

The Wanderer

July 2022

What's up with SAWS?

The Marion
Weather

Interview with...
The Leaders of the Team

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



A glimpse from an islander...

Circle of Life

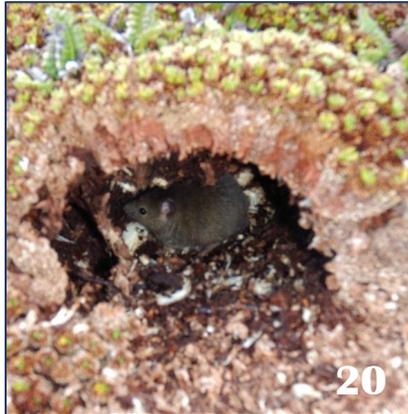
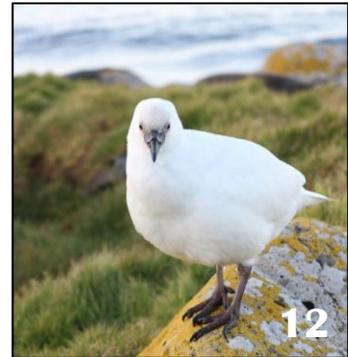
Part 2: Change is inevitable

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Northern Giant Petrel
(*Macronectes halli*)
Elsa van Ginkel



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REPUBLIC OF SOUTH AFRICA



letter from the *editors*

Time passes rather quickly on this sub-Antarctic Island, but every second is worth it. The pristine beauty of Marion Island is what amazes me the most. When you look out of your window every morning, and you see the vastness of red and black volcanic scoria hills, occasionally draped with snow, you feel both humbled and thankful to be able to work in such an extraordinary environment.

July was challenging for the team due to unforeseen circumstances early during the month, but towards the end, things started falling into place again. It was definitely a month of growth – for us as a team and in all aspects of the island life.



The Wandering Albatross chicks scattered across the plains have doubled in size, and the daylight hours are also slowly increasing. Our excitement to explore the island is growing as the breeding season starts to show its colours... Marion has been treating us well. I hope you will enjoy this edition!

Elsa van Ginkel
Editor

July has been good, and it came with many challenges, including increasing work capacity. It feels like time is rather flying; today is Monday and tomorrow feels like the following Monday, hysterically. The team spirit is growing as we continue with the expedition... The braai Saturdays and an ongoing pool tournament every weekend keep the team spirit even stronger. We get to see that people are still alive and well.

Random team activities, birthday and event celebrations have kept us busy and entertained. Let us take you slowly through the expedition as we continue to share our journey with you! I hope you enjoy the rest of the upcoming newsletter editions!

Tankiso H. Moso
Co-Editor



from our Team Leader...

Hi to all our readers out there. Let me introduce myself, my name is Tshimangadzo Jufter Munyai, and I am the base engineer and team leader for the M79 overwintering expedition. It is an honour for me to be part of the SANAP program. This is my 3rd expedition after being part of SANAE 58 and GOUGH 66. I am very grateful for this opportunity, and I would like to share a little about our journey from Cape Town until our arrival and stay here on the island.

The team assembled in Cape Town from the beginning of March, although most of them joined us a bit later, just a couple of weeks before sailing down to the great unknown (Marion Island). The team is mixed with experienced islanders and also new islanders, and with the covid-19 regulations, it was hard on the team to get most things ready for the expedition, but with the help of friends, family and the department, I'd say most of us managed to get all our necessities and equipment ready. We spent two weeks in quarantine, which I can surely attest that none of us or any of the voyage participants was happy about, but it had to be done. After quarantine, we found ourselves in the red taxi (SA Agulhas II), ready to sail down to the sub-Antarctic. I must say it is always a good feeling being inside the red taxi. Although some of our team members suffered from motion sickness, the journey was smooth.

After a couple of days at sea, our destination was within sight. What a beauty this island is!

We got to base and met the team we were to relieve, and I could see the excitement from those guys when they saw us. I knew what that feeling meant; it meant their time was over, and soon they'll be heading home.

We settled in as quickly as possible and started our training with the M78 guys, takeover personnel and the NDPWI team (National Department of Public Works & Infrastructure). Take-over was definitely the most tiring and exhausting few weeks, with long working hours. I am glad the team didn't break down during that period; they showed strong character and overcame all assigned tasks. Getting used to the base full of people was a bit of an emotional roller coaster, and when the last flight with passengers took off from the base back to the red taxi, I think that was when most of us knew or felt that our expedition had really started. I would like to extend the best of wishes to the M79 team for the time we will spend here on the island.



