



**Intern / Student
Information Package**

Organisation Overview

Transfrontier Africa

Transfrontier Africa fulfils its role as an environmental conservation organisation by operating according to three main corporate values: Wildlife and Ecosystem Conservation, Landscape Security, and Community Development and Engagement in conservation. Research is one of the core functions of Transfrontier Africa and is strongly linked to all the other fields of action of the organisation: volunteering, security and community development and engagement. One of the key objectives of the organisation is to support management in making informed decisions based on scientific evidence.

As a non-profit environmental conservation organisation under contract with Olifants West Nature Reserve (OWNR,) Transfrontier Africa's objectives are aligned with OWR's Management Plan to improve wildlife conservation and ecosystem sustainability in the reserve. TA's focal area has recently been extended to include Blyde Olifants Confluence Conservation Area (BOCCA), and TA now provides ecological, security and educational services to both areas and surrounding communities.

Research sites

Transfrontier Africa conducts research projects in two nature reserves located in Limpopo province in South Africa: OWR (88 km²) and BOCCA (40 km²). OWR is a Big-5 area, linked to the Kruger National Park and part of the Greater Kruger, while BOCCA is a recently created conservation area, which hosts plains game (no Big-5 except leopards), as well as predators that cannot be held within fenced reserves (e.g., leopards, spotted hyaenas, black-backed jackals, occasionally wild dogs). The two areas lie on the Olifants River and are separated by the R40, a provincial road that prevents most animal movements. At the same time, the geographical proximity ensures biotic and abiotic similarities, allowing comparative research projects to be conducted between the two areas. Both areas are hot semi-arid granite lowveld savannas and are characterized by a hot wet season (October – May) and a cool dry season (June – September).





Research Projects

Research axes

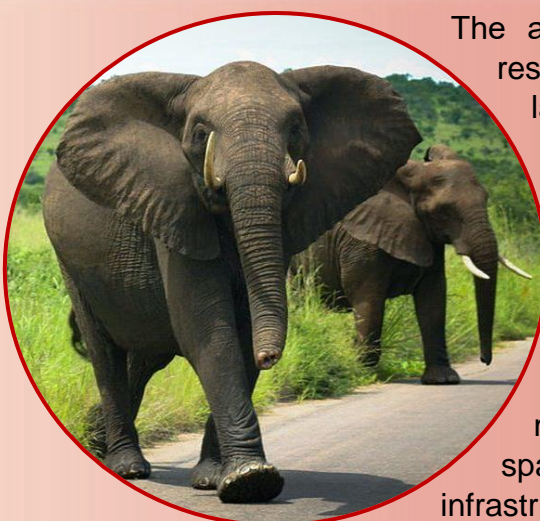
TA's Research Department focuses its efforts on five main research axes, under which the on-going, past, and future research projects fall. These five research axes have been selected to meet OWN'R's requirements in terms of ecological monitoring, research development, sustainable use of the landscape and wildlife, security, and community empowerment. These five research axes are:

- **Biodiversity and Trophic Interactions**
- **Community Development**
- **Human-Wildlife Conflicts**
- **Criminology**
- **Ecological Monitoring**



The axis 'Biodiversity and Trophic Interactions' includes research projects related to species diversity, intra- and inter species interactions, spatiotemporal use of the landscape by animals, and the relationship between wildlife and habitats.

The axis 'Community Development' includes all the research needed to investigate the effects of the Bush Babies and Black Mambas programmes in the surrounding communities and the perception of these communities towards wildlife, conservation, and (illegal) wildlife utilisation.



The axis 'Human-Wildlife Conflicts' encompasses the research needed to mitigate human-wildlife conflicts in the landscape and surrounding areas. Developing conflict mitigation methods is particularly important to reduce human losses/injuries and structure/crops damages caused by wildlife and human impact on wildlife populations, and can be used throughout Africa, but also in other continents facing similar issues. This axis includes behavioural studies of species involved in human-wildlife conflicts, pilot studies testing innovative conflict mitigation methods, the monitoring of both human and wildlife spatiotemporal use of the landscape and the impact of human infrastructures, movement, and pollution on wildlife.

The axis 'Criminology' includes all the research needed to understand and prevent illegal wildlife trade, with a focus on the prevention of poaching. This axis includes socioeconomic studies in communities surrounding nature reserves, spatiotemporal studies of poaching patterns, studies to evaluate the effectiveness of anti-poaching methods used and pilot studies to test new methods for detecting and preventing poaching in nature reserves. This axis therefore uses interdisciplinary science, building on sociology, criminology, and biogeography, to provide holistic and comprehensive answers to scientific and security questions.



