



The Wanderer

MARION ISLAND 67TH OVERWINTERING TEAM

June 2010

Monthly Weather Statistics

From the editor

Ave Max Pressure	1011.2 hPa
Ave Min Pressure	999.4 hPa
Ave Pressure	1005.6 hPa
Max Pressure	1025.9 hPa
Min Pressure	983.3 hPa
Ave Max Temp	7.6 °C
Ave Min Temp	2.4 °C
Ave Temp	5.0 °C
Max Temp	13.5 °C
Min Temp	-1.4 °C
Ave Humidity	85 %
Max Humidity	99 %
Min Humidity	25 %
Max Wind Gust	34.2 m/s 123.1 km/h 66.5 kt
Total Rainfall	193.6 mm
Highest in 24 Hours	33.4 mm
Total days with rain	21
Total days > 1mm	19
Total Sunshine	59.4



Cobus Cronjé
Meteorological Observer
(a.k.a Wallace Wombat)

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For some, the habit of writing one's experiences down whilst they are on an adventure of some kind seems to be of second nature. Others, however, find this tedious in the extreme, but will none the less promise themselves that this time, they will make an effort, that this time will be different, knowing in their hearts these promises to be utter rubbish. Sadly, I fall under the latter group of people. In fact, apart from a few days of enthusiastic notation during the initial excitement upon arrival, this is one of the few things I have written down so far. However, as I have rather foolishly volunteered to be editor of this esteemed newsletter, I dare not continue with this habit of peevish penmanship.

This issue of The Wander promises to be an exciting one, with photos and experiences, both on and off the island, being shared by team members. As you will gather from reading Mia's story, I accompanied her and Kari on a round-island during this month. I can only say that it was a truly amazing (and exhausting) experience, and one I hope to repeat as soon as possible. This issue also sees the first appearance of two new, soon-to-be regular section titled "Profile of the month" and "Marion Landscapes".

I sincerely hope each and every person reading this edition will enjoy it as much as we enjoyed sharing these experiences with you.



The Wanderer

Life between Marion



Feeding the chimp



"I decided that during my time at home, I wanted to spend time with family and friends, and meet as many different types of animals as possible. And so the journey began."



Hiking in the Baviaanskloof



Meeting my first elephant

Once you have been lucky enough to participate in a "Marion experience", it is not easy to settle down in the "real world" again. After I got back to South Africa after my first Marion expedition in 2006, I knew that I had to get back to the island. It took two years before I was chosen to represent Marine and Coastal management once again, working with the seabirds on the island. The year seemed to pass so quickly, and once again, when it was time to leave the island in 2009, I was not ready to go home.

So here I am back on the island and very happy and fortunate to be here. When I think about the 10 months that I had in South Africa between these two expeditions, I realised just how unsettled I was. I decided that during my time at home, I wanted to spend time with family and friends, and meet as many different types of animals as possible. And so the journey began.

A couple of the highlights of this journey included finding a "blow-up orca" on the beach at Dassen Island. The orca had washed the 12 kms from the mainland to land up on the island. It was very satisfying to know it was just a blow-up animal, after having assisted with the mass stranding of whales at Kommetjie a few weeks earlier. My other finding was this three-legged penguin chick found dead in a burrow.

I then volunteered to help out at the East London Zoo and Aquarium, and sadly whilst I was there, one of the chimps fell during a play fight and lost consciousness. It was first taken to the hospital for X-rays and then it had to be kept quiet overnight. Of course I volunteered to assist immediately, and so another adventure began. I never knew that chimps too love peanut butter sarmies, especially with jam on the top. I never in my wildest dreams thought I would ever get this close to a chimp - what a privilege!!

Volunteering on Malgas island, was definitely a case of getting down and dirty. We were banding gannet chicks just about to fledge, and getting stomach samples from the adults coming in to feed the chicks.

Then it was time to get into the bush and do a bit of hiking with my friends. Many happy times were had! Time to meet a few more animals, and the elephants at Magaliesburg, were not disappointing. One has amazing admiration and awe when standing alongside one of these magnificent creatures.