Interview with...

The Leaders of the Team

- by Elsa van Ginkel

TEAM LEADER



Tshimangadzo Jufter Munyai

DEPUTY TEAM LEADER



Gladys Chelimo Kemei

SCIENCE TEAM LEADER



Tankiso H. Moso

Role on the M79 team

Base Engineer

Communications Engineer

SANSA Electronics Engineer

Qualifications

Electrical Engineer

Masters of Technology in Electrical Engineering from Tshwane University of Technology.

Bachelors of Technology in Electrical Engineering from Durban University of Technology

Bachelor of Technology Degree in Electrical Engineering (Light Current) - Durban University of Technology;

Bachelor of Science Honours in Physics (Space Science and Astrophysics) - University of KwaZulu Natal;

Master of Science in Applied Mathematics (Astrophysics) - University of KwaZulu Natal.

Tell us a bit about your passions and what led you to Marion Island?

I'm very passionate about sports, especially soccer. After being on Antarctica and Gough Island, I thought to myself, why don't I complete a hat trick and do all stations that South Africa has under the SANAP program?

I am passionate about understanding communication systems. Some of my friends had told me about Marion Island from their experience, and I was curious to find out more about the island, so I decided to apply for the position. I am grateful for this opportunity of a lifetime.

I'm passionate about Engineering in general, and all that comes with it. What led me to Marion Island was the very rare leap of faith that I took, bridging the gap between engineering and science. I love to explore, and I am an adventurous person. I don't just like to do what everyone can/has done. I like to test my limits and challenge myself, which has successfully led me to the *mysterious Marion Island*.

The Wanderer – Leaders of the Team

Team Leader - Jufter

Deputy Team Leader - Gladys

Science Team Leader - Tankiso

Favourite animal or plant on the island so far?

Favourite animal will have to be the killer whale.

I admire the fur seal pups and the albatrosses, but if I had to pick a favourite, it would be the Wandering Albatross chicks. They seem to be perfectly made creatures, and their fluffy feathers are just adorable. When I look at the adults incubating their eggs through the horrible weather, I am humbled at their endurance.

Killer whales take the crown. I love the eyes of the fur seals. In general, I haven't seen most of these animals and plants face to face before coming to Marion Island. So, almost all of them carry a unique special feature.

Who do you miss most from the mainland?

My family and sports.

I really miss my family and friends.

My family, girlfriend, and close friends.

Do you have any food cravings and what are they for?

As for food I don't have, the only craving I have is for fresh fruits.

The cravings come and go, but what I really wish I could have right now besides fresh juicy fruit is mursik, a traditional milk delicacy of the Kalenjin people of Kenya.

Chicken Licken, fresh vegetables, and fresh fruit.

Is there anything specific that you would like to achieve this year on the island?

Broaden my technical skills, and learn more about the island, and its wildlife.

Other than my maintaining the communication systems at the base, it will be an achievement when I overcome the fear of getting mired and make a trip or two around the island.

Do my best to keep all my systems working.

Any advice for future Marionites / people considering a job on Marion?

Do research about the island before considering coming here.

Being on a remote and isolated island such as Marion, future Marionites should be physically fit, mentally strong and ready for a challenging but satisfying adventure.

Do not limit yourself to the year's supplies and refreshments, and you never know when you'll crave a specific flavour of snack, juice or even something you're not used to eating inland. Once you come here, your appreciation of nature will rise from -10 to 100. :D

If there is a lesson so far, that you have learnt from the island – what is it?

Never underestimate mother nature.

Considering it is both a work and personal living space. It is important to define the boundaries of each. Both to yourself and to others.

Understanding different people's personalities and perspectives is very important.

"Teamwork makes the dream work."

The Wanderer – Leaders of the Team

Team Leader - Jufter

Deputy Team Leader - Gladys

Science Team Leader - Tankiso

Favourite event so far, on the island?

Braai nights are my favourite.

Saturday braais have got to be my favourite. We come together as a team to prepare a meal and later sit and dine together.

The day we had lightning strikes and a thunderstorm. The excitement that day was on another level. Marion is known for its very rare events of thunderstorms and lightning.

What do you love most about your job?

I love the challenges it possesses, and every day is a learning day in this field I am in.

I have some work to do at the huts which requires me to hike up there. I am not much of an outdoor person so this job gets me out of my comfort zone.

