

Saving Marion Island's Seabirds™  
The Mouse-Free Marion Project



# QUARTERLY NEWSLETTER



Planning for the  
Marion eradication:  
*an update from the  
island*

MFM Project  
announces three new  
Project Patrons

Leaping into  
spring on  
Marion Island





# Welcome

to issue No. 7 of the Mouse-Free Marion Project Quarterly Newsletter

Summer is on its way, and many of the seabirds that spend the winter away from Marion Island have started returning. It's a busy and fulfilling time for all the researchers on the island. In this edition of the Mouse-Free Marion Quarterly Newsletter, we feature two articles from researchers currently on the island as part of the 80<sup>th</sup> Overwintering Team (M80).

Camilla Smyth has written a personal account of her first five months on Marion Island as the MFM Project Research Assistant. The research that Camilla is undertaking on the island is important to help inform the technical

planning for the baiting operation; it also contributes to the collection of pre-eradication (baseline) data which will form an important component of the overall strategy to assess and monitor the ecological outcomes and recovery associated with the mouse eradication intervention.

Michelle Risi and her partner Chris Jones have spent many years on islands studying seabirds. They have returned to Marion as part of M80 to continue their passionate devotion to seabird research and conservation. In her article, Michelle tells us about the joys of conducting fieldwork on Marion, but also of the sadness of witnessing first-hand the impacts that mice are having on the island's seabirds.

Marion Island is an awe-inspiring place but in the presence of mice is no longer the safe haven it used to be. The MFM Project aims to secure a positive conservation future for Marion Island, one in which Wandering Albatrosses and other seabirds do not have to contend with being eaten alive by mice.

The number of islands from which invasive rodents have been successfully eradicated has been increasing rapidly over recent decades. In each case, eradication projects benefit from lessons learned and experience gained from earlier operations, the majority of which have been successful, but some of which have failed. Supporters of the MFM Project will know about the unsuccessful eradication attempt on Gough Island in 2021. Regrettably, in August this year, a second unsuccessful mouse eradication effort was reported from Midway Atoll in the Hawaiian Archipelago. A root cause for these failures is not immediately evident, and teams involved with these projects have initiated efforts to investigate the possible factors that may have contributed to the failures of these mouse eradication efforts.

After careful consideration, and to give the MFM Project the best chance of being a success, the baiting operation on Marion Island planned for 2025 will be shifted to 2026. This additional time will allow our team the opportunity to engage with colleagues involved in these unsuccessful eradication efforts and to assimilate their experience and the learnings. Understanding possible contributing factors to the failures of these two projects can help inform any modifications that could be made to the planning and implementation of future mouse-eradication operations, including on Marion.

Right: Camilla Smyth working on Marion Island, photo: Michelle Risi

Each island, and operation, is different, and it may well be that factors implicated in the failures of Gough and Midway are not directly applicable to Marion. However, it is our view that the operational deferral is the responsible course of action. The delay in the baiting operation does not stop or delay our planning or preparation efforts, which continue along with engaging with international colleagues about Gough and Midway. Conservation is seldom easy, but the efforts are always worthwhile.

Our outreach to potential philanthropic partners to help fund the eradication project through the [Conservation Campaign for Marion Island](#) remains a priority. You can expect to receive updates on our work on these and other aspects of the project as we move forward. We remain deeply grateful to the dedicated supporters who have helped fund our work and continue championing this important project.

Finally, I am delighted to welcome three new international patrons for the MFM Project. It is through continued collaboration, and your support, that we can achieve a favourable conservation future for Marion Island and its globally important seabirds.

*Dr Anton Wolfaardt*  
MFM Project Manager







The preparation work for the eradication primarily includes monitoring weather conditions, bait availability trials, exclosure plot trials and possibly some mouse DNA sampling later in the year. Although weather conditions change from year to year, monitoring them during the winters of the years leading up to an eradication operation is important, as these provide insights into the possible weather conditions that can be expected during the winter of the actual operation. This work is key for planning the eradication operation as it will aid in determining the number of hours helicopters can fly to distribute bait. In addition to carrying out daily weather observations, I also have five cloud monitoring cameras around the island that take photos every daylight hour. These photos all capture the interior mountains of the island from different angles and are used to approximate the base level of

clouds across different parts of the island throughout each day.

