

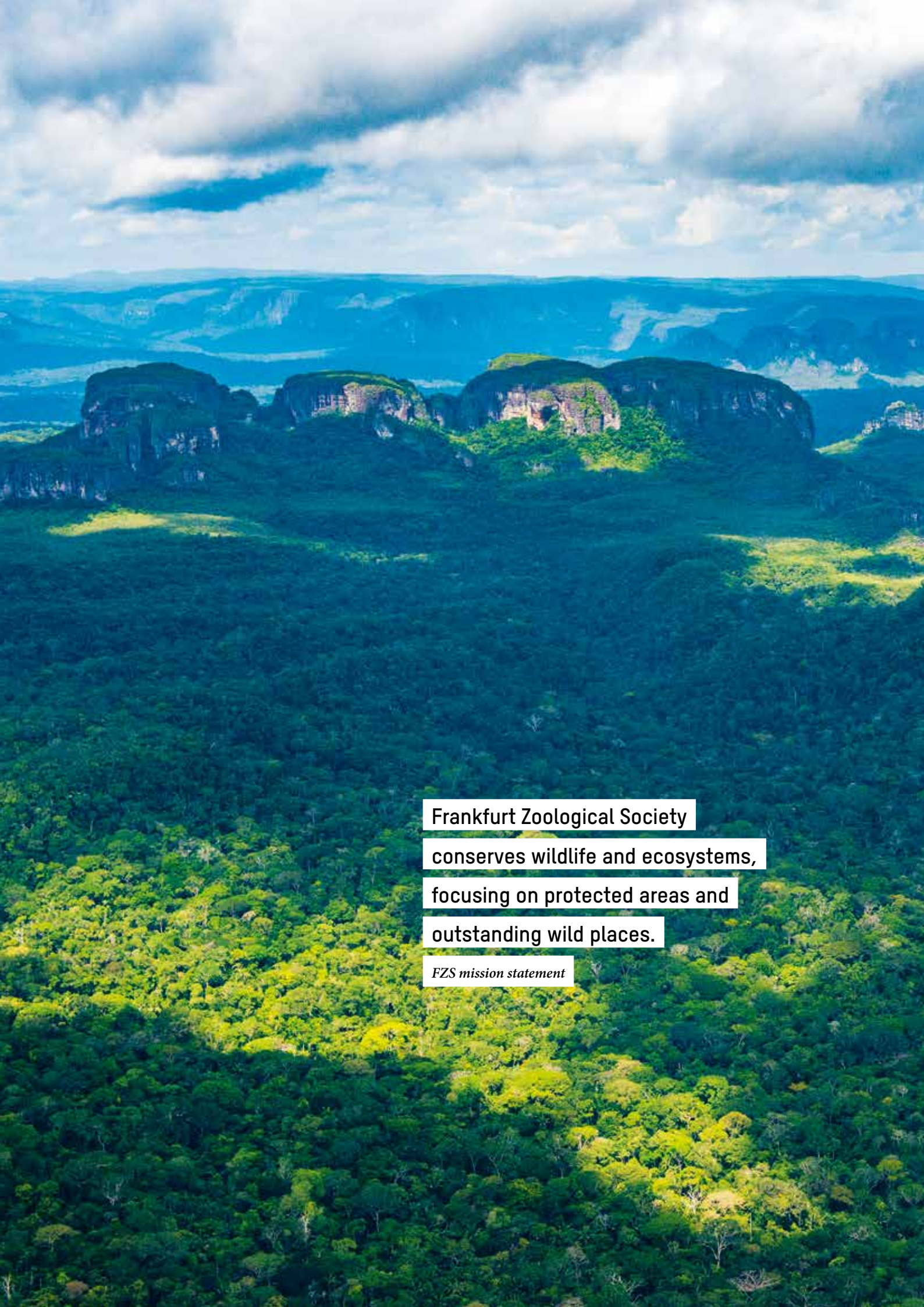


MISSION: WILDERNESS

ANNUAL REPORT 2018
FRANKFURT ZOOLOGICAL
SOCIETY



FRANKFURT
ZOOLOGICAL
SOCIETY



Frankfurt Zoological Society

conserves wildlife and ecosystems,

focusing on protected areas and

outstanding wild places.

FZS mission statement



CONTENT

- 03 WORDS FROM THE PRESIDENT
- 04 WORDS FROM THE EXECUTIVE DIRECTOR
- 06 CONSERVATION SUCCESSES 2018
 - 08 AFRICA
 - 22 EUROPE & CENTRAL ASIA
 - 36 SOUTH AMERICA
 - 44 SOUTHEAST ASIA





Dear Readers and Friends of FZS,

When scientists of the World Biodiversity Council IPBES stepped in front of the cameras and microphones of the world press in Paris on 6 May this year, they pulled no punches. Our planet is in a critical state. Coral reefs, forests, seas and wetlands – man has interfered to such an extent in almost all natural realms that functioning habitats and biodiversity are now in a precarious downward spiral. The IPBES report makes deeply frustrating reading for all nature conservationists, all wilderness experts, all animal lovers and all biologists. It shows just how quickly everything we are working to protect can slip through our fingers.

Fortunately, there is also some good news in that our projects are having a positive effect and that our efforts are not in vain, despite some setbacks. For the first time in ten years, not a single elephant was poached within the North Luangwa National Park in Zambia in 2018. The consistent and professional protection of the park as set out in our North Luangwa Conservation Programme is bearing fruit. This was made possible by the efforts of the highly committed employees, but also by the trust and support of numerous donors.

The example of Yaguas in Peru shows how closely the protection of nature is linked to the protection of the livelihoods and rights of indigenous peoples. Yaguas lies in the north of the country and was designated a national park in 2018. This was at the urging of local communities and represents a great success for local people and the natural environment alike.

Examples like these give us courage. Because in climate protection, but also in the face of the destruction of the natural world, we cannot simply return to “business as usual”. Fortunately, this message is now being understood by politicians and large sections of the public. But it remains to be seen to what extent we humans will actually be prepared to bear personal consequences, to change our standard of living or to accept cuts. We at FZS will continue to work with all means at our disposal to preserve the last wild areas of our planet. I would like to take this opportunity to thank the numerous institutions and individuals who support us in this endeavour for their financial commitment, their generosity and their trust in us.

Klaus Becker

President of the Frankfurt Zoological Society

A different wilderness: FZS President Klaus Becker (left) and Executive Director Dr. Christof Schenck (right) at the Schirn Kunsthalle Frankfurt. The museum hosted a wilderness exhibition in November 2018 and FZS gave one of the guided tours about wilderness.

Climate and biodiversity crisis

A last call to humanity

By Dr. Christof Schenck

“Last Call. Last call for all passengers on planet Earth. Act now, otherwise you will soon be excluded from further life on this planet.” This was the gist of the message of the World Biodiversity Council IPBES to humanity on 6 May 2019. For three years, 145 scientists from 50 countries analysed thousands of studies and data and compiled a 1,800-page status report on the Earth. Nothing of this dimension had ever been undertaken before. A Herculean scientific task, the results of which were received by representatives from 132 countries. No longer will anyone be able to claim: “We missed the last call.”

And this is what it says in the IPBES report: 85 per cent of wetlands have been destroyed, 99 per cent of coral reefs are endangered, 32 million hectares of rainforest were destroyed between 2010 and 2015 alone, 23 per cent of the global land area is ecologically damaged, there has been an 82 per cent decrease in the biomass of wild mammals. One in four species of mammals, birds, amphibians and reptiles is under threat – a total of one million species. In some places, the decline in insect numbers is so dramatic that it is threatening annual losses of almost 600 billion US dollars through lack of pollination. Africa is predicted to lose half of all bird and mammal species, and African lakes will lose up to 30 per cent of their productivity.

The destruction has reached epochal proportions

The losses and destruction have reached epochal proportions. Five human factors are the main reasons for this disaster: our land use, our exploitation of species, climate change, pollution and the invasive species that we distribute around the planet.

There have already been many studies and data on species loss. But now, for the first time, the attention is on the big picture – and it is being accepted as fact by the international community. Entire ecosystems are in danger, and with them the services on which we humans are directly dependent: pure air and clean water, food, materials and pharmaceuticals, the protection of our settlements against storms, floods and landslides. The authors are clear: if the trends in biodiversity loss continue, 80 per cent of the Sustainable Development Goals (SDGs) – the United Nations' sustainability goals and our roadmap for making a better world – will not be achievable. Nature conservation must no longer be regarded simply as a niche activity.

The great gap

In terms of development cooperation, as well as for all areas of political activity, this means that radical change is necessary. For decades, the priorities for the use of development cooperation funds were clear. The first priority was to improve health and nutrition in the developing countries, combat poverty and develop education, infrastructure and energy supply. If there were any funds left they could be used for protecting natural resources.

Germany spends 500 million euros annually on protecting biological diversity. Compared to the federal budget as a whole, however, these nature conservation funds are almost microscopically small at 0.14 per cent. And the situation is no better internationally, either. There is a shortfall of 70 billion US dollars a year in the financing of protected areas alone. Only 17 per cent of global nature conservation resources reach developing countries. But this is precisely where the great treasure troves of species and ecosystems lie.

As the IPBES report makes clear: if we fail to protect biodiversity and ecosystems, investment in economic and social development will also be at risk.

Nature protection is ultimately human protection

A scenario in which the construction of a hospital no longer makes sense because the people in the region can no longer survive there may sound apocalyptic. And yet we are now facing just such a situation: in the east of the Serengeti in Tanzania, the Maasai population has increased tenfold in recent years, and livestock numbers have grown to hundreds of thousands. There is growing demand for space for grazing land and crop fields. However, forest clearance is rapidly reducing the region's water retention capacity. At the end of the dry season, more than a thousand people are already having to rely on one tiny spring, hours away from their home. The cattle have to make do with a visit to the spring every two days. The situation is even more dramatic in the Bale Mountains in Ethiopia.

The Bale National Park, 300 kilometres southeast of Addis Ababa, serves as a gigantic water reservoir. More than 40 rivers rise from the mountain massif which is rich in forests and swamps. Like a sponge, the vegetation and landscape absorb the plentiful rains of the rainy season and then release the water gradually during the dry season. With three large rivers draining to the south, Bale is the water reservoir for more than 12 million people in the dry Somali lowlands. But the population in and around the park is growing rapidly and so, too, is the livestock population. More than 30,000 people live in the park, which is experiencing massive forest loss. The sensitive alpine vegetation is overgrazed, with every rain shower washing away the topsoil and with it the future of the people who live there. Global rarities such as the Ethiopian wolf or the mountain nyala also live in Bale. Bale teaches us just how closely species protection and human protection are intertwined.

On the wrong track

Faced with increasing domestic pressures, some state leaders are preparing to sacrifice the national silverware – at the expense of their countries' grandchildren. One example is the Selous Game Reserve in Tanzania, one of the world's largest wilderness areas and a Natural World Heritage Site, where a gigantic dam is under construction. Although the origins of the game reserve go back to colonial times, the independent United Republic of Tanzania had kept the Selous free of settlements and large-scale construction projects for almost 60 years. This required major effort, but is now being abandoned. In other places, too, the figurative Mona Lisas are being removed from the walls for sale. The government of the Democratic Republic of Congo wants to allow oil exploration in the Virunga and Salonga Natural World Heritage sites. The government of Uganda has similar plans for its Queen Elizabeth National Park. And Kenya is planning dams on the Mara River, with potentially fatal consequences for this lifeline for the world-famous Serengeti in neighbouring Tanzania. Dramatic, not only for Brazil, but for the whole world, is the sharp increase in deforestation in the Amazon basin. Now, at the latest, the question arises: To what extent may short-term, often largely private profits result in long-term, irreversible losses of common goods? Examples show that, when it comes to making informed choices about land use, insufficient value is attached to natural resources, and there is insufficient international support for the conservation of globally important natural landscapes.

The IPBES report has made it clear that equal levels of importance need to be attached to economic, ecological and social justice factors. "There are no passengers on spaceship Earth. We are all crew," wrote the Canadian philosopher Herbert Marshall McLuhan back in the 1960s – we all carry responsibility. It's in our hands. The last call has been made to us humans.

PROJECTS & PROGRAMMES 2018

Conservation projects and programmes managed by FZS itself and projects operated by other organisations, that were supported by FZS.



1 FZS AFRICA PROGRAMME

TANZANIA

- ✓ Serengeti National Park
- ✓ Serengeti Ecosystem Management Project (SEMA)
- ✓ Mahale Ecosystem Project
- ✓ Selous Conservation Project

ZAMBIA

- ✓ North Luangwa Conservation Programme
- ✓ Nsumbu-Tanganyika Conservation Project

ZIMBABWE

- ✓ Gonarezhou Conservation Programme

ETHIOPIA

- ✓ Bale Mountains Conservation Project

DEMOCRATIC REPUBLIC OF CONGO

- ✓ Virunga Conservation Project
- ✓ Lomami Conservation Project

2 FZS EUROPE PROGRAMME

GERMANY

- ✓ Wilderness in Germany
- ✓ Brandenburg Wilderness Foundation
- ✓ Hohe Schrecke Beech Forest Conservation Project
- ✓ Günztal Riverbed Restoration – Bavaria
- ✓ Conservation ambassadors at Frankfurt Zoo

TRANSBOUNDARY PROJECTS

- ✓ Cross-border Protection of old-growth forests in the Wolf Mountains (Poland, Slovakia and Ukraine)
- ✓ Wilderness in Europe – Casework for securing important European Wilderness Areas

BELARUS

- ✓ Preservation of the Białowieża-/Bielaviežskaja Pušča primeval forest
- ✓ Wilderness without borders – new protected areas in Polesia

UKRAINE

- ✓ Protecting virgin forest in the Ukrainian Carpathians

ROMANIA

- ✓ Establishment of a wilderness/forest reserve in Romania

KAZAKHSTAN

- ✓ Protecting the steppes and the saiga antelope in Kazakhstan



Tanzania

Cutting edge
technical support



1 SERENGETI NATIONAL PARK

2 SERENGETI ECOSYSTEM MANAGEMENT PROJECT (SEMA)

3 MAHALE ECOSYSTEM PROJECT

4 SELOUS CONSERVATION PROJECT

Tanzania is one of the most biodiverse countries in the world. FZS's work here focuses both on parks established for their concentrations of large mammals and also on those established for their high biodiversity. This, coupled with continued government support for conservation (Tanzania earmarked five game reserves – Biharamulo, Burigi, Kimisi, Ibanda and Rumanyika – for upgrading into national parks for photographic wildlife tourism), makes the country a key focus for FZS.



Monitoring of animals, vehicles and a number of other parameters at the Serengeti Operations Room.

Advances in conservation technologies are moving on apace. Our role in the FZS Tanzania Programme is increasingly becoming one of supporting our host country's capacity to deliver conservation commitments through providing appropriate technologies, and building the skills and systems within our partners to apply these. In doing so, FZS is being vigilant in the way in which we support our partners' approach to implementing protected area legislation, to ensure international safeguards and standards are met.



Maintaining and replacing the Serengeti National Park vehicles is a key factor in successful park protection.

Introducing new technologies and raising potential

We are joining up the dots of a “golden law enforcement triangle”, through aerial surveillance, communication and ground patrols. In both Serengeti and Selous, wardens fly daily, allowing them to monitor both the natural assets of their patch from the air, and the threats to them. This is communicated to a control room where operational decisions are made by the park authority that merges this aerial surveillance information with other intelligence. Finally, a ground response is provided, targeting illegal bush-meat, livestock and high-value wildlife poaching. This approach is delivering impressive results.

The introduction of the latest remote radio tracking techniques allows real time data to be provided to the rangers on the locations of key species (for example, rhino, elephant, wild dog), which helps them guard against threats. These same radio tracking techniques are being tested to ensure better traffic management, an issue that is becoming increasingly important in parks such as the Serengeti, by helping to ensure that the greater traffic volumes there abide by park rules. Automated wildlife counting techniques speed up the analysis of wildlife census data, reducing costs, and allowing for quicker and more frequent updates on the status of key species and their population dynamics.

Remote sensing techniques monitor how effective our work is in protecting vital wildlife corridors and water catchment forests, and also inform our partners where legal and alternative livelihood approaches are needed. The technology is required more than ever in the face of growing pressures on the protected areas, for example in the Selous, where there is increasing conflict as new construction projects impact the area, and in Mahale, where new road construction is bringing new settlers into areas of previously intact forest.



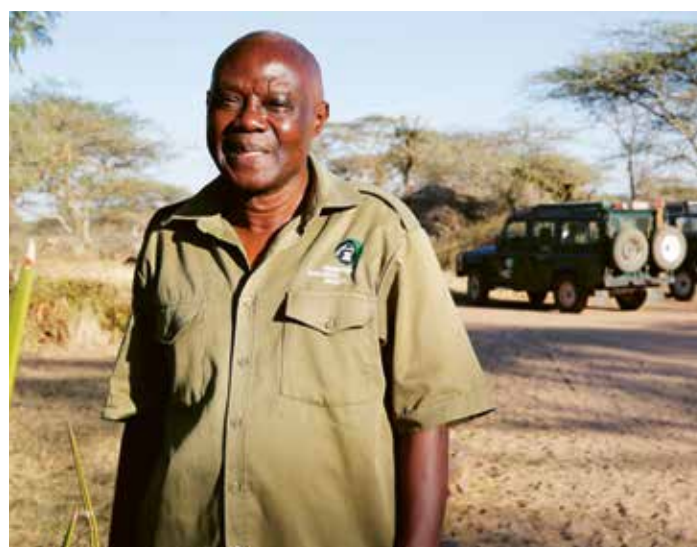
In the Serengeti, we combine aerial surveillance with ranger patrols on the ground.

More resources are essential

Providing technology and responding appropriately to the information it gives us are only half of the story. The other half is the work that we do with our partners to provide the people, systems and training needed to apply these technologies. We support our partners by providing formal and on-the-job training, by arranging access to comparable projects from which they can learn, and by arranging visits to companies and conferences internationally.

In 2018, FZS expanded the use of new radio tracking technologies to the Ngorongoro Conservation Area. In the Selous, intelligence training and law enforcement planning was rolled out across all sectors of the game reserve. Tanzania National Parks (TANAPA) started applying the control room model in further parks in their estate and FZS radio technicians and staff worked in other parks to support these efforts.

The results of all of these approaches suggest that we are moving in the right direction. This is borne out by the health of key wildlife species in the parks where FZS is working. In 2018 mostly stable or expanding populations were recorded, whilst the habitats they depend on remain intact. All of this would not be possible without the powerful support of the technology and our project teams and partners.



A PRESTIGIOUS AWARD

At the end of 2018, our long-standing and highly respected country director Gerald Bigurube retired. He was succeeded in 2019 by Dr. Ezekiel Dembe, who has joined FZS after a lifelong career in Tanzania National Parks. On 27 November 2018, Bigurube's life's work in the service of nature conservation in Tanzania was honoured in Berlin, where he was presented the renowned Africa Award of the German Africa Foundation. For 45 years, Gerald Bigurube has been committed to the conservation of Tanzania's biodiversity. He is the first Tanzanian to be awarded this prize, and it was also the first time that it has been given to a conservationist.



We aim to create structures for a stable buffer zone by setting up Community Conservation Banks in the villages outside the Serengeti National Park.

SERENGETI NATIONAL PARK

PROJECT AREA: 14,750 km² (park), 25,000 km² (ecosystem)

PROJECT START: 1957

SERENGETI ECOSYSTEM MANAGEMENT PROJECT (SEMA)

PROJECT AREA: 14,750 km² (park), 25,000 km² (ecosystem)

PROJECT START: 2005

IMPACT & MILESTONES 2018

- ✓ Serengeti National Park Operations Centre (SOC) improved, housing for the SOC staff is now fully in place.
- ✓ A second de-snaring team was deployed, and the numbers of snares collected doubled to an incredible figure of more than 17,000.
- ✓ Cattle incursions into the park have been a growing threat in recent years and a new livestock control unit was deployed with great success.
- ✓ Assistance was given to SENAPA in their rhino tagging operation. Twenty rhinos were captured and had transmitters implanted and/or were earnotched.
- ✓ Creation, training and deployment of a dedicated rhino tracking team.
- ✓ FZS has started tracking work on lions, which are under threat in areas close to the western and eastern boundaries of the park.
- ✓ The modernisation and maintenance of the SENAPA vehicle fleet by the FZS workshop was a major factor in the success of protecting Serengeti National Park.

IMPACT & MILESTONES 2018

- ✓ A big success of the project in 2018 was the completion of the Serengeti District Land Use Framework Plan and land use plans for nine villages in the Serengeti district.
- ✓ In 2018, SEMA continued to support the governance and management of two community wildlife management areas (WMAs) at Ikona and Makao and the establishment of the Sarian Community Forest in Loliondo.
- ✓ We completed construction of a WMA Ranger Post for the Ikona WMA village game scouts and a honey processing centre in Ikona WMA.
- ✓ Village Game Scouts in both Ikona and in Makao WMA were given proper field uniforms and boots as well as GPS sets for patrol data collection.
- ✓ FZS spearheaded the facilitation of Community Conservation Banks (COCOBAs) in the villages within and immediately adjacent to the WMAs.
- ✓ 30 new COCOBA groups (12 in Loliondo-Ngorongoro district and 18 in Serengeti district) were formed and trained in entrepreneurship and microfinance techniques.
- ✓ In Loliondo, environmental education training was conducted for 20 teachers in ten secondary schools.
- ✓ In addressing the problem of human elephant conflict, vehicles were provided for use in protecting villages and fields from crop raiding elephants.



A general management plan for Mahale was developed in 2018.



Three weeks, three aircrafts, 20 scientists – four organisations worked together for the Selous Aerial Census in 2018.

MAHALE ECOSYSTEM PROJECT

PROJECT AREA: 1,613 km² (park), 19,446 km² (ecosystem)

PROJECT START: 2004

IMPACT & MILESTONES 2018

- ✓ FZS made good progress in 2018 in securing the dispersal areas used by chimpanzee and elephant outside the national park.
- ✓ In Tanganyika district, FZS supported operations in the 365,000 hectare District Forest Reserve (Tongwe West). In neighbouring Uvinza district, FZS worked with partners to create a habitat corridor as a new District Forest Reserve.
- ✓ Within the national park, support was provided to TANAPA to complete drafting its new National Park General Management Plan.
- ✓ Logistical support was provided to a new survey of chimpanzee numbers in Mahale National Park. The preliminary results show chimp numbers to be stable.
- ✓ The Mahale project has a long history of supporting the formation and successful operation of COCOBA savings and loans groups. Monitoring and training were provided to 63 out of 71 groups operating there.

SELOUS CONSERVATION PROJECT

PROJECT AREA: 54,600 km² (protected area), 100,446 km² (ecosystem)

PROJECT START: 2012

IMPACT & MILESTONES 2018

- ✓ An aerial survey of large mammals was undertaken in October 2018. The Tanzania Wildlife Research Institute (TAWIRI), Tanzania Wildlife Management Authority (TAWA), Tanzania National Park (TANAPA) and FZS together conducted the Selous Wildlife Census. The preliminary findings indicate that elephant numbers and wildlife populations numbers are stabilising, which represents a change from the rapid declines caused by poaching recorded from 2008 to 2014.
- ✓ Support for the Selous Game Reserve (SGR) intelligence teams has improved the detection, apprehension and follow-up arrest and prosecution record of the SGR teams, particularly in the northern sectors where FZS is mainly based.
- ✓ Our vehicle repair workshop at Matambwe continues to provide reliable and useful service to the SGR.