I always learn something new.

Hobbies?

On this island, it will be games, all games we play at the island.

I like travelling and reading books.

Cooking, writing, music, working out.

Favourite quote

“What bothers the moon when the dog barks?”

“The struggle you are in today is developing the strength you need tomorrow.”
- Robert Tow

“Great things never came from comfort zones.”



The Marion Weather

- by Michael Ross

“The weather” is perhaps the most ubiquitous topic of conversation the world over. Nowhere is this truer than on Marion Island, where checking the Yr weather predictions is almost a full-time job and an anxiety-inducing pastime of everyone on Marion, particularly the field assistants. Despite the seemingly mundane topic, the weather on Marion is anything but, and a thorough understanding of the weather on the island will greatly enhance your respect, or perhaps sympathy, for those of us stuck here. If you are left wondering why we endure such tribulations, rest assured you aren't alone. It usually feels like even Mother Marion is trying to blow us away.

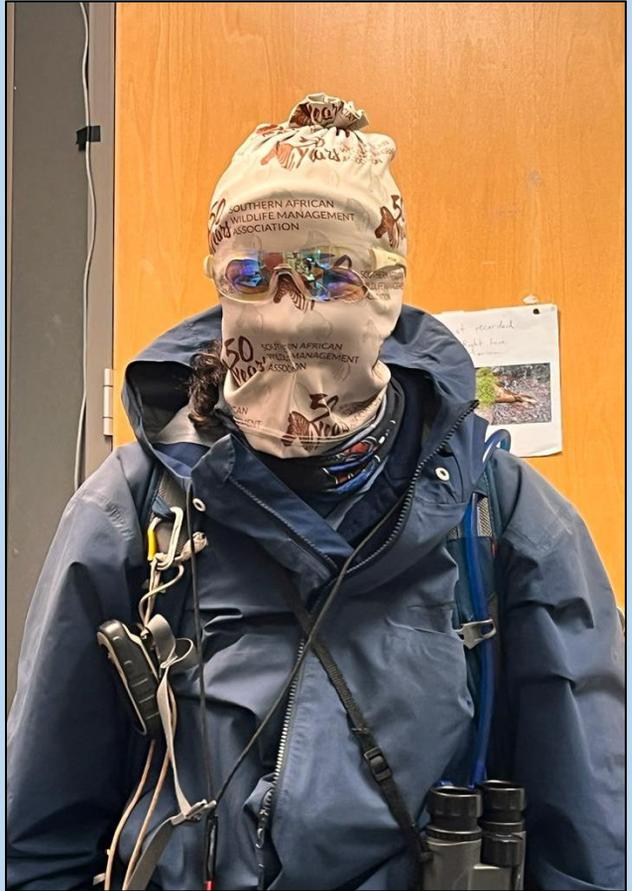
Looking at the weather forecast for Marion Island on Yr, it really doesn't seem that bad - unless you come from Durban as I do, where any time the temperature even approached single digits, the blankets, hot water bottles, and heaters made an appearance. Over the next nine days, the temperature on Marion is predicted to hover between 0 and 8 degrees Celsius, with some rain on most days. The predicted wind speed is expected to range between 12 and 17 m/s. At first glance, you might conclude that we Marionites are rather soft for eternally complaining about the weather. You might point out (entirely correctly) that despite our tendency to state that we are “halfway between South Africa and Antarctica”, the entire United Kingdom and even some parts of Spain lie closer to the North Pole than we are to the South Pole. Alas, Yr doesn't quite do it justice.

The wind estimate given by Yr is somewhat deceptive because it is given in meters per second (m/s). Humans don't really know what to do with m/s. To make this number somewhat interpretable, you have to multiply it by 1.8 to get knots (again, something the average person doesn't quite know what to do with) and then again by 1.8 to get a kilometer per hour (km/h) value (finally something we understand). 17 m/s sounds somewhat more formidable when you convert it to 61 km/h. If there is one important thing to know about Yr, it is that it is generally wrong (though less wrong than everyone else), and when it is wrong, it usually underestimates rather than overestimates. You can therefore end up going out to do fieldwork on a day when 18 m/s (65 km/h) was predicted (as myself and a fellow sealer Banele did), but the wind grew angrier throughout the day until it was gusting at 125 km/h when we returned. For those of you unfamiliar with 125 km/h, the weather chart in our office terms this a “hurricane”, helpfully stating that it is “very rarely experienced; accompanied by widespread damage”. Despite this, the sealers were in the field, getting the job done.