The remaining part of the preparation work for the eradication relates to how bait pellets weather in conditions specific to Marion Island. It is important to assess bait weathering and persistence on the island because it is imperative that sufficient bait pellets remain accessible to mice for a certain amount of time after the bait has been distributed for an eradication to be successful. To assess the weathering and disappearance of bait, I conducted bait availability trials and exclosure plot trials. These trials involve monitoring a certain number of bait pellets placed in plots along a transect for a week. The main factors that are monitored are the number of pellets remaining in each plot each day, what proportion of each remaining pellet is left, to what degree each pellet is weathered, if

*Left: Camilla Smyth celebrates after a successful field trip to Swartkop Point  
Below: A Northern Giant Petrel Inspects a study plot on Marion Island*

# PLANNING FOR THE MARION ISLAND MOUSE ERADICATION:

*An update from the Island*

By Camilla Smyth,  
MFM Project Research Assistant  
M80 Overwintering Team.

It's hard to believe that time can pass so quickly, but the 80th overwintering team on Marion Island is approaching the five month mark on this windy, wild and amazing sub-Antarctic island. Working and living on Marion Island is an adventure of a lifetime, full of rewarding work, beautiful scenery and some rather challenging weather conditions. My official job title is 'Mouse-Free Marion Project Research Assistant' but on the island I'm more commonly known as a 'mouser'. The work I'm undertaking on Marion Island is quite varied. Part of it is preparation work for the mouse eradication operation and the remainder is undertaking ecological monitoring work to provide baseline information against which the ecological outcomes of the eradication operation can be assessed.





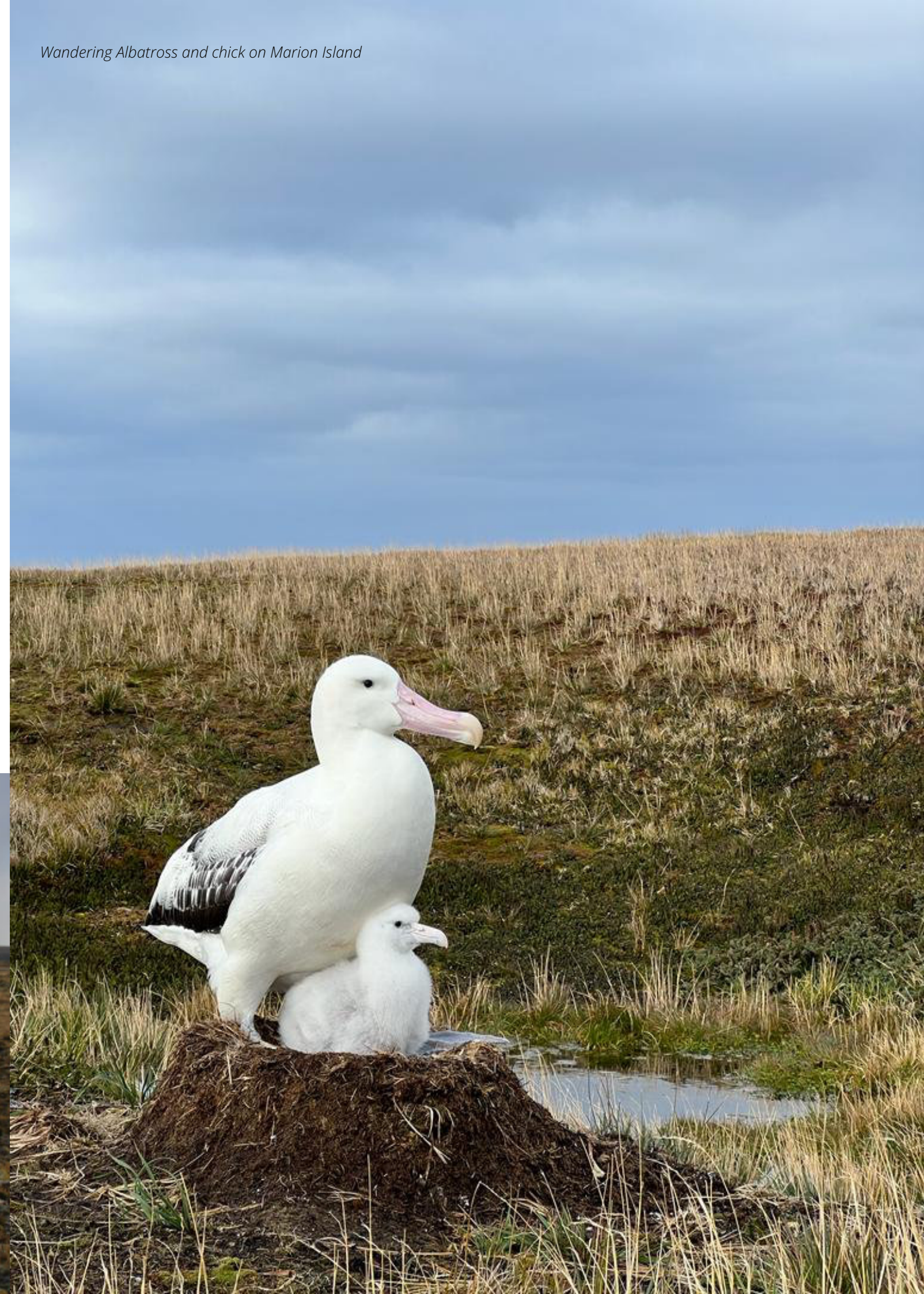
there are signs of mouse consumption of the pellets and whether there are any signs of invertebrate activity around the pellets. These trials are carried out at different altitudinal gradients and in different habitat types to account for variances in different parts of the island. The data acquired from these trials help to inform how much bait should be distributed in different regions of the island. The bait pellets used in these trials do not contain any toxins, so no species are unnecessarily impacted.

