

NICO DE BRUYN and CHERYL TOSH

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Interviewer (Q): Lize-Marie van der Watt | Department of History | Stellenbosch University

Respondent 1 (NdB): Nico de Bruyn | University of Pretoria | Bouvet 2007, Marion 60, 63 | 2003 – ...

Respondent 2 (CT): Cheryl Tosh | University of Pretoria | Marion 63 | 2006

Q: Thank you. I'd first like to know what is the background to your involvement with Marion Island and the Marion program?

NdB: Okay, I'll start. In 2002, I did my Masters with Marthan Bester and as a consequence of that obviously got to know more about the Antarctic program, especially Marion Island. I'd been very interested in Marion Island since I was a little boy, and I was always very, very interested in going down to the island, or to Antarctica specifically. But then I learned about Marion Island, and so in 2003, I applied to go down to the island with Marthan's group and with Peter Ryan's bird group, the Fitzpatrick bird group, but at that stage it was run by Marine and Coastal Management – both sides of the ... So there were only two birders; one was for Marine and Coastal Management, one was for the Fitz. But MCM ran both, both sides at that stage. Anyway, I applied for both. I couldn't go as a sealer, because Marthan had already, by that stage, chosen two candidates for that year, and so I went down to Marion Island in 2003/2004 for the M60 team as a birder, working on Fitzpatrick work, and ... Yes. And then I came ... When I came back, just before coming back, Marthan offered me a PhD, which I obviously accepted at that stage, and I went ...

Then, following that, I went back that November for a construction voyage with John Cooper, to follow up on some bird work, some Giant Petrel work. And then the following year, 2004/2005, I went on a takeover, and at that stage Cheryl had started her PhD as well with Marthan, and she also joined us – and she'll tell you about it. In 2006, I went as a sealer for a year, with Cheryl; 2006/2007 – it was a year as a sealer with Marthan's group. And in 2008, I went back again for the takeover, and ... But between that – the 2008 takeover and my end of my first year – I went to Bouvet Island for two or three months, I don't remember. But that was ... Well, it was the Norwegian Polar Institute expedition; the logistic support came through SANAP. So the logistic support came through SANAP at that stage, and there were three South Africans on that particular expedition to Bouvet; three other out of the five. And the other two are both ex-Marion expeditioners as well, Greg Hofmeyr and Petrus Kritzinger. So Greg Hofmeyr and I actually spent ... My first year on Marion, as a

birder, that was his third year on Marion as a sealer and his last year on the island as well. So he showed me a lot of the ropes to do with the sealer program. I did a lot of the sealer work at that stage as well, because his colleague on that team, Fhatuwani Munyai, was injured. And so ... He was injured early on in the winter already, so I ended up doing a lot of the seal work on top of my bird responsibilities – which was great, because I learned a lot there. Yes, so that's sort of a brief history of how I'm involved with that; yes.

Q: Okay. Cheryl?

CT: I started in 2005 with my PhD, with Marthan, and I had the opportunity to go for a takeover and a construction voyage in November, to deploy transmitters, and then... Yes, Nico and I, we were married in 2004, so together we were able to as a team in 2006/2007. And I've been busy with my PhD up until now. I've maintained a link to Marion Island through the work that I've been doing academically.

Q: What work was that?

CT: It's research on the migration patterns of Southern Elephant Seals from Marion Island.

Q: And when are you planning to finish?

CT: Now; I'm almost done now.

Q: Getting your degree in December then?

CT: September.

Q: Oh?

CT: Yes, we graduate in September.

Q: Congratulations!

CT: Thank you! Hopefully.

Q: You said as a little kid, you were interested in Antarctica really. How did that come about?

NdB: Well, I've always been ... My love for wildlife and for nature started as soon as I remember; in fact my grandmother tells me that even when I was ... before I could even talk, I was very interested in all crawling bits and bobs. And they had a house in Mariepskop, which is close to Orpen Gate of the Kruger National Park, so I often went there for holidays; I spent a large amount of time there. And they also lived on a farm, where I spent a lot of time. So I've always been very interested in wildlife and in nature, and in fact that's always been what I've wanted to do, is work with wild animals. And then, with that of course, one reads around and you watch shows or listen to radio things and all that, and I was fortunate, because lots of my family

exposed me to especially the Kruger National Park and the Kalahari, which still ... which is still a big part of my life, and ... And so because of that, yes, I got very interested in that. I remember clearly at some stage reading, in the National Geographic, an article about Antarctica, and I was still young; I was still small, maybe twelve or so, and I remember then being really fascinated by all that ice and the fact that this place was just so far away and untouched. And that's always been a part of me I think, that I love places that are far away, isolated and relatively untouched. And so that was the sort of attraction for me about the Polar regions; yes.

