Africa. The initiative will provide a sustainable source of financing to support conservation efforts and protect important crane habitats through improved land-use management. Working with landowners to conserve their land provides a way to manage the landscape to allow for the verifiable sequestration of carbon. This carbon is typically retained in a landscape through improved grazing and fire management of grasslands and wetlands, wetland rehabilitation, and improved management of agricultural lands through reduced tillage and fertiliser management. The verified carbon sequestered during projects can be converted into carbon credits or offsets. Liable entities, usually big carbon emitters, can then purchase up to 10% of their carbon emissions as carbon credits to reduce their tax liability. Doing so creates a long-term revenue stream for both farmers and conservation organisations to support and manage these critical species and habitats. After signing our agreement with WeAct, our Drakensberg team met with several landowners to introduce them to the concept, and initial discussions have been positive with strong potential to soon enter into carbon agreements.

The work on carbon trading is made possible by the ICF Conservation Impact Fund and Paul L King.

Mqatsheni in the Southern Drakensberg.



Wattled Cranes. Photo credit: Jacquie van der Westhuizen.

COUNTING CRANES

We completed the 28th consecutive annual KwaZulu-Natal crane aerial survey in August 2020, which we combined with our ground-based monitoring of the breeding status of Wattled Cranes. The preliminary results show the highest counts for Wattled and Blue cranes since the surveys began in 1992, and the second-highest count for Grey Crowned Cranes. The final counts for all three crane species included 1,466 Blue Cranes, 3,309 Grey Crowned Cranes, and 399 Wattled Cranes. While all three crane species in the province demonstrate positive trends, with counts showing stable or increasing populations over the last ten years, our observations of the breeding sites of Wattled Crane dropped from 81 in 2019 to 73 nest sites this year. While we note this drop, historically, our records indicate annual breeding variations are driven by factors such as drought. At this stage, we are not concerned as there is no reason to believe that this drop represents a trend that may continue.

This work is made possible by Eskom, Ezemvelo KZN Wildlife, the International Crane Foundation's Conservation Impact Fund, Millstream Farm, N3 Toll Concession, Paul L King, and Rand Merchant Bank.



Grey Crowned Crane ringing with Wayne McNamara, liaison of the Underberg Farmers Association.



ACCP field staff keeping a low profile while waiting to ring Wattled Cranes in Ingula Nature Reserve.



Wattled Cranes and chick. Photo credit: Jacquie van der Westhuizen.

INFLUENCING POLICY IN RWANDA

Through our partnership with the Integrated Polytechnic Regional College Kitabi, we embarked on a mission to promote the cultivation and production of Napier Grass (Elephant Grass) as an alternative to harvesting the grass from the Rugezi Marsh for cattle fodder. First, we raised community awareness about **Napier Grass production** in all seven sectors neighbouring the Marsh, a combined population of over 200,000 people. We then taught the communities the benefits of producing fodder on their plots, especially on terrace bands, compared to spending long hours harvesting vegetation from the Marsh. Subsequently, over 10,000 households adopted our recommendations, growing their own Napier Grass.

Testimony to our work, Rwanda's Ministry of Agriculture has subsequently made it mandatory, from the end of 2020, for all rural households in Northern Province to plant Napier Grass along terrace bands to provide fodder for livestock and reduce erosion. This directive came from the impacts we have shown in our project around Rugezi Marsh, where local people previously harvested vegetation from the Marsh illegally to feed their livestock. We signed two Conservation Agreements with community groups at Rugezi Marsh, ensuring that the illegal harvesting of vegetation and poaching from the Marsh are reduced in return for receiving additional Napier Grass, worth over USD90,000, for livestock fodder. Due largely to our efforts to reduce human disturbance at the Marsh and building on previous work by the Rwanda Wildlife Conservation Association (RWCA) to reduce the impact of the crane trade, 12 Grey Crowned Crane chicks fledged this season – a significant increase from none fledging seven years ago.

This work is made possible by the Dohmen Family Fund.



MORE PROTECTED HABITAT FOR CRANES

In South Africa, Mpumalanga's Minister for Agriculture, Rural Development, Land and Environmental Affairs gazetted his 'Intention to Declare' the Upper Wilge Protected Environment (UWPE) through the South African Biodiversity Stewardship Programme in February 2021. **Biodiversity Stewardship** is an approach to entering into agreements with private and communal landowners to protect and manage land in biodiversity priority areas, led by conservation authorities across South Africa. It recognises landowners as the custodians of biodiversity on their land. The UWPE came about through our close cooperation with BirdLife South Africa and the ongoing relationships with landowners. Once the UWPE is proclaimed, this will secure 24,000 ha of pristine Eastern Free State Sandy Grassland habitat for cranes and other threatened species, including the Sungazer lizard that the EWT is also working to protect.

We completed biodiversity site assessments across 34 properties, covering a further 14,000 ha along the Eastern Escarpment of Mpumalanga. These landowners have committed their properties to long-term conservation. We presented the results of these assessments to the Biodiversity Stewardship provincial working group – a body that provides recommendations on the importance of land that is assessed – to clarify the level of protection for which the properties qualify. They could enter South Africa's protected area capital as either Nature Reserves – the highest level of protection possible – or Protected Environments, depending on the outcome of these assessments.

This work is made possible by the Ford Wildlife Foundation, Heather Henson, International Crane Foundation's Conservation Impact Fund, Nedbank Green Trust, Paul L King, Rand Merchant Bank, and the Whitley Fund for Nature.

KENYAN CRANES AND COMMUNITIES

Our Western Kenya Project continues to grow both in staff numbers and geographical scope. A first for the ICF/EWT Partnership in East Africa, we fitted unique colour-combination rings to 18 Grey Crowned Crane chicks during the 2020/21 breeding season, of which 14 successfully fledged. To assist in monitoring ringed and breeding cranes and raise community awareness, we trained 31 Crane Custodians in King'wal and Kipsaina in March 2021. The training helped the Crane Custodians understand the basic ecology of cranes, their behaviour, lifecycle, habitat, current threats causing their number to decrease, and the importance of conserving them.

We are starting to reap the benefits of the Conservation Agreements, which we signed with communities last year. In return for conservation action, we assist the communities in starting and running alternative livelihoods to reduce overdependence on agriculture through these agreements. The initiative supports over 200 households (some 1,200 community members in total). Under the livelihood projects, the community groups have already harvested and sold 85 kg of honey and 80,000 tea seedlings, and the chickens we gave have started laying eggs, which supplement the community's income. During the 2020/21 crane breeding season, we monitored 20 crane nests, mostly identified by community members, on community farms where we have signed Conservation Agreements. The community has also stopped farming in over 26 hectares of the wetland riparian zone around King'wal Wetland, which is now being left to regenerate, as agreed in the Conservation Agreements.

Encroachment of agriculture into wetlands, driven in part by poor agricultural practices and poor crop suitability to changing climate conditions, is the most serious long-term threat to Grey Crowned Cranes in western Kenya. Under our climate-smart agriculture programme, we brought together ten agriculture and climate change stakeholders to promote the adoption of responsive and resilient farming methods in western Kenya. Thirty farmers attended an intensive one-week practical course on climate-smart agriculture in Kenya. The training aims to support farmers to adopt conservation-friendly farming methods such as minimum tillage, bio-fertilising, and farming drought-resistant crops. These measures will help address current crop failures due to reduced rainfall and address the risk of those wetlands that have water being drained during dry periods.

We implement our Kenyan project in partnership with Community Action for Nature Conservation (CANCO) and the Kipsaina Crane and Wetland Conservation Group (KCWCG). This work is made possible by Bob Hallam, Cheyenne Mountain Zoo, Dohmen Family Fund, Heather Henson, International Crane Foundation's Conservation Impact Fund, Leiden Conservation Foundation, and Pat and Bill Mutch.



Maurice Wanjala and Vivian Nekesa monitoring a Grey Crowned Crane nest in Kipsaina, Kenya.



Livelihoods project to reduce overdependence on agriculture.



The first cranes to be ringed by the ACCP in Kenya (October 2020).

TRACKING CRANES IN THE WESTERN CAPE

South Africa's National Bird, the Blue Crane, is an interesting species in the modern conservation landscape. Its numbers increased dramatically in the Western Cape's farmlands in the mid to late twentieth century, and we now estimate that over half of all Blue Cranes live in this province. This poses some interesting conservation challenges since these cranes live in an intensively farmed agricultural landscape where they face threats such as power line collisions, fence entanglements, breeding disturbance, and occasionally conflict with farmers. Together with potential changes to the agricultural landscape through climate or socio-economic change, the security of this newfound population is questionable. In September 2018, we initiated a research project to assess the long-term viability of this Blue Crane population. This year our team carried out several activities as part of this assessment, including fitting 17 satellite trackers to Blue Cranes in the Western Cape to track their movements within the region, surveying 150 km of power lines to assess crane mortality from collisions, monitoring 63 breeding sites for breeding success, and conducting 15 farmer interviews. We will use data from these activities to help understand how climate change and market forces may change future farming dynamics and their associated impact on the cranes. We are analysing the data at this stage of the project, and the results will be available in the new financial year.

This work is made possible by Eskom, Indwe Risk Services (Pty) Ltd, and the Leiden Conservation Foundation.



Blue Cranes in Overberg. Photo credit: Ciming Mei.



One of the 17 Blue Cranes fitted with trackers in the Western Cape to monitor the long-term viability of the population in the face of threats such as collisions with power lines and conflicts with farmers in the Overberg.



EWT field officers fitting tracking devices to a Blue Crane. Photo credit: Jana Malherbe.



Blue Cranes in the Swartland, Western Cape, South Africa. Photo credit: Ciming Mei.

CLEARING THE FLATS IN ZAMBIA

In Zambia, our work focuses on the Kafue Flats. This extensive wetland – a critical breeding and foraging area for cranes, particularly the Wattled Crane – is under increasing pressure. A critical concern is the alien invasive plant *Mimosa pigra* that seriously compromises the ecology of the Flats. In addition, there is growing pressure to graze cattle here, while poaching is an issue that the COVID-19 pandemic has exacerbated as people struggle to survive. Other threats include mining and mineral exploration, the increasing numbers of permanent settlements, and unsustainable fishing.

Through hard and dedicated work, the clearance of Mimosa by our Zambia team reached 87% (2,305 ha) of the infestation by December 2020, through the clearance by local community members using physical, chemical, and biological control methods. This now means our three-year Mimosa clearing project has ended, and ongoing Mimosa removal will be mainstreamed into the park management practices to ensure the long-term success of our work. As a result of the clearing, Wattled and Grey Crowned cranes have begun to return to the wetland, along with native vegetation and large herbivores such as Oribi, Hippopotamus, and Kafue Lechwe, in the cleared areas.

Additionally, we have made significant progress in improving law enforcement efforts on the Kafue Flats by providing fuel and patrol rations for field operations to 66 wildlife police officers, including



The EWT team clearing alien invasive plant, Mimosa pigra, on the Kafue Flats in Zambia.



Wattled Cranes on the Kafue Flats in Zambia.

18 community scouts, through the Department of National Parks and Wildlife (DNPW). We increased patrol effort, frequency, and coverage resulting in several confiscations of illegal wildlife products, including game meat and skins, and equipment used to commit the offences, such as boats and motor vehicles.

Zambian legislation permits mining in national parks (category II protected areas) subject to approval by the Director of the Wildlife Department and the Zambia Environmental Management Agency. This year there was a significant increase in gypsum mining applications in these parks. Four applications were recently rejected for Lochinvar National Park that lies towards the southern area of the Kafue Flats. We teamed up with six other conservation NGOs and submitted a joint letter to the Director of National Parks and Wildlife against the proposed expansion of mining and mineral exploration. Our joint letter of objection contributed to the rejection of these mining applications in the park.

The co-management agreement between ICF (on behalf of the ICF/EWT Partnership), the National Department of Parks and Wildlife, and WWF Zambia has been approved in principle and is close to being finalised. The agreement actions our 20-year Kafue Flats Restoration Programme.

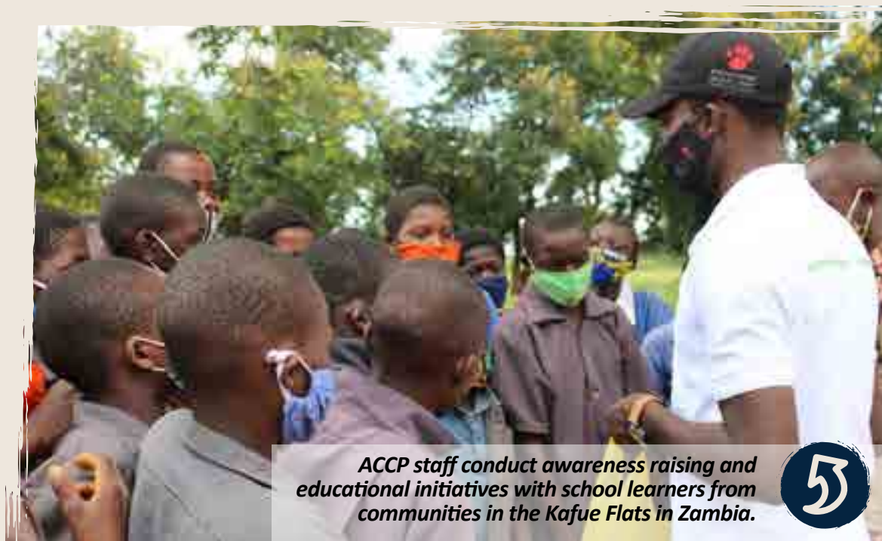
We were able to reach 13 schools in the Kafue Flats. Eighty-two teachers were oriented in facilitating school conservation clubs, with 20 conservation clubs formed and approximately 1,300 children reached. Four meetings were held in four chiefdoms, attended by 40 community conservation leaders from the four Community Resource Boards (CRB), 12 traditional leaders and six DNPW staff to share the vision of the Kafue Flats Restoration Partnership (KFRP) and seek their input in refining it. Twenty (20) youths were engaged in road clearing to a look-out tower at Blue Lagoon National Park for wildlife monitoring, environmental education and law enforcement.

This work is made possible by an anonymous donor, the Dohmen Family Fund, Elephant Charge, Fondation Segré, Jeanne Eloranta Family, Nimick Forbesway Foundation, WWF Zambia, and the Zambian Department of National Parks and Wildlife.

1,300

CHILDREN REACHED

& 20 CONSERVATION CLUBS FORMED



ACCP staff conduct awareness raising and educational initiatives with school learners from communities in the Kafue Flats in Zambia.

COVID RELIEF

Thanks to support from our donors, we distributed COVID-19 relief supplies to communities and some schools in the Drakensberg, Rwanda, Uganda, Kenya, and Zambia. We distributed face masks, soap, hand sanitisers, salt, maise meal, beans, hoes, and foot-operated buckets for washing hands.

We thank the HCI Foundation, the Leiden Conservation Foundation, and the Lewis Foundation for COVID relief funding for South Africa, and the Leiden Conservation Foundation for COVID relief funding for Rwanda, Uganda, Kenya, and Zambia.



We made every effort to assist the communities we work with, such as those pictured here from Mqatsheni, to stay healthy through the COVID-19 Pandemic by providing food parcels and personal protective equipment such as face masks and sanitiser.



Blue Cranes in the Drakensberg Kwa-Zulu Natal. Photo credit: Jacquie van der Westhuizen.

AFRICAN CRANE CONSERVATION PROGRAMME TEAM



Kerryn Morrison
ICF/EWT Senior Manager: Africa



Dr Adalbert Aine-omucunguzi
East Africa Regional Manager



David Banda
Community Engagement Officer, Zambia



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Africa Programme Officer
(until August 2020)



Richard Berridge
Grants Officer, Africa



Eva Cherotich
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Stacey Chibiya
Finance and Administrative Officer, Zambia



Cynthia Chigangaidze
Senior Administrator, Africa

AFRICAN CRANE CONSERVATION PROGRAMME TEAM (CONTINUED)



Christie Craig
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Kelvin Floyd
Research Associate, Zambia



Bradley Gibbons
Highland Grasslands Field Officer, South Africa



Dr Lara Jordan
Drakensberg Project Coordinator, South Africa



Damaris Kisha
Western Kenya Research Assistant



Thabo Madlala
Drakensberg Community Project Officer, South Africa
(deceased August 2020)



Kelvin Marimo
Senior Finance and Governance Officer, Africa
(until February 2021)



Daniel Munana
Field Coordinator, Rwanda



Dr Joseph Mwangi
Kenya Country Coordinator



Philani Mweli
Senior Finance and Governance Officer, Africa
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Janat Nabuuma
Finance and Administrative Officer, Uganda



Thandiwe Ndlovu
Communications Intern, Zambia



Vivian Nekesa
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Olivier Ngabonziza
Project Assistant, Rugezi Marsh, Rwanda



Phiona Orishaba
Southwestern Uganda Field Officer, Uganda



Samson Phakathi
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Dr Unjinee Poonan
Community Specialist, Africa
(until August 2020)



Claire Relton
Senior Science Officer, Africa
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Griffin Shanungu
Zambia Country Coordinator



Mwape Sichilongo
Southern Africa Floodplains Regional Manager



Tanya Smith
South Africa Regional Manager



Gilbert Tayebwa
Southcentral Uganda Field Officer, Uganda



John Tumusiime
Field Research Assistant, Uganda



Maurice Wanjala
Kipsaina Crane and Wetland Conservation Group, Kenya

Birds of Prey Programme



Birds of prey are iconic figures of the landscapes they inhabit. They are also vital barometers of healthy habitats across Africa. From vast savannahs to rugged mountain ranges, forests, grasslands, and river systems, they provide critical ecosystem services essential for the functioning of these environments. Birds of prey are equally important to people, as they have social, cultural, and religious importance for many African communities.

Throughout southern Africa, birds of prey are experiencing ongoing population declines, with many species – vultures in particular – moving rapidly towards extinction. It is our responsibility to ensure that wild populations remain viable and healthy. The EWT's Birds of Prey Programme's goal is to protect and improve the conservation status of threatened birds of prey in the wild and safeguard the habitats they need to thrive, directly benefitting a diversity of other wildlife and people too. We aim to reduce the impact of human-related threats, maintain and recover populations, and secure or create raptor safe spaces to sustain the irreplaceable ecosystem services they provide. Our programme uses a combination of on-the-ground actions, partnerships, education and awareness, legislative support, and robust science to strengthen the regional birds of prey conservation network. We operate in important raptor spaces across eight of South Africa's provinces and Lesotho, Namibia, Zimbabwe, Mozambique, and Botswana.

IMPLEMENTING VULTURE SAFE ZONES IN SOUTHERN AFRICA

During 2020/21, we launched a series of Vulture Safe Zone (VSZ) projects across strategic sites in southern Africa. A VSZ is an area where we use conservation measures targeting and addressing key threats relevant to the local vulture population. Within VSZs, we work directly with landowners and communities to reduce the impacts of major threats such as poisoning and collisions or electrocutions with energy infrastructure. The VSZ concept arises from the joint CITES/CMS **Multispecies Action Plan for Vultures**, which recommends that conservationists work with landowners, government agencies, and communities to create VSZs. Doing so secures large tracts of suitable habitat in which land is managed in a vulture-friendly manner, reducing threats to vultures markedly so that vulture populations can thrive. Our work over 2020/21 has centred largely on establishing a broad network of stakeholders, VSZ implementing parties, and most vitally, the commitment from over 350 properties to becoming vulture-safe.



A poisoned vulture being treated at the Moholoholo Rehabilitation Centre in the Lowveld.

Together, these properties extend over an area of approximately 1.8 million ha across southern Africa. Here we have assessed each property to understand the threats, raise awareness around vulture conservation, and initiate work with support from the landowners to start mitigating these threats on the ground.

The EWT's VSZ work would not be possible without our partners, including the Associated Private Nature Reserves, BirdLife South Africa, BirdLife Zimbabwe, Blyolifant Private Nature Reserve, Ezemvelo KZN Wildlife, Kimberley Veterinary Clinic, Raptors Botswana, Moholoholo Rehabilitation Centre, SANParks, Wild Rivers Private Nature Reserve, and Wildlife ACT, as well as all the stakeholders, communities, and landowners currently engaged in these projects.

The work is made possible by Alu-Cab, the Bio-Bridge Initiative (Convention on Biological Diversity), Cennergi, Charl van der Merwe Trust, Cleveland Zoo, Disney Conservation Fund, Puy du Fou, Rand Merchant Bank, Rupert Nature Foundation, SANParks Honorary Rangers, and WindLab.

POISON RESPONSE IN THE LOWVELD

Our Lowveld VSZ centres around the highly-threatened riparian habitat along the Blyde River in the Kruger to Canyons Biosphere Reserve. This VSZ also targets the vulture-rich landscape along the Olifants River and the Associated Private Nature Reserves eastwards into the Greater Kruger landscape. We focus on protecting a significant breeding population of Critically Endangered Hooded Vultures, some 158 breeding pairs, in this vital southern Africa stronghold.

Wildlife poisoning in the Greater Kruger is a growing concern, as it is across Africa. The most significant impact it has is on Africa's vultures, killing countless individuals and debilitating many others. The impact of mass-poisoning events in which vultures can gather on carcasses in their hundreds is catastrophic. During 2020/21, working alongside our **Vultures for Africa Programme**, we continued to improve the capacity and response to wildlife poisoning in the area through Wildlife Poisoning Response Training. We enhanced the identification, rescue, and administration of first aid to surviving vultures at poisoning events across the Lowveld VSZ. From January to June 2021, we shifted our training focus westwards from the Kruger National Park into the Associated Private Nature Reserves, Kruger to Canyons Biosphere Reserve, and Sabi Sands Game Reserve, where we trained 186 individuals, including field rangers, wardens, and law enforcement officers. We also helped to develop Standard Operating Procedures for each reserve, enabling the effective identification, coordination, management, and decontamination of wildlife poisoning events in these areas.



Hooded Vulture with an identification tag.

CONSERVATION COOPERATION IN THE KAROO HEARTLAND

Our **Karoo VSZ** has grown into one of South Africa's largest farmer-driven conservation initiatives in partnership with conservation organisations. In this Great Karoo heartland, farmers and other landowners partnered with the EWT, Rupert Nature Foundation, SANParks, Mountain Zebra Camdeboo Protected Environment (MZCPE), and SANParks Honorary Rangers to establish a VSZ. The Karoo VSZ is vast, spanning approximately 2.3 million hectares and includes three major protected areas – the Karoo, Camdeboo, and Mountain Zebra national parks – and the MZCPE, over 90% of which is privately owned. Our long-term goal is to encourage Cape Vultures back to their historical range throughout this heartland and ultimately recover this population. We also aim to link the Karoo VSZ to Cape Vulture strongholds in the Eastern Cape.

In 2021, we continued to build strong relationships with landowners in the Karoo. We signed up 131 large properties to the Karoo VSZ, comprising an area of 681,607 ha. Here, a key objective is to reduce the use of poisons that are highly toxic to vultures. Farmers often leave poisons out to kill livestock predators such as Black-backed Jackals, and the leaded ammunition that hunters and culling operators use is also highly toxic when vultures ingest it. Hugely encouraging, the owners of over half a million hectares in the Karoo have already stopped, or are committed to phasing out, the use of poisons to kill livestock predators, as well as leaded ammunition. Promisingly, we have had reports of over 200 Cape Vultures sighted in our Karoo VSZ since the project's inception, the product of increased awareness and reporting by farmers throughout the area, and as the landscape becomes increasingly vulture safe.

CROSSING BORDERS IN THE GREATER MAPUNGUBWE LANDSCAPE

The Greater Mapungubwe Transfrontier VSZ, launched in October 2020, includes significant vulture breeding habitat along the Limpopo River, linking vulture-rich sites in South Africa, Botswana, and Zimbabwe. In Africa's first transboundary VSZ, we have identified key implementing parties in each country, including BirdLife Botswana and **BirdLife Zimbabwe**, who will join the EWT and **Raptors Botswana** to build this VSZ.

Our initial funding through the Bio-Bridge Initiative allowed us to launch landowner engagements, site assessments, and undertake wildlife poisoning response training within Botswana's Tuli Block. These activities spanned the Northern Tuli Game Reserve and Limpopo Lipadi Private Game and Wilderness Reserve, covering approximately 72,000 ha. In South Africa, 90,000 ha of properties running 180 km west of Mapungubwe National Park have also pledged to support the VSZ. They will manage their properties in a vulture friendly manner and work with the team to remove key threats to vultures over the next two years. The EWT has also initiated Wildlife Poisoning Response Training within critical sites within this VSZ.





Cape Vulture in Mockford Farms, Limpopo. Photo credit: Andre Botha.



INCUBATING NEW VULTURE SAFE ZONES FOR CAPE VULTURES

The Winterberg, Frontier Country, Amathole, and Wild Coast regions of the Eastern Cape are home to significant populations of Endangered Cape Vultures. The area is experiencing a proliferation of wind farms, which can negatively impact vultures, mainly through collisions with turbine blades. In addition to this, threats including collisions and electrocutions with power lines and poisoning are prolific. Subsequently, we initiated the establishment of the Amathole-Frontier VSZ in February 2021. Our work in this VSZ will primarily address the cumulative impacts of these new wind farms on local vulture populations. We aim to eventually ensure that areas frequented by vultures within the VSZ are free of all major threats, including poisoning, power line collisions, and electrocutions on electrical infrastructure. Our work in this area has already catalysed an important collaboration with various wind energy developers. These developers include five within the Renewable Energy Development Zone (REDZ) in the Bedford, Cookhouse, and Golden Valley region. They have committed to working alongside us to ensure that wind farms, and the surrounding landscape, are developed and managed in a vulture-safe manner.

In partnership with the University of Cape Town and other vital data contributors, including VulPro and Ezemvelo KZN Wildlife, we have helped to produce a much-needed vulture collision sensitivity map for South Africa using movement data from GPS-tracked Cape Vultures. This map has allowed us to identify areas of high turbine blade collision risk within the development envelopes of the Eastern Cape, which will guide future wind farm developers by ensuring they do not construct turbines within these sensitive flight zones. Moving forward, the collision risk map represents a significant conservation breakthrough for Cape Vultures in the face of increasing wind energy development across their Eastern Cape strongholds.

TAKING VULTURES TO TASK

We continued to work closely with the National Vulture Task Force, convened by the Department of Forestry, Fisheries, and the Environment, and its various sub-task forces and working groups, including the Lead Task Force and the National Wildlife Poisoning Prevention Working Group. We helped to develop and draft the Biodiversity Management Plan for Vultures in South Africa, fleshing out this action plan and blueprint for vulture conservation across the country by hosting six major workshops with key stakeholders and specialists. This vital product will strengthen the regional vulture conservation network and its approaches. As members of the Bearded Vulture Task Force, we worked diligently to implement and revise the Bearded Vulture Biodiversity Management Plan for South Africa and Lesotho.

A CONSERVATION FRONTIER FOR RAPTORS

The arid parts of South Africa, including the Karoo and Kalahari, contain vital breeding and foraging habitat for Cape, White-backed, and Lappet-faced vultures, as well as a variety of other threatened raptors. With extensive, largely undeveloped landscapes and fewer threats, we consider the area one of the last conservation frontiers for vultures in South Africa. Our programme has a widespread, long-term presence stretching over 25 years in this region. We have well-established relationships with landowners and communities across the Karoo and Kalahari. Our long-term Arid Raptors Project continues to deliver over this vast landscape that covers over 21 million hectares. Over the last year, we helped to resolve over 50 conflict issues involving raptors and farmers. These included preventing the near-certain persecution of around 300 vultures, seven Verreaux's Eagles, and two Martial Eagles. We also worked closely with farmers to identify where livestock had died from natural causes so that vultures and eagles were not wrongly persecuted for their predation. Our work led to greater awareness about raptors and their habits at over 50 different farms through this arid region. We also responded to and rescued over 100 injured raptors, including 25 vultures. We worked with developers, electricity utilities, and cellular service providers during infrastructure development and maintenance to guide raptor-safe development and reduce disturbance for six pairs of nesting eagles.

This work is made possible by the Charl van der Merwe Trust, Kimberley Veterinary Clinic, Puy du Fou, and Rand Merchant Bank.



The EWT's Ronelle Visagie with a White-backed Vulture in need of X-rays at the Kimberley Veterinary Clinic.

WE RESOLVED **50**
CONFLICT ISSUES
INVOLVING RAPTORS & FARMERS

&

RESCUED OVER 100
INJURED RAPTORS
INCLUDING **25 VULTURES**

MARTIAL EAGLES – THE ENIGMA OF TREE-NESTERS IN A TREELESS LANDSCAPE

Since its inception in October 2018, we have made significant progress with our Karoo Martial Eagle Project in partnership with Eskom Research, Testing, and Development. This work is helping us develop an intimate understanding of an extraordinary population of Martial Eagles that breeds and lives on electrical pylons. Strung across the arid Karoo landscapes, the pylons that support power lines provide an artificial structure for Martial Eagles to nest on, enabling their range expansion into a largely treeless landscape where these tree-nesters were previously unable to breed. We estimate that over a third of South Africa's breeding Martial Eagle population now nests on Eskom structures in the Karoo. This finding, which is at odds with the generally held belief that the Martial Eagle is confined increasingly to large, protected areas, has significant implications for our thinking around the conservation management of this Endangered species.

Using ground and aerial surveys, we are well into the third full year of investigating this population's status, threats, breeding performance, and diet by closely monitoring 149 pairs of Martial Eagles. These pairs nest on six major transmission lines that traverse 1,750 km of the Karoo. Our work has confirmed that a significant proportion of the national Martial Eagle population breeds on power line structures. We have also successfully trapped and satellite-tagged 18 individuals to better understand the species' movements and threats across the Karoo, a critical step in developing robust conservation interventions and management plans for this population. Interestingly, early results suggest this population has relatively higher breeding productivity than those in its traditional strongholds such as the Masai Mara, Kenya and Kruger National Park, South Africa.

We are heartened by the response of landowners to this project. Their numbers are growing, with over 120 Karoo farmers now directly engaged in Martial Eagle monitoring and conservation. This support is probably one of our project's most important conservation outputs, as landscape-level conservation begins with improving landowners' attitudes towards threatened species and creating a synergy between them. With the uplisting of the Martial Eagle to globally Endangered by the IUCN in 2021, our work on this remarkable population of eagles has never been more critical.

This work is made possible by Alu-Cab, the Bateleurs, Charl van der Merwe Trust, Eskom Research, Testing and Development, and Rand Merchant Bank.

AFRICAN GRASS-OWL GUARDIANSHIP

With over 13 years of research and conservation work on the African Grass-owl, we spearheaded an initiative to restore grass-owl habitat on the Mpumalanga Highveld coal-belt. Throughout this area, the birds' grassland habitat has largely been lost to mining and farming activities. We work with mines here to restore their land to support greater numbers of these threatened grassland specialists. These mines include the Mafube Colliery near Witbank and several neighbouring landowners. We aim to establish a 340-ha African Grass-owl refuge and restore large tracts of habitat consumed by open cast coal mining for them to forage over.

We also initiated the establishment of the first grass-owl safe spaces on the Mpumalanga Highveld. We are currently working on six significant grassland patches to protect breeding and foraging habitats and ensure that active nesting pairs are safeguarded from fire, livestock trampling, and disturbance. At each site, we cordoned off active sites with owl-safe fencing, thereby creating exclosures to keep livestock from trampling these sensitive areas, and constructed firebreaks which, since 2020, have resulted in the first fire-free season on four of our grassland breeding patches. Therefore, these patches have not been lost due to uncontrolled fires, providing the grass-owls with a chance to nest and fledge their chicks successfully.

This work is made possible by Anglo American, Mafube Coal, National Geographic Society, and Rand Merchant Bank.



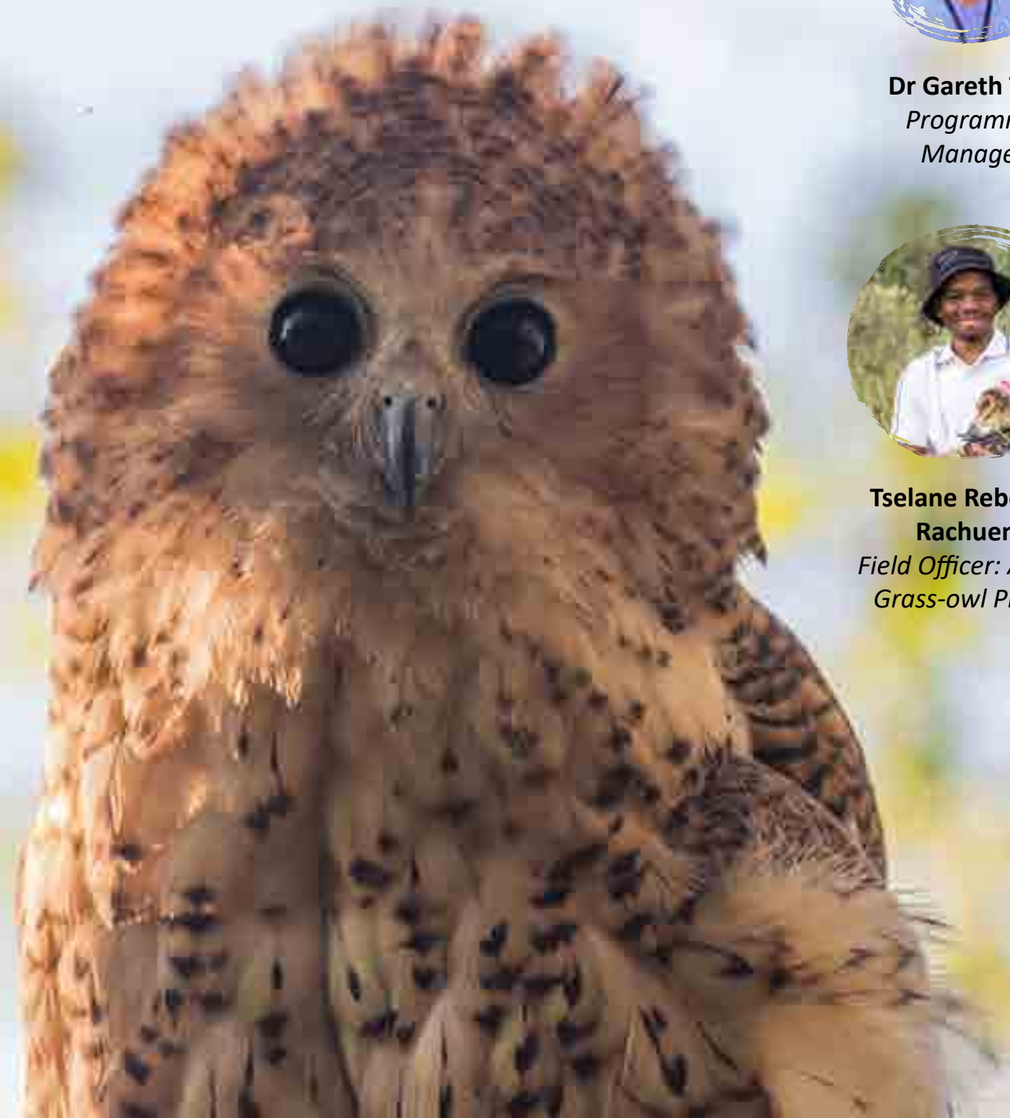
The EWT's Rebothile (Rebo) Rachuene releasing an African Grass-owl after fitting it with a ring to monitor its movements over the long-term and its lifespan.

