

## Advertisement for 3 field biologists for Marion Island

The Marine Apex Predator Research Unit (MAPRU), a division of the Coastal and Marine Research Institute at Nelson Mandela University, is offering three suitably qualified candidates an opportunity to spend a year on Marion Island ([http://www.sanap.ac.za/sanap\\_marion/sanap\\_marion.html](http://www.sanap.ac.za/sanap_marion/sanap_marion.html)), collecting field data on seabirds to be used for academic purposes. This involves two South African National Antarctic Program (SANAP) funded projects. Two positions will be offered under the project 'Southern Indian Ocean Top Predators: linking ecology, oceanography and marine spatial planning needs' led by Dr Pierre Pistorius (with Dr Newi Makhado (DEA) and Prof. Peter Ryan (Fitz, UCT)) among the core members. This project will involve distributional and dietary investigation on a suite of marine top predator species breeding at Marion Island (four penguin, three albatross, four petrel and two fur seal species), as well as a subset of conspecifics breeding at the neighbouring French owned Crozet archipelago. This will be done to address questions related to ecosystem level changes in the Southern Ocean marine environment, areas of importance and high productivity relevant for spatial planning, and the projected impact of climate forcing on Southern Ocean marine top predators.

The third post will fall within the project 'Small Procellariiformes as indicators of ecosystem changes and plastic pollution' led by Dr Maëlle Connan (NMU – CMR) and Prof. Peter Ryan (Fitz, UCT). The project intends to use small Procellariiformes (petrels, shearwaters, prions, diving-petrels, storm-petrels) breeding in the Prince Edward islands, the Tristan da Cunha archipelago and possibly Antarctica as indicators of the health and status of the Southern Ocean ecosystem. One aspect of the project will focus on the trophic ecology of these species while the other will use the birds as biological samplers to investigate the extent and temporal trend of plastic pollution in the Southern Ocean.

### **DUTIES:**

Successful applicants will be actively engaged in collecting field data on a range of seabirds, and to a lesser extent seals, and dependent on the position (see below), will be involved in tracking at-sea distribution of study species through animal-borne instrumentation and obtaining dietary data from a host of species to among others, assess at-sea distribution and resource partitioning. This will require extensive walking to the respective breeding colonies over rough terrain under demanding environmental conditions. The successful applicants will furthermore contribute towards on-going long-term seabird monitoring, involving four penguin and albatross species. The successful applicants will need to manage and keep track of all aspects of research, including electronic tracking equipment. Office work will entail report writing and keeping meticulous records of all collected data.

## **GENERAL REQUIREMENTS:**

The incumbents will execute duties at an Antarctic Base and adhere to the health, safety and environmental requirements. The successful applicants will spend a full year (April 2018 to May 2019) on Marion Island. *There is no option to return to South Africa before May 2019.* The ability to work and live with small groups of people is thus essential. Although the base is well-equipped with e-mail, fax and satellite telephone facilities, the applicant has to be self-sufficient and self-motivated. Candidates must be physically very fit, mentally strong and enjoy the challenge of physically demanding work. In addition, the successful candidates may often be called upon to work long hours in extreme conditions on duties unrelated to their core function. Appointment to these positions is subject to a rigorous medical examination, which will be arranged for at no cost to the applicants.

## **SPECIFIC POSITION RELATED REQUIREMENTS:**

### ***Southern Indian Ocean Top Predators: linking ecology, oceanography and marine spatial planning needs***

Two positions are being offered, one at PhD level (Post 1) and one at MSc level (Post 2).

#### **Post 1 requirements:**

1. A strong academic background with clear evidence of capacity and willingness to undertake a PhD within the program
2. Previous experience in handling and deploying tracking instrumentation on seabirds
3. Strong numerical skills with a good grasp of the R software environment.
4. Either completed or at final stages of completing a MSc degree in Zoology.

#### **Post 2 requirements:**

1. A strong academic background with preference given to applicants qualified and willing to undertake a MSc in Zoology based on field collection during the year on the island
2. Previous experience in working with seabirds
3. Data management and report writing experience
4. Demonstrated history of field activity collecting biological data

**Please contact Dr P.A. Pistorius [pierre.pistorius@mandela.ac.za](mailto:pierre.pistorius@mandela.ac.za) for any further queries regarding these two posts.**

### ***Small Procellariiformes as indicators of ecosystem changes and plastic pollution***

One position is being offered, to work closely with other top-predator field workers on Marion Island. This project is the first, since the 1980s, to focus primarily on

burrowing nesting seabirds. The Prince Edward Islands are thought to house 12 burrow nesting species, and the work will first entail prospecting to identify the breeding areas, which are still unknown for some species. Then, dietary data and a wide range of samples will be collected to study their trophic ecology and the current extent of pollution.

**Post 3 requirements:**

1. Strong academic background (minimum of a BSc Honours), with a possibility of working towards either an MSc or a PhD within the project,
2. Previous experience in handling birds including tissue sampling,
3. Demonstrated history of field activity collecting biological data,
4. Well organized and demonstrated attention to detail as several samples will be collected for further chemical analyses for which strict protocols need to be followed.
5. Data management and report writing experience

**Please contact Dr M. Connan [muelle.connan@gmail.com](mailto:muelle.connan@gmail.com) for any further queries regarding this post.**

**SALARY:** Approximately R 160,000 p.a dependent on qualification (plus R18,000 potential bonus at end of contract).

**Note:** preference will be given to previously disadvantaged individuals who are particularly encouraged to apply for these contract positions.

Please send a letter of motivation, detailing why you think you are a suitable candidate for the position, together with your certified academic record and a comprehensive CV including three references to either of the respective project leaders. Please indicate in application to which post you are applying, and if not successful, whether you would like to be considered for the other 2 posts. Correspondence will be limited to short-listed candidates who will be contacted no later than the 21<sup>st</sup> of December.

**Application Deadline: 23 November 2017**