FZS began tracking lions in 2018.



Zambia

The best protected ecosystem in the country



For more than three decades FZS has been actively involved in the conservation of North Luangwa.

1 NORTH LUANGWA CONSERVATION PROGRAMME (NLCP)

2 NSUMBU-TANGANYIKA CONSERVATION PROJECT

The North Luangwa Conservation Programme (NLCP) has, through its 34 year partnership with the Zambian Department of National Parks and Wildlife (DNPW), worked to conserve the 22,000 square kilometres of the North Luangwa Ecosystem. This project aims to reduce direct threats to species and ecosystems by ensuring effective, transparent and adaptive protected area management, but also by helping communities to sustainably manage natural resources in the multiple landuse areas around the core national park. In recent years, successful fund-raising has enabled the programme to grow in breadth and depth and thus create what is arguably the best protected ecosystem in Zambia.



Since April 2017 not a single elephant has been lost to poaching inside North Luangwa National Park. In 2018 we recorded zero elephant poaching.

NORTH LUANGWA CONSERVATION PROGRAMME (NLCP)

PROJECT AREA:

4,636 km² (park), 22,000 km² (ecosystem)

PROJECT START:

1986

Ground-based law enforcement hinges on its anti-poaching force and is critical to the successful conservation of a national park. In 2018, over 300 wildlife police officers and village game scouts in the 33 base camps in the North Luangwa ecosystem were supported by the NLCP and equipped to conduct anti-poaching patrols. 64 of those officers are attached to the centrally-based Rhino and Elephant Protection Unit, which includes 28 officers in the Rhino Monitoring Unit and seven officers in the North Luangwa Canine Unit. The Endangered Species Protection Agency (ESPA) completed four training cycles for the Rhino and Elephant Protection Unit and also trained five assistant instructors.

Patrol monitoring was improved with the utilization of the Vulcan-sponsored Domain Awareness System (DAS) which enables real-time visualization of tracked assets such as collared elephants and digital radios. This, combined with near real-time data management within the SMART software for patrol observations and incidents, provided a more strategic approach to threat monitoring and mitigation management.

There was a further decline in the number of poached elephants, with 2018 recording the lowest annual number of carcasses since 2011, no elephant was poached inside North Luangwa National Park since April 2017.

Intelligence and Investigations Units

The NLCP supported eleven DNPW Intelligence and Investigations Units across northern Zambia. Since we began to support these units, there has been a sharp increase in the number of people arrested for wildlife-related crimes. Activities are implemented jointly with other national agencies (e.g. police, drug enforcement) and partners in neighbouring countries, and NLCP works collaboratively with other NGOs, Wildlife Crime Prevention (Zambia) and the Lilongwe Wildlife Trust (Malawi).

The North Luangwa Canine Unit comprises independent teams to deploy in support of the Intelligence and Investigations Units. They also conduct roadblocks and intelligence-led operations. The dogs are able to track poachers and detect a wide variety of wildlife products. A satellite kennel was built in Mpika for use by the Canine Unit, and permission and funds were sourced to build a second canine unit facility in Nakonde (on the Tanzanian border).

Infrastructure and equipment maintenance

The NLCP workshop plays a critical role by ensuring functioning law enforcement. The vehicle fleet maintained by NLCP includes over 50 trucks, tractors, quad bikes, motorbikes and vehicles. In addition we maintain park infrastructure such as roads, drifts, culverts, mitre drains, etc. NLCP also provides support in maintaining, repairing and expanding the digital radio system and extending the coverage to the north into Mwakana Sector.

Ecosystem and species monitoring

In 2018, the black rhino population suffered no losses to poaching, and three calves were born. The protection unit recorded daily VHF transmitter signal data for all animals and individuals were sighted from the ground and air.

Annual black rhino immobilizations were completed for ear notching, micro-chipping and/or VhF transmitter implants. In December 2018 two additional rhinos from a genetically unrelated Zimbabwe population were translocated to North Luangwa National Park. Earlier in the year a young female, who had been placed in a boma at the end of 2017, was released into the rhino conservation area, where she has remained. The national park is experiencing a black rhino compound biological population growth rate of more than 12 per cent – one of the best reproductive rates on the continent.

NLCP implemented its fire management plan to protect the majority of the national park from late dry season hot fires by carrying out a combination of early strip and block burns. A portable pump unit was purchased and staff trained in fire management which proved beneficial in September and October 2018 when two arson fires breached the fire breaks and required extensive measures to mitigate the impact.

Regrettably, plans for a landscape-wide aerial survey of wildlife were shelved after a last-minute withdrawal of approval from DNPW. This was most unfortunate after months of careful planning and logistical scheduling, and agreed contracts had to be scrapped.



Top: Three black rhinos were born in North Luangwa in 2018.

Bottom: The canine units are a very successful and important component of law enforcement.

IMPACT & MILESTONES 2018

- ✓ 0 rhinos poached
3 rhino calves born
2 rhinos translocated to North Luangwa National Park
- ✓ 0 poached elephants inside the national park
18 poached elephants in the Game Management Area
- ✓ 570 foot patrols
(with a total of more than 23,000 kilometres) resulted in 103 arrests,
the seizure of 23 firearms,
4 elephant related seizures and
721 kg of animal parts and bush meat.
- ✓ DNPW Intelligence and Investigations Units (IIU) were responsible for
296 arrests,
the seizure of 129 firearms and
609.6 kg of animal parts and bushmeat.
- ✓ The Canine Unit undertook
12,330 vehicle searches,
714 building searches,
717 open area searches,
88 arrests and assisted with an additional
58 arrests,
the seizure of 72 firearms and of
495.5 kg of animal parts and bushmeat.

Human-wildlife conflict

In 2018 NLCP embarked on a vigorous human-wildlife conflict mitigation initiative. A pilot project was implemented in 22 village action groups with the focus on practical measures that can easily be applied in the villages. We supported the farmers by supplying the necessary tools and materials. The use and maintenance of this new equipment will be in the hands and responsibility of community members. Additional training included the growing, harvesting, drying and storage of chilli plants for use in conflict mitigating measures as well as whole-sale vending to food producers.

Conservation education: Lolesha Luangwa

Lolesha Luangwa is NLCP's conservation education programme that targets 22 schools surrounding the North Luangwa National Park to complement and support traditional anti-poaching measures. Addi-

onal community awareness campaigns that complement Lolesha Luangwa are carried out. In 2018 the theatre group SEKA from Mfuwe was contracted to develop two short plays to perform to the communities surrounding the national park.

Organisational capacity

FZS Zambia reoriented its overall strategies, objectives, outputs and outcomes to the following goal: Working in partnership with communities and government, to be the most effective in the management of vast landscape protected areas by 2023. One of the project's main aims is to complete the discussions for a co-management partnership with DNPW for the development and protection of the North Luangwa Ecosystem as a large rural community and wildlife conservation landscape.

NSUMBU-TANGANYIKA CONSERVATION PROJECT

PROJECT AREA: 4,000 km²

PROJECT START: 2017

A challenging but viable opportunity for conservation

Nsumbu National Park was once famed for its large herds of wildlife and a significant black rhino population. Unfortunately, a lack of resource protection from the 1960s onwards led to a gradual decline in terms of wildlife. The high rates of elephant poaching of the 1980s reduced the elephant population and exterminated black rhino from the entire area

This decline continued through the early 2000s, and by 2010 there was no movement of elephant between Nsumbu, Mweru Wantipa and the Democratic Republic of Congo, as had historically occurred. Only Nsumbu National Park remained with resident elephants and significant numbers of other herbivores.

While there is no doubt the wildlife population of Nsumbu has suffered immense pressure and devastation from illegal hunting for many years, the park has shown remarkable resilience and remains hugely productive. The current elephant population is estimated to be 150 and is showing signs of recovery, with young animals regularly sighted in breeding herds.

The next phase

A law enforcement strategy developed in 2018 is being implemented for the recruitment, training and employment of 40 select community scouts, including new field equipment, and for a progressive and intensive professional training regime running through to 2021.

Lake operations will be improved through the operation of a second patrol boat, surveillance equipment and the specialized training of boat operators. Investigations and Intelligence Unit operations and support will be expanded and intensified in problem areas through further training, supervision and funding.

Foot patrols and elephant conservation will remain a core law enforcement activity, supported by improved control procedures and adequate vehicle, boat and management support and supervision. International cooperation will be increased through planned collaborations with neighbouring country agencies across Lake Tanganyika and across land borders in the region to reduce the illegal wildlife trade across and around Lake Tanganyika.

A fisheries co-management feasibility study will be conducted. This is expected to result in a large fisheries support project across the southern part of the lake that will complement ongoing terrestrial community-based natural resource management support. An environmental education programme is being designed and family reproductive health support will be provided, aimed at ensuring long term reductions of the negative human impacts on the landscape.

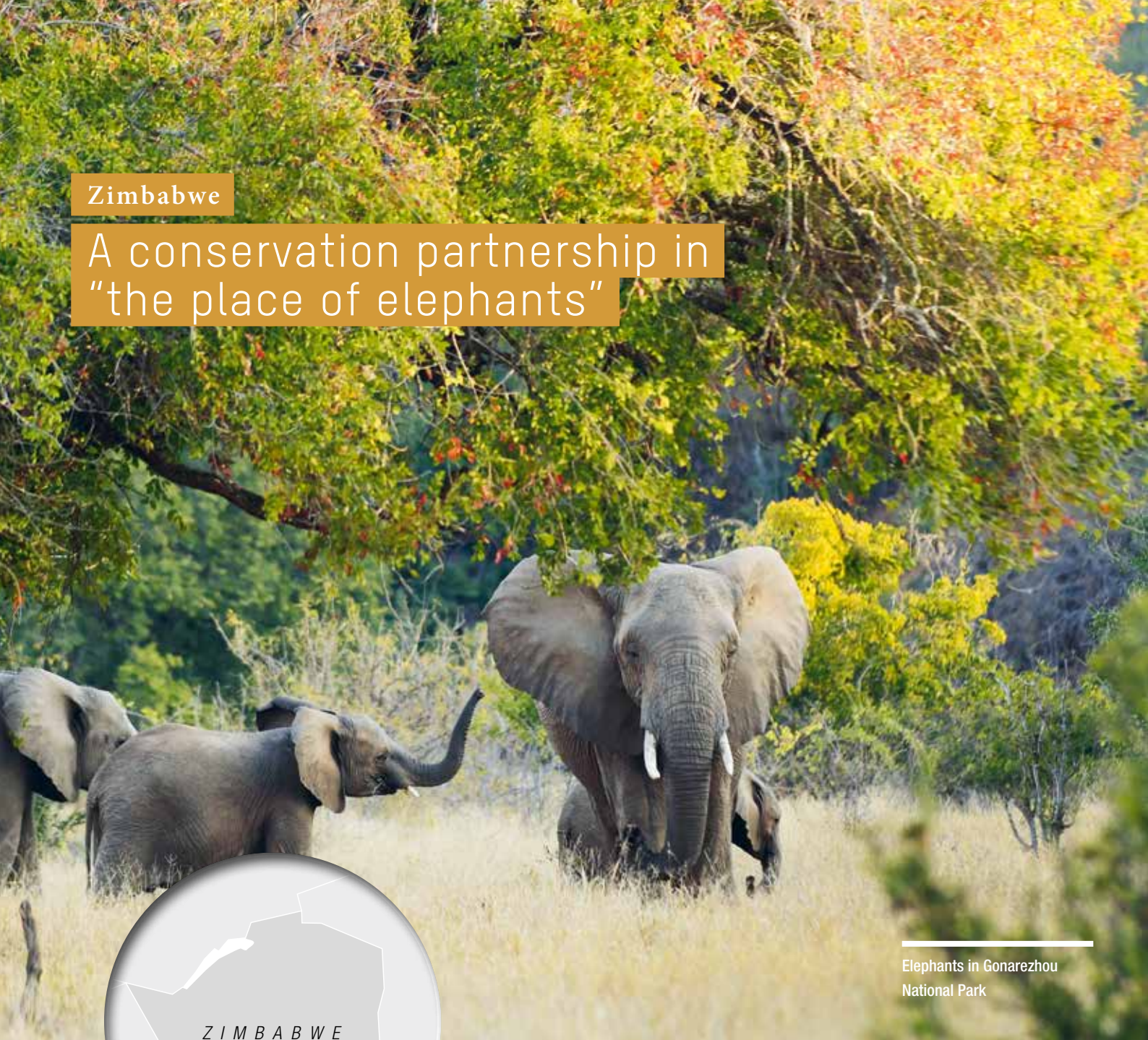
IMPACT & MILESTONES 2018

- ✓ 50 per cent increase in patrols compared to previous year.
- ✓ Establishment of field communications and live tracking of patrols thus supporting well-coordinated patrol planning, investigations and intelligence focus areas.
- ✓ Renovation of a workshop and a harbour, creating the necessary capacity to maintain a protected area management fleet including anti-poaching vehicles, motorbikes, patrol boats and project support equipment for immediate needs as well as expected growth.
- ✓ Construction of scout housing at Mutundu camp, the first development in what will become one of the primary law enforcement bases in Nsumbu.
- ✓ Improved governance and financial management of community co-management structures, consequently enhancing communities' understanding of the socio-economic drivers and conservation-compatible opportunities in the project area.

Nsumbu is situated on the shore of Lake Tanganyika and is known for its swimming elephants.

Zimbabwe

A conservation partnership in "the place of elephants"



Elephants in Gonarezhou National Park



GONAREZHOU CONSERVATION PROGRAMME

PROJECT AREA:

5,053 km² (park), 100,000 km² (ecosystem)

PROJECT START:

2007

As the second largest national park in Zimbabwe – measuring about 5,000 square kilometres – Gonarezhou National Park presents many challenges, and therefore, has need for new conservation strategies. As the park continues to attract more tourists each year, it is necessary to seek integrated and innovative conservation approaches that will ensure it maintains its ecological integrity and sustainability.

The Gonarezhou Conservation Trust (GCT) is consolidating its position as a strong and valuable partnership for conservation in the country and wider region, and is increasingly being hailed as a model for effective management which could potentially be relevant for other protected areas in Africa as well.



Thanks to optimized law enforcement
poaching has declined significantly.

The mandate of the Gonarezhou Conservation Trust – a partnership between the Zimbabwe Parks and Wildlife Management Authority and Frankfurt Zoological Society – is based on five ‘pillars’ which embody the Trust’s vision of its role as a holistic entity focusing on conservation, communities, commercial activities, connectivity and corporate governance. In 2018, the Trust acted across all those focus areas to achieve long-term sustainable conservation. It expanded its community engagement initiatives and initiated a number of new tourism ventures. Through an inclusive process, a strategic plan for the Trust was also developed which will guide the activities and impact of the Trust over the coming five years.

With the increase in the workforce and more effective deployment strategies, there was comprehensive ranger coverage of the park during 2018, with a focus on known problem areas.

Based on elephant carcasses located by patrol teams, the number of incidents declined significantly as a result of the direct increase of law enforcement. The number of incidents dropped from 58 in 2015, and 39 in 2016 to 18 in 2017, and only 13 had been recorded by the end of December 2018. A further considerable development is that no elephant or any other wildlife was lost due to poisoning, which had become a significant concern over the preceding five years.

Challenges big and small

However, despite these milestones, a concerning trend was increased fish poaching, which can be attributed to the current weak economic outlook in the country, and low rainfall that caused a strain on agricultural production. This will necessitate a different type of response involving collaboration with the community to curb this practice.



Employees of the Gonarezhou Conservation Trust make sure that vehicles are operational at all times.

Another issue is the substantial grass fuel load, which is leading to high fire risk. The prolonged dry season saw many fires coming in across the boundary with Mozambique which proved very challenging, with little assistance in managing the fires coming from the concession holders in Mozambique.

One of the bigger challenges we will potentially face comes as a result of the changing political climate in Zimbabwe, as several government-supported infrastructure projects in and around Gonarezhou have received fast-track approval.

IMPACT & MILESTONES 2018

- ✓ Decrease in elephant poaching. Only 13 carcasses attributed to illegal activities in 2018.
- ✓ Recruitment and training of 28 new rangers, increasing the total number of rangers available for active field duties to 144 (of which 92 are armed).
- ✓ Patrol working days increased by 42 per cent compared to 2017, and by 80 per cent from 2015. The increase in the workforce has also increased our 10-day extended patrols from 837 in 2017 to 1,395 in 2018.
- ✓ Completion of the development of a new security operations centre at Chipinda Pools and installation of the Domain Awareness System (DAS) as a real-time surveillance tool for all security activities.
- ✓ Development of the GCT strategic plan, which will act as a guideline for GCT activities for the coming five years.
- ✓ Completion of a comprehensive aerial survey of large mammals in Gonarezhou and adjacent wildlife areas.
- ✓ Launch of the ‘Mpfhuka’ – a Tsonga term for “Let us walk together” – community engagement movement, with meetings held with communities in all five catchment areas.
- ✓ Significant progress in renovation and upgrading of the old Malipati scout camp into the ‘Makonde Training Centre’, aimed at increasing the capacity of local communities to meaningfully benefit from and support a conservation-led, ecotourism economy in and around the Gonarezhou National Park.
- ✓ Achievement of highest tourism occupancy to date during August peak season (48 per cent higher than 2017), and total tourism revenue of over 420,000 US dollars for 2018, which is the highest ever tourism revenue recorded for Gonarezhou.

Ethiopia

Taking an eco-regional approach



Wattled crane on the Sanetti Plateau in the Bale Mountains

BALE MOUNTAINS CONSERVATION PROJECT

PROJECT AREA:

2,200 km² (park), 8,000 km² (ecosystem)

PROJECT START:

2004

Bale Mountains National Park is a biodiversity hotspot and the last stronghold of many endangered and endemic species such as the Ethiopian wolf, mountain nyala, many amphibians, insects, mammals and plants. Perhaps most importantly, the Bale Mountains constitute a water tower, providing and regulating water via the five main rivers that drain from the massif to the 12 to 20 million people living downstream – as far as the Somali coast. This ecosystem service depends on the integrity of the habitats in the mountains which soak up the rains in the wet season while maintaining flows in the rivers during the dry season.

To help safeguard the biodiversity, landscapes and ecosystem services of Bale Mountains National Park, FZS supports the park management with various measures, including equipment and infrastructure for the patrolling ranger system to enhance their ability to detect and deal with illegal activities in the park. Equally important,



Our aim is to phase out resource use in the park over the next ten years.

FZS works with communities around the park to support more conservation-compatible livelihoods, guided by the General Management Plan for Bale which was ratified in 2017.

Funding to support these actions is aligned with government programmes such as Sustainable Land Management and Conservation and Sustainable Use of Biodiversity in Ethiopia, financed by the European Union, KfW and GIZ as well as by other third-party donors.

In 2018, FZS supported an integrated approach to conservation and development by working with the Oromian regional authorities responsible for the environment, forestry, climate change, agriculture, livestock, land use and human health. For example, FZS piloted homestead-grown coffee to demonstrate the viability of coffee production without the need for cultivation in the forest. This approach was supported through involvement in a consortium of civil society organizations and NGOs working towards building efficient local institutions for community-based natural resource management. Those local institutions, modelled on participatory forest as well as rangeland management, oversee the regulated use of natural resources to phase out resource use in the park over the next ten years.

Population health and the environment

To tackle the complex socio-economic and religious factors constraining reproductive health services and the uptake of family planning approaches in Bale, FZS set up “Village Health Committees (VHC)” comprising 15 to 18 members members per community including the local administrator, religious leaders, model women, health extension workers, school directors, agricultural development agents and heads of the local primary health care units.

Training of the VHC members on how to use the FZS flipbooks and posters was conducted to enhance community interaction, improve knowledge and to influence a change of attitude and behaviour in the communities towards population health and environment links and family planning service utilization. The community conversation sessions led to an increase in modern contraceptive uptake from the 19.8% baseline in 2017 to 26.5% at the end of 2018. Continuing this trend should make a positive long-term contribution towards reducing population pressure on natural resources inside and outside the protected area.

More cooperation is vital

The liberalization introduced by the current government is a positive development for the country. However, this has led to the weakening of local authorities. To address this challenge, FZS helped develop more effective concerted approaches to dealing with illegal activities by bringing together all the components needed for law enforcement into district-level ‘Protected Area Crime Investigation Teams’. These are chaired by the local head of Peace and Security and include the

judiciary, police and forest authorities. This has led to an increase in law enforcement actions resulting in reduced incidences of new illegal activities. Besides this, a ‘Park Advisory Committee’ that brings regional authorities together with the park management was also formed.

FZS efforts were also fundamental in raising awareness at the government levels on the importance of effective coordination between federal and regional government for safeguarding Bale Mountains National Park and the services it provides to millions of people.

The way forward for Bale

FZS is working towards an agreement with the Ethiopian Wildlife Conservation Authority (EWCA) to establish a co-management body for the BMNP which would provide the autonomy and flexibility necessary for adaptation as the challenges change over time. This will bring together the current staff under one management with a standard set of terms and conditions. We are also exploring opportunities for raising revenue and retaining it in the park for use in supporting actions that help local communities benefit from the park, such as tourism and other recreational activities.

IMPACT & MILESTONES 2018

- ✓ Construction of a new ranger outpost, provision of high-quality equipment and continued maintenance of all outposts and staff quarters in order to facilitate effective and regular patrolling of the park
- ✓ Confiscation of 546 illegal timber operations, 40 sacks of charcoal and 13 chainsaws
- ✓ Successful prosecution of 29 individuals, resulting in substantial fines and even custodial sentences
- ✓ Distribution of about 13,725 coffee seedlings to 84 farmers in three districts, dispelling the myth that coffee cannot be grown outside the protected forest
- ✓ Provision of training in the construction of modern beehives and beekeeping techniques as well as beekeeping equipment to four of the communities to the north of the park which should lead to much higher incomes from the improved yield and allow women to enter beekeeping as a livelihood option.

Germany

More wilderness for Germany



Hazel grouse

Wilderness enriches biological diversity – only in wilderness can nature unfold freely. With only 0.6 per cent of Germany designated as wilderness the country is still lagging behind the rest of Europe. Our target therefore is to create more large wilderness areas in Germany and thus help achieve the two per cent goal set out in the Federal Government’s National Strategy for Biological Diversity (NBS).

1 WILDERNESS IN GERMANY

2 BRANDENBURG WILDERNESS FOUNDATION (SNLB)

3 HOHE SCHRECKE – AN OLD FOREST REDISCOVERED

Supporting wilderness

Back in 2007, in its National Strategy for Biological Diversity, the Federal Government of Germany set the goal of allowing nature to develop freely again in at least two per cent of the country’s land area by 2020. In the “Wilderness in Germany” initiative, FZS coordinates the activities of 18 nature conservation organisations and wilderness supporters with the aim of creating further wilderness areas in Germany. The initiative’s demand to set up a wilderness fund became part of the coalition



In 2019 the Wilderness Fund became reality. The German government is using this support programme to make ten million euros available per year to purchase land for wilderness development or to acquire its rights of use.

agreement of the German government in 2018. This programme provides funds to purchase land for wilderness development or to acquire the rights of use. In 2019 the Wilderness Fund became reality. With this support programme the German government will make available ten million euros per year. The support of both the government and the general population is required if the wilderness goals are to be achieved. Together with its 17 partners, FZS therefore conducts public relations work in the field of wilderness and promotes public and expert debate on the subject. In order to convince even more target groups and propagators of the benefits of wilderness, the Federal Agency for Nature Conservation (BfN) and the Federal Ministry for the Environment (BMU) are supporting the work of the “Initiative Wildnis in Deutschland” in the “Wildnisoffensive 2020” communication project. Both projects are implemented by FZS.

