The Wanderer

July 2018

REPETTO'S: First Stop

... Round island for the Readers!

Lunar Eclipse

longest of the century

Interviews:

- The Geo
- Mama Mavis

Pup weighing @ Cape Davis

What' s up with this weather?

... the iconic weather balloon

Contents

COVER IMAGE:
Crozet Shag
(*Phalacrocorax melanogenis*)
Danielle Keys

environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

SANAP

The day is TODAY
MARION75
The time is NOW

letter from the *editors*

July – a month filled with birthday celebrations, pup-weighing, mountains of white and tons of laughter. Marion Island builds character and imprints the soul with experience - every new sunrise is gifted with numerous challenges but the team is still in high spirits and ready for more Marion action! For now – I hope that you will be entertained by the past month's activities and re-live the moments with us as you take in every word.

Elsa van Ginkel
Editor

What else to say about July? It has indeed been a very busy month, both socially and work-wise … but it flew by. Summer fast approaches and the island's natives have kept the field workers on their toes; with seal pups and baby birds, the work has been both extremely rewarding and exhausting. As a team, M75 continues to function in harmony and all systems are, so to speak, up and running. We hope you enjoy this edition of the Wanderer as we share some of our highlights!

James Burns
Co-Editor

Interview with…

"The Rock"

- Liezl Pretorius

Abuyiselwe Athandile Nguna

Known as Abu for short, this man is the personification of steadfastness (a quality he shares with most of his study subjects!). Being a young and upcoming scientist himself, he knows what it takes to lead the science team effectively. He does this with a gentle kindness that can only come from the heart of someone who knows and is very comfortable with himself. Abu does not do things half measure…he works hard, plays hard, is quick to smile and gives great hugs when needed. Overall an extremely nice guy to have on the M75 team! Keep up the good work, you are a legend!!!

Position on the M75 team

Geomorphology Field Assistant
Science Team Leader

Qualifications

BSc: Geography and Environmental Science
BSc (Hons): Geography and Environmental Science
MSc candidate (2nd year)

You are finishing up your MSc; tell us a bit about it…

It's on aeolian (wind generated) processes and landforms on Marion Island. With the rise in ambient air temperatures and the decrease in precipitation over the past decades and also the receding snowline, new landforms have been discovered over the years and "true aeolian" landforms are part of those landforms that have come to the fore.

How did your passion for Geomorphology start?

It all started back in 1st year but Climatology was my first love but because we did it first, and then later came Geomorphology and that was it for me, I had found my love.

RIGHT: Abu recording data at one of his stations.

This is your 2nd overwintering expedition to Marion. Why did you decide to come here again?

Within the results we got from the MSc I am currently nearing completion of, we found things that can make up for a great PhD, and there's nothing better than collecting your own data, especially for your Doctorate.

Favourite animal and plant on the island?

I have 3 favourite animals; Brown Skua, King Penguin and Elephant Seal Bulls and my favourite plant is the Moss.

What and/or who do you miss most from the mainland?

Mom, sister and girlfriend.

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

Barbeque sticky wings, King Steer Burger and a Milk and Honey Craft beer.

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

Smooth running of my experiments and I want to walk from base to the west side of the Island.

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

Nike said it best, JUST DO IT! This Island is a gem and the epitome of scientific field work for young South African researchers/scientists.

Would you like to work on other remote places? If so, where?

No, not really, but would love to go to Antarctica..

Favourite quote…

"In dreams begin responsibilities"

- William Butler Yeats -

RIGHT. Abu plays a mean game of pool… and he looks good doing it!

Interview with…

"THE VOICE"

- Liezl Pretorius

Bukelwa Mavis Lekhesa
M75 Radio Technician

Affectionately known by the team as "Mama Mavis", this woman is an inspiration to all who know her. Not only is she happily married and the mother of two clever boys, but she is also highly skilled in her field of communication. Her great sense of adventure has led her to Marion Island. For all the field assistants, hearing her happy voice over the hut radios it's a great comfort, knowing that your safety is her main concern. She is quick to lend a helping hand where needed, has a gentle soul and a gorgeous smile that can brighten anybody's day! Thanks for everything Mama! You are truly a star!!

Position on the M75 team

I am the Communication Engineer/Technician known as Radio Technician of M75.
The Communication Engineer/Technician is responsible for research, design, development and production of communication equipment/systems. I encompass modes of communication such as satellite, radios, internet, broadband technologies and telephone services. I am providing technical support, interpreting data, writing reports and testing systems.

Qualifications

I matriculated at Tlokweng Senior secondary school and went to further my studies at Germiston college, known as Ekhuruleni Tvet College and completed N6 in Electrical engineering (light current). I studied further with the University of Johannesburg (UJ) and graduated with a National Diploma in Electrical engineering (light current). I majored with Electronics, Electronic measurements, Radio engineering and Network systems. Furthermore, I studied with the University of South Africa (UNISA) for a Bachelor degree of Technology (BTECH) in Telecommunications. I did a few modules and it is my wish to complete it as soon as I go back home.

Why did you apply for this position on the island?

It's much deeper and I don't know how to put it on paper but firstly I would say it is because of the love of electronics and communication systems and secondly I would love to get more exposure in my field of study and learn technical challenges in this men dominated industry and how to deal with them. For me being on Marion Island is a good experience in terms of work experience. I worked for few electronics companies and this expedition will be a bonus that will put me in good place in my career. For being on the remote island just makes it much more special.

LEFT. *Mavis keeps her eye on the Server Board to make sure everything is running smoothly.*

What do you love most about your job?