RIVER RAPTORS PROJECT: PEL'S FISHING-OWL

We expanded our Pel's Fishing-owl research and conservation project from the original Lowveld sites to survey a significant population of fishing-owls along the Limpopo River. Our work represents the first complete assessment of this section of the river for Pel's Fishing-owl, in an area where agriculture, in particular, is exerting increasing pressure on the landscape. Our conservation work here allows us to assess and, wherever possible, mitigate the threats that these birds face. In May and June 2021, we spent four weeks engaging with landowners along a 180-km stretch of the river at sites where we have identified suitable fishing-owl habitat using remote sensing and habitat niche models from Mapungubwe National Park westwards. Here we discovered 18 occupied territories and seven nest sites. These findings have generated significant interest and support from the landowners, as very little conservation work has been conducted on fishing-owls in this area, with many landowners unaware that their properties help protect this threatened bird. We aim to use this interest as leverage to improve the protection status of this bird and its sensitive riparian habitat through landowner custodianships and stewardships. Our findings have exciting implications for the conservation status of Pel's Fishing-owl in South Africa, as information on the distribution of this species remains scarce through southern Africa. Our work alludes to a larger population than previously suspected.

In the Lowveld, we have been encouraged by a good Pel's Fishing-owl breeding season this year. At our monitoring sites in the Lowveld, breeding and territory spacing have been relatively stable, with four chicks fledging on the Blyde River and another three along the Olifants River. However, there was no noticeable improvement in the territories within Balule Game Reserve, with only the western pair breeding successfully, as has been the case over the last three years. Two pairs have fledged chicks for the first time since 2015, whilst we witnessed successful breeding in consecutive years in two other territories, all indicating optimal conditions for breeding.

This work is made possible by Alu-Cab, the Charl van der Merwe Trust, Ford Wildlife Foundation, and Rand Merchant Bank.



BIRDS OF PREY PROGRAMME TEAM



Dr Gareth Tate
Programme Manager



John Davies
Project Coordinator: Raptor Conservation and Research



Rebecca Mabuza
Administrator

Tselane Rebothile Rachuene
Field Officer: African Grass-owl Project



Dr Lindy Thompson
Project Coordinator: Vulture Conservation and Research



Danielle du Toit
Karoo Vulture Safe Zone Officer



Ronelle Visagie
Project Coordinator: Arid Raptors Project

Blyde/Olifants Pel's Fishing Owl Project. Photo credit: John Davies.

Carnivore Conservation Programme

Carnivores are some of the most charismatic yet threatened mammals and require innovative strategies to ensure their survival. The EWT's Carnivore Conservation Programme works to increase population numbers, expand the ranges, and improve the conservation status of Africa's threatened large carnivores, including African Wild Dogs, Cheetahs, Lions, Leopards, and Spotted Hyaenas. We achieve this by: implementing large-scale, collaborative, field-based projects to reestablish, expand, and manage safe space for carnivores; actively reducing threats to carnivore survival and persistence; promoting positive changes in human values and attitudes towards carnivores; and supporting legislation to protect them.





Livestock Guardian puppies in training.

DOGS PROTECTING CATS

Since the start of our Livestock Guardian Dog Project in 2008, we have placed 230 support dogs to assist farmers experiencing conflict with predators in the Waterberg Biosphere Reserve, in the Magaliesberg, and at Ingula in the Drakensberg. In these areas, the conflict between farmers and large carnivores, particularly Leopards, is rife. The retaliatory killing of predators is the default recourse for many farmers. We work with these farmers to change their approach to predators. Throughout this year, we interacted with 65 farmers, including holding a socially-distanced workshop in the Waterberg for 23 farmers and a series of small group sessions to teach non-lethal methods of protecting livestock. Our Livestock Guardian Dog Project has successfully reduced losses from protected herds from an average of 6.7 livestock per year to almost zero. Throughout our project areas, 113 dogs are actively protecting their livestock. This project has been so successful that our field staff have compiled a waiting list for dogs as farmers see the value and savings they bring. Since these farmers are no longer losing livestock, they are not motivated to kill carnivores in retaliation. In fact, in the Waterberg, farmers now tell us when they find predators that are snared or killed, and in January 2021, this allowed us to save a snared Leopard and relocate him to Lapalala Wilderness Reserve.

To support our livestock guardian dog work, and with the support of our UNDP GEF Small Grant, we constructed a livestock guardian dog breeding facility in Rebone, Limpopo Province. Mokgadi Guardian Dogs, a local community-based organisation, will breed dogs for our Livestock Guardian Dog Project. They will breed these dogs under the guidance of our livestock guardian dog expert, the EWT dog handling team, and **Green Dogs Conservation**. These kennels will work towards meeting the farmers' needs while following ethical breeding standards. The facility will help provide much-needed support dogs in the Waterberg and promote coexistence between farmers and carnivores.

This work was made possible by Bakwena N1N4 Toll Concessionaire, Eskom, Elizabeth Wakeman Henderson Foundation, Eukanuba, Gaie Ferguson, Milkywire, Princess Charlene of Monaco, Relate Trust, and the UNDP GEF Small Grant Programme.

OUR **GUARDIAN DOG PROJECT**

REDUCED LOSSES FROM

6.7 LIVESTOCK

PER YEAR

TO ALMOST ZERO



African Wild Dog in the Waterberg.

ROAMING WILD AND FREE IN THE WATERBERG

The Waterberg Mountains and the far north of Limpopo Province are home to South Africa's last truly free-ranging African Wild Dogs. These packs roam outside of protected areas through a landscape mosaic that includes livestock farms and wildlife ranches. Some of these packs even roam into Botswana and Zimbabwe, making this a critical cross-boundary population. In 2017, we were aware of only one pack of four individuals in the Waterberg. Through our ongoing work tracking these African Wild Dogs and careful relationship-building to prevent retaliatory killings, the Waterberg population has grown from four individuals in 2017 to 20 in 2021. We now constantly monitor three packs in Limpopo Province, including the Waterberg, using satellite collars and we keep tabs on five other uncollared packs as they course through the landscape by proactively engaging with over 250 farmers each week, and using our network of contacts throughout the region. Our engagement allows these farmers to protect high-value livestock and game and, by doing so, helps prevent the retaliatory killing of predators.

Like much of the country, one knock-on effect of the COVID-19 pandemic in the Waterberg was increased financial stress among farmers and wildlife ranchers, with restrictions imposed on hunting and inter-provincial movement. Job losses and financial stress also led to an increase in snaring for bushmeat as a supplemental protein source. Tolerance for predators declined through the pandemic, too, as every commercially bred animal became critical to people's livelihoods. This has made for a challenging time in the Waterberg, where livestock and wildlife ranching are key economic sectors. Thankfully, over the last several years, we have built relationships with farmers across these mountains. These relationships proved invaluable this year, as we worked with many of these farmers to notify them when the African Wild Dogs were approaching their farms and, where necessary, helping them move the African Wild Dogs on to other areas to minimise their economic impacts. Thankfully, 85% of the 250 farmers and landowners we engage with weekly support our African Wild Dog conservation work and are willing to work with us to find solutions that allow the Wild Dogs to safely roam free.

This work was made possible by the Elizabeth Wakeman Henderson Foundation, Gaie Ferguson, Princess Charlene of Monaco, and the Relate Trust.



African Wild Dog in the Waterberg.



LIONS CROSS THE LINE

In response to an increase in the targeted poisoning of Lions in retaliation for livestock loss or the trade in Lion parts in the Great Limpopo Transfrontier Conservation Area, we are working closely with the Administração Nacional das Áreas de Conservação (ANAC), South African National Parks (SANParks), and the Peace Parks Foundation (PPF), to protect the Lions in Limpopo National Park and northern Kruger National Park (hereafter Limpopo and Kruger).

Targeted poaching has led to a concerning decline in the Lion population from an estimated 66 Lions across this 11,230 km^2 protected area in 2012 to just 22 in 2017. This year, with the support of SANParks Veterinary Services, Saving the Survivors, and the Mozambique Wildlife Alliance, we placed satellite tracking collars on eight Lions to monitor their movements in high-risk areas of Limpopo and the northern Kruger. Tracking data showed that five of these Lions used territories that traversed both Kruger and Limpopo, making this a transfrontier conservation issue. To better understand this challenge, we will continue to expand our Lion monitoring over the coming year and use this data to identify high-risk areas that would benefit from increased anti-poaching efforts.

We also work closely with the anti-poaching team in Limpopo to use Lion movements to guide anti-poaching patrols. By closely monitoring the core home range areas and important landscape features Lions use, we increase our chances of detecting poachers and preventing Lion deaths. Since the international border opened in February 2021, and we could enter Mozambique, we have worked with our partners to intervene in four human-wildlife conflict incidents and prevented livestock owners from poisoning at least seven Lions.

To counter the insidious threat posed by poison, we assisted the EWT's Vultures for Africa Programme in providing Poison Response Training for 231 rangers in the Kruger, Limpopo, and Banhine National Parks. This training will ensure that all rangers within these parks can respond safely and effectively to the growing poisoning threat.

This work was made possible by the UK Government through the International Wildlife Trade Challenge Fund and Lion Recovery Fund and with operational support from Administração Nacional das Áreas de Conservação, the EWT's Wildlife in Trade and Vultures for Africa programmes, Freeland, Herding4Health, Peace Parks Foundation, and SANParks.



Collared female Lions in the Kruger National Park.



Anti-poaching team keeping the Lions in Limpopo safe.

SPOTTED IN ZINAVE NATIONAL PARK

Zinave National Park sits within the Mozambican section of the Great Limpopo Transfrontier Conservation Area. The park's wildlife, particularly its carnivores, were devastated in the Mozambican Civil War that raged from 1977–1992. We signed an MoU with the Peace Parks Foundation (PPF) to provide carnivore reintroduction and monitoring expertise for the year. Working with PPF, the Administração Nacional das Áreas de Conservação (ANAC), and the Mozambique Wildlife Alliance (MWA), we are reconstructing Zinave's carnivore guild. We started with the scavengers, introducing four Spotted Hyaenas in August 2020. By consuming carrion, hyaenas perform essential ecosystems services, including stemming the spread of disease. In April 2021, we confirmed the birth of Zinave's first Spotted Hyaena cub in decades. The Spotted Hyaenas will soon be followed by Leopards, Lions, Cheetahs, and African Wild Dogs.

This reintroduction provides an opportunity to nurture and support the next generation of conservationists in Mozambique. We have established a good working relationship with Universidade Eduardo Mondlane in Maputo to provide field experience and training for undergraduate students and facilitate graduate-level research.

This work was made possible by the Oak Foundation.



An adult female Cheetah captured by the EWT and reserve staff on Rogge Cloof Game Reserve in Sutherland, Northern Cape. Despite -15°C winter temperatures, this female successfully raised her entire first litter to independence.

CHEETAHS ON THE MOVE

As of June 2021, the Cheetah Range Expansion Project included 456 Cheetahs on 65 reserves, covering over 2.07 million hectares through southern Africa. We moved 31 Cheetahs between reserves over the reporting period to ensure population genetic diversity and assist individuals in dispersing. Over the past decade, the Cheetah Range Expansion Project has increased at a rate of 21 individuals and two reserves each year. These gains have resulted in South Africa and Malawi boasting the only growing wild Cheetah populations worldwide.

This year, we undertook our most ambitious Cheetah reintroduction to the 600,000 ha Bangweulu Wetlands Game Management Area in Zambia, which was also our first reintroduction to an unfenced system. African Parks co-manages this park through an agreement with the Zambian Department of National Parks and Wildlife. Part of the reintroduction included engaging with the chiefs of the surrounding villages to obtain their blessing and permission to reintroduce these big cats. We released five Cheetahs into Bangweulu in May 2021, including two females and three males, and we subsequently trained people from the local communities to monitor them.

Likewise, in partnership with African Parks, we reintroduced Cheetahs into Liwonde National Park in Malawi, in 2017. This population has done exceptionally well, and this year contributed to the species' regional range expansion. In June, we kicked off our reintroduction into the Zambezi Delta, our second reintroduction to a large, unfenced landscape, by capturing two female Cheetahs ready to disperse from their mothers and flying them to Coutada 11, Mozambique, in the Marromeu landscape.

Our collaboration with the Conservation Science Unit has ensured that the EWT's Biodiversity Databank contains updated data on our Cheetah reintroductions and translocations, enabling us to easily and effectively track, report on, and plan our Cheetah Range Expansion activities.

This work was made possible by Ashia Cheetah Conservation, Charlie Amm, Ford Wildlife Foundation, Gaie Ferguson, Ivan Carter Foundation, Milkywire, National Geographic, Paul King, PWC, Seremed, and the Tandy Grant Foundation.



Dr Joel Alves and Grant Beverley collaring a Wild Dog in Greater Kruger National Park. Photo credit: Thandiwe Knutson.

BIG BROTHER PROTECTING AFRICAN WILD DOGS IN THE KRUGER

When African Wild Dogs disperse from the Kruger National Park, they often encounter disgruntled wildlife ranchers, a literal minefield of snares they are accidentally caught in, and are exposed to diseases such as canine distemper and rabies. We have now collared 22 African Wild Dog packs in the Kruger National Park and the neighbouring Associated Private Nature Reserves to monitor the African Wild Dogs living in these high-risk areas more effectively. Tracking these packs will improve our ability to respond when farmers threaten to shoot them, when we receive reports of snared individuals, or when they move close to human settlements where domestic dogs roam.

We partnered with wildlife veterinarian, Dr Louis van Schalkwyk, to streamline this tracking by developing a near real-time monitoring application. The team created a risk map for the entire Greater Kruger ecosystem, highlighting areas of high snare risk and outlining the borders of the protected areas. African Wild Dog movement data is automatically uploaded to an online server, incorporating it into an up-to-date risk map. The system sends an automated alert when African Wild Dogs pass through high-risk areas or leave protected areas, allowing us to check individuals for snares through on-the-ground follow-ups or by engaging with farmers and recovering packs in danger of persecution.

Another serious risk to African Wild Dogs is exposure to diseases such as canine distemper and rabies, both carried by domestic dogs. To mitigate this, our risk map also indicates proximity to domestic dogs, allowing us to monitor packs as they travel through areas with high risks of exposure to these diseases. Vaccinating these packs will also protect them from these potentially devastating diseases.

Results of our trials to date are highly encouraging, as information from our system allowed us to remove eight snares from African Wild Dogs in the Greater Kruger system between March and June 2021, compared to four snares removed in the 12 months before launching the system. Once we iron out some of the system's limitations, it will revolutionise our ability to address threats facing carnivores.

This work was made possible by the Boucher Legacy, the Ford Wildlife Foundation, Investec, the Oak Foundation, Wild Wonderful World, and Wildscapes Veterinary.



African Wild Dog mother and her puppies. Photo credit: Grant Beverley.

SUCCESS BREEDS SUCCESS

Between 2017 and 2019, we coordinated **a series of African Wild Dog reintroductions into Mozambique**. These have been so successful that these reserves can now contribute individuals from their burgeoning populations to support regional African Wild Dog range expansion. Introduced in 2017, with three subsequent translocations to the area, the Gorongosa National Park African Wild Dog population now exceeds 100 individuals. Given this success, we flew a dispersing group of three males from the park to Karingani Game Reserve, also in Mozambique. Here we bonded them with a group of three young females from Karingani. This represents the first time a new pack has been formed artificially outside South Africa. We consider this a huge success for African Wild Dog conservation in the region. In July 2021, we will fly this new pack to Malawi to find a new home in Majete Wildlife Reserve. At the same time, we will fly another pack of eight African Wild Dogs from South Africa to Liwonde National Park, Malawi. Moving two packs comprising 14 African Wild Dogs across three countries is no small feat. This complex reintroduction highlights the power of passionate conservation partners joining forces to achieve the impossible. The Wild Dog Range Expansion Project now includes 250 African Wild Dogs across 16 reserves totalling 1.2 million hectares.

This reintroduction was made possible through the collaboration between the Administração Nacional das Áreas de Conservação, African Parks, Bateleurs, Carr Foundation, Ezemvelo KZN Wildlife, Gorongosa Project, Karingani Game Reserve, Dr Rowan Leeming, Malawi Department of National Parks and Wildlife, Malawi Wildlife Alliance, uMphafa Nature Reserve, Wildlife ACT, Wildlands. This work was made possible by African Wildlife Vets, Tania Ihlenfeldt and Rob Hibbert, Oak Foundation, Painted Wolf Wines, and Remembering Wildlife.



The world's fiirst state-of-the-art Wild Dog holding facility on Welgevonden Game Reserve in the Waterberg in Limpopo.

MATCHMAKING HOTEL

To support our work within the Wild Dog Range Expansion Project, we partnered with Welgevonden Game Reserve in October 2020 to construct a state-of-the-art holding facility in the Waterberg. This facility will serve primarily as a stopover for African Wild Dogs on their way to release sites across southern Africa. Based on years of African Wild Dog handling experience, the dual compartments in the facility will allow us to safely bond new packs under the close supervision of our African Wild Dog experts. The facility includes an observation platform that will let students and researchers conduct behavioural research to inform our bonding, reintroduction, and conflict mitigation work. Our facility's first 'guests' arrived from northern Limpopo Province, a dispersing pack of five males born near Musina. Over several weeks, they traversed 800 km through high-risk areas in both Zimbabwe and northern South Africa, searching for females. We decided to assist them in their amorous quest by capturing and bonding them with three females from Somkhanda Game Reserve in KwaZulu-Natal. We plan to move this new pack to start their new life together in Malawi's Liwonde National Park.

This work was made possible by Colette Carty, Ford Wildlife Foundation, Lizzie Hide, Tania Ihlenfeldt and Rob Hibbert Oak Foundation, Painted Dog Conservation Inc., Richard Bosman, SSU Plant Quarry, Alastair Stalker, TNH Fencing, Lucia van Dyk, and Welgevonden Game Reserve.

THE **WILD DOG RANGE EXPANSION PROJECT** INCLUDES **250 AFRICAN WILD DOGS**

OVER **1.2 MILLION HA**

KRUGER WILD DOG AND CHEETAH CENSUS

Every five years, dating back to 1989, we partner with citizen scientists to census the African Wild Dog and Cheetah populations in the Kruger National Park. These censuses provide barometers of population health for both species, flagging any unexpected population events and negative trends. Due to the COVID-19 pandemic and low visitor numbers to the Kruger, we had to postpone the latest census for almost two years. In the meantime, we have partnered with the African Carnivore WildBook, Tech 4 Conservation, and the Tshwane University of Technology to use machine learning to identify individuals. Manual identification, looking at animals' individual spot and coat patterns, is time-consuming and prone to human error – especially for Cheetahs whose coats are harder to identify. To kickstart the machine learning process, we uploaded data from historical censuses to provide baseline data and identify individuals that have survived between surveys. Encouragingly, we have demonstrated faster image processing and increased accuracy by leveraging these advances in artificial intelligence. We will use these gains for future surveys in the Kruger National Park.

This work was made possible by the Ford Wildlife Foundation, Investec, Meter Man, Outliers Coffee Roasters, Painted Wolf Wines, Relate Trust, SANParks, and the Tshwane University of Technology.



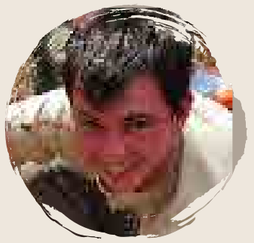
CARNIVORE CONSERVATION PROGRAMME



Dr David Mills
Programme Manager



Grant Beverley
Lowveld Regional Coordinator



Cole du Plessis
KZN Regional Coordinator and Wild Dog Range Expansion Project Coordinator



Joseph Hlako
Waterberg Community Conflict Mitigation Field Officer



Kulani Nyakane
Lowveld Carnivore Conservation Community Field Officer



Marnus Roodbol
Lion Conservation Field Officer



Derek van der Merwe
Limpopo Regional Coordinator



Vincent van der Merwe
Eastern Cape Regional Coordinator and Cheetah Range Expansion Project Coordinator

Conservation
Science Unit

The Conservation Science Unit is the EWT's scientific hub, providing scientific support across the organisation's programmes and projects to ensure that our work is scientifically sound and evidence-based. We manage the organisation's central biodiversity database and build capacity among our staff and partners to analyse, interpret, and publish the results of our conservation research, making it accessible and meaningful to diverse audiences.

We also run special projects, such as the African Lion Database and the Trailblazer Species Distribution Modelling Project, which do not fall within the scope of other EWT programmes.

As a support service function of the EWT, the Conservation Science Unit's work is made possible by our framework donors Artifact Advertising, Barloworld, Cliffe Dekker Hofmeyr, Deloitte, Hans Hoheisen Charitable Trust, Rand Merchant Bank, and Speedspace.



SCORING NEW GOALS

In April 2021, the EWT undertook a mid-term strategy review and realignment at the first all-staff face-to-face meeting since the pandemic began. A primary focus was to revisit our conservation and business approaches considering recent world events, ensuring our global and national relevance in the run-up to our 50th birthday in 2023. Through this process, we revised the EWT's High-level Goals from ten down to six. We also refined our programme and department objectives and brainstormed key deliverables for our birthday.



AWARD-WINNING CONSERVATION IMPACT

The EWT uses the internationally recognised **Conservation Standards** to plan, implement, and monitor our conservation initiatives and adapt projects to meet our conservation objectives. In October 2020, the Conservation Science Unit compiled a case study describing how the EWT and the International Crane Foundation have worked together to institutionalise the Conservation Standards. This case study was awarded first place in the Conservation Coaches Network's Third Global Conservation Case Study Competition. Our **case study** highlighted the critical lessons learnt during this journey and will provide valuable insight to other organisations working towards adopting the Conservation Standards. A full recording of the awards ceremony is available on **the Conservation Standards YouTube page.**



SETTING HIGH CONSERVATION STANDARDS

Through our efforts to institutionalise the Conservation Standards into the EWT, the Conservation Science Unit has used Miradi software to design, manage, monitor, and report our project and programme progress. As a result of the skills gained in using the software, we can assist other organisations in using Miradi. In September 2020, we hosted a training webinar entitled "Introduction to the Conservation Standards and the use of Miradi", targeted at external partners, conservation practitioners, government officials, and university students. Thirty-seven participants attended the event, which provided them with the skills to work independently in Miradi. In November 2020, the Conservation Science Unit provided a Miradi showcase presentation to external conservation project teams funded by USAID, as it is interested in utilising Miradi in their projects. These two events were held to help integrate the Conservation Standards into the work of several leading wildlife non-profits in South Africa.

The EWT participated in and helped facilitate the first Conservation Coaches Network of Africa and Madagascar (**CCNet Africa**) Regional Network gathering of 2021. Conservation coaches from across Africa participated in the event to build collaboration among African conservation practitioners using the Conservation Standards.

Our work on the Conservation Standards and Miradi culminated in the acceptance of the EWT as a member of the Conservation Measures Partnership (CMP) in April 2021. The CMP is an international community of conservation-oriented NGOs, government agencies, funders, and private businesses that work collectively to guide conservation globally. We are already involved in several CMP initiatives, including the Conservation Audit Tool and the CMP Population, Health, and Environment (PHE) Learning Initiative.

Our Conservation Standards work is made possible through ongoing support and collaboration from the International Crane Foundation. The Conservation Standards webinar and Miradi showcase presentation were made possible by the United Nations Development Programme (UNDP), GEF5 Sustainable Land Management Project in partnership with the Department of Forestry, Fisheries, and the Environment (DFFE), and the Department of Agriculture, Land Reform, and Rural Development (DALRRD).

THE AFRICAN LION DATABASE

The African Lion Database (ALD) is a first-of-its-kind platform that collects and consolidates population, distribution, and human-related mortality data from across the African Lion's range throughout the continent. This allows us to improve our understanding of the status and trends of this threatened species, guide conservation action, and direct funding effectively to African Lion populations that need it most.

African Lion Database

In the last year, the ALD made good progress in boosting its data sets. As reflected in the database's metrics, progress included gathering data for areas previously missing from the ALD and significantly increasing the number of human-related mortality records, which we began collecting in early-2020. These deaths are caused by human actions – both legal and illegal – including hunting, poaching, vehicle accidents, human-wildlife conflict-related killings, and snaring. In addition, we made positive steps towards moving the ALD onto a more sophisticated online platform that will allow us to manage the data better, store the data on the cloud, and set up a user interface for the public to access information on Lion populations and distributions.

This work is made possible by the Lion Recovery Fund, National Geographic Society, and United States Fish and Wildlife Service.

Metric	Countries' Lion data in the ALD	Lion areas represented in the ALD	Records of Lion population sizes	Areas providing data on Lion population sizes	Ad hoc Lion distribution records	Lion mortality records	Individuals contacted for Lion data	Individuals providing Lion data
Number	**22**	**34%**	**731**	**295**	**17,033**	**1127**	**428**	**166**
Change (year on year)	**0 ▲**	**3% ▲**	**40 ▲**	**53 ▲**	**2,928 ▲**	**847 ▲**	**80 ▲**	**57 ▲**

12,929
Distribution Records in ALD

621
Population Records in ALD

200
Lion Mortality records in the ALD

162
Individuals contacted for data

13,734
ADL minimum lion population estimate

27%
of lion areas included in the ALD



Photo credit: Samantha Nicholson.



Green-banded Swallowtail Butterly

WHERE THREATENED SPECIES DARE TO TREAD

A fundamental aspect of conserving species is knowing where in the landscape they occur. However, this knowledge is often imperfect, and this is especially true of rare and cryptic species. This calls for the use of innovative tools to fill these information gaps. In this respect, species distribution models are an essential conservation tool that the EWT uses in various projects. They serve several functions, most notably to predict where we can expect to find particular species, in areas not sampled for them, based on a measure of habitat suitability. These models also provide information on the predicted effects of climate change on species' distributions, informing both current and future conservation planning. Similarly, they can identify unsurveyed areas with favourable habitat characteristics that could allow for the long-term persistence of animal populations.

This year we worked with butterfly experts from the Lepidopterists' Society of Africa (**LepSoc Africa**) to update butterfly models for the Western Cape. We submitted this information to the Department of Forestry, Fisheries, and the Environment (DFFE) in August 2020, for inclusion in its **Environmental Screening Tool** (an online platform that identifies areas of high environmental sensitivity at the site of a proposed development). In addition, we re-ran the analyses for 20 reptile species after comprehensively cleaning the data and adding new records from a team of herpetologists. Through the SANBI-led Reptile Red Listing process, an additional reptile species, Meuthen's Dwarf Gecko, was uplisted from Data Deficient to Vulnerable. This gecko species was subsequently included in the Environmental Screening Tool. We continued to grow the number of species included in the tool and provided the DFFE with our latest updates, in a major overhaul of the tool, in June 2021. To date, the information we have provided for the screening tool covers 426 terrestrial animal species of conservation concern. These numbers almost double the number of species included last year and include amphibians, reptiles, birds, mammals, spiders, butterflies, and other invertebrates.

In addition, our team developed no-go zone maps for developments – based on highly sensitive areas for these species of conservation concern – within DFFE's Environmental Screening Tool. These areas include recent records confirming the presence of highly range-restricted threatened species. We presented this map to over 180 participants of the International Association for Impact Assessment South Africa (IAIAsa) **virtual symposium** in October 2020, which the EWT co-hosted. This symposium provided a great platform to promote the idea of no-go areas. We are confident that Environmental Assessment Practitioners will use this map before formally starting any Environmental Impact Assessment (EIA) process. To distribute these no-go maps, we developed an interactive online app to host the **Threatened Species No-Go Map**, allowing EIA practitioners and others to conduct a rapid assessment of the sensitivity of a site.

This work is made possible by Rand Merchant Bank.



Carpenter Bee

GIANT BULLFROGS – THREATENED OR NOT?

Giant Bullfrogs are classified as a species of Least Concern by the IUCN and are therefore ineligible for inclusion in the DFFE Environmental Screening Tool. However, the species faces severe and persistent threats, primarily linked to the loss of wetland habitat and road mortalities, in Gauteng, which is regarded as the species' South African stronghold. Working with our Threatened Amphibian Programme, we developed a species distribution model for the Giant Bullfrog to appeal its exclusion from the screening tool. Although the South African National Biodiversity Institute (SANBI) did not find sufficient cause to overturn their exclusion, the appeal process did spark valuable discussions on objectively incorporating threats to species that may not be threatened nationally but face severe pressures on a local scale. In response to this process, SANBI has, as a part of their Biodiversity Monitoring Framework, agreed to convene a multitaxa panel to evaluate such species and explore how they can be incorporated in the screening tool in the future.

This work is made possible by Rand Merchant Bank.





Giant Bullfrog. Photo Credit: Anton van Niekerk.

AUTOMATING DATA UPLOADS AND ONLINE DATABASES

The **Biodiversity DataBank** is a centralised repository of all the biodiversity data that the EWT collects. A centralised database ensures that we do not lose data stored on individual computers and allows for more efficient data use and sharing. The DataBank includes the bulk of our GPS wildlife tracking data, the Mammal Red List Database, the **African Wildlife Poisoning Database**, and the Ecological Goods and Services Database. In total, it houses 25 data tables from nine of the EWT's programmes. The Biodiversity DataBank took a significant leap forward by migrating its databases onto cloud storage this year. One significant upshot is that multiple people can now simultaneously access and work with the Biodiversity DataBank, opening up greater possibilities for viewing, editing, analysing, mapping, and summarising the data. We developed user-friendly data summary dashboards for our programmes and implemented the first of these for use with the African Wildlife Poisoning Database.

This year, we signed a contract with Luna Software Solutions to develop online databases for the African Lion Database and the EWT's Wildlife and Energy Programme's Central Incident Register. We also developed an online management system to add and track datasets collaboratively across the EWT.

We made significant progress to house our Cheetah metapopulation data on the Biodiversity DataBank, which tracks Cheetah reintroductions and translocations, amongst other things. This included compiling and cleaning data, which we have now uploaded to the cloud server. We also created several queries that automatically generate data summaries and graphs. These will form the basis of a data summary dashboard for the Cheetah database and allow us to track and report on the **Cheetah range expansion work** more easily.

This work is made possible through ongoing mentoring and technical support from the International Crane Foundation.

SHARING OUR DATA AND KNOWLEDGE

This year we received 46 requests from stakeholders for data and, when we had data available for these requests, we shared 27 datasets externally. Datasets were used most frequently for EIA or pre-screening reports (12 datasets) and research projects (eight datasets). We received 11 data requests for the African Wildlife Poisoning Database, our most requested data. At the same time, there were also several requests for Riverine Rabbit data, as this is important for informing renewable energy developments in the Karoo.

We also shared datasets through the Global Biodiversity Information Facility (GBIF) and currently have three freely available datasets for downloading on African cranes and Cheetahs (two datasets). Collectively, academic researchers and conservation planners have downloaded these datasets 13,668 times to date and cited them 67 times.



ETHICAL CONSERVATION

The EWT Ethics Committee (EWTEC) is the EWT's formal, independent ethics committee. The committee evaluates and approves animal and social welfare procedures for any project before work begins. The EWTEC follows national legislation and standards. The EWTEC met five times over the reporting period to review our conservation projects, and in doing so, we grew the total number of EWT projects with ethics approval by 17 to a total of 40, including 34 wildlife projects, six social projects, and two Standard Operating Procedures.

EWT ETHICS COMMITTEE ATTENDANCE DURING THE PERIOD 2020-2021.

COMMITTEE MEMBER Expertise (affiliation)	21 JUL 20	15 SEP 20	10 NOV 20	9 FEB 21	11 MAY 21
Dr Harriet Davies-Mostert Chair (EWT)	✓	✓	✓	✓	✓
Samantha Nicholson EWTEC Administrator (EWT)	✓	✓	✓	✓	✗
Erika Bornman Animal welfare (previously NSPCA)	✓	✓	✗	NA	NA
Dr Richard Burroughs Wildlife veterinarian (University of Pretoria)	✓	✓	✗	✗	✗
Dr Jacklyn Cock Social scientist (University of the Witwatersrand)	✓	✓	✓	✗	✓
Adam Gunn Public representative (Gunn Attorneys)	✗	✗	✗	✗	✗
Sonam Mansingh Public representative (previously Gunn Attorneys)	✓	✓	✗	✗	NA
Dr Kelly Marnewick Scientist (Tshwane University of Technology)	✓	✓	✓	✓	✗
Dr Leith Meyer Wildlife veterinarian (University of Pretoria)	✓	✓	✓	✓	✓
Lebo Sentle Animal welfare (NSPCA)	✗	✗	✓	✓	✓
Prof Michael Somers Scientist (University of Pretoria)	✗	✓	✓	✓	✓
NUMBER OF PROJECTS APPROVED					
Animal projects	5	2	1	3	2
Social projects	1	2	1	0	0

WILDLIFE APPS

One of the services the Conservation Science Unit provides is the development of data collection apps for the EWT's programmes to use in South Africa and across the continent. This year we developed several new data collection apps. For example, the **Threatened Amphibian Programme** regularly monitors Kloof Frogs in the eThekwini (Durban) area. The app allows them to capture data on the size and location of egg clumps and ultimately understand the habitat requirements and impacts of habitat degradation on this threatened species. We also developed an app that allows the programme to log environmental transgressions in the field, such as placing buildings within wetlands or illegal dumping. Another app, which we built for the Carnivore Conservation Programme, allows field officers to collect data on lion occurrence and responses to different call-up techniques in the Greater Limpopo Transfrontier Conservation Area. We also updated and improved the data collection apps for the EWT's **African Crane Conservation Programme**. Meanwhile, with our help, the **Drylands Conservation Programme** successfully deployed an app to capture information on the collection of soil samples for testing for environmental DNA (eDNA). The programme uses the app regularly in the field for its Riverine Rabbit and golden mole projects.

This work is made possible by Esri South Africa.