The Marion rain, which totals around 2400 mm in a year, is similarly deceptive. It doesn't usually rain very hard, though it can, it rains endlessly in what is best described as a soft, subtle soaker. Given that field workers spend most of their time outside, it is usually enough to make you wet... very wet.

The precipitation we experience isn't limited to rain – we routinely work outside in falling snow and, perhaps most painful of all, ice pellets. Picture small, solid chunks of ice blown at 80 km/h directly into your eyeball and stinging the rest of your face. Those are ice pellets. All of this is compounded by waterproof gear, which has lost most of its waterproofness and now functions primarily as a sweat suit, causing the wearer to get wet from both the outside and the inside.

Fieldworkers employ a range of interesting engineering hacks in an attempt to circumvent the elements while allowing us to continue our work. The first of these, which gained widespread acceptance, was covering fleece gloves with rubber dishwashing gloves, allowing one's hands to remain simultaneously warm and dry – what a treat. The most impressive improvisation, however, belongs to a fieldworker (who shall remain nameless to protect her identity) who cut eye holes in a buff, so she could protect her face from ice squalls and see at the same time, though glasses placed over the eye holes – genius (this one has to be seen to be believed, so take a moment to appreciate the attached picture of a fearsome fieldworker).



The fearsome fieldworker

The weather on Marion Island is tough, but we are up to the challenge (most of the time).

Sometimes we really don't want to go outside, and we procrastinate, cry out in frustration, or promise ourselves a reward when we come back. But because we have work we love and which brings value to this world, we go out. Every so often, the island rewards our efforts, treating us to the most spectacular day, which we appreciate so much more because of all the difficult ones. Summer is on its way, and hopefully, so, too, are the sunnier days!



A rare sunny day on Marion.

Fashionable Field Gear

Sub-Antarctic style advice straight from Marion Island

- by Monica Leitner

Welcome fashionistas! Do you find yourself looking for ways to spruce up your work wardrobe? Look no further as we bring you the latest fashion trends and advice from M79, who don't let the sub-Antarctic weather or isolation from mainland South Africa cramp their style.

This month's feature

The ECOs

Mishumo



Gcobani

We loved the practical and fun looks from our ever-fashion-conscious ECOs!

Mishumo is sporting the Marion Island "Blues" look this July (can't go wrong with this classic!). Keeping mice and fashion monotony under control, he adds some flare with the reflective strips on his pants and makes sure that the gloves pop but stick with the Blues theme.

Gcobani says NO to pathway degradation and drab colours this season: adding a splash of colour with luminescent yellow gloves is a fun way to brighten up any outfit!

Both ECOs are showing off the versatility of the official M79 buff - this essential Marion Island accessory is worn as a scarf (Mishumo) or headband (Gcobani), and we wouldn't be caught without it this season!



Who says eradicating alien species and environmental compliance is a drab business? These ECOs make sure to keep things trendy while protecting our environment.

Now, back to work, you two!



Stay tuned for more fun fashion trends and inspiration in our next edition!

Circle of Life



Part 2: Change is inevitable

- by Elsa van Ginkel

July had a slow start, but around the middle of the month, island life was business as usual. I worked in an area called Duikers on the northern side of the base. There were multiple Northern Giant Petrels close to my site, and they are always making these croaking sounds when they are in their colonies. When these giant petrels get ready to take flight, it is quite a sight to see them hobble in a direction on their webbed feet before they eventually fly off...



A Northern Giant Petrel shortly before take-off.

Another visible change worth mentioning is that of the Wandering Albatross chicks; there is a white ball of fluff on its nest on the route I tend to take to my camera sites at Duikers, and as I've occasionally been working in this area during the past three months – the size-difference of this chick is quite phenomenal. These chicks have probably become two to three times the size they were. Additionally, I also had an opportunity to assist the birders with the ringing of these Wandering Albatross chicks, and it was such a privilege to get a chance to get to work with the largest flying birds in the world. What a lovely experience...



The same Wandering Albatross Chick photographed in May and July. The size-difference is phenomenal.

Sheathbills are another species which always show interest in my work! They are like little white-coated inspectors inquiring on whether you are following the correct work protocols, and they need to inspect the quality of your work by pecking at either your equipment or your boots... Thankfully, they usually approve of my work ethic.



The albatross ringing squad. Left to right: Elsa, Lucy, Mike, Andile and Sam.



Sam and Andile approaching a Wandering Albatross chick for ringing.