First of all, my job is not an easy job. It is a male-dominated industry where you sometimes feel more pressure when the challenge comes, but it is enjoyable and manageable. In my job you can't be specific which part you love most because they have different challenges and you learn new things every day and all I can say, I enjoy working on Marion island.

What and/or who do you miss most from the mainland?

I miss my whole family especially my hubby and my kids. I miss all those Sunday lunch times we spent together after church. We share stories and jokes every time. We have a wonderful relationship and they did accept that I will be away from them for a year. We found a way of supporting each other through this long distance relationship.

Are you married and do you have children?

I am happily married and we are blessed with two handsome boys. Their names are Botle (Handsome) and Dithoriso (Praise) and they are 17 and 10 years old respectively. Everytime I think about them I smile. They are my pride, my joy and my happiness. I have a great relationship with them.

ABOVE. *Mavis busy with the daily scheduled radio communication with the field huts.*

What are your hobbies?

I have many hobbies but I will mention a few of them. I love reading, cooking, baking and sewing. I learnt at an early age that as a woman you need to be strong in those things.

Do you have any food cravings?

I am craving for my Xhosa cultural food sometimes. I miss Umleqwa (a dish made with free-range chicken), umvubo (sour milk mixed with dry pap), imifino which is a real gift from God, it grows in the veld in most of the time, it is pure and no chemicals on it . I am craving for especially one utyuthu to botanists is an Amaranthus hybridus. It is so tasty and healthy and it prevents cancer and HIV viruses.

What would you like to achieve this year on the island?

To be able to live without my family for a year but so far I am trying to get along with everyone on the team and enjoying this beautiful island. I just want to have a great peaceful and enjoyable expedition with one of the best teams in recent time I believe. I would love to be more involved in technical projects.

LEFT. *Having fun during sched!*

Would you like to work in other remote places?

I would love to although is not an easy decision to take if you have family. I would love to go to Gough island and Sanae one day in order to complete the cycle of Antarctic legacy. This would be a story to tell to all my grandchildren and my great grandchildren, and my name will be written all over the walls of these beautiful islands, that will make myself proud and my family.

Favourite animal on the island?

All animals, birds and whales I see at the island are my favourite. It is the first time I see them with my naked eye. I used to see them on TV but now I see them every day, they are so amazing. To me it is a fulfilment of the word of God that says "The earth is the Lord's and the fullness of it". (1 Corinthians 10:26).

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

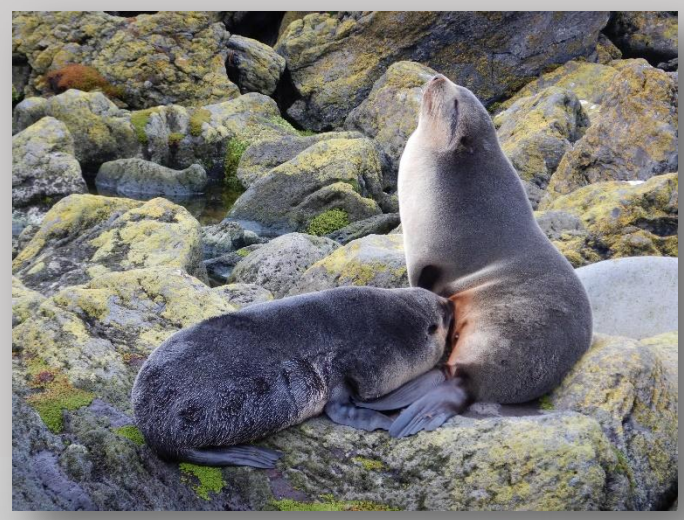
I would love to give this advice to anyone who wants to apply for a job on Marion island: she/he must be fully prepared - mentally and physically. He/ She must expect the unexpected. After all, we are God's attributes and by all means we can try and show those attributes even though we are not perfect, it is worth trying and if we can, we will succeed.

ABOVE. Mavis meeting the elephant seals close to base.

Tropicalis pup weighing
Cape Davis 6 July 2018

- Liezl Pretorius

As part of the Marion Island Marine Mammal Programme, the sealers are required to weigh a 100 sub-Antarctic fur seal (*Arctocephalus tropicalis*) pups at predefined intervals. These pups are born around the 18th of December and are weighed at days 30, 60, 90, 120, 150, 180, 200 and 300. This is an essential part of basic population monitoring. In essence, it reflects the success of the adult female's foraging, how well she feeds her pup and how well the pup utilises the energy acquired.



At the beginning of July the pups were 200 days old and a team was put together to weigh these fatties. Even though the weather was less than optimal, this team ran like a well-oiled machine and no target (aka pup) escaped un-weighed once it was in their sights.

A special thanks to the PWTE (Pup Weighing Team Extraordinaire)…

You guys are AMAZING!!!

From left to right:
Liezl (Sealer), Michelle (Birder). Dineo (Winder), Marike (Botanist), Sean (Birder), Elsa (Winder)

REPETTO'S

...Welcome fellow traveller

- Elsa van Ginkel

Hut of the month: Repetto's

Last month we started off at base in preparation for the Round Island – but this month, we head off to Repetto's for our first hut night.

You'll have to brace yourself for a walk coloured with mischievous mires, disguised as patches of mossy grass all along the route. It's a clear route and you have the freedom to choose between either the inland or coastal route. Enjoy the scenery and every moment!

Route to Repetto's:

'Meet me in the boot room in 5.' The words that announce the start of all Marion journeys, unless you are travelling on your own...

Are you ready? Grab your blue battle gear because the fight is real.