AFRICAN CRANES

12 APPS

African cranes, breeding and incident monitoring (crane range states throughout Africa)

CARNIVORES

2 APPS

Lion occurrence, African Wild Dog immobilisation (southern Africa)

DRYLANDS

3 APPS

Riverine Rabbits and golden moles: sightings, fitting of satellite collars, and eDNA sampling (South Africa)

THREATENED AMPHIBIANS

3 APPS

Kloof Frogs breeding monitoring, Ecological Goods and Services monitoring in wetlands, environmental transgressions (South Africa)

VULTURES

2 APPS

Wildlife poisoning (sub-Saharan Africa)

WILDLIFE & ENERGY

6 APPS

Monitoring of different types of powerline mitigation (three apps), Ludwig's Bustard surveys, bird faults on transmission lines, monitoring at Sere Wind Farm (South Africa)

28 TOTAL NUMBER OF APPS IN USE



Photo credit: Samantha Nicholson.

SCIENTIFIC PUBLICATIONS

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Lambertucci SA, Margalida A, Amar A, Ballejo F, Bowden CGR, Bildstein KL, Blanco G, **Botha AJ**, Cortés-Avizanda A, Duriez O, Green RE, Hiraldo F, Ogada D, Plaza P, Sanchez-Zapata JA, Santangeli A, Selva N, Speziale KL, Spiegel O & Donazar JA. 2021. Presumed killers? Vultures, stakeholders, science and misperceptions. *Conservation Science and Practice* 3: e415: 1–10.

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SUPPORTING THE EWT'S PROGRAMMES

As always, the Conservation Science Unit provided scientific support to the EWT's programmes and partners. One of the ways that we assist programmes is with project design – well-designed projects ensure that their impact can be measured, research questions can be answered, and suitable types and amounts of data are collected. A rigorous, empirical approach also allows good feedback to ensure adaptive management.

We helped develop a survey protocol for a project on Angulate Tortoises at Eskom's Sere Wind Farm and used the data collected to run an analysis to estimate the density and abundance of tortoises at the site.

When called upon, we also assist programmes with fieldwork, such as conducting a vegetation survey at Sere as part of Eskom's pilot-testing phase of the **National Biodiversity and Business Network's** Biological Diversity Protocol.

We worked extensively on the African Wildlife Poisoning Database over the past year. First, we integrated all old poisoning incidents collected by the EWT from 1995–2010 into the database. We also developed a data summary dashboard for the wildlife poisoning database to extract regular graphs for poison training, presentations, reporting, and scientific publications by the EWT's programmes. This will soon be accessible publicly and provide access to all the summary information we hold on wildlife poisoning from across the continent.

We also support the EWT's programmes through scientific training. This year, we provided training opportunities through webinars on various topics, ranging from data management to project design. Two examples are a presentation on how to account for and model spatial bias in crane survey data and how to design robust studies that allow for accurate measurement of conservation impact.

The Conservation Science Unit used the methodology, data and workflows from the Species Distribution Modelling project (detailed above) to help with the study design and sampling location selection of four projects: (1) the development of a monitoring plan for the invasive Asian Toad, working with SANBI; (2) a collaboration with Dr Samantha Mynhardt from the University of Pretoria, on the phylogeny of golden moles in the Eastern Cape; (3) determining high suitability areas for sampling for the Amathole Toad and the Cape Platanna, in collaboration with the Bionerds and SANBI; and (4) development of a camera trap sampling design for the use in baseline biodiversity measurements in the Karoo.

CONSERVATION SCIENCE UNIT TEAM



Dr Lizanne Roxburgh
Senior Scientist



Dr Oliver Cowan
Conservation Science Officer



Tamsyn Galloway
Conservation Science Intern



Dr Dominic Henry
Ecological Modelling Specialist



Samantha Nicholson
African Lion Database Coordinator



Claire Relton
Conservation Science Officer
(until April 2021)



A CSU field trip to Landroskop in the Western Cape to look for the Vulnerable Dwarf Crag Lizard.

Drylands Conservation Programme

The EWT's Drylands Conservation Programme is the only initiative working exclusively to conserve the Karoo's unique habitats and species. This arid landscape, incorporating the Nama and Succulent Karoo, is the largest ecosystem in South Africa, covering an area of approximately 400,000 km², an expanse slightly larger than Germany. We are fortunate to work in this inspiring landscape, the vast open spaces in the Western and Northern Cape. We aim to maximise opportunities to conserve species and habitats while working alongside local communities.

The Karoo is a landscape in motion. Driven by climate change impacts and shifting land usage patterns, we anticipate that the conservation and renewable energy sectors will contribute more and more to livelihoods in these drylands. Rapid population growth and habitat transformation to the east of the country and along our coastlines will redefine the Karoo as a conservation frontier, creating new opportunities for species and habitat conservation.

In the past year, we doubled the geographic area of our work and quadrupled the number of drylands species we protect, diversifying our work to include both the Van Zyl's and De Winton's golden moles and the Karoo Dwarf Tortoise. This growth is in line with our strategy, which we are proud to see coming to fruition.

Our broader work in this landscape is funded by the Global Environment Facility Sustainable Land Management (GEF5 SLM) Project managed by the United Nations Development Programme (UNDP), in partnership with the Department of Forestry, Fisheries, and the Environment (DFFE), and the Northern Cape Department of Agriculture, Environmental Affairs, Rural Development, and Land Reform (DAERL).



GOLDEN OPPORTUNITY

Golden moles are some of South Africa's most threatened mammals. In fact, two of the most elusive mammal species globally are the Endangered Van Zyl's Golden Mole and the Critically Endangered De Winton's Golden Mole. Both species occur on the West Coast of South Africa, and, as inhabitants of the coastal dune belt and adjacent sandy areas, they are extremely difficult to find. Our project **aims to rediscover both long-lost species**, identify their distribution, and ultimately protect suitable habitat for their survival. The dune and coastal ecosystems inhabited by both species along the West Coast are under immense pressure due to mining, residential development, and agriculture. We hope to highlight the plight of these extraordinary creatures to spark conservation action.



eDNA samples from a Grant's Golden Mole in Lamberts Bay proved the value of the technique for the detection of elusive species in the drylands. Photo credit: Jean Pierre le Roux.



The EWT's Drylands Conservation team and Samantha Mynhardt from University of Pretoria (left) searching for golden moles in the dunes of South Africa's West Coast. Photo credit: Nicky Souness.

This year we developed an **environmental DNA** (eDNA) method to find and identify golden mole DNA left in the sand that they 'swim' through while foraging. In September 2020, we carried out our first expedition to Lamberts Bay to search for tell-tale signs of these mammals left in the sand by their eDNA. This work is a collaboration with the University of Pretoria, which allowed Dr Samantha Mynhardt to join the EWT as a research associate. Her ground-breaking research in terrestrial eDNA allowed us to successfully isolate golden mole DNA from sand samples collected on this trip.

While these samples proved to be from Grant's Golden Mole, this proof of concept demonstrated that using eDNA is a viable technique to identify different golden mole species along the West Coast. **This is the first time that this technique has been used to identify golden moles globally.** Now that we have demonstrated the technique's effectiveness, we will be collecting more samples along this coast in our efforts to track down the more threatened golden mole species that historically occurred here. We will also apply eDNA technology to understand further the distribution of **Riverine Rabbits** and other cryptic drylands species.

This work is made possible by Re:wild (previously Global Wildlife Conservation).

GOING BIG IN THE BULB CAPITAL

With the highest number of indigenous bulb species on Earth and a unique assemblage of insects, the Nieuwoudtville area in the Northern Cape is known as the bulb capital of the world. Due to the convergence of the Fynbos, Succulent, and Nama Karoo biomes, the area is extraordinarily rich in biodiversity. **Papkuilsfontein** is a farm near Nieuwoudtville that lies within this biodiversity hotspot and is famous for its spring flowers. Several threatened bulb species occur on the farm, as well as wildlife such as the Endangered Speckled Dwarf Tortoise and Ludwig's Bustard. Climate change is dramatically altering the farming landscape here, and given the farm's exceptional biodiversity value, the EWT and provincial conservation authorities are in the process of declaring the farm a Protected Environment.

In November 2020, **we officially launched** more than 100 km of mountain bike and trail running routes on the farm. Establishing these trails helps diversify farming income through adventure tourism and balances nature-based income generation and farming activities. The work contributes to our GEF 5 Sustainable Land Management Project that seeks to develop novel ways to support landowners to farm more sustainably and diversify their income streams, reducing their reliance on intensive farming and enabling them to adapt to changing climatic conditions.

In addition, we began to train two community members as nature guides to work on the Papkuilsfontein hiking and mountain biking trails. We also hosted a first aid training course for the Nieuwoudtville community, which was attended by 29 people.

This work is made possible by the Global Environment Facility Sustainable Land Management (GEF5 SLM) Project, managed by the United Nations Development Programme (UNDP), in partnership with the Department of Forestry, Fisheries, and the Environment (DFFE), and the van Wyk family.



Rock climing in the magnificant landscape of Papkuilsfontein.



The EWT's Dr Tim Jackson exploring the Papkuilsfontein mountain bike trails.



Bonnie Schuman and Esther Matthew installing camera traps on Anysberg Nature Reserve in the Western Cape.

IT'S ANYSBERG'S WONDER

Anysberg Nature Reserve in the Western Cape, and its surrounding properties, are an uncharted treasure of natural history. In September 2020, we coordinated a comprehensive **biodiversity survey** on the 7,000-ha farm **Lettas Kraal**, which borders Anysberg. Our survey teams included knowledge experts from both government (including **CapeNature**) and NGO collaborators. Initial results from camera traps provided images of Leopards, Brown Hyaenas, Honey Badgers, and Riverine Rabbits, and the mammalian diversity and threatened species identified demonstrated the value of this property to their conservation.

The survey teams encountered more species than expected and even discovered five plant species new to science, subject to verification by botanical experts. Subsequently, four additional landowners surrounding Anysberg have committed their properties to South Africa's protected area expansion programme, while a fifth landowner is interested in protecting land through a conservation servitude. Together, these properties will boost the size of the proposed Greater Anysberg Conservation Initiative to almost 20,000 ha. We are now preparing to take the properties through CapeNature's biodiversity review process as the next step towards their declaration as nature reserves.

This work is made possible by Mr J Roodt, Rand Merchant Bank, and Zoological Society for the Conservation of Species and Populations (ZGAP).

OUR **BIODIVERSITY SURVEY** ENCOUNTERED

LEOPARDS, BROWN HYAENAS, HONEY BADGERS, RIVERINE RABBITS

& 5 NEW PLANT SPECIES

SNEAKY RABBITS

As part of a stewardship assessment in the Northern Cape to declare the 2,400-ha Vogelfontein farm a protected area, we carried out a rapid biodiversity survey with the Northern Cape Department of Agriculture, Environmental Affairs, Land Reform, and Rural Development (DAEARDL) Conservation Stewardship Unit. Situated on the edge of the Nuweveld Escarpment, the farm does not include extensive riparian habitat, which Riverine Rabbits typically inhabit. Even so, our camera traps unexpectedly turned up pictures of this highly threatened species. The property will be the first Protected Environment in the Northern Cape to formally conserve Riverine Rabbits.

This work is made possible by the Global Environment Facility Sustainable Land Management (GEF5 SLM) Project managed by the United Nations Development Programme (UNDP), in partnership with the Department of Forestry, Fisheries, and the Environment (DFFE).



Riverine Rabbit spotted on a farm near Loxton in the Karoo. Photo credit: Gail C. Thomson.

TAKING THE DISTANCE OUT OF LEARNING

Given the vast size of the Northern Cape, working face-to-face with people presents a real challenge. By migrating many of our training activities online this year, we have brought our stakeholders closer to one another, enabling us to spread our conservation message more efficiently and widely across the Karoo. These training events are valuable, given almost 70% of people in the province do not finish high school. The timing of our project was particularly good, as South Africa's various levels of COVID-19 lockdowns continued to restrict people's movements.

The Karoo Forever UNDP/GEF Sustainable Land Management Project **website** contains our sustainable land management resources and online course content, overcoming the challenge of distance in the Karoo. The content includes our webinar series, which contributes to our successful ongoing collaboration with the Western Cape Department of Agriculture, with whom we developed and presented these webinars, and the Northern Cape Department of Agriculture, Land Reform, and Rural Development. The webinars highlight sustainable land management practices in the Karoo drylands. Recordings of our webinar series are also available on the website. In addition, 56 people registered to complete our **Integrated Farm Planning and Management** course.

This year we completed the second and third webinar series focusing on sustainable land management topics. Altogether 90 people attended the second webinar series and 67 the third series, with 356 views of the online recordings. Topics included climate change, sustainable grazing practices, and vegetation monitoring. The information we provide enables landowners to plan and manage their farms better, and we received positive feedback from participants all over South Africa.

In December 2020, we hosted a Mapping, Apping, Technology and Grazing Tracking for Sustainable Land Management open day for farmers in Graaff-Reinet, in collaboration with the Mountain Zebra-Camdeboo Protected Environment. Approximately 90 people attended the event, which showcased the latest use of technology to promote sustainable land management and was a first of its kind. Participants gained valuable knowledge around new applications for mapping and planning farm activities. We also officially launched our EWT Grazing Plants of the Nama-Karoo app (**Android/iStore**) at this event, developed in collaboration with the Grootfontein Agricultural Institute. We designed it to help farmers identify approximately 250 Nama Karoo plants that are significant in livestock farming.

This work is made possible by Rand Merchant Bank and the UNDP GEF5 SLM Project.

KAROO BOFFINS

Our three Loxton students completed their Agricultural Sector Education Training Authority (AgriSETA) National Qualifications Framework (NQF) 4 National Certificate: Animal Production diplomas and graduated in Bloemfontein in April 2021. The International Agricultural Academy for Africa (i3A) hosted their graduation ceremony. The students came from farming families in Loxton and used the EWT-RMB e-learning facilities we established there a few years ago to complete their studies. We harnessed the newly acquired skills of these three students to help distribute social benefits, such as COVID relief and learning opportunities, to the broader community. These included the distribution of 50 rocket stoves and 60 food parcels from the Lewis Foundation and the distribution of data so that our students could continue their learning during the lockdown. These individuals have shown significant potential to be of service to conservation, and we will continue to enhance their skills.

In addition, Insauf De Vries, the programme's Administration and Field Support Officer, completed her Honours Degree in Environmental Management through UNISA and graduated in 2020. Insauf is currently enrolled in this course. Cobus Theron and Esther Matthew completed a six-month **Intergenerational Leadership Course** in 2020, enabling them to work better together to achieve higher impacts and improve collaborations with diverse stakeholder groups.

We developed **several posters and practical documents** promoting sustainable land management and shared these with both the public and government stakeholders throughout the Karoo. These can all be found on the SLM project website.

This work is made possible by the Lewis Foundation, Rand Merchant Bank, and the UNDP GEF5 SLM Project.



Three proud graduates whose studies were supported by the EWT-RMB e-learning facilities in Loxton.

KNOW YOUR RIGHTS

In the light of newly emerging developments in the Karoo, including wind energy, solar energy, and mining infrastructure, we facilitated a **Renewable Energy Development** webinar in March 2021. We designed this to share information on landowners' rights and lessons learned and empower them with relevant facts before potentially signing contracts with renewable energy companies. The Loxton Farmers' Association and attorney Derek Light presented the webinar with us. The webinar attracted 20 attendees in person and 82 online attendees.

In April 2021, we presented a follow-up webinar, **Know Your Environmental Rights**, which informed stakeholders of their rights in terms of developments and what actions they could take. This information is particularly important for communities opposing unsustainable developments in fragile areas such as hydraulic fracturing and mining (fracking).

Our webinars provide landowners with valuable information on the developments in their area, how they can comment on developments, and important dates and contact details. As a result of the intensive interest in renewable energy developments in the Karoo, we also engaged proactively with the renewable energy sector, alongside other EWT programmes to raise our concerns and influence planning.

This work is made possible by the Global Environment Facility Sustainable Land Management (GEF5 SLM) Project managed by the United Nations Development Programme (UNDP), in partnership with the DFFE.

RAPID SPECIES IDENTIFICATION TECHNOLOGY

We collaborate with the Liverpool John Moores University to develop machine learning to identify various species, including rabbits and hares, whose images we capture during camera trap surveys. Working with a volunteer, we visually identified and tagged each mammal in over 24,000 photos as part of this process. Our next step is to add more images to ensure the systems have been trained on 2,000 images per species. Once the machine learning process is completed, we can upload full camera trap datasets from our biodiversity surveys and use the artificial intelligence system to identify the different mammals. This system will provide a much faster way to obtain survey results and detect the presence of endangered species, allowing us to implement conservation activities for target species more rapidly.

This work is made possible by the Zoological Society for the Conservation of Species and Populations (ZGAP).

DRYLANDS CONSERVATION PROGRAMME TEAM



Cobus Theron
Programme Manager



Insauf de Vries
Administration and Field Support Officer



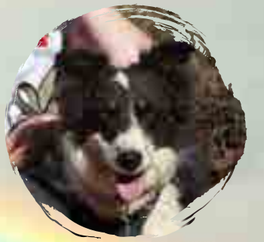
Esther Matthew
Specialist Conservation Officer



Jean Pierre le Roux
Field Officer



Bonnie Schumann
Nama Karoo Coordinator



Jessie the Border Collie
Scent Detection Dog

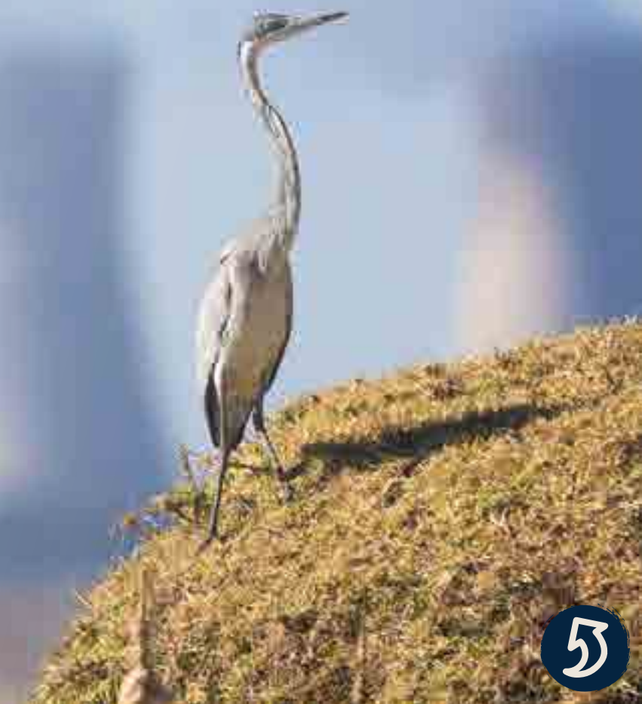
A rainbow over Papkuilsfontein.

National Biodiversity and Business Network

With a significant stake in biodiversity sustainability, business has the power and responsibility to act as a powerful lever for change. Recognising the importance of biodiversity to business, the EWT established the National Biodiversity and Business Network (NBBN) in 2013 to build the capacity of business to act as a positive force for the conservation of biodiversity in South Africa and beyond.

Companies would not be able to operate without biodiversity or ecosystem services that provide a wide variety of products and services on which businesses depend. Examples include raw materials, crop pollination, genetic resources, water filtration, flood attenuation, erosion control, and many others. However, biodiversity is under severe threat globally, including in South Africa, and the private sector is one of the primary drivers of its degradation and loss. The NBBN works with innovative businesses to identify and manage the risks and opportunities resulting from their interactions with the natural world. We provide a platform for businesses to proactively collaborate to discover solutions that lead to sustainable business growth and develop exciting business opportunities. The EWT is a member of the **Global Partnership for Business and Biodiversity** of the Convention on Biological Diversity. It is also a Natural Capital Regional Platform of the **Natural Capital Coalition.** This international collaboration unites the global natural capital community under a common vision of a world that conserves and enhances natural capital. The coalition comprises almost 300 organisations (and engages many thousands more) who represent all parts of society and span the global economy.

NBBN founding partners are Anglo American, the De Beers Group, the Department of Forestry, Fisheries and the Environment, Eskom Holdings SOC Ltd, Nedbank, Pick n Pay, Transnet, and Woolworths.



HELPING SOUTH AFRICAN COMPANIES MEASURE THEIR RELATIONSHIPS WITH BIODIVERSITY

The Biodiversity Disclosure Project helps companies to understand, measure, and disclose their biodiversity impacts and policies. As part of this initiative, we developed **freely available guidelines** of all the steps along the corporate biodiversity journey – from understanding biodiversity to valuing and strategising policies. Ultimately this leads to implementation, disclosure of results, monitoring, and continual reduction in companies' biodiversity impacts.



GUIDELINES FOR THE BIODIVERSITY MAINSTREAMING JOURNEY

STEP 1



Build the business case.
Why does biodiversity matter to my business?

STEP 2



How does my business depend and impact on biodiversity?

STEP 3



How can my business measure its biodiversity dependencies and impacts?

STEP 4



How can my business value its biodiversity dependencies and impacts?

STEP 5



How can my business improve its decision making about biodiversity?

STEP 6



What strategy can my business design to manage its biodiversity dependencies and impacts?

STEP 7



What actions can my business take to effectively manage its biodiversity dependencies and impacts?

STEP 8



How can my business disclose its biodiversity risks and performance?

STEP 9



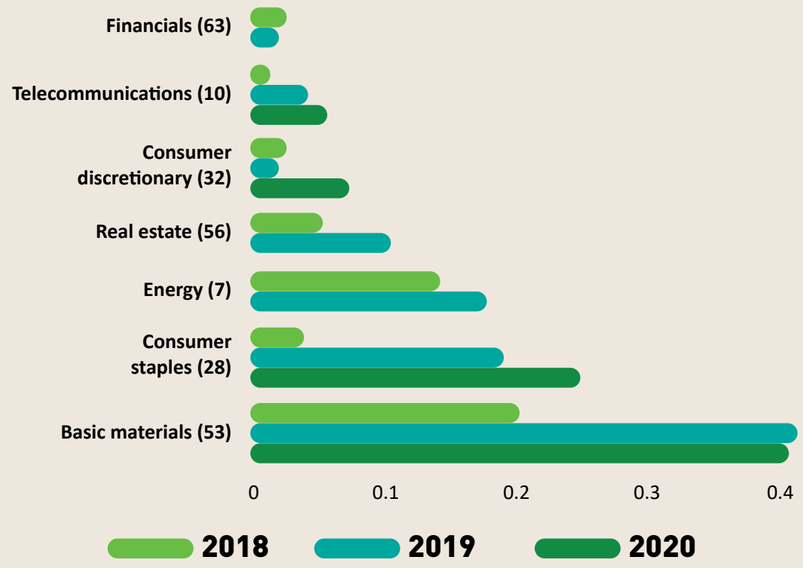
How can my business monitor and improve its performance?

HOW WELL DO SOUTH AFRICAN CORPORATES INCORPORATE BIODIVERSITY INTO THEIR POLICIES?

As part of the Biodiversity Disclosure Project, the NBBN conducts an annual corporate biodiversity performance assessment of all companies listed on the Johannesburg Stock Exchange (JSE) and several State-Owned Enterprises (SOEs). We assess how well each organisation integrates biodiversity policies and actions directly into its business strategies, investments, and production processes. This past year was the third assessment and involved 327 JSE-listed companies and 27 SOEs. We base each organisation's rating on a series of questions following the steps of our biodiversity mainstreaming journey.



OVERALL AVERAGE RATING CHANGE PER MAIN SECTOR

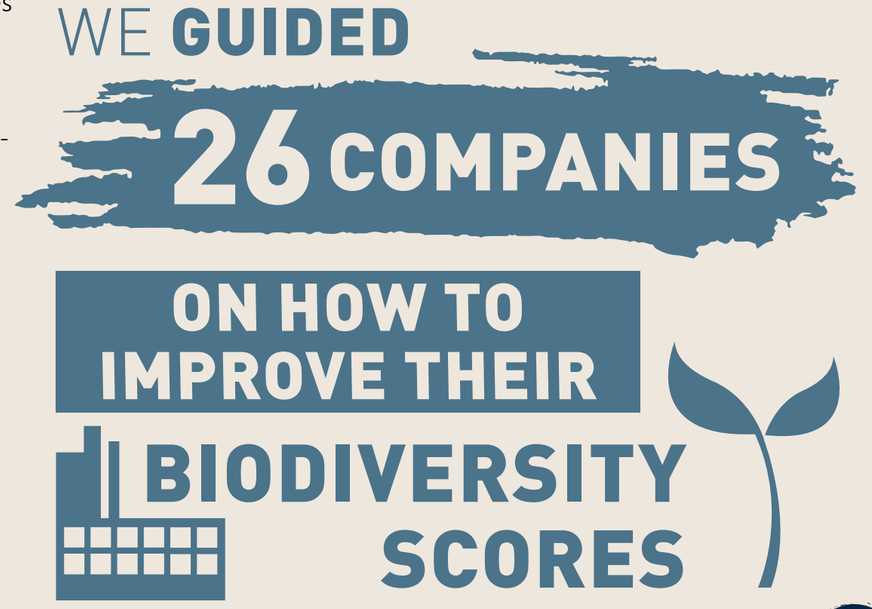


This year's results show slight improvements in overall average scores for most questions over the previous two years. The highest scores are still related to basic corporate biodiversity policy and identifying potential biodiversity impacts and dependencies. However, companies continued to score poorly for questions requiring science-based data or evidence. These questions concerned the scale of impacts and dependencies and specific, measurable, achievable, realistic, and timely targets. The basic materials sector continues to be the leader in biodiversity performance, with the healthcare, financial and technology sectors showing the worst performance.

In 2021, the United Nations Convention on Biological Diversity will adopt a post-2020 global biodiversity framework, after an international co-construction process, as a stepping-stone towards the 2050 Vision of "Living in harmony with nature". To that end, the private sector has repeatedly been called to mainstream biodiversity into its business strategies, investments, and production systems.

Our findings confirm that the private sector is presently ill-prepared to mainstream biodiversity into strategies, investments, and production models, with only 22% of companies on the JSE including any mention of biodiversity in their policies. Following the draft assessment, the NBBN approached each company on the JSE to offer in-depth gap analysis and mainstreaming workshops. We worked with 26 companies to guide them on their biodiversity mainstreaming journeys to improve their scores.

Our methodology has been recognised internationally, including with our Spanish partners at Ecoacsa – a company offering business solutions to measure and value natural capital – along with the Universidad Politécnica de Madrid. Together, they have used our ratings criteria to evaluate the biodiversity performance of the Ibex 35 Exchange – the benchmark stock market index of the Bolsa de Madrid, Spain's principal stock exchange – enabling us to compare industry performance across the globe. The proportion of companies mainstreaming biodiversity in the two exchanges was similar for most sectors, except for energy, where IBEX scored better (53% IBEX 35, 14% JSE), and basic materials, where 57% of South African companies recognised biodiversity as a material issue, compared to 24% in IBEX 35.



LIFT-OFF FOR THE BIOLOGICAL DIVERSITY PROTOCOL (BD PROTOCOL)

Following a year-long **public consultation**, we launched the open-source Biological Diversity Protocol (BD Protocol) **online** in March 2021. The BD Protocol resulted from a two-year collaborative, multi-stakeholder effort made possible with funding from Eskom Holdings SOC Ltd and the WWF Nedbank Green Trust. Writing the protocol was an involved task, given our collaboration with more than 40 co-authors and contributors. The virtual launch was very successful, with more than 100 business representatives, consultants, and the like joining the call from over 20 countries. After the event, the team received great feedback, with requests to translate the BD Protocol documentation into several languages, including French, Spanish, and Danish. The BD Protocol has received increasing international attention and, in May 2021, was listed on the official resource list of the **EU Business@Biodiversity** website.

The BD Protocol allows all companies, big or small, and from any industry, to establish a baseline dataset to determine their impact on biodiversity and identify areas of improvement over time. This represents the first standardised accounting framework for biodiversity impact, based on adaptions of double-entry bookkeeping. The system will enable any organisation to show both accumulated impacts over time – a balance sheet – and impacts over a specific period – profit and loss statement. It assesses net impacts by calculating the surface area of both negative and positive ecosystems footprints and the impacts on material species. The protocol also allows companies to report against the Sustainable Development Goals and contribute to regional or national conservation targets by measuring the share of total biodiversity they manage.



The seven steps of the Biological Diversity Protocol.

THE BD PROTOCOL, AS ADOPTED BY SOUTH AFRICA'S BIGGEST COMPANIES, FROM SETTING ASSESSMENT BOUNDARIES TO REPORTING AND MANAGING BIODIVERSITY IMPACTS

We completed Biological Diversity footprint case studies at two of Eskom's generation sites: Ingula Pumped-storage Scheme in the eastern Free State and Sere Wind Farm on the West Coast. The results are available on the NBBN's **website** and showcase a practical application of the footprint assessment tool. For both operations, we conducted detailed accounts of the extent and condition of all the ecosystems at both sites, as well as population estimates of material species (e.g. threatened or keystone species, or where the business will impact its overall population). The results were simple consolidated metrics of total hectares of positive and negative biodiversity footprints, which Eskom can now use as baseline indicators to improve the biodiversity at these sites and scale their footprint up to group level by assessing additional sites. Our results enable Eskom to integrate measurable biological diversity data into its management decisions and budget planning at minimal costs.

We partnered with Sibanye-Stillwater, a multinational precious metals mining company, to develop a pilot assessment of its footprint using the BD Protocol. Our assessment considered all ten Sibanye-Stillwater's operational mining sites through South Africa, totalling over 47,000 ha. This partnership will help assess and improve the biodiversity footprints of some of South Africa's oldest mining sites. These occur in some unique, threatened ecosystems such as the Soweto Highveld Grassland, of which only 54% remains, with none formally protected. Our assessment demonstrated that the BD Protocol is a valuable tool to companies, regardless of their industry, size or location.



Biomonitoring – Sibanye-Stillwater.

JOINING THE COALITION

In January 2021, the NBBN signed a partnership agreement with the Business for Nature initiative of the World Business Council for Sustainable Development and will work as its representative in South Africa. The **Business for Nature** Coalition includes a diverse and influential group of more than 60 partner organisations, including research institutes, business membership organisations, industry associates, and other NGOs. As a partner, the NBBN provides support to Business for Nature through advocacy, engagement, and outreach, with the common goal of encouraging business action coupled with ambitious policies to reverse nature loss before 2030.

NATIONAL BIODIVERSITY AND BUSINESS NETWORK TEAM



Dr Gabi Teren
Programme Manager



Dr Joël Houdet
BD Protocol Lead



Megan MacKeown
Programme Officer
(until August 2020)

People in Conservation Programme

The EWT's People in Conservation Programme collaborates with its many partners to address critical conservation challenges and foster human resilience so that people from all walks of life benefit from conservation. By implementing innovative strategies that incorporate the needs of both people and the environment, we believe that people can coexist within nature, despite mounting pressures on the environment and our natural resources. In collaboration with local stakeholders, we co-design solutions that improve the management of species and habitats and enhance human wellbeing.

Our projects include facilitating biodiversity stewardship agreements between private or communal landowners and conservation agencies, implementing climate-resilient agriculture with smallholder farmers, and developing micro-enterprises in the green economy. We also initiate eco-clubs, adventure activities, and education programmes to ensure that future generations are well-positioned to continue these conservation efforts. We implement projects in Gauteng, Limpopo, KwaZulu-Natal, North-West, and the Eastern Cape and support other EWT programmes across southern and East Africa and Senegal.

WORKING WITH SOUTPANSBERG COMMUNITIES

In line with the EWT's strategic objective to benefit people and mitigate human impacts on the environment, we develop People in Conservation initiatives with communities living in many of our project areas. In the **Soutpansberg,** we are developing projects with people from nine villages in Ha-Kutama adjacent to the EWT's Medike Mountain Reserve. Over the past year, we met with vegetable and cattle farmers, traditional health practitioners, schools, women, and youth, amongst other stakeholders. Together, we identified potential strategies to support them in improving the management of natural resources and to ensure that people in this area benefit from conservation. We also facilitated a meeting between the Ndouvhada Communal Property Association (CPA) and the Limpopo Department of Agriculture, Land Reform and Rural Development (LDARD) to support CPA members in improving their land management. In addition, we are engaging with local partners such as LDARD to address water and animal husbandry challenges experienced by cattle farmers in Mideroni and neighbouring villages.

This work is made possible by the Elizabeth Wakeman Henderson Charitable Foundation and Ford Wildlife Foundation.



Young farmers of SPA (left and right).



GUARDIANS OF THE FUTURE

The Guardians of the Future is an education for sustainability project that aims to support educators and stimulate learning in subjects such as the natural sciences and technology, life orientation, and social sciences through the application of interactive and dynamic teaching aids we develop called 'curriculum boosters.' Apart from supporting education, our goal is to reconnect learners to nature and demonstrate specific behaviours we can all use to live more sustainably. Research has shown that raising awareness of human impacts on the environment and fostering behavioural change in children also often leads to adult family members making more conscious choices.

With the COVID-19 pandemic limiting direct interactions with schools this year, we focused on developing curriculum boosters, including one on biodiversity and another on the structure of animals. We also launched the EWT's exciting **new e-learning platform**, including puzzles, games, stories, and other learning materials to stimulate children's imaginations and curiosity about nature. We continued developing partnerships and exploring additional opportunities to introduce the Guardians of the Future to more primary and secondary schools in the future in collaboration with other EWT programmes and organisations. These partnerships included collaborating with the Magaliesberg Biosphere Reserve and the University of Johannesburg to co-develop boosters for schools in this biosphere reserve.

This work is made possible by Bakwena Platinum Corridor Concessionaire and Ford Wildlife Foundation.

CONTEMPORARY CONSERVATION FOR TRADITIONAL MEDICINES

Pepper-bark Tree populations are under severe pressure in the wild due to high harvesting levels to meet the demand for traditional medicines. Loss and degradation of the trees' habitat exacerbate this pressure. Despite its wide range across southern Africa, the Pepper-bark's distribution is fragmented, and similar human pressures are experienced across its range, such that the species is now listed as Endangered. To improve the conservation management of this species, we collaborate with the EWT's Soutpansberg Protected Area team.

Stripping bark from trees for their use in traditional medicines eventually kills the plants. However, Pepper-bark leaves contain the same phytochemicals as those occurring in the bark and roots, and we are encouraging healers to substitute the leaves for bark in traditional medicines. Since the impacts of harvesting are lower for leaves than bark or roots, in time, we should considerably reduce pressures on wild populations and ensure a continued supply of this precious resource for future generations.

Our aspect of this project includes an assessment of local markets to determine the extent of harvesting and a seed germination trial. We also provide traditional health practitioners and community members from Ha-Kutama **with trees for cultivation in home gardens** to reduce the pressures on wild populations. Through this initiative, traders in Limpopo are also starting to cultivate medicinal plant orchards, as are communities in areas with suitable habitat, to provide gatherers and other market operators with a source of legal products whilst significantly alleviating pressure on wild populations.

