

## Vacancy for Mouse-Free Marion (MFM) Project Research Assistant (March 2024 – May 2025)

BirdLife South Africa, via the Mouse-Free Marion (MFM) Non-Profit Company (NPC), is offering an opportunity to a suitably qualified candidate to spend a year on Marion Island to continue monitoring studies designed to support the ongoing planning for the mouse-eradication operation. The position will include collecting field data on mice, continuing the monitoring of weather parameters, undertaking further field trials relating to the bait and, in collaboration with the University of Pretoria, contributing to the collection of baseline data on invertebrates and plants.

**Post:** Mouse-Free Marion (MFM) Project Research Assistant.

**Location:** Marion Island.

**Salary:** The remuneration package for this fixed term contract is approximately R240,000 for 15 months (April 2024-May 2025), including a potential performance-linked bonus. Food, accommodation and Personal Protective Equipment (PPE) are provided.

### Background to Project:

More than 200 years ago, House Mice were unintentionally introduced to Marion Island, the larger of the two islands that together form the Prince Edward Islands Special Nature Reserve in the Southern Ocean, 1,900 km southeast of South Africa. In recent decades, as the climate has become warmer, drier, and more favourable for House Mice, their densities have increased dramatically. By preying on invertebrates on the island, and consuming and burrowing into plants, mice have had profound impacts on most aspects of the island's ecology. In the past two decades, researchers have confirmed that mice have been increasingly preying on the albatrosses and petrels nesting on the island, inflicting fatal wounds on chicks and, recently, adults. The birds are naïve to terrestrial predators, and have no defences against this agonising death.

To address this urgent conservation problem, in 2020 a partnership between the Department of Forestry, Fisheries and the Environment and BirdLife South Africa was formalised with establishment of the Mouse-Free Marion (MFM) Project <https://mousefreemarion.org/>. BirdLife South Africa has established the MFM Non-Profit Company (NPC) to facilitate the execution of its responsibilities under the partnership. The purpose of the MFM Project is the eradication of mice on Marion Island in a once-off operation, using a technique that has effectively restored more than 700 islands in all the world's oceans, and from tropical to sub-Antarctic latitudes. We will spread rodenticide bait over the entire island using helicopters. This highly effective conservation tool offers a rare hope: that with one action we can restore the island's ecology, biodiversity, and status as a safe breeding-ground for many thousands of threatened seabirds and home to sub-Antarctic plants and invertebrates.

Several monitoring initiatives and trials have been initiated to help inform the planning of the mouse-eradication project and to establish a longitudinal monitoring framework to assess the ecological outcomes of

mouse eradication. The MFM Project Research Assistant will continue the field-work required on Marion Island to progress these initiatives.

### **Key Responsibilities on Marion Island:**

- This post continues and builds on work done by previous Research Assistants on the island over the past two years. The annual relief voyage in April-May 2024 will provide an opportunity for handover and training during the approximately 25 days when the outgoing and new Research Assistants, and the Project Manager, are together on the island.
- Fieldwork will occupy a significant portion of the incumbent's work time, including plant and invertebrate sampling, setting up and conducting field experiments with non-toxic bait, deploying and servicing remote cameras for weather observation and bait trials, and possibly working with data loggers.
- The Research Assistant will be responsible for undertaking, managing, and keeping track of all aspects of the longitudinal monitoring work associated with mouse impacts on vegetation, invertebrates, and seabirds.
- The incumbent will need to use lethal methods (snap traps) to sample mice and preserve their tissues (tails, ears, bodies, and fur) for DNA and stable isotope analyses that will be carried out in mainland South Africa.
- The incumbent will map (identify and recording the locations and characteristics of) caves and lava tubes that will be hand-baited.
- Fieldwork will usually be under challenging conditions (cold, wet or snowy, windy, and marshy), sometimes for long hours or at night.
- The Research Assistant's remaining time will be dedicated to laboratory and office work: extracting, sorting, and identifying of invertebrates; data entering, curation, and analysis; and monthly report-writing.

### **Basic Academic Requirements, Experience, and Skills:**

- Candidates must have at least a B.Sc. (Hons) degree in conservation biology, ecology, or a related field.
- Field experience working with plants, invertebrates and/or birds, will be an advantage. Meticulous observation will be required, as will good note-taking and record-keeping abilities.
- Experience of ecological survey techniques and navigating in rugged terrain is required; experience with manipulative field experiments will be an advantage.
- Prior experience of working on a sub-Antarctic Island will be an advantage.
- In the laboratory, some experience of maintaining equipment and conducting experiments is required.
- Prerequisite computer competencies include proficiency in MS Office suite or an equivalent, adaptability, willingness to work with unfamiliar applications and software for field equipment such as cameras and data loggers, and experience with data organisation, management, basic statistical analysis, and scientific writing.
- The ideal candidate will be committed to and enthusiastic about conservation, physically fit, self-motivated, mentally robust, and interested in data collection and analysis.
- The Research Assistant will need good organisational skills, and an ability to work independently and adapt to unexpected challenges. They will also be required to work well in a team, asking for help when needed and reciprocating by helping others.
- The ability to work and live with small, diverse groups of people in an isolated and sometimes socially complex environment is essential.

### **Other information:**

- The incumbent will execute duties at a sub-Antarctic Base and adhere to the health, safety and environmental requirements of the managing authority for Marion Island, the Department of Forestry, Fisheries and the Environment.

- The successful applicant will spend 13 months (April 2024 to May 2025) on Marion Island. There is no option to return to South Africa before May 2025.
- The base has limited e-mail and satellite telephone facilities, but these can be intermittent, so the applicant must be able to do without constant supervision or links to family and friends in South Africa.
- The post will require extensive walking over rough terrain under demanding environmental conditions. Candidates must be physically very fit, mentally strong and enjoy the challenge of physically demanding work. In addition, the successful candidate may often be called upon to work long hours in extreme conditions on duties not directly related to core project functions; for example, assistance with routine seabird monitoring.
- The appointment is subject to a rigorous medical (physical and psychological) examination, which will be arranged at no cost to the applicant.
- The incumbent will report to the MFM Project Manager.
- The MFM NPC reserves the right not to appoint a candidate to this position.

### **Submission of Applications:**

Deadline for applications: **12 February 2024**

**To apply**, please e-mail your application to Dr Isabel Human, at [isabel.human@birdlife.org.za](mailto:isabel.human@birdlife.org.za), with the subject title **MOUSE-FREE MARION RESEARCH ASSISTANT**.

We require the following information, with all attachments submitted as PDFs:

- Cover letter motivating why you consider yourself suitable for the post, and giving your reasons for applying.
- Detailed CV, including contact details of at least three referees.
- Copies of qualifications (including grades, for undergraduate degrees).
- Copy of ID document.

South African applicants will receive priority. ***Please note that the appointment will be contingent on availability of ship berths and associated approvals.***

Correspondence will be sent to short-listed candidates only.

Short-listed candidates will undergo competency tests to ensure adherence to requirements.

For queries contact Dr Sue Tonin, the Mouse-Free Marion Assistant Project Manager, at [sue.tonin@birdlife.org.za](mailto:sue.tonin@birdlife.org.za)