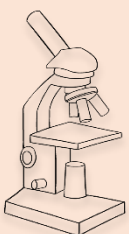
The axis 'Ecological Monitoring' includes all the research needed to ensure the sustainable use of the landscape, inform wildlife and landscape management policies, ensure the monitoring of endangered species and the development of policies for effective protection, monitor wildlife populations over time and their response to biotic and abiotic factors.

Research projects

TA's Research Department conducts several on-going projects, that take place every year, and undertakes temporary projects that fall under the Research axes described above. Temporary projects are subject to changes and evolve with the needs of the organisation and reserves (c.f., <https://ln5.sync.com/dl/23caec5e0/rx6zeq5x-ghgbp7bk-pk8sq6z2-jthsrqxf> for further information on the latest projects conducted), the on-going projects are detailed below:

Predator Diet Study

Every winter, apex predators' scats (lions, spotted hyaenas, leopards and wild dogs) are collected in selected plots. The location, date and species are recorded, and the scats are brought back to the office, where they are crushed. Samples of the scat are randomly selected, and hairs found in these samples are picked up and analysed under a microscope, to determine prey species. These data are entered in a database, and further projects will look at comparing this methodology with e-DNA analysis, and at apex predator diet, species composition and preferences, analysed parallelly to the prey species composition and abundance in the reserve (prey availability).



Bioproducts usage as Elephants Deterrent

Human-elephant conflict are common in Asia and Africa, and often have unfortunate consequences for both sides. Therefore, to prevent elephants from breaking fences, raiding crops, compromising the safety of rural dwellers, destroying human infrastructures such as water pipes and tanks, feeding on large trees or colliding with human transports, effective and ethical methods are urgently needed. One of the methods that was developed is the use of bees, which deter elephants. However, this solution is associated with logistical issues, as maintaining beehives is labour intensive, and with potential ecological issues, as it floods the habitat with a single pollinator species. Professor Mark Wright, from the University of Hawaii, therefore decided to investigate the potential of bees' alarm pheromones as a bio-deterrent product to mitigate human-elephant conflicts ethically. For the past years, he has been experimented this new methodology on African savanna elephants (*Loxodonta africana*) with Transfrontier Africa, by studying the behavioural reactions of elephants when confronted with the pheromones.

Tree Wrapping

African savanna elephants (*Loxodonta africana*) are believed to be one of the primary forces contributing to the conversion of savanna woodlands to grasslands. By pushing the trees over to feed on their roots, or ring barking them to feed on the cambium, i.e., bark removal around the entire circumference of the tree, causing its death by interrupting water and nutrients exchanges between the roots and the leaves, elephants represent an important factor of mortality for savanna trees.



Trees play an important role in savannas by limiting soil erosion, stabilizing ground temperatures, providing refuges, shade and food resources to wildlife and influencing nutrient cycle and water availability. While elephant-driven tree mortality is a natural process, the establishment of fenced nature reserves coupled with an increase in artificial perennial water resources, can lead to an increase in this mortality rate due to an increase in elephant density. To reduce this rate, reserve managers can either reduce elephant population size (e.g., culling or reduction of water availability), or protect the trees from being damaged. There are numerous solutions, including surrounding the tree with rocks to limit its access to elephants, and wrapping them in meshed wire to limit the access to the cambium, i.e., debarking opportunities. This solution has been implemented in Olifants West Nature Reserve since 2021 to protect marulas (*Sclerocarya birrea*) and knobthorns (*Senegalia nigrescens*) from elephants, and its efficacy is monitored by revisiting wrapped and control trees.

Alien Vegetation Control

Human movements across the world have promoted the spread of species outside their native biogeographical ranges, intentionally or accidentally, leading in some cases to biological invasion. Invasive alien species are able to invade new ecosystems thanks to their highly competitive and adaptive abilities and represents a threat to ecosystems and native species across the world. These invaders can notably exclude less competitive native species from a system, reduce biodiversity, and eventually disrupting ecological functions and interspecific interactions.

Invasive alien plant species are well known and studied in South Africa and management measures have been established across the country to control and monitor their spread. According to the Conservation of Agriculture Resources Act of 1983 (CARA), invasive alien plant species can be classified in different categories depending on their invasive status in South Africa and the threats they represent for the ecosystem:

- **Category 1:** Invader plants must be removed & destroyed immediately.
- **Category 2:** Invader plants may be grown under controlled conditions only.
- **Category 3:** Invader plants may no longer be planted.