SAPPI donated trees, and this work is made possible by Fondation Franklinia and the Ford Wildlife Foundation.



Endangered Pepper-bark Tree.

TACKLING ILLEGAL HUNTING WITH DOGS THROUGH THE PANDEMIC

Through the pandemic, the number of incidents of illegal hunting with dogs in KwaZulu-Natal increased substantially. The programme's Samson Phakathi continued to engage communities despite COVID-19 challenges, increasing communications via WhatsApp teleconferences and Facebook pages to get his message across when travel and other restrictions were in place. We backed up this messaging with community visits as lockdown restrictions were eased. The project has been successful at multiple levels. For instance, the 30-plus rural communities we work with frequently requested assistance on numerous conservation issues, including illegal hunting. Tellingly, the work has shifted the mindset of many illegal hunters to the extent that a conservation organisation recently appointed five former poachers as permanent employees through the project. Additionally, several local reserves invited former illegal hunters from the Midlands Cycling Club to participate in game counts, which is testimony to the transformational power of the initiative. Despite its obvious benefits, lack of funding has been the project's nemesis, and the project was closed as the EWT was unable to continue covering the costs indefinitely.

A **CONSERVATION ORGANISATION** APPOINTED

5 FORMER POACHERS

AS EMPLOYEES

CONSOLIDATING CONSERVATION EFFORTS IN THE AMATHOLE CATCHMENT

Established in 2013, the Amathole Catchment Conservation Project in the Eastern Cape integrates biodiversity stewardship, enhancing local livelihoods through the green economy, and monitoring of the Critically Endangered Amathole Toad, Border Barb, and Eastern Cape Rocky. Through the project, we also conducted alien plant clearing to improve the water flow of the Tjume River and contribute to local livelihoods.

This year we returned to the Amathole to consolidate community engagement, training, livelihood development, and species monitoring in the project's closing phase. This work included conducting biomonitoring and assessments of fish species numbers in the Tjume River. Although samples sizes were small and fluctuated depending on drought and other environmental conditions, we were encouraged to find that the number of Border Barbs (Endangered) sampled in 2021 was 80% higher than the 2015 catch. Similarly, the number of Eastern Cape Rockys was 95% higher than the 2015 sample. While rainfall fluctuations over the project period contributed, we attribute much of this success to our removal of alien plants here during the first phase of the project and its positive impact on habitat health.

We collaborated with our **Threatened Amphibian Programme** to facilitate biodiversity stewardship processes with private landowners and secure habitat for the Critically Endangered Amathole Toad. We initiated the highly successful Amathole Catchment Forum to improve communication between stakeholders and the numerous organisations striving to improve the management of this critical water catchment. To contribute to local livelihoods and biodiversity, we continued mentoring the Tyume Valley Beekeeping Association, establishing two fenced apiaries near Nothenga and Sompondo villages. We prepared a follow-up course in climate-smart agriculture for vegetable farmers, which partners will implement when the COVID-19 restrictions are lifted. The development of strong partnerships in the Amathole has laid a sound foundation for a smooth transition as the EWT closes out the project in 2021.

This work is made possible by the Rand Merchant Bank.



EWT staff conducting biomonitoring assessments.

AU REVOIR TO MARICO

The Marico Catchment is a Strategic Water Source Area and a National Freshwater Ecosystem Priority Area. The Marico River has significant cultural, conservation, and economic value to the people of this semi-arid region of the North West Province.

In 2013, the EWT initiated the Marico Catchment Conservation Project to contribute to the sustainable management of this important catchment. The first phase incorporated alien plant clearing, biomonitoring of threatened fish species and water quality, education and awareness initiatives, and a People, Health, and Environment (PHE) project. In the second phase, the project focused on community wellbeing and livelihoods and provided support for the Marico Biosphere Reserve, wetland conservation, and water management initiatives. To support local livelihoods and enhance community wellbeing, we implemented climate-smart agriculture and micro-enterprise development. Through this activity, five project participants could sustain their families and sell surplus vegetables through permaculture, which enabled 17 vegetable farmers from Koffiekraal to survive a severe and prolonged drought.

Bolstering local livelihoods further, six beekeepers from Reboile, situated near Marico, now produce honey and provide bee removal and pollination services to residents in Marico and surrounding areas, providing a valued additional source of income to their families. After seven years of working on the project, we successfully exited the Marico Catchment in December 2020. Based on the resilience of our initiatives over the last two years, we are confident that the project demonstrates the ability to continue independently. However, we have ensured ongoing support for each group through the Marico Biosphere Reserve and other local partners, which will enable them to withstand shocks and other challenges.

This work is made possible by the Elizabeth Wakeman Henderson Charitable Foundation.



Mr Sompodo, Tyume Valley Beekeepers association.



Koffiekraal farmers harvesting spinach.

BLACK CROWNED CRANES – SENEGALESE TOTEMS

Black Crowned Cranes are under threat across their range in the Sahel and Sudan savannah region due to trade in live birds and widespread habitat loss associated with a protracted regional drought and human disturbance. However, the Black Crowned Crane has been revered historically by some Jola communities in the Casamance, Senegal, as it is an important totem animal of the Diedhiou clan. As part of a strategic conservation project implemented by the EWT and the International Crane Foundation, we assessed local perceptions of Black Crowned Cranes and the socio-ecology of 11 Jola communities. The Jola have experienced severe challenges over the past three decades due to the drought, loss of critical natural resources, and a lengthy regional conflict, which ended in 2014. Understanding these and other stressors on communities and their relationship with the Black Crowned Cranes and other wildlife is critical to effective conservation planning and management in the future.

Preliminary results show that the Jola communities we approached have extremely high regard for the Black Crowned Crane, and many are willing to actively contribute to its conservation. Community members raised numerous concerns regarding the loss and degradation of habitats, including wetlands, mangroves, and forests. Since the people of the Casamance depend heavily on natural resources, an integrated conservation strategy that incorporates improved management of these habitats will also benefit the people living in the area, and we are busy developing a conservation strategy for the Casamance.

This work is made possible by Aqualia International Foundation.



PEOPLE IN CONSERVATION PROGRAMME TEAM



Dr Jenny Botha
Programme Manager



Nkosinathi Nama
Project Coordinator, Amathole
(until May 2021)



Samson Phakathi
Project Coordinator, KwaZulu-Natal



Emily Taylor
Project Coordinator, Gauteng

Soutpansberg Protected Area

South Africa's Soutpansberg Mountains are noted for their high levels of species endemism and unique ecosystems. They form part of the core areas and buffer zones of the UNESCO Vhembe Biosphere Reserve, which also includes the northern Kruger National Park and the Mapungubwe National Park and Cultural Landscape. All the vegetation types in the Soutpansberg Protected Area are endemic to Limpopo Province or the Soutpansberg Mountains, apart from the Northern Mistbelt Forests, which also have a limited range into the Mpumalanga escarpment. Despite their unique biodiversity, there is a critical need to provide better protection, given that less than two percent of the Soutpansberg Mountains is formally conserved.

In 2015, the EWT entered into a land purchase on behalf of the Roberts family in Australia, resulting in the purchase of the 1,398 ha Medike Mountain Reserve in 2017. We almost doubled the reserve size a year later with the purchase of the neighbouring property. Simultaneously, we developed the concept of an expansive Soutpansberg Protected Area (SPA) through the country's Biodiversity Stewardship Programme, for which the EWT went on to secure further funding through the Rainforest Trust, the Coca-Cola Foundation's Replenish Africa Initiative (RAIN), Fondation Franklinia, and the Wilson Family. This ambitious project will establish a continuous 33,515 ha protected landscape between two existing nature reserves through the collaboration of several landowners who are including their properties in the newly formed protected area. The SPA will afford protection to many threatened and locally endemic species of animals and plants and protect critical water catchments and culturally significant sites. Our activities will also combat the illegal wildlife and unregulated medicinal plant trades and improve the mountains' resilience to climate change. In addition to this, we contribute towards local job creation and enable access to properties through the development of nature-based tourism opportunities.

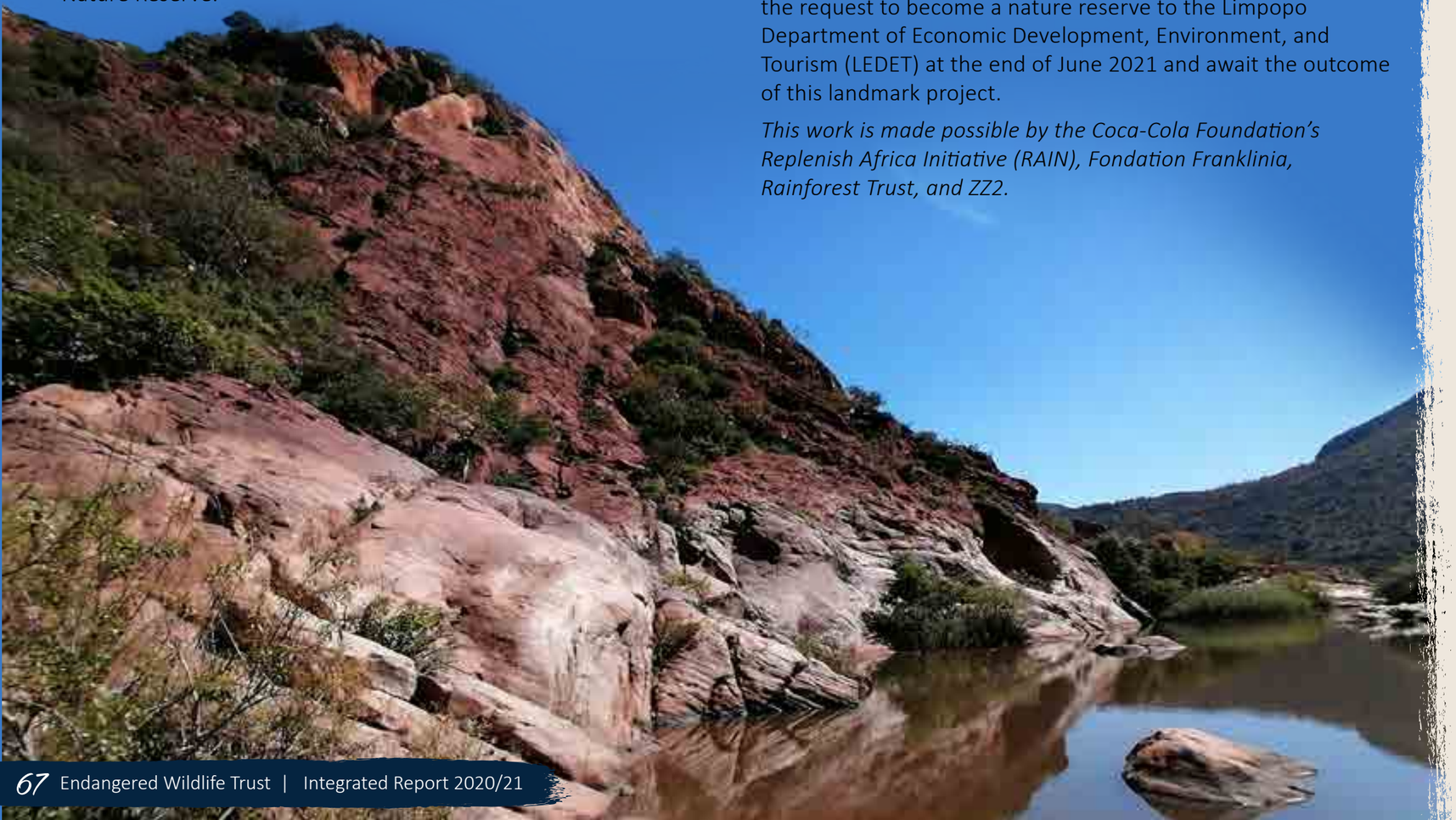


WESTERN SOUTPANSBERG NATURE RESERVE IN THE MAKING

The formation of a large protected area along the western Soutpansberg will secure vital habitat for a plethora of endemic and threatened species, as well as strategically important water resources for generations to come. This protected area will also reduce threats such as land-use change, a current shadow over the mountain. A protected area in this unique landscape will attract visitors, create sustainable jobs, and drive nature-based economic activity in this pristine, awe-inspiring landscape. This vision will be realised through the formation of the Western Soutpansberg Nature Reserve.

In August 2020, the first Special General Meeting of the newly formed Western Soutpansberg Nature Reserve Association took place. The Association adopted its Constitution and elected its first Executive Committee, including the EWT's Cath Vise as Chairperson and Oldrich van Schalkwyk as Vice-Chair. The Association, consisting of 21 landowner-members, including the EWT, will be assigned as the Management Authority once the Western Soutpansberg Nature Reserve is proclaimed. In May 2021, the Association held its first AGM. We have also received landowner resolutions to declare the nature reserve from 17 registered landowners, comprising 31 properties and covering an area of 22,000 ha. A huge milestone, we submitted the request to become a nature reserve to the Limpopo Department of Economic Development, Environment, and Tourism (LEDET) at the end of June 2021 and await the outcome of this landmark project.

This work is made possible by the Coca-Cola Foundation's Replenish Africa Initiative (RAIN), Fondation Franklinia, Rainforest Trust, and ZZ2.



A DASH OF PEPPER IN THE SOUTPANSBERG

The Soutpansberg mountain is an important sanctuary for the Pepper-bark Tree. Highly sought after for its medicinal properties, the Pepper-bark is one of South Africa's most threatened trees due to the over-harvesting of wild trees. We were delighted to learn that an assessment completed in January 2021 by Prof. Norbert Hahn from the University of Venda showed that the EWT's Medike Mountain Reserve has more Endangered Pepper-bark trees – well over 400 – than anywhere else in the Soutpansberg. We are now working to secure this critical habitat for the species through dedicated research to understand the conservation needs of the species in the Soutpansberg. We are also implementing conservation action by proclaiming the Western Soutpansberg Nature Reserve, clearing alien invasive plants, and working with local communities to identify threats, guide sustainable harvesting practices, and encourage and enable cultivation to reduce and avoid wild harvesting.

Thanks to Tim Neary, from Sappi's Threatened and Endangered Species Stewardship Programme, the SANParks' Skukuza Indigenous Nursery donated 2,000 Pepper-bark saplings to the SPA. We will distribute the saplings amongst local traditional healers to reduce the threat of harvesting from wild populations in the Soutpansberg.

This work is made possible by Fondation Franklinia.



The EWT and partners are cultivating Pepper-bark saplings to distribute amongst local traditional healers to reduce the strain of harvesting on wild populations in the Soutpansberg.

THE LESOBA DIFFERENCE

Lesoba Difference, an award-winning integrated marketing and communications agency, produced an **inspiring video** of the Soutpansberg, shared widely by supporters and partners, including the Coca Cola Foundation's **Replenish Africa Initiative** (RAIN). The video shows interviews with several landowners and the EWT's Medike Mountain Reserve staff and focuses on the invaluable role the mountain plays in the lives of those who reside and depend on it and the story of how the western Soutpansberg is being conserved through biodiversity stewardship and other initiatives underway.

MAKING IT RAIN IN LOCAL SCHOOLS

A core activity of the Soutpansberg Water Conservation Project, funded by the Coca-Cola Foundation's Replenish Africa Initiative (RAIN), was our workshops with local community schools. The workshops complemented our water conservation work (through biodiversity stewardship and alien vegetation clearing on the mountain) by teaching local school children about the importance of water conservation. We also used the workshops to educate children about hygiene and the importance of washing hands, especially with the onset of COVID-19. In all, we facilitated 15 water, sanitation, and hygiene (WASH) sessions at three schools in villages adjacent to the Soutpansberg. Over 470 learners and 16 teachers participated, well-exceeding our target of 400 children. Children also received PPE, and we installed WASH handwashing facilities in their classrooms.

As part of our commitment to empowering local communities, we partnered with Sumbandila Scholarship Trust, initiating a pilot reading club at the local rural primary school. Three volunteers also visited Pharani School each day for over a week to help learners with their reading and writing skills.

This work is made possible by the Coca-Cola Foundation's Replenish Africa Initiative (RAIN).





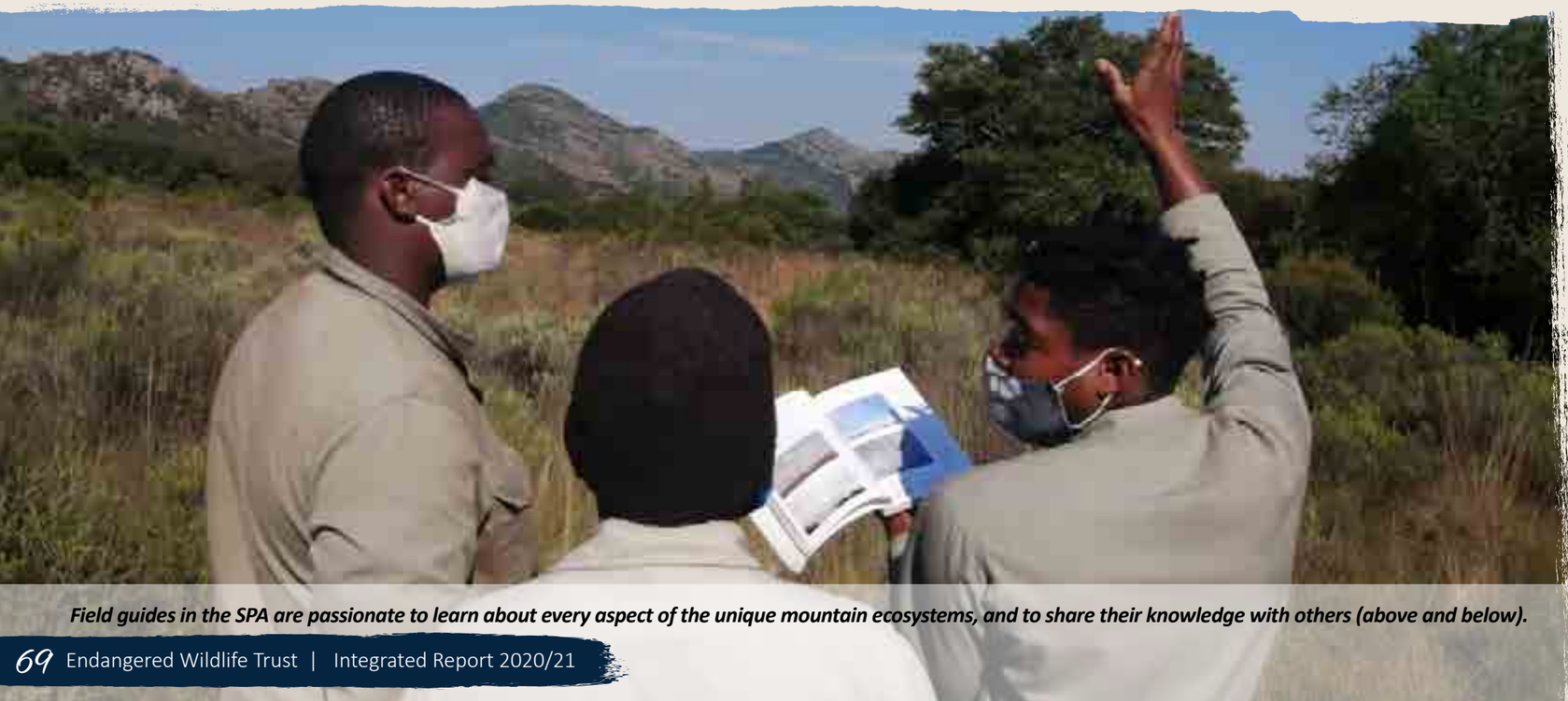
Nathi Nama engaged with school groups in the communities surrounding the Soutpansberg Protected Area to promote water conservation and the importance of good hygiene, as part of the Coca-Cola Foundation's Replenish Africa Initiative (RAIN).

FIELD RANGER TRAINING

This was a busy year for ranger training as five of our rangers started training towards their Field Guides Association of Southern Africa (FGASA) Apprentice Field Guide qualification. This training will enable these rangers to become field guides, supplement their income, or start their own guiding businesses by taking visitors on hikes across the Soutpansberg. In addition, these rangers completed multi-day Level 1 and 2 Wilderness First Aid Courses at Medike Mountain Reserve. They were also fortunate to receive pro bono bird guide training from Patrick Cardwell, from **Avian Leisure**, in November 2020. Fifteen of our field and water rangers also completed an Agricultural Sector Education Training Authority (AgriSETA) course on herbicide application, while ten rangers completed the Health and Welfare Sector Education and Training Authority's (HWSETA) First Aid Level 1 and 2 training.

This work is made possible by the Coca-Cola Foundation's Replenish Africa Initiative (RAIN) and FE van Pletzen/L Steynberg Trust.





Field guides in the SPA are passionate to learn about every aspect of the unique mountain ecosystems, and to share their knowledge with others (above and below).

KRUGER 2 CANYONS TO SOUTPANSBERG

Kruger 2 Canyons Biosphere Reserve, in collaboration with SANParks, awarded the EWT a one-year contract to develop a business case for ecological infrastructure in the northern Greater Kruger region, which includes the Soutpansberg. Ecological infrastructure refers to the ecosystems that provide valuable ecosystem services that benefit society, such as mountain catchments providing water. We started the project in November 2020, part of the Greater Kruger Strategic Development Programme. This strategically important work will strengthen the EWT's footprint in the area and our partnership with SANParks and both the Kruger 2 Canyons and Vhembe Biosphere Reserves. Our baseline report highlighted the Soutpansberg as a critical area for securing these valuable ecosystems. In particular, the western Soutpansberg and our SPA project were identified as key programmes in the area and chosen as a study site to develop a business case for securing ecological infrastructure. Given this mandate, we are currently exploring various activities related to ecological infrastructure in the western Soutpansberg. Once we complete our work, we will have developed a business plan for securing vital ecosystem services in the area and identified key activities we must implement here in the years to come. This will assist us in focusing our work on addressing key threats to these ecosystems.

This work is made possible by the Global Environment Facility Protected Area Programme, Kruger 2 Canyons Biosphere Region, and SANParks.



PICTURES, PRIMATES, PREDATORS

In February 2020, we set up a camera trap grid across Medike Mountain Reserve, contributing to our Mammal Monitoring Project. This grid expands a current long-term monitoring grid implemented across numerous properties on the western Soutpansberg by Durham University's Primate and Predator Project. The grid gives us valuable insight into mammals on Medike, particularly Leopards, and establishes a long-term monitoring database for research and assessing ecosystem health. Cameras help with scientific studies and bring our attention to snared animals, which we can then try to assist.

We have now initiated a partnership agreement with Durham University's (UK) Primate and Predator Project concerning this monitoring. This partnership comes as the project prepares to move its research operations to Medike Mountain Reserve. The Primate and Predator Project will also facilitate long-term research assistants from overseas, who will work with the project while based on the reserve. The partnership contributes towards the reserve's financial sustainability by bringing in crucial rental income while strengthening our understanding of the mammals of Medike Mountain Reserve. For example, this year, we captured images of a Bat-eared Fox on camera, which to our knowledge, is the first record of this mammal on top of the western Soutpansberg mountains. The find brings the number of mammal species recorded on the reserve to 60.

This work is made possible by Durham University's Primate and Predator Project, Rainforest Trust, and the Wilson family.

60 MAMMAL SPECIES

RECORDED ON MEDIKE MOUNTAIN RESERVE


Brown Hyaena


Black-backed Jackal


Leopard cub with mother.

CAUGHT ON CAMERA


Scrub Hare


Pangolin


Leopard


Aardvark


Caracal

THE OLD SALT TRAIL

The Soutpansberg Mountains derive their name from the salt pans found on the north-western slopes. The area has a rich history, with multiple communities settling here over the years, evidenced by the ancient rock art found throughout the mountains. The Soutpansberg used to be an important trade route, particularly for the salt mined from pans and ivory. In this spirit of people moving through the mountain for centuries and referencing the salt harvested off the mountain, we have developed a network of multi-use trails called The Old Salt Trail. Through these trails across the Soutpansberg, we aim to provide exciting opportunities for outdoor enthusiasts and create sustainable income for property owners and local communities. The new trail network will also enable rangers to access remote areas of the mountains to curb illegal bushmeat harvesting and plant collection. An increase in recreational activity by people on the mountain will also serve as a deterrent to poachers.

Our long-term vision for this project is to catalyse a thriving ecotourism industry, bringing visitors to the mountains in an ecologically sensitive way. Visitors can experience the exceptional beauty and biodiversity on offer while gaining knowledge from the trail guides and supporting local socio-economic development. We initiated our multi-day trail project by marking nearly 100 km of routes. A dedicated team of trail builders helped us open up new routes and link these to existing trails across the mountains, which we now aim to accredit with **Green Flag** status.

In addition to opening the Soutpansberg as a hiking destination, our team is also working with KZN Trail Running to market the Soutpansberg as a trail running destination through dedicated trail running events. In October 2020, we hosted a three-day trail running test event in collaboration with KZN Trail Running. The test run was in preparation for the commercial **Soutpansberg Mountain Marathon**, a challenging trail running event covering a distance of 42 km through this majestic landscape, with an altitude gain of 2,000 m, which we will host in August 2021.

This work is made possible by the F E van Pletzen/L Steynberg Trust.



Every now and then members of the EWT team based in the office get the opportunity to go out and enjoy something truly special. Here, the team was testing the hiking trails and spectacular views of the Soutpansberg Protected Area.





Invasive alien plants are a threat to the sensitive ecosystems and indigenous biodiversity in the Soutpansberg. The EWT and partners have made extensive progress in removing and controlling these plants in vast areas that had been invaded.

CLEARING OUT THE ALIENS

Invasive alien trees such as Eucalyptus and Black Wattle have a very high impact on water resources, especially when they are situated near watercourses. Our SPA Water Conservation Project, funded by Coca-Cola RAIN and Fondation Franklinia, addresses this issue by employing a dedicated team of eight water rangers to remove these invasive trees from riverine and upper catchment areas within areas of high conservation value along the western Soutpansberg. Since work began in August 2018, our team has cleared over 47 ha of dense invasive alien trees from within sensitive water catchments, replenishing over 12-million litres of water back into the environment every year. Based on our impact, in February 2021, the Coca-Cola Foundation's Replenish Africa Initiative (RAIN) provided additional bridge funding to continue this vital work for another year.

This work is made possible by the Coca-Cola Foundation's Replenish Africa Initiative (RAIN) and Fondation Franklinia.

MEDIKE MOUNTAIN RESERVE: UPGRADES AND OPERATIONS

Our programme received a very generous donation from Douglas Wilson, who grew to love the Soutpansberg following a visit to the region through the Rainforest Trust. With support from the Wilson family, we will carry out essential infrastructure upgrades at the EWT's Medike Mountain Reserve to support tourism and research opportunities and contribute to the reserve's sustainability. We will also use this funding to construct the Thomas Wilson Pass in tribute to Douglas Wilson's father. The scenic 4X4 track will meander from the base of the Soutpansberg to Medike Mountain Reserve at its summit. While this track will serve predominantly as a maintenance and access track, it provides an exciting opportunity for research and ecotourism on the reserve.

Our field rangers continue to perform ongoing conservation work on the reserve. Their operations include a dedicated anti-poaching unit that conducts patrols regularly to remove snares and fishing nets and escort intruders off the property. This year, the field rangers removed 64 snares from the property, a reduction from the 94 snares we removed two years ago, indicating that our anti-poaching work is paying dividends protecting wildlife on the reserve.

This work is made possible by the Wilson family and Rainforest Trust.

RANGERS REMOVED

64 SNARES

FROM MEDIKE,
DOWN FROM 94
LAST YEAR



Junior Water Ranger Intern, Sengani Ramalamula, with a snare he removed on patrol in the SPA.

SOUTPANSBERG PROTECTED AREA TEAM



Catherine Vise
Programme Manager



Oldrich van Schalkwyk
Programme Manager
(until April 2021)



Climate Vhutari Hlungwani
Senior Water Ranger
(until December 2020)



Chris Joubert
Medike Reserve and Eco-Tourism Manager



Cyrintha Joubert
Water Conservation Project Coordinator



Vumbhoni Clyde Kubayi
Junior Water Ranger Intern



Klaas Madzhie
Field Ranger



Shumani Makwarela
Senior Field Ranger and Water Ranger Team Leader



Lufuno Willington Mavhandu
Junior Water Ranger Intern



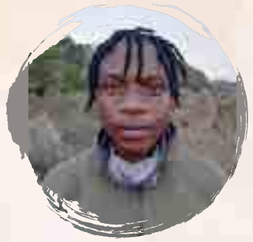
Michael Modimana
Water Ranger



Tharollo Mthisi
Field Ranger



Khathutshelo Mukhumeni
Senior Field Ranger



Samuel Mukhumeni
Field Ranger



Pfuluwani Oscar Musevhula
Field Ranger



Shumani Edward Mutenda
Senior Water Ranger



Richard Ndou
Water Ranger and Assistant Team Leader



Luvhengo Ramabulana
Field Ranger



Sengani Ramalamula
Junior Water Ranger Intern



Judy van Schalkwyk
Enterprise and Skills Development Officer
(until May 2021)



Michael Sithagathagha
Junior Water Ranger Intern



Rotondwa Sithagu
Research Assistant and Field Ranger



Elias Elvis Sithole
Water Ranger Team Leader
(until August 2020)

Threatened Amphibian Programme

Amphibians are the most threatened vertebrates on Earth, with 41% of species assessed by the IUCN at risk of extinction. Furthermore, amphibian populations are declining on every continent where they occur, including in South Africa. The scope and severity of these declines make amphibian conservation a high global priority. In line with global trends, almost 30% of South Africa's 135 frog species are considered threatened.

In this context, the EWT is the only NGO in South Africa with a programme dedicated to frog conservation, focusing on threatened species as flagships. In recent years, we have included reptile species under the programme's umbrella. We work to protect the critical freshwater and terrestrial habitats on which these herps (and we) depend; improve the management of important amphibian and reptile habitat; use research to monitor species and habitats to support conservation action; and promote behavioural change that reflects increased knowledge and recognition of the importance of frogs and their habitats in South Africa and beyond.

While focusing on enhancing species and habitat protection, ecosystem integrity, and driving innovative research to understand these systems better, we also collaborate extensively with the communities in each of the landscapes where we work. We run five projects across three provinces (the Eastern Cape, Western Cape, and KwaZulu-Natal), focusing on eight threatened flagship species. Since 2018, we have also worked on one of Africa's most threatened snake species, the Albany Adder. We are currently running a project to secure habitat for this dwarf viper known only from a very restricted range in the Eastern Cape.

GLOBAL CONTRIBUTIONS TO AMPHIBIAN CONSERVATION

At a global scale, our work contributes directly to the **Amphibian Conservation Action Plan (ACAP 2015)** produced by the IUCN Amphibian Specialist Group (ASG), which will be revised and published in 2021. Programme Manager, Dr Jeanne Tarrant, is co-chair of the ASG's Habitat Protection and Management Working Group and was part of an international team responsible for writing the revised chapter on this topic. The most recent version of the ACAP will also include a user-friendly practitioner version, offering practical, creative, innovative, and realistic actions based on what works in amphibian conservation and can be applied and tested at both large-scale and local levels.

This work is made possible by the Amphibian Survival Alliance, IUCN Amphibian Specialist Group and Whitley Fund for Nature.

THREATENED FROGS OF THE WESTERN CAPE

In July 2020, we initiated a new project in the Western Cape, surveying sites for the country's endemic and most threatened frog species. This work represents another important step to realising the programme's strategy developed in 2018. We conduct this work in collaboration with local experts **Bionerds**, who help carry out floral and faunal surveys and facilitate the establishment of new protected sites for our target species. These unique species include the Rough Moss Frog, Moonlight Mountain Toadlet, Micro Frog, Western Leopard Toad, and Cape Platanna. The Moonlight Mountain Toadlet was very recently described (2017) and is considered Data Deficient by the IUCN. Others, such as the Rough Moss Frog, already listed as Critically Endangered due to their very limited ranges, are threatened by alien plant infestation, or in the case of the Western Leopard Toad, urbanisation of their habitat.

Our work will help to improve knowledge of where these species occur and their biology. Between July 2020 and June 2021, we confirmed ten previously unknown sites for the Cape Platanna, Rough Moss Frog, and Moonlight Mountain Toadlet. So far, three landowners, whose properties cover 1,775 ha of frog habitat, are interested in declaring their properties as protected areas. In May 2021, we met with several Western Cape partners, including the South African National Biodiversity Institute (SANBI), Bionerds, and the Cape Leopard Trust. We led a stakeholder meeting with 25 delegates for input into the revised Western Leopard Toad Biodiversity Management Plan, which we are updating and preparing for gazettal by the Department of Forestry, Fisheries, and the Environment. This plan will only be the second such plan gazetted for a threatened frog species in South Africa and will help coordinate actions to address the critical threats it faces.

This work is made possible by the Amphibian Survival Alliance (Global Wildlife Conservation), Stiftung Artenschutz, Synchronicity Earth, and Whitley Fund for Nature.



Critically Endangered Ferricrete Fynbos habitat in the Overberg where surveys revealed new populations of the Data Deficient Moonlight Mountain Toadlet.



Moonlight Mountain Toadlet. Photo credit: Gary Nicolau.

LEAP DAY FOR FROGS

Every year the EWT's Threatened Amphibian Programme coordinates its Leap Day for Frogs campaign on the last Saturday of February. Unfortunately, this year we could not hold any gatherings due to the COVID lockdown restrictions. Instead, we opted to hold a nationwide virtual event through the Find Your Frog campaign. Running throughout March 2021, we asked citizen scientists to upload frog observations to **iNaturalist**, a social network of naturalists, citizen scientists, and biologists built on the concept of mapping and sharing observations of biodiversity across the globe. We received a great response, with 157 observers reporting 520 observations of 52 frog species. This campaign kick-started the revision of the South African Frog Atlas, an update of the ambitious 2004 project tasked with mapping the occurrence of the region's frog species. The updated Atlas will consolidate all known records of South Africa's 135 frog species.

This work is made possible by Disney Conservation Fund, Rand Merchant Bank, and the Whitley Fund for Nature.



The EWT engaging with landowners in the Western Cape to conserve sites on their properties important for frog conservation.



The EWT staff members are always excited to find threatened species thriving in the wild, but particularly so when they are as rare and elusive as the Albany Adder.

ROUGH TIME FOR FROGS

The Critically Endangered Rough Moss Frog is only known from the Klein Swartberg Mountains, near Caledon. An exceptionally heavy infestation of pine trees has taken hold at the site where the species was described originally, threatening to extirpate the population here by eliminating its mossy habitat in fynbos seepages. We were grateful to receive an IUCN Save Our Species African Wildlife Rapid Action Grant, provided by the European Union, to implement fire management at this site. Given the density of the infestation, fire is the first step in eradicating the pines. The grant will see the removal of 400 ha of pine trees, coupled with improved ecosystem health and recovery of the frog's fynbos habitat. Fortunately, we have since discovered two new populations, the habitats of which are in much better condition. These sites will provide some assurance of the long-term survival of this species on its mountain, where we are working with the Klein Swartberg Conservancy towards our long-term conservation vision for the species.