Exclosure plot trials also look at the weathering of bait pellets over time, but in the absence of mice and other vertebrates. In these trials, one or more bait pellets are placed inside a cage, which prevents mice and other vertebrates (such as birds) from accessing them, and each pellet condition is then assessed daily. These trials are useful for planning purposes because they provide information on what factors other than mice contribute to the weathering and disappearance of bait pellets and how quickly this happens.

The other aspect of the work I am undertaking on Marion Island is the

ecological monitoring work. Collecting ecological data prior to the mouse eradication is valuable because it provides baseline data which can be used in comparisons after the eradication. The monitoring work I am undertaking includes seed counts of selected plant species, invertebrate sampling and some vegetation cover surveys. The aim of the seed counts is to measure the rate at which mice predate on flower and seed heads of various plant species on the island. These counts involve counting flower heads, seed heads and heads bitten off by mice in marked plots each month. To sample invertebrates, I use pitfall traps and 20-minute invertebrate searches. Both of these invertebrate sampling methods provide a way to quantify invertebrate abundance and diversity in different habitat types. The data collected prior to the eradication will provide a baseline for measuring changes in invertebrate populations following the eradication. I will also be doing some vegetation cover surveys in the near future which allow changes in vegetation cover to be measured over time.

*Wandering Albatross and chick on Marion Island*



*Fieldwork takes place in different areas of the island*

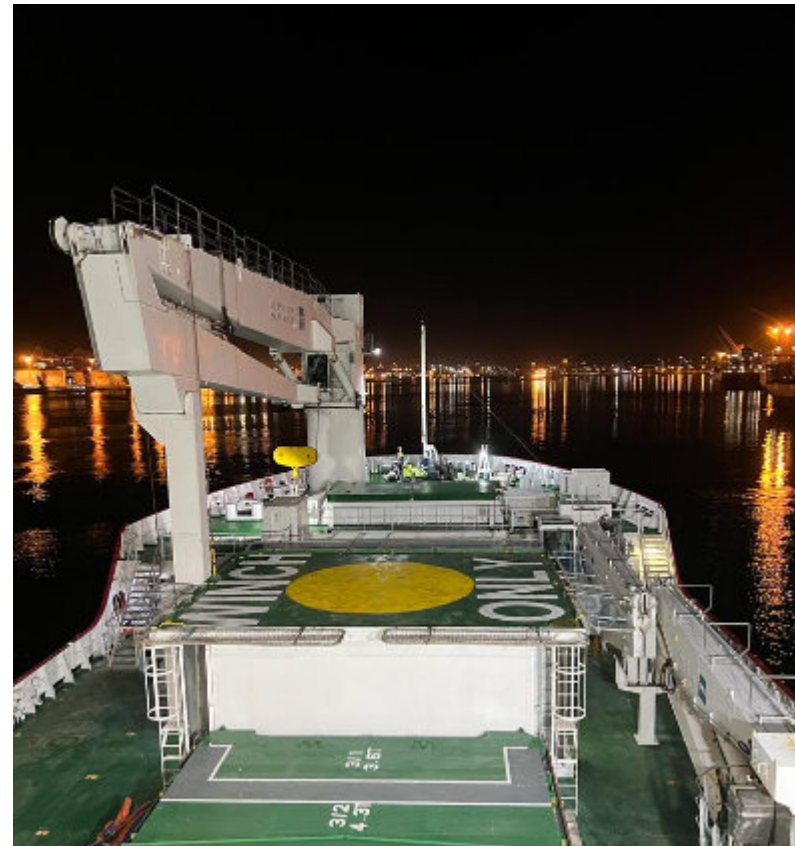




Work aside, there are many other aspects to life on Marion Island. Working here involves living at a research base with a relatively small team of people, and with that comes various responsibilities. The most concrete of them is keeping the base in good condition, clean and tidy. To achieve this there are various rosters called skivvy rosters which are schedules of who is responsible for different parts of the base each week. There is a general base skivvy roster, a kitchen-assist skivvy roster, three accommodation corridor skivvy rosters as well as a braai skivvy roster. Skivvies are done in teams and the different rosters rotate on different time intervals.

A less concrete and harder to measure responsibility that comes with living in an isolated research base with a relatively small team of people is making sure that you are positively contributing to the morale of the team. There is no metric to measure team spirit, but it is hugely important in a place

such as Marion Island. Small gestures often go a long way to keeping spirits high and our team has been really good at consistently carrying out these kinds of gestures. These range from playing a song over the radio at the end of each day to field assistants who are at field huts, making birthday cards when someone has a birthday and organizing other activities such as pool tournaments and movie evenings. We have also celebrated