These were just some of the highlights of my journey. It was absolutely wonderful just to take time out and spend it with family and friends.

Between May 2009 and March 2010, I travelled right across the country staying wherever I wanted to, either with friends and family, or camping in the bush, and sometimes even in friends' back gardens.

I would like to thank everyone that shared this amazing adventure with me, in the 10 months on the road, I stayed in 43 different places and met some amazing people and animals. These memories will be with me forever - roll on retirement!!!!

- Linda Clokie, Birder



My sister retrieving the blow-up whale.



Three-legged penguin.

Life's a Journey, Enjoy the Ride

I have always been a relaxed person, someone who could classify sleeping as a hobby. If I had to liken myself to an animal, a sloth comes to mind. Thus you can imagine coming to this island, where I basically hike as a job, posed a great challenge. But that is why I came here, because I needed to get out and see and feel wildlife. And on Marion Island there are no shortcuts. You need to go somewhere, you walk there. Through crumbly jagged black lava, taffy-like mires, gale-force headwinds and stinging ice pellets.

I am a slow walker... Us sloths move slowly. Sometimes I wish I could walk faster, like when the weather is remarkably bad or I desperately need a shower after a long round island. But I celebrate my steady pace, and ignore the sniggers of the other fast-paced field assistants (*cough* Matt). I make an effort to enjoy my walks and capture pictures, sounds and smells in my memory bank. Next year I will leave this magnificent place and at least then I will have these memories to hold close to my heart. When I hear a Salvin's Prion complaining loudly as I pass his burrow, I stop and stick my ear against the opening to hear what he has to say (nothing nice, for the record). I engage in a friendly banter with the Wandering Albatross chicks clapping their b e a k s a t m e : "Hey Albie chick! You're fat!" Albie chick claps beak in agreement.

*"Have you ever seen the face paint of a Sooty?
Or asked the Killer Whale about his fins?
Can you sing with all the voices of the penguins?
Can you paint with all the colours of the wind?
Can you paint with all the colours of the wind?"*

*Come run the hidden paths of Santa Rosa
Come taste the ice cold water of Soft Plume
Come roll in all the Blechnum all around you
And wait for a bow of the bright moon
The mires and black lava are my brothers
The Albie and the Skua are my friends
And we are all connected to each other
In a circle, in a hoop that never ends"*

Stop and smell the roses... um... I mean moss. I tried to express this passion to my recent round island companions, Kari and Cobus, on top of a foggy Azorella Kop, only to be stared at glassy eyed and shivering. I restrained myself from breaking out in song: Where else will we ever experience life as pristine and wild as this? Next time we find ourselves rushing to the next hut, eyes fixed to the path and counting down meters, we need to stop and remind ourselves where we are. Play with some leftover snow, laugh at the pterodactyl-like Giant Petrels or soak in a brief flash of sunlight.

Be glad when you get to the hut 30 minutes later than you planned on, because those minutes are the ones you will cherish for years to come. Marion is a journey, enjoy the walk!

Profile of the month



Name:	Matthew Wayne Lachenicht
Also known as:	Matt / Mattie / That guy
Age:	23
Hometown:	Pretoria
Occupation:	Student
Qualification:	B.Sc (Hons) Conservation Ecology, University of Stellenbosch
Island designation:	Gogga (mooser, birder)
Favourite food:	Wacky Wednesday
Relationship status:	Little Lady (Ermelita Geral) ... miss you!
Hobbies:	Rock climbing, mountain biking, kayaking, fly fishing
Favourite author:	Whoever writes is National Geographic or SA Mountain Magazine
Best movie ever:	Road Trip
Best Marion moment:	Seeing the island, our home for 13 months, for the first time from the trusty, rusty SA Agulhas
Favourite Marion dish:	Jimmy's Braai (It's a sauce, not a dude)

Marion Landscapes

Scoria Cones

Walking around on Marion Island one can not help but notice a diversity of landscapes. The study of landscapes, as well as the processes that create them, falls within the field of geomorphology. There is currently a geomorphology program running on the island under Prof Ian Meiklejohn from the geography department at Rhodes University. Yet it is not only earth scientists that can appreciate these wonderful features. To share these miraculous landscapes with the readers of this newsletter, a monthly article will be published showing pictures and briefly discussing how the landscape features in them came to be.