Q: And when did you first hear about Marion Island?

CT: I heard about it starting my undergrad year at the University of Pretoria. But we had lectures with Steven Chown at that stage, and I remember him saying he does what he does, because he gets to go to cool places, and things like that. So that was the first real exposure that we had; yes.

Q: We already spoke a bit about your jobs on the island. Can you maybe elaborate on a day in the life of a birder or a day in the life of a sealer?

NdB: Yes ... Well, as a birder, life is busy and you ... But it's very cyclical, so you During the summer, you're very, very ... you're exceptionally busy with Grey-headed Albatross work, Wandering Albatross work, skuas, White-chinned Petrels ... all sorts of work. And it varies, what you do. So there's [..?] components to it, so you're ringing birds and you go in re-site them; there's survival analysis, relatedness analysis work that ... So you go out and you check, are chicks surviving over time? And of course, with the new age of technology, there's a lot of deployments of satellite tracking devices and geolocation devices ... Diet sampling ... So those are sort of the things that made up my work as a birder. And I remember it being exceptionally busy, and also because I was helping with some seal work at the time. But even just the bird work was busy. But it is an order of magnitude less busy than being a sealer. And in the year that I was a sealer, I mean I've never in my life worked that hard physically. And the hours are long. The physical labour is hard. But it's incredibly rewarding, so ... And there of course, it's mostly mark recapture of Southern Elephant Seals, that keeps you busy throughout the year, and then thrown in with that there's Fur Seal work – weighing, scat sample analysis ... You know, all sorts of things. And of course I initiated a few things during my sealer year for my PhD, which entailed some added bits to the program, and that was photogrammetry and identifying pups of mothers and so on, which was difficult before that. Yes, so the day in the life of a sealer ... I would have to say ... Yes, you're up early; you're out there all day, going slowly from beach to beach, checking Elephant Seals ... Depending on the time of year, you may be tagging Elephant Seals; as soon as you're

done with that, you may be deploying on an animal ... a satellite device on an animal at some beach somewhere ... And 12 to 13 , 14 hours later you get to a hut, and then you have a lovely evening in a hut – you usually read a bit, eat a lot, and the next morning you wake up and you do the same thing again on a different section of coastline. Perhaps on that day there's Fur Seal weighing thrown in, or something like that. I mean, the one thing that stays constant is that it's a lot of work. And it's constant and you need a lot of self-discipline to keep it up, because the weather is terrible, of course, and ... But the animals don't wait, so you can't wait for the weather; you have to get out there. But it's wonderful. I mean I would do another year any time; it's a fantastic experience.

Q: And how was it for you? You were also a sealer?

CT: Yes, I was also a sealer. It was tough. It was hard work. I was very, very tired when I finished and if anyone asks me if I would do it again, I'd think very carefully ... But I really enjoyed it. It is rewarding. It's a lot of fun. You have a lot of new experiences. But it does take its toll on your body.

Q: On your body?

NdB: Yes, it's physically very demanding.

CT: Yes.

Q: Did you become both very fit, or ... ?

CT: Yes.

NdB: Yes; I've never been fitter in my life than that particular year. And yes ... It's quite remarkable, you know. In my birder year, I was so fit, I could eat what I wanted ... I would never ... I mean, I lost weight even, still; and one walks, I calculated, maybe 3,000 km during that birder year. And I thought my goodness, you can't work more than this. And it's incredible how much more work it was as a sealer, you know, where again I calculated one walks over 6,000 km on the island during that year. And that's just with your normal work duties; it's excluding any fun walks. So that just gives you an idea of how you're spending so much time out in the field, you're covering so much distance, but all the way, in-between, you're working – it's physical; you're picking up one and a half ... *ag*, 150 and up kg-Elephant Seal pups; you're weighing them You're weighing thousands of Fur Seal pups over the course of the year. So yes ... So that's why, for Cheryl and I as well, it was good to be there together, because you need to understand who you're with. You need to have a very good working relationship with whoever you're there, because you can't do this alone; it's not possible. There are facets of it that can be done alone, of course, the walking part. But when you're actually out there in amongst the harems or whatever, then you can't ... you know, you can't work alone.