In OWNR and BOCCA, 14 species have been identified as invasive alien plant species and are the object of management measures. While lodges and private landowners have the responsibility to manage their populations on their land, Transfrontier Africa is responsible for the remaining parts of the reserve, assisting the lodges and landowners in detecting and treating the invaders, and managing their population on Ekuthuleni (BOCCA). These species can be separated into two categories, which are managed differently: the cacti species which can be found everywhere in the reserves and are mostly treated with biocontrol agents and chemical products, and the drainage line species are mostly found in drainage lines and removed manually (mechanical removal).

Cochineal bugs (*Dactylopius coccus*) are used as biocontrol agents for the Prickly pear (*Opuntia* sp.) and were obtained through the Centre for Biological Control (CBC). These agents feed on the cactus' moisture and nutrients, damaging, and eventually killing the host plant. Cochineal bugs naturally disperse with the wind and can also be purposelessly placed on target plants by adding an infected cladode on it. The insects will then spread from the infected cladode to new host plants and establish a new generation on it.



Monosodium Acid Methane Arsonate (MSMA) is a selective herbicide which is sprayed on the cacti using a hand-pump sprayer. While MSMA is applied during the dry season, to increase its efficacy and durability, as rains tend to wash off chemical products, biological control is applied during the wet season, when plant growth is at its maximum, providing more nutrients to the biological agents.

Boreholes and Subterranean waters

Olifants West Nature Reserve is categorised as a hot, semi-arid, granite lowveld savanna, with a long-term average annual rainfall of 421 mm (since 1985). Water is essential to all life and is a scarce resource. Underground water flows through aquifers towards river basins and provides an important source of water for deep rooted plants and can also emerge at springs when levels are high enough. Monitoring the water table level is therefore essential to ensure sufficient water is available for the ecosystem through the sustainable water use by landowners and lodges present on the landscape. To do so, the depth of the water tables has been monitored weekly since 2019 in 7 boreholes, i.e., holes bored vertically in the ground to extract water, in Olifants West. The trend in depth of the water table is monitored over time and is linked to annual rainfalls, to establish recharge and consumption rates and propose management measures.

Ecological Carrying Capacity

Vegetation is probably the single-most influential characteristic of the environment that can reveal many pieces of vital information on various aspects of an area under observation. Where possible annual vegetation surveys should be conducted across the managed area. This will allow for the detection of change over time and enable management to make informed decisions.



Ecological carrying capacity (ECC) is the largest population size an ecosystem is able to support without long-term degradation of the ecosystem. To a certain extent, population numbers are self-regulating because deaths increase when a population exceeds its carrying capacity. Resource use, drought, competition, predator-prey interaction, disease, and the number of populations in an ecosystem all affect carrying capacity. The smaller the area managed the greater the impact is of small disturbances and therefore it is essential to monitor the condition regularly, to enable timely intervention when needed.

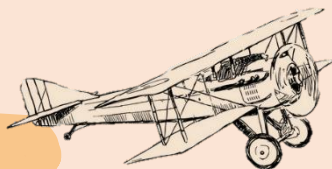
The objectives of this annual project are to calculate the Veld Condition Score and ECC, determine whether a change in species composition has occurred during the past year, determine whether the ratio of plant species has changed and assess whether any changes to the ratio of decreasers to increasers has occurred.

Fixed Points Photography

In any ecosystem, the vegetation forms one of the pillars on which the complex food-web rests. A healthy ecosystem is not sustainable without a healthy vegetation base and monitoring it is therefore essential. Vegetation follows numerous temporal cycles, phenology, of varying length, from daily cycles of photosynthesis and annual cycles of growth to lifetime cycles from seed to adult. Vegetation monitoring in the bushveld needs to include both the woody and the herbaceous layers. This makes the monitoring much more complex and very little practical methods had been available so far. The rise of advanced software however allowed the development of simple and efficient methods, such as fixed-point photography. Fixed-point photography is a method of data collection which requires recording images at a predefined location, at regular intervals, over a long period of time. Each picture is taken from the same position and angle so that the recorded data is of the same physical area in every picture. Each picture can be analysed to determine structure and composition of the vegetation, estimating phytomass, animal impact, erosion, bush encroachment, and tree recruitment. By correlating this data with rainfall data, shifts and trends in phenology can be detected. This method has been implemented in Olifants West Nature Reserve and its bufferzone since 2019, with pictures being taken monthly at 20 locations (18 in OWNR and 2 in the bufferzone).

The repeated pictures can then be compared using an image-processing software, such as Adobe Photoshop, to detect changes by overlaying photosets, or using convolutional neural networks for automated detection of changes.