Representatives of state and federal authorities, universities, foundations and associations discussed further potential wilderness areas in Germany at the first conference in the “Wilderness in Dialogue – New Opportunities for More Wilderness” series at the end of 2018 on the island of Vilm. The conference was organised and conducted by Brandenburg Wilderness Foundation (SNLB) and FZS. The BfN also charged FZS and the SNLB with organising the meetings planned for 2019 and 2020.

Protected forest areas in Hesse

Large contiguous natural forests are important because they perform irreplaceable functions for animal, plant and fungal species and for functioning biotope connectivity. The Hessian biodiversity strategy envisages allowing natural forest development in a total of five per cent of the forest area (44,709 hectares), around three per cent of which was achieved in 2018. Up to now, it has mostly been smaller forest areas in Hesse that have stopped being used for forestry purposes. FZS – together with NABU Hessen, BUND Hessen, Hessische Gesellschaft für Ornithologie und Naturschutz, Greenpeace and WWF Germany – has therefore submitted 25 concrete proposals for the establishment of large protected forest areas in the state forest. The proposed areas were published in the “Land der Naturwälder” (Land of Natural Forests) brochure. FZS actively campaigned for the proposals to be considered at various political levels (especially in the run-up to state elections), and organised a parliamentary evening. In April 2019, the Hessian Minister of the Environment announced that 6,400 hectares of state forest would be taken out of use. Eight large forest areas were selected, mainly from the “Land der Naturwälder” concept.

FZS and its partners have been campaigning for large wilderness areas in Hesse for some years now. One of these areas which has already been taken out of use is Wispertaunus (Rheingautaus), about 1,000 hectares in size. In 2018, FZS launched a preliminary study together

with neighbouring forest owners in the region to analyse the extent to which the existing natural forest area in the Wispertaunus could be expanded and networked. The test-and-development project is financed by the Federal Agency for Nature Conservation (BfN) with funds from the Federal Environment Ministry (BMU).

Potential wilderness areas in Germany

FZS supports SNLB in the acquisition and management of former military sites. SNLB has since become the largest private owner of wilderness areas in Germany. It has already acquired a total of around 13,600 hectares of former military training areas. In 2018, the Foundation was able to celebrate its largest increase in area since its founding years: an area of 850 hectares called “Eichberg” was purchased, located in the former Heidehof military training zone. The area lies entirely within the “Heidehof-Golmberg” nature reserve which is protected under European law and is an important habitat for the wolf pack which has made its home there, as well as for rare species such as the nightjar or the stag beetle. The purchase has created an unfragmented wilderness area covering more than 2,500 hectares, embedded in the Heidehof area which covers about 11,000 hectares.

In addition to purchasing land, the SNLB focused in 2018 on the ongoing planning of the Internationale Naturschau (I.N.A. – International Nature Exhibition) in the region of Lieberoser Heide. The I.N.A. is intended to link regional development processes to the conservation goals for the wilderness areas in Lieberose.

Even more wilderness in Hohe Schrecke

FZS is also funding the purchase of suitable areas in northern Thuringia in an effort to expand wilderness in the “Hohe Schrecke” region. In the former military training zone of Hohe Schrecke, around 2,000 hectares of wilderness are to be protected in a large-scale nature conservation project supported by us and implemented by Naturstiftung David. A further five hectares of wilderness were added in 2018. A total of 1,834 hectares of wilderness have now been secured.

Naturstiftung David also campaigned hard at the political level to put an end to forestry use of certain forest tracts outside its project areas in Hohe Schrecke. The decision of the state government to remove about 220 hectares from forestry use from 2029 therefore represented a particular success.



WILDERNESS IN GERMANY

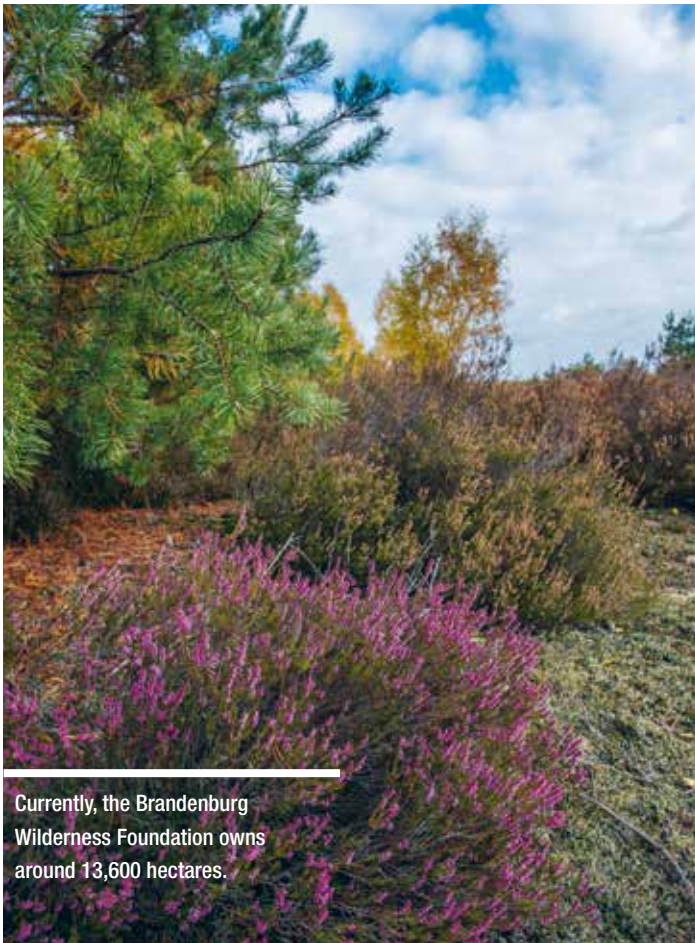
PROJECT AREA: nationwide

PROJECT START: 2014

IMPACT & MILESTONES 2018

- ✓ FZS coordinates the joint activities of the 18 nature conservation organisations in the “Initiative Wildnis in Deutschland”. These include the campaign for a national wilderness fund.
- ✓ The Wilderness Fund was included in the coalition agreement of the Federal Government and is intended to support the federal states in achieving the two per cent wilderness target.
- ✓ Nature conservation associations collected proposals for 25 protected forest areas in Hesse and published these in the “Land der Naturwälder – 25 Waldschutzgebiete für Hessen” brochure.
- ✓ In April 2018, FZS and its partners organised a parliamentary evening in Wiesbaden in order to impress the importance of wilderness and natural forests in Hesse upon politicians.
- ✓ A workshop was held with “Nationalpark Initiative Steigerwald”.
- ✓ Work began on a preliminary study to analyse the expansion and networking of the 1,000 hectare natural forest area in Wispertaunus in Hesse.

Rotting wood provides habitat for many different species.



Currently, the Brandenburg Wilderness Foundation owns around 13,600 hectares.



Eight wildcats have been confirmed in the Hohe Schrecke.

BRANDENBURG WILDERNESS FOUNDATION (SNLB)

PROJECT AREA: 136 km² (Foundation-owned area)

PROJECT START: 1996

HOHE SCHRECKE – AN OLD FOREST REDISCOVERED

PROJECT AREA: 73 km², 20 km² (wilderness areas)

PROJECT START: 2009

IMPACT & MILESTONES 2018

- ✓ In 2018 SNLB purchased 850 hectares of the former military training area of Heidehof, bringing the total area owned to around 2,500 hectares.
- ✓ The International Nature Exhibition I.N.A. in the Lieberoser Heide was further developed: a dark-sky-park, an observation tower as well as hiking and biking trails along the wilderness area were planned.
- ✓ The first regional forum for a dialogue with the citizens, organised by the advisory board of I.N.A. GmbH (with the involvement of SNLB), was held in October 2018.

IMPACT & MILESTONES 2018

- ✓ Five hectares were added to the wilderness area in the Wiegental region, a core area of Hohe Schrecke, thanks to the owners' decision to renunciate all use.
- ✓ In a wildlife count taken in the region, eight wildcats were found to inhabit Hohe Schrecke.
- ✓ All four bunkers in the Hohe Schrecke forest, which had been adapted for bats, were indeed being used by bats over the winter.
- ✓ The Thuringian state government has decided to take about 220 hectares of land on former military training areas out of forestry use as of 2029, following the Hohe Schrecke example.



Belarus

In the bison forest



Belarus is home to a significant part of the European bison population.

PRESERVATION OF THE BIALOWIEŻA-/BIELAVIEŽSKAJA-PUŠČA PRIMEVAL FOREST (BELARUS)

PROJECT AREA:

1,500 km² (National Park, Belarusian side),
2,000 km² (entire forest region)

PROJECT START:

2012

The Białowieża pristine forest in Poland and Belarus covers an area of around 200,000 hectares. It is one of the last great natural forests in the European lowlands and large parts of the forest belong to a UNESCO World Heritage Site. The greater part of the forest and associated mires are on the Belarusian side. This part of the Bielaviežskaja Pušča National Park is largely untouched by human hand and is allowed to develop without any external interference; its core zone is now more than four times the size of the Bavarian Forest National Park's core zone.

Movement data of radio-collared wolves are being matched with camera trap photos.



Restoring the natural water balance

FZS has been supporting the conservation efforts of the national park administration since 2012. The focus of our work in the Belarusian project area is on restoring the water balance in the region. The drainage of mires on the eastern edge of the forest and river regulation have destroyed the natural water storage function of the lowland forest in both countries. The natural relief causes the water to flow rapidly out of the forest towards the west, and as a result, the ground-water level has dropped.

The Polish government began large-scale deforestation in 2017, citing bark beetle infestation of dry spruce regions as its justification. In April 2018 the Polish government was sentenced by the European Court of Justice and the clearing was finally stopped. Against this background, the main focus of our work and that of our project partners in Bielaviežskaja Pušča National Park – rewetting the mires – became even more urgent. 1,147 hectares of the Dziki-Nikar mire were already restored in 2017. In 2018 330 hectares of the 20,000-hectare Dzikaje mire were made part of the national park and their rewetting was prepared in the same year, which was started at the beginning of 2019.

As part of the restoration project at the Solomenka River, the reconstruction plans for a 3.2-kilometer river section were completed in 2018. In this section of the river, the Solomenka will again flow unregulated and in meanders. This slows the flow of the river, reduces soil erosion and helps restore natural floodplains.

Research and education in lowland forests

A second focus of FZS in Bielaviežskaja Pušča is research into individual/groups of species that are typical for large old-growth forest tracts. The main emphases here are on bats and birds that depend on natural forests with particularly old trees. Also, a camera trap monitoring is being carried out to survey space utilization by predators such

as lynx and wolf as well as by herbivores such as deer and elk. Data from a wolf study that was conducted during the past years showed, for example, that the forest was the “core home range” of neighbouring wolf populations. The populations were founded by some young wolves that migrated from Bielaviežskaja Pušča to other areas (even as far as the Ukrainian part of Polesia). The hunting ban on wolves within the national park, achieved in 2016, was unfortunately not extended at the end of 2017. The behavioural study on wolves is therefore all the more important and was continued in 2018.

In order to promote understanding and acceptance of the project objectives, of the importance of the lowland forest and of wilderness development, the project team organised numerous lectures for the national park staff and also for the local population.

IMPACT & MILESTONES 2018

- ✓ 330 hectares of the Dzikaje fen mire were integrated into the Bielaviežskaja Pušča National Park to make them available for restoration.
- ✓ Rewetting of part of the Dzikaje fen mire began at the beginning of 2019.
- ✓ The reconstruction plans for the restoration of a 3.2-kilometer-long section of the Solomenka River have been completed and river deconstruction is envisaged for 2019.
- ✓ 20 public lectures for the national park staff have strengthened the acceptance and understanding of wilderness development.

Belarus / Ukraine

The wild waters of the Prypjat



At over 18.6 million hectares, Polesia is about half the size of Germany and one of the largest natural river landscapes in Europe. At its heart is the Prypjat river. This untamed 700-kilometre river flows through Polesia. With its meanders, tributaries and oxbow lakes, it transforms the landscape into a veritable labyrinth of swamps, wet meadows and floodplain forests.

WILDERNESS WITHOUT BORDERS – NEW PROTECTED AREAS IN POLESIA (BELARUS AND UKRAINE)

PROJECT AREA:

58,000 km² (entire Polesia region)

PROJECT START:

2015

Polesia is one of the last vast wilderness areas in Europe. Western Polesia includes a UNESCO biosphere reserve and numerous parts of Polesia have been recognised as “Ramsar” sites. Despite major intervention in the natural landscape during the Soviet era (through drainage and weapon testing), large areas still remain untouched by human hand. In spring, countless wetlands form along the river. When the Prypjat bursts its banks as the waters rise, it resembles a large lake. The water surface then stretches to widths of up to 30 kilometres. The floodplains provide an important resting place for hundreds of thousands of migratory birds in spring and autumn. Endangered species such as the greater spotted eagle and the aquatic warbler breed in or along the wetlands. These birds are dependent on untouched habitats. The extensive forests on both sides of the river also provide a retreat for large mammals such as wolves, lynxes, moose and bison, and brown bears are increasingly being spotted.



The untamed Pripjat river flows more than 700 kilometres through Polesia.

“Wilderness without borders” under pressure

Unfortunately, the extensive river wilderness of Polesia, which stretches across Poland, Belarus, Ukraine and Russia, is also coming under pressure. Fragmentation of habitats as the result of infrastructure projects and the spread of forestry are all threatening Polesia. These worrying developments led FZS to commit itself to working in Polesia in 2015. With funds from the “Claus und Taslimawati Schmidt-Luprian Stiftung Vogelschutz in Feuchtgebieten” foundation, FZS mapped almost the entire Polesia area in 2015 and 2016. This led eventually to the selection of a core project area. Since 2017 we have been working together with our project partners in the core area of Polesia, north and south of the middle reaches of the Pripjat. Our Polesia project is called “Wilderness without Borders”. The project region covers 5.8 million hectares and straddles the Belarus and Ukraine border. Our goals are to create a network of protected land covering a total area of 1.2 million hectares and to protect around 100,000 hectares of new land. In addition, 6,000 hectares of mires and alluvial forests are to be renaturalised in order to restore the natural water balance. The Cam-

bridge Conservation Initiative’s Endangered Landscapes Programme (ELP) has earmarked EUR 3.9 million of funding for this extensive nature conservation programme over the next five years. The grant is provided by Arcadia – a charitable fund of Peter Baldwin and Lisbet Rausing.

Preventing the planned E 40 waterway

The wild nature of Polesia is threatened by a planned 2,000-kilometre long inland waterway called E 40. The plans for the waterway, which will create a navigable link between the Black Sea and the Baltic Sea, envisage the partial dredging and canalisation of the Pripjat riverbed. This work would not only cause immediate damage to the ecosystem, but would also have an indirect effect on adjacent mires due to the changed water level. Nevertheless, representatives from Belarus, Poland and Ukraine are pushing ahead with the plans and began feasibility studies at the end of 2018. Together with our regional partners, we are trying to convince the governments in the affected countries to abandon their E 40 plans. Several studies have been commissioned to this end, and are to be presented to the decision-makers. Among other things, the effects of the large-scale construction project on the Polesia ecosystem, and economically and ecologically preferable alternatives to the waterway are being analysed. We have launched an information campaign (which will eventually also be submitted to the European Union) to inform political decision-makers about the importance of an intact river landscape and the consequences of the planned waterway.

IMPACT & MILESTONES 2018

- ✓ At the end of 2018, FZS received a five-year project grant from the Endangered Landscapes Programme (ELP) financed by Arcadia – a charitable fund of Peter Baldwin and Lisbet Rausing.
- ✓ In 2018, FZS funded the mapping of drained mires, which are to be restored in the next few years as part of the ELP project in order to restore the natural water balance.
- ✓ In March 2018, all partners involved in the prevention of the E 40 waterway met for a strategy meeting at the FZS headquarters in Frankfurt.
- ✓ The publicity campaign aimed at preventing the E 40 waterway in Polesia was launched (website, petitions, etc.).
- ✓ An application to have the heart of Polesia added to the list of UNESCO World Heritage Sites will be drawn up in 2019.
- ✓ In 2018, further greater noctule bats were radio-tagged as part of the bat studies. Evaluation of the movement patterns of the animals showed that the bats prefer former forest fire areas as hunting grounds.

Carpathians

Europe's large primeval forests



1 WOLF MOUNTAINS

2 FĂGĂRAȘ MOUNTAINS

3 UKRAINIAN CARPATHIANS

At 1,300 kilometres, the Carpathian Arc is the longest mountain range in Europe. The peaks rise to above 2,500 metres and the great biodiversity makes the Carpathians one of the most valuable biogeographical regions in Europe. More than half of the 10 million hectare area is covered with old beech and spruce forests. Ten areas in Ukraine and Slovakia – the “Carpathian beech forests” – have been jointly designated a UNESCO World Natural Heritage Site.



In Romania and Ukraine we are making progress in expanding the protected areas.

Conflicts over the use of wood and illegal logging are endangering the forests in the Carpathians. In Romania alone, an estimated 400,000 hectares of forest have been illegally cleared in the last two decades. This clear cutting means that valuable, old and species-rich forests are lost forever, but so, too, are their functions as carbon reservoirs, sources of drinking water and oxygen, and as retreats for animals such as brown bears. Just a little further along the Ukrainian border, the untouched old-growth forest areas are still largely intact, and the Ukrainian government is now endeavouring to preserve this natural heritage. But the insatiable demand of large Western European timber companies for wood does not stop at the Ukrainian border.

Protecting Europe's last virgin forests

In order to prevent the Romanian scenario from repeating itself, FZS is working on a transnational basis in the Carpathians. FZS has been collaborating with local partners in Romania, Poland, Ukraine and Slovakia on a total of three project regions since 2012 to secure the ancient Carpathian mountain forests as wilderness areas forever. Here we are supporting our regional project partners both with funding and our expertise.

There is particularly great pressure on the protected areas in the Polish-Ukrainian-Slovak border region of the Carpathians – the Wolf Mountains. On the Slovak side of the project area there have been boundary disputes regarding the UNESCO World Heritage sites since 2007. IUCN, FZS and the Aevis Foundation are trying to achieve recognition of a larger area at the political level. The project partners sent several letters to the relevant ministries in 2018 and have already held initial talks. Aevis put forward a regional development plan for the coordination of further nature conservation areas with the authorities, and submitted a concept for their long-term protection. In the Polish part of the project, the focus is on public relations work to convince the population of the expansion of protected areas. We are also supporting our project partners in the purchase of land in order to promote the development of natural game populations and to prevent overly large hunting areas.

With the support of FZS, around 100,000 hectares of additional forest area are to be included in the existing eight national parks and protected areas in the Ukrainian Carpathians in the coming years. The Ukrainian state is already making great efforts to preserve the existing protected areas (which include UNESCO World Heritage sites), and has imposed a ban on the clearing of coniferous forest areas at elevations of over 1,100 metres. FZS is also leading a project to support protected areas in the Ukrainian Carpathians, which is supported by

KfW funding of EUR 14 million. The national parks are provided with equipment and extensive training for their employees, and we also support area mapping works related to the national park extensions. In order to increase the acceptance of the national parks among the population, we also promote the sustainable production and marketing of local products together with our project partner Ukrainian Society for the Protection of Birds (USPB).

In neighbouring Romania, we are supporting the efforts of our project partner Fundatia Conservation Carpathia (FCC) to expand a private protected area of around 100,000 hectares. In addition to the purchase of land, we are helping in the reforestation of former clear-cuts in order to prevent soil erosion on the slopes. These areas are also controlled and patrolled by rangers. The long-term objective of the project is to establish one of the largest European national parks in the Romanian Carpathians.

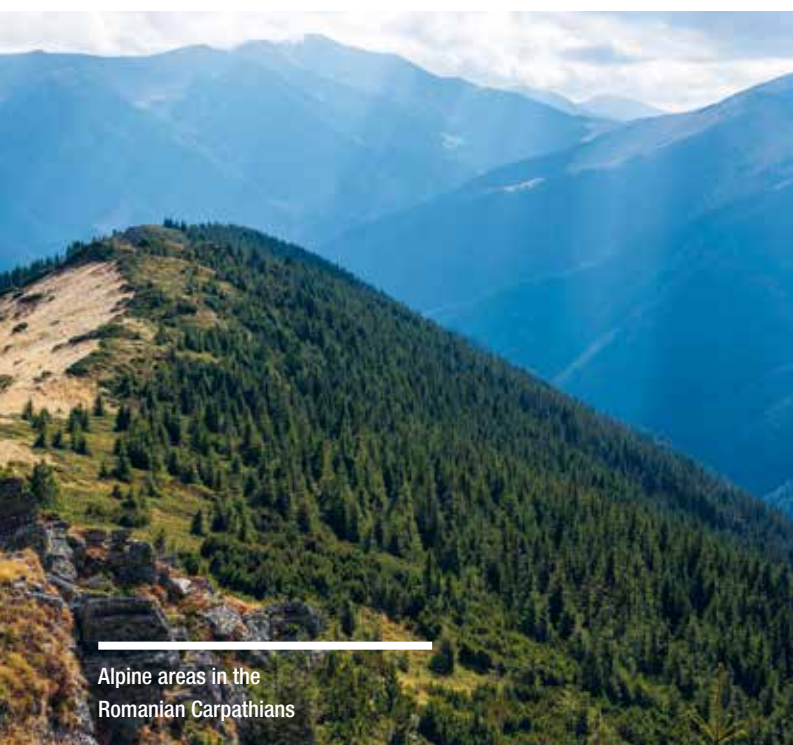
CROSS-BORDER PROTECTION OF OLD FORESTS IN THE WOLF MOUNTAINS (POLAND, SLOVAKIA AND UKRAINE)

PROJECT AREA: Target size 2,000 km²

PROJECT START: 2016

IMPACT & MILESTONES 2018

- ✓ A regional development plan was drawn up for the Slovakian project region and agreed with the authorities. It contains concepts for sustainable economic use in the region as well as recommendations for new protected areas.
- ✓ Discussions started with the Slovak government on recognition of the boundaries of the UNESCO World Heritage Site as designated in 2007.
- ✓ A change in the hunting law was introduced in the Polish project areas of the Carpathians. This may result in larger no-hunting zones in the future.
- ✓ 40 short films about wildlife in Poland and the Wolf Mountains were produced and published on Facebook and YouTube to promote the planned expansion of the territory in the Polish part of the Wolf Mountains.



Alpine areas in the
Romanian Carpathians

ESTABLISHMENT OF A WILDERNESS/FOREST RESERVE IN ROMANIA

PROJECT AREA: 2,000 km² (national park and NATURA 2000 area)

PROJECT START: 2012

IMPACT & MILESTONES 2018

- ✓ Following an extensive application process, our Romanian project partner Fundatia Conservation Carpathia (FCC) received five million US dollars in project funding from the Cambridge Conservation Initiative's Endangered Landscapes Programme.
- ✓ Purchase of 285 hectares of forest in the Făgăraș mountains and 574 hectares in the Leaota region, bringing total land ownership to 22,352 hectares.
- ✓ As part of the LIFE project, a wildlife monitoring concept was developed and the impact of more sustainable forest use on employment and income in the region was monitored.