*Below: The M80 Overwintering Team on the helicopter deck on Marion Island  
Right: Leaving Cape Town harbor aboard the S.A. Agulhas II*



World Albatross Day and Midwinter (the winter solstice). Prior to coming here, I did not know that Midwinter was celebrated in the Antarctic and sub-Antarctic communities, but it turns out that it is a well-celebrated and much-anticipated day. In the week leading up to the day we were inundated with Midwinter greetings from various research bases in Antarctica and the surrounding islands. Although these seemingly small things could appear to be relatively insignificant in the greater picture, they have brought the team together and have been keeping us in good spirits. Although we still have a number of months remaining in our expedition, we're confident that we will be able to carry the strong morale through the rest of the year.

Winter has been quite a busy few months for me, but I have loved being in what has felt like a winter wonderland. Island life is much simpler than life in a city and it's incredibly freeing to experience. It's still mind blowing to me that on a normal day of work I walk past Wandering Albatross chicks on their

nests, I sometimes look up to see killer whales gliding through the water and I frequently have to divert my route to avoid the elephant seals and give way to the Gentoo Penguins coming in from the sea. The weather can however be quite harsh at times, and this can sometimes prove to be challenging. Ice can freeze over camera traps and snow can cover seed count plots when they need to be counted. Strong winds, rain and freezing temperatures can also make it hard to maintain finger dexterity when it's needed. Sometimes the wind can also have you leopard-crawling on all fours and sometimes the simplest of tasks such as opening a hut door can require well thought-out tactics to prevent it from being blown off its hinges. Luckily creative solutions come with experience and I have found solutions for many of these challenges. I've learned to successfully wrestle a hut door closed and I've also learned that the best way to stay warm when doing work outside that doesn't involve moving is to run up and down a hill a few times between samples. Layers are also an obvious solution to the cold, and during





many days in winter when I had work that didn't require walking very far, I found myself in four layers of trousers and seven layers of tops. That being said, the days are already less icy and the excessive number of layers and running up hills haven't been quite as necessary recently.

The days are already noticeably longer and there are many other signs that spring is in the air. I've already found some of the first grass flowers of the season, the Wandering Albatross chicks from last season have started to get their juvenile feathers, some of the gentoo chicks are already in creches, the giant petrels have started incubating eggs, and the elephant seal bulls have returned to the island. There are many more species which are yet to return to the island for the breeding season and I'm waiting for this with great anticipation.