We will be heading north-west, cross Van den Boogaard River, climb a staircase of *Blechnum* leading over Skua's Ridge and then face Hoppie's Hell, which offers less 'hell' then implied.

All depending on whether your journey includes a cloak of mist or a day of 'Marion-sunlight', you might stumble upon hundreds of Salvin's Prions (*Pachyptila salvini*) dancing through the black lava of Hoppie's Hell on a rather misty day.

Follow the path and pass to the left of 3rd Sister, crossing the Fairy Prion Valley and then head past Bill Briggs Beacon to enter the mistery of Long Ridge. Mystery – because every time I have passed through this area, the mist was a blanket of white with approximately zero visibility hiding the Ridge in plain sight.

Once you have conquered Long Ridge, your heartrate will settle and you'll definitely start enjoying the adventure.

Looking down from the Ridge, Goney Plain will come into view, painted with white dots, which at closer examination, will prove to be Wandering Albatross chicks – also referred to as walbies.

As you approach Goney Plain, Prinsloomeer will reveal itself. This lake will cause excitement once you realise that it is shallow enough to walk through – that is if your boots still have the status of waterproof. The sound of King Penguins (*Aptenodytes patagonicus*) will greet you as soon as you set foot on the opposite shore of Prinsloomeer.

Now, we'll have to keep our eyes open for the mires which always make their appearance on the last stretch towards Repetto's Hut, situated at the foot of Repetto's Hill. Beware... Mires will lure you into their depths of frustration...

The Hut

This hut is nestled at the foot of Repetto's Hill – which owe its name to Arthur Ernest Repetto, a Tristan da Cunha islander and also the cook on the very first Marion expedition.

Water

The river is situated close to the hut but is more often dry than in flood.

Hut Recipe

STEAM BREAD:

Ingredients

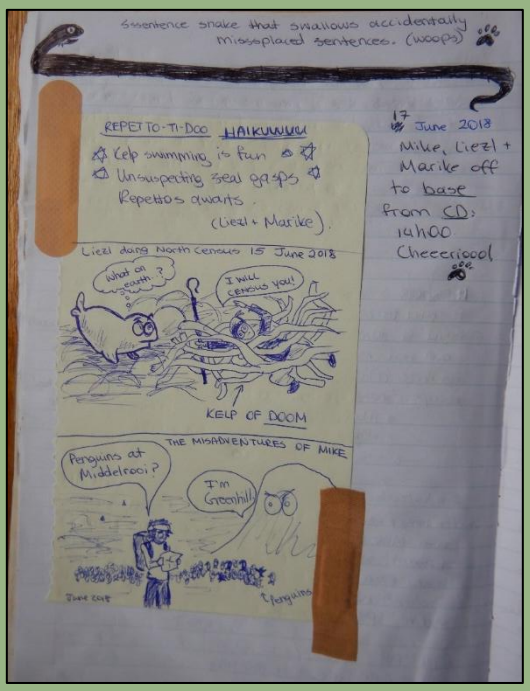
- 250g of self-raising flour
- 2tbl spoons of oil
- 2tbl spoons of powdered milk
- 2tbl spoons of condensed milk
- Luke warm water

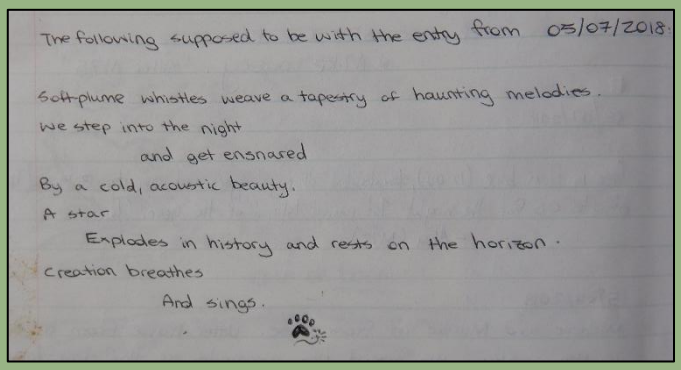
Methods

1. Mix all ingredients together
2. Slowly add water while mixing until the dough forms a ball that doesn't stick to the sides.
3. Oil the dough and place it in a small pot.
4. Take a larger pot and fill it 1/3 with water.
5. Place the small pot within the larger pot and put a large enough lid over the pot so that it covers both the pots.
6. Cook on the stove for 30 minutes on low heat.

Hut Entry

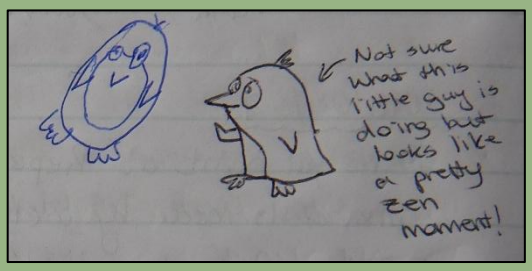
Every hut has a hut book in which all Marionites can jot down their thoughts and experiences after a long day of work. The majority of these hut entries usually provide much entertainment.

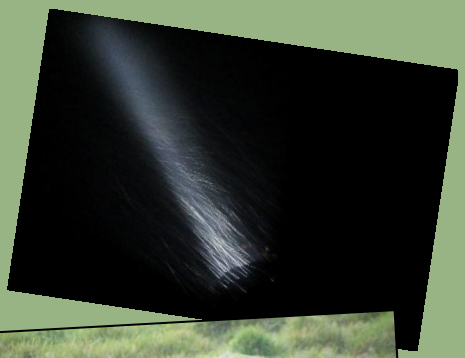




The following supposed to be with the entry from 05/07/2018:

Soft-plume whistles weave a tapestry of haunting melodies.
We step into the night
and get ensnared
By a cold, acoustic beauty.
A star
Explodes in history and rests on the horizon.
Creation breathes
And sings.