Old beech forest in the
Ukrainian Carpathians

PROTECTING VIRGIN FOREST IN THE UKRAINIAN CARPATHIANS

PROJECT AREA: 2,000 km² (all national parks involved in the project), 24,000 km² (Ukrainian Carpathians)

PROJECT START: 2013

IMPACT & MILESTONES 2018

- ✓ The first documents on potential areas for the planned expansion of the national parks (which would add 100,000 hectares in total to the existing national park territories) were submitted to the then Ukrainian President Poroshenko in 2018. He adopted the first extensions, totalling 12,000 hectares, at the beginning of 2019.
- ✓ In the Transcarpathian region, a 193-hectare forest conservation area was designated and, in addition, four smaller primeval forest areas covering a total area of 106 hectares were placed under protection. This is to be expanded in the future.
- ✓ The marketing scheme for regional products in the Skolivski Beskydy National Park was extended to all eight national parks participating in the project due to its great success. The regional administration in Lviv announced that it would co-finance the project.
- ✓ The Carpathian Biosphere Reserve received a new project vehicle. Within the framework of the KfW project, several tenders for the procurement of further equipment (vehicles, radio sets, motorbikes, etc.) for other protected areas in the Carpathians were launched at the end of 2018.

Kazakhstan

The return of the saiga



The saiga populations are growing.

PROTECTING THE STEPPES AND THE SAIGA ANTELOPE IN KAZAKHSTAN

PROJECT AREA:

55,000 km² (protected areas),
560,000 km² (entire Altyn Dala area)

PROJECT START:

2002

The saiga antelope, a particularly hardy mammal, lives in the barren steppe of central Asia. For centuries it has defied the extreme temperatures of -45 °C to +45 °C in the grasslands of temperate latitudes. Most of the remaining natural steppes of Eurasia and 95 per cent of the global saiga population are in Kazakhstan. Until the 90s there were still about one million saiga antelopes there. However, hunting and poaching decimated the population to just tens of thousands in 2002 and the saiga were put on the IUCN Red List as “critically endangered”.



We finally know that a combination of bacteria and climatic factors caused the 2015 saiga mass death.

FZS, together with its partner in Kazakhstan, the Association for the Conservation of Biodiversity of Kazakhstan (ACBK), the Royal Society for the Protection of Birds (RSPB) and Fauna & Flora International (FFI), is committed to supporting the Altyn Dala Conservation Initiative (ADCI) and the Kazakh government in protecting the steppe. This joint international project is devoted to preserving the unique grasslands of Kazakhstan and its predominant species.

Establishing the causes of the saiga mass death

200,000 saigas died in a mass death during calving in 2015. The project team spent three years researching the causes of this mass death and in January 2018 published the results in “Science Advances”. The international and interdisciplinary group of scientists, including FZS project leader Steffen Zuther, discovered that mass deaths usually occur during the calving period and that, in this particular case, above-average temperatures and high humidity in the days before the disaster were the triggering factors for a bacterial infection that led to the death of the animals. The bacterium *Pasteurella multocida* occurs naturally in the airways of the saigas and develops a deadly form under the influence of the named stress factors.

In addition to the rising temperatures, however, infrastructure projects and poaching are also endangering the species and its habitat. The saigas have been given a temporary reprieve on a major infrastructure project: at the beginning of 2018,

the World Bank cancelled funding of the planned road through the saigas’ migration region. The project was postponed to 2020 by the Kazakh state. The ADCI continues to advocate a change in the route of the road in order to minimise the negative effects on the saigas.

To strengthen cooperation against the illegal saiga horn trade in Kazakhstan, ACBK organised a conference aimed at identifying illegal hotspots and trade routes for wildlife objects and products. In eight training sessions, seminars and various workshops, objectives and recommendations for a more effective fight against illicit trafficking were developed together with customs officials, border guards and police authorities. In addition, there was international dialogue on the use of sniffer dogs, and the introduction of SMART (software for the systematic storage and analysis of observation data by rangers) was prepared. The rangers will be trained in SMART in 2019 when the software will become operational.

Encouraging growth in saiga populations

The saiga count carried out by ACBK in April 2018 provided encouraging results: there was a total of roughly 215,100 saigas in Kazakhstan at that time, which corresponds to 95 per cent of the world population. It was also found that the ratio of male to female saigas was sufficient for successful reproduction in all saiga populations. This is especially important for the eastern Ustyurt population.

Although this population is growing, it is still very small at just 3,700 animals. The work of the ADCI ranger unit in the Ustyurt region also played an

Scientists from the Royal Veterinary College of the University of London, from ACBK and FZS analysed saiga samples on site.





In April 2018 the first nine kulans were released in Altyn Dala after their relocation.

important role in this positive development. It not only provides up-to-date data, but also works with state rangers in the fight against poaching. It maintains contact with the local population and carries out educational work in schools.

Asiatic wild asses have returned to the Kazakh steppe

For the first time in a century, Asiatic wild asses (kulans) are once again roaming the central Kazakh steppe. In October 2017 nine animals were flown in the world's largest helicopter (MI-26) from the Altyn Emel National Park to the Altyn Dala protected area in central Kazakhstan. Over the winter, the wild asses were able to acclimatise to their new surroundings and the colder temperatures in their familiarisation enclosure. In April 2018 they were then released. Since then the wild asses have travelled long distances as they explored their new home. A total of at least 30 to 40 animals are to be added in the next few years. This relocation project was undertaken together with international project partners and has been in preparation for many years.

A scientific publication by ACBK on the wolf population and acceptance of the wolf in Kazakhstan revealed deviations from official wolf population figures. At the political level, these results have enabled us to ensure the continuation of restrictions on wolf hunting. In the future, we want to continue our research into wolves in Kazakhstan together with our Kazakh project partners. In 2018, a wolf was fitted with a radio collar for this purpose.

IMPACT & MILESTONES 2018

- ✓ The annual saiga count showed further growth of the three Kazakh populations to around 215,100 saigas.
- ✓ A scientific study on the causes of the mass death of the saigas was published in "Science Advances" in January 2018. The main causes were climatic factors and bacteria.
- ✓ Nine Asiatic wild asses (kulans) were released in April 2018 after a six-month settling-in period in an enclosure in the Altyn Dala project region. They have already travelled long distances in their new home.
- ✓ The ADCI initiated the first public burning of 148 confiscated saiga horns, 31 skulls and five carcasses in October 2018. The Kazakh media reported extensively on the incineration, which helped to publicise the issues surrounding the illegal trade in horns and poaching in Kazakh society.
- ✓ The public was informed about the projects in all Kazakh project regions, and educational work on the ADCI's nature conservation objectives was carried out in schools.

Peru

Land of great diversity



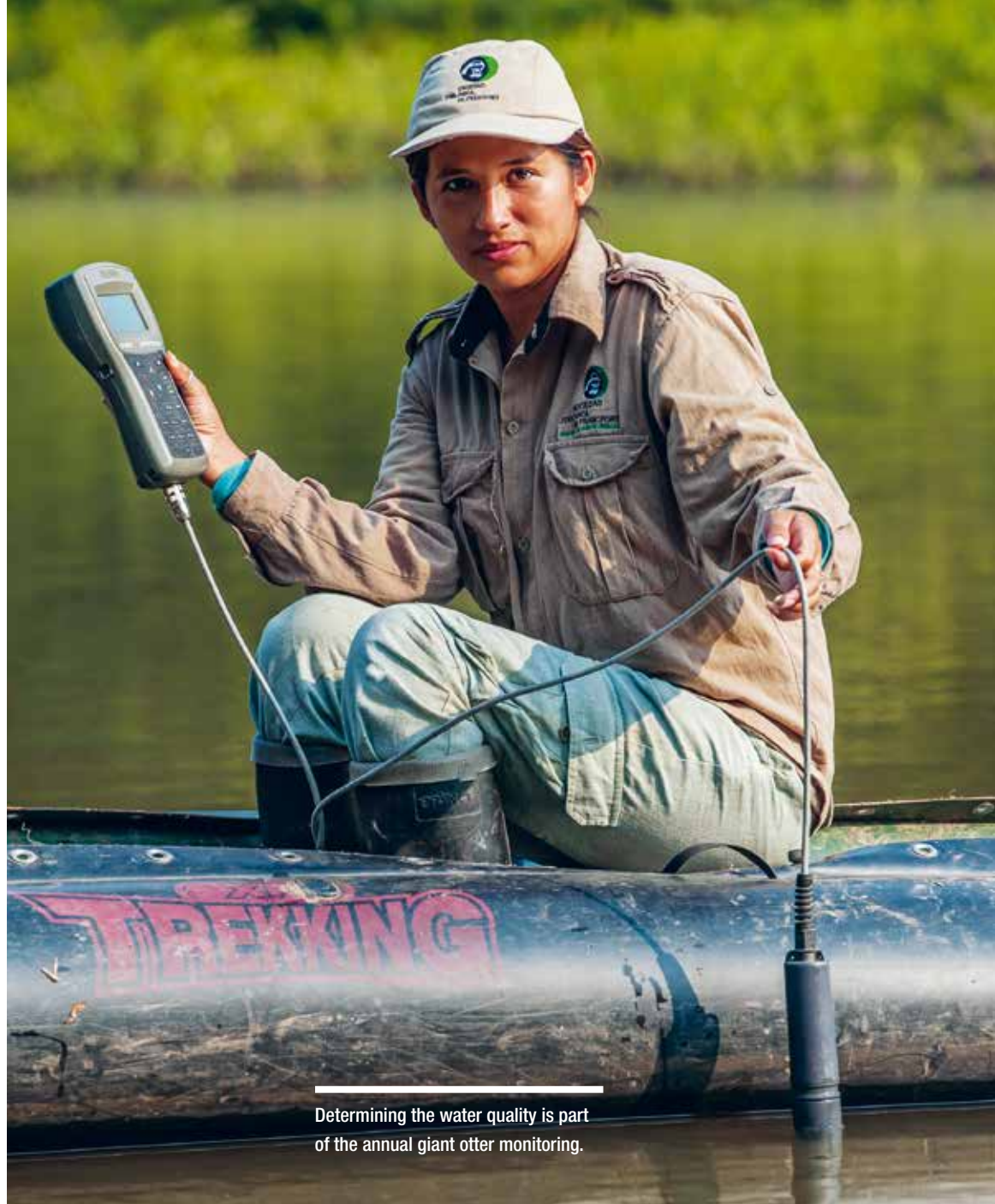
1 ANDES TO AMAZON NATURE CONSERVATION PROGRAMME

2 PROTECTION OF THE YAGUAS NATIONAL PARK

The Amazon rainforest occupies more than five million square kilometres in the north of South America. This is where the Amazon, the most powerful river on earth, flows and it is the location of the most species-rich regions of our planet. Indigenous peoples living in isolation or first contact also inhabit some of South America's unique wilderness areas. In recent decades, the Peruvian government has established several protected areas, some of them very large, such as the Manu, Alto Purus, Bahuaja Sonene National Parks, the Tambopata and Megantoni reserves and indigenous protection zones. This means that more than 60,000 square kilometres are now protected as nature reserves. They offer refuge to large populations of other endangered species such as giant otters, jaguars and Andean bears.



Giant otter enjoying a fish in an oxbow lake along the Manu River.



Determining the water quality is part of the annual giant otter monitoring.

For many years, the FZS programme in Peru has focused on protecting the unique, species-rich forests on the eastern slopes of the Andes and in the adjacent Amazon lowlands. Yaguas, the newest national park in the north of the country, was added to our programme four years ago. Due to its remoteness, Peru's rainforest has retained much of its wild, original state. But its inaccessibility also makes the monitoring and management of protected areas a complex and expensive undertaking. This is why we coordinate closely with the park administrations of the relevant authority, SERNANP, which we support in carrying out these particular tasks in seven protected areas in south-eastern Peru and in Yaguas in the north. We work closely with the administration staff of these protected areas, with the rangers and with various other authorities and bodies, such as the education authority, the Ministry of Culture and Environment, indigenous associations and other NGOs.

In practical terms, FZS helps to monitor the huge areas by providing additional patrols and equipment, and by evaluating aerial photographs. It also builds ranger posts and takes care of their maintenance. We offer education and training to rangers and employees of protected areas, while communities in and around protected areas benefit from our environmental education programmes. FZS also carries out conventional biological monitoring in the protected areas. Increasingly, we aim to steer the use of resources of the protected area into a more sustainable direction.



The Yaguas protected area became Peru's 15th national park.



The dramatic proportions of illegal gold mining in the Madre de Dios area are best seen from the air.

ANDES TO AMAZON CONSERVATION PROGRAMME

PROJECT AREA:

Seven protected areas covering a total area 70,000 km²

PROJECT START: 2002

The curse of gold

One of the biggest current threats to Peru's "wild east" is illegal gold extraction. It is spreading along the rivers, does not always stop at the borders of protected areas and leaves behind lunar landscapes contaminated with toxic mercury. The high price of gold on the global markets is what makes this illegal activity so attractive.

In addition to illegal gold extraction, population growth is a further factor that will have a long-term impact on the conservation of the rainforests and their fauna. Like many protected areas in South America, the Manu National Park is home to indigenous peoples who hunt and fish or cultivate crops using simple means. The population growth rate here is much higher than the national average. Understandably, there is also increasing need for development. More people need more food, meaning that they need more arable land, more fruit to collect and more animals to hunt. Today, some villages are already complaining that there are ever fewer animals and crops in the protected areas in which they live.

IMPACT & MILESTONES 2018

- ✓ The annual survey of the giant otters yielded 58 animals – the highest number since 2007.
- ✓ New management plans have been developed for the Manu and Alto Purus national parks with FZS support.
- ✓ National and international media reported on our projects.

THE FIGHT AGAINST ILLEGAL GOLD EXTRACTION:

- ✓ FZS financed flights over the Manu and Alto Purus national parks. There was no evidence of illegal activity within these protected areas.
- ✓ In 2018 we used high-resolution satellite images for the first time in Manu, Alto Purus and Tambopata to detect illegal gold extraction outside the boundaries of the protected area. In addition to ranger patrols, drones were also regularly used to monitor critical areas.
- ✓ The military and police took action against illegal gold mining in the Manu biosphere reserve and Tambopata in 2018. In this context, FZS provided information and logistical support to SERNANP.

WORK WITH COMMUNITIES:

- ✓ The boarding school for young Matsiguanka in Boca Manu on the border of the Manu National Park received vital support in 2018.
- ✓ In the highlands of the Manu National Park we continue to work on preventing conflict between Andean bears and humans. The focus is also on alternative sources of income, e.g. growing physalis or weaving scarves for sale.



SERNANP park rangers in Yaguas

PROTECTION OF THE YAGUAS NATIONAL PARK

PROJECT AREA: 8,700 km²

PROJECT START: 2015

Great success for Yaguas

Covering 870,000 hectares, the Yaguas area in northern Peru is exceptionally biodiverse and is one of the country's largest wilderness areas. The lowland river Yaguas is the lifeline of the region and provides a rich habitat – including flood forests, cut-offs and lakes – for a diverse range of fauna. Yaguas has the most diverse range of fish species in Peru, and people from the local indigenous communities visit the area for hunting and fishing.

Yaguas was declared a national park in January 2018. An overwhelming majority of the communities around Yaguas were in favour of the national park and FZS supported the national park authority SERNANP and the communities in the lengthy process.

FZS has been working in Yaguas since 2015 and here, too, our focus has been on supporting the park authority in managing the area, be it logistically by purchasing boats and other equipment, providing fuel and helping with monitoring, or financially by paying ranger salaries. We also act as technical advisors, for example in the development of a management plan for the country's youngest national park.

IMPACT & MILESTONES 2018

- ✓ Yaguas was designated a national park (and the 76th state protected area) on 11 January 2018.
- ✓ In 2018, FZS financed five regular patrols, a further patrol together with the Peruvian navy, as well as five longer special patrols inside the park, and a surveillance flight. FZS employees accompanied these patrols. No illegal activities were detected in the protected area.
- ✓ In cooperation with SERNANP, three indigenous associations and the NGO IBC FZS organised workshops with the 26 neighbouring communities, aimed at drawing up a new management plan for the national park. The plan is scheduled for completion in 2019.
- ✓ 20 camera traps were set up to provide information on terrestrial mammals.
- ✓ In 2018, FZS employees counted giant otter (21 animals) and manatee (7 animals) numbers in Yaguas for the first time.

Guyana

A land full of nature conservation opportunities



ESTABLISHMENT AND MANAGEMENT OF THE KANUKU MOUNTAINS PROTECTED AREA

PROJECT AREA:

6,600 km²

PROJECT START:

2014

Almost 80 per cent of the Republic of Guyana in the north-east of South America still consist of near-natural tropical rainforest and tropical wet savanna where there is still minimal human influence. The Kanuku Mountains Protected Area was established in southern Guyana in 2011. Savannas, gallery forests and rainforests make the Kanuku Mountains an ecologically highly diverse area. Although no people live in the reserve, indigenous communities from the neighbouring regions come here to fish and grow fruit in small fields. The Protected Areas Commission (PAC) is responsible for managing the reserve.

At present there is still only moderate pressure on the protected areas of the country, but the situation is changing, as the population is growing and the infrastructure is set for further expansion. In particular, the construction of new roads poses a risk, as these provide access to regions which were previously protected by their inaccessibility. Logging, wildlife trade and gold extraction become much easier as a result.



The Rupununi River rises in the Kanuku Mountains.

IMPACT & MILESTONES 2018

- ✓ The monitoring programme jointly developed by PAC and FZS in 2017 was implemented in 2018. With the aid of PAC and FZS, rangers collected samples and data on water quality and fish populations in the Kanuku Mountains. The aim is to monitor ecological factors and potential threats.
- ✓ The FZS and PAC staff evaluated 40 camera traps. Afterwards these – and 60 further camera traps – were relocated elsewhere in the protected area.
- ✓ PAC and FZS visited each of the 21 neighbouring communities to the protected area and informed the villagers about the results of a workshop that had been held in 2017 on the use of natural resources. Each visit strengthens personal relationships with the communities and fosters cooperation.
- ✓ In 2018, the rangers and staff of the PAC communications team ran two three-day environmental education programmes with approximately 45 children in the Kanuku Mountains.
- ✓ At present there is no evidence of interference in the ecosystem and the Kanuku Mountains continue to be a safe haven for wildlife.

A small FZS team has been helping the Protected Areas Commission to manage the Kanuku Mountains Protected Area since 2014. Updating management plans is part of the support offered by FZS, as are planning and carrying out wildlife censuses, training rangers and advising on the strategic planning and further development of the national protected area system. In 2018 the FZS project leaders once again invested a great deal of time in the education and training of the PAC staff in Georgetown and the six rangers in the Kanuku Mountains. They also supported the development of a strategic plan for the newly established Guyana Wildlife Management and Conservation Commission.

Colombia

Ambitious expansion of the “home of the jaguar” national park



Table mountains, or tepuis, are characteristic features of Chiribiquete National Park.



A brown woolly monkey in Chiribiquete National Park.

The rich and untouched wilderness of the Serranía de Chiribiquete National Park is in the heart of the Colombian Amazon. Table mountains up to 1,000 metres high, called tepuis, rise up in the rainforest and create unique conditions for rich biodiversity, including many endemic species, thanks to the special climatic conditions on the high plateaus.

The deep gorges that run through the area make it virtually inaccessible and provide a habitat for an incredible and largely unresearched variety of animals and plants. It is highly likely that indigenous groups live here in isolation. The park is an ecological link between the Andes and the Amazon lowlands. There are rock paintings that are estimated by anthropologists to be many thousands of years old on some of the steep cliffs of the table mounts.

Illegal gold extraction in the rivers around Chiribiquete represents a great danger for the national park. Mercury is used to extract the gold particles from the sediment. When the amalgam burns, it escapes into the atmosphere, poisons the environment and enters the food chain. In addition, there is deforestation of ever larger forest areas for large-scale cattle farms or coca cultivation.

The Chiribiquete National Park, also known as the “Home of the Jaguar”, was enlarged by 1.5 million hectares to 4.3 million hectares in June 2018. More or less simultaneously, the park was added to the list of Mixed World Heritage Sites (both cultural and natural heritage) by UNESCO. Even though FZS was not directly involved in the designation processes, we supported the Colombian protected area authority Parques Nacionales Naturales de Colombia (PNNC) indirectly and unbureaucratically, by assuming the translation and printing costs of the application documents, for instance. The FZS project leader also assisted the UNESCO evaluation mission.

Since 2014, FZS has supported the Colombian PNNC and indigenous associations in protecting the Caquetá River landscape. An FZS project leader has been assisting the PNNC with the planning since 2017. FZS helps fund equipment and environmental education for the park.

PROTECTION OF THE CHIRIBIQUETE NATIONAL PARK AND ITS SURROUNDINGS

PROJECT AREA: 43,000 km²

PROJECT START: 2014

IMPACT & MILESTONES 2018

- ✓ In July 2018, the Chiribiquete National Park was enlarged by 1.5 million hectares to its current 4.3 million hectares and declared a UNESCO Mixed World Heritage Site (Natural and Cultural Heritage). This makes it one of the largest national parks in the Amazon region.
- ✓ In 2018, FZS purchased equipment for two ranger posts and one research station and paid the salaries of two rangers. It also provided petrol for boat patrols.
- ✓ Turtle monitoring in cooperation with indigenous communities along the Caquetá River was continued and expanded.

COOPERATION WITH THE PARK AUTHORITY:

- ✓ FZS financed a trip of PNNC employees to Peru, enabling knowledge-sharing with Peruvian colleagues and authorities on making first contact and dealing with indigenous peoples living in isolation.
- ✓ FZS helped organise the bi-national “Putumayo Protection Corridor” workshop in Leticia in southern Colombia. Representatives of PNNC, SERNANP and FZS staff from Peru compared notes with indigenous representatives and other NGOs from Colombia and Peru. Together they developed roadmaps to improve and intensify cooperation across the national border. The eventual aim is to draw up a joint nature conservation and land planning concept for the Putumayo border river.

FIGHT AGAINST GOLD EXTRACTION:

- ✓ Samples were taken from edible fish caught along the Caquetá River in order to document mercury contamination of the environment.

Indonesia

From species protection to landscape conservation



Win Gayo, an adult male, is one of nearly 170 orangutans that were released into the wild over recent years.

BUKIT TIGAPULUH LANDSCAPE CONSERVATION PROGRAMME

PROJECT AREA:

1,450 km² (national park), 2,500 km² (forest area)

PROJECT START:

2000

The Bukit Tigapuluh ecosystem contains one of the largest continuous lowland rainforests on the Indonesian island of Sumatra. Charismatic animal species such as elephants, tigers and tapirs live here and, thanks to the work of FZS, orangutans were reintroduced in recent years. At 145,000 hectares, the national park, founded in 1995, covers about half of this ecosystem. But there are also valuable natural forests outside the Bukit Tigapuluh National Park. There, however, legal and illegal deforestation is leading to more and more conflict between humans and wildlife as they both compete for the same habitat. Elephants, for example, who actually prefer to live in the ever-dwindling forests, are now invading farmers' fields in search of food.

Today Bukit Tigapuluh is a green island amidst cleared areas which are now being used as plantations for the production of palm oil, rubber or paper. The deforestation rate in Indonesia in general, and in Sumatra in particular, is breathtaking. Between 1985 and 2007 alone, around 12 million hectares of tropical forest were cleared. 50 per cent of Sumatra's total forest area disappeared within just 22 years.