One of the most distinctive features that any newcomer to the island notices is a giant red hill towards the interior of the island behind the base. Like a bouncer to club interior, this hill, named Junior's Kop, stands at the entrance to the route that leads to the interior. But this is not merely your run of the mill hill, but rather a specific landscape element termed a scoria cone. More specifically this feature forms as a result of extrusive igneous activity (Summerfield, 1991) which is a fancy way of saying that it is volcanic activity which results in magma erupting onto the surface. Yup, you've guessed it, Junior's is a volcano. But this is hardly a surprise since Marion is a volcanic island and a lot of the features in the landscape are volcanic in origin.

But what exactly constitutes a volcano? The form that a volcanic eruption can take is highly variable and can be classified based on the shape of the vent, the nature of the eruption as well as the material being ejected (Goudie, 2001). With regard to the vent the most important division is between a central and a fissure eruption, the former occurring when material is ejected to the surface from a hole in the ground (Goudie, 2001). This ejected material continues to pile up around the vent producing a

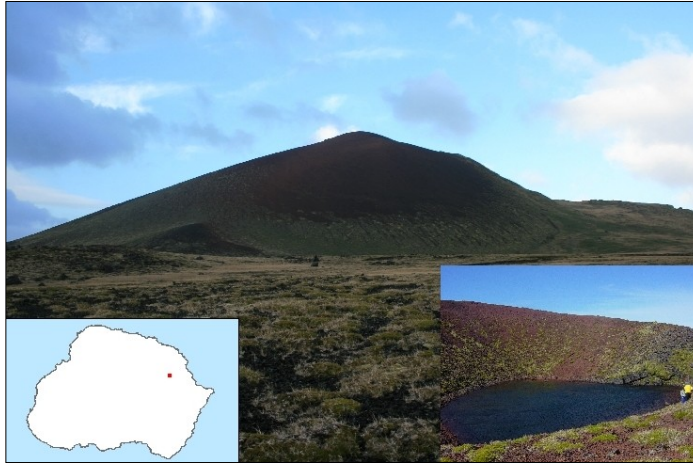
heap of material called a volcano (Goudie, 2001). It is this type of event that leads to the formation of a scoria cone.

There are a number of ways in which magma from beneath the earth's crust can reach the surface. When the magma contains abundant levels of gas then there will be numerous gas-filled vesicles within the eruptive material (Summerfield, 1991) and these vesicles can be seen in the solidified particles. A simple analogy would be opening a bottle of any carbonated drink. As soon as the pressure inside the bottle is released, the gas within in the drink comes out of solution and bubbles toward the surface. Similarly, gasses within the magma get released when the pressure exerted on the magma gets released en route to the surface. This lends a sponge like form to the material which is then called scoria (Summerfield, 1991). If the vesicles are extremely abundant then pumice is formed which can have such a low density that it can actually float on water (Summerfield, 1991). A scoria cone, therefore, is a volcano built up of this sponge like material.

Junior's kop reaches an elevation of approximately 300 m.a.s.l (meters above sea level) and roughly 130m of unvegetated red scoria is visible from the weather station located at the coast. Summiting Junior's a magnificent lake greets the

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"On Marion Island more than 130 scoria cones dot the landscape and they were dated to between 15 000 and 400 000 years old ."



intrepid hiker. This lake formed in a subsidence crater which may either be small, in which case they are called pit craters or collapse craters, or large (exceed 1km in diameter) in which case they are termed calderas (Goudie, 2001). The one at the Junior's summit is small and therefore will fall into the former category.