A curious Lesser Sheathbill

The Wanderer – Circle of Life



As the month progressed, I also completed several trips to an area located between the 2nd and 3rd Sisters' Hills on the northwestern side of the island. The terrain and vegetation around 200 m a.s.l. are quite different from that of the coastal regions. The coastal areas are influenced by the salt-spray from the ocean, and the vegetation mainly consists of low-growing but abundant species, including *Crassula moschata*, a succulent species, and *Leptinella plumosa*, a coastal daisy. In contrast, in the area I worked, the ground was extremely bare, dominated by bryophytes and a cushion plant, called *Azorella selago*. This type of vegetation is known as a fellfield. It is fascinating how the vegetation can be so extremely different with such a slight increase in elevation.



I also had a trip to Repettos field hut, also known as Rep-**wet-toes**... as the mirey depths on the second stretch to this field hut is something out of a horror film. If you don't keep your eyes peeled, the *mire octopus* might swallow you whole, and you might not live to tell the tale... A mire is probably similar to quicksand - maybe less severe – you can get out of it after practice. Nonetheless, I've never experienced such a feeling: when you accidentally step into a deep mire, your entire leg (or both) gets engulfed up until hip-depth.



Some islanders have definitely also experienced deeper mires than the hip-depth-swallower, but this is a story for another day. I have respect for this island. It humbles you on every trip – whether it's the weather or the mires or even just the *Blechnum* slopes giving you the leg work-out of your life... Marion keeps us entertained!



The Three Musketeers

- A Decade and More Years to Come -

- by Tankiso H. Moso



Tankiso, Austin and Gladys on Marion Island

What a lovely world to live in! Where fate brings good souls back together!

It was 2011 when we all met during the first year of the National Diploma (ND) in Electrical Engineering (EE) at the Durban University of Technology (DUT). We attended the same lectures and majored in exactly the same modules. What a coincidence! When doing an ND, you have two components of the qualification: the theory part and the work integrated learning (WIL). We all completed our theory component and went on to do our WIL. Usually, this is where most friendships die, where the ways part and you get recruited by different companies and move to different provinces. To our surprise, we were all appointed by the same organization. The South African Square Kilometre Array project appointed us and placed us at the Hartebeesthoek Radio Astronomy Observatory (HartRAO), almost a year after each other. They were both my predecessors.

These types of coincidences are extremely rare!

They completed their WIL, and the organization continued to fund the furthering of their studies. I am sure you already know what happened next! After my completion of the WIL, I also had funding to further my studies and went back to DUT, now doing the Bachelor of Technology (B. Tech.) Degree in EE. Same lectures, and coincidentally, once again, we all had one supervisor for our final project, specializing in Communication and Microwave Engineering. Still, as my predecessors, we all completed our B. Tech. Yet again, after the completion of the qualification, people graduate and look for jobs or continue studying. We all wanted to be Masters in the field, so the journey continued but now on different avenues while still keeping in touch. Gladys relocated to Gauteng, while Austin and I remained in KwaZulu Natal (KZN). We all have similar interests in an academic and professional sense, and that is why our paths keep on crossing.

The Wanderer - Three Musketeers

I was introduced to the University of KwaZulu Natal/Marion Island project by Austin in 2016/2017, where we consecutively furthered our studies while Gladys was furthering her studies at the Tshwane University of Technology. One Musketeer wandered for some time while the other two were working together every day on similar but different projects that were run under the same laboratory. Austin and me doing exactly the same qualifications: Bachelor of Science Honours Degree in Physics and further Master of Science Degree in Physics and Applied Mathematics, respectively, while Gladys was pursuing her Master of Technology Degree in EE based at HartRAO.



Tankiso and Gladys on the SA Agulhas II



Tankiso, Austin and Gladys

The concept in our Masters' degrees have a similar background. At the end of the day, we are all engineers who took different paths. My thesis topic was *"Low-Frequency Observations of the Radio Sky from Marion Island"*, Gladys's thesis topic was *"Design and Development of a Wideband Microwave Receiver at Hartebeesthoek Radio Astronomy Observatory"*; and Austin's title was *"The Development and Commissioning of Radio Frequency Analog Systems for HIRAX"*. With all that being said, our roads have now led us all to Marion Island, where we have either scientist or engineering roles. Wayne Dyer said, "In Mathematics, two angles that are said to coincide fit together perfectly. The word "coincidence" does not describe luck or mistakes. It describes that which fits together perfectly", and this has been "too coincidental to be a coincidence".

