Long-term Assessment of environmental variables on Robben Island by the Department of Conservation Ecology & Entomology – MOU signed

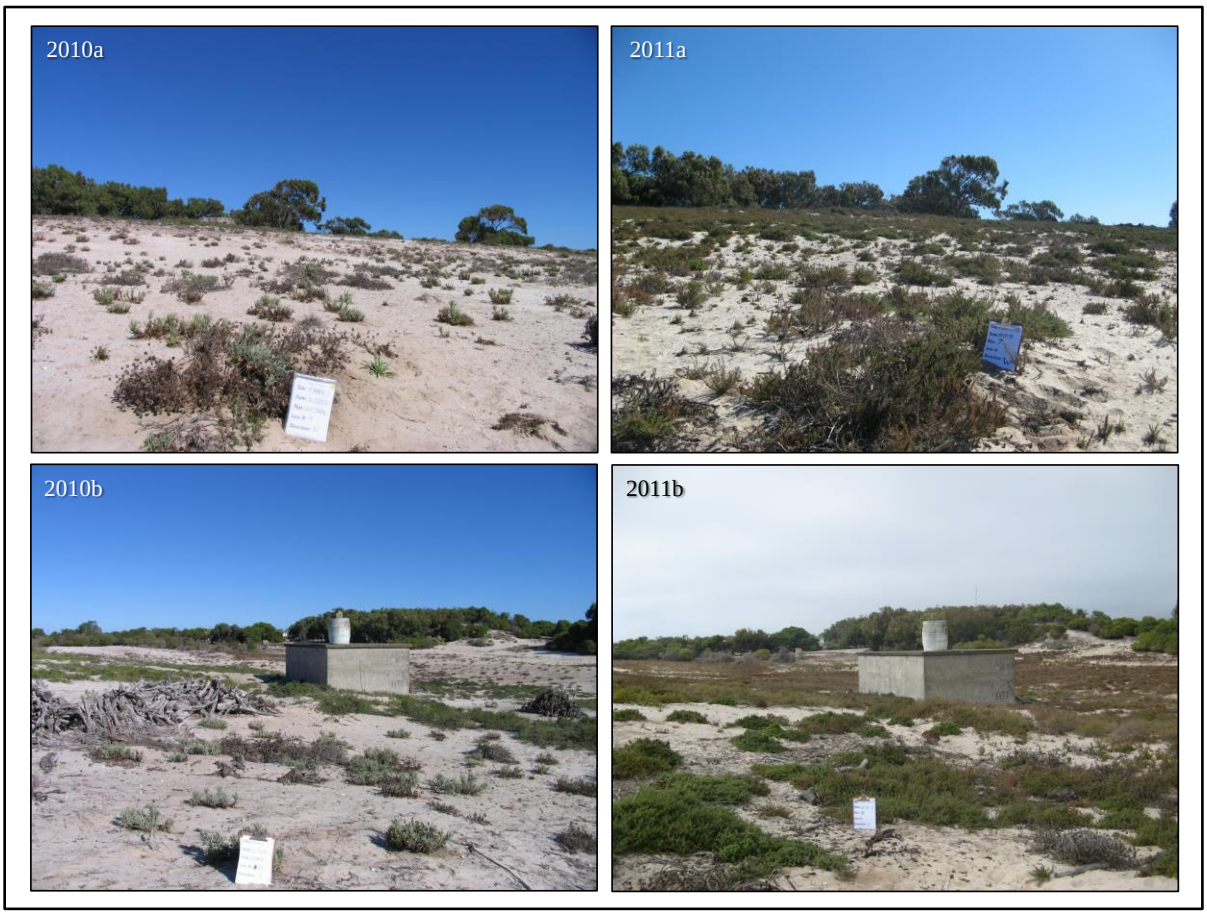
In March 2010, the Department of Conservation Ecology and Entomology initiated what was hoped to become a long-term monitoring, research and training collaboration with Robben Island Management. To formalize this relationship, a Memorandum of Understanding was signed by the CEO of Robben Island, Mr SM Mkhize and the Dean of AgriSciences, Prof ASM Karaan in June 2012. This significant agreement will pave the way for a long term association between the Department of Conservation Ecology & Entomology and Robben Island.

Currently, the Island is listed as a UNESCO World Heritage Site and it is a popular destination for domestic and international tourists wishing to visit the former prison which housed Nelson Mandela and other representatives of the anti-apartheid struggle in South Africa. With its long history of use, impacts on the island's biodiversity have been many and varied, but most significant (to this collaboration) are the introductions of invasive plant and animal species which have significantly altered the structure and function of the island's natural ecosystems. The European rabbit (*Oryctolagus cuniculus*) was introduced to provide food in the 1600s and is considered one of the world's worst invasive alien species by the IUCN/SSC's Invasive Species Specialist Group. Before Robben Island Management initiated an active control programme, rabbit numbers on the island were estimated to reach in the thousands with an estimation in 2009 of 20 000. In combination with other herbivores, such as Fallow deer, indigenous species richness and diversity has declined dramatically through selective grazing and the proliferation of these species has led to the over-use of natural ecosystems found on the Island and erosion problems. To assist in the monitoring of the current eradication and rehabilitation activities on the island, we have established an initiative to monitor various aspects of the recovery trajectory of the ecosystem. To date, five research/training trips have been completed and data collected on a range of biological and social attributes; several research papers have been drafted. Robben Island Management has generously provided transport and accommodation to over 100 final year Conservation Ecology students and in turn, their results are already contributing in a meaningful and responsible way to an understanding of the environmental management of the Island. We are excited by this community engagement exercise and prospects for educating the next generation of environmental managers through research which is monitoring the social and ecological dimensions of the island.
Queries: Contact Prof Karen J Esler (KJE@sun.ac.za)

A range of photographs are available on request (sample below)

Robben Island, a UNESCO World Heritage Site, is a popular destination for tourists who visit the prison which housed Nelson Mandela and other representatives of the anti-apartheid struggle. With its long history of use, impacts on the island's biodiversity have been many. Most significant (to this proposal) are the introductions of invasive plants and animals which have significantly altered the island's natural ecosystems. For example, before Robben Island Management (RIM) initiated a control programme, rabbit numbers on the island were estimated to reach in the thousands. Indigenous species richness and diversity has declined dramatically through selective grazing and over-use of the islands natural ecosystems. To assist in the monitoring of eradication and rehabilitation activities on the island, we have established a training initiative to monitor various aspects of the recovery trajectory of the ecosystem. Since 2010, five research/training trips have been

completed and data collected on a range of biological and social attributes. Results are already contributing in a meaningful way to an understanding of the environmental management of the Island. This community engagement exercise allows us to educate the next generation of environmental managers through research which is monitoring the social and ecological dimensions of the island.



It is early days, but results are promising. The photos above provide clear visual evidence of an increase in vegetation cover after the initiation of the Robben Island Rabbit Control programme.


new balance