On Marion Island more than 130 scoria cones dot the landscape and they were dated to between 15 000 and 400 000 years old (Boelhouwers *et al.*, 2008). Dating of the geology on the island, on the other hand, reveals that the islands are less than 1 million years old (Boelhouwers *et al.*, 2008), meaning that the scoria cones are a relatively recent, at least in the geological sense of the word, addition to the landscape of Marion. Regardless of their age scoria cones are a definitive component of the Marion landscape and the highest point on the island, Mascarin Peak (1231 m.a.s.l), is itself a scoria cone. Scoria cones also do not occur in a singular morphology (shape) and the variety of forms and colors found on the island greatly eases navigation when hiking around the island.

Key questions under investigation at the moment on scoria cones is the rate of movement, as well as the direction, of these particles on the scoria cone as a result of frost processes. This project, being under-

taken by Jacqui Davis (M64/67) and supervised by Prof Ian Meiklejohn and Prof Jan Boelhouwers (Sweden), is currently in its fourth year. Movement of particles is initiated, amongst a variety of other potential processes, by the freezing of water within the soil. If environmental conditions are right then a specific type of soil ice, termed needle ice due to its needle-like appearance (hey geomorphologists call things as they see them), is formed. These can actually lift sediment off the ground and upon melting deposits the particle in a new location. This is of course a gross over simplification of the process but it does provide a description of its fundamentals. Patterned ground (to be covered in a later issue) also occurs on scoria cones most notably in the form of sorted stripes.

Scoria cones are therefore not just interesting landscape features in themselves, but they provide the foundation upon which other landscape features and processes can occur. There are still unanswered questions relating specifically to scoria cones but one thing is for certain, the island is going to be here long enough for those who are interested and willing to come to the island to plumb the depths of its secrets.

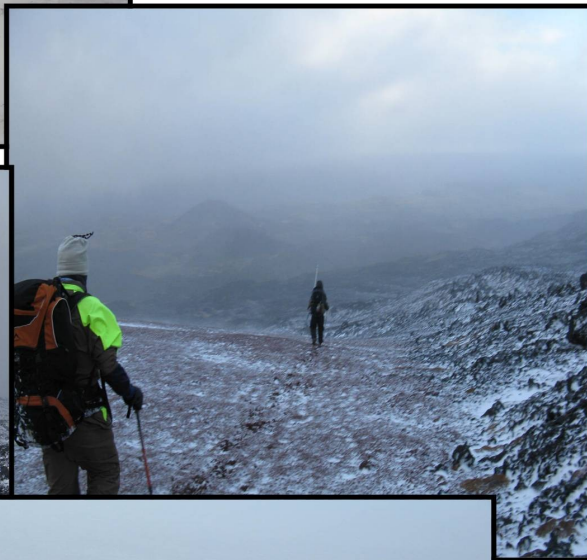
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Up high and yonder: Vincent visiting the coldest, and highest, dwelling on Marion



The Rock Report

With crazy, frizzy hair and a broad smile I greet you this month - posed in my element and looking a little, shall we say, rough around the edges. After a few hut nights one tends to look a tad unkempt, but, as my picture shows, gleefully happy about the situation.

What a pleasure it has been to be back on Marion for another year! Coming back to Marion I always feel as though I have never left, which leaves me with a deep sense of content - a satisfaction that results in me smiling daftly to myself in some sort of giddy daze as I survey my island surrounds. Snapping back to reality with a sigh, I draw my attention to my work here and my new team.

I was incredibly lucky to have been part of a wonderful team (M64), filled with amazing people, and I've struck gold again with M67! It has also been a

By
Jacqueline
Davis



ENO's - either fetching your own from the hospital on your way to dinner, or that *ENO's* will be supplied with dinner. There is never a dull moment with Pierre around. A crowd often congregates in the kitchen close to 7pm in enthusiastic anticipation, but

food added in on the side! Whether it be the light-hearted banter of teasing someone or other; the silly jokes that float about; the sometimes dodgy (but equally funny) comments or *grappies* that cause giggles to erupt from men and ladies alike; the stories about field adventures; or the discussing of some news or sports scores, the conversation jumps and skips around the table at will. The dialogue ranges from the absolute ridiculous (see 'Medic's Explanations - bird strikes') to discussions of historic facts and events, but always encompasses a particular important element - laughter. Dinner ends with a mass cleanup of the dishes and kitchen, before everyone disperses to various parts of base, or congregates for a movie or games in the lounge (or perhaps there are some who hit the *ENO's* behind the scenes!).