Memorable shots!



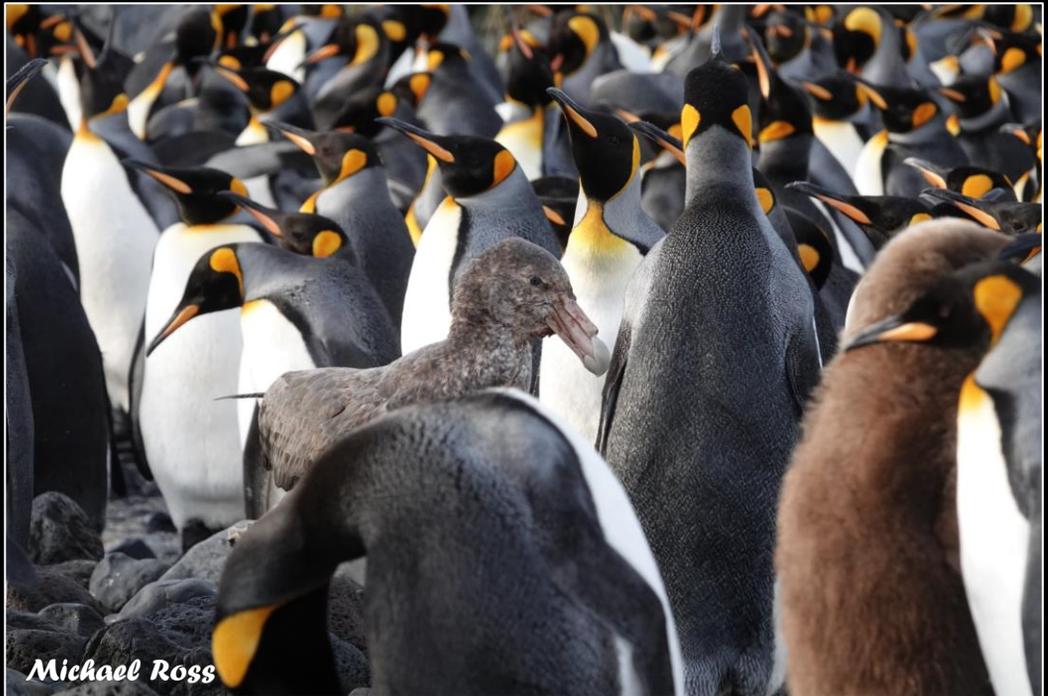
Monica Leitner



Michael Ross



Elsa van Ginkel



Michael Ross



Monica Leitner



Michael Ross



Michael Ross



Michael Ross



Elsa van Ginkel

Saving Marion Island's Seabirds™

The Mouse-Free Marion Project



A glimpse from an islander...

- by Elsa van Ginkel

An ecosystem as globally important as that of Marion Island is prone to suffer adverse impacts from introduced species. Sometimes the impact appears minor - such as an alien plant species, which doesn't necessarily become invasive but instead just gradually forms part of the island environment without affecting the majority of other co-inhabiting fauna and flora. However, now and then, a small invader can cause mountains of havoc – for Marion Island, this is unfortunately the case. The House Mouse, *Mus musculus*, assumed to have been introduced to Marion Island about 200 years ago by the sealers of the olden days, has now become an intricate problem, having detrimental effects on the entire island ecosystem.



A House Mouse damaging an *Azorella selago* cushion

The island's seabirds are taking a hard knock due to these small rodents feeding on the helpless chicks of multiple albatross species breeding on the island, such as Grey-headed Albatross, Sooty Albatross and Wandering Albatross chicks. Chicks of winter-breeding petrels such as Grey and Great-winged Petrels are also attacked by mice. In addition, the mice feed on numerous invertebrate species, including weevils and two of the flightless moth species occurring on the island. Mice also destroy the vegetation with their burrows and paths - *Azorella selago* cushions, one of the dominant plant species on the island, often never fully recover after severe mouse damage. I think it is safe to say that these little creatures have outstayed their welcome on Marion Island, and this is exactly the reason why the Mouse-Free Marion initiative saw the light.



A Grey Petrel chick (*Procellaria cinerea*)

Mouse-Free Marion is a collaborative project between Birdlife South Africa and the Department of Forestry, Fisheries and the Environment (DFFE). DFFE is responsible for the management and conservation of the Prince Edward Islands (as a Special Nature Reserve and declared as a RAMSAR wetland site of international importance). Together, these two partners are undertaking the planning, and will facilitate the execution of the eradication project in the near future. A range of research, planning and other preparatory work needs to be completed prior to the challenging task of eradicating mice from this sub-Antarctic island. This includes field work at Marion Island to help refine the eradication strategy.