What began in the late 1990s as a project to reintroduce confiscated orangutans has developed into a comprehensive landscape conservation programme consisting of many different components. The programme focuses on preserving the habitat inside and outside the park by providing a dedicated ranger team, for example. In addition, FZS supports the nature conservation authority of the province in carrying out its tasks. Together with local communities and administrative and planning bodies, we are also trying to shift the development of the southern border areas of the park in a more conservation compatible direction. This will also reduce the pressure on the park itself. Since 2015, an Ecosystem Restoration Concession (ERC) has been managed together with the WWF in order to secure the long-term future of this buffer zone.

The focus of our work is currently on protecting this 39,000 hectare Ecosystem Restoration Concession in the south of the park and the new 23,000 hectare Orangutan Sanctuary in the east. The staff of FZS in Indonesia are continuing to train and release orangutans who were once in captivity in two field stations (OOS and SORC), and to protect Sumatran elephants.

Orangutans that were illegally kept and then confiscated or otherwise taken into human care are prepared for independent survival in the forest at the two stations, and given veterinary care. After their final release, they continue to be supervised and monitored using radio te-

lemetry transmitters. This long-term data provides new and valuable insights into the behaviour of orangutans and helps answer questions about migration behaviour and habitat selection. Over the last ten years, some 170 Sumatran orangutans have been released back into freedom in this way. The aim is to establish a viable orangutan population in the long term. A gratifying number of natural-habitat births gives reason to hope for organic growth in the future.

IMPACT & MILESTONES 2018

- ✓ In September 2018 FZS signed a contract with the forestry authority of Jambi Province, which has entrusted us with management of the Orangutan Sanctuary, a 23,000 hectare block of forest to the east of the national park. One of our field stations is located there.
- ✓ **Work with communities:** We help the people who live in the Ecosystem Restoration Concession to earn their living in ways that are compatible with nature conservation, for example through vegetable cultivation or sustainable cattle and goat farming. FZS also supports small microcredit groups that are aimed specifically at women. In addition, a tree nursery for the reforestation of pilot areas was established in the ERC.
- ✓ **Environmental education:** FZS's Mobile Education Unit conducted lessons at five schools in the vicinity of the national park, and 12 schools have integrated the teaching modules into their curricula.
- ✓ **Orangutan protection project:** The released orangutans are reaching sexual maturity and are having more and more offspring. In 2018, field station staff monitored five pregnant females and were able to observe a birth in the wild.

In 2018 eight orangutans were released into the wild: seven of these had already been released but came back to the station for various reasons (e.g. injuries). Since the beginning of the project, a total of 168 animals have been released into the jungle after appropriate training.

- ✓ **Elephant protection project:** Closer cooperation with the local police and forest protection police has proved fruitful. In 2018 there were significantly fewer criminal actions within the nature conservation concession. 336 potential human-elephant conflicts and nine incidents with orangutans were reported by people in the Bukit Tigapuluh area to the Wildlife Protection Unit (WPU), which then drove the animals away. There were no accidents or injuries in 2018. To prevent conflict, WPU staff organised 20 workshops for more than 500 small farmers. In addition, seven electric fences were built. One elephant was given a new radio collar.



Monitoring the released orangutans is an important component of the programme.

Vietnam

In the forest
of the grey-shanked
douc langur





Vietnam is slightly smaller than Germany, but is much more densely populated. More than 94 million people live in this southeast Asian country. There is hardly any space left for unspoilt nature in Vietnam, as the land is being used for intensive agriculture.

Only in the central Vietnamese highlands can large contiguous areas of forest still be found. The government is keen to preserve these remaining havens for the diverse and in some cases unique fauna and flora by setting up conservation areas. The approximately 42,000 hectare Kon Ka Kinh National Park is home to numerous animal species, including about 500 grey-shanked douc langur, an endangered primate species that can only be found in central Vietnam. The Kon Ka Kinh mountains are also an important water catchment area.

Illegal logging, poaching and the successive expansion of agricultural land are increasingly encroaching upon the protected areas, and in some cases are not stopping at their borders. In the Kon Ka Kinh region, too, original forests are being cleared to establish coffee plantations, for example, and road construction work is cutting up the large forest area. The small FZS team supports the Kon Ka Kinh National Park administration in monitoring and managing the area. The park rangers operate out of eight stations and FZS provides equipment for them, including GPS devices, motorcycles and cameras. In addition, FZS supports the initial and further training of the rangers. During their patrols in the park, the rangers often come across illegal activity. They then destroy snare traps, break up illegal logging and hunting camps and arrest any wood thieves and poachers that can be caught red-handed.

Red-shanked douc langur

In cooperation with the University of Danang, FZS supports environmentally relevant research in Vietnam with practical benefits for conservation.

FOREST PROTECTION IN THE HIGHLANDS OF CENTRAL VIETNAM

PROJECT AREA:

420 km² (national park), 1,000 km² (forest area)

PROJECT START: 2010

IMPACT & MILESTONES 2018

- ✓ The FZS team organised training courses for 32 park rangers in Kon Ka Kinh.
- ✓ It financed a total of 14 five-day forest patrols. In the process, 445 wildlife traps and eleven logging camps were destroyed, 12 loggers arrested and 13 firearms confiscated.
- ✓ **Work with communities:** It is important to maintain continuous contact with the indigenous Bana from the villages around the park and to ensure they receive environmental education. FZS employees organised the first Bana cultural evening in 2018, which attracted 400 visitors. When six Bana village chiefs were taken on a trip to the Son Tra and Sao La Nature Reserves, they were inspired by the involvement of the Tai Oi ethnic minority in protecting the Sao La area, as well as by their ecotourism concept.
- The FZS environmental education officers held lessons in three secondary schools in the area around the park and organised a trip to the national park for 40 pupils.
- ✓ **Cooperation with the University of Danang:** The annual practical ecology course took place with students in the national park in August and September. In December, the University awarded FZS a prize for many years of successful partnership.

FZS Financial Report 2018

Frankfurt Zoological Society is in a strong financial position and makes an important contribution to international nature conservation thanks to the support of its private sponsors and public and institutional donors.

FZS maintains a very healthy, stable and diversified revenue structure. In 2018, there was strong support from members, donors and sponsors, with revenues remaining stable. For a number of years now, we have been successful in leveraging our, for the most part, flexible core funds (for example, private donations and capital gains) to acquire third-party funds from large institutional granting agencies. Large donations and inheritances have developed into another mainstay of project financing.

Nature conservation is an ongoing task, and FZS is strongly committed to its carefully chosen fields of activity. That is why we continue to emphasise sustainability and long-term financial security in our conservation work. The capital of the "Hilfe für die bedrohte Tierwelt" foundation is to be further increased in order to create such a solid basis and to cushion ourselves against any fluctuations on the capital markets.

→ The detailed financial report of the Frankfurt Zoological Society and the "Hilfe für die bedrohte Tierwelt" foundation for the year 2018 can be found in the enclosed brochure "Financial Report 2018" or online at fzs.org

OUR LARGEST INSTITUTIONAL DONORS IN 2018

INSTITUTIONAL DONORS	PROJECT COUNTRY	FUNDING in Euro
The Wyss Foundation	Tanzania, Zambia	1,379,707
U.S. Agency for International Development (USAID)	Zambia	1,108,127
Gordon and Betty Moore Foundation	Peru	769,732
U.S. Department of State International Narcotics and Law Enforcement Agency (INL)	Tanzania, Zambia	720,812
The Wildcat Foundation	Zambia, Zimbabwe	666,698
KfW Entwicklungsbank and KfW Stiftung	Ethiopia, Guyana, Peru, Tanzania, Ukraine, Zambia	1,201,566
Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ)	Ethiopia, Tanzania, Zambia	678,287
German federal ministry for the environment, nature conservation and nuclear safety (BMU)	Indonesia, Peru	463,968
European Union (EU)	Ethiopia, Tanzania	292,767
German federal ministry for economic cooperation and development (BMZ)	Zambia	170,624

REVENUES AND EXPENDITURES OF FRANKFURT ZOOLOGICAL SOCIETY 2018

REVENUES in million Euro	2018	2017	EXPENDITURES in million Euro	2018	2017
Third-party Funding	9.88	9.10	Project Funding	14.22	13.90
Bonuses from the "Hilfe für die bedrohte Tierwelt" Foundation	1.66	1.60	Coordination of Conservation Programme, Frankfurt Headquarters	1.35	1.10
Bequests (including Real Estate)	5.75	1.84	Support of Frankfurt Zoo/ Conservation Ambassadors	0.08	0.10
Donation and Allocated Fines	1.59	2.10	Communications and Public Relations	0.32	0.36
Membership Fees	0.26	0.26	Fundraising and Sponsor Service	0.34	0.25
Interest and Income from Securities	0.68	1.04	Asset Management and Other expenses	0.88	0.29
Other Income	0.48	0.38	Write-downs on Securities and Fixed Assets	0.74	0.34
TOTAL	20.30	16.33	Accumulation of Reserves	2.38	- 0.02
			TOTAL	20.31	16.32



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Thank you so much ...

We would like to thank all members, donors, sponsors and friends of the Frankfurt Zoological Society for their generous support and their commitment on various levels to the conservation of the last wilderness areas on our planet.

... for your donations

which we use promptly and directly in our conservation projects, e.g. to fund equipment or training for rangers.

... for your membership fees,

which constitute the basis of the Frankfurt Zoological Society and the foundation of our global conservation projects.

... for bequests,

in which the FZS is named as the heir or beneficiary and which were paid out to us in the past year.

... for the civil penalties and fines

which have reached us from courts, public and local prosecution services and lawyers.

... for your sponsorships,

which give our projects the planning security they need and permit the ongoing protection of the habitats of elephants, gorillas, rhinos, orangutans, wild cats and giant otters.

... for your family-event donations,

which you have collected for us at your birthday, wedding anniversary, retirement or wedding instead of gifts and flowers.

... for your endowments

which have added to the capital stock of our Help for Threatened Wildlife Foundation and which now help to support our conservation projects from the resulting earnings on a permanent basis.

Frankfurt Zoological Society

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www.fzs.org



A close-up photograph of an elephant's head and trunk. The elephant is eating a green branch with its trunk. The background is a blurred savanna landscape with trees and a bright sky.

MISSION: WILDERNESS

ANNUAL REPORT 2018
FRANKFURT ZOOLOGICAL
SOCIETY

/ FINANCIAL REPORT



FRANKFURT
ZOOLOGICAL
SOCIETY

SUCCESSES IN 2018

A YEAR OF NO POACHING

2018 was the first year for a long time in which not a single elephant was poached within the North Luangwa National Park in Zambia. Poaching has been reduced by more than 50 per cent in the adjacent protected areas which are administered by the communities. It is the biggest success recorded by FZS so far and the first time that we can genuinely claim zero elephant poaching within the park. This success has been made possible thanks to a great team, the well-trained and well-equipped rangers, as well as the extremely efficient monitoring system.



YAGUAS – A NEW NATIONAL PARK

On 11 January 2018, Peru's Minister of the Environment Elsa Galarza Contreras and President at the time, Pedro Pablo Kuczynski Godard, published a parliamentary decision in "El Peruano" declaring Yaguas the 15th National Park in Peru. A broad alliance of neighbouring communities as well as national and international organisations and institutions, including FZS, had joined forces to campaign for the National Park. The new National Park covers an area of 8,700 square kilometres – almost half the size of the German federal state of Saxony. It is now important to strengthen the controls against illegal logging and gold mining.

MYSTERY OF MASS SAIGA DEATHS IN 2015 REVEALED

In May 2015, around 200,000 saiga antelopes, including many new-born calves, died in agony within just a few weeks on the central Kazakh steppe. Three years later, a team of researchers and FZS staff solved the mystery behind the cause. Many saiga antelopes carry the normally harmless bacterium *Pasteurella multocida*, however an unusual combination of above-average temperatures and high humidity in the days before the mass death turned this into a fatal killer.

→ Further information on the individual projects can be found in FZS Annual Report 2018 and online at www.fzs.org.





CONTENT

04	HIGHLIGHTS 2018
06	PRESENTING THE FRANKFURT ZOOLOGICAL SOCIETY
08	DISTRIBUTION OF EXPENDITURES BY COUNTRY
10	TRANSPARENCY
12	FINANCIAL REPORT
16	CHANCES, RISKS AND OUTLOOK
18	COMMUNICATION AND FUNDRAISING
19	HILFE FÜR DIE BEDROHTE TIERWELT FOUNDATION
24	DONORS AND PARTNERS

HIGHLIGHTS 2018



FEB MON TUE WED THU FRI SAT SUN

Spring School in Frankfurt

Good conservation project managers are rare, but the success of conservation projects depends on their dexterity and management skills. This is where the Frankfurt Spring School on Conservation Project Management comes in and complements the training of future nature conservation project managers. During the four-week intensive course, which takes place in the semester break and is unique in Germany, experts teach important topics of successful project management to students of biology and related disciplines. The Spring School is an initiative of Frankfurt-based institutions such as FZS, KfW Stiftung, KfW Entwicklungsbank, WWF, KPMG and BioFrankfurt in close cooperation with the Goethe University.

Following the great success of the pilot project, the second Frankfurt Spring School took place in February 2018 with 30 participants from 11 countries, including six scholarship holders from Ethiopia, Ecuador, Madagascar, Peru, Tanzania and Vietnam. In their respective home countries, they work in nature conservation projects of FZS or WWF. The KfW Stiftung financed their participation in the Spring School. With the support of an external consultant, each of these six scholarship holders developed an application for a newly designed nature conservation project during the Spring School. After an extensive selection process, three of them received funding from the KfW Stiftung of up to EUR 100,000 each for the effective implementation of their project.



JUN MON TUE WED THU FRI SAT SUN

Fire in the Bale Mountains, Ethiopia

It could have been worse – is perhaps the best way of looking at the disaster in our Bale Mountains National Park project in Ethiopia. The FZS project building was destroyed in a fire at the beginning of June 2018. It burned to the ground. Fortunately, nobody was in the building that night, so no-one was harmed. Why the fire broke out is unclear and the cause will probably never be determined. A technical defect is one possibility, arson is another. An appeal for donations raised around EUR 100,000 for the reconstruction work.



JUL MON TUE WED THU FRI SAT SUN

160th anniversary of FZS

We celebrated the 160th anniversary of FZS with a special supplement about our nature conservation work in the newspaper “Frankfurter Allgemeine Zeitung”. We also cooperated with the museum “Schirn Kunsthalle” in Frankfurt on the occasion of the exhibition “Wilderness”. For a limited time we offered a special anniversary membership.



NOV MON TUE WED THU FRI SAT SUN

Biodiversity on the big screen

The German TV broadcaster ZDF presented two films on the importance of biodiversity on the occasion of the international conference on the Convention on Biological Diversity. The ZDF filmmaker Axel Gomille had accompanied Dr. Christof Schenck to the barren highlands of the Bale Mountains in Ethiopia and to the tropical rainforest of the Manu National Park in Peru. FZS presented the two episodes of the ZDF's "planet e" series in a preview at a Frankfurt cinema on 9 November 2018. This was followed by a panel discussion. The films have been in the ZDF media library since they were broadcast on TV (available until November 2019).



DEC MON TUE WED THU FRI SAT SUN

Conservation outreach at the zoo

The 37 volunteer conservation ambassadors spent 2,552 hours talking to visitors at Frankfurt Zoo in 2018. With their zebra-striped information carts, the enthusiastic teams of two conducted 319 sessions aimed at explaining biodiversity and the enthralling nature of conservation work based on a variety of visual objects, games and experiments. The conservation ambassador scheme is a joint project between FZS and Frankfurt Zoo.



MAY MON TUE WED THU FRI SAT SUN

German Africa Prize for Gerald Bigurube

Gerald Bigurube was awarded the German Africa Prize of the Deutsche Afrika Stiftung by the President of the Bundestag, Dr Wolfgang Schäuble, on 27 November 2018 (in the photo in the back: presenter Jan Hofer). The Tanzanian Gerald Bigurube has dedicated himself to nature conservation in his home country for more than 40 years. He has close links to rangers as well as to parliamentarians and other decision-makers. From 2010 to 2018 Gerald Bigurube was FZS Country Director for Tanzania; before that he headed the Tanzanian National Park Authority TANAPA. He has a unique approach to nature conservation which is in harmony with the economic development of his country.

PRESENTING FRANKFURT ZOOLOGICAL SOCIETY

FZS STRUCTURE

Zoologische Gesellschaft Frankfurt von 1858 e.V. (Frankfurt Zoological Society, FZS) is a registered non-profit-making society based in Frankfurt am Main, Germany. The origins of the Society are to be found in the work of Professor Bernhard Grzimek who first set up FZS as a support society for the Zoo, although he then gradually developed the Society into a nature conservation organisation. From the outset it has been based at the zoo in Frankfurt.

As it promotes nature conservation and animal welfare, Frankfurt Zoological Society enjoys corporate tax exemption on the basis of the notice of exemption and the annex to the notice of exemption of the Frankfurt am Main V Tax Office, tax no. 47 250 98191, of 22 June 2018 according to § 5 para 1 no. 9 of the Corporation Tax Law. Its official organs are the General Assembly and the Board of Directors.

The **General Assembly** convenes once a year. It elects the Board and approves its activities, approves the annual financial statements and elects the auditor. In 2018, the Society had 3,497 members, consisting of private individuals and institutions.

According to its statutes, the **Board** consists of up to eight individuals who work on a voluntary basis. It is elected for three years and adopts the annual programme of projects and the annual budget as put forward by the Executive Director. No conference or attendance fees are paid to the members of the Board of Directors. The Board may appoint an executive director for operational management. The biologist Dr Christof Schenck has conducted the Society's business since the year 2000.

In 2018, Frankfurt Zoological Society employed a total of 410 staff members, 30 of whom were based at the headquarters in Frankfurt or elsewhere in Germany.

There were also 37 volunteers working as conservation ambassadors at Frankfurt Zoo, where they explain FZS's conservation projects to zoo visitors. In addition, there was one volunteer assistant working at the Frankfurt headquarters. Roughly 40 volunteers were engaged in environmental outreach for our Peru Programme, providing information in schools about the diversity of the Amazon rainforest.

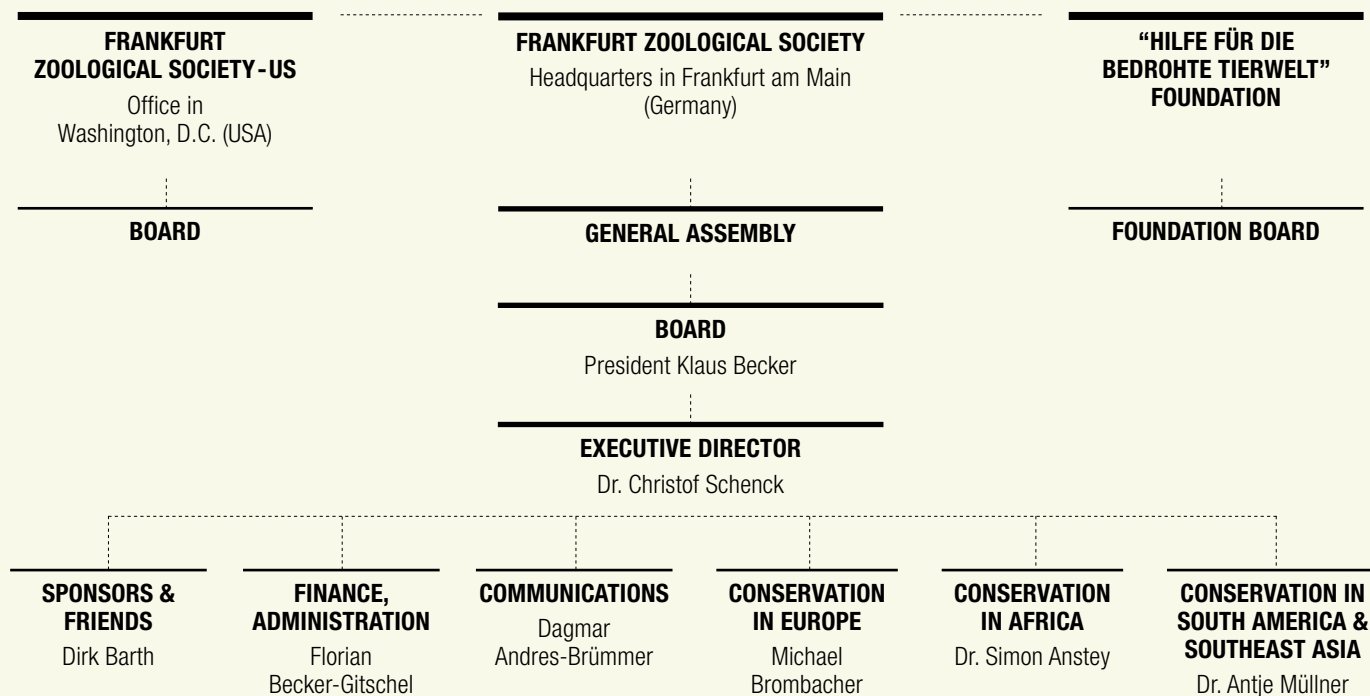
THE FZS NETWORK

FZS is supported by its **Hilfe für die bedrohte Tierwelt** foundation. This is a legally independent foundation under private law with charitable status. Founded in 2001, the foundation started out as a special account of the same name which was established in 1961 by Bernhard Grzimek and into which the donations of many viewers of his television show "Ein Platz für Tiere" were paid over many decades.

FZS has been supported in the United States of America since 2008 by the independent non-profit organisation **Frankfurt Zoological Society US (FZS-US)**. This "501(c) (3)" organisation is also exempt from tax, and the donations from private and institutional American donors in support of the FZS project work are eligible for tax relief. FZS-US is run by a board. This consists of seven volunteer members. Its President is the FZS Executive Director Dr. Christof Schenck. Since 2012, the organisation has been run by Executive Director Dr. Peyton West, who is also a member of the Board.

Frankfurt Zoological Society is represented in Peru by the non-profit association **Ayuda para vida Silvestre Amenazada – Sociedad Zoológica de Frankfurt Perú (AVISA SZF Peru)**, in Colombia by **Sociedad Zoológica de Frankfurt**, and in Zambia by **Frankfurt Zoological Society Zambia Ltd**. It is also registered as a national non-profit organisation in other countries such as Ethiopia, Tanzania and Zimbabwe. Employees of the Frankfurt Zoological Society are represented in the statutory bodies of these organisations.





HONORARY BOARD OF FZS-US

Dr. Christof Schenck (*President*)
Prof. Dr. Andy Dobson (*Vice President*)
Dr. Peyton West (*Treasurer and executive Director*)
Matt Arnold
Curtis Ravenel
Jason Scott
Heather Zichal

HONORARY BOARD OF FZS

Klaus Becker (*President*)
Prof. Dr. Manfred Niekisch (*Vice President*)
Dr. Thomas Kantenwein (*Vice President*)
Gerold Dieke
Egon Kochanke
Renate von Metzler
Prof. Dr. Dr. h. c. Volker Mosbrugger
Hans Joachim Suchan

HONORARY FOUNDATION BOARD

Gerhard Kittscher (*Chairman of the Board*)
Prof. Dr. Manfred Niekisch (*Vice Chairman**)
Hans Bernhardt (*Vice Chairman***)
Klaus Becker
Dr. Jürgen Heraeus
Dr. Thomas Kantenwein
Dr. Norbert Kloppenburg
Johann-Peter Krommer*
Dr. Altfried M. Lütkenhaus
Dr. Manuela Rottmann

* until 5.12.2018 ** since 5.12.2018

FZS INVOLVEMENT IN OTHER ORGANISATIONS

FZS has joined the “Initiative Transparente Zivilgesellschaft” founded by **Transparency International Germany** and provides transparent information online about its organisational structure and the sources and use of its funds.