Work in the Area

1. Birders:

- Light-mantled Albatross
- Night-birding - Soft-plumed Petrels

2. Sealers:

- This is the most northern point of the Elephant Seal Census

3. Winders:

- The winders have a station situated about 1.5 km from the hut.

Photos: Liezl Pretorius

Fun Facts

A Marion timeline

- Charlotte Heijnis

1663	The Islands were discovered on the 4th of March 1663 by Barent Barentzoon Lam ("Ham"), captain of the Dutch East India Company ship Maerseveen. Ham named Marion 'Maerseveen' and Prince Edward 'Denia'. The islands were recorded to be at 41° south rather than at 46° and the Dutch never found the islands again.
1772	Just over a 100 years later, in 1772, the French naval officer Marc-Joseph Marion du Fresne rediscovered the Islands and named them Marion îlede l'Esperance (Island of Hope) and Prince Edward, île de la Caverne (Cave Island). Later, he referred to them collectively as îles des Froides (The Frigid Islands), supposedly as poor weather made it impossible to actually land on either. Du Fresne also discovered îles Crozet which was originally named Marion Island.
1776	In 1776, James Cook used charts obtained from Crozet to find the Islands and named the group **the Prince Edward Islands** after Prince Edward, the fourth son of the British King in the 18th Century. Cook was also unable to land.
1803/4	First sealers set up camps often for months at a time... and inadvertently introduced house mice to the island.
1804	Introduction of the domestic pig (eradicated some years later).
Mid 1800's	First record of sealers referring to the larger of the islands as Marion Island.
1873	HMS Challenger visited the Islands and conducted biological and geological research.
1930	Final sealing expedition by the S.S. Kildalkey (most of the fur- and elephant seal populations of the Prince Edward Islands had been depleted to the point where it was no longer economically viable to continue these expeditions).
1947	The South African frigate, HMSAS Transvaal, occupying party landed at Gunner's point in Transvaal Cove.
1948	Islands annexed by South Africa, a meteorological station was established and the first expedition team replaced the occupying party. There has been a continuous scientific presence since.
1949	Five cats were introduced to control the house mice.

Early 1950's	Several other animal species were knowingly introduced to the Island e.g. sheep and brown trout. These have all been removed or made extinct.
1956	Year which the scientific team relief expeditions became annual rather than bi-annual.
1960	First permanent research station build on Island (the "Old base").
1965/66	First comprehensive survey of vascular plants and formal geological surveys.
Early 1970's	Start of extensive terrestrial research programme.
1974	Start of the cat eradication programme.
1976	First comprehensive marine biological investigation when the MS Marion Dufresne visited the Islands.
Spring 1986	Start of nocturnal hunting of the feral cat population which had been reduced from a maximum of some 3,400 individuals in 1977 to around 600 after introduction of feline panleucopaenia.
1989	Year in which research direction shifted from the CSIR (Council for Scientific and Industrial Research) to SACAR (South African Committee for Antarctic Research).
1995	Declared a Special Nature Reserve.
Late 1990's	Switch towards a focus on conservation and monitoring issues identified by the Prince Edward Island Management plan.
Late 1980's - 1990's	Shift in emphasis of research to impacts of climate change.
1991	Last cat trapped on Marion ending the approximately 20 year cat eradication programme which included introduction of a feline virus, the use of poison, traps and hunting – the only successful eradication of feral cats on an island to date.
2007	Declared a RAMSAR wetland of International Importance.
2012	Inauguration of the new Marion base.
2018	M75 - the largest over-wintering team yet (24).

Experience the Natives

species of the month...

- Dineo Mogashoa

Agrostis magellanica

- Dominant grass species on Marion
- Native to many sub Antarctic islands
- Common in both wet and dry mires
- Grows in a variety of heights ranging from 50–450 mm and forming short grassland communities
- Has a distinct inflorescence with many shiny, greenish-purple, spikelets.
- In the sub-Antarctic islands it grows at the lower altitudes within peat and among mosses and cushion plants, or as scattered small plants in fellfield.