There is no question that Marion Island is an amazing place and I know that I am one of

the lucky few who has had the chance to experience it first hand. However, of greater significance is its importance for the survival of many sub-Antarctic species. There aren't very many sub-Antarctic islands, but they provide vital breeding grounds for an array of wildlife species. It is therefore extremely important to preserve and protect the sub-Antarctic islands and to ensure that human impacts are minimised. As mice were introduced to Marion Island by humans, and as they are having a multitude of negative impacts on the ecology of the island, eradicating them from this island is hugely important for the conservation of many sub-Antarctic species and for biodiversity conservation as a whole. The Mouse-Free Marion Project is therefore a vitally important project in the pursuit of preventing biodiversity loss, and I am honoured to be part of the team working to achieve this outcome.

*Below: Camilla Smyth enjoying a chilly Marion Island  
Right: Marion Island's impressive landscapes*





# The Mouse-Free Marion Project appoints three new International Patrons

The Mouse-Free Marion Project is pleased to announce the appointment of three more International Patrons. They are Antarctic scientist and conservationist Professor Steven Chown FAA, South African businesswoman Gloria Serobe and Christel Takigawa, a TV anchorwoman based in Japan.

The new patrons follow the earlier appointments of International Patrons of His Royal Highness the Duke of Edinburgh and seabird author and illustrator Peter Harrison MBE.

International Patrons of the MFM Project help raise awareness and credibility of the Project by sharing their reputation and visibility. They lend their names to the project by their endorsements, by helping to raise publicity and, when possible, by attending fund-raising and other events held by the project. The MFM Project thanks its five International Patrons and looks forward to working closely with them as it prepares to eradicate House Mice on the largest island ever attempted in a single operation.

Read abbreviated biographies of the three new International Patrons on the MFM Project's website [here](#).

*John Cooper, Mouse-Free Marion Project News Correspondent*



## Professor Steven Chown FAA

*Antarctic scientist and conservationist*

Steven Chown is the Director of Securing Antarctica's Environmental Future, an Australian Research Council (ARC) Special Research Initiative in Excellence in Antarctic Science, based at Monash University in Melbourne, Australia, where he is also a Professor of Biological Sciences.



## Gloria Serobe

*South African business entrepreneur*

Gloria Serobe is a founding member and the Chief Executive Officer of WIPHOLD (Women Investment Portfolio Holdings), a black women-owned investment company.



## Christel Takigawa

*French/Japanese television anchorwoman*

Christel Takigawa is a French-Japanese television anchorwoman in Japan. In 2014 she founded the Christel Vie Ensemble Foundation for habitat conservation of endangered species and animal welfare, especially for rescued dogs and cats.

# Saving Marion Island's Seabirds: one of the world's most important bird conservation projects featured at the prestigious Oppenheimer Research Conference

The Mouse-Free Marion (MFM) Project, arguably the world's most important bird conservation endeavour currently underway, delivered a 30-minute address to a prestigious conference in South Africa this week. The annual Oppenheimer Research Conference is a space for showcasing and discussing the natural and environmental sciences, conservation and sustainable development in Africa. It is a meeting place for change-makers to shift the dial on biodiversity research and conversations. The focus is impact in Africa and the conference welcomes global perspectives.

The Conference, the 12th to be held, took place in Midrand, Gauteng Province, South Africa from 04 to 06 October 2023. The MFM Project's address was jointly delivered by Mark Anderson, CEO of BirdLife South Africa and Chair of the MFM Project Management Committee, and Dr Mavuso Msimang, who chairs the MFM Non-Profit Company Board.

*Below: Dr Mavuso Msimang, Chairman of the Mouse-Free Marion NPC, and Mark D. Anderson, BirdLife South Africa's Chief Executive Officer, presented a talk on the Mouse-Free Marion Project to 420 delegates at the annual Oppenheimer Research Conference in Midrand on 4 October 2023.*







# Leaping into Spring on Marion Island

**Michelle Risi,**  
*Marine Apex Predator Research Unit,  
 Nelson Mandela University  
 M80 Overwintering Team*

*Above Photo: Welcoming the new season in front of Crawford Bay on Marion Island's south-east coast. From left "birders" (ornithological researchers) Chris Jones, Mpumelelo Mabutyana, Michelle Risi and Kyle Maurer get airborne on their August 'Round-Island'; photograph from Michelle Risi*