Game Count



Bi-weekly game counts are conducted in Blyde Olifants Confluence Conservation Area (BOCCA), in order to obtain the most accurate representation of the species composition. For the past few years, the same methodology has been employed allowing for consistency in the data and the ability to detect trends over time. These data can then be compared to primary vegetation production to help understand the changes in species composition over time.

Rhino Monitoring


Black (*Diceros bicornis*) and white rhinoceros (*Ceratotherium simum*) populations are both threatened by habitat loss and poaching (illegal trade of rhino horn), and are classified as Critically Endangered and Near Threatened, respectively, on the IUCN Red List. In this global context, local monitoring of their population and global



collaborations are essential. The Black Rhino Range Expansion Project (BRREP), which was founded in 2003 by World Wildlife Fund (WWF), Ezemvelo KZN Wildlife, Eastern Cape Parks, and Tourism Board, is one of these attempts to join local and global forces to counter the drastic decline in rhino populations. Its aim was to increase black rhino populations by reintroducing them in suitable protected areas to create new breeding populations. As Olifants West Nature Reserve offers suitable protected black rhino habitat, it was included in the project in 2011, when 19 black rhinos were introduced from Great Fish River Nature Reserve. To monitor the success of this project, Transfrontier Africa has committed to gather all the sightings of both species in OWNR, and to share this data with WWF. To this end, landowners, lodges, and TA staff members are encouraged to relay any sightings, and camera traps are placed at key locations in the landscape (e.g., waterholes, active rhino midden).

Where possible, the individual rhinos are identified based on their specific ear notches, and their species, sex, age class, location (coordinates), number of individuals, behaviour (activity, direction), and body condition are recorded. It also allows us to build a consistent database over time that can be used to monitor their population dynamic, their temporal activity pattern, and their spatial distribution in the reserve, as well as their health condition (especially in times of drought).

Wildlife Monitoring



Threatened and iconic species, such as African wild dogs (*Lycaon pictus*), Southern ground-hornbills (*Bucorvus leadbeateri*), cheetahs (*Acinonyx jubatus*) and vultures (e.g., white-headed vultures – *Trigonoceps occipitalis*), are closely monitored in OWNR, and the data is shared to global or regional conservation programs. The data collected for Southern ground-hornbills is shared with the APNR Ground-Hornbill Research & Conservation Project (<https://apnrgroundhornbillproject.com/>), run by the FitzPatrick Institute of African Ornithology and which investigates southern ground-hornbills' habitat use, reproductive success, and behaviour. The objectives of their research are to (1) better understand the ecology of this species, and (2) use this knowledge for conservation purposes, as ground-hornbills are listed as 'Vulnerable' on the IUCN Red list. Vulture sightings, especially of rare and elusive species such as white-headed vultures, are shared with Endangered Wildlife Trust (EWT), and integrated in the EWT's Vultures for Africa Program (<https://ewt.org.za/what-we-do/saving-species/vultures/>), which aims at protecting vulture species from human impact, such as poisoning, raising public awareness, engaging governments to implement conservation actions, and improving our understanding of the different species to enhance our conservation strategies.



Internship conditions



Supervision and internship requirements

Paul Allin. Research Coordinator

Paul first travelled to Africa in 2007 and developed a deep passion for the abundant nature. He has travelled extensively across the continent and completed a Masters in Wildlife Management at the university of Pretoria in 2016. His research was on the impact management has on the behaviour and genetic diversity of Roan (*Hippotragus equinus*), Sable (*Hippotragus niger*), and Buffalo (*Syncerus caffer*). Paul joined Transfrontier Africa in 2018 as the research coordinator, overseeing the various research projects, supervising interns and building and maintaining relationships with external research organisations and universities.



During the past 5 years Paul has helped set up the African Rail Ecology Research Group and has co-founded BOCCA, the game reserve adjacent to Olifants West. His main research interests lie in trophic interactions and applied science. Paul is also currently working on his PhD at the University of Stellenbosch; Improving accuracy and precision of aerial census in the savanna biome, using remote sensed imagery and machine learning.

Elwenn Le Magoarou. Research Assistant

Since her first trip to South Africa in 2018, Elwenn has broadened her experience through diverse trips to Southern Africa. After volunteering in 2021 with Transfrontier Africa, she returned as an intern in 2022 to conduct fieldwork for her master's thesis on spatiotemporal patterns of co-occurrence between apex and mesopredators using camera traps and Multi-Species Occupancy Models (MSOMs). In 2023, after successfully completing her MSc in Biodiversity Dynamics and Conservation in France, she joined Transfrontier Africa's Research Department as a research assistant.