Agrostis magellanica habitat

Photo: Elsa van Ginkel

SOUTHERN ELEPHANT SEALS
Mirounga leonina

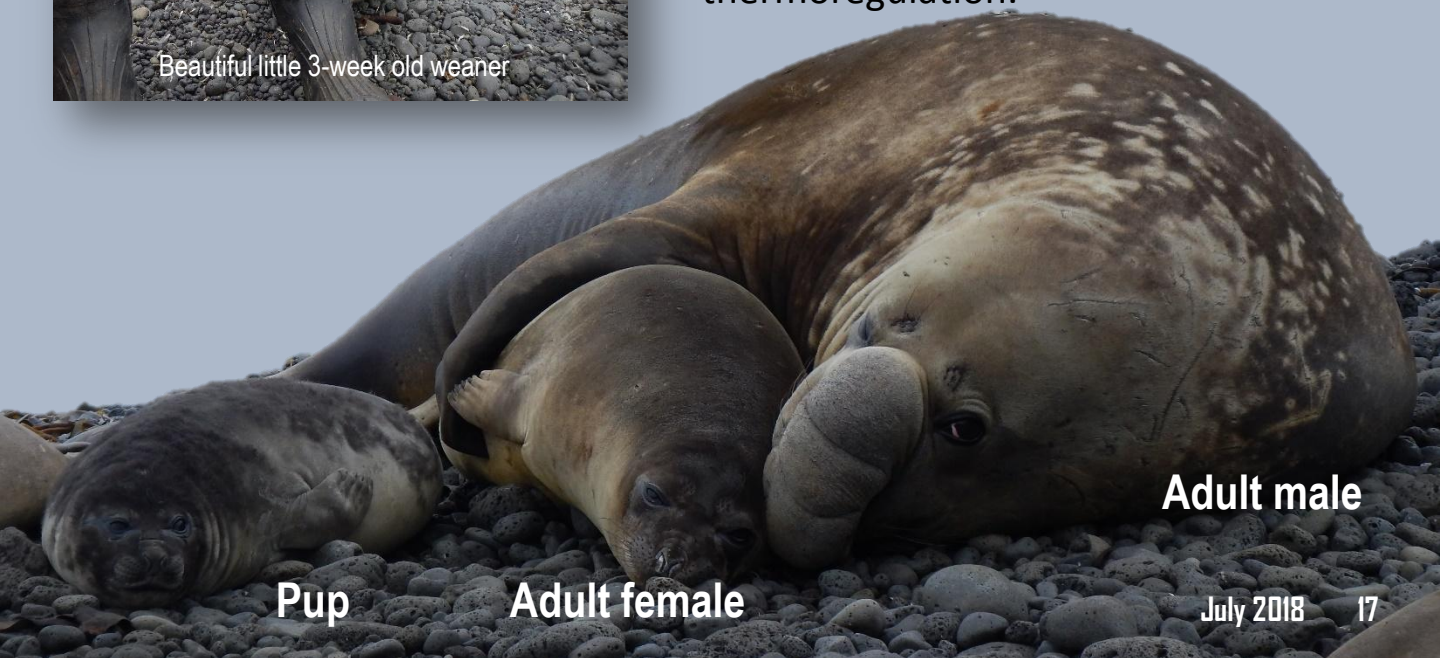

Adult male's size in relation to a human

- From the family, Phocidae ("earless" or "true" seals).
- Elephant seals are the largest living seal species.
- One of the most sexually dimorphic species.
- Males are extremely large (weighing between 2 to 4 tons).


Adult female with her newborn pup

- Females are much smaller, weighing between 400 and 800 kg.
- Pups are born with a black woolly coat and weigh about 40 kg.
- Pups wean in approximately 3 weeks and weigh between 70 to 180 kg on average ("Super Weaners" can weigh up to around 200 kg!).
- Around 550 pups are born annually on Marion Island.
- Marion Island is one of the northernmost breeding colonies of elephant seals in the world.
- A thick layer of blubber allows thermoregulation.


Beautiful little 3-week old weaner



Birds of the month

- Oyena "Oyster" Masiko

Gentoo penguin

Scientific name: *Pygoscelis papua*

Conservation status: Least concern (however rapid declines in certain breeding colonies are believed to be influencing a slight decline in the species' global population).

Distribution: mainly found in the sub-Antarctic regions, extending to the Antarctic Peninsula.

Habitat (on Marion Island): They can be found directly on the shoreline or even further inland. Colonies can be found up to 2 km inland, in vegetated areas (often between tufts of grass).

Diet: Gentoos are opportunistic feeders. They live mainly of crustaceans such as krill, with small fish contributing only a small proportion to their overall diet.

Predators: *At sea:* leopard seals, sea lions, killer whales. *On land:* skuas, giant petrels and sheathbills are known to prey on chicks and snatch eggs from the nests.

GENTOO FUN FACTS

- They are the third largest penguin species in the world.
- They are the fastest underwater swimming birds, reaching a speed of up to 36km/h.
- They may make 450 dives during a single day foraging.
- When they dive, they reduce their heart rate from 80-100bpm to 20bpm.
- They can outrun a man on land.

Birds of the month

King penguin

Scientific name: *Aptenodytes patagonicus*

Conservation status: Least concern.

Distribution: mainly found in sub-Antarctic islands as well as other temperate islands within the region.

Habitat (on Marion Island): They are usually found on flat coastal plains and tussocks and gently sloping beaches, within easy reach of the ocean.

Diet: Their diet comprises mostly of various species of small fish but they will also feed on squid, krill and a variety of crustaceans. Their foraging range stretches from 255km when feeding a small chick to ¬300km when feeding a large chick.

Predators: *At sea:* leopard seals, Antarctic fur seals, killer whales. *On land:* skuas, giant petrels and sheathbills prey on chicks and unattended eggs.

KING FUN FACTS

- King penguins are the second largest penguin species.
- Can live up to 20 years in their natural environment and up to 30 years in captivity.
- They can dive up to 500m deep.
- Their average foraging speed is 8.7km/h.
- The pupils of their eyes are round but when constricted, appear square.
- They have up to four layers of feathers.
- King penguins are mostly monogamous but divorces can occur when the arrival of the birds are poorly synchronized.

The coastline: water meets land!

Marion terrain Part 3

- Marike Louw

When you're dodging bellicose gangs of young snarling fur seals, carefully skirting by bewildered Gentoo penguins, peering down sheer smooth cliffs or getting salt spray clinging to your eyelashes or peppering your beard - you are at the Marion coast.

The edges of Marion Island presents an astonishing medley of sights and sounds. Sometimes the ocean meets the land with a resounding chaotic crash of white whirling water, fiercely hurling itself over and over at the island as if to push it away in frustration. At other times, the water takes on a liquid mercury appearance, and the timid, gentle lapping of the startling silver almost looks inviting. One thing is for sure: the dramatic coastal terrain keeps the field worker in a constant state of appreciation and focus.