As seabird biologists living on Marion Island, our workload is determined by the number of breeding birds present at any given time of the year. Winter is relatively quiet with regular monitoring checks of Wandering Albatross nests, as chicks need nearly a full year to grow before fledging. These checks bring moments of joy, as we watch chicks flap their wings to strengthen their flight muscles or soak up all the attention from mom or dad during a feeding visit. However, they are also marred by moments of great sadness when mouse wounds are seen on chicks or when we need to recover a metal band from a chick carcass that has succumbed to mouse wounds and

will never be resighted as a breeding adult. The seasons are changing, and spring is a time of hope as it brings with it a new season of breeders and the aspiration that Marion comes closer to a time when there will no longer be House Mice present to prey upon on the island's seabirds. As our days become longer and slightly sunnier, we are kept increasingly busy. The first arrival of the summer breeders is the Northern Giant Petrel (NGP). Their first eggs appear at the beginning of August. They like to breed on the leeward side of rocky outcrops, so searching for nests becomes the ultimate Easter egg hunt. These birds are fierce predators but while on the nest they are gentle giants and a

pleasure to work with. We never tire of adults attempting to brood our hands as we try to read their colour leg bands. We have three monitoring colonies that we regularly visit throughout their breeding season from laying in August right through to fledging in February.

At the start of September, we ventured out on a 'Round-Island' count of NGP nests, a

*Right: An incubating Northern Giant Petrel against its protective lava outcrop on Marion Island, August 2023; photograph by Michelle Risi*

*Below: Chris Jones carefully checks an incubating Northern Giant Petrel for leg bands, August 2023. His backpack contains numbered nest markers that will allow season-long records to be kept for each study nest; photograph by Michelle Risi*





great activity that certainly adds lots of mileage along the whole coastline to our legs as we zig-zag between the many, many rocky outcrops searching for nests and recording their coordinates on our hand-held GPS units, while checking the birds for metal and colour bands. We will end up with a whole-island count for the number of NGPs breeding this 2023/24 season, that will be compared with previous seasons to enable us to ascertain trends. NGPs also have no respite from mice as, when we were last on Marion in 2017, we observed the first definite mouse wound on a breeding adult, something which was unfortunately observed again at a higher incidence rate last season.

Other events to look forward to are the return of the Grey-headed Albatrosses to the island's southern coast. During our August 'Round-Island' we spotted a handful of adults flying about the coastal cliffs and at least one adult that had landed on Grey-headed Albatross Ridge to begin refurbishing its nest. The Ridge must be the most magical place on the island (we are a little biased though as we get to spend a lot of time there, staying in the nearby field hut) but nothing can compare to a completely full ridge buzzing with thousands of albatrosses flying overhead and reuniting on their nests down below. So, it's safe to say that summer is on its way, but for now, we are just trying to soak in and enjoy the island and its birds as much as we can, as we leap into spring!

*Below: A Grey-headed Albatross broods its chick on the slopes of Grey-headed Albatross Ridge; photograph and poster design by Michelle Risi*



A Grey-headed Albatross broods its chick on Grey-headed Albatross Ridge, Marion Island © Michelle Risi







*A Grey-headed Albatross fledgling on the nest, photo: Anton Wolfaardt*

## Get involved and help make a Mouse-Free Marion possible!

- For more information on the Project, visit our website at [mousefreemarion.org](http://mousefreemarion.org) or contact us at: [info@mousefreemarion.org](mailto:info@mousefreemarion.org)
- To make a gift of any amount or support the project by sponsoring a hectare (or more) visit our website or contact Heidi Whitman, Chief Philanthropy Officer: [heidi.whitman@mousefreemarion.org](mailto:heidi.whitman@mousefreemarion.org)
- Stay up to date: follow us on Facebook (Mouse-Free Marion) and Instagram (@mousefreemarion) or sign up on our website to receive project news alerts

**Cover Photo:** Wandering Albatross, photo: Camilla Smyth

## Saving Marion Island's Seabirds™ The Mouse-Free Marion Project



forestry, fisheries  
& the environment

Department:  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA

*The Mouse-Free Marion Project is a registered non-profit company (No. 2020/922433/08) in South Africa, established to eradicate invasive albatross-killing mice on Marion Island in the Southern Ocean. The project was initiated by BirdLife South Africa and the South African Department of Forestry, Fisheries and the Environment. Upon successful completion, the project will restore the critical breeding habitat of over two million seabirds, many globally threatened, and improve the island's resilience to a warming climate. For more information or to support the project please visit [mousefreemarion.org](http://mousefreemarion.org)*