FZS is an **institutional member** of BioFrankfurt e. V., Deutscher Naturschutzring (DNR), Charles Darwin Foundation and the International Union for Conservation of Nature (IUCN).

In 2018, FZS was also represented by its executive director, board members and heads of departments and programmes on the **boards and committees of the following organisations and institutions**: Allianz Umweltstiftung, Bruno H. Schubert-Stiftung, Claus und Taslimawati Schmidt-Luprian Stiftung Vogelschutz in Feuchtgebieten, Conservation Lake Tanganyika, Eleonore-Beck-Stiftung, Fundatia Conservation Carpathia, Gonarezhou Conservation Trust, In-

itiative Frankfurter Stiftungen, IUCN Otter Specialist Group, Johanna-Samel-Stiftung, Kashikoto Conservancy, Lowveld Rhino Trust, Polytechnische Gesellschaft e. V., Prespa Ohrid Nature Trust (PONT), Stiftung Naturlandschaften Brandenburg (SNLB), Stiftung Zoo Frankfurt, Tanzania Wildlife Management Authority TAWA, Wildlife Crime Prevention, Walter und Monika Schneider Stiftung.

FZS launched the “**Wildnis in Deutschland**” initiative and has been coordinating its activities ever since. 17 nature conservation organisations have joined the initiative.

The foundation “**Hilfe für die bedrohte Tierwelt – Förderstiftung der Zoologischen Gesellschaft Frankfurt von 1858 e. V.**” is also a member of the Bundesverband Deutscher Stiftungen (Association of German Foundations).

15 MILLION EURO
29 PROJECTS & PROGRAMMES
18 COUNTRIES

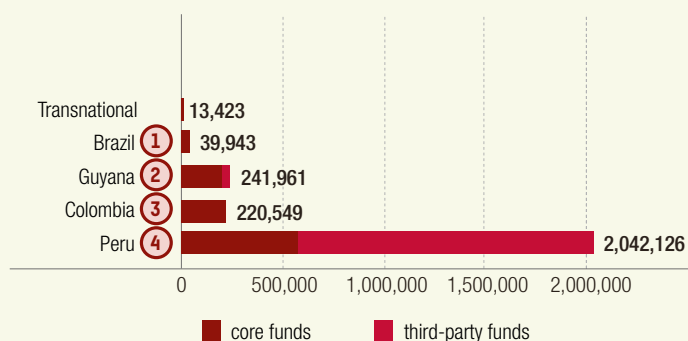
The FZS focuses on the protection of large wilderness areas such as grasslands, forests, wetlands and mountain areas. Geographically, our focus is on East Africa (e.g. Serengeti, Tanzania), South America (e.g. Manu, Peru), Eastern Europe (e.g. Altyn Dala, Kazakhstan) and Southeast Asia (e.g. Bukit Tigapuluh, Indonesia).

DISTRIBUTION OF EXPENDITURES BY COUNTRY

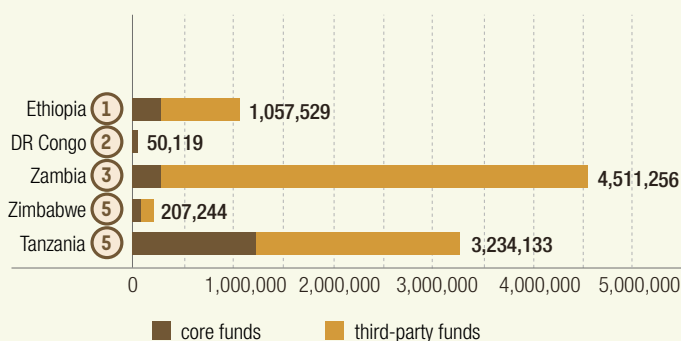
Distribution of our conservation project expenditures (core funds plus third party funding) by country

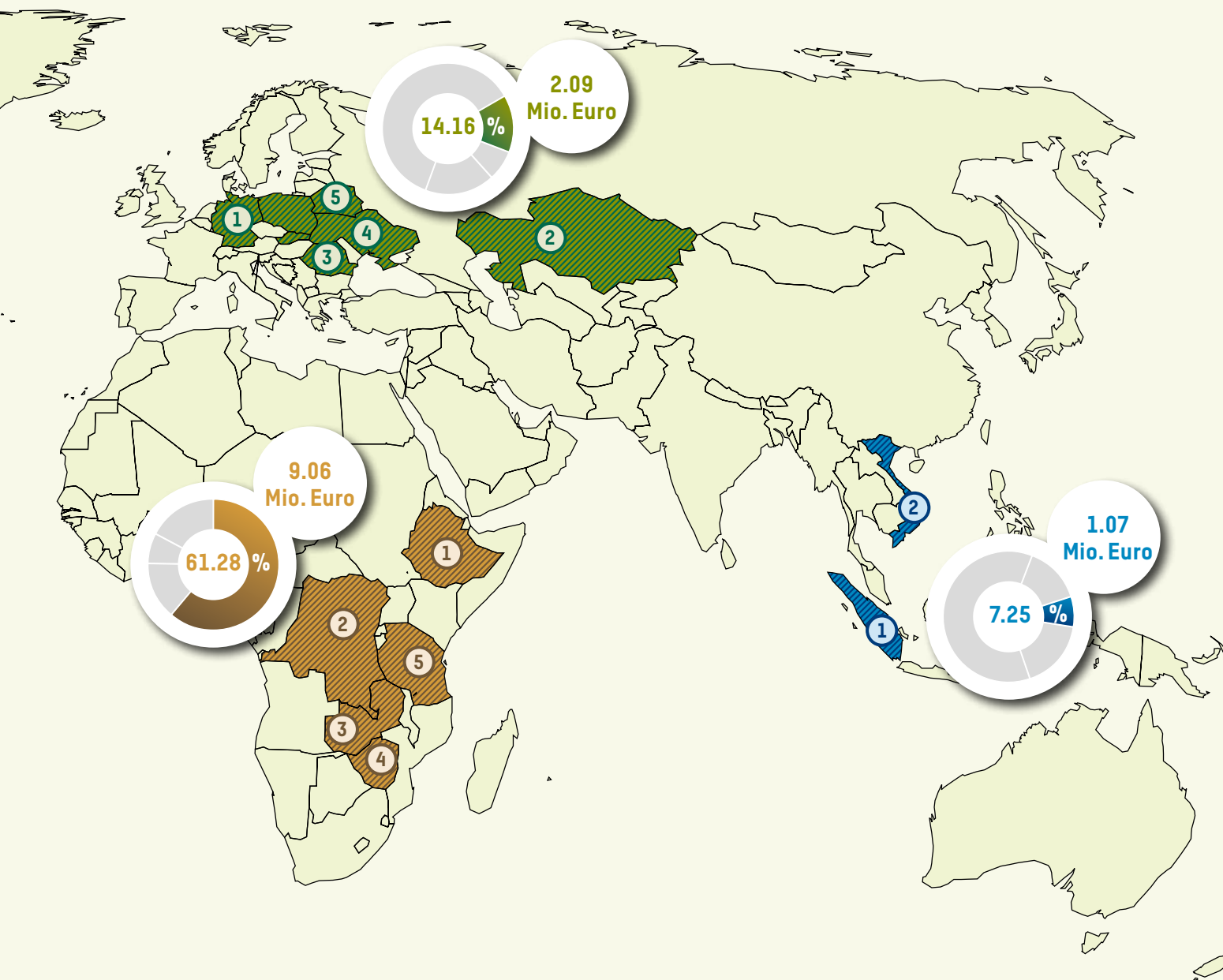


SOUTH AMERICA in Euro

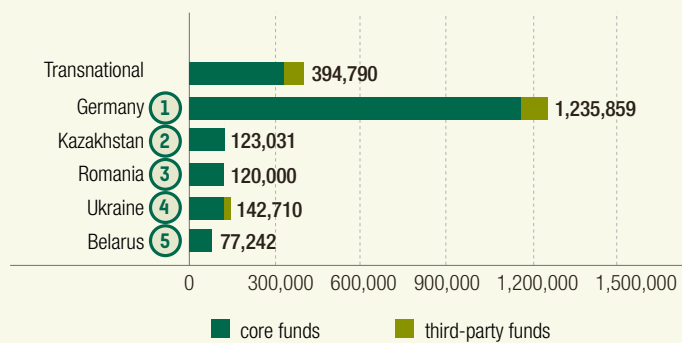


AFRICA in Euro

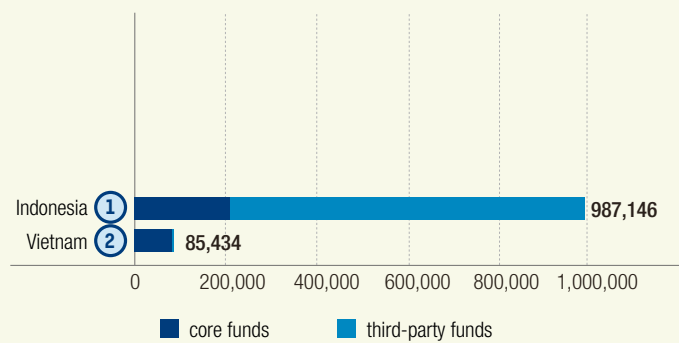




EUROPE & CENTRAL ASIA in Euro



SOUTHEAST ASIA in Euro



TRANSPARENCY: PLANNING, IMPLEMENTATION, CONTROLLING

Our work is based on the Society's statutes and above all on the long-term conservation strategy of Frankfurt Zoological Society. This, in turn, is based on the vision and mission and is the guiding principle behind the selection of new projects and the development of the annual conservation programme. This sets out all necessary measures and relevant budgets. However, each project is unique and has its own country-specific requirements that cannot be taken into account in the representation.

1

The annual conservation programme is drawn up and budgeted by the project and programme managers in cooperation with the executive management. It is based on the long-term strategic planning of the FZS, as well as any acute challenges which may arise such as the dramatic rise in poaching. The money comes from the Society's own funds (donations, membership fees, distributions from foundations, etc.) and funding from public and institutional donors.

The Board decides the conservation programme and the related budget plan (including project investments), as well as the organisational resources.

2

The project managers and their teams submit applications to further public and institutional donors, to the extent required and possible. Typically, the funds are earmarked and time-limited. The Society's own resources, however, can be used strategically and are often used to leverage additional funds for the project work from public and institutional donors.

3

The projects in the different countries obtain the funds directly from the headquarters and then confirm receipt.

The expenditure of project funding is monitored through an internal control system (ICS) and overseen by project controlling to check for possible deviations to the budget. A financial software used in all FZS projects worldwide allows the financial processes to be reviewed and managed by the Frankfurt headquarters.

4

The project staff implement the FZS conservation programme in collaboration with governmental and other partners in the project countries.

5

There is an established reporting system for the projects and expenditure. This consists of reports on the Society's own resources and the often highly specific reporting required for public and institutional donors. Reports are generated on a regular basis, at least once per year. They are reviewed by experts from the individual projects.

6

Financial statements are drawn up in accordance with international and country-specific legislation (where possible) in all project countries. Independent auditors check the proper expenditure of funds in the priority countries every year. The financial statements of all project countries are compiled in the FZS headquarters.

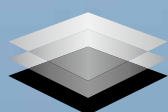
Information about the conservation work in the different countries is published online and in the Gorilla magazine.

7

The headquarters of FZS in Frankfurt and the combined financial statements of the project countries are scrutinised by an independent auditor.

8

The financial statements are presented to the Board. The Board and executive management account for the conservation work and the use of FZS funds at the General Assembly. The General Assembly is responsible for discharging the Board.



Initiative
Transparente
Zivilgesellschaft

Salt plain in the Irgiz-Turgai
reserve, Kazakhstan

ACCOUNTING AND VALUATION METHODS

The annual financial statements as per 31 December 2018 have been prepared according to the provisions of section 264 et seq. of the German Commercial Code (HGB) and meet the accounting requirements set out in section 267 (2) HGB for a medium-sized corporation. The profit and loss account was prepared in accordance with the commercial law nature-of-expense method according to section 275 (2) HGB, taking into account the specific characteristics of the Society's expense and income presentation. The annual financial statements were audited and approved by W+ST Wirtschaftsprüfung GmbH without reservations.

In 2018, FZS projects in Peru, Indonesia, Tanzania, the Democratic Republic of Congo and Zambia were audited by Baker Tilly International, the project in Zimbabwe by Ernst & Young and that in Ethiopia by Ephrem Melaku & Co. The expenses of individual European, South American and Southeast Asian projects were audited internally in Frankfurt by the Finance department and spot checks were made by the auditing company W+ST Wirtschaftsprüfung GmbH. Additional independent, project-specific audits have been conducted for individual KfW-funded and GIZ-funded third-party projects, e.g. in Tanzania and Indonesia.

The same financial software (ABACUS) and double-entry book-keeping methods are used for all FZS projects in Africa, Indonesia and in Peru as in the Frankfurt headquarters. This makes group consolidation of international projects with the German headquarters' activities considerably easier and facilitates very high transparency levels in the presentation of the financial flows. From 2019 it is also planned to deploy ABACUS in full for the projects in Colombia and Vietnam. The internal control system for correct expenditure will be further strengthened.

ASSETS

FIXED ASSETS

Intangible assets

The intangible assets are software licenses and licenses for the ABACUS accounting system at the head office in Frankfurt. The value of these assets declines over the course of the depreciation period, but the value is increased by newly capitalised custom developments for FZS.

Tangible assets

Tangible assets amounted to EUR 6.35 million (previous year: EUR 3.48 million). Total intangible assets also includes properties and many smaller pieces of conservation land with a total value of EUR 0.69 million (previous year: EUR 1.30 million). Following an internal strategic reorientation, these will gradually be transferred to other conservation organisations. In 2018, nature conservation land in Buckow, Brandenburg, was successfully transferred to Großtrappenschutz e. V. (Great Bustard Conservation Association). The total value of tangible assets was significantly higher than in the previous year, as numerous new plots of land and smaller properties with a total value of around EUR 3.50 million arising from estates were still in the portfolio at the end of the year. Smaller properties are usually sold in order to reduce disproportionately high costs. Larger properties were transferred to the capital of "Hilfe für die bedrohte Tierwelt" foundation at the beginning of 2019 as a long-term investment. Continuous revenue from rental income is very important for nature conservation work, especially in view of the capital market risks and the current low interest rates. Both FZS and its "Hilfe für die bedrohte Tierwelt" charitable foundation therefore have an ongoing interest in obtaining larger contiguous residential properties for its investment portfolio with a view to further diversification.

ASSETS in TEUR	2018	2017
FIXED ASSETS		
Intangible assets	4	11
Tangible assets	6,349	3,476
Financial assets	8,192	9,520
CURRENT ASSETS		
Receivables and other assets	3,371	4,323
Liquid assets	6,287	4,684
PREPAYMENTS AND ACCRUED INCOME	32	51
TOTAL	24,235	22,065

LIABILITIES

EQUITY

Financial assets

The financial assets consist of shareholdings and securities. The amount invested in the financial markets fell from EUR 9.52 million in 2017 to EUR 8.19 million by the end of 2018 due to maturing bonds and necessary write-downs. The securities are carried at cost or using the lower-of-cost-or-market principle. This also means that any price increases of shares or bonds that exceed the purchase costs have no effect on the balance sheet. Only when the securities are sold, or when the securities are written down (if the value at sale is below the purchase cost), does the result have an impact on the profit and loss account.

CURRENT ASSETS

Receivables and other assets

In receivables and other assets, the main item is made up of funds from project partners and third-party granting institutions. The value of these assets is currently EUR 1.65 million (previous year: EUR 1.34 million). This level of receivables vis-à-vis project partners is mainly due to funds unspent during the financial year, or FZS making advance payments for third-party granting agencies. These prepayments are repaid on a regular basis or at the conclusion of the funded project. Receivables from estates and bequests currently stand at EUR 0.40 million (previous year: EUR 1.29 million). These receivables arise from estates that are still being wound up, the existence and recoverability of which, however, must be evaluated on the balance sheet date.

Liquid assets

The cash and bank balances of FZS in Frankfurt, Indonesia, Peru and the five African project regions amounted to EUR 6.29 million (previous year: EUR 4.68), of which EUR 4.65 million is assigned to the Frankfurt office. The increase results mainly from expiring investments and income from inheritances. EUR 2.91 million is held at banks in the project regions and in Frankfurt in foreign currencies, EUR 1.93 million of which is in US dollars.

PREPAYMENTS AND ACCRUED INCOME

Accrued income encompasses costs for individual financial years such as insurance costs.

Capital and free reserves

The Society's capital remained unchanged at EUR 12.65 million. Its free reserves rose to EUR 6.59 million (previous year: EUR 4.23 million). The additional reserves are used for organisational and project development as well as risk reduction. As a consequence, the equity capital rose significantly from EUR 16.89 million in 2017 to EUR 19.24 million.

PROVISIONS

Provisions amounted to EUR 0.64 million (previous year: EUR 0.37 million). Principal among these are provisions for taxes for a special settlement of an estate in the amount of EUR 0.41 million. FZS is exempt from gift and inheritance tax.

LIABILITIES

Project funds for international projects

Project liabilities vis-à-vis third-party granting organisations were EUR 3.57 million in 2018 (previous year: EUR 2.99 million). The total is mainly due to third-party funds which were unspent during the year under review and must be separately accounted for at year's end. Frequently, third-party payments are made in December for project activities that will take place the following year. We were also able to reduce liabilities for international projects last year.

Other liabilities

There were other liabilities of EUR 0.78 million (previous year: EUR 1.82 million). These consist of liabilities in the form of personnel costs, taxes, usufruct, etc. This item was reduced by EUR 1.04 million, mainly due to the winding up of an estate.

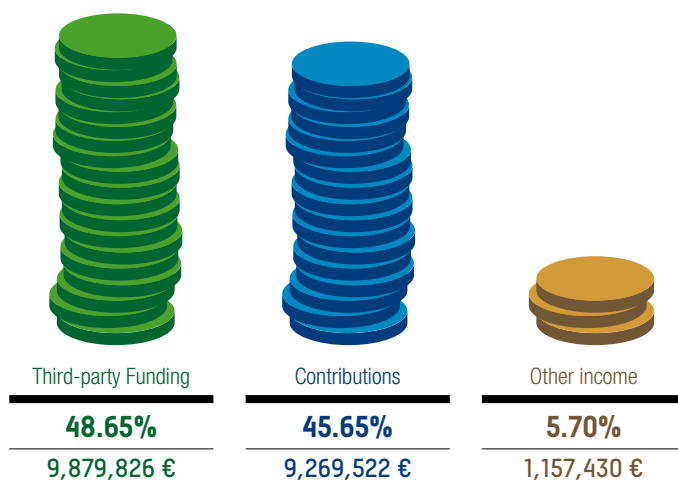
LIABILITIES in TEUR	2018	2017
EQUITY		
Capital and free reserves	19,241	16,888
PROVISIONS	644	367
LIABILITIES		
Project funds	3,574	2,991
Other liabilities	776	1,819
TOTAL	24,235	22,065

REVENUES

Revenues from third-parties and **funding grants** remain at a very high level. They amount to EUR 9.88 million (previous year: EUR 9.10 million).

In 2018, the “Hilfe für die bedrohte Tierwelt” foundation contributed EUR 1.66 million to FZS at a free reserve ratio of 16 per cent (previous year: EUR 1.60 million at 10 per cent free reserve ratio). The distribution also includes the regular donation from the Eleonore Beck Foundation of EUR 0.55 million (previous year: EUR 0.55 million).

REVENUES



REVENUES in million Euro	2018	2017
Third-party Funding	9.88	9.10
Bonuses from the “Hilfe für die bedrohte Tierwelt” Foundation	1.66	1.60
Bequests (including Real Estate)	5.75	1.84
Donations and Allocated Fines	1.59	2.10
Membership Fees	0.26	0.26
Interest and Income from Securities	0.68	1.04
Other Income	0.48	0.38
TOTAL	20.30	16.33

FZS continues to have a highly diversified revenue structure. **Donations from inheritances and bequests** have remained at a consistently high level in recent years. Due to the large number of (in some cases more substantial) inheritances, there was an exceptionally high increase in this item in 2018 to EUR 5.75 million (previous year: EUR 1.84 million).

Donations, sponsorship contributions and fines remain at a gratifyingly high level. At EUR 1.59 million, however, they were unable to match the previous year’s result of EUR 2.10 million which was attributable to a single major donation. Income from fines amounted to EUR 38 thousand in 2018 and, accordingly, was down on the previous year (EUR 77 thousand).

Income from **membership fees** remained stable at EUR 0.26 million. The number of members increased slightly from 3,493 to 3,497.

Due to the low level of interest rates and the poor development of the capital markets, **interest and income from securities** fell more sharply in 2018 than in the previous year. A result of EUR 0.68 million (previous year EUR 1.04 million) was achieved.

Other income of EUR 0.48 million includes rental income from portfolio properties (previous year: EUR 0.38 million).

EXPENDITURES

Expenditures for conservation work in accordance with our statutes, as well as for project management, general administration and central FZS tasks, amounted to EUR 17.93 million (previous year: EUR 16.34 million). **Conservation project** expenses amounted to EUR 14.22 million (previous year: EUR 13.90 million). EUR 1.35 million was spent on **project coordination and administration**. Personnel costs amounting to EUR 1.14 million (previous year: EUR 0.82 million) are a major component here. Legal and consulting costs of EUR 39 thousand were kept at a low level thanks to the use of experts and pro bono networks.

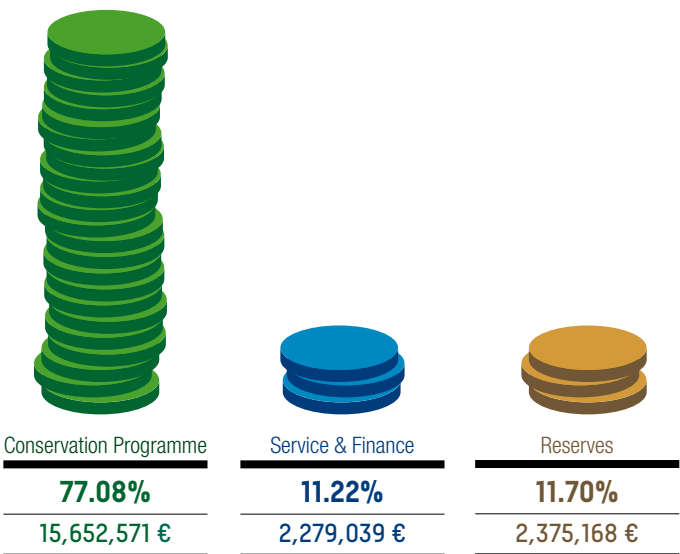
FZS gave EUR 0.08 million to **Frankfurt Zoo** and the collaborative conservation ambassador project (previous year: EUR 0.10 million).

Communications and public relations including associated personnel costs amounted to EUR 0.32 million (previous year: EUR 0.36 million), with EUR 0.34 million for **sponsor services and fundraising** (previous year: EUR 0.25 million). Vacancies were filled and new projects implemented.

Asset management, securities and exchange rate losses, accrued interest and other expenses amounted to EUR 1.62 million at the end of 2018 (previous year: EUR 0.63 million). This includes write-downs on securities and fixed assets amounting to EUR 0.74 million (previous year: EUR 0.34 million). Also included are the write-downs for the transferred nature conservation land in Bukow (see balance sheet, tangible assets).