The sealers are well acquainted with the smoothened, slippery rocks and boulders which form the "beaches" at Marion. With binoculars glued to their face, they often exhibit splendid acrobatic dance moves as they manoeuvre around seals trying to read tags on the flippers of un-obliging beauts.

The birders are also adept at approaching penguins in the very slippery, rocky (and reeking by the colonies) terrain. In addition, they are experts on the grassier, slightly-climbable cliffs at which Sooty albatrosses nest by the coast. The birders will scuttle up and down to check their monitoring colonies or replace batteries on cameras positioned at bird's nests. At various times during the expedition, some birders do coastal round-islands where they will count all birds in sight, and they will know Marion's dramatic fringes better than anyone. As for the botanists (or the "Inyangas" as we are known on the island), we too find ourselves crawling, slipping and teetering along the coast as we investigate coastal vegetation.

Gentoo penguin on its nest at Ship's Cove

In terms of vegetation, the edges of the island is a rich gathering of alien and native flora. *Cotula plumosa* is a native vascular plant that can grow low over the black lava rocks. As its scientific name suggests, the leaves are featherlike and it spreads like a green carpet that crunches gently underfoot. At a section between the comely Swartkops and Rooks huts at the southwest part of the island, *C. plumosa* forms a little green highway across the crumbly, black lava rock terrain. The annual meadow grass (or annual blue grass, if you prefer) that so lusciously graces lawns in suburban gardens is an introduced species on Marion that is a common sight on vegetated cliffs and at the island edge.

Close-up of *Cotula plumosa*

Crassula moschata

If you walk to pay a visit to the Killer Whaler at his rocky perch (from where he studies passing killer whales) that juts into the sea, you are bound to pass over a species of *vetplant* or succulent on the island: *Crassula moschata.* It thrives in the salt spray environment and clings tenaciously to the dark, coastal rocks.

The historical treasures linked to the early seal hunting visitors (survivors!) of Marion can be appreciated at the coast and are quite eye-opening: from the capacious Sealer's Cave where the hardy humans resided to the half-buried Cape Davis kettle and the barely visible Trichardt boat. The coastal terrain encases a bit of every other Marion terrain, so it is broadly addressed here. But it is such a special part of the experience of every field worker on Marion that it is worth dedicating a section of our beloved *Wanderer* to it.

Photos: Elsa van Ginkel

Wit Tapyt

Skerwe
van iets –
wat eers druppels was,

kloof
- golwend -
deur mistigheid
se wals

dans:
klein treëtjies
teen horison
se glans

en vorm
met tyd
'n skitterwit tapyt.

- Elsa van Ginkel

The Great Wing
(lyrics)

I'm hidden in the darkness
I'm hidden underground
My wings folded amongst the roots
I don't make a sound.

The sun is up and full of hope
Its beating at my door
She promises me the warmth
Beckoning me to sore.

But woe to those who answer her
They stretch their wings at dawn
The enemy will be waiting
hovering above their lawn.

I hold the urge to drink the air
For freedom I will starve
Waiting patiently and dreamingly,
Of the skies I wish to carve.

The light has seized its knocking
The claws have made its husk
A familiar voice faintly calls
My belly assures its dusk.

My wings all wet and muddy
they smear against the wall
The smell of freedom, oh so great
I inch towards the call

The fresh cold breeze fills my lungs
My wings begin to spread
I give two flaps and move the air
Towards I fly unfed.

- Stephan Keys

PICK OF PICS

Family Outing...

King Penguins
Aptenodytes patogonicus


Danielle Keys

Pretty Shag

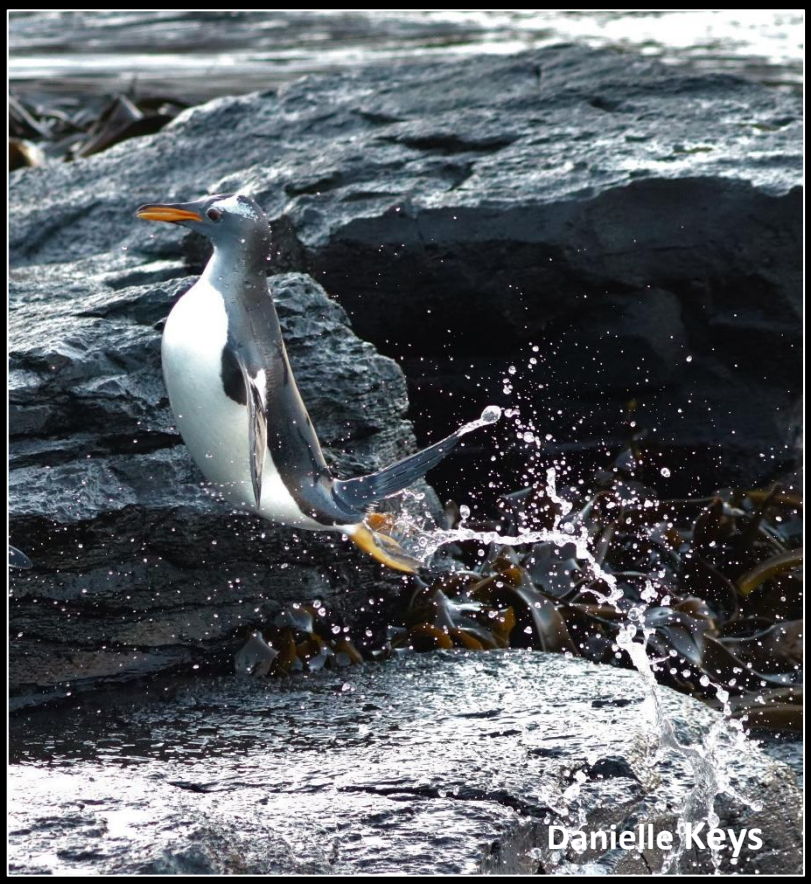

Liezl Pretorius

Crozet Shag
Phalacrocorax melanogenis

What are you Wandering about?