What does this all have to do with rocks you ask? Well, nothing really, but next month I will broach the exciting topic of rocks - more specifically Geomorphology and my work here on sediment movement.

For now, I will leave you with a small fact about my very cool marker stones that I use to measure surface movement downslope on Marion: the little 2 cm diameter painted stones can move up to 296 cm in one year! Finally, in preparation for July's issue of The Rock Report, I include a photograph of one of my marker stones - they don't usually smile, but this is a close-up after all!

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wonderful experience living alone on the Island, with one of my favourite parts of a 'base-day' being dinner time. Dinner-time always begins with a message over the intercom system informing base that "dinner is served". This is repeated at least three times (just to make sure, I assume) if Allen is making the announcement, after which he politely thanks us (for listening, I presume). If Pierre has the microphone then there is usually some comment about

the rest soon file in. Dinner-times are many things to many people I am sure, but M67's dinners are never quiet affairs, no matter how good the food might be.

All comfortably placed at our large table in the dining room, the entire team (at least all who are home and not out in a hut) sit and enjoy good food over a vast array of conversation. Actually, it is more like a festive conversation with the

MISSING



WOMBAT.

Grey-brown coat, cute furry face, with powerful hind legs (Beware of the kick). Friendly (mostly). Last seen in the bar with shady characters. Responds to the name Wallace. Owner having trouble sleeping since Wallace's disappearance. Please contact Marion Base: 021 405 9460