EUR 2.38 million, mainly from the extraordinarily high inheritance income, is earmarked as funds carried forward for organisation and project work development as well as for risk reduction, and will be released over the next few years.

EXPENDITURES



EXPENDITURES in million Euro	2018	2017
Project Funding	14.22	13.90
Coordination of Conservation Programme, Frankfurt Headquarters	1.35	1.10
Support of Frankfurt Zoo/ Conservation Ambassadors	0.08	0.10
Communications and Public Relations	0.32	0.36
Fundraising and Sponsor Service	0.34	0.25
Asset Management and Other expenses	0.88	0.29
Write-downs on Securities and Fixed Assets	0.74	0.34
Accumulation of Reserves	2.38	- 0.02
TOTAL	20.31	16.32

AUDIT OPINION

W+ST Wirtschaftsprüfung GmbH, Frankfurt am Main, issued the following opinion on the complete annual statement of Zoologische Gesellschaft Frankfurt von 1858 e. V. consisting of balance sheet, profit and loss account, notes and the management report for the 2018 financial year:

To Zoologische Gesellschaft Frankfurt von 1858 e.V.,
Frankfurt am Main

We have audited the annual statement – consisting of the balance sheet, profit and loss account, notes – and including the bookkeeping and the management report of Zoologische Gesellschaft Frankfurt von 1858 e.V. for the financial year from 1.1. to 31.12.18. The legal representatives of the society are responsible for the book-keeping and for preparing the annual statement and management report in accordance with German commercial law. Our task is to issue an assessment of the annual state-ment, including the bookkeeping, and of the management report on the basis of the audit conducted by us.

We have conducted our audit of the annual statement in accordance with Article 317 of the German Commercial Code (HGB), based on the generally accepted audit principles defined by the German Institute of Chartered Auditors (IDW). These state that the audit is to be planned and executed in such a way as to recognize with sufficient certainty inaccuracies and infringements that have a material effect on the picture of the assets, financial and earnings position conveyed by the annual financial statement, taking into account the principles of proper accounting, and the management report. Knowledge of the business activities and the economic and legal environment of the society and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control sys-tem and the evidence supporting the disclosures in the bookkeeping, annual statement and the management report are examined primarily on a spot check basis within the framework of the audit. The audit includes assessing the accounting and consolidation principles used and significant estimates made by the legal representatives, as well as evaluating the overall presentation of the annual statement and the management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit led to no objections.

According to our assessment on the basis of the knowledge acquired in the course of the audit, the annual statement complies with the legal requirements and imparts – under observation of the principles for orderly accounting – a representation of the as- set, financial and profit position of the society corresponding to the true circumstances. The management report is consistent with the annual financial statement and as a whole provides an accurate picture of the society's position and accurately conveys the opportunities and risks of future development.

Frankfurt am Main, 12 June 2019

W+ST FRANKFURT GMBH

STEUERBERATUNGSGESELLSCHAFT

WIRTSCHAFTSPRÜFUNGSGESELLSCHAFT

(Dr. K. Hövermann)
Wirtschaftsprüfer

(T.F. Waldmann)
Wirtschaftsprüfer

OPPORTUNITIES, RISKS, OUTLOOK

Frankfurt Zoological Society is in a strong financial position and makes an important contribution to international nature conservation thanks to the support of its private sponsors and public and institutional donors.

FZS maintains a very healthy, stable and diversified revenue structure. In 2018, there was strong support from members, donors and sponsors, with revenues remaining stable. For a number of years now, we have been successful in leveraging our, for the most part, flexible core funds (for example, private donations and capital gains) to acquire third-party funds from large institutional granting agencies. Large donations and inheritances have developed into another mainstay of project financing.

Nature conservation is an ongoing task, and FZS is strongly committed to its carefully chosen fields of activity. That is why we continue to emphasise sustainability and long-term financial security in our conservation work. The capital of the “Hilfe für die bedrohte Tierwelt” foundation is to be further increased in order to create such a solid basis and to cushion ourselves against any fluctuations on the capital markets.

OPPORTUNITIES AND RISKS

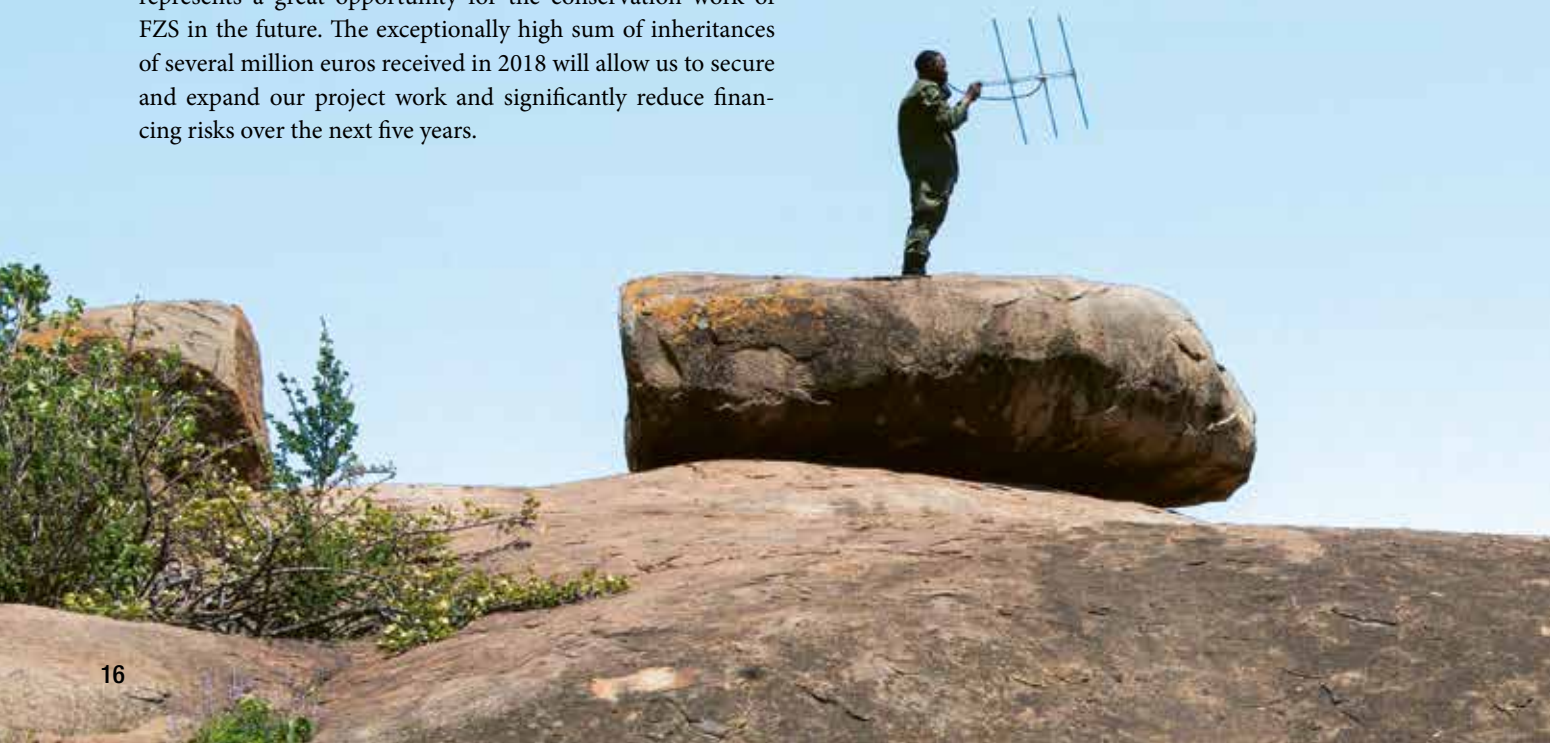
✓ Our sponsors are undiminished in their continuing support for the work of FZS. We are grateful for the trust they place in us. They appreciate the practical nature of our organisation's work and value the individual support we give them. This is one of our major strengths – one which we intend to maintain and develop. More and more people are including FZS or the “Hilfe für die bedrohte Tierwelt” foundation in their will. This represents a great opportunity for the conservation work of FZS in the future. The exceptionally high sum of inheritances of several million euros received in 2018 will allow us to secure and expand our project work and significantly reduce financing risks over the next five years.

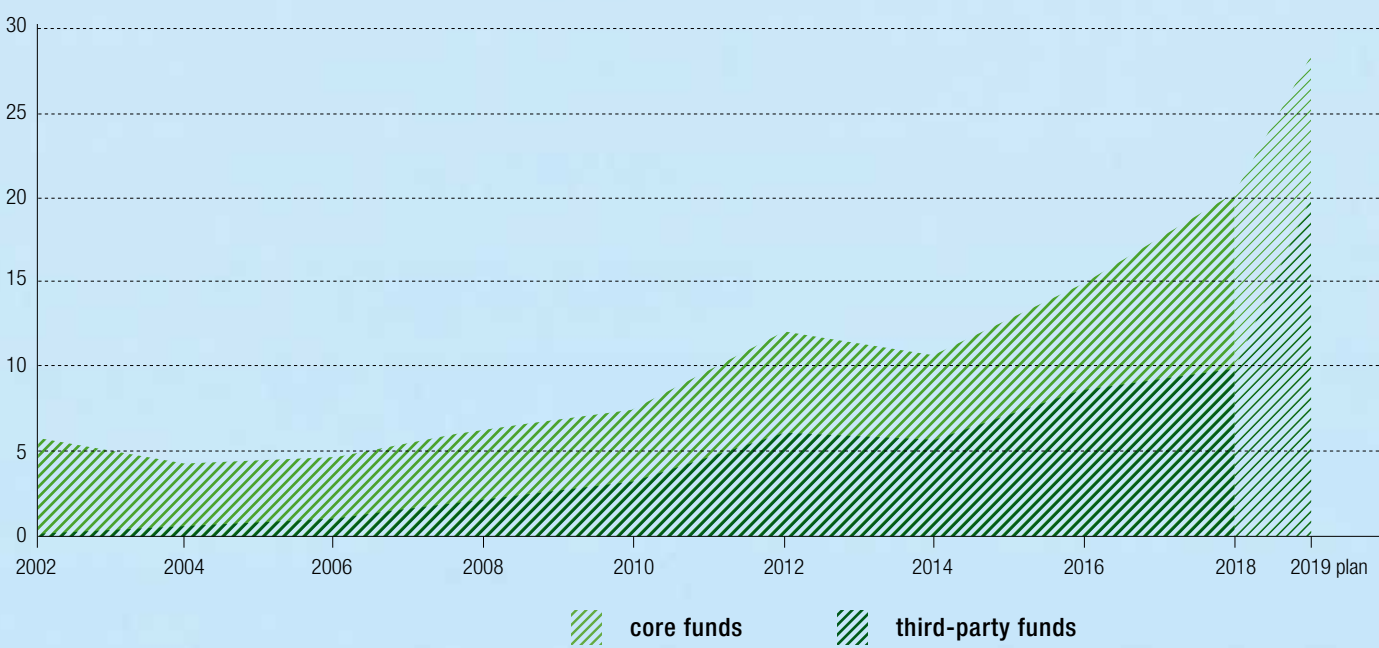
✓ Climate change and biodiversity are increasingly becoming integral parts of the funding policy of public and institutional donors, and additional funding is now being earmarked for conservation. We see good prospects for accessing more of these funds for our project work. An additional position was created back in 2017 in order to seize these opportunities. In recent years, FZS has established itself as a reliable and competent partner for institutional and public donors.

✓ A number of major national construction projects are making our work more difficult. These include the extension of the E 40 waterway in Europe's largest wetland area, Polesia (Ukraine/Belarus), road construction projects in the steppes of Kazakhstan and, of course, one of Africa's largest dams in the Selous Game Reserve. In all these places, original wilderness areas are under threat of long-term destruction, resulting in loss of biodiversity. Our strong local presence, which has been built up over decades in many cases, allows us to work in partnership with local authorities and administrations. We highlight the impact of such construction projects on the environment and contribute our know-how to prevent the destruction.

✓ In many project countries we have to react to changing political developments and adapt our planning when these changes affect the conservation efforts there. But we also have to react to changes in the legal framework.

✓ We invest as much capital as possible in euros or US dollars in order to minimise currency fluctuations. Nevertheless, a total of EUR 2.91 million has been invested in various national currencies, as some project countries do not accept foreign currencies.





OUTLOOK

We still have sufficient options for actions to mitigate climate change and limit the resulting loss of biodiversity in ways that are largely acceptable to humans. However, the efforts must now be redoubled and accelerated.

- ✓ Together with KfW Entwicklungsbank we are developing the Legacy Landscape model aimed at securing large, contiguous areas of wilderness on a long-term basis. The goal here is to facilitate the long-term financing of important protected areas in order to safeguard their continued existence.
- ✓ The Frankfurt Conservation Center project is being pursued: together with partners, a new interdisciplinary competence centre for innovative solutions for problems facing nature and mankind is to be established in Frankfurt.

- ✓ At the beginning of 2019, two properties were transferred from the capital of FZS to the “Hilfe für die bedrohte Tierwelt” foundation to generate ordinary property rental income and to ensure long-term asset preservation. Together with other properties bequeathed to it in an estate, this will give the foundation a very good and lasting basis for generating income which is less dependent on the capital market. In addition, the foundation is endeavouring to further expand its directly held property portfolio.

PLANNING 2019	in million Euro
REVENUES	
Donations, wills, fines	2.00
Membership fees	0.24
External funding	20.00
Distribution from “Hilfe für die bedrohte Tierwelt” foundation	1.75
Other income, release of reserves	4.40
EXPENDITURES	
Project funds	25.13
Funding for Frankfurt Zoo	0.11
Patrons & Friends	0.41
Communication	0.38
Administration and other expenditure	2.36

Ranger at Moru Kopjes, Serengeti National Park, Tanzania

PUBLIC RELATIONS AND FUNDRAISING

For years, FZS has deliberately kept its advertising and public relations spending at very low levels in order to ensure that as much money as possible can be invested in the conservation work: "As much conservation as possible" is the underlying philosophy. Patrons and members receive no welcome gifts, for example, and there are no face-to-face campaigns or major poster advertising or TV spot-based publicity campaigns. We use our Gorilla magazine, our brochures, our website, our social media channels, lectures, special events and fundraising letters to keep our patrons and friends informed, to ask for support and to attract new supporters to the cause. In the case of the fundraising letters, and the Gorilla magazine in particular, the donations generated exceed the funds used several times over. All these activities are implemented by our full-time team in Frankfurt. We are supported by service providers, who often grant a discount to FZS as a non-profit organisation. In putting together the measures, we attach a great deal of importance both to effective content planning and sustainable production. No performance-based commissions are paid to service providers. Our sponsors' data is subject to strict data protection requirements. And naturally, we contact no one who has signalled the wish not to be contacted.

MEDIA WORK

We provide regular information about our conservation work in our Gorilla magazine, on our website and in our annual report. In addition, articles on the subject of Serengeti or gold mining in Peru, for example, appeared in prominent publications such as *Der Spiegel* and *Süddeutsche Zeitung*. A special supplement on our project work was published in the *Frankfurter Allgemeine Zeitung* to mark the 160th anniversary of FZS. Our project staff members or Frankfurt-based experts are frequently asked to give radio or TV interviews or to take part in special events such as *Naturfilmbühne Berlin*. Programmes focusing on our work are frequently broadcast on television. In 2018, two ZDF episodes of the planet e series spotlighted our projects in Ethiopia and Peru.

DONATIONS AND EXTERNAL FUNDS

In the year under review, FZS received a total of EUR 1.85 million in donations and membership fees. Thanks to these, we were able to submit additional project applications to institutional and public donors such as KfW Entwicklungsbank, Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). This allowed us to invest a total of EUR 9.88 million in our nature conservation work. Every euro donated therefore had a fivefold impact!

OUR LARGEST INSTITUTIONAL DONORS IN 2018

The funds listed below were used in the projects in 2018.

INTERNATIONAL	PROJECT COUNTRY	EURO
The Wyss Foundation	Tanzania, Zambia	1,379,707
U.S. Agency for International Development (USAID)	Zambia	1,108,127
Gordon and Betty Moore Foundation	Peru	769,732
U.S. Department of State International Narcotics and Law Enforcement Agency (INL)	Tanzania, Zambia	720,812
The Wildcat Foundation	Zambia, Zimbabwe	666,698

GERMANY AND EU	PROJECT COUNTRY	EURO
KfW Entwicklungsbank and KfW Stiftung	Ethiopia, Guyana, Peru, Tanzania, Ukraine, Zambia	1,201,566
Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ)	Ethiopia, Tanzania, Zambia	678,287
German federal ministry for the environment, nature conservation and nuclear safety (BMU)	Indonesia, Peru	463,968
European Union (EU)	Ethiopia, Tanzania	292,767
German federal ministry for economic cooperation and development (BMZ)	Zambia	170,624

"HILFE FÜR DIE BEDROHTE TIERWELT" FOUNDATION

The "Hilfe für die bedrohte Tierwelt" foundation was founded in 2001 from the assets of FZS. Its declared goal – of preserving the earth's biodiversity – is realised by FZS. It has untouchable foundation capital of EUR 46.30 million. In the year under review, the Foundation provided EUR 1.66 million for the nature conservation work of FZS.

The "Hilfe für die bedrohte Tierwelt" foundation, based in Frankfurt am Main, is a **legally independent foundation** under private law. It is recognised as a non-profit organisation for the promotion of nature conservation and animal welfare and enjoys tax exemption on the basis of the last notice of exemption and the annex to the notice of corporate tax exemption of the Frankfurt am Main III Tax Office, tax no. 45 255 58672, of 22 November 2017. The Foundation is based on a special account of the same name, which was used by Bernhard Grzimek from 1961 to collect donations in conjunction with his television programme "Ein Platz für Tiere". Today, the Foundation is managed by Executive Director Dr. Christof Schenck.

It is represented by a **Foundation Board** consisting of up to ten members. Ten members held office in the year under review. Each is appointed for three years and works on a voluntary basis. The Chairman of the Foundation Board is Gerhard Kittscher. The Foundation Board makes decisions about how revenues are spent and ensures that the Foundation is meeting its statutory commitments. "Hilfe für die bedrohte Tierwelt" foundation is a member of the Bundesverband Deutscher Stiftungen (Association of German Foundations). Patrons who wish to make a sustainable and long-term commitment can support the "Hilfe für die bedrohte Tierwelt" foundation by making a donation or creating a named endowment or trust. This is possible during the lifetime of the individual concerned, but also by means of a testamentary decree.

FINANCIAL REPORT OF THE "HILFE FÜR DIE BEDROHTE TIERWELT" FOUNDATION

ACCOUNTING AND VALUATION METHODS

The annual financial statements as of 31 December 2018 were prepared in accordance with the provisions of sections 264 et seq. of the German Commercial Code (HGB). The statement of income was prepared in accordance with the commercial law nature-of-expense method according to section 275 (2) HGB, taking into account the specific characteristics of the Foundation's expense and income presentation.

ASSETS

FIXED ASSETS

Tangible assets

In 2018, the Foundation had no tangible assets, as these had already been dissolved in 2017 as part of the estate settlement. Starting from 2019, the long-term aim is to build up property assets as direct investments. The first step will be to transfer roughly EUR 2 million from FZS to its foundation. Furthermore, from 2019 the property assets will also be strengthened by a larger inheritance including five further residential properties in Frankfurt.

Financial assets

Financial assets fell slightly to EUR 45.97 million (previous year: EUR 47.73 million) and consist of securities and property investments. These are valued at acquisition cost. Value adjustments in the form of unplanned depreciation are made to cover decline in value. Bonds, the acquisition costs of which are higher than the nominal value, are written down at the time of addition at the lower face value. Financial assets acquired by the Foundation at no cost are recognised at their fair value at the time of addition. The majority of the financial assets are invested in the Foundation's own special fund which is tailored to the organisation's specific needs and characteristics and is in line with its own investment guidelines. The decline in financial assets is attributable to the fact that expired assets from the direct portfolio were not reinvested, but are being held as liquid assets for the Foundation's distribution. In addition, share price write-downs had to be carried out at the end of the year due to the poor performance of the capital market.

ASSETS in TEUR	2018	2017
FIXED ASSETS		
Tangible Assets	0	0
Financial Assets	45,967	47,730
CURRENT ASSETS		
Receivables and Other Assets	54	110
Liquid Assets	1,919	746
BALANCE ITEMS for undisturbed fund earnings	8,977	8,051
TRUST ASSETS	6,349	6,444
Claus und Taslimawati Schmidt-Luprian Stiftung Vogelschutz in Feuchtgebieten		
TOTAL	63,266	63,081

CURRENT ASSETS

Other assets

Receivables and other assets are comprised primarily of receivables from estates and bequests (EUR 22,500) and receivables from accrued interest (EUR 20,300).

Liquid assets

Bank balances and cash in hand total roughly EUR 1.92 million (previous year: EUR 0.75 million). These result from matured financial investments which have not been reinvested. The liquidity forms the basis of the Foundation's distribution to the Frankfurt Zoological Society in the following financial year.

BALANCE ITEMS FOR UNDISTRIBUTED FUND EARNINGS

The distributions to FZS stem from the matured direct securities investments, meaning that the net income of the special fund remains in the fund. The adjustment item of undistributed fund earnings was created for this. This continued to increase: from EUR 8.05 million to EUR 8.98 million. If a further distribution is made from the special fund, this item must be reduced accordingly.

LIABILITIES in TEUR	2018	2017
FOUNDATION ASSETS		
Foundation Capital	46,301	45,878
Revenue Reserve	8,100	8,401
Regrouping Result	652	656
Operating Reserve	1,750	1,661
PROVISIONS	10	41
LIABILITIES	104	0
TRUST ASSETS	6,349	6,444
Claus und Taslimawati Schmidt-Luprian Stiftung Vogelschutz in Feuchtgebieten		
TOTAL	63,266	63,081

LIABILITIES

FOUNDATION ASSETS

Foundation capital

The foundation capital increased by EUR 0.42 million, from EUR 45.88 million in 2017 to EUR 46.30 million in 2018. A large part of this comes from the inheritances that were transferred to the foundation capital.

Revenue reserve

The free revenue reserves were reduced by EUR 0.31 million in 2018 in order to make an increased donation to FZS. An alloca-

tion to the revenue reserves was also made. The free reserves as a whole nevertheless rose to EUR 8.10 million (previous year: EUR 8.40 million) and will safeguard the mission of the Foundation for years to come, even in difficult times.

Regrouping result

The regrouping reserve was reduced by EUR 4 thousand to EUR 0.65 million. This was due to the need to write down securities according to the lower-of-cost-or-market principle.

Operating Reserve

The annual result of EUR 1.44 million and the release of EUR 0.31 million free reserves resulted in retained earnings for nature conservation of EUR 1.75 million (previous year: EUR 1.66 million). This will be distributed in 2019 for FZS conservation projects.