Wandering Albatross
Diomedea exulans

A Giant Leap of Faith...



Gentoo Penguin
Pygoscelis papua

Touching the Sky

Salvin's Prion
Pachyptila salvini

Windows of the soul...

Sub-antarctic fur seal
Arctocephalus tropicalis

Rocking your field gear

…we're sexy and we know it…

- Liezl Pretorius

…The Sock Dilemma…

When you work in gumboots pretty much all the time, socks become a very important aspect of your daily life. The way you wear them becomes a science in itself as you try to keep your feet as happy as humanly possible…especially when you have to walk in excess of 20km per day over rough terrain! Some of the difficulties that we have to overcome include blisters, tired feet, foot cramps, continuous wet feet from either excessive sweating or from dragging your feet out of the mires, etc. Daily questions such as these come to mind… How many pairs will I wear today? Will it be a thin and a thick pair, or two thick pairs, or three thin pairs? Should I pack extra socks just in case I might need them? How many days can I wear my socks before I HAVE to change to clean ones during a Round Island? Most of us have our own individual preferences that we have settled with by now and we all just hope that the socks we have will last until the end of the expedition! Below is a rough estimate of the number of socks that M75 members wear with their gumboots…

4.2 % = 1 pair

83.3% = 2 pairs

12.5 % = 3 pairs

RIGHT. As an example, you can wear your socks either inside or rolled over the sides of your boots.

LEFT. When you can't find a matching pair (or you just feel like it), nothing prevents you from mixing it up!

Birthday Bonanza

A month of celebrations

James - Colourful!

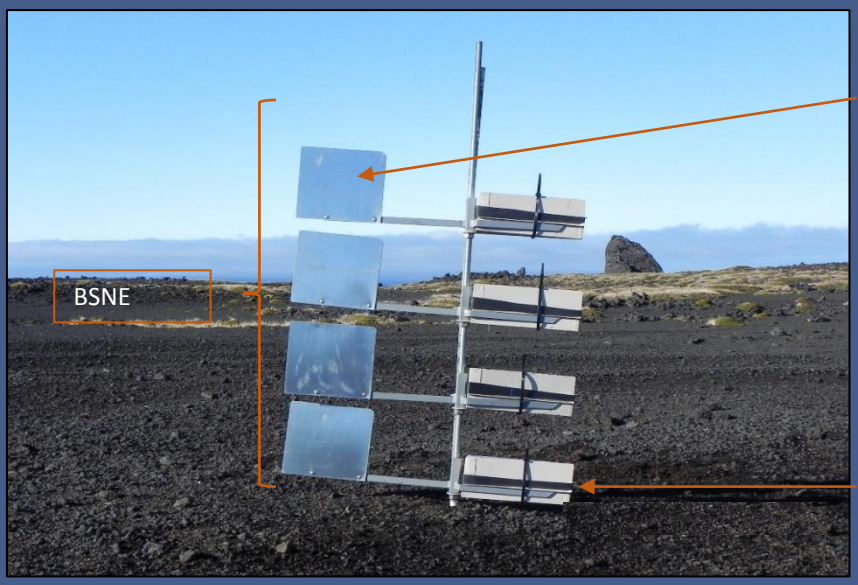
Mavis - Dress to Kill...

Marike - Blanket fort

Sean - What did you want to be when you were 3-8 years old?

My favourite piece of equipment...

- Abu Nguna



Wind vane – redirects the sediment sampler towards the dominant wind direction.

Sediment sampler - with 10 cm^2 opening

This low tech piece of equipment is called the Big Spring Number Eight (BSNE) field dust sampler. The sampler will collect at least 86% of the material passing the 10 cm^2 opening and retain an average of 96% of the material entering the opening. I use it for my aeolian (wind) processes work on the island, so as to track how much sediment is retained and then later correlate that with the wind velocity and other meteorological conditions experienced during that period (sediment flux). This will help us understand what determines the rates of sediment movement.

Abu at work and the amazing scenery that comes with being a geomorphologist.

The Burrow scope

- Oyena "Oyster" Masiko

We (the birders) use this useful piece of equipment to determine nest presence as well as attempt to accurately identify nest occupants for the different burrowing petrel species, and on occasion certain prions. We started using the burrow scope when other techniques (such as using sound, smell and signs at burrow entrances) proved too inaccurate to reliably index population size or breeding success.

(A) 12 volt battery used to power the burrow scope; (B) camera head with flashlight attached; (C) flexible wire cable connecting the camera to the LCD monitor; and (D) colour LCD monitor.

Oyena at work: checking a burrow.

Above is a picture of the burrow scope that we currently use which was put together by Ben Dilley. The flexible wire cables (C) make it very easy to access burrows of different lengths and locations e.g. rock crevices.

Bonjour!!!