As a research assistant, Elwenn assists Paul supervise students and interns, provides constructive feedback at presentation evenings, helps initiate new research projects and ensure the smooth running of ongoing projects, carries out data analysis, writes comprehensive reports and helps conduct fieldwork.

Interns Supervision

During their time at Transfrontier Africa, interns are supervised, or co-supervised, by Paul and Elwenn. The supervision conditions will be specified and agreed upon beforehand in an internship contract provided by the intern's university, and/or in a Memorandum of Understanding (MoU) provided by TA.

The MoU will also specify the conditions of use of TA's equipment, the ownership of the data collected and the scope in which the data can be used.

Every intern will have to attend weekly gatherings at the reserve's office with Paul, Elwenn and the other interns. This day represents an opportunity for the interns to discuss their research projects with TA's Research Department, ask for advice and assistance, and focus on their computer work.

Every intern is expected to present their project monthly to the members of the organisation, volunteers, students, and interns, and occasionally to guests and professors. This gives the opportunity for the interns to practice their communication skills in a safe space for a diverse public, and to prepare for their internship defence. The presentations must last 10 minutes and are followed by questions. All the interns and the Research Department then gather, and everyone is asked to provide feedback about their own presentation and those of the other interns. This exercise allows the student to improve at presenting over time and is a good way of developing critical thinking and giving and receiving constructive criticism.

Requirements

Transfrontier Africa interns are required to report on their findings and manage databases. Therefore, interns should have a **strong knowledge of MS Office** and a **basic knowledge or an interest in learning software for reporting and research** (e.g., QGIS, R Studio). The level of expertise with these different software packages will vary according to the internship, and will be specified and verified in advance, as will the technical skills to conduct the fieldwork.

As Transfrontier Africa is a multi-cultural organisation, English is the most widely used language for oral communication and the only language used for written reports. Interns should therefore have a **good level of spoken and written English**.

Ideally, interns should be keen to **publish** their findings with the support of our team.

Transfrontier Africa interns carry the image of the organisation during their time with us and are therefore expected to be always **professional** and **respectful**. This internship requires to interact with a wide spectrum of stakeholders, with different backgrounds and cultures. Therefore, interns are expected to be capable of **adapting to a multi-cultural and multi-disciplinary team**.

As the organisation operates in a relatively remote area, interns must be **highly motivated and willing to work in remote field conditions** for the duration of their

internship. Although living conditions are decent, they remain **basics** and incidents linked to the nature of the location, such as a shortage of water for a few days when elephants pull out water pipes, can create inconveniences that interns will have to understand and accept.

As our camp and research centre are open and located in a Big-5 area, and most of the fieldwork is conducted in a Big-5 environment, **strict safety rules** exist, and interns must always comply with them. No deviation will be tolerated.

Finally, given that our camp and research centre both involve **living in a small community**, interns are expected to be respectful of each other, volunteers, and staff, to keep the premises clean and tidy and to participate in household chores according to the rota.

Daily life at Transfrontier Africa

Students and interns are accommodated in Olifants West Nature Reserve, in either Ndlovu Bush Camp (Bachelor interns and student groups) or Nonwane Research Camp (MSc and Ph.D. interns).