This work is made possible by the Amphibian Survival Alliance (Global Wildlife Conservation), IUCN Save Our Species, Stiftung Artenschutz, Synchronicity Earth, and Whitley Fund for Nature.

GIANT SUPPORT FOR A DWARF SNAKE

The Albany Adder is one of Africa's most threatened snakes, arguably its most threatened viper. This dwarf adder species – adults measure only up to 35 cm long – occurs only through a very limited area west of Addo Elephant National Park in the Eastern Cape. Here processes including mining, alien plant infestation, and agriculture threaten the snake's thicket and grassland habitat. Recent severe drought has stressed these areas even further. In September 2020, we secured a five-year grant from the Rainforest Trust to pursue formal habitat protection for this Endangered snake. This significant grant is a valuable continuation of the feasibility work we carried out for the species in 2017, which the **Rainforest Trust** and People's Trust for Endangered Species both supported. We are now in discussions with a landowner about creating a protected area of approximately 8,000 ha containing prime adder habitat. Should our negotiations prove successful, this proposed nature reserve will represent the first protected area in Africa dedicated to the security of an endangered snake species.

This work is made possible by the Rainforest Trust.



Showing landowners in the Western Cape the rare Albany Adder, not seen before by these farmers whose properties border the key site where the species occurs.

OVERCOMING FEARS OF FROGS WITH FUN

In February, we collaborated with the EWT's African Crane Conservation Programme, the Matatiele-based NGO, **Environmental and Rural Solutions (ERS)**, and the uMzimvubu Catchment Partnership Programme to **train 20 ERS Enviro Champs in Matatiele** in frog identification, biology and conservation. While many of the participants were initially nervous about encountering live frogs, this quickly turned to curiosity. In the end, everyone had a fun day in the field, discovering frog species and exploring freshwater habitats. The area falls within the proposed Maloti Thaba Tsa Metsi Protected Environment, a 48,500 ha site that includes all six chieftainships along the uMzimvubu watershed. Following the engagement, one of the trainees, Thabo Sithole, sent in a photograph, saying, "this guy is a Raucous Toad…not easy to kill them after the Frog 101 training." Encouraging this kind of appreciation, and changing people's attitudes towards frogs, are important goals of our work.

This work is made possible by Disney Conservation Fund, Rand Merchant Bank, and Whitley Fund for Nature.







Community Environmental Education Training (above and on the left).

PROTECTING THE GLOBAL RANGE OF THE AMATHOLE TOAD

The Critically Endangered Amathole Toad went missing in action from 1998 until a team, including the EWT, rediscovered it in 2011. In fact, this was the first frog species the Threatened Amphibian Programme helped to conserve. Restricted to the Amathole Mountain region of the Eastern Cape and threatened by loss of habitat caused by agriculture and forestry, our work aims to secure the first protected areas for the Amathole Toad. These areas occur in one of the Eastern Cape's most important Strategic Water Source Areas – those land surface areas that supply the bulk of South Africa's water. These mountains are critical for downstream water provision in the Eastern Cape as they supply 92% of the region's water, yet only <1% is protected. This year, we added two new properties for inclusion in biodiversity stewardship processes towards securing this critical catchment. In partnership with the Bionerds, we now work with seven landowners to declare over 12,000 ha of Amathole Montane and Mistbelt Grassland as the first formally protected habitat for the Amathole Toad encompassing almost its entire global range.

This work is made possible by the Rainforest Trust, Synchronicity Earth, and Whitley Fund for Nature.



Amathole Toad. Photo credit: Chad Keates.



Amathole Toad Habitat. Photo credit: Keir Lynch.

A TALE OF TWO LEOPARDS

In June 2021, we launched our joint project, A Tale of Two Leopards, in partnership with the Cape Leopard Trust. The project aims to improve knowledge and conserve two iconic species in the Overberg Region, the Western Leopard Toad and its mammalian namesake, the Leopard. Unlike other large carnivores, Leopards survive in the Cape, where they traverse a wide range of lands. Similarly, Western Leopard Toads must navigate highly modified landscapes during their annual migrations between summer-breeding and over-wintering sites. Named after its striking resemblance to a Leopard, the species exists in only a tiny area of the Western Cape, with one population on the Cape Peninsula and another in Agulhas National Park. Familiar to many Capetonians, general development and habitat degradation severely threaten this species. At the same time, road traffic results in the death of hundreds of toads each year during their annual migration. We are updating the Biodiversity Management Plan for the Western Leopard Toad and helping improve knowledge of its distribution in the Overberg Region to inform conservation initiatives better there.

This work is made possible by Synchronicity Earth and Whitley Fund for Nature.



Western Leopard Toad



Table Mountain Ghost Frog. Photo credit: Joshua Weeber.

FROGS ON SOUTH AFRICA'S TABLE

The Table Mountain Ghost Frog is unique, found in only eight streams on Table Mountain National Park and nowhere else in the world. The species has already disappeared from at least one historical site. We completed six weeks of intensive work during the brief field season for ghost frogs, which ran between February and March 2021. Our surveys included consecutive repeat visits to 105 monitoring sites to record the presence of tadpoles, measure water quality, and assess the health of stream habitats. We also used Visual Implant Elastomer (VIE) tagging of ghost frog tadpoles as a mark-recapture method to track their movement between stream pools and improve the understanding of their biology. This tracking shows that the distribution of tadpoles does not change much between years. Given that tadpoles take up to 12 months to metamorphose into frogs, this is perhaps not surprising. Adults accumulate near streams during the summer months to breed, and adult density is perhaps higher than previously thought.

In May 2021, we led a Table Mountain Ghost Frog workshop in which we presented the findings of our monitoring data from the past three seasons. This included information on stream health, enabling us to understand threats caused by siltation and alien invasive plants. We found that general habitat integrity and pool health strongly influenced the presence of ghost frog tadpoles.

In addition, we provided guidelines for monitoring protocols for the species, with a strong commitment from SANParks to continue aspects of this monitoring. SANParks granted us permission for night visits to film a documentary, **Ghosts of Table Mountain**, which we are producing in partnership with Fishwater Films. The documentary aims to reveal the secret life of this Critically Endangered ghost frog and other unique freshwater creatures that share its ecosystem. We plan to educate park users and inspire collaborative efforts to restore and maintain these critical stream habitats.

This work is made possible by the Mohamed Bin Zayed Species Conservation Fund, Synchronicity Earth, Table Mountain Fund, and Whitley Fund for Nature.

THE KWAZULU-NATAL FROG ROUTE

Creating an appreciation of frogs and the essential role they play in representing ecosystem health is crucial to supporting their conservation. Embracing this through nature-based tourism, we have developed the KZN Frog Route. In December 2020, on a stormy evening at Mount Moreland, we launched our KZN Frog Route tours. These outings aim to connect people with nature, share knowledge, and create an appreciation for frogs in the region. Our chosen venue was very appropriate, as we monitor the population of Endangered Pickersgill's Reed Frogs there on behalf of Airports Company South Africa. One of our guests described the tour as "an amazing experience for any nature lover to truly immerse themselves in while searching for rare species." We will resume tours again over the summer of 2021 at several of our project sites. To date, we have trained four nature site guides from the Adam's Mission community, where we work with the traditional authority towards declaration of the 500 ha Sobonakhona Protected Environment. We aim to secure over 500 ha of coastal wetland habitat at the site, critical habitat for both the Pickersgill's Reed Frog and Kloof Frog – the only site where these Endangered species are known to co-occur.

This work is made possible by the Disney Conservation Fund, Rainforest Trust, Rand Merchant Bank, and Whitley Fund for Nature.



Pickersgill's Reed Frog



Community members in KZN learning about frogs and their habitats, and being trained in natural resource management activities such as alien plant clearing.

COMMUNITIES FOR CONSERVATION

People and frogs frequently share the same space, no more so than is the case for the coast-hugging Pickersgill's Reed Frog in KwaZulu-Natal. This Endangered species occurs in low-lying areas, where many people occur too. The species is restricted to coastal wetland – itself a Critically Endangered habitat type. Working with 40 people from two local communities living in the vicinity of these habitats, we cleared over 200 ha of alien plants this year as part of a Natural Resource Management Programme. We provided training and skills development to over 100 community members in nature-based livelihoods and computer literacy skills. We also reached over 1,000 people through our educational resources, such as Frogs in the Classroom, Community Cinemas, Conservation Conversations, and the Amphibian Learning Programme.

This year, we developed a course in environmental compliance aimed at helping local community members to understand environmental law and their rights. The course included the development of a data collection app to record environmental transgressions and build a case for legal non-compliance when necessary. We aim to roll this out across all our project sites and develop it into a national tool. So far, our two Biodiversity Protection Officers have trialled the app at the Sobonakhona Protected Environment site.

This work is made possible by the Department of Forestry, Fisheries, and the Environment, Disney Conservation Fund, Rainforest Trust, and Rand Merchant Bank.



Cherise Acker setting up camera traps to monitor the behaviour of the Endangered Kloof Frog in Vernon Crookes Nature Reserve in KZN.

UNCOVERING THE SECRETIVE BEHAVIOUR OF FROGS

In a South African-first, we used camera traps to observe previously undocumented behaviour of the Endangered Kloof Frog at the Vernon Crookes Nature Reserve on KwaZulu-Natal's south coast. With support from Ezemvelo KZN Wildlife Honorary Officers, we used egg-clump counts to monitor the species here since 2013. The species lays distinctive clutches above the streams it inhabits. By monitoring these clutches, we gain an indication of population health and changes in breeding success in response to climatic variables and management interventions. By adding camera traps to our monitoring arsenal, we have been able to delve deeper into the secretive nocturnal behaviour of this species. **Our video** footage shows that a single male and female will form a pair and repeatedly investigate an egg-deposition site. After the female has laid the eggs, she or the male will return to watch over the clump, keeping it moist and possibly deterring any would-be predators. Males also form cohorts close to the egg site, while females move individually. We plan to roll out this innovative technique to uncover the secret behaviour of other species we protect.

This work is made possible by Synchronicity Earth.

FROGS IN THE FRAME

The programme received a lot of media exposure through the period following Dr Jeanne Tarrant's Whitley Award last year, given that over 3,000 people watched the virtual ceremony. The ceremony included a **short video** narrated by Sir David Attenborough highlighting the EWT's amphibian work that the award supported. Jeanne was also featured on a **BBC podcast** on frogs, fears, and myths and overcoming these. This year, the programme's impacts have gone viral with nearly 875,00 views of our **Frogs And Their Calls** video. In response to challenges with in-classroom learning during the pandemic, we also brought all of our educational modules into the virtual space. These modules included our three **Frogs in the Classroom** lessons, our #FrogFriday, and **Froggers in the Field** social media posts.

This work is made possible by the Whitley Fund for Nature, Rand Merchant Bank, and Synchronicity Earth.



Kloof Frog laying eggs.



Natal Tree Frog

THREATENED AMPHIBIAN PROGRAMME TEAM



Dr Jeanne Tarrant
Programme Manager



Cherise Acker
Senior Field Officer, KwaZulu-Natal



Jiba Magwaza
Field Officer, KwaZulu-Natal



Evan Milborrow
Table Mountain Field Assistant
(Feb–March 2021)



Arlene Mkhize
Biodiversity Protection Officer, Adam's Mission



Nomonde Ngidi
Biodiversity Protection Officer, Isipingo



Nonkululeko Nzama
Environmental Compliance Officer, Adams Mission



Joshua Weeber
Field Officer, Table Mountain

Vultures for Africa Programme

The EWT's Vultures for Africa Programme works to reduce the imminent and real risk of extinction of African vultures through effective interventions – focusing on the most significant current threat these birds face, namely wildlife poisoning in its various forms.

African vultures have declined drastically over the last 30 years, and five species are now Critically Endangered. This decline catalysed the drafting of an international **Multi-species Action Plan to Conserve African-Eurasian Vultures** (Vulture MsAP) in 2017, which aims to stop this trend through a range of strategies. Vultures for Africa implements specific actions to reduce the impact of wildlife poisoning and works with our partners to collect quantitative data on vulture populations in identified gap areas across the African continent. Our work also contributes to achieving the objectives of the Pan-African Vulture Conservation Strategy and the IUCN Species Survival Commission Vulture Specialist Group.

Vultures for Africa operates in Kenya, Tanzania, Uganda, and all Southern African Development Community (SADC) countries, except for the Democratic Republic of Congo. This year, we added The Gambia, Ghana, and Ethiopia to the list of African countries in which we have operated since we initiated the programme, bringing this to a total of 14. Our primary focus is outside South Africa, although we also contribute to the EWT's Birds of Prey Programme's work within the borders.

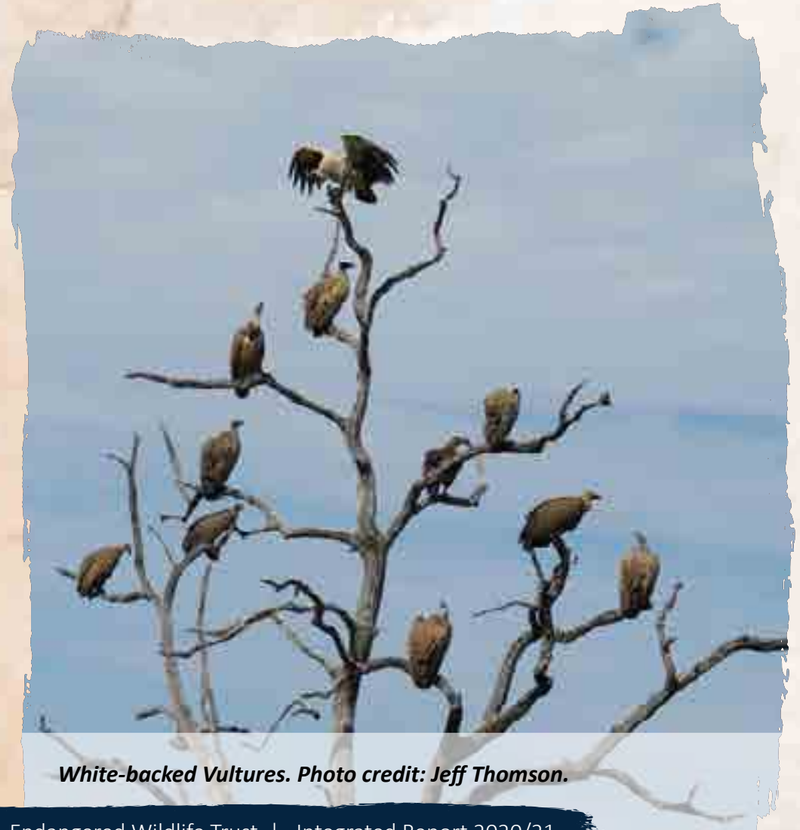
We achieve a critical component of our work through our partnership with the Hawk Conservancy Trust and other partners in the countries in which we work, including BirdWatch Zambia, the Lilongwe Wildlife Trust (Malawi), Raptors Botswana, The Peregrine Fund (Kenya), and the Uganda Conservation Foundation. These partners provide substantial funding towards poisoning response training and issuing equipment to trainees for effective deployment in the field during incidents.



Artwork of a Lappet-faced Vulture by Alice Van Jaarsveld.

POISON PROTOCOLS FOR THE KRUGER

With the support of staff from several other programmes, Vultures for Africa completed wildlife poisoning response training within all sections and to all field rangers in the Kruger National Park. This mammoth task ran from May 2020 till July 2020. Fortunately, we were able to complete the training, despite the continued COVID-19 lockdown restrictions due to the urgent nature of the work and while observing all social distancing and other health-related protocols. A total of 40 training workshops resulted in the training of 456 learners across the 23 sections of the park. This critical work will better equip the Kruger's rangers to deal with poisoning incidents in the park, reducing the number of vultures killed – deliberately or otherwise – at poisoned carcass sites. While carrying out this training, we were able to attend four wildlife poisoning events.



White-backed Vultures. Photo credit: Jeff Thomson.

Thanks to our intervention, through the provision of air support in the northern section of the park, at least one of these incidents was detected more quickly. This meant that early interventions at this incident reduced mortalities amongst vultures and other wildlife and increased efforts by relevant law enforcement to apprehend the perpetrators of these acts. This initiative also enabled us to develop greater training capacity within the EWT by including staff from the Birds of Prey, Carnivore Conservation, and Wildlife and Energy programmes in our training teams.

This work is made possible by the Hawk Conservancy Trust, Investec, and US Fish and Wildlife Service.

WORKING TOWARDS AFRICA'S FIRST TRANSBOUNDARY VULTURE SAFE ZONE

The Greater Mapungubwe Transfrontier Vulture Safe Zone is the first international Vulture Safe Zone to be developed in Africa and covers critical vulture habitat in South Africa, Botswana, and Zimbabwe. The establishment of this Vulture Safe Zone aligns closely with the Vulture MsAP, an important conservation action plan that includes all southern Africa's highly threatened vulture species. To boost understanding of the threat of poisoning to vultures and train people to respond to poison events, we conducted a wildlife poison response training workshop with 26 staff from SANParks, the Limpopo Department of Economic Development, Environment, and Tourism, and the South African Police Service. We held the workshop at the Blouberg Nature Reserve in the western Soutpansberg, in late April 2021.

This work is made possible by the Bio-Bridge Initiative.



White-headed Vulture

WILDLIFE POISONING AIDE MEMOIRE

Working with the Namibia Animal Rehabilitation Research and Education Centre (NARREC) and HumaneLABS (an architecture practice that develops tools to mitigate and manage human-wildlife conflict), we completed the Wildlife Poisoning Aide Memoire. This booklet provides supporting information and promotes knowledge retention following poisoning response training. We will distribute the booklet to rangers, wildlife veterinarians, and law enforcement staff who complete future training in all areas we work. We designed the booklet so that it can easily be adapted to country-specific and organisational needs. The booklet was translated into Portuguese with support from the Chuilexi Conservancy in the Niassa Special Reserve, Mozambique. We will make the translated booklet available to learners in Portuguese-speaking African countries, including Mozambique, Angola and Guinea-Bissau, when we conduct training there.

This work is made possible by USAID and the US Fish and Wildlife Service.



WINGS OVER THE SAVANNAH

We participated in the aerial survey of vulture nests in Zululand, in the Phongolo and Mkhuze Game Reserves, as well as the Hluhluwe-iMfolozi Park, in August 2020, working with our partners Wildlife ACT and Ezemvelo KZN Wildlife. In addition, in collaboration with our Birds of Prey Programme, we carried out aerial surveys of vulture and other large raptor nests in two areas in northern and southern Kruger National Park during September 2020. These surveys assessed the impacts of wildlife poisoning events on the numbers and breeding efforts of these highly threatened species, comparing them to the previous surveys that we concluded in 2015. These surveys are essential given the possible impact of the poisoning of more than 500 vultures in the northern Kruger since January 2019. We collected more than 1,000 observations, and data analyses are underway. Fortunately, initial results indicate a stable-to-increasing breeding population of African White-backed Vultures in southern Kruger and Mkhuze Game Reserve. At the same time, we noted declines in breeding populations of White-headed and Lappet-faced vultures in Hluhluwe-iMfolozi Park and African White-backed Vultures in Phongolo Game Reserve. We conducted these surveys with ongoing support from the Bateleurs.

This work is made possible by the Bateleurs, Network for Animals, and Wildlife ACT.

INTERNATIONAL VULTURE AWARENESS DAY

International Vulture Awareness Day took place on 5 September 2020. The EWT and Hawk Conservancy Trust established this annual event in 2009 and it is held annually on the first Saturday in September as a day in which we reflect on the importance of vultures and the essential role they play in maintaining healthy ecosystems. It is a time to spread awareness and take action. This important day has grown from Vulture Awareness Days run originally only by the EWT, and our partner in England, the Hawk Conservancy Trust, into an international event. More than 100 organisations took part in the event this year, from 43 countries representing an increase in numbers from previous years. The event has become a fixed feature on the international conservation calendar.

100 ORGANISATIONS **43** COUNTRIES

TAKING PART IN THE AWARENESS CAMPAIGN



Photo credit: André Botha.

SPREADING OUR WINGS

The COVID-19 pandemic has certainly restricted travel to and from South Africa, with a knock-on effect on our ability to conduct fieldwork and training regionally. Even so, we were able to travel outside South Africa in November 2020, for the first time since the pandemic began. A first trip, to Malawi and working with the Lilongwe Wildlife Trust and African Parks, established the first sample of 16 wing-tagged and one satellite-tracked vultures. We trapped these birds in the Majete Wildlife Reserve and Nyika Plateau National Park to fill critical knowledge gaps about vulture movements across southern Africa. We also conducted two wildlife poisoning response training workshops, for a total of 47 learners, in these two protected areas. We were able to more than double our tracked vulture numbers in Malawi during fieldwork in these reserves in May 2021. We also deployed three tracking units on vultures at Liwonde National Park during the same visit. Subsequently, one of these birds dispersed to central Zimbabwe and another to Gorongosa National Park in Mozambique within two weeks of tagging.

Elsewhere, we conducted a virtual wildlife poisoning response training workshop for 21 conservation staff from in-country partners in The Gambia, Ghana, and Ethiopia at the request of BirdLife International in March 2021. This training expanded our reach to three more African countries, bringing the total number of countries in Africa where we have conducted this training to 14. We also conducted seven more wildlife poisoning response training workshops for 183 learners in Botswana and Malawi, as well as Mpumalanga and Limpopo in South Africa.

This work is made possible by BirdLife International, Hawk Conservancy Trust, and Lilongwe Wildlife Trust.



Vulture trapping with partner organisations Ezemvelo KZNWildlife, Wildlife ACT, and Raptor Rescue in the Hluhulwe-Imfolozi Park in Zululand. In the picture are (left to right) André Botha (EWT), Geoff Clinning (EKZNW), Ben Hoffman (Raptor Rescue), and Jed Bird (EKZNW).

FIVE YEARS IN THE MAKING

After five years of engagement, a trip to the Niassa Special Reserve in northern Mozambique became a reality in late May 2021, thanks to funding generously provided by the Hawk Conservancy Trust. This area is recognised as a significant knowledge-gap area in terms of vultures and other raptors. By initiating work here, we hope to understand vulture conservation needs in an area that links East and southern Africa. During the visit, we presented two wildlife poison response training workshops to 52 learners from the National Administration of the Conservation Areas (ANAC), Wildlife Conservation Society, and the Niassa Carnivore Project at two concession areas in the reserve. We also joined the Wildlife Conservation Society to conduct an exploratory aerial survey looking for possible vulture roosts and Taita Falcon nests in the Matambile Concession. We recorded at least three potential historical roosting sites for Rüppell's Vultures and recorded at least three pairs of Taita Falcon during the short survey. Due to the extensive network of inselbergs that dot the landscape, substantial habitat is available for the latter species, making the area a potential stronghold for one of Africa's rarest raptors. Elsewhere in Mozambique, in early June 2021, we conducted the first wildlife poison response training workshops in the Limpopo and Banhine National Parks to 69 learners.

This work is made possible by the Hawk Conservancy Trust and Investec.



Ringing birds, such as the White-backed Vulture pictured here, helps us understand more about their movements and the threats they face. Ringing of a White-backed Vulture.

TAKING VULTURES TO TASK

Our programme also represents the EWT on the Department of Forestry, Fisheries, and the Environment (DFFE) lead National Vulture Task Force as well as the National Wildlife Poisoning Prevention Working Group and Lead Task Team. The former group is currently drafting a National Biodiversity Management Plan for all vulture species in South Africa.

We are working with a range of West African partners, BirdLife International, and the IUCN Conservation Specialist Group, to draft a strategy to combat the impact on vulture populations in that region by belief-use trade and other practices. This work follows the largest known mass-poisoning of vultures in Guinea-Bissau in March 2020. These deaths were linked to belief-use trade, the primary cause of the massive declines in vulture populations that continue through West Africa. In addition, we continue our work on the Convention on Migratory Species Raptors MoU Technical Advisory Group, Vulture MsAP Working Group, and the CMS Wildlife Poisoning Working Group.

This work is made possible by the Convention on Migratory Species, Hawk Conservancy Trust, and Investec.

DOUBLE VISION

We discovered the first known nest of an African White-backed Vulture containing two almost fully developed nestlings during fieldwork at the Dronfield Game Reserve outside Kimberley in October 2020. Although this vulture is known to lay and successfully raise two nestlings in the same nest, this species usually lays a single egg and fledges a single chick in a breeding season. Successfully raising two chicks is extremely rare, and this is the only recorded occurrence of such a phenomenon at Dronfield. We are undertaking genetic analysis to determine parentage and the number of adults involved in this unusual event.

This work is made possible by the Hawk Conservancy Trust.

VULTURES FOR AFRICA PROGRAMME



Andre Botha
Programme Manager



White-backed Vulture

Wildlife and Energy Programme

The goal of the EWT's Wildlife and Energy Programme is to significantly reduce the impacts of energy infrastructure on wildlife. A long-standing programme within the EWT, and the longest-running programme of its kind in Africa, we signed a strategic partnership with Eskom in 1996 and, since then, have worked together to address some of the most pressing issues related to wildlife interactions with electrical infrastructure. We now work with Eskom as a member of its Envirotech Steering Committee, an interface between engineers and environmental managers.

Energy infrastructure can have devastating effects on wildlife, particularly through collisions with power lines and electrocution, and the EWT continues to positively influence the wildlife management policies of energy utilities. We help reduce impacts on wildlife, improve the quality of supply to customers, and ultimately phase out problematic processes and hardware to substantially minimise negative wildlife interactions with electricity infrastructure across Africa. These positive impacts include building a database to quantify the risk of wildlife mortalities related to the energy sector in South Africa; improving the efficiency of power line marking by working with Eskom Distribution and Transmission to install bird flappers using drones; and implementing interventions (such as proactively retrofitting existing electrical infrastructure to prevent negative wildlife interactions) – ideally through strategic partnerships with other African countries. The programme operates across all of South Africa's provinces. Based on our extensive experience and the lessons we have learned in South Africa, we now engage and advise electrical utilities in Botswana, Kenya, Lesotho, Mozambique, Namibia, Uganda, and even Australia.

LIFTOFF FOR THE EWT'S DRONE UNIT

TAKING CONSERVATION TO NEW HEIGHTS

Drones or RPAS (remotely piloted aircraft systems) are a relatively new technology that the EWT recognises has many potential conservation applications. However, to operate a drone legally in South Africa, one requires a ROC (RPAS Operating Certificate), which the EWT received from the South African Civil Aviation Authority (SACAA) in 2021. As the final step of this process, we needed to demonstrate our drone operation capability to SACAA inspectors, who inspected our operational headquarters at the EWT's Conservation Campus. The inspectors evaluated the quality assurance aspects of our operations, record keeping, systems safety, and security. We carried out this demonstration and operational base inspection in December 2020. The ROC was issued in January 2021, representing the culmination of four years of working diligently to obtain all the various permits, licenses, certificates, and approvals required for the process. With approval from the SACAA, the official **list of legal drone operators** in South Africa now includes the EWT, and we are ready to use this technology to take our conservation efforts to new heights.



AN HISTORIC ACHIEVEMENT FOR DRONE TECHNOLOGY

In March 2021, the programme made good use of the EWT's new status as a legal drone operator by testing a delivery device that can attach bird flappers (a type of bird flight diverter that increases visibility to flying birds) to power line cables using a drone. We designed the device to carry a payload of four flappers per flight, which it then attaches onto an overhead cable using an SABS-approved link stick (a connector between the flapper and the drone used in its installation). The system is unique, specifically designed to carry out this work on live power lines and is detailed in this **eNCA television interview** (at 4:21 min). To test the system, we demonstrated the use of the device to Eskom at two locations in the North West Province. The testing sites included an energised line designed for training purposes at the Vutlhari Coaching Centre near Stilfontein and, subsequently, at the location of an actual power line incident near Bokkraal. This was an historic achievement, the first time drone technology has been deployed for this purpose on the African continent, as reported in **Engineering News.**

EYE IN THE SKY

We aim to use the EWT's drone services as a tool to carry out many conservation-related tasks, as detailed in a recent **Conservation Matters** article about the use of drones in conservation. Particularly useful is having an 'eye in the sky' to provide a perspective that solves a problem or answers a question that is not achieved easily from the ground. In June 2021, Eskom provided a challenging opportunity to employ our drone technology and capabilities to count Common Waterbuck at the Kriel Power Station in Mpumalanga. We used a thermal sensor attached to the drone to look for the heat signatures of the animals at night. The sensor worked well, and after a long search, we eventually found the animals resting in dense *Eucalyptus* stands that would have been difficult to survey from the ground.



Field testing the use of drones to attach markers to power lines (above and left).



A power line pole that has fallen under the weight of a weavers' nest.

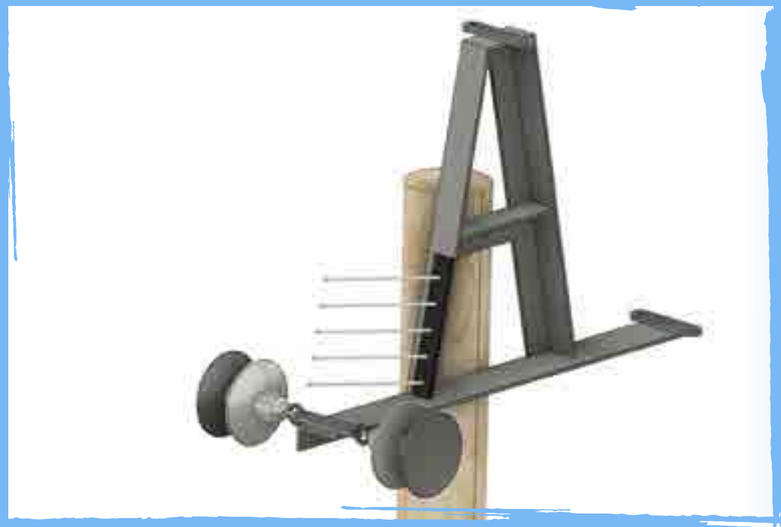
FIRST STEPS IN MOZAMBIQUE

This year, we expanded our footprint by engaging with Electricidade de Moçambique (**EDM**), Mozambique's national electricity generation and distribution company. The Southern Africa Energy Programme (SAEP), funded by USAID and in partnership with Deloitte, aims to optimise utility performance through effective wildlife management on electrical infrastructure. During our exploratory field visit in April 2021, we uncovered a host of challenges ranging from crows roosting in substations to poorly designed distribution structures and exposed contact points on transformers. Our field trip took us to some of the most remote areas of Mozambique, where the utility is suffering major supply interruptions caused by climbing mammals, snakes, and various birds. We plan to strengthen our relationship with EDM through several wildlife-related training sessions and further engagements they have requested. We now have the opportunity to introduce the utility to a range of mitigation options, improved structure designs, and cost-effective solutions for installing bird flight diverters, insulation products, and perch preventers.

CROWS ON THE LINE

Pied Crows can cause numerous line faults and power interruptions when they breed on power lines along the Eskom network. Our A-frame Crow Nest Exclusion Project evaluated this problem and showed the extent of the issue, with crow nests causing 89% of faults on two A-frame 22 kV feeder lines in the Overberg. To address this, we will install exclusion devices on selected poles to see if crows can still nest on the structures with the devices in place. These devices are blunt plastic spikes designed to prevent crows from perching and nesting on the structure.

Crows cause other problems by defecating on power lines. As they do so, their streamers (long excretions) cause flashovers between live and earthed power line components, resulting in power interruptions. Working with Eskom Research, Testing and Development, we have designed an innovative way to measure the maximum length of Pied Crow excreta to understand how these faults occur. By placing high-tech motion-sensor cameras on specially planted poles, we can record the precise moment that a crow defecates. Using this **footage,** we measure the length of the birds' streamers and model precisely how this will impact different structure designs and the voltages that pass through them.



A-frame Crow Nest Exclusion device to deter crows from perching or nesting on power line poles.



BRIGHT SPARKS

Programme staff made good use of the time spent working from home during the continued COVID-19 lockdowns. This time was spent preparing manuscripts for completed projects to disseminate these results through peer-reviewed publications. In August 2020, *Wildlife Biology* published the first, **a paper** from our Lesser Flamingo tracking project. This research examined Lesser Flamingo movements in southern Africa, including some unexpected findings that challenged previous assumptions that they are nomadic in their movements between waterbodies. The flamingos we tracked embarked on long-range seasonal movements, with consistent flight paths, despite significant variation in environmental conditions. Our results suggest that these birds are partially migratory, providing important motivation to introduce measures to reduce power line collisions at critical feeding and breeding sites. We also engaged with the public about our findings in this paper through the EWT's **Wild Chat** workshop series.

In February 2021, *The Condor: Ornithological Applications* **published our second paper**, detailing results of a decade's worth of information relating to bird collisions with high voltage transmission lines near De Aar in the Karoo and the effectiveness of line markers in reducing these collisions. Importantly, we found that line markers were very effective for Blue Cranes, reducing collision incidents by 92%. For large birds in general, the markers reduced collisions by 51%, though they did not prevent any bustard or korhaan species from colliding with lines. Subsequently, we initiated research into the bustards' vision to understand their inability to avoid collisions.

LINE MARKING REDUCED AVERAGE COLLISION RATES BY

51% **FOR ALL BIRDS**

92% **FOR BLUE CRANES**



Helicopter and live-line team deployed to fit 90 ROTAMARKA devices to increase line visibility to birds in flight, thereby reducing bird-power line collisions.



Great White Pelican on a power line.

COLLISION COURSE FOR GREAT WHITE PELICANS

In September 2020, Eskom deployed a helicopter and live-line team to the Acacia/Koeberg transmission line near Cape Town, where it had recorded multiple bird collisions. Since 2017, more than 80 Great White Pelicans have collided with this line, with many dying directly on impact and others later from the injuries they suffered. This is a significant number of deaths, given there are only an estimated 250 breeding pairs of these pelicans on nearby Dassen Island. We fitted 90 experimental bird flight diverters sourced from Australia to the problematic sections of the line. The novel bird flight diverter, called a **ROTAMARKA**, is relatively large and rotates even in a slight breeze, making it extremely visible to birds in flight. We closely monitored this line section for seven months, three months before and four months after the diverters' installation. Encouragingly, our provisional results demonstrated a 55% reduction in pelican collision mortality rates. We plan to extend our testing across all seasons based on these results, as weather conditions (rain, mist, wind) are major contributing factors in bird collisions. We also plan to test the device on other collision-prone species, such as bustards, for which no diverters have successfully reduced power line collisions to date.



