

Securing Africa's future



South Africa is an ecologically rich and diverse country famous for its national parks and big game. Nearly 300 species of mammal, more than 800 species of bird and well over 20,000 plant species are recorded in the country.

However, loss of habitat, poaching, and climate change has led to many species becoming endangered and conservation efforts are now widespread across South Africa.

University of Exeter partner, Oppenheimer Generations, the organisation which represents the global interests of the family of Nicky, Strilli and Jonathan Oppenheimer, has played a key role in this. The Oppenheimer Generations Research and Conservation team support ground-breaking environmental programmes through dedicated centres, strategic partnerships and their annual Oppenheimer conference, now in its 11th year. In 2007 the family's conservation efforts were honoured by the WWF.

Dr Duncan MacFadyen is Head of Research and Conservation at Oppenheimer Generations Research and Conservation (OGRC). He has worked for the organisation since 2002 when he joined from the Ditsong Museum of Natural History.

He says: "We manage around 190,000 hectares which are home to some incredibly endangered species. For example, at Tswalu in the Kalahari we have both the black and white rhino, Kalahari lion, cheetah, leopard and spotted hyaena. In Telperion we have more than 280 different bird species, and at Shangani, across the border in Zimbabwe, we can have as many as 300 elephants on the ranch at one time.

"At Tswalu we have completely rewilded the area to form one of the greatest wildernesses in South Africa, while Telperion is hugely important from a conservation perspective as only 2% of the Bankenveld grassland is officially under conservation protection. The continued existence of the grassland is threatened by mining, agriculture and human development.

At each Oppenheimer Generations property there is also a research centre. These have been running for many years and the team has supported a significant number of

PhD and Masters students to come and conduct research. Through this work they have been able to build up a good amount of data to help manage the properties better, protect the ecosystems and conserve species, and support local communities.

Duncan says: "Our aim is always to make meaningful impact in both ecosystems and in people's lives. It is important for us to be sustainable, which means being economically and environmentally sustainable. We recycle almost everything, reducing waste to a minimum; we manage water resources; all the food served at Tswalu comes from within a 300 kilometre radius; and we work with local farming communities to support them to make a living. Everything we do is to help people become better custodians of the land, whether through regenerating ecosystems, supporting businesses, or providing training.

"Training the next generation of African environmentalists is so important. It is crucial for the future that young Africans are able to learn about conservation, to understand these environments and how to protect them, and are empowered to make a difference. Through our research centres, the Oppenheimer Memorial Trust and the Jennifer Ward Oppenheimer Research Grant, we've been able to support researchers at all stages in their careers and this is something that is hugely important to the Oppenheimer family as well as us in Research and Conservation."

This desire to train as well as conserve has seen Oppenheimer Generations partner with academic institutions and NGOs, including in October 2021 setting up a programme with the Global Systems Institute at the University of Exeter and the University of Witwatersrand's Global Change Institute.

The Oppenheimer Programme in African Landscape Systems (OPALS) was made possible by a £1 million contribution from OGRC, a £400,000 contribution from alumna Sarah Turvill and support by the University of Exeter.

It aims to deliver a sustained long-term benefit to landscape understanding and management against a background of rapid environmental change. It will support African students to spend time at Exeter and then use their knowledge on the ground. The overall programme is designed to provide a strong and credible voice for African communities, land managers and researchers in the global climate and ecological crisis, equip these stakeholders to understand, mitigate and adapt to environmental change, and develop pathways to resilient natural and human systems in African landscapes.

Duncan says: "I am so excited about the project with Exeter. It covers so many different elements that all interlink with one another, we won't just be looking at the environmental implications of climate change but the financial and social implications too. It is a completely holistic programme that aims to create real impact, not just in South Africa, but across the African continent.

"We want to better understand the unique and complex relationships between man and the environment, as well as the self-healing rates of these different landscapes. It is a long-term project over six years, but ultimately I would love to extend it for even longer because of the potential value of the data we will gather and the impact that it can have. For me, research is always about the impact and I think with this project we can make a massive difference to the preservation of African ecosystems and create a more sustainable future for the continent."

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