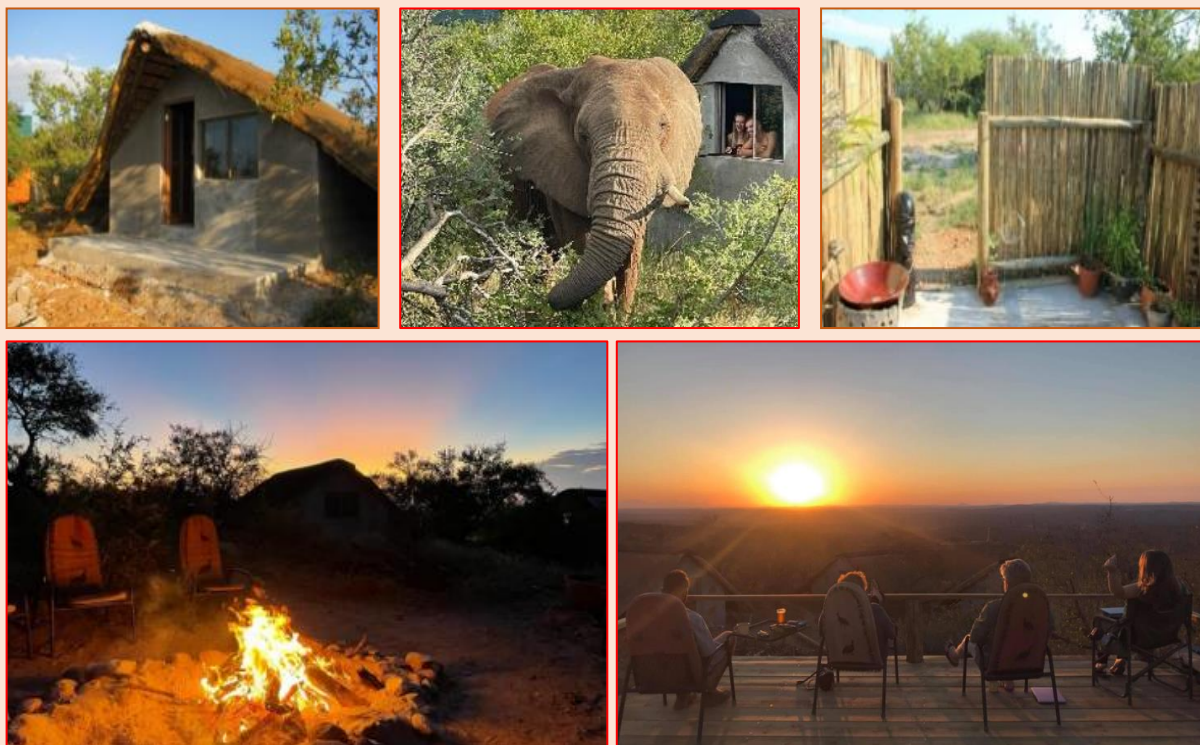
Ndlovu Bush Camp

Ndlovu Camp was newly built early in 2013 following a move from the project's former home, Paradise Camp. The camp consists of basic but functional accommodation in the form of chalets, an open-air Lapa/Communal area, kitchen, open-air bathrooms, and a viewing deck. The camp is not a lodge and there is no bar or swimming pool or air conditioning. It will, however, offer you an authentic bush experience!



The chalets are brick built and have a thatched roof, which keep them nice and cool in summer. They are lockable but care should still be taken with any valuables you bring to camp. The chalets have been arranged in a semi-circular formation around the Lapa/Communal area and are close together for safety purposes, but their door is facing the bush to maintain privacy. The bathroom facilities in camp are open air and surrounded by a reed screen. There are flushing toilets and a shower, with cold water only.

Ndlovu Camp is 'Open', which means that the local wildlife can move through freely, should they choose to do so! The local elephants are particularly curious and have caused some exciting times in camp! They have been known to damage facilities, in particular the plumbing, sometimes leaving camp without water for several days (drinkable water is then collected at the office and available for volunteers). Lions and hyenas have also made several appearances within camp and have a tendency for stealing shoes or towels when left outside. This information is not intended to alarm you but to make you aware of the realities of life in a purposely designed open bush camp environment.



Wi-Fi: Wi-Fi is available in camp, and preference will be given to those using this facility for work and or project purposes if the network becomes slow due to high use.

Mobile phone reception: Mobile phone reception is available in camp, and volunteers and interns can buy airtime and data through **Vodacom** for that purpose. Please bear in mind that Olifants West is a wilderness location and that the use of mobile phones must be reasonable and considerate to avoid disrupting other members and of course the wildlife.

Power: Since 2023, the chalets are all equipped with solar panels, that enables students and volunteers to charge their electronic items. However, solar power relies on the weather, and is therefore limited. Please be mindful that resources in the bush are precious and should be used with considerations. Everyone on camp should aim to conserve the very limited resources available, which includes firewood, water, power, fuel, and gas.

Meals: You will be provided with 3 meals per day and have access to tea, coffee and safe drinking water. In the field, snacks in between meals are also provided. All cooked meals are prepared on the open fire. Ensure you declare any dietary requirements during the booking process, failure to do so may lead to a restricted menu until the next town trip.

Activities: Students and interns might be assigned volunteers to assist them in their project in the field. During this time, interns and staff will educate volunteers in their area of study.

Laundry: Students and interns are expected to launder their own clothes while in camp and will be able to do this using the facilities at their chalet. Each chalet has a tap and cement basin for this reason. Clothes can also be cleaned in town at the local laundrette or laundromat at your own cost.