This is where I come in: my role is to collect priority baseline (pre-eradication) data for the preparations and to facilitate long-term monitoring of the ecological outcomes of the mouse-eradication project.

As an MFM ecologist on Marion Island, employed by the MFM Project and the University of Pretoria, I'm basically ground-truthing multiple scenarios expected to occur during the eradication. I'm collecting real-time data on winter weather conditions and mouse activity, as well as conducting a variety of invertebrate and vegetation surveys throughout the year. Marion island is a special place, and I am extremely excited to be part of a project aiming to restore the island's ecosystem to a more natural state and be able to contribute to the conservation of this remarkable island in the process. As the year proceeds, I will keep you updated on the groundwork taking place in preparation for the Mouse-Free Marion Project.

You can help make a mouse-free Marion possible. To find out more about the MFM Project, including ways in which you can donate and support the project, please visit www.mousefreemarion.org



A Wandering Albatross chick in the midst of snowy Marion.



Marion

July Birthday Celebrations

- by Thendo Sikhwari

On 17 July 2022, the team celebrated Mndeni Hlatswayo's birthday, the Medical Orderly. It was filled with music, dancing and playing games. DJ TK also took us from Marion to Mzanzi with top hit tracks on the deck, one after another. Thanks to Monica and Lucy for baking the birthday cake and also to all the team members who participated on that particular day to be an amazing one. Hlatswayo said, "If he was in South Africa, the birthday bill would be on him, but here on Marion, it's a manna from heaven". Hlatswayo received various birthday gifts from team members to show love and unity of the team members.





M79ers



Weather

for the brave...

- by Sikhwari Thendo, Tshitavhe Tanganedzani and Faltein Siphesihle

Metkassies in the South East Indian Ocean 'Marion Island'

In March 2022, the Department of Forestry, Fisheries and the Environment took the M79 team members for First Aid training and Fire fighting and rescue training. After training and preparations for the island, the team was sent to quarantine in compliance with the COVID-19 health regulations in South Africa. Later in April, the team boarded the SA Agulhas II. Three Metkassies met for the first time at Cape Town East Pier on SA Agulhas II and met the SAWS deployed team leaders: Chief meteorological technician Mr Shadrack Podile and Senior meteorological technician Mr Vuyo Xelithole. Their main duties were to oversee and train the meteorologists on weather observation and technical maintenance on their way to Marion Island and to ensure that the incoming team received training from the M78 SAWS team during the take-over period. The ship departed from Cape Town on 17 April 2022 and arrived at Marion Island on 21 April. Arriving on Marion Island, we were welcomed by the M78 team. The following day we dived straight into our working schedule. That's when the reality kicked in that this would be our home for 14 months.

Thendo, Tanganedzani and Siphesihle are the three SAWS Meteorological Technicians on Marion Island. They actively participate in running surface meteorological and atmospheric research projects assigned by the Marine Section of the South African Weather Service through the Department of Forestry, Fisheries and the Environment. Their duties involve performing 24-hour surface observations, quality control of meteorological data, routine maintenance, verification and calibration of meteorological instruments, conducting quality control of data and report writing.



Left to right: Sikhwari Thendo (Snr.), Tshitavhe Tanganedzani and Faltein Siphesihle



South African
Weather Service



For more than 70 years, SAWS has sent personnel to monitor critical weather and climate parameters in these inhospitable regions such as Marion Island, Antarctica and Gough Island.

Meteorological observations in remote areas are essential for predicting severe weather events and issuing early warnings. South Africa is responsible for Met-area VII as determined by World Meteorological Organization (WMO). SAWS responsibilities include sending out three days of forecasting for Met-area VII. This helps the field assistants to plan their field activities in advance, flight operations during take-over and also assist in planning rescue operations. In addition, the meteorological data collected is also used by forecasters, climate scientists or researchers in South Africa and worldwide. Aviation, as well as sea and ocean navigation, also use the data intensively and extensively.

Senior Meteorological Technician

Mr Sikhwari Thendo was appointed as Senior Meteorological Technician for the Marion Island M79 Expedition team (2022/23) under SAWS. In 2019 Sikhwari Thendo was also part of the Gough Island expedition as Senior Meteorologist and also served as deputy team leader.