ROTAMARKA experimental device that rotates, making it extremely visible to birds in flight.

BIODIVERSITY IMPACT MONITORING: SERE WIND ENERGY FACILITY

The EWT and Eskom Strategic Partnership is currently in the sixth year of post-construction biodiversity impact monitoring at Eskom's first operational wind farm, situated along the West Coast of South Africa. Sere Wind Farm became operational in March 2015, and our monitoring commenced in May 2015, with four local EWT staff members permanently on-site to conduct various surveys. The EWT's main objective at Sere is to document bird and bat turbine-related fatalities. The team also undertakes various other surveys in and around Sere, including vegetation monitoring, roadkill surveys, bat monitoring, associated infrastructure surveys, and avifaunal surveys. Through this ongoing monitoring programme, we provide Eskom management with information on long-term population trends, mortality trends, and seasonal variation in species abundance. This long-term data is important given most operational wind farms in South Africa only conduct intense operational monitoring in the two years following commission, while little is known about the long-term impacts and benefits of wind energy facilities.



The annual floral display at Sere Wind Farm.

SUMMARY OF THE WILDLIFE AND ENERGY PROGRAMME'S ACHIEVEMENTS AT SERE

Number of turbine plots searched
4,500

Power lines surveyed
528KM

Bat roosts monitored
12

Distance walked
7,812KM

Priority bird surveys conducted
4

Roadkill survey distance completed
11,960KM

WILDLIFE AND ENERGY PROGRAMME TEAM



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Programme Manager



Ndzalama Chauke
Senior Field Officer



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Renewable Energy Team Leader



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Renewable Energy Field Officer



Ronelle Visagie
Field Officer

Wildlife in Trade Programme



Illegal wildlife trade and unregulated legal trade are significant threats to biodiversity at both local and global scales. Southern Africa is disproportionately targeted for illegal wildlife trade because of the region's megadiverse flora and fauna. The purpose of the EWT's Wildlife in Trade Programme (WIT) is to reduce the impacts of these illegal and unsustainable practices through a broad range of approaches, including the development of a better understanding of illegal or unsustainable legal trade on the survival and wellbeing of wild animals and plants; identification and implementation of actions to reduce threats arising from illegal or unregulated legal wildlife trade; and enhancement of positive outcomes of wildlife trade that are beneficial to conservation. The programme works mainly within South Africa but also has projects in Botswana, Mozambique, Namibia, and Tanzania.

WILDLIFE AND THE LAW

South Africa has a comprehensive but complex legal framework for wildlife that creates challenges in implementation, as laws are actioned at both national and provincial levels, whilst the mandates of national departments differ. In addition, there is little transparency in wildlife-related decisions. To address these challenges, the Wildlife and Law Project aims to catalyse change in South Africa's legal and governance frameworks to improve decision making about the country's wildlife.

One challenge in strengthening wildlife governance is the absence of wildlife-related policy to guide decision-makers. To address this, we have engaged extensively with each province's conservation department and the national Department of Forestry, Fisheries, and the Environment (DFFE) to identify opportunities for policy development. Based on these engagements, we identified the most urgent policy needs. These include responding to human-wildlife conflict, the welfare of wildlife, and policies regulating the introduction of wild animals into controlled environments (where wildlife is closely confined and managed). This year we supported these needs by designing a dedicated course to train permitting officials to make responsible, environmentally conscious legal decisions. We will present this course through the next year.

The EWT and Centre for Environmental Rights' 2018 report, **Fair Game? Improving the wellbeing of South African wildlife. A review of the legal and practical regulation of the welfare of wild animals in South Africa** called for an update of wildlife-related laws and the closure of potential loopholes. We initiated an extensive review of wildlife-related legislation to achieve this, exploring opportunities to strengthen these laws. Another way we work to strengthen the legal framework is by contributing to public participation processes. This year we contributed through these processes to comment on the National Forests Amendment Bill, the National Environmental Management Laws Amendment Bill, the National Norms and Standards for the Management of Elephants in South Africa, the Draft Revised National Biodiversity Framework 2019–2024, and the Norms and Standards for the Trophy Hunting of Leopard. We also submitted written comments to an Advisory Committee (known as the High-Level Panel), appointed under the National Environmental Management Act, related to the management, handling, breeding, hunting, and trade of elephant, Lion, leopard, and rhinoceros. This Advisory Committee was deliberating on issues surrounding these important species that are likely to have far-reaching consequences for conservation in South Africa over the coming years. This public participation process is critical, as it ensures lawmakers have all the necessary information before them to draft or amend legislation.

Finally, we continue to ensure that critical wildlife habitats are protected and promoted. This year, we helped to defend the Mabola Protected Environment – a highly sensitive wetland within the Enkangala-Drakensberg Strategic Water Source Area – by challenging this Protected Environment's proposed de-proclamation and subsequent mining. We also submitted comprehensive comments on the Environmental Impact Assessment for the proposed Musina-Makhado Special Economic Zone, which threatens the Vhembe Biosphere Reserve and the EWT's own Medike Nature Reserve in the Soutpansberg. Should this Special Economic Zone go ahead, it will have devastating impacts on biodiversity, compromise the water table, undermine sustainable ecological support for livelihoods, and impact tourism revenue. Finally, as the Special Economic Zone would receive power from coal-fired power stations, this directly contradicts a move towards a climate-resilient and lower-carbon economy.

This work is made possible by the Lewis Foundation and the US Fish and Wildlife Service.



BREED STANDARDS REDUCE SPECIES RESILIENCE

We continued our challenge, launched in January 2020, in the North Gauteng High Court, of the decision of the (then) Department of Agriculture, Forestry, and Fisheries to declare 33 species of wild animals as 'landrace breeds' and/or 'locally adapted and regularly introduced breeds,' for purposes of the Animal Improvement Act. These species include Lions, rhinos, zebras, and Cheetahs. Essentially, this misguided legislation allows for the establishment of breed societies for these species, in which breed 'standards' would be set for them, subjecting these species to selective and cross-breeding at a potentially industrial scale. The creation of breed standards, and so-called 'genetically superior' animals, is wholly inappropriate for wildlife where natural selection drives evolutionary processes that lead to more resilient species.

In September 2020, the court heard our legal challenge, and in reply, the respondents argued for the listing of these wildlife species in the Animal Improvement Act. Having reviewed their documents, we identified and raised additional grounds for review. The legal challenge is ongoing, and we anticipate a judgement in our favour in the next year.

This work is made possible by Christo Reeders Attorneys and the Lewis Foundation.

GIVING A VOICE TO THE VOICELESS

In court cases, both the accused and the victims have the right to be heard. But what if the victim is a pangolin or a rhino that cannot speak for itself? When humans are victims of a crime, their voices may be heard through victim impact statements detailing the crime's effects on them and their families. In the case of wildlife, people must speak up on their behalf. In response to this, we initiated a new project to develop victim impact statements for threatened wildlife species, which will involve gathering species experts to develop **wildlife crime impact statements** for 25 widely traded species. We will distribute these statements to prosecutors from South Africa, Namibia, Botswana, and Mozambique. The statements will make judges and magistrates aware of the significant impact of crimes involving fauna and flora to encourage them to treat these crimes as serious offences.

This work is made possible by USAID VukaNow.





SMELLING A RAT

Wildlife trafficking through seaports is a global problem, and detecting wildlife contraband through container shipping is a significant challenge. In partnership with APOPO, based out of Tanzania, we are developing an innovative approach to detecting wildlife products hidden in shipping containers using the African Giant Pouched Rat. **APOPO** uses these rats as scent detectors, and they have already helped remove landmines and identify carriers of tuberculosis worldwide. Working from its laboratory in Tanzania, APOPO is developing innovative techniques to detect pangolin scales and hardwoods – the target scents – smuggled in shipping containers. Over the past year, this work focused on activities that prepare the rats to work in an operational environment, testing them on a broad range of target and non-target scents. Overall, the rats successfully learned the odour profile of the target scents and could identify all African pangolin species, even when these were hidden amongst other smelly substances such as garlic powder, dried fish, or banana peels. This past year, we focused on developing workable deployment strategies, some of which we are now testing. One such technology relies on remote signalling, where rats are trained to pull a small ball attached to their harness. The rats' movements trigger a microswitch when they find the target scent. We will trial this method in a simulated port environment next year. Our project features in a **Waterbear Production**.

Working in collaboration with APOPO, this work is made possible by GIZ, the Pangolin Crisis Fund, UK Illegal Wildlife Trade (IWT) Challenge, and the US Fish and Wildlife Service.





An African Giant Pouched Rat showing method of remote signalling where the rats were trained to pull a small ball attached to their harness, which triggers a microswitch when they find their target scent. Photo credit: APOPO.

ILLEGAL WILDLIFE TRADE DYNAMICS

The Great Limpopo Transfrontier Conservation Area (GLTFCA) includes South Africa's largest rhino and elephant populations but faces an ongoing poaching crisis. The USAID funded **Khetha Programme**, managed by WWF-SA, was developed to halt wildlife trafficking impacts on rhinos and elephants in this region using community-based and law enforcement approaches. The EWT conducts two projects focusing on law enforcement within the GLTFCA, both of which support the implementation of critical wildlife trafficking policy frameworks through increased crime detection and prevention.

A critical need in wildlife crime prevention is access to information used to predict where and how wildlife crimes are likely to be committed. As part of the EWT's contribution to the Khetha Programme, we analysed wildlife crime dynamics around the GLTFCA to identify the most effective methods for targeting wildlife crime. These include using open-source information from news articles (a surprisingly prolific source of wildlife crime statistics), accessing data held in police dockets and court records, obtaining information from relevant law enforcement agencies, and monitoring the rhino and elephant parts trade in traditional medicine markets. We intend for law enforcement agencies to use our research findings to target crimes against rhinos and elephants more effectively.

RESTORATIVE JUSTICE

The most common wildlife offences include poaching and the illegal possession, transport, and trade of protected species. The conventional approach to these offences does not address the underlying reasons for committing the crime, possible resulting in reoffending, and does not always provide restitution to the victims of offences. Restorative justice, a flexible, participatory, and problem-solving response to criminal behaviour, addresses these limitations.

Our Restorative Justice Pilot Project – also through the Khetha Programme – operates in the central Kruger National Park and Bushbuckridge areas. We aim to enhance the criminal justice system through facilitated engagement and restorative justice programmes for wildlife offences. These enhancements make the criminal justice system more inclusive and responsive to the needs of crime victims while also addressing harms that result from the wildlife offence and preventing reoffence.

This project is broadly divided into foundation and implementation phases. Our team made good strides in completing the foundation phase activities, including the development of technical guidelines with minimum standards for the application of restorative justice to wildlife crimes and the development of awareness-raising resources. To inform these resources, we engaged with over 50 stakeholders from July to October 2020. These people represented diverse groups involved in the restorative justice process, including victims, communities, law enforcement officials, and prosecutors. Critically, we established the importance of understanding and responding to harm resulting from wildlife crimes, which, together with the prevention of reoffending, are the project's two pillars. The foundation phase was critical to ensure all stakeholders understood the value and application of restorative justice. We were also able to identify and prepare for challenges we may face in the next phase of the project, which will implement restorative justice processes for wildlife offences.

As our project gains momentum, SANParks has included it in the broader initiatives it facilitates in the Greater Kruger Area. This provides a mutually supportive platform to entrench restorative thinking within the landscape more broadly, specifically to respond to human-wildlife conflict and conflict resolution.

This work is made possible by the WWF South Africa Khetha Programme, supported by the United States Agency for International Development (USAID).



CONSERVATION CANINES ON THE CASE

One of the EWT's contributions to preventing wildlife crime in South Africa is the deployment of Conservation Canines to detect poachers and wildlife smugglers. Our well-established Conservation Canine Unit currently fulfils two critical roles in doing this. First, we support anti-poaching initiatives on game reserves, and second, we detect wildlife contraband before it is smuggled out of the country.

Over the last year, we deployed seven dogs in reserves in the Lowveld and Eastern Cape. Here our canine unit continues to provide support through refresher training for both dogs and their handlers. Our detection dogs work mainly at strategic locations in the field, where they each screen up to 500 vehicles per month for firearms, ammunition, and wildlife contraband. We train our tracking dogs to follow poachers through the bush to identify entry and exit points, routes taken, and possibly locate poachers. Due to the travel restrictions imposed during the pandemic, general poaching levels during the last year were substantially lower than in previous years, which meant that anti-poaching units, including our dogs, were not as active. However, our dogs continued to work and provide an ongoing presence to disrupt poaching. In the Eastern Cape, our dogs conducted around ten patrols every month, each covering distances of between 20–40 km. While these were mostly routine patrols to provide visual policing, the dogs were regularly trained and tested and are always ready to track poachers when necessary.

In Gauteng, we increased our capacity to screen cargo at O.R. Tambo International Airport from one to three dogs. All three dogs are certified to detect rhino horn, elephant ivory, Lion bone, and pangolin scales, making us one of the few organisations with such broad capacity to detect different wildlife species. We carry out this work under our agreement with the Department of Forestry, Fisheries, and the Environment to provide wildlife detection canine support to its Environmental Management Inspectors (EMIs.

The regular appearance of our dogs creates visible policing and disrupts traffickers' plans, playing an important role in the fight against transboundary wildlife trafficking. Between September 2020 and June 2021, our dogs screened cargo on 212 days, during which time they searched 3,294 targeted items being shipped to destinations considered high-risk for illegal wildlife trade. Our dogs also screened substantially more non-targeted items that were not considered high-risk but which could nonetheless have carried wildlife contraband. In addition, our canine team conducted training exercises with law enforcement to test the dogs' abilities to detect wildlife products. Our dogs always came through with flying colours and detected all wildlife products present.

The capacity of our Gauteng-based dogs and handlers has increased, with two dogs now certified for tracking and one trainee handler qualifying in both tracking and detection. We have also taken on four young Belgian Malinois from Kilo9 Kennels in Hoedspruit as part of an agreement sponsored by Global Conservation Force, and we will deploy these dogs in reserves in North West Province, the Eastern Cape, and the Lowveld over the next year to work as tracking or detection dogs.

This work is made possible by Boehringer Ingelheim, Greef Properties, IUCN SOS Wildlife, MyPlanet Rhino Fund, Platinum Life, Relate Trust, Royal Canin, Tomlin family, Tourvest, and the United States Fish and Wildlife Service.

OUR DOGS
SCREENED CARGO & SEARCHED

3,294

TARGETED ITEMS



EWT Conservation Canine Handler, Shay Seebran with Conny.

FRESH PERSPECTIVES ON RHINO CONSERVATION

For the fifth year in a row, Lapalala Wilderness School and the EWT celebrated World Rhino Day with our schools' public speaking competition. This event encourages young people to think about biodiversity conservation and present their perspectives and ideas about solutions to wildlife crime. We hope that they will take this knowledge back to their families to act as ambassadors for rhinos and broader conservation issues. In September 2020, we hosted 12 Grade 10 learners from six high schools in the Waterberg, including Sekoba, George Langa, Nkgoru, Lemetja, Moepel, and Leseding. The topic of this year's speaking competition was 'What are the social, political, and economic impacts of rhino poaching in South Africa?' A common theme of the learners' talks was that rhino poaching negatively impacts tourism, which leads to economic losses with knock-on effects on job creation. Leseding High School provided the winning talk, with the speaker winning a new laptop, while the runners-up walked away with vouchers for school uniforms and stationery.

This work is made possible by MyPlanet Rhino Fund, Save the Waterberg Rhino, Tintswalo Game Lodge, Waterberg Biosphere Reserve, Waterberg Nature Conservancy, and Waterberg Waves FM.

SAVING AFRICA'S PRIDE

Africa's Lion populations are declining, with illegal trade in Lion products being a potential driver of illegal killing. To reduce this threat, we currently run two projects with very different objectives. The first aims to build capacity in the regulatory sectors of South Africa's government by developing a training course for permitting officials who enforce national and provincial legislation. The primary goal of this training is to enhance responsible and sound decision making when officials issue permits. We use Lions as a case study and a practical example for decision making so that permitting officials can apply their knowledge to other species of wildlife that require permits for restricted activities. However, due to the COVID-19-induced travel restrictions, we will be moving this course online. To implement this eLearning work, we will use a Learning Management System to reach a minimum of 100 permitting officials and allow them to complete the work in their own time.

Our second Lion project focuses on South Africa's captive Lion sector, in which at least 8,000 Lions are currently housed (compared to less than 3,000 in the wild). This sector is highly controversial because it keeps an iconic species in small spaces and is associated with other activities, including cub petting, hunting of captive-bred Lions, and the sale of Lion bones. In addition to ethical considerations, there are concerns that the sector might stimulate illegal wildlife trade and lead to increased poaching of wild Lions, while any proposed contribution of captive Lions to the conservation of wild Lions remains highly contentious. Within this context, there is a need for a detailed understanding of the structures and functioning of the captive Lion industry and the supply chains for captive Lions. In July 2020, we initiated a survey and analysis of the industry to determine what motivates them and how they function. This work will help evaluate the socio-economic and environmental impacts of the sector, provide government and authorities from the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) with useful information on which to make decisions and help guide policy to bring about meaningful change to the captive Lion sector. Our report is timeous given the recent deliberations of the DFFE Advisory Committee that considered matters relating to the management and handling, breeding, hunting, and trade of Lions. We believe the report will be important in informing future decision making around the sector and support the implementation of relevant changes.

This work is made possible by the US Fish and Wildlife Service.



WILDLIFE IN TRADE PROGRAMME TEAM



Dr Andrew Taylor
Programme Manager



Carina Bruwer
Wildlife and Law Project Officer



Innocent Buthelezi
Conservation Canine Handler



Ashleigh Dore
Wildlife and Law Project Manager



Shadi Henrico
Conservation Canine Project Coordinator



Tina Hiller
Lion Trade Consultant



Obeid Katumba
Wildlife and Law Project Officer



Ndifelani Mulaudzi
Trade Officer



Kerushka Pillay
Training Coordinator

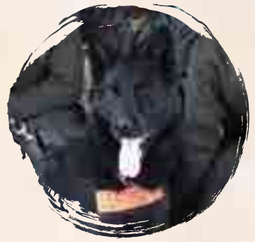


Shayen Seebran
Conservation Canine Handler

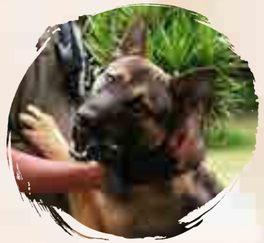


EWT CONSERVATION CANINES

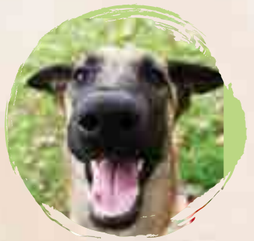
Gauteng based - certified on rhino horn, ivory, Lion bone, and pangolin scales



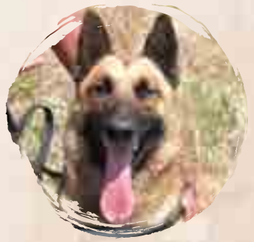
Hitch



Conny

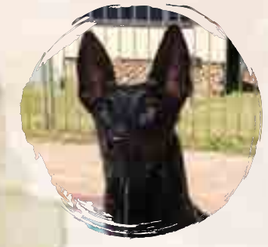


Kisha



Pirate

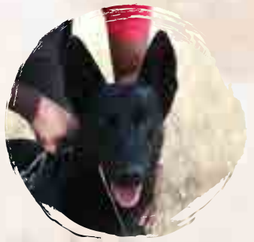
Gauteng based - training for detection and/or tracking



Reaper



Kesatobo



Nala



Bekah

Reserve-deployed as detection and/or tracking dogs



Bullet



Fly



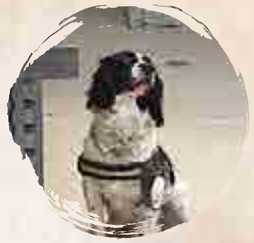
Grizzly



Blacky



Puk



Spike
(now retired)

Wildlife and Transport Programme



Transport networks, in this instance, roads and railways, are critical elements of human economic development and society. Global rates of network construction will likely keep rising for the foreseeable future, particularly in Africa, which is comparatively undeveloped. Transportation infrastructure has numerous, diverse – and mostly negative – consequences for biodiversity and ecosystem functioning. These impacts include the destruction and degradation of habitat, fragmentation and disruption of wildlife populations, direct impacts from vehicles colliding with wildlife, and secondary impacts such as the accelerated spread of alien species or increased human access to previously remote natural resources.

The Wildlife and Transport Programme addresses the impacts of transport networks by working with relevant stakeholders from both the public and private sectors to provide planners with science-based advice on minimising the adverse environmental impacts of transportation infrastructure. We are currently the only organisation in Africa to do so, putting the EWT at the forefront of this work. The programme works across all South African provinces and collaborates on numerous projects with colleagues worldwide.

SOUTH AFRICAN STUDENTS ON TRACK

Much of our work depends on student involvement in critical research. This year we collaborated with nine students from South African universities, with Programme Manager Wendy Collinson supervising eight of them. Two of these students, working jointly through the University of Venda and the Swedish University of Agricultural Sciences (Siboniso Thela) and the University of the Witwatersrand (Hannah de Villers), are addressing wildlife-rail-mortalities and animal behaviour adjacent to the railway line on the Balule Nature Reserve. This railway line extends over 45 km, operating from Hoedspruit to Phalaborwa, transporting copper and phosphate deposits. For several years, trains have killed wildlife, including giraffes, lions, elephants, and zebras, on the section of the railway line that bisects the reserve. We urgently need to address the threat these animals face and the costs of these collisions to the rail operator, Transnet. Siboniso's research will provide us with baseline data on impacted species and help us prioritise the sections of the railway most dangerous for wildlife. Hannah uses camera traps in the underpasses beneath the railway to determine if wildlife uses these as an alternate option to cross the rail line safely. She has recorded Leopards, Lions, Cape Porcupines, and Common Duikers using the underpasses.

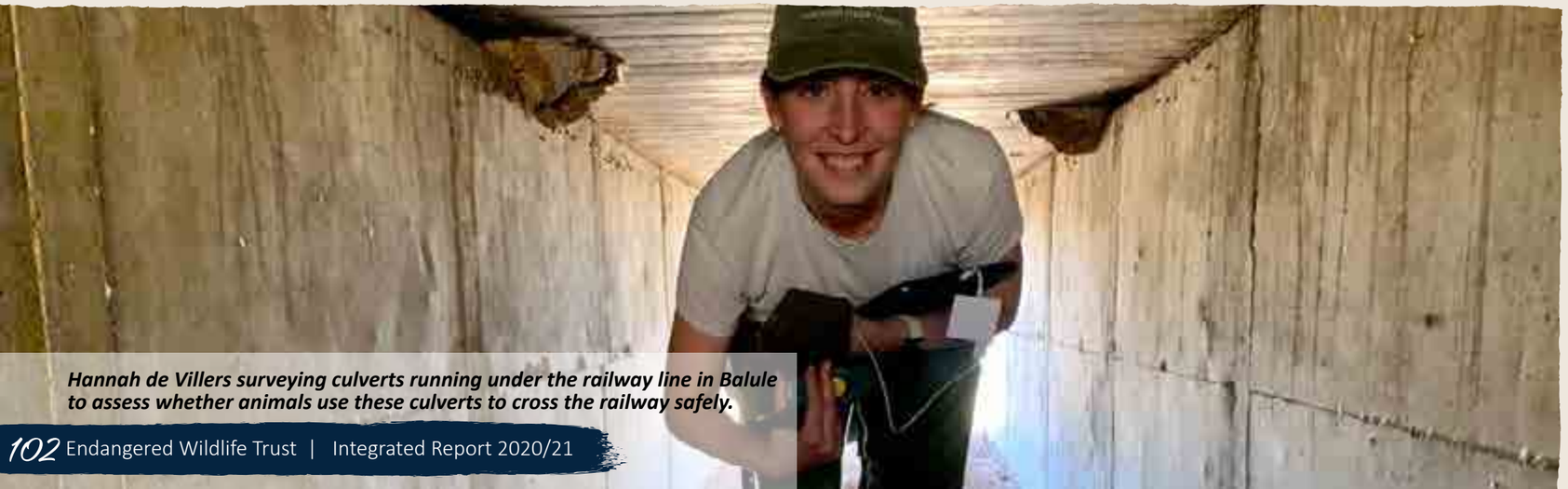
This work is made possible by the Balule Nature Reserve, GreenMatter, Swedish University of Agricultural Sciences, Transfrontier Africa, University of Venda, and University of the Witwatersrand.



Siboniso Thela surveying the impacts of the railway line in Balule Nature Reserve on wildlife mortality and behaviour.



An elephant crossing the railway line running through Balule Nature Reserve.



Hannah de Villers surveying culverts running under the railway line in Balule to assess whether animals use these culverts to cross the railway safely.



A Leopard caught on camera using a culvert to cross underneath a railway line.

ROADS IN PARKS

Wildlife is not only impacted on railway lines in protected areas but also the road network within and around the parks. Cameron Cormac, a PhD student from the University of KwaZulu-Natal, is conducting research on roads in the Hluhluwe-iMfolozi and Tembe Elephant parks. Here, animals such as African Wild Dogs, Greater Kudus, and many amphibian and snake species escape through the fencing surrounding these reserves and find themselves trapped on the road. Cameron gathers animal-road mortality data within these parks and along the adjacent road systems to develop measures to save wildlife. His records show that almost 350 individuals, including African Buffalos, Cape Porcupines, and Leopard Tortoises, were killed on 54 km of road over five months. This research will contribute baseline wildlife-road mortality data to the EWT's ten-year Roads in Parks Project, which commenced in 2014 and aims to reduce roadkill in protected areas. Using this data, we will assess the most appropriate roadkill-reduction measures to implement in the parks.

Through the same project, two students completed their degrees this year: Brilliant Mashao through the University of Venda and Innocent Buthelezi with the Tshwane University of Technology. Both carried out research in the Kruger National Park. Brilliant designed a map that predicted hotspots where animals were most likely to be killed on roads. Based on Brilliant's findings, we will work with park management to install innovative wildlife-warning signs that help increase driver awareness about wildlife on roads. To this end, Innocent trialled various sign-types, including photographic images and silhouettes of a snake, Cheetah, and Greater Kudu, as well as a speed trap sign. Surprisingly, he found that while drivers said they would respond most positively to the image of a Cheetah by modifying their driving behaviour, it was the snake that elicited the most significant driver response. These two projects will guide the most appropriate signage placement within the park and suggest that images, specifically photographic ones which contain smaller species, are most effective.

This work is made possible by De Beers Group of Companies, GreenMatter, Ezemvelo KZN Wildlife (Hluhluwe-iMfolozi and Tembe Elephant Parks), Ford Wildlife Foundation, SANParks (Kruger National Park), Syntell Traffic Monitoring, TRACN4, Tshwane University of Technology, University of KwaZulu Natal, University of Mpumalanga, and University of Venda.

350 ANIMALS WERE KILLED ON 54 KM OF ROAD OVER 5 MONTHS



Cameron Cormac conducting roadkill surveys on road networks in and around protected areas in KwaZulu-Natal.

BUILDING BRIDGES IN THE SOUTPANSBERG

Thabo Hlatswayo completed his degree through the University of Venda, gathering road mortality data on amphibians in Limpopo. The species most commonly killed on roads were the Red Toad, African Bullfrog, and Eastern Olive Toad. Whilst none of these three species are considered threatened, their carcasses may attract other species that scavenge them on the roads, potentially falling victim themselves. Thabo's project provides critical baseline data on native fauna occurring within the proposed Musina-Makhado Special Economic Zone. Should this development go ahead, the area will see a significant increase in traffic volumes, with negative road-related impacts on wildlife, in this critical biodiversity area of the country.

Studying through the University of Venda and Lajuma Research Centre, Bibi Linden completed her PhD examining methods to reduce road-related deaths for Samango Monkeys, a Near Threatened species, in the Soutpansberg. Many arboreal species are at risk from roads as, when a road is built, the natural canopy cover is often removed for the safety of drivers. This forces tree-dwelling species to come down from the tree canopy to cross roads. Bibi trialled various bridge designs to assess which design the monkeys preferred. She found that Samango Monkeys and other species such as bushbabies and lizards commonly used bamboo poles as safer alternatives to cross roads.

Vervet Monkeys are another primate species commonly killed on roads. Courtney Maiden, working jointly through the Universities of South Africa and Wisconsin, is trialling options for reducing road-related deaths in Vervet Monkeys. Currently, she is experimenting with using rope bridges to connect canopies. Both primate-related projects could prove invaluable in reducing tree-dwelling species' deaths by providing them with safe, arboreal routes above roads.

This research is made possible by GreenMatter, Lajuma Research Centre, EWT's Medike Nature Reserve, University of South Africa, and University of Wisconsin.

Soutpansberg Protected Area in Limpopo.

GLOBAL LINKS

The programme continues to gain recognition on the global stage. One major accomplishment was our role in developing the **Global Congress for Linear Infrastructure and Environment**, of which Wendy Collinson is the co-chair. The vision of the congress is to provide an opportunity for a global gathering that includes both the intellectual content of a scientific conference and the international reach of the United Nations' Sustainable Development Goals.

Alongside two other international experts, Wendy was invited to co-edit a special issue of *Frontiers, Ecology, and Evolution* focused on transport ecology. We also collaborated with six international authors to publish a scientific paper in *Biological Conservation*, 'Designing Wildlife-Vehicle Conflict Observation Systems to Inform Ecology and Transportation Studies.' The study reviewed methods used in six countries to gather animal road mortality data and provided suggestions for countries to develop their own roadkill data collection systems.

In addition, we published a paper in the *Journal of Environmental Management* that outlines a methodology to reduce roadkill count bias. Counting dead animals on roads rarely indicates the full scale of threats, as animals are scavenged, or their carcasses degrade and disappear. This creates biases in detection rates, and the methodologies we developed described various models to reduce this bias. A useful outcome of this paper is the R Shiny app called **RoadSPLAT**, an app that allows researchers to compare the costs and logistical effort of roadkill surveys.

In addition to our global networks, we have given **several online presentations** and workshops both nationally and internationally – primarily about the research we are undertaking and good practice guidelines to gather road mortality data.

NATIONAL TRANSPORT MONTH

October is National Transport Month in South Africa, and in 2020 we ran a successful and innovative campaign on social media using various images of different animals on the road, showing how potholes hamper driving, with a message to watch out for both potholes and animals on the road. Species included tortoises, Leopards, and elephants. Our campaign slogan, in English and isiZulu, was 'Potholes are not the only things to look out for on the roads!'

In January, our billboard campaign, Lives are on the Line (see below), was placed on sections of the N1 highway in Gauteng. Various images, including frogs, snakes, cheetahs, and tortoises, alerted drivers to the risk posed to wildlife when attempting to cross the road by using a painted shape of the animal on the road.

This work is made possible by Artifact and Jurgens Bekker Attorneys.

THE ENVIRONMENTAL AND SOCIAL IMPACT OF HIGHWAYS

Designing and building new roads is critical to developing a country's economy and social aspirations through transporting goods and people. Working with a team of Kenyan partners and WSP Australia – a company providing planning, environmental, and infrastructure services – we are contributing to the environmental and social impact assessment for the Nairobi-Nakuru-Mau Summit Highway in Kenya. The assessment will identify potential locations for wildlife crossings for three key conservation target species: Masai Giraffes, Plains Zebras, and African Buffaloes. To date, we have provided high-level expert input into two workshops, taking the opportunities to involve the EWT's expertise at the road-planning stage and using our knowledge to make a difference for both wildlife and people along this highway.

This work is made possible by WSP Australia.



A billboard placed on the N1 highway in Gauteng to raise driver awareness to the threats vehicles pose to wildlife on the roads.

ROADS TAKE THEIR TOLL ON WILDLIFE

The EWT currently partners with the N3 Toll Concession (N3TC), Bakwena N1/N4 Toll Concession (Bakwena), and Trans African Concessions (TRAC) N4 on their national toll routes. The COVID-19 pandemic triggered several challenges for our programme in 2020, particularly for the in-person training of toll route patrol teams in collecting roadkill data. Despite this, the route patrol teams could still collect data using a specially created WhatsApp group that all patrollers could access.

With the relaxation of COVID-related national lockdown levels in 2021, we **trained 24 route patrollers** and worked with our route patrol teams through face-to-face training, despite travel limitations. We have also written a new handbook that route patrol teams can upload to staff tablets, which is proving more effective than our previous paper manuals.

The various levels of lockdown influenced road movements, providing us with a unique opportunity to examine the effects of traffic volumes on roadkill occurrence and animal behaviour around roads. We received 325 records from the three toll companies in 2019, which reduced to 150 in 2020, demonstrating that despite the various travel restrictions imposed by South Africa's lockdown, wildlife road deaths still occurred, but at a lower rate. Our results will help us to tease apart some of the factors underlying wildlife mortalities on South Africa's busy roads and propose solutions to make roads safer for all road users, both humans and wildlife.

This work is made possible by the Bakwena N1N4 Toll Concession (Bakwena), Ford Wildlife Foundation, N3 Toll Concession (RF) Proprietary Limited (N3TC), and Trans African Concessions (TRAC) N4.

We went from **325** ROADKILL RECORDS ON TOLL ROADS IN 2019 to **150** IN 2020

CAUGHT ON CAMERA

We initiated roadkill-reduction trials on the N3TC highway in March 2021. Working adjacent to the N3 highway, we erected temporary roadside fencing that directs wildlife towards under-road culverts. We intend to divert wildlife from crossing roads directly, with its inherent high risk of injury or death. This work aims to protect both wildlife and road users. Images from our camera traps – **strategically placed in culverts under the roads** – already show species using these tunnels. The species most commonly caught on camera include mongooses, servals, and porcupines. We have even recorded an eagle-owl. We plan to analyse the impacts of our roadside fencing further to determine the success of this project, but early results are promising. Our work represents the first time this method has been trialled on a national highway in South Africa to reduce road-related wildlife deaths.

This work is made possible by the Ford Wildlife Foundation, N3 Toll Concession (RF) Proprietary Limited (N3TC), and IdeaWild.