Sundays: Sundays involve the cleaning of camp and vehicles by interns and volunteers as allocated by the cleaning rota. The kitchen, bathrooms and other communal areas will be cleaned daily, as allocated by the rota. All chalets will be kept clean and tidy, by the current resident. The rest of Sundays is generally a day to relax and have fun, with visits to the endangered species centre, the reptile park, hiking in Blyde river canyon, daytrip to the Kruger National Park, etc. These visits are decided by the group and at the interns/students/volunteers' own expenses (e.g., entrance fees, fuel)

Mondays: Town trips to Hoedspruit, to save resources such as fuel, are limited to one day a week (on Mondays), unless in the case of an emergency. All volunteers, students, interns, and staff alike are to purchase anything needed for the week or drop off or pick up laundry on this day. Due to work requirements and limitations of space in vehicles, all the interns and students might not be able to go to town every week but will be able to ask those going to buy items on their behalf. It is suggested to plan an extra R500 – R1000 per week, depending on your personal requirements.

When staying at Ndlovu Bush camp, the following are included in the cost:

- ✓ Accommodation
- ✓ Linen
- ✓ Food (breakfast, lunch, dinner, tea, coffee, and snacks during fieldwork)
- ✓ Drinking water (borehole water – filtered water at your charges)
- ✓ Participation in daily reserve management activities and research projects
- ✓ Wi-Fi
- ✓ Power (solar, available in most rooms most of the time)

NONWANE *Research Centre*

Nonwane Research centre consists of basic but functional accommodation in the form of a shared house, shared indoor communal area, shared kitchens, and bathrooms, and an outdoor protected braai area. The centre is not a lodge and there is no bar or swimming pool or air conditioning. It will, however, offer you an authentic bush experience!



Nonwane is 'Open', which means that the local wildlife can move through freely, should they choose to do so! The local elephants are particularly curious and have caused some exciting times in Nonwane! They have been known to damage facilities, in particular the plumbing, sometimes leaving the centre without water for several days. Lions and hyenas have also made several appearances within Nonwane and have a tendency for stealing shoes or towels when left outside. This information is not intended to alarm you but to make you aware of the realities of life in a purposely designed open bush camp environment.

The house has 4 rooms in which one or two students can be accommodated, a communal area, 2 toilets, a shower with hot water available and a kitchenette with personal fridges, freezers, and cupboards.



Wi-Fi: Wi-Fi is available in Nonwane, and preference will be given to those using this facility for work and or project purposes if the network becomes slow due to high use.

Mobile phone reception: Mobile phone reception is available, and interns can buy airtime and data through **Vodacom** in that purpose. Please bear in mind that Olifants West is a wilderness location and that the use of mobile phones must be reasonable and considerate to avoid disrupting other members and of course the wildlife.

Power: Power is available in all rooms and communal areas but is subject to regular loadshedding (planned power outages). Loadsheddings are implemented by the power suppliers in the entire region and cannot be controlled by the organisation. Interns must plan their days around these times without power to ensure their ability to work (a mobile application called ESP can be downloaded to be alerted of the next outages). Please be mindful that resources in the bush are precious and should be used with considerations. Everyone on camp should aim to conserve the very limited resources available, which includes firewood, water, power, fuel, and gas.

Meals: Nonwane is a self-catering facility. Therefore, all the food and beverages are at the responsibility and at the expense of the intern/student.

Activities: Interns are free to organise their working days at Nonwane the way they wish and will be assisted in the field by TA staff members and eventually volunteers and other interns. They can occasionally join Ndlovu Bush camp on their projects in the field, when possible and with the permission of the camp manager.

Laundry: Interns are expected to launder their own clothes while in Nonwane and will be able to do this using the bathtub in the house. Clothes can also be cleaned in town at the local laundrette or laundromat at their own cost.

Sundays: Sundays involve the cleaning of the communal areas of Nonwane by interns and staff members. All rooms must be kept clean and tidy, by the current resident. The rest of Sundays is generally a day to relax and have fun, with opportunities to visit the Endangered Species Centre, the Reptile Park, hike in Blyde River Canyon, and go on daytrips to the Kruger National Park, etc. This is however subject to available space, as priority is given to volunteers.

Mondays: Town trips to Hoedspruit, to save resources such as fuel, are limited to one day a week or every two weeks (on Mondays), unless in the case of an emergency. Due to work requirements and limitations of space in vehicles, all the interns and students might not be able to go to town every week but will be able to ask those going to buy items on their behalf. It is suggested to plan R1500 – R2500 per week for food and beverages, depending on your personal requirements.

