

# JAMES RENNIE BEQUEST

## REPORT ON EXPEDITION / PROJECT / CONFERENCE

**Expedition/Project/  
Conference Title:** Operation Wallacea: South Africa Expedition 3 (Dinokeng and Sodwana Bay).

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**Travel Dates:** 14th June to the 13<sup>th</sup> July 2018

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**Location:** South Africa: Dinokeng and Sodwana Bay

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**Group member(s):** Emily Rayson

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**Aims:** The aim of this expedition for me was to increase my knowledge of surveying techniques, increase my experience or conservation worldwide and attain experience in relation to my future career in conservation.

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### **OUTCOME (a minimum of 500 words):-**

#### **Research Assistant in Dinokeng Reserve and Sodwana Bay, South Africa**

On the 14<sup>th</sup> June, I started off my Operation Wallacea excursion with the intentions of travelling from Edinburgh airport to Dinokeng Game Reserve in South Africa, where I would spend the following 3 weeks as a research assistant before spending a final week on the coast at Sodwana Bay becoming a PADI open water qualified diver. The initial travel however did not go as planned, on arrival to Paris my connecting flight to Johannesburg was cancelled and in turn I had to then fly to Mauritius, to then finally fly over to Johannesburg over a day late. In being late, I had to stay overnight in Johannesburg, sadly missing a couple introductory lectures. However, as this was my first time travelling alone over such a large distance I gained a lot more confidence for my future travels. On arrival at Dinokeng, my accommodation for the following 3 weeks was paired tents in a small fenced off camp called Tambuki within the reserve. The reserve itself was situated close to an urban area and town, with a large public tar road running through the centre. Not only did this come as a surprise to me as the town could be both seen and heard at night, but also intrigued me on the impacts of human-wildlife interactions. I would later learn that this is the focus of many studies carried out by Operation Wallacea, particularly with dissertation students. Dinokeng Game Reserve also provided a unique approach to wildlife conservation due to its composition being made predominantly from landowners, giving insight for how existing conservation areas can be created and funded through human interaction.

Over the first 3 weeks of my expedition the agenda for the site involved an African Wildlife Conservation and Management Course, in addition to a variety of biodiversity surveys and surveying techniques. These surveys included game transects, vegetation surveys, bird point counts, camera traps and a newly introduced 'Fake snake' survey. The data that myself and other research assistants would collect from these surveys throughout the season goes towards research for different scientific journals and publications. In addition, may also be used for independent research topics such as accessing human-wildlife interactions in the reserve and accessing ranging patterns and habitat use of African elephants in fenced

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reserves. In relation to accessing ranging patterns of the African elephant, surveys such as the game transects, bird point counts and vegetation surveys enabled data to be collected to aid in the understanding on the elephant's impact on other herds and species, human habitation, habitat usage and preference. Survey data on human-wildlife interaction is used to create detailed maps showing distributions of different species and their relation to interactions with roads, self-drive routes and housing within the reserve. The findings of studies such as these can assist reserve managers across South Africa as human density and interactions increase. The newly created 'Fake Snake' experiment was used to gauge driver's reactions to wild animals on the tar and gravel roads that ran through the reserve, whether they would make an effort to swerve and avoid injury to the animal or if they purposely would hit the snake. The findings of this survey in particular may encourage higher safety regulations and signs within reserves but also explain the densities of species around roads. For the vegetation surveys, I had previously had experience on my degree course of how to identify and collect samples of different plant species, so I had the opportunity to apply previous knowledge and skills in a completely different habitat with different local flora. However, game transects quickly became my favourite study as it allowed me to see large mammals such as the elephants in a more natural environment. Through this opportunity, my passion and aspirations to work in conservation have been amplified. I was lucky enough to witness a female breeding heard and a group of three bulls coming together, but also see first-hand the destruction they may cause within the reserve, as they broke down many fences of private property. From my experiences, so far, it has made me consider a career in not only conservation but particularly elephant conservation and management.

As part of the African Wildlife Conservation and Management Course during the first 3 weeks our surveying was also accompanied by corresponding lectures. These ranged from how to identify different bird species on our bird point counts, the carnivores and herbivores we would hopefully come across in the reserve to more thought provoking lectures such as the management of elephants and elephant-human conflict. For example, these conflicts may include incidents such as crop raiding, illegal poaching, destruction of property and their effects on local habitats. To combat this many methods exist, including translocation, range manipulation, deterrents on farms such as beehives and growing of chili plants, to more extreme options like contraception and culling. As someone wanting to go into conservation it was extremely interesting and to understand more about the struggles and decisions made by scientists and reserves to try protect these animals, and the species around them. Even if I do not agree with some of the methods used in the past such as mass culling. During my time in Dinokeng I also gained more of an understanding about the issues of poaching, which although I knew was a big issue with large game I didn't think it would be to such a large extent in a reserve as small as the one I was in. During week two there was an incident close to the camp, where poachers were detained and an anti-poaching dog was lost in the reserve. Furthermore, the reserve itself was unable to tell us how many rhinos were in the area, when we did come across a black rhino its horn had also been removed. Any photos we did attain of rhinos we were prohibited to post to social media with the location, as even that could be used to find the location of the animals within the reserve. From this I gained additional knowledge on the extent of the problems faced within conservation.

After a captivating 3 weeks in Dinokeng we departed on a ten-hour bus drive over to Sodwana Bay on the coast. Here I began my Open water PADI qualification, spending the first 3 days

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learning skills in a nearby pool before being able to dive in the sea. As scuba diving is something I have previously never tried, to be able to not only acquire a new skill but also achieve it in the breath-taking views of Sodwana Bay was a one in a lifetime experience. During the training, I had difficulty at the start with maintaining my levels of buoyancy under the water, which is critically important when making sure you do not damage the already sensitive corals. Much like at Dinokeng our training was also accompanied by corresponding lectures, the first several about coral bleaching. Coral bleaching has particularly increased in recent years as global warming continues to rise, at Sodwana Bay, increased water clarity and radiation appeared to be a synergistic cause. Coral acts as shelter for 25% of marine species, protects shoreline and supports the fishing industry, as it continues to bleach and starve these will all be impacted in severe ways. Our lectures also included the inhuman treatment of shark species, and how they are inaccurately portrayed within the media fuelling a lack of compassion among the general public. Many sharks not only in south Africa but worldwide are caught as bi-products through destructive fishing techniques such as bottom trawling, which subsequently destroys coral. Again, this has inspired and motivated me to further my career in conservation, and now that I am PADI qualified I may have the option later in my career to explore more marine aspects of conservation.

Overall my month in South Africa as a research assistant was a once in a lifetime experience that has given me increased levels of motivation for achieving a career in conservation. I had the opportunity to apply my knowledge from my degree and attain new skills that hopefully I may be able to apply later in my career. I have broadened my spectrum on the struggles and issues faced by conservationists, in particularly with human-wildlife interactions which I was particularly interested in. Furthermore, showing me the negative aspects that also come with working in this field. Achieving a PADI open water diving qualification gives me the opportunity to explore marine conservation and keep up this newly found skill at university to higher levels and qualifications. I now aspire to travel back to South Africa to gain more experiences in these types of environments, and work out with the UK once I have completed my university education. Being away from the UK, travelling alone and being thrown into a situation with groups of people from all different backgrounds across the world has increased my confidence and allowed me to make some lifelong friends with similar interests in conservation. Additionally, I hope to continue to take part in expeditions like this in the following years and gain more experience.