Mr Sikhwari Thendo was born and bred in the Vuwani area in Limpopo province. His home language is Tshivenda. He is proudly Lemba and according to their oral tradition, the Lemba are descended from seven Jewish men who left Israel 2,500 years ago and married African women. This will be another lecture about the history of the Lemba people when you get a chance to visit Limpopo. He is currently pursuing a doctorate in Science with Disaster Risk Sciences at the University of North West. He also holds a Master of Environmental Science from the University of Venda. His current research interests are weather forecasting and time series analysis, statistics of extreme events, statistical learning/modelling and exploratory data analysis. Mr Sikhwari says: "I followed a career path in meteorology because in the year 2000, the tropical cyclone Eline affected my village with floods, and at that time, I was only seven years old. This arose a curiosity in me because of the high volume of water in dams and rivers and heavy rainfall. This was a phenomenon that I had never experienced." Today I understand the science behind this phenomenon, and I am professionally working in that sphere as a Meteorologist.





Assistant Meteorological Technician

Tanganedzani Tshitavhe is a young, vibrant female scientist from Limpopo province, Thohoyandou. She is an assistant meteorological technician at SAWS, based on Marion Island. Preceding this appointment, she was a tutor and an academic writing consultant at the University of Venda.

Tanganedzani has a Master's degree in Environmental Sciences. Her research interests include atmospheric science, climate change and adaptation, agricultural production and rural development. She hopes to pursue a PhD in atmospheric science and climate research in the near future.

Tanganedzani expressed that being on Marion Island is a once-in-a-lifetime experience, and she is thrilled to be part of the overwintering team. She is looking forward to exploring the island during her 14-month stay on this remote island. Tanganedzani is dedicated to advancing women's representation in science by learning and sharing her expertise. She is committed to working for the environment and for the betterment of communities.

She volunteers and participates in community development programs. She is a firm believer in dedication, discipline and consistency.

"I believe that there is nothing a person cannot accomplish if they apply their mind and time to it. We often set our own limits based on general beliefs that society or others impose on us. It is crucial that we break past these (fictitious) barriers" – Tanganedzani Tshitavhe.



Tshitavhe Tanganedzani





Assistant Meteorological Technician

Mr Faltein Siphesihle was born in Eastern Cape, the home of the late former 1st black South African president Nelson Rolihlahla Mandela. He is also currently appointed as an assistant meteorological technician at SAWS under DFFE on Marion island meteorological station. Before Mr Faltein joined DFFE, he was working at Mapeyi Enterprise as a Consultant. Indeed Faltein is a scientist who graduated from the University of the Free State, holding a BSc degree in Geography and Agrometeorology as well as an Honours degree in Soil Science. His research focus area is climate seasonal prediction, atmospheric modelling, climate change projections and statistical analysis.

Mr Faltein said, “I am fortunate to work in this remote environment where there is only 5 minutes load shedding, no mobile mode of transport like taxis, no malls and with a limited number of only 19 people”.

He also said, “After two days upon our arrival at Marion Island, we visited a close site known as Ship’s Cove; the place is so amazing with the diversity of animals, like elephant seals, penguins and sea birds.

The adventure was so much fun but not easy as you can’t slay as the first timers based on the terrain. If I was a car, I was going to engage in 4x4 mode to beat the mountainous path; unfortunately, you have to sweat for adventure. I would also like to thank DFFE for this once-in-a-lifetime opportunity. For the next 11 months, I am looking forward to gaining more experience in weather observations.

The unity of M79 team members is all for one and one for all with the culture and diversity. To my family and friends in Mzansi, I really miss you, and I love you, Sisonke!! *Andiva ke ngoku!!*”



Faltein Siphesihle



SAWS Monthly Weather Stats – July 2022

TEMPERATURE	MIN	-3.4 °C
	MAX	14.3°C
	AVERAGE	4.5°C
	AVERAGE LOW	-1.6°C
	AVERAGE HIGH	10.3°C
PRESSURE	MIN	974.4 hPa
	MAX	1023.2 hPa
	AVERAGE	1006.8 hPa
RAIN	TOTAL	128.6 mm
	DAYS WITH RAIN (> 1mm)	19 days
	MAX IN 24 HOURS	24.0 mm
WIND	MAX	104.4 km/h
	DIRECTION	North West
SUNSHINE	TOTAL	56.1 hours
HUMIDITY	AVERAGE	84%

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