When staying at Nonwane Research centre, the following are included in the cost:

- ✓ Accommodation
- ✓ Linens
- ✓ All project-related fieldwork
- ✓ Wi-Fi
- ✓ Support and supervision
- ✓ Drinking water (borehole water – filtered water at your charges)
- ✓ Power (subject to loadsheddings)





Travelling to South Africa

It is your responsibility to ensure that you meet the passport and visa requirements for entry to South Africa. Please check with the relevant South African Diplomatic post/website in the country in which you reside. Any documentation that must be provided by our organisation can be supplied upon request.

The main international airport, O.R. Tambo International Airport, is in Johannesburg, and transport to OWNR therefore needs to be organised. Two options can be considered: taking a national flight from Johannesburg to Hoedspruit or taking a shuttle from the airport directly to the reserve (approximate distance: 450 km). **Arrivals at and departures from TA should preferably be on Fridays.** We can accommodate on other days if needed, please contact us to check availability. The nearest airport to our project is Hoedspruit's – Eastgate Airport. There are two flights to/from Johannesburg and one to/from Cape Town daily by SA Airlink (<http://www.flyairlink.com>).

An alternative, environmentally friendlier and generally cheaper option is the Swift's or Safari Link's shuttle which departs O.R. Tambo daily at 07h00. This shuttle has a drop off point at the Olifants West Gate where a member of our team will meet you. Transfrontier Africa can help with the booking of the shuttle and can also book a night in a lodge next to the airport if an overnight is needed, depending on arrival times. As the shuttles leave at 07h00, any intern/student arriving past that time will have to book a night first. Free shuttles are available between the lodge and the airport.

If you require assistance or have any questions regarding any practical or travel arrangements, please contact us at volunteer@transfrontierafrica.org.

Health and security

Prior to travelling to the project, you should visit your Doctor/Healthcare Profession to obtain advice on vaccination and general health requirement. The Greater Kruger Park is generally a low-risk malarial area, but you should consult your Doctor/Healthcare Professional about appropriate anti-malaria medication. Ensure that you declare any medical information we should be aware of on your booking form including allergies and dietary requirements (e.g., allergies, veganism). Ensure that you take out adequate travel insurance for you trip. Drinkable water, extracted from our boreholes, is available in all our facilities, and filtered water can be bought in town (Oasis offers an option to buy and refill large bottles for a very low cost).

Money and currency

It is crucial to ensure that your bank is made aware of your trip beforehand, and that your card can be used in South Africa. The national currency is the Rand (ZAR), with

an exchange rate close to 1€ = R20.04 (updated in July 2023). Credit and debit cards are accepted almost everywhere, and ATM are available for money withdrawal in O.R. Tambo Int. Airport and in Hoedspruit. In South Africa, a 10% tip is usually expected when a service is provided (e.g., restaurants, bar).

What to bring

The suggested packing list below should help with deciding what to bring for your internship. During your time out in the field all clothing should conform to game management / industry standard (khaki and / or green). OWNR expects all TA volunteers, interns, and students to wear a standardized uniform: a khaki shirt with the TA logo, available at our TA shop in sizes S-3XL (enquiries can be made during the booking process). No bright colours to be worn during fieldwork in the bush.

Required

- ✓ Water bottle
- ✓ Powerful torch (with spare batteries or charger)
- ✓ Day backpack
- ✓ Laptop and charger to work

Clothing

- ✓ Hat
- ✓ Sunglasses
- ✓ Warm Jacket / Fleece (seasonal)
- ✓ Waterproof Jacket (seasonal)
- ✓ 4 x Shirts (durable and of neutral coloration. Green or khaki)
- ✓ 2 x T-shirts TA
- ✓ 4 x Pairs shorts (green or khaki)
- ✓ 2 x Pair trousers (green or khaki - seasonal)
- ✓ 4 x Pairs socks
- ✓ Comfortable Walking Boots
- ✓ Sandals (for in camp)
- ✓ Gloves and Beanie (seasonal)
- ✓ Watch
- ✓ Underwear
- ✓ Sleeping clothes to suit

Toiletries

- ✓ Sunscreen
- ✓ Shampoo & soap
- ✓ Toothbrush
- ✓ Toothpaste
- ✓ Hairbrush
- ✓ Mosquito repellent
- ✓ Towel
- ✓ Personal toiletries (e.g., razors, deodorant)

Recommended

- ✓ Small personal first-aid kit (e.g., plasters, tweezers, tablets)
- ✓ Binoculars
- ✓ Camera (with spare batteries and memory card)
- ✓ Reading book
- ✓ Plug-adaptor (South African 3-point 'round' plugs are used)
- ✓ Phone charger
- ✓ Mosquito net (available at our TA shop – arrangements can be made during the booking process)
- ✓ Possibility to buy a **Vodacom** SIM card (on site)

Contact Us



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