From Frenchie, the Elephant Seal

- Liezl Pretorius

On the 26th of July 2018, the very last animal I found on the Northern stretch of our sealers' elephant seal census got me very excited. When I saw the tag, I immediately knew that this was not a local animal. The colour and the writing did not correspond with the Marion Island Marine Mammal's tags for that particular age class. The animal was the size of an under-yearling and relatively calm, allowing me to quickly have a proper look at the tag and voila! She was from some French island and I will let you all know from where exactly in the August edition of the Wanderer!

The reverse side of the tag confirmed that she is of French origin…

The obligatory "sealfie" with Frenchie!

Lunar Eclipse

Longest of the Century

- Elsa van Ginkel

On Friday, 27 July 2018, even on Marion – multiple eyes were anxiously awaiting the Blood Moon ... This blood moon was the longest total lunar eclipse of the 21st century.

The deep red colour of the moon during a total lunar eclipse is caused due to the Earth's atmosphere which acts as both a lens and a scattering medium for the sun's light when the full moon passes through the Earth's shadow.

Elsa van Ginkel

What's up with this Weather?

…the iconic weather balloon …

- James Burns

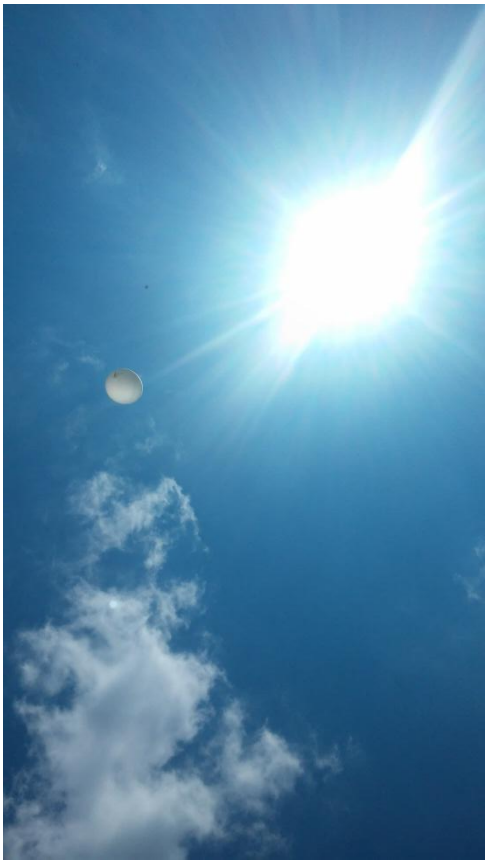
July has seen quite a lot of diversity when it comes to weather. There has been plenty of rain and snow and of course strong winds but there has been a definite shift as the end of winter slowly draws nearer. The most notable change is in the daylight hours; the sun is rising a few minutes earlier every day and the field workers are taking full advantage of the additional hour or so to work although, admittedly, the ominous cloud-cover is still just as likely to block out the brightening sky. Another bonus was the small number of sunny, pleasant days we have experienced; warm(ish), wind still and perfect for relaxing and absorbing some of the fleeting radiation.

As promised, I will start my run-through of the duties of a meteorological technician starting with an overview of the upper-air soundings with the iconic weather balloons. These latex rubber balloons are filled with hydrogen gas (no, not helium) from our hydrogen generator which separates the hydrogen and oxygen from thrice-filtered and purified water. The filled balloon (about 1.5 meters in diameter) is tied securely with string and a dereeler (sort of like a spool of cotton) is attached. A radiosonde, which is a small cardboard box containing various sensors (temperature, humidity, pressure and GPS tracker) and a battery, is then attached to the dereeler. The balloon is carried outside through either of two garage-type doors (South or East facing) depending on the direction of the wind.

ABOVE: the balloon room

What's up with this Weather?

After launching the balloon, it is possible to track the balloon as well as the measurements it is recording as it rises to around 20km. At this height, the atmospheric pressure is really low (under 50hPa) and the balloon will have expanded to an approximate 8m diameter before bursting. The entire ascent takes around an hour and it is fascinating to observe, for example, how the temperature steadily drops to -60°C or how the humidity suddenly spikes as the balloon passes through a cloud. Using satellite tracking, the flight path and wind speeds are also measured as the balloon is swept away. Balloons are launched twice a day (simultaneously from hundreds of locations around the globe) and, although it may seem exciting and spectacular to outsiders, it has become just another one of the duties of a Marion metkassie.



SAWS MONTHLY WEATHER STATS – July 2018					
TEMP	MIN	MAX	AVERAGE	AVERAGE LOW	AVERAGE HIGH
	-0.4°C	12.3°C	5.3°C	2.5°C	8.0°C
PRESSURE	MIN	MAX	AVERAGE	HUMIDITY	AVERAGE
	984.4hPa	1031.2hPa	1011.4hPa		84%
RAIN	TOTAL	DAYS WITH RAIN (>1mm)		MAX IN 24 HOURS	
	134.0mm	25 (15)		21.4mm (2nd July)	
WIND	MAX	DIRECTION	SUNSHINE	TOTAL	
	119.5km/h	NW		64.9 HOURS	

South African Weather Service

ISO 9001 Certified Organisation

The Team ☺

Photos: Liezl Pretorius, Dineo Mogashoa, Elsa van Ginkel, Marike Louw

Thank you to our sponsors!!!

- Liezl Pretorius

Once again we would like to thank the sponsors for the lovely products they gave us! We all smell wonderful, our hair is glistening in health and our skins are soft and supple. And above all, we are grateful that there are companies like yours that take their impact on the environment seriously and produce their environmentally-friendly products sustainably. It is a great comfort to know that these products that we use on the island are not hurting the wonderful creatures and their home! Keep up the good work! We are definitely spreading the word about it…

Background photo: Elsa van Ginkel