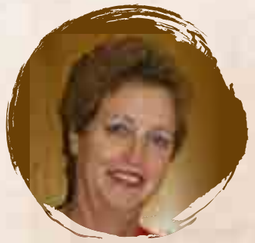
WILDLIFE IN TRANSPORT PROGRAMME TEAM



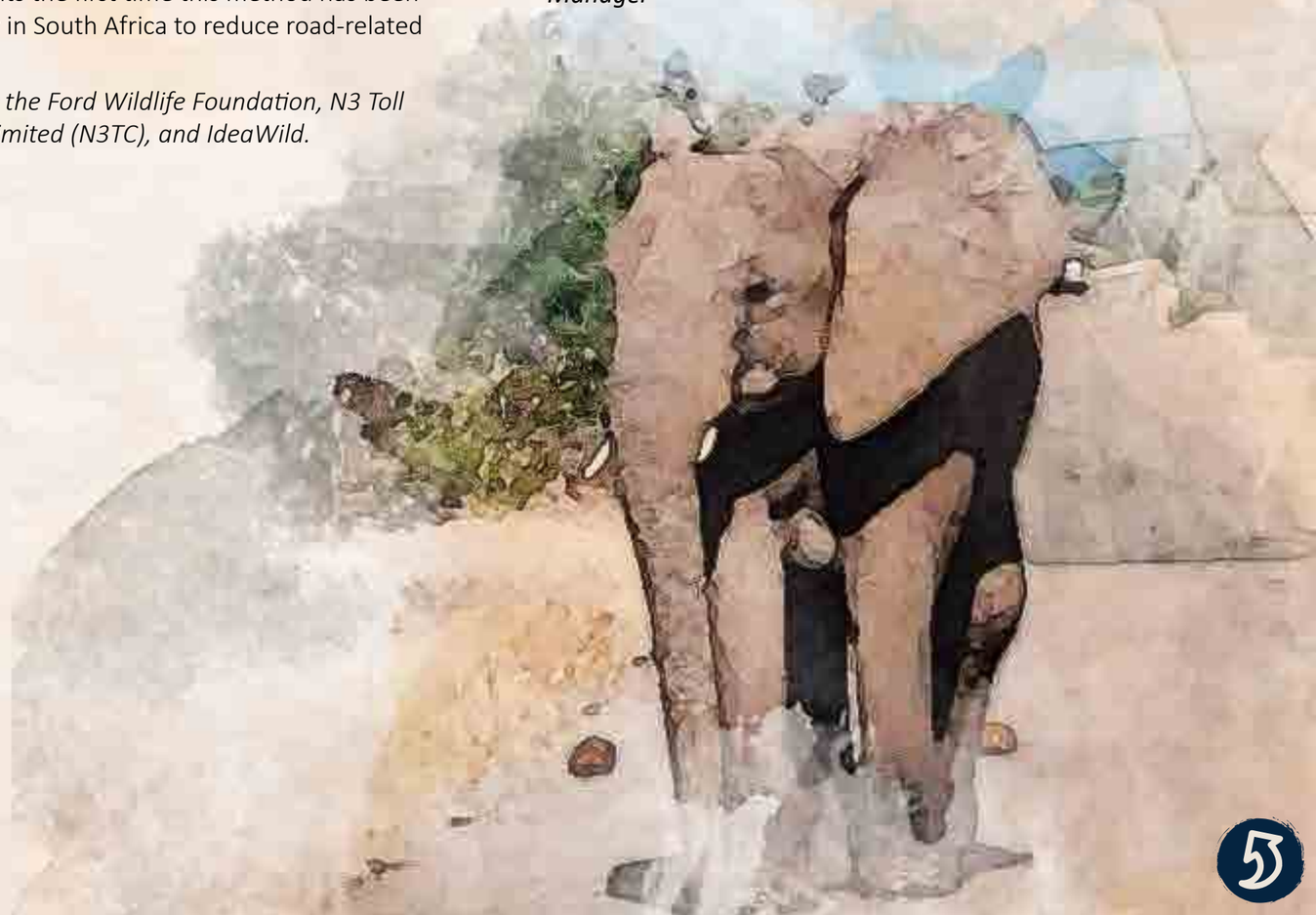
Wendy Collinson-Jonker
Programme Manager



Innocent Buthelezi
Field Officer



Marianne Golding
Administrator
(until March 2021)

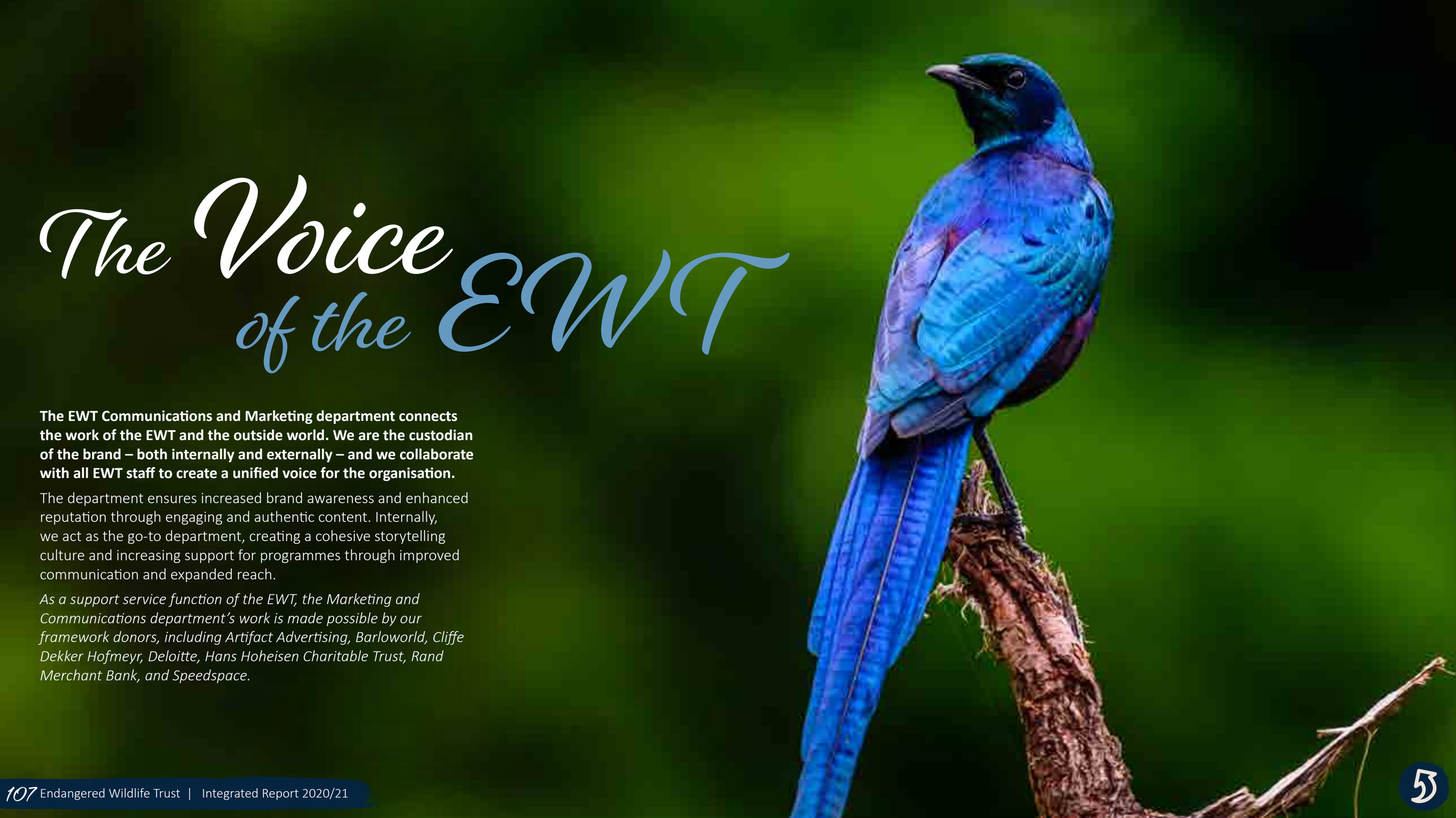


The Voice of the EWT

The EWT Communications and Marketing department connects the work of the EWT and the outside world. We are the custodian of the brand – both internally and externally – and we collaborate with all EWT staff to create a unified voice for the organisation.

The department ensures increased brand awareness and enhanced reputation through engaging and authentic content. Internally, we act as the go-to department, creating a cohesive storytelling culture and increasing support for programmes through improved communication and expanded reach.

As a support service function of the EWT, the Marketing and Communications department's work is made possible by our framework donors, including Artifact Advertising, Barloworld, Cliffe Dekker Hofmeyr, Deloitte, Hans Hoheisen Charitable Trust, Rand Merchant Bank, and Speedspace.



COMMUNICATION CAMPAIGNS

We developed a Mandela Day Campaign called 67 things, providing 67 suggestions for changes that people can make in their everyday lives that can have a significant positive impact in the world, both environmentally and socially. August 2020 (Women's Month) included a great virtual discussion between Ndzalama Chauke (WEP Field Officer), Yolan Friedmann (CEO), and the Honourable Minister Barbara Creecy from the Department of Forestry, Fisheries, and the Environment (DFFE). We also ran a campaign called #inherownwords on social media with interview-style videos of each female staff member discussing their role at the EWT and how they became involved in conservation. Wills Week ran from 26–30 October, and using designs from Artifact and in-house collateral, we posted daily on the importance of having a will, the benefits of including the EWT in one's will, and how much wildlife conservation benefits from bequests. Each Saturday, we feature our Science Saturday posts to showcase the scientific and research outputs of the EWT and general educational material.



ENDANGERED WILDLIFE TRUST
Protecting forever, together.

Women's Month
August 2020



Due to COVID-19 and restrictions on gatherings, this year's annual Leap Day for Frogs took the form of a virtual, month-long campaign encouraging citizen scientists to send frog sightings to our Frog Atlas. The "Find your Frog" project was hosted on **iNaturalist** and encouraged everyone to go out and take images of frogs and toads to be uploaded onto the site. The campaign was a success, with over 520 observations of 52 frog species reported.

With assistance from Artifact, we ran a social media fundraising and brand awareness campaign for World Biodiversity Day on 22 May 2021. The campaign ran for a week with the aim of raising #R22KBefore22May. The campaign used short videos to emphasise the benefits of biodiversity to humans and how humans can positively impact biodiversity in turn. In addition, personalised screensavers with the EWT and our corporate partners' logos were sent out with a personalised message.



BRINGING CONSERVATION HOME

The changes in our lifestyles and working habits brought on by the COVID-19 lockdown persisted for much of the year. While adapting to the significant lifestyle changes over the last year, the role of effective, real-time communication, both within the organisation and externally, has been more critical than ever, and our communication methods have evolved to fulfil this role and meet the conditions and requirements of the new normal.

One of the sad consequences of the lockdown and curtailed mobility was that people worldwide could not travel and experience the incredible wildlife and wild places that South Africa has to offer. This not only reduced the income brought into conservation by tourism, but it also impacted the mental wellbeing benefits that people experience when being in nature. The EWT developed new channels to share our conservation stories and wildlife experiences on various media platforms, including social media, television, and radio to fill this gap. We continued to use our internal communication channels to engage all staff and keep them informed and connected on all matters. We expanded our external reach significantly, ensuring we maintained a public presence by increasing and improving our social media outputs, securing additional billboard and advertising space, refreshing our website look and feel and content, developing and providing professional video content for television broadcasts, working with radio stations to promote events and run campaigns, and working with partners to ensure consistent and inclusive messaging across platforms.

WILD CHATS

We teamed up with the fundraising department during lockdown to bring our supporters a series of Wild Chats online. We hosted a total of 40 informative chats within the reporting period, attended by 3,127 viewers. The recordings of these chats were posted on our YouTube channel and viewed by over 800 people.





THE EWT IN THE MEDIA

The EWT enjoyed extensive media coverage during the reporting period, including features and mentions in print, online, and broadcast media.

Mentioned in

1,000 online articles

WITH A POTENTIAL 1.8 BILLION REACH

Estimated Advertising Value Equivalent (AVE) of coverage for **JULY 2020 – JUNE 2021**

=R16.8 MILLION

MOST FREQUENT REPEAT PUBLISHERS:

- Good Things Guy
- Netwerk24
- IOL
- Getaway Magazine
- MSM South Africa
- Springer

COUNTRIES WHERE COVERAGE WAS RECEIVED

- South Africa – 54%
- India – 28%
- United Kingdom – 3.5%
- United Arab Emirates – 3%
- Australia – 3%
- Mexico – 2%
- Other – 6.5%

COMMUNICATION COLLABORATIONS

We were fortunate to work with many media partners this year, who helped us produce professional multimedia content to communicate our messaging and increase our brand exposure effectively.

Facilitated by EWT Trustee Lloyd Madurai, the EWT communications team and Hot 91.9 FM (now Hot 102.7) developed a radio campaign to increase the EWT's brand exposure and raise awareness about World Environment Day and our critical conservation work. On 4 June, four interviews with staff members (Yolan Friedmann, Jiba Magwaza, Oscar Mohale, and Dr Ian Little) were broadcast live. Throughout the day, environmental tips were given, and over the following week, each show featured an environmentally themed song, whereafter audience members could WhatsApp their names and the song name to enter a draw for an aha Hotels and Lodges giveaway. The brand exposure of this campaign, provided to us for free, was estimated to be worth R312,745.

Waterbear filmed a documentary on the APOPO Rats project overseen by our Wildlife in Trade Programme, showcasing the role of these special rats in scent detection for illegally traded wildlife products such as pangolin scales and hard woods. BlackFly TTL media agency also created a fun and engaging animated video to increase awareness of the EWT, which we launched on Giving Tuesday in November 2020 and aired on all platforms. Lesoba Difference developed a beautiful video on the EWT owned properties and our vision to establish the Soutpansberg Protected Area along with several partners and landowners, which the Coca Cola Foundation (as a key funder of our work on the mountain) also shared on their network of over a million followers on social media and their website. The video was submitted to Wild Earth, Waterbear, People's Weather, and other platforms for broadcast.

MENTIONS OF THE EWT

82% SOCIAL MEDIA & **18%** ONLINE PUBLICATIONS

ADVERTISING

We secured space for several digital adverts for the Wildlife and Transport programme's pothole campaign on AdReach's digital street pole boards on Sandton and William Nicol drives in Johannesburg and finalised a large, sponsored three-panel billboard for the Kruger Mpumalanga International Airport (KMI). EWT adverts appeared in *Trail Mag* and *Farmer's Weekly*, and WildEarth (TV and online channel broadcasting live safaris) assisted us in producing three short promo videos for the EWT. The 30-second adverts were themed around the EWT's focus on keeping wildlife wild and free. These were flighted on DSTV and multiple social media platforms. People's Weather Channel also aired staff interviews and content, along with the 30-second promotional clips.

WE HAVE INCREASED OUR FOLLOWING BY

- 7%
- 27%
- 26%
- 37%
- 17%

COMMUNICATIONS TEAM



Emily Taylor
Head Writer



Khanya Peacock
Designer



Megan MacKeown
Public Relations



Billboard campaign created by Artifact Advertising illustrating the interconnectedness of species, habitats, and people.

Funding our work

Our support services are funded by the EWT's framework donors, including Artifact Advertising, Barloworld, Cliffe Dekker Hofmeyr, Deloitte, Hans Hoheisen Charitable Trust, Rand Merchant Bank, and Speedspace.

INCOME STREAMS

The EWT's income for project activities more or less reflected our 2018/19 income levels but was lower than 2019/20. We attributed this to the effects of an extended lockdown and partly to the significant income received in the preceding financial year for the purchase of EWT land holdings, which bolstered our balance sheet for that reporting period.

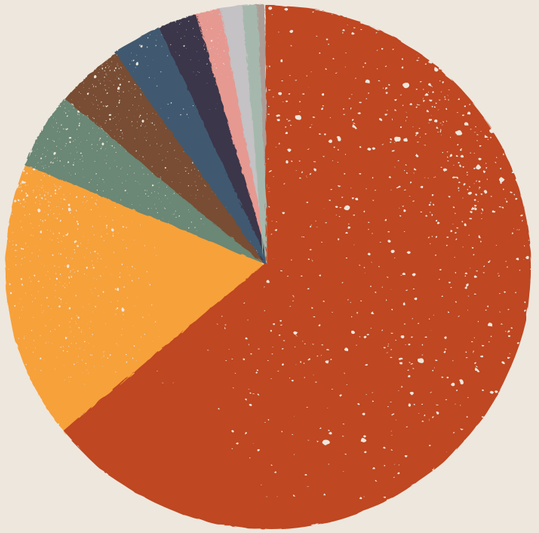
Foundational income continued to represent the EWT's most important income stream, contributing 64% of our 2020/21 revenue. Even so, we recorded a 15% reduction in foundational income (trusts, foundations, and bilaterals) this past year. Several funding cycles came to an end through this period, and while we applied for several significant grants, these are mostly still in the review process and we anticipate them contributing to our future income.

Corporate income is our next most important funding stream. Despite the effects of the pandemic throughout the current reporting period, corporate income increased year-on-year, up 8% from 2019/20, and accounted for 17% of the EWT's total income.

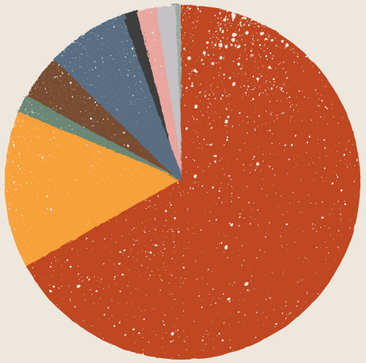
Through an almost three-fold increase, consultancy income moved to represent the next major contributor to income this year, thanks primarily to our USAID Power Africa programme engagement. Philanthropic contributions from individuals remain important to the EWT, as they are mostly unrestricted and cover critical expenses often not secured by project-specific donors. This individual income remained steady, year-on-year while we received slightly lower income from bequests than in previous years.



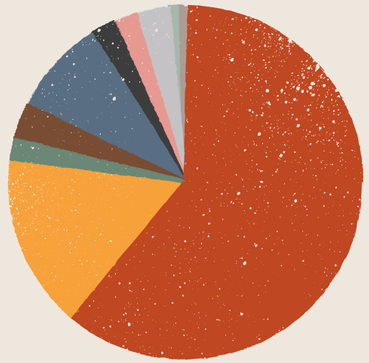
INCOME STREAMS



2021



2020



2019

Foundation | Corporate | Consultancy | Individual | Bequest

Other | Interests | Events | Retail | CRM

GETWILD

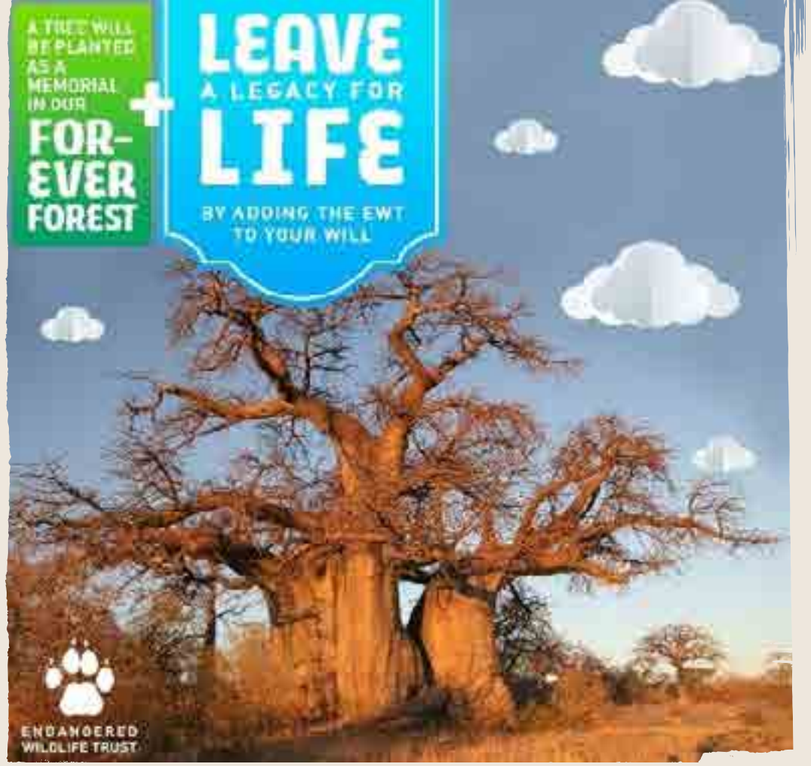
We invested substantial effort into raising our online store's profile and increasing this revenue stream. We rebranded the EWT store as GetWild, and gave it a fresh look and feel. Our supporters loved our EWT animal face masks which highlight some of the beautiful Endangered species on which we focus our conservation work. We also introduced branded winter clothing, as well as t-shirts sporting our disappearing African Wild Dog and Cheetah designs. We logged record sales of EWT-branded items through our shop this year.



ONLINE CAMPAIGNS

The national lockdown forced us to run more virtual campaigns, including a successful Giving Tuesday Now campaign, launched in response to the pandemic in May 2020. This was in addition to our annual Giving Tuesday campaign, held immediately after Black Friday. Faithful to Nature once again named us as their beneficiary for their Black Friday campaign.





BEQUESTS

We are always grateful to those who remember the EWT in their will by pledging to continue supporting the conservation of threatened species. We received bequests from the LM de Jongh, JM Griffiths, David Mitchell, and DB Gaynor estates. To honour the memory of all the individuals who included us in their will, we initiated plans to plant a Memory Forest on our Conservation Campus in Midrand. The forest will be a beautiful tranquil spot on our campus where loved ones can visit and remember those they have lost.

EVENTS

We were able to host three golf days as COVID-related restrictions eased. These included our first golf events in Cape Town and Malelane (adjacent to the Kruger National Park), as well as our annual Johannesburg golf day. These events were well received, as was the sit-down dinner event in Johannesburg for our Conservation Canines and a pop-up art exhibition.

DONATING TO THE EWT

Besides good citizenship and working together towards achieving the Sustainable Development Goals (SDGs), the EWT has a 95% Socio-Economic Development (SED) rating, allowing corporates to receive their full five SED points on their Broad-based Black Economic Empowerment (B-BBEE) scorecard. The EWT can also offer an 18A tax-exemption certificate to corporates and individuals who give bona fide donations.

OUR LOYAL SUPPORTERS

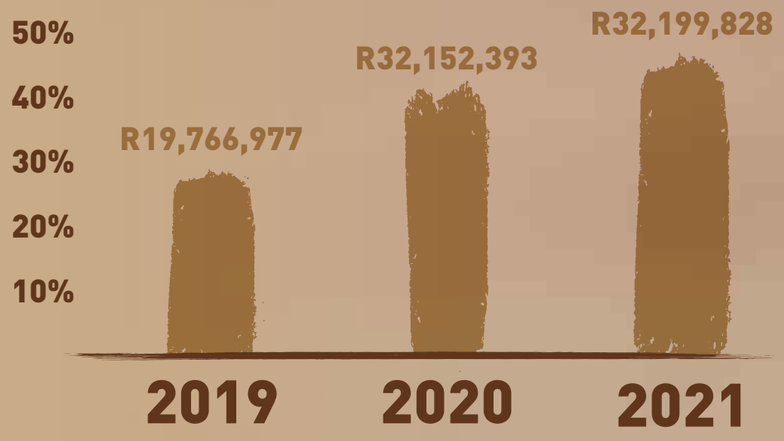
Different ways to give include debit order, stop order, PayFast and GivenGain, while we continue to receive monthly donations through MySchool MyPlanet cards. We partnered with the King Baudouin Foundation in the United States this year, to issue tax certificates on our behalf for donations made from the United States.



Alex, Harry, and Peter, three remarkable 11-year-old boys from Dublin who ran the distance equivalent to that from Dublin to London to raise money for the Endangered Wildlife Trust.

FOREIGN VERSUS LOCAL INCOME

Foreign income remained steady year-on-year, rising by <1% this year. A wide range of donors contributed to our foreign income, most notably from the United States, United Kingdom, and European Union countries. Our foreign donors and partners included the Wilson family, the International Crane Foundation (through our Strategic Partnership), and the UK-based Illegal Wildlife Trade Challenge, which each contributed over R2-million to specific projects.



FOREIGN INCOME AS A PERCENTAGE OF TOTAL INCOME

The percentage of foreign versus local (ZAR) income we received increased 4% in 2021, while the total amount of foreign income the EWT received in 2021 remained very similar to 2020 (foreign income figures above bars).

FUNDRAISING TEAM



Alison Jänicke
Head of Resource Development



Tammy Baker
Business Development Officer



Frank Jackson
Business Development Officer



Dr Tim Jackson
Senior Technical Writer



Rebecca Mabuza
Business Development Administrator



Claire Patterson-Abrolat
Senior Technical Writer

Our Passionate People

The EWT is a people-inspired company. Our staff members and their strength, talent, passion, and energy remain our most essential and valued assets. As such, the Human Resources Department works to support the EWT's Mission and Vision, enabling a progressive and equitable work environment that will attract and retain EWTeam members.



WORKFORCE DEMOGRAPHICS

Our long-term success depends on our capacity to attract, retain, and develop a multicultural and multigenerational team of employees and ensure the ongoing and sustainable growth of the EWT.

	AVERAGE AGE (YEARS)	MALE	FEMALE	BLACK	WHITE	ANNUAL STAFF TURNOVER (N)	STAFF TURNOVER (% OF ALL STAFF)
2018	38.1	47%	52%	47%	53%	7	7.2%
2019	37.2	49%	51%	48%	52%	6	5.9%
2020	38.0	50%	50%	46%	54%	12	11.3%
2021	38.6	49%	51%	46%	54%	7	6.73%

The demographics of staff employed by the EWT each year between 2018 and 2021.

THE EWT'S HUMAN RESOURCE OPERATIONS

Year on year, the EWTeam member numbers have remained mostly unchanged, with a drop of only one:

YEAR	TOTAL NUMBER OF STAFF	PERCENTAGE OF STAFF PER DEPARTMENT
2018/19	102	Support Services Staff 19% Programmatic Staff 81%
2019/20	105	Support Services Staff 17% Programmatic Staff 83%
2020/21	104	Support Services Staff 19% Programmatic Staff 81%

Total number of staff employed by the EWT from 2018–2021 and the percentage of staff in support services and programmes.

EMPLOYMENT EQUITY (EE)

We believe that implementing employment equity strategically and sustainably will foster greater opportunities and benefits for both the EWT and society, and we remain committed to the process.

The table below compares our progress towards achieving our targeted demographic breakdown against our actual demographic figures on 30 June 2021. There has been a slight improvement of 1% growth in Coloured female targets, but this is still below target compared to last year. An increase of 1% can also be seen in the number of African males.

PERIOD	MALE				FEMALE				TOTAL	
	African	Coloured	Indian	White	African	Coloured	Indian	White	Male	Female
Target figures as per EE Plan	21%	1%	1%	20%	16%	6%	1%	33%	43%	57%
Actual figures as of 30 June 2021	27%	0%	1%	21%	12%	5%	2%	33%	49%	51%
	▲	▼	▲	▲	▼	▼	▲	▲	▲	▼

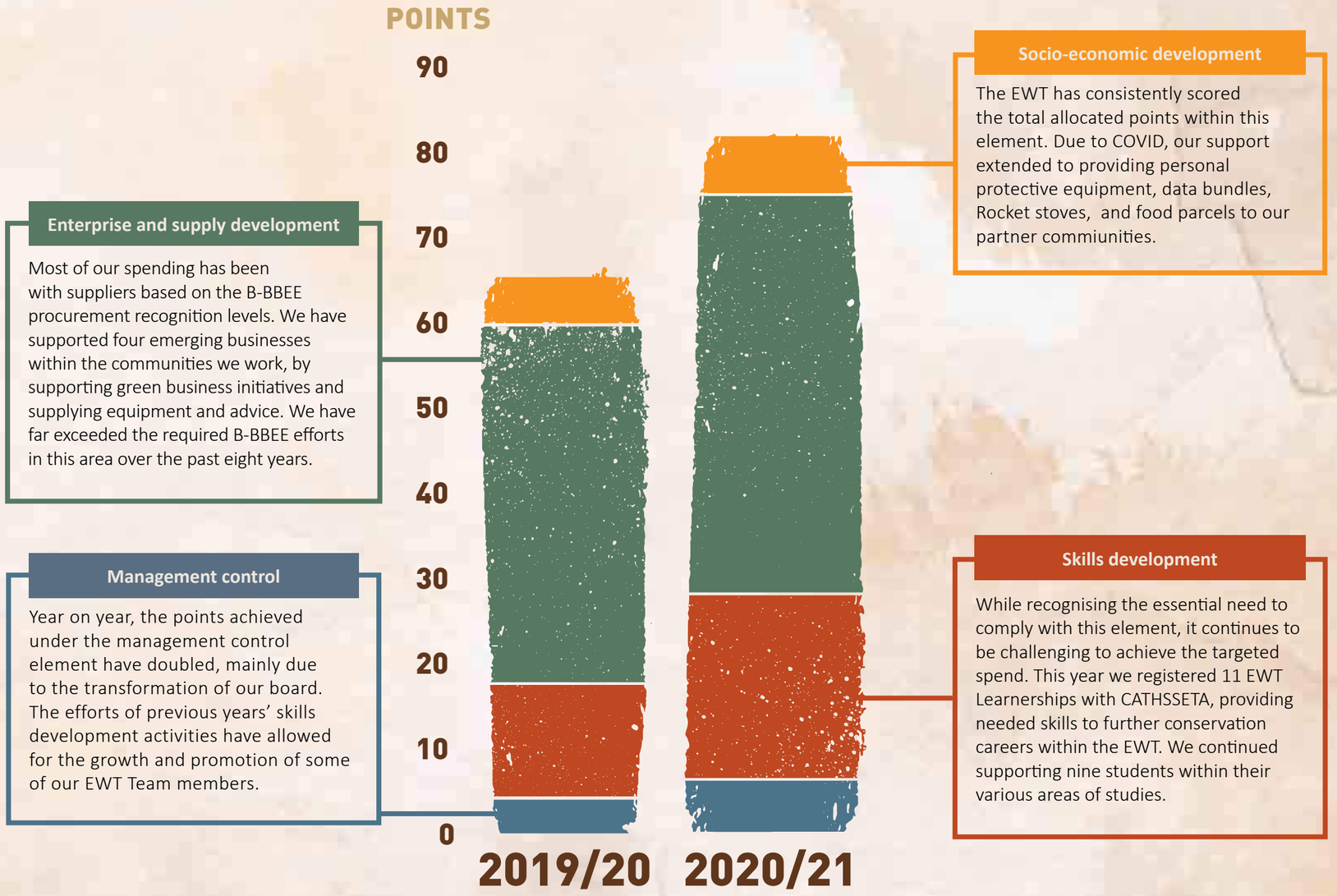
Progress towards achieving our targeted demographic breakdown against our actual demographic figures on 30 June 2021.

BROAD-BASED BLACK ECONOMIC EMPOWERMENT AND SOCIO-ECONOMIC DEVELOPMENT CERTIFICATE

Despite us scoring a level 7 on the Broad-Based Black Economic Empowerment (B-BBEE) Generic Certificate rating for the rating period 2019/20, we anticipate achieving no less than a level 4 rating in the current reporting cycle.

The EWT also has a 95% rating for our Socio-Economic Development (SED) Certificate. The SED certificate allows the EWT's supporters to recognise 95% of the value of their sponsorship in calculating their own scorecards.

INDICATOR	2019/20	2020/21	TARGET POINTS	ACHIEVED POINTS
Management control	3,2	6,7	20	6,7
Skills development	15,04	21,97	30	21,97
Enterprise and supply development	41,63	46,63	54	46,63
Socio-economic development	5	5	5	5



The EWT has made improvements across the four core elements of its Amended Specialised Generic Score Card

TALENT MANAGEMENT

We acknowledge the value of the development and training of the EWTeam and encourage and facilitate further studies and training in relevant fields. However, COVID-19 social distancing restrictions prevented us from holding our regular annual training initiatives, such as Development Week. Fortunately, our Conservation Week that took place from 19–23 April 2021 allowed us to hold in-depth strategic discussions to guide us through the coming five years.

Although our internal training has been limited, we have excelled in the support we have offered through learnerships, internships, and student programmes during this reporting cycle.

Of the 12 interns hosted during this reporting period, eight have been absorbed into permanent positions, with the remaining four continuing their internship programmes. We have continued to collaborate with students working in the conservation sector and started supervising an additional two, bringing the total number of students supported this year to 12. Their qualifications included BTech Nature Conservation, Honours, Masters, and Doctoral degrees, some of which were completed this year. These students were enrolled at the Sefako Makgatho Health Sciences University, Tshwane University of Technology, University of Cape Town, University of KwaZulu-Natal, University of Pretoria, University of Venda, and the University of the Witwatersrand. The EWT considers it an honour and privilege to support these students through their academic years and ultimately into employment.

In addition to the above, the EWT has enrolled 11 of our talented EWTeam members in one-year Generic Management Learnerships through Training Force. With their previous academic studies being science-focused, we believe the skills gained through this programme will equip them for the next step in their career path.



Some of the EWTeam members attending a contact session at our head office in Midrand.

HUMAN RESOURCES TEAM



Alison Jänicke
Head of Resource Development



Emma Chisare
Human Resources Assistant



Rudolf Ndwalane
Head Groundsman



Takalani Ndwalani
Groundsman



Thembi Mlimi
Housekeeper



Dorah Mncube
Housekeeper



Sizakele Ntsele
Housekeeper

Ensuring Good Governance

The EWT is a Trust registered in accordance with the Trust Property Control Act No. 57 of 1988, under Master of the High Court reference number IT 6247. The Amended and Restated Deed of Trust 2014, as registered with the Master of the North Gauteng High Court in Pretoria, is the founding document of the EWT and lays out the roles and responsibilities of Trustees, the Board and the committees of the Board. EWT Trustees are not remunerated for their services and serve the EWT in a voluntary capacity. The EWT Management thanks the Trustees for giving their time freely and for their contribution to the governance and strategic direction of the Trust.

TRUSTEE MEETINGS

ANNUAL GENERAL MEETING

The 46th EWT AGM took place on 26 November 2020 and was held with some Trustees attending in person at the EWT Conservation Campus in Midrand and some via a virtual platform due to the COVID-19 pandemic.

The meeting noted and accepted the resignations of three Trustees that were tendered during the calendar year, being Dr Anusha Lucen (26 January 2020), Dr Ven Pillay (17 August 2020) and Kiyasha Thambi (30 October 2020).

The meeting accepted and ratified the recommendation of the Board of Trustees that seven new Trustees be invited into Trusteeship, being Dr Luthando Dziba, Roshael Hoosen, Praxedis Hwindingwi, Lloyd Madurai, Valli Moosa, Douglas Ramaphosa, and Mpho Sono.

Dirk Ackerman's and Paul Smith's current three-year terms of office, as Chair and Treasurer, respectively, formally ended at this meeting. In accordance with the Trust Deed, the election for both positions was held, and both incumbents were proposed, seconded, and re-elected unopposed to remain in office until the 2023 AGM.