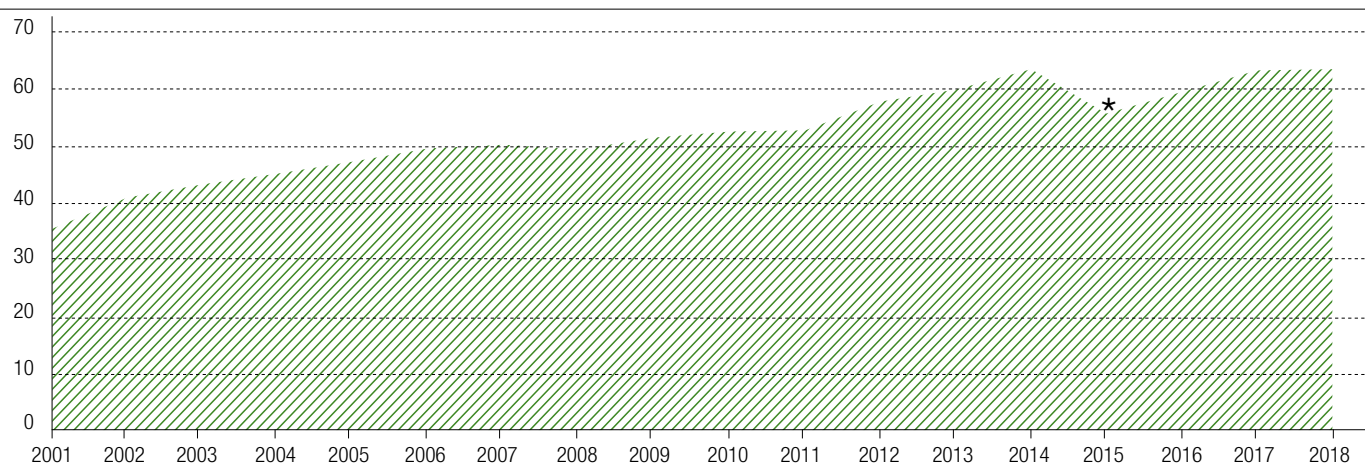
PROVISIONS

The provisions for annual financial statement costs are now down to EUR 10 thousand (previous year: EUR 41 thousand).

LIABILITIES

In 2019, two FZS properties will be taken over by the "Hilfe für die bedrohte Tierwelt" foundation. The renovation work carried out on these properties in 2018 was pre-financed by FZS. The transfer agreement between the Foundation and FZS stipulated that the Foundation would reimburse FZS for any renovation costs incurred to date. EUR 0.10 million were thus allocated as a liability.

DEVELOPMENT OF THE BALANCE SHEET TOTAL FROM 2001 TO 2018 in million Euro



*In 2015, the valuation was changed from market to cost of acquisition principle.

PROFIT AND LOSS ACCOUNT in TEUR	2018	2017
Total revenues	1,822	2,256
Total expenses	-377	-81
Net profit for the year	1,445	2,175
Setup of reserves	-305	514
Distributable profit	1,750	1,661

REVENUES

Net income before appropriation of funds in 2018, including donations and grants from other foundations as well as expenses, amounts to EUR 1.45 million (previous year: EUR 2.18 million). The Foundation thus posted a worse result in the year under review than in the previous year. This was mainly due to the lower ordinary income from the special fund, the write-down of securities and the transfer of liabilities. The distribution will be made by slimming down the directly held investment portfolio. As a result, there will be a decline in direct inflows from interest and dividends. In return, income from the special funds are increasing, as this is currently being retained, thus increasing the investment holdings. As in the previous year, the “Hilfe für die bedrohte Tierwelt” foundation received a further donation of EUR 0.55 million from the Eleonore Beck foundation. This is the highest individual donation from another foundation. The statutory donations to FZS rose slightly to EUR 1.66 million (previous year: EUR 1.60 million). In combination with the distribution of the trust-held “Claus und Taslimawati Schmidt-Luprian Stiftung Vogelschutz in Feuchtgebieten” foundation, EUR 1.78 million were made available for nature conservation.

EXPENDITURES

EUR 1.66 million were distributed by the Foundation to Frankfurt Zoological Society for conservation work in 2018. The total Foundation expenditure amounted to EUR 377,000 in the financial year ended. Of this amount, EUR 41,000 were incurred for the administration and auditing of the Foundation and EUR 234,000 to cover the depreciation and losses associated with the disposal of securities. EUR 103 thousand were set aside as a liability for the forthcoming assumption of renovation costs. The total costs correspond to 0.6 per cent of the Foundation's balance sheet total. This is only possible because FZS actively manages its Foundation.

**Donations Account of the
“Hilfe für die bedrohte Tierwelt” foundation**
IBAN: DE63 5005 0201 0000 3102 80
BIC: HELADEF18522

EXCERPT FROM THE CAPITAL INVESTMENT GUIDELINES OF FRANKFURT ZOOLOGICAL SOCIETY AND THE “HILFE FÜR DIE BEDROHTE TIERWELT” FOUNDATION

- No investment may conflict with the conservation mandate.
- Investments in gold, precious metals or other commodities, the extraction of which currently has a strong negative impact on the environment, are excluded.
- The assets may not be invested in companies which generate their principal revenue from arms, alcohol, tobacco, gambling, or genetic engineering. Also excluded are investments in corrupt and illiberal states in which human rights are not respected.
- Investments should only be made in certified bonds and money market instruments. Bonds and money market instruments without investment grade ratings are allowed only with the consent of the Foundation or of the Society.
- The investment currency is the euro. The currency risk is limited to a maximum of 30 per cent of the total investment volume.

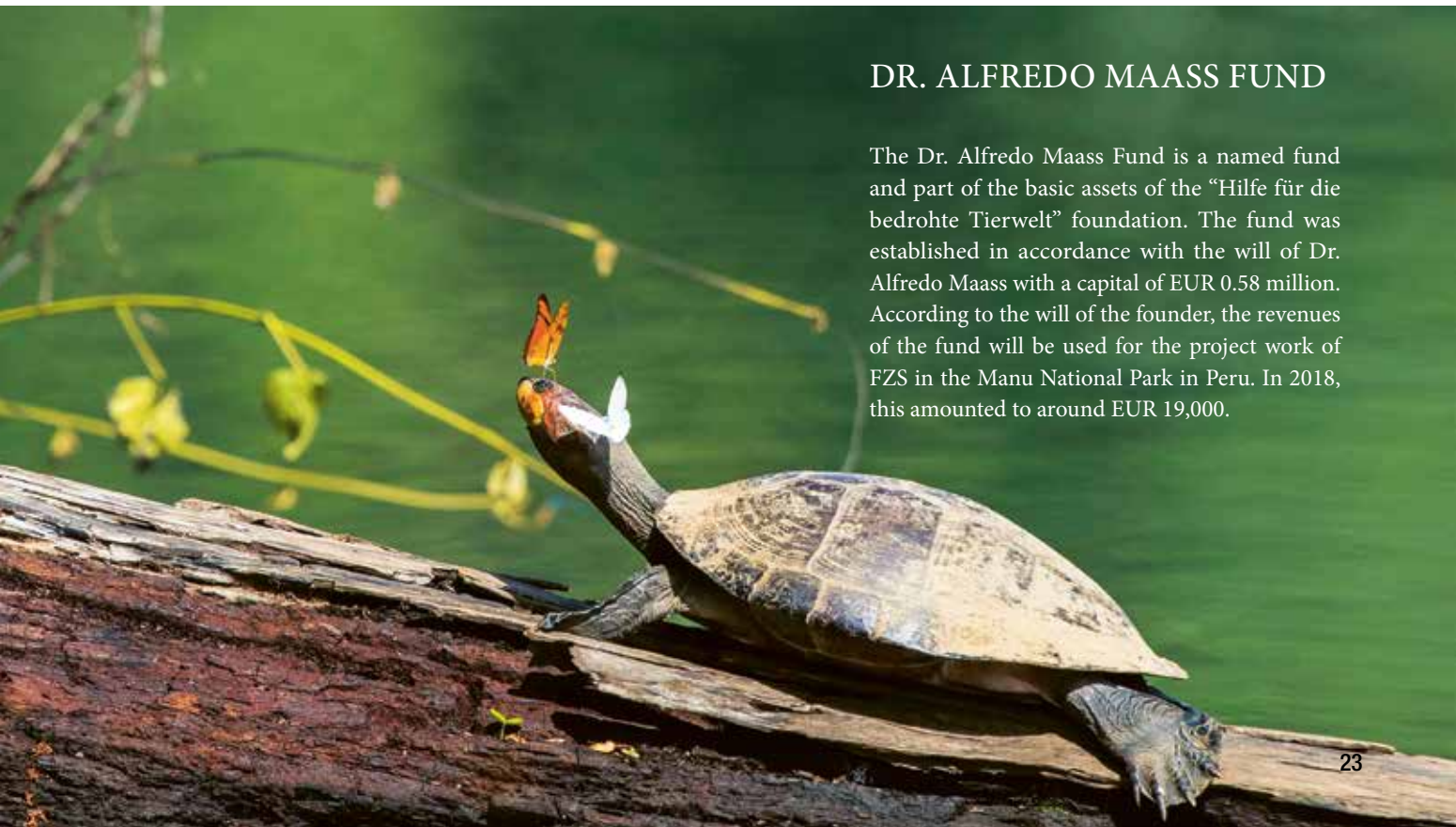
“CLAUS UND TASLIMAWATI SCHMIDT-LUPRIAN STIFTUNG VOGELSCHUTZ IN FEUCHTGEBIETEN“ FOUNDATION

The “Claus und Taslimawati Schmidt-Luprian Stiftung Vogelschutz in Feuchtgebieten” foundation is a trust foundation. It was established in 2012 with initial capital of EUR 0.5 million under the umbrella of the “Hilfe für die bedrohte Tierwelt” foundation. The purpose of the foundation is to provide financial support to FZS projects for the conservation and creation of wetlands for the protection of the bird species which are dependent on them. The balance sheet total of the trust foundation increased to EUR 6.35 million as a result of generous endowments by the founder. The investment assets of the foundation are invested in full in the special fund of the parent foundation. In 2018, the foundation distributed EUR 0.12 million from its proceeds for project work in Polesia.



DR. ALFREDO MAASS FUND

The Dr. Alfredo Maass Fund is a named fund and part of the basic assets of the “Hilfe für die bedrohte Tierwelt” foundation. The fund was established in accordance with the will of Dr. Alfredo Maass with a capital of EUR 0.58 million. According to the will of the founder, the revenues of the fund will be used for the project work of FZS in the Manu National Park in Peru. In 2018, this amounted to around EUR 19,000.



DONORS AND PARTNERS 2018

List grouped by headquartes of institutions and organisations

AUSTRALIA

Griffith University
International Elephant Project, IEP
Perth Zoo
The Orangutan Project, TOP

AUSTRIA

WWF Danube-Carpathian Programme
WWF Österreich

BELARUS

Administration of Bielaviežskaja Pušča
National Park
APB-BirdLife Belarus
Bahna

BRAZIL

Instituto Araguaia

COLOMBIA

Fundación para la Conservación y el Desarrollo Sostenible, FCDS
Parques Nacionales Naturales de Colombia, PNNC
WWF Colombia

DR CONGO

Institut Congolais pour la Conservation de la Nature, ICCN
Virunga National Park/Virunga Foundation

ECUADOR

Fundación Charles Darwin, FCD

ETHIOPIA

Bale Mountains National Park
Charities and Societies Agency, Chsa
Ethiopia Wolf Conservation Project
Ethiopian Wildlife Conservation Authority, EWCA
Oromia Agriculture and Natural Resource Bureau, Oanrb
Oromia Environment Forest and Climate Change Authority
Oromia Forest and Wildlife Enterprise
Oromia Regional Health Bureau, OHB
Oromia Livestock and Fishery Resource Development Bureau, Olfrdb
Oromia Planning and Economic Development Commission, PEDCO
Oromia Rural Land Administration and Use Bureau
Population, Health and Environment – Ethiopia Consortium
SOS Sahel

EU

European Union

FRANCE

United Nations Educational, Scientific and Cultural Organization, UNESCO

GERMANY

AHT Group AG
Akademie für Zoo- und Wildtierschutz e.V.
Albert und Barbara von Metzler-Stiftung
Betreibergesellschaft der Internationalen Naturausstellung Lieberoser Heide GmbH, INA
BioFrankfurt e. V.
Bruno H. Schubert-Stiftung
Bund für Umwelt und Naturschutz Deutschland, BUND
Bundesamt für Naturschutz, BfN
Bundesministerium für Umwelt, Naturschutz und nukleare Sicherheit, BMU
Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, BMZ
BUNDstiftung
Bürgerbewegung Freunde des Spessarts e. V.
Charlotte-und-Werner-Herrmann-Stiftung
Claus und Taslimawati Schmidt-Luprian Stiftung
Vogelschutz in Feuchtgebieten
Convention on Migratory Species of Wild Animals, CMS
Deutsche Gesellschaft für Internationale Zusammenarbeit, GIZ
Deutsche Postcode Lotterie
Deutsche Umwelthilfe
Deutscher Naturschutzring, DNR
Eleonore-Beck-Stiftung
EUROPARC Deutschland
Förderverein Nationalpark Senne-Eggegebirge e. V.
Frankfurter Sparkasse
Freunde und Förderer der Goethe-Universität
Freundeskreis Nationalpark Hunsrück e. V.
Greenpeace Deutschland
Gregor Louisoder Umweltstiftung
GRÜNE LIGA
Gunther Parlow Stiftung
Heinz Sielmann Stiftung
Helaba Invest Kapitalanlagegesellschaft mbH
Hellabrunn – Der Münchner Tierpark
Hildegard-Haube-Stiftung
Initiative Frankfurter Stiftungen e. V.
Institut für Gemeinwohl gGmbH
Institut für Tierökologie und Naturbildung
Internationale Klimaschutzinitiative IKI, BMU
Irene Thiermann Stiftung
ISO-ELEKTRA Heinrich Piepho Stiftung
Johann Wolfgang Goethe-Universität Frankfurt
Johanna Samel-Stiftung

Karl Kübel Stiftung für Kind und Familie
KfW Entwicklungsbank
KfW Stiftung
KPMG Deutschland
Kurt und Christel Müller Stiftung
Landesbund für Vogelschutz in Bayern
Manfred-Hermesen-Stiftung
Michael Succow Stiftung
NABU, Naturschutzbund Deutschland
NABU-Stiftung Nationales Naturerbe
Naturstiftung David
Naturwald Akademie
Partnership against Poaching and Illegal Wildlife Trade in Africa and Asia
Sambia-Hilfe Dr. Gerhard Konzelmann e. V.
Sigrid I. Gramm de Berumen Stiftung
Stiftung Artenschutz
Stiftung Feuchtgebiete
Stiftung Flughafen Frankfurt
Stiftung Freunde des Tieres
Stiftung KulturLandschaft Günztal
Stiftung Naturlandschaften Brandenburg, SNLB
Stiftung Wolfgang Wüsthof
Stiftung Zoologischer Garten Berlin
Tiergarten Nürnberg
Verein Nationalpark Nordsteigerwald
Vogelschutz Komitee
Walter und Monika Schneider-Stiftung
WWF Deutschland
Zoo Dresden
Zoo Frankfurt

GUYANA

Protected Areas Commission, PAC

HONG KONG

Full Circle Foundation

INDONESIA

Bukit Tigapuluh National Park Administration
Directorate General of Natural Resource and Ecosystem Protection, KSDAE
Hutan Harapan Project
Jambi Province Conservation Authority
PT Alam Bukit Tigapuluh, PT ABT
Universitas Gadjah Mada
Universitas Jambi
WWF Indonesia
Yayasan Ekosistem Lestari, YEL
Yayasan Konservasi Ekosistem Hutan Sumatera, KEHUS



KAZAKHSTAN

Association for the Conservation of Biodiversity of Kazakhstan, ACBK

Committee for Forestry and Wildlife, Ministry of Agriculture of Republic of Kazakhstan

Ministry of Agriculture of the Republic of Kazakhstan

KENYA

Save the Elephants

LIECHTENSTEIN

Sarastro Förderstiftung

PERU

Asociación para la Conservación de la Cuenca Amazónica, ACCA

Centro de Recursos y Educación en la Selva, CREES

Federación Nativa del Rio Madre de Dios y Afluentes, FENAMAD

Fondo Nacional para Areas Naturales Protegidas por el Estado, PROFONANPE

Instituto del Bien Común, IBC

Ministerio de Cultura, Viceministerio de Interculturalidad, MINCUL

Ministerio del Ambiente, MINAM

ProPurús

Servicio Nacional de Areas Naturales Protegidas por el Estado, SERNANP

Sociedad Peruana de Derecho Ambiental, SPDA
WWF Peru

POLAND

Natural Heritage Foundation, NHF

Polish Society for the Protection of Birds, OTOP

ROMANIA

Fundatia Conservation Carpathia, FCC

SLOVAKIA

Aevis Foundation

SOUTH AFRICA

South African National Parks

SRI LANKA

International Water Management Institute

SWITZERLAND

Fondation Segré

Friends of Serengeti

International Union for the Conservation of Nature, IUCN

mountain wilderness

Oak Foundation

PanEco

Stiftung Farald Von Wedekind

Stiftung Temperatio

TANZANIA

Asilia Africa

Friedkin Conservation Fund

Grumeti Reserves and Grumeti Fund

Ikona and Makao Wildlife Magegement Areas

Jane Goodall Institute

Ministry of Natural Resources and Tourism

Ngorogoro Conservation Area Authority, NCAA

District Councils: Kigoma, Mpanda, Ngorongoro, Serengeti, Tanganyika, Uvinza

Tanzania Association of Tour Operators, TATO

Tanzania National Parks, TANAPA

Tanzania Wildlife Management Authority (TAWA)

Tanzania Wildlife Research Institute, TAWIRI

Wildlife Division of the Ministry of Natural Resources and Tourism

WWF Tanzania

UKRAINE

Ministry of Ecology and Natural Resources

National Ecological Centre of Ukraine, NECU

Ukrainian Society for the Protection of Birds, USPB

UNITED KINGDOM

Anna Merz Trust

Arcadia Fund – A charitable fund of Lisbet Rausing and Peter Baldwin

Cambridge Conservation Initiative

Conservation Capital

Farm Africa

Fauna Flora International

Save the Rhino International

Society of the Apothecaries

The European Nature Trust, TENT

The Royal Society for the Protection of Birds, RSPB

Tusk Trust

Wild Europe Initiative

USA

Butler Conservation Fund

CI Critical Ecosystem Partnership Fund

Disney Conservation Fund

Elephant Crisis Fund

Gordon and Betty Moore Foundation

International Crane Foundation, ICF

International Rhino Foundation

Lion Recovery Fund

Lukuru Wildlife Research Foundation Inc.

Paul G. Allen Family Foundation

Paul Tudor Jones Family Foundation

San Diego Zoo Global Wildlife Conservancy

Save the Rhino International Inc.

Sheldon and Audrey Katz Foundation

The Wildcat Foundation

The Wyss Foundation

U.S. Agency for International Development, USAID

U.S. Department of State International Narcotics and Law Enforcement Agency, INL

U.S. Fish & Wildlife Service

Vulcan Inc.

Wildlife Conservation Network, WCN

Wildlife Conservation Society, WCS

WWF US

VIETNAM

Danang University

Department of Nature Conservation, DoNC

GreenViet

People's Aid Coordinating Committee, PACCOM

Province People's Committee (PPC) of the Gia Lai Province

The Management Board of Kon Ka Kinh National Park

Vietnam Administration of Forestry

ZAMBIA

Agrismart

Baileys Roofing

Celtic Freight

Conservation Lower Zambezi

Conservation South Luangwa

Department of National Parks and Wildlife, DNPW

German Embassy Lusaka

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African Wildlife Conservation Fund

Lowveld Rhino Trust

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Tikki Hywood Trust

WILD Programme

Zimbabwe Parks and Wildlife Management Authority, ZimParks

WAYS TO SUPPORT US

We can only meet the many nature conservation challenges with the help of our patrons. There are various ways to support us in our commitment to protecting the last wilderness areas:

Donations are a good means of providing help quickly and promptly. Non-specific donations can be used where they are most needed. Earmarked donations are used to support the project specified by the donor. Regular donations – as well as membership and sponsorship fees – give us additional planning security, as we know in advance what funds are available to us.

Becoming a **member** is more than just making a contribution to conservation. You are then part of the Frankfurt Zoological Society and are entitled to vote at the General Assembly. Your contribution of EUR 48, EUR 60, EUR 120 or more provides the basis for our nature conservation work and give us planning security.

Sponsors get involved for a specific project, region or purpose. By donating EUR 30 or more per month they help to protect the habitats of orangutans, elephants or saiga antelopes. Their contributions benefit the relevant projects directly and are a dependable factor in project planning.

Occasion-related donations are a special form of donation. They are initiated by patrons in celebration of private events such as birthdays, anniversaries or garden parties. Instead of gifts, the patrons ask for donations, often for a project that is particularly close to their heart. Even on sombre occasions, donations may be requested instead of flowers.

Endowments increase the capital of our “Hilfe für die bedrohte Tierwelt” foundation and thus provide ongoing support. The resulting annual income is used to fund the nature conservation work of the Frankfurt Zoological Society on a permanent basis.

Named funds are a special form of endowment. A named fund can be set up with minimum capital of EUR 20,000. It is managed separately within the capital of the “Hilfe für die bedrohte Tierwelt” foundation and bears a name chosen by the patron. The proceeds from the named fund flow into the nature conservation work on an ongoing basis.

Trust foundations are dependent foundations under the umbrella of our “Hilfe für die bedrohte Tierwelt” foundation. In contrast to legally independent foundations, trust foundations are not subject to time-consuming tax law approval procedures or direct state scrutiny. The founder can specify a purpose in a charter. Minimum capital of EUR 500,000 is recommended to ensure that the associated activities can be discharged on a lasting basis through the earnings of the foundation. Trust foundations can also be set up by a community of founders consisting of several persons.

PRESERVING WHAT IS DEAR TO YOUR HEART – A WILL FOR MORE WILDERNESS AND BIODIVERSITY

A bequest is a very special form of support and an expression of great trust in the conservation work of Frankfurt Zoological Society. Such a bequest can either be set up as a permanent endowment or trust foundation to increase the capital of the “Hilfe für die bedrohte Tierwelt” foundation, or as a donation for the project work of Frankfurt Zoological Society. We attach great importance to reviewing wills in which significant amounts of funds are pledged to the FZS or the “Hilfe für die bedrohte Tierwelt” foundation with particular care (and free of charge). Regardless of whether you wish to dedicate all or part of your estate to protecting the last wilderness regions on earth, we will be more than happy to assist you.

Sonja Steiger,
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Bequests either to Frankfurt Zoological Society or to “Hilfe für die bedrohte Tierwelt” foundation are exempt from German tax according to §13 para. 1 no. 16 ErbStG.

WE CONSERVE WILDLIFE AND ECOSYSTEMS
FOCUSING ON PROTECTED AREAS AND OUTSTANDING
WILD PLACES.

1.9 Million Euro

from donors, members and
sponsors

6,234 Sponsors

supported FZS in 2018

410 Staff Members

worldwide, of which 30 are
based at headquarters in
Frankfurt (Germany)

29 Projects & Programmes

in 18 countries

1.7 Million Euro

provided by the "Hilfe für die
bedrohte Tierwelt" foundation

15 Million Euro

invested in our conservation
projects in 2018

9.9 Million Euro

from institutional and public
third-party donors

Large Grasslands, Forests, Wetlands and Mountains

are the focus of our work

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PROTECTING WILDERNESS - SAVEGUARDING BIODIVERSITY

WE THANK ALL SPONSORS, FRIENDS AND PARTNERS
OF THE FRANKFURT ZOOLOGICAL SOCIETY,
WHO SUPPORTED OUR WORK IN 2018.

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