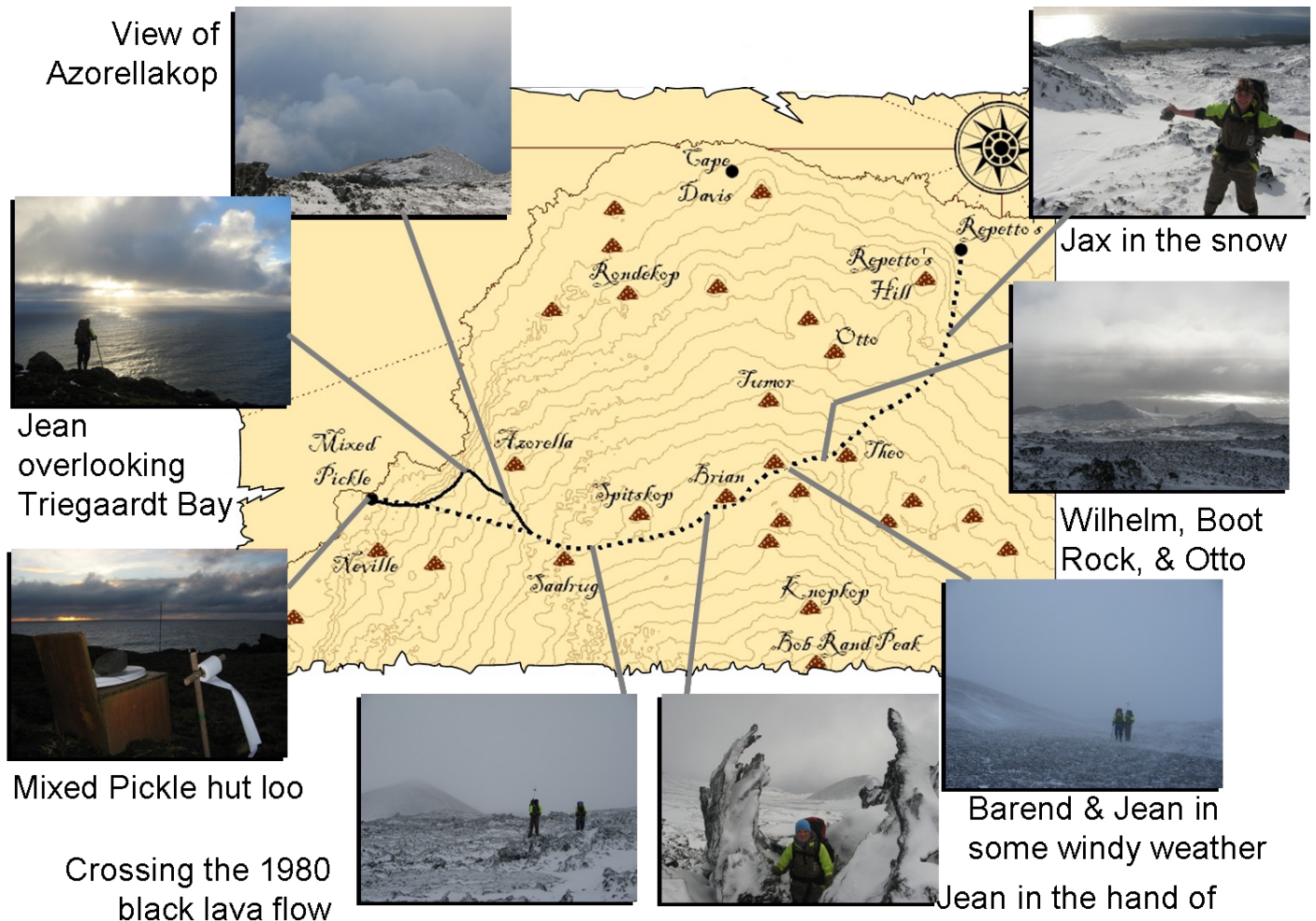
Medic's explanation for bird strikes

As part of my duties on the island, I need to expand on some theories regarding certain burning issues, to keep the rest of the crew sane. So here is my theory on bird strikes:

The birders in our team (namely Clokes and Yolo) tag the birds they find with shiny SAFRING's. When the birds see these brightly polished bands on their legs in mid-flight, they get a huge fright and bank to the 'heavy side' (where the ring is), crashing into our fragile base and labs. Any senior scientist interested in this can contact me for the full publication.



Route of the Month



Breaking News

Above-average sightings of Killer Whales have been noted around the coast of Marion Island. An independent investigation by an inquisitive M67 team member can safely reveal the following;

The disgraced North Korean soccer team has been secretly smuggled onto Marion Island and are living in the E-base. We were contacted a few days ago by FIFA on behalf of Comrade Chairman Chang Dong, requesting that we house their soccer team in our Emergency-Base. The E-base is fully stocked with Bully Beef, tomato sauce and salad dressing. The only means to smuggle the disgraced team that lost 7-0 to Brazil in their last World Cup match, is indeed by the North Korean Killer Whale submarine. We can quite safely confirm

that the North Korean Navy have successfully camouflaged some of their nuclear submarines to look like Killer Whales.

Scanning the radio frequencies over the last few days have confirmed that some of the 'Killer Whales' are communicating in a strange squeaky high pitched noise. Our sealers and birders have analyzed these noises and they confirm that these noises are not known to them, thus the safe conclusion that these Killer Whales are indeed camouflaged as North Korean submarines.

FIFA has accredited the mires outside E-Base as an official World Cup 2014 soccer training area and is out of bounds to all who have not been accredited by FIFA.

We sincerely hope FIFA provided enough soccer balls and we would hate to see our precious penguins being kicked around as soccer balls.

- Anonymous

Wombat Report



Handed in by an anonymous source, this photograph features what may indeed be Wallace the Wombat. It was snapped during the weighing of 100 fur seal pups. Apparently Wallace disappeared shortly after being weighed and was not sighted again. The question remains – **where's Wallace the Wombat?**