The meeting resolved that the Vice Chair should forthwith serve a three-year term of office and Mr Antony Wannell was re-elected unopposed and continues as Vice Chair until the 2023 AGM.

The AGM voted to ratify the Annual Financial Statements for the year ending 30 June 2020 as audited by Deloitte. The Trustees voted to retain Deloitte as the auditors of the Trust.

BOARD AND COMMITTEES

As per the Trust Deed, the Board administers the affairs of the Trust, performing oversight of the management function of Executive Management staff. The Board now consists of 23 Trustees, including the CEO as an ex officio member. The Board met four times this financial year and undertook activities in accordance with its Charter and to fulfil its Work Plan, which is developed and adopted annually on a calendar-year basis. In line with the principles of excellent corporate governance, the Board evaluates its own performance in relation to its Work Plan at the end of every year.



The Board Committees assist the Board in the administration of the affairs of the Trust.

The COVID-19 pandemic Board sub-committee continued to guide Executive Management in formulating the Trust's response to the pandemic itself and adapting the EWT's work activities to the restrictions imposed.

BOARD MEETING ATTENDANCE DURING THE PERIOD 2020/21

BOARD	1 OCT 20	26 NOV 20	30 MAR 21	24 JUN 21
Dirk Ackerman – Chair	✓	✓	✓	✓
Antony Wannell – Vice Chair	✓	✓	✓	✓
Paul Smith – Treasurer	✓	✓	✓	✓
Prof Barry Ackers	✗	✓	✓	✓
Angela Cherrington	✓	✓	✓	✓
Anthony Diepenbroek	✓	✓	✓	✗
Luthando Dziba	NA	NA	✓	✗
Mike Esterhuysen	✓	✓	✓	✓
Joanna Goeller	✗	✓	✗	✓
Sharmila Govind	✓	✓	✓	✗
Roshael Hoosen	NA	NA	✓	✓
Praxedis Hwindingwi	NA	NA	✓	✓
Karin Ireton	✓	✓	✓	✓
Lloyd Madhurai	NA	NA	✓	✓
Abdul Mohamed	✓	✗	✗	✗
Valli Moosa	NA	NA	✓	✓
Crispian Olver	✓	✓	✓	✓
Douglas Ramaphosa	NA	NA	✓	✓
Lesego Rammusi	✓	✓	✓	✓
Christo Reeders	✓	✓	✗	✗
Muhammad Seeedat	✓	✓	✓	✓
Mpho Sono	NA	NA	✓	✓
Kiyasha Thambi	✓	RESIGNED		
Ms Yolan Friedmann – CEO – ex officio	✓	✓	✓	✓
In attendance – Ms Mandy Poole – COO	✓	✓	✓	✓



AUDIT AND FINANCE COMMITTEE

The Audit and Finance Committee (AFC) is an official committee of the Board established under Clause 23.1 of the Amended and Restated Deed of Trust 2014. It is chaired by Paul Smith in his capacity as Treasurer. The AFC also adopts an annual Work Plan for the calendar year and self-evaluates at the year's close. The AFC met four times this financial year to fulfil its financial oversight responsibilities to the Board and the Trust, in particular the approval of the annual budget for the financial year and continual monitoring of performance against this budget.

AUDIT AND FINANCE COMMITTEE MEETING ATTENDANCE DURING THE PERIOD 2020/21

AFC	22 SEP 20	19 NOV 20	25 MAR 20	15 JUN 21
Paul Smith – Treasurer and Chair – ex officio	✓	✓	✓	✓
Prof Barry Ackers	✓	✗	✓	✓
Prax Hwindingwi	NA	NA	NA	✓
Abdul Mohamed	✓	✓	✓	✗
Neil Morris	✓	✓	✓	✗
Lesego Rammusi	✗	✗	✗	NA
Muhammad Seedat	✓	✓	✓	✓
Mpho Sono	NA	NA	NA	✓
Antony Wannell	✓	✓	✓	✓
In attendance – Yolan Friedmann – CEO	✓	✓	✓	✓
In attendance – Mandy Poole – COO	✓	✓	✓	✓

The AFC, the Board of Trustees, and the EWT Management team, are grateful for the support of Deloitte in the carrying out of the organisation's annual financial audit.

SOCIAL, ETHICS AND REMUNERATION COMMITTEE

The Social, Ethics and Remuneration Committee (SERC) met three times through the financial year as noted below. The SERC also works to an annual Work Plan.

SOCIAL ETHICS AND REMUNERATION COMMITTEE MEETING ATTENDANCE DURING THE PERIOD 2020/21

SERC	21 OCT 20	25 MAR 21	15 JUN 21
Karin Ireton – Vice Chair & Acting Chair	✓	✓	✓
Mike Esterhuysen	✓	✓	✓
Sharmila Govind	✗	✗	✓
Roshael Hoosen	NA	NA	✓
Douglas Ramaphosa	NA	NA	✓
Lesego Rammusi	NA	NA	✓
Paul Smith	✓	✓	✓
In attendance – Yolan Friedmann – CEO	✓	✓	✓
In attendance – Alison Jänicke – Head of Resource Development	✓	✓	✓

INTERNAL STRUCTURES

EXECUTIVE MANAGEMENT TEAM: The EWT Executive Management Team consisted of Yolan Friedmann, (CEO and Chairperson), Mandy Poole (Chief Operations Officer), Dr Harriet Davies-Mostert (Head of Conservation), Alison Jänicke (Head of Resource Development), Kerryn Morrison (Senior Programme Manager: Africa), Constant Hoogstad (Senior Programme Manager: Industry Partnerships) and Dr Ian Little (Senior Programme Manager: Habitats). The team generally meets on a weekly basis, subject to schedules and holidays. During the financial year, the Executive Management Team met 26 times. Agenda items focus on strategic matters, governance and compliance, financial performance, resource development ¬(human and financial), physical infrastructure (properties and equipment), operations and IT, communications and branding, partnerships, and new ventures. The Executive Management Team continued to lead in the management of the Trust's response to COVID and the national lockdown, and its activities in times of severe restrictions in the country.

CONSERVATION MANAGEMENT TEAM: The EWT Conservation Management Team (CMT) met ten times during the financial year. Support Services and Programme Managers attend these meetings, where the focus is on conservation, research, ethics, operations, strategic and programmatic issues. Matters discussed include programme and project management, conservation strategy, ethics, data sharing, science and research, partnerships, new projects and regional field offices. Financial wellbeing and sustainability are also discussed from a programme/project perspective. Having regard to the restrictions on movement due to the COVID-19 pandemic, the EWT used internet-based video meeting platforms to provide staff with the ability to participate remotely in these crucial meetings by audio and/or video conferencing.

CONSERVATION FORUM: The EWT Conservation Forum (CF) met ten times in the financial year. These meetings are for all staff, and, in keeping with the restrictions on movement due to the COVID-19 pandemic this financial year, staff met using internet-based video meeting platforms. The CF provides a forum for information-sharing between field and head office-based staff and seeks to promote a greater understanding of one another's portfolios of work. Guest speakers often attend to raise awareness of issues outside of the EWT's fields of expertise. Meetings are recorded for staff to listen to if they are unable to attend in real-time.

COMPLIANCE

The EWT regularly reviews its internal policies and procedures to ensure that the Trust is compliant with and progressive in its application of all external and statutory requirements. In this respect, the Trust created a new position in this financial year of Governance and Compliance Manager. There has been a special emphasis on the Protection of Personal Information Act and its statutory obligations, with the implementation date of the Act being 1 July 2021.

In the financial period under review, Cliffe Dekker Hofmeyr has provided invaluable legal assistance, particularly regarding the issuance of new Letters of Authority by the Master of the High Court.

FINANCE AND GOVERNANCE TEAM



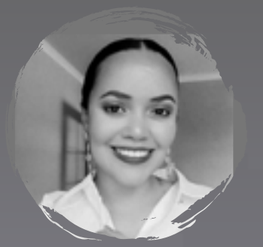
Mandy Poole
Chief Operations Officer



Lauren Bailey
Senior Accountant



Melissa Govindsamy
Senior Bookkeeper



Marion Groenewaldt
Governance and Compliance Manager



Yves Manana
Information Technology Manager



Florence Nkholise
Head of Finance

Financial Statements



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INDEPENDENT AUDITOR'S REPORT ON THE SUMMARY FINANCIAL STATEMENTS TO THE TRUSTEES OF THE ENDANGERED WILDLIFE TRUST

Opinion

The summary financial statements, which comprise the summary statement of financial position as at 30 June 2021, the summary statement of comprehensive income, and summary notes, are derived from the audited financial statements of The Endangered Wildlife Trust for the year ended 30 June 2021. We expressed a qualified audit opinion on those financial statements in our report dated 28 October 2021.

In our opinion, the accompanying summary financial statements are consistent, in all material respects, with the audited financial statements, in accordance with the basis of accounting described in note 1 to the financial statements. However, the summary financial statements are misstated to the equivalent extent as the audited financial statements of The Endangered Wildlife Trust for the year ended 30 June 2021.

Summary Financial Statements

The summary financial statements do not contain all the disclosures required by the requirements as set out in note 1 to the financial statements. Reading the summary financial statements and the auditor's report thereon, therefore, is not a substitute for reading the audited financial statements and the auditor's report thereon.

The Audited Financial Statements and Our Report Thereon

We expressed a qualified audit opinion on the audited financial statements in our report dated 28 October 2021.

In common with similar organisations, it is not feasible for the Endangered Wildlife Trust to institute accounting controls over cash collections from subscriptions, donations and fundraising activities prior to the initial entry of such collections in the accounting records. Accordingly, it was impractical for us to extend our examination beyond the receipts actually recorded.

Trustees' Responsibility for the Summary Financial Statements

The Trustees are responsible for the preparation of the summary financial statements in accordance with basis of accounting described in note 1 to the financial statements and the requirements of the Fundraising Act, for determining that the basis of preparation is acceptable in the circumstances and for such internal control as the trustees determine is necessary to enable the preparation of the summary financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on whether the summary financial statements are consistent, in all material respects, with the financial statements based on our procedures, which were conducted in accordance with International Standard on Auditing (ISA) 810 (Revised), Engagements to Report on Summary Financial Statements.

Deloitte & Touche

Deloitte & Touche
Registered Auditors

Per: F. Coovadia
Partner
28 October 2021

MAKING AN IMPACT THAT MATTERS since 1845

National Executive: *L Bam Chief Executive Officer *TMW Jordan Deputy Chief Executive Officer *Clients & Industries *MJ Jarvis Chief Operating Officer *M Mkosi Audit & Assurance *N Sing Risk Advisory *JP Nothnagel Tax & Legal *MW Hobbs Consulting *R Kruger Human People & Purpose *AG Da Sa Risk Independence & Legal *TS Hudson Financial Advisory *K Govender Chief of Staff Office

A full list of partners and directors is available on request. * Partner and Registered Auditor

B-BBEE rating: Level 1 contribution in terms of the DTI Generic Scorecard as per the amended Codes of Good Practice

Associate of Deloitte Africa, a member of Deloitte Touche Tohmatsu Limited

SUMMARY STATEMENT OF FINANCIAL POSITION

as at 30 June 2021

	NOTES	30 JUNE 2021 R	30 JUNE 2020 R
ASSETS			
Non-current assets			
Land holdings and Buildings	2	24 253 765	24 065 627
Property and equipment	3	3 900 616	2 804 871
Total non-current assets		28 154 381	26 870 498
Current assets			
Accounts receivable	6	1 149 550	1 166 339
E-shop stock in hand		125 509	264 181
Cash and cash equivalents	7	51 684 092	38 021 543
Total current assets		52 959 151	39 452 063
TOTAL ASSETS		**81 113 532**	**66 322 561**
FUNDS AND LIABILITIES			
Trust funds			
Accumulated funds		8 925 281	8 807 776
Non-distributable reserves	4	27 033 160	26 057 219
Total Trust funds		35 958 441	34 864 995
Current liabilities			
Accounts payable	5	2 015 945	1 447 281
Funds held on behalf of other organisations	8	3 911 463	3 240 074
Deferred revenue	10	38 428 236	25 990 376
Leave Provision	9	799 448	779 835
Total current liabilities		45 155 091	31 457 566
TOTAL FUNDS AND LIABILITIES		**81 113 532**	**66 322 561**

SUMMARY STATEMENT OF COMPREHENSIVE INCOME

for the year ended 30 June 2021

	NOTES	30 JUNE 2021 R	30 JUNE 2020 R
Revenue		57 536 419	68 695 081
Expenses		(57 418 914)	(69 359 319)
Total Comprehensive Operational (Deficit)/ Surplus for the year		117 505	(664 238)
After charging:			
Depreciation			
Owned and leased assets – charged to income	3	230 739	173 268
– charged to non-distributable reserves	3	1 584 001	805 153
		1 814 740	978 421
and after crediting:			
Interest received – bank deposits		1 314 376	1 544 384
Accumulated funds at beginning of period		8 807 776	9 472 014
Accumulated funds at end of period		8 925 281	8 807 776



NOTES TO THE SUMMARY FINANCIAL STATEMENTS

1. ACCOUNTING POLICIES

The financial statements are prepared on the historical cost basis. The following are the principal accounting policies used by the Trust and are consistent with those of the previous periods.

1.1 Revenue

Gross revenue excludes value-added tax and represents bequests, grant, institutional and bilateral income, individual and corporate donations, interest on cash balances and other voluntary contributions. Project income is recognised as project expenses are incurred. All other income and expenses are recognised on receipt and disbursement.

1.2 Deferred revenue

Revenue received for specific projects is matched against project expenditure when incurred. Unspent Programme Revenue is treated as Deferred Revenue. Deferred revenue relating to completed projects is re-allocated to other projects. Deficits are recouped from other donors or projects.

1.3 Land holdings

The Trust raises funds from donors specifically for the purchase of land holdings, to further conservation and biodiversity protection. Land holdings are included at cost and are not depreciated.

1.4 Vehicles and equipment

Vehicles and equipment are included at cost. Cost includes all costs directly attributable to bringing the assets to working condition for their intended use.

Depreciation is calculated by a charge to income computed on a straight-line basis so as to write off the cost or amount of the valuation of the assets over their expected useful lives.

The depreciation rates applicable to each category of fixed assets are as follows:

Vehicles	20% straight-line
Equipment	33.3% straight-line

Donated artwork is not depreciated.

Assets purchased for projects are charged against revenue upon acquisition. The related depreciation of these assets is written down against Non-Distributable Reserves.

The gain or loss arising on the disposal of an item of property and equipment is determined as the difference between the sale proceeds and the carrying amount of the asset and is included in income or deficit for the period.

1.5 Cash and cash equivalents

Cash and cash equivalents are measured at fair value and comprise cash on hand, deposits held on call with banks and investments in money market instruments.

1.6 Provisions

Provisions are recognised when the Trust has a present obligation (legal or constructive) as a result of a past event, it is probable that the Trust will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the statement of financial position date, taking into account the risks and uncertainties surrounding the obligation.

Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, the receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

1.7 Financial instruments

Financial assets and financial liabilities are recognised on the Trust's statement of financial position when the Trust has become a party to contractual provisions of the instrument.

Financial assets

The Trust's financial assets are bank balances and cash and accounts receivable.

The accounting policy for bank balances and cash is dealt with under cash and cash equivalents set out in note 1.5.

Accounts receivable are stated at amortised cost.

Financial liabilities

The Trust's principal financial liabilities consist of accounts payable.

Accounts payable are stated at amortised cost.

1.8 Trust funds

The Trust raises funds for future projects which are designated as Special Funds in the Statement of Financial Position. Due to the fact that the future use of these funds is unspecified, Management assesses and releases funds back to the Statement of Comprehensive Income as and when approved by a resolution of the Board. The Trust does not currently hold any Special Funds.

1.9 E-Shop Products

E-Shop products bought are treated as a prepayment and only recognised as an expense when items are sold.

They are however shown as a separate item on the Balance Sheet.

Awards and Achievements

EXTERNAL RECOGNITION

Our staff are regularly recognised, both internationally and nationally, for their outstanding contributions towards conservation. These awards provide well-deserved acknowledgement for our staff and are an important indicator of our conservation credentials. The EWT is very proud of the following staff who were recognised in the past year for their conservation excellence:

- **Conservation Coaches Network's Global Conservation Case Study Competition:** the EWT's Conservation Science Unit was awarded first place for its case study describing how the EWT and the International Crane Foundation have worked together to institutionalise the Conservation Standards into our work. The Conservation Standards are an internationally recognised system used to plan, implement, and monitor conservation initiatives and adapt projects to meet their conservation objectives.
- **Top 100 Youth Conservation Leaders Award:** Cole du Plessis (Carnivore Conservation Programme) and Oscar Mohale (Wildlife and Energy Programme) both received this award. Richly deserved, both won their award for impactful conservation in Africa. They will benefit through a personalised one-year leadership development programme that will mentor and train a team of youth professionals to contribute to Africa's Agenda 2063.
- **Ezemvelo KZN Wildlife Honorary Rangers Certificate of Recognition:** Samson Phakathi (People in Conservation Programme) received this certificate in September 2020 in recognition of his contribution to addressing illegal hunting with dogs in KwaZulu-Natal.





Khanya Peacock

INTERNAL AWARDS

The EWT acknowledges outstanding achievements by its staff through monthly and annual awards. The top achievers for this year include:

- **Programme of the Year:**
  Drylands Conservation Programme
- **Programme Manager of the Year:**
  Lourens Leeuwner – Wildlife and Energy Programme
- **Conservation Achiever of the Year:**
  Ronelle Visagie – Birds of Prey Programme
- **Conservation Achiever of the Year (runner up):**
  Jean-Pierre Le Roux – Drylands Conservation Programme
- **Conservation Supporter of the Year:**
  Khanya Peacock – Marketing and Communications
- **Honey Badger (fiercest field officer):**
  Cath Vise – Soutpansberg Protected Area
- **Maluti Award (managing conflict situations):**
  Joshua Weeber – Threatened Amphibian Programme
- **Media Award:**
  Drylands Conservation Programme
- **Newcomer of the Year:**
  Tina Hiller – Wildlife in Trade Programme
- **Long Service Award – 10 years:**
  Mandy Poole – Chief Operations Officer
  Ian Little – Senior Manager, Habitats
  Constant Hoogstad – Senior Manager, Industry Partnerships
- **Long Service Award – 20 years:**
  Melissa Govindsamy – Finance
  Samson Phakathi – People in Conservation Programme



Ian Little, Khanya Peacock, and Megan MacKeown.



Lourens Leeuwner



Ian Little



The 2020 EWT award winners

Who we Work with

STRATEGIC PARTNERSHIPS

The EWT achieves its significant conservation impacts by collaborating with a host of organisations, including government agencies and parastatals, communities, other NGOs, companies, academic institutions and private individuals. While our current partnerships are too numerous to mention individually, we would like to draw attention to the following overarching strategic alliances and partnerships that were in force over the past year:

- Administração Nacional das Áreas de Conservação (ANAC, Mozambique)
- African Parks
- Afriwet Consultants Etude & Conseils
- aha Hotels and Lodges
- Alliance for Zero Extinction (International)
- Amathole District Municipality
- APOPO (Anti-Persoonsmijnen Ontmijnende Product Ontwikkeling) (Belgium/Tanzania)
- Artifact Advertising
- Ashia Cheetah Conservation
- Bateleurs
- Bionerds (Pty) Ltd
- BirdLife South Africa
- Birdlife Botswana
- BirdWatch Zambia
- Business for Nature
- Cape Leopard Trust
- CapeNature
- Community Action for Nature Conservation (Kenya)
- Conservation International Foundation South Africa
- Conservation Outcomes
- Conservation South Africa
- Department of Forestry, Fisheries, and the Environment
- East African Energy Programme
- Eastern Cape Department of Rural Development and Agrarian Reform
- Eastern Cape Parks and Tourism Agency
- Eskom Holdings SOC Ltd
- Ezemvelo KZN Honorary Rangers
- Ezemvelo KZN Wildlife
- Fauna and Flora International
- Fishwater Films
- FitzPatrick Institute of African Ornithology
- Global Biodiversity Information Facility (International)
- Gauteng Department of Agriculture and Rural Development
- Hawk Conservancy Trust (UK)
- International Crane Foundation (USA)
- Johannesburg Zoo



Lindy Thompson (right) with the Black Mambas.



The EWT and SANParks collaring an African Lion.

We acknowledge our donors and supporters in the relevant pages throughout this report

- Integrated Polytechnic Regional College-Kitabi (Rwanda)
- Karkloof Conservancy
- Kipsaina Crane and Wetland Conservation Group
- Kimberley Veterinary Clinic
- Kruger 2 Canyons Biosphere Reserve
- Lesoba Difference
- Lilongwe Wildlife Trust (Malawi)
- Limpopo Department of Economic Development, Environment, and Tourism
- London School of Hygiene (UK)
- Margaret Pyke Trust
- Mohololoholo Rehabilitation Centre
- Mondi South Africa
- Mozambique Wildlife Alliance
- NARREC (Namibia)
- National Department of Parks and Wildlife (Zambia)
- National Zoological Gardens of South Africa
- Nature Uganda
- North West Parks and Tourism Board
- Northern Cape Department of Agriculture, Environmental Affairs, Rural Development and Land Reform
- Overberg Crane Group
- Painted Dog TV
- Pathfinder International
- Peace Parks Foundation
- People's Weather
- Power Africa (USAID)
- The Peregrine Fund (UK)
- Population Sustainability Network (UK)
- Rainforest Trust (USA)
- Raptors Botswana
- re:wild (formerly Global Wildlife Conservation) (USA)
- Rugarama Hospital
- Saving the Survivors
- Sibanye-Stillwater
- South African Hunters and Game Conservation Association
- South African Institute for Aquatic Biodiversity
- South African National Biodiversity Institute
- South African National Parks
- Southern African Energy Programme
- Synchronicity Earth
- The Wild Foundation (US)
- The Peregrine Fund
- Together SA CAN NPO
- TRAFFIC (East/Southern Africa)
- Uganda Conservation Foundation
- Uganda Ministry of Wildlife, Tourism, and Antiquities
- Umzimvubu Catchment Partnership
- United Nations Development Programme
- Vhembe Biosphere Reserve
- Waterbear
- We Act
- WESSA (Wildlife and Environment Society of South Africa)
- Western Cape Department of Agriculture
- White River Animal Hospital
- Wilderness Foundation
- Wildlife Act
- Wild Earth
- WWF South Africa
- WWF Zambia



Preparing a Cheetah for translocation to Maputo Special Reserve in Mozambique. Photo credit: Ashia Cheetah Conservation.

In addition, through our action on the ground across most of the country, we work closely with all relevant national and provincial conservation departments and agencies.

Our efforts to ensure that our work is based on sound scientific methods, and contributes to knowledge in the conservation sector, mean that we have forged strong relationships with a diversity of academic institutions, and many staff have formal associations with universities. Our academic partners include:

- Alterra Wageningen University (Netherlands)
- Boise State University (USA)
- Durham University (UK)
- Liverpool John Moores University (UK)
- North-West University
- Reading University (UK)
- Rhodes University
- Swedish University of Agricultural Sciences
- Tshwane University of Technology
- University of Cape Town
- University of Edinburgh (UK)
- University of the Free State
- University of Johannesburg
- University of KwaZulu-Natal
- University of Kent (UK)
- University of Limpopo
- University of Mpumalanga
- University of Pretoria
- University of Stellenbosch
- University of Utah (USA)
- University of Venda
- University of Wisconsin (USA)
- University of the Witwatersrand



The EWT's Drylands Conservation team and Samantha Mynhardt from University of Pretoria (left) searching for golden moles in the dunes of South Africa's West Coast. This expedition was made possible through a collaboration with re: Wild. Photo credit: Nicky Souness.

THE EWT AND THE IUCN – THE INTERNATIONAL UNION FOR CONSERVATION OF NATURE

The EWT is a long-standing member of the International Union for Conservation of Nature (IUCN), the world's oldest and largest global environmental organisation comprising approximately 1,400 government and NGO members. During the year under review, the EWT's Head of Conservation, Dr Harriet Davies-Mostert, continued in her role as Chair of the IUCN South Africa National Committee, served as Chair of the Regional Committee for the East and Southern African Region, and represented the region on the Global Group for National and Regional Committee Development.

In addition, our expert staff play key roles among several of the IUCN's Commissions. Dr Ian Little maintained his position as the Regional Chair for East and southern Africa for the Commission on Ecosystem Management, and also represented the EWT on the Temperate Grasslands Specialist Group, and the Privately Protected Areas and Nature Stewardship Group, of the World Commission on Protected Areas (WCPA). Wendy Collinson was also an active member of several specialist groups of the WCPA related to connectivity and road ecology.

We are particularly active in the IUCN Species Survival Commission, with staff currently contributing to the following specialist groups and bodies under this commission:

- Afrotheria Specialist Group (Dr Andrew Taylor, Chair).
- Amphibian Specialist Group (Dr Jeanne Tarrant, Co-Chair Habitat Protection Working Group; Regional Chair, Afrotropical Realm).
- Canid Specialist Group, and its subsidiary, the Wild Dog Advisory Group (Dr Harriet Davies-Mostert).
- Cat Specialist Group, and its subsidiary, the African Lion Working Group (André Botha; Dr Harriet Davies-Mostert, Yolan Friedmann, Samantha Nicholson).
- Conservation Planning Specialist Group (André Botha; Dr Harriet Davies-Mostert, Kerryn Morrison).
- Crane Specialist Group (Kerryn Morrison, Chair).
- Hornbill Specialist Group (André Botha, Dr Gareth Tate).
- National Red List Alliance (Dr Harriet Davies-Mostert, Coordinating Body).
- Species Monitoring Specialist Group (Lizanne Roxburgh).
- Stork, Ibis and Spoonbill Specialist Group (André Botha).
- Sustainable Use and Livelihoods Specialist Group (Andrew Taylor)
- Vulture Specialist Group (André Botha, co-Chair, Lizanne Roxburgh).
- Lagomorph Specialist Group (Cobus Theron).

Ashleigh Dore became a member of the World Commission on Environmental Law, and participated in several workings groups of this Commission.



Many organisations collaborate on cheetah translocations. Photo credit: Peace Parks Foundation.



Staff and students from the EWT's Wildlife and Transport Programme at the African Conference for Linear Infrastructure & Ecology, which the EWT co-hosted.

OTHER PARTICIPATION

- Cherise Acker: Vice-chair, KZN Wetland Forum.
- Dr Adalbert Aine-omucunguzi: Regional Coordinator, East Africa African Eurasian Waterbird Agreement (AEWA) Grey Crowned Crane International Working Group.
- André Botha: Vice-Chair of the Technical Advisory Group of the Convention on Migratory Species' (CMS) Raptors MoU; CMS Working Group on the Prevention of Wildlife Poisoning (and served on its Lead Task Force); Working Group for the Prevention of Wildlife Poisoning in southern Africa; Director, Board of the Raptors Research Foundation; Over-arching Coordinator, CMS Vulture MsAP; DFFE National Vulture Task Force; National Wildlife Poisoning Prevention Working Group; National Lead Task Team.
- Wendy Collinson: Scientific Expert Committee and Steering Committee member of Infrastructure Eco Network Europe; International Association for Impact Assessment; Research Committee, South African National Roads Agency; Steering Committee and Programme Committee, International Conference for Ecology and Transportation; Ecology and Transportation Committee, Transportation Research Board; Co-Chair, African Conference for Linear Infrastructure and Ecology; Co-Chair, Global Conference for Linear Infrastructure and Environment.
- Dr Harriet Davies-Mostert: Africa and Madagascar Steering Committee Representative, Alliance for Zero Extinction; Member of the Nature Conservation Programme Advisory Committee of the University of South Africa (UNISA).
- Ashleigh Dore: National Cycad Task Team; DFFE Advisory Committee on matters related to the management, breeding, hunting, and handling of elephant, Lion, Leopard and rhinoceros.
- Yolan Friedmann: Board Member, Tourism Conservation Fund; Environmental Subcommittee and Just Transition Working Group, Business Unity South Africa (BUSA); Advisory Board, Global Change Institute (University of the Witwatersrand); Advisory Board, Ford Wildlife Foundation.
- Constant Hoogstad: CMS Energy Task Force.
- Lourens Leeuwner: Birds and Renewable Energy Specialist Group, South Africa; South African Bat Assessment Association Panel.
- Dr Ian Little: Key Biodiversity Areas Committee, South Africa; National Biodiversity Stewardship Technical Working Group, South Africa.
- Kerryn Morrison: Coordinator, AEWA Grey Crowned Crane International Working Group.
- Megan Murison: Conservation Measures Partnership Integrated Reproductive Health and Conservation Learning Initiative.
- Samantha Nicholson: National Action Lion Task Team (NALTT); South African Lion Management Forum.
- Dr Lizanne Roxburgh: Technical Committee, AEWA; Associate Editor Ostrich: Journal of African Ornithology.
- Tanya Smith: Regional Coordinator, AEWA Grey Crowned Crane International Working Group.
- Dr Jeanne Tarrant: Chair, Sungazer Working Group (South Africa); Committee Member, Herpetological Association of Africa; Steering Committee for The Conservation Symposium, South Africa; Associate Editor for the African Journal of Herpetology, African Journal of Wildlife Research and Journal of Herpetology; Global Council representative, Amphibian Survival Alliance.
- Dr Gareth Tate: Bearded Vulture Task Force; Birds and Renewable Energy Specialist Group, South Africa; DFFE National Vulture Task Force; National Wildlife Poisoning Prevention Working Group; National Lead Task Team; Research Associate: FitzPatrick Institute of African Ornithology, University of Cape Town.
- Dr Gabi Teren: Elephant Specialist Advisory Group (ESAG); African Conference on Linear Infrastructure and Ecology (ACLIE).
- Dr Lindy Thompson: Bearded Vulture Task Force; DFFE National Vulture Task Force; National Wildlife Poisoning Prevention Working Group; National Lead Task Team.



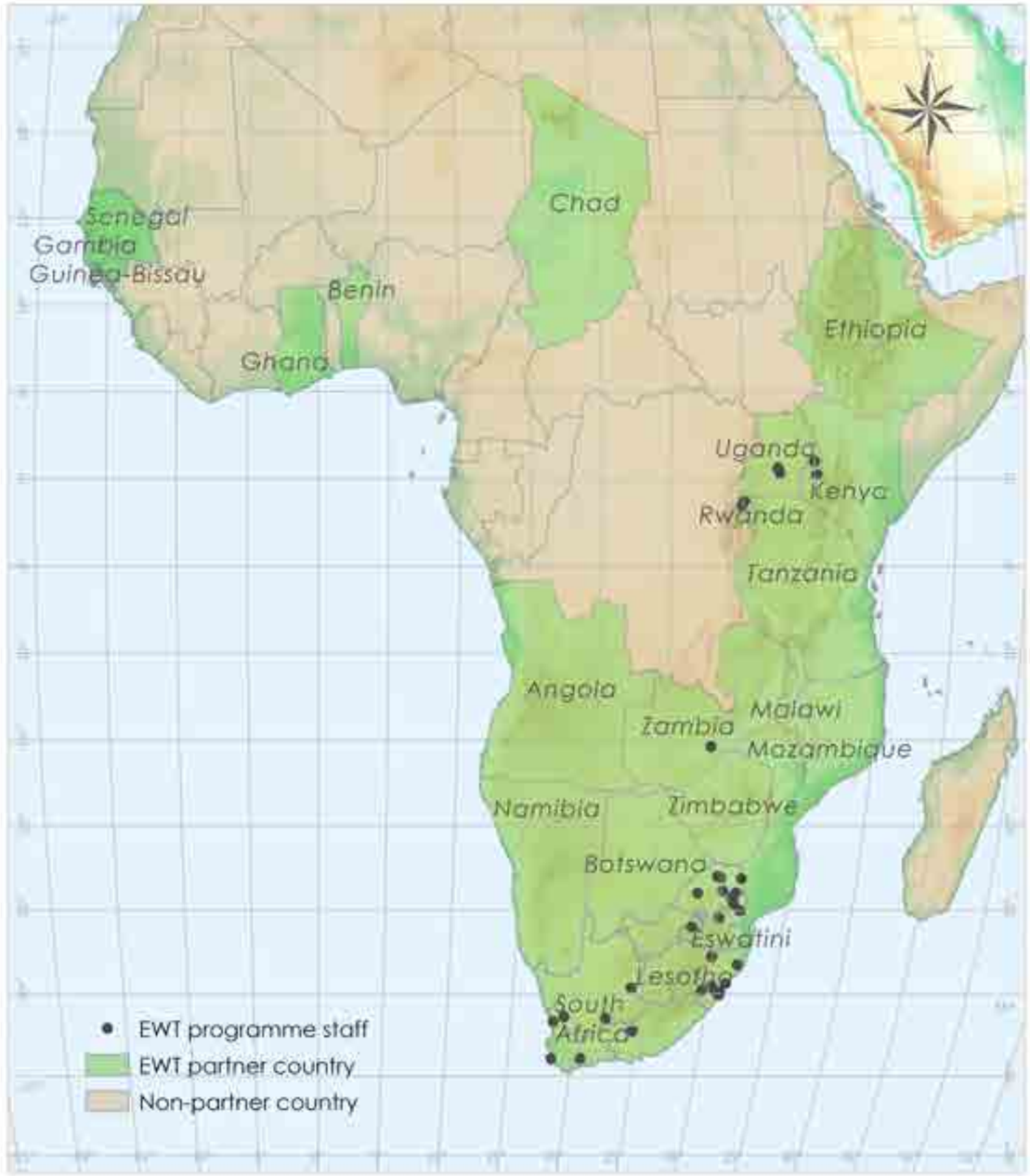
Ford Wildlife Foundation provides the EWT with vehicles throughout our project areas, ensuring that our staff members are where wildlife needs them to be.

Where we work



The EWT's Head Office (pictured here) is situated in Johannesburg, and our staff are active across all of South Africa's nine provinces. We also work across 20 other countries in Africa, both through in-country partnerships and as part of the work we do under the International Crane Foundation(ICF)/EWT Partnership.

Our Conservation Campus in Midrand, proudly sponsored by the Hans Hoheisen Charitable Trust and Rand Merchant Bank, with Metro Fibre, Ryobi, Speedspace, Standard Bank, the Meter Man, Tiletoria, and Wigget Architects.



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This report was prepared by Yolan Friedmann, Dr Harriet Davies-Mostert, Dr Tim Jackson, Emily Taylor, and Suzette Britz.

The EWT is registered as a Non-Profit Organisation, registration number 015-502 NPO and PBO registration number 930 001 777. The EWT is 501 (c)(3) compliant, US IRS Reg. EMP98-0586801.

The EWT is a member of the International Union for Conservation of Nature and a signatory to the United Nations Global Compact.