Q: Describe your first journey to Marion Island.

NdB: That was 2003 ... Cheryl and I had already at that stage been together for about four years ...

Q: Where did you meet?

NdB: Here.

CT: At university.

NdB: First year of university. And so we'd been together for many years already at that stage, and we took the big decision that okay, I'm going to go for the year and Cheryl will be here, waiting. And in the end, well, here we are, married; it paid off. But so that was a big part obviously of going to the island the first year, is leaving for what I then knew were to be 13 or 14 months. And communication wasn't nearly what it is now, and Cheryl was here, on this side. And so the excitement of going to the island for the first time, actually finally experiencing the Polar regions, the sub-Antarctic, was enormous. I was tremendously excited about that. But of course there was, you know, this other facet to Cheryl staying at home, wondering goodness, is this going to work? A year is a long time ... and all the rest of it. And looking back now, that year is like a blink of an eye. And its' amazing – if you stay busy, you keep your focus on the island, what an enjoyable experience it is, and how much you grow. So going down to the island that first time, I would have to say: incredibly excited to see well, what does this place look like and how is it in terms of ... how do you experience it. Here, you hear about the bad weather, the team situation ... We were only 11 in that team, so it was a small little team, and ... Yes, how is the team situation going to pan out for the year? How are you going to survive that in itself? How are you going to survive the work you have to do? But then also, how are you emotionally going to survive being separated, physically separated, from your girlfriend or family members or whatever it might be. So it was a challenge going down the island, in many ways.

Q: And your first journey?

CT: My first journey was easy. No, because I went ... I was one of the lucky few who could go down for a takeover before making up my mind whether or not I wanted to go for a year. They actually convinced me on the island that it's a good idea to come back for a year.

NdB: In Mixed Pickle Hut ...

A: In Mixed Pickle Hut.

NdB: Marthan and I ... !

CT: So for me it was really ... it was really, really nice. I went down to do some work. I didn't have any pressure about being away for 13 months. And it really ... You're fortunate it you can prepare yourself with a trip like that, because then when you do go down for 13 or 14 months, you're prepared; you're much better prepared and it's not so much of a shock when you get there. And the other thing is, going with Nico was lovely, because I didn't have that stress of being separated or anything like that.

NdB: Yes, that; but also, I'd been before for a year, and so that was – I think for both of us – comforting that I knew what the year experience held. And also, very importantly, I had prior experience of the work, and that's very important, because if it's your first time tackling this thick work plan, which is a book, then you're concerned, you know. Are you going to do it right? Is this the way you want to do it? This and that and so forth. So yes, that second year was magic; it really was.

Q: Would you have gone for a year without him?

CT: No. *Nee, ek dink nie so nie; nee.*

Q: What did you expect before you first went?

NdB: Well, I think I expected what I got. Because I'd been very interested in the Polar regions for many, many years, I had obviously tried to find out a lot about it, and so I had spoken with people like Greg Hofmeyr, who were here, at Tukkies. And the year prior to that, I did my Masters, as I said, in Namibia, on Cape Fur Seals, and Steve Kirkmann was there at the time, and he's a past sealer – he did two years on Marion Island; one of the legend sealers – and so of course, there, you can talk to the man; you can gain a lot of insights from him and so on. And I also met, on Ichaboe Island at that stage, Pete Bartlett, who's also a legend of the cat hunting years, and he'd been to Marion five times. Yes, and so I started to meet people who had spent years on the island, and that of course made a big impression on me and it allowed me to know more or less what was waiting. Of course there was a lot of new ... a lot of surprises, still. But I expected to work hard; I expected it was going to be a ... you now, the weather was going to be terrible. I expected it ... You go through ups and downs, emotionally and physically, but I also expected it to be a hell of an adventure, which it was. So no, it was magic; I loved that first year. It really, really was magic. It was more stressful in terms of the emotional side of things, but it was magic.

Q: How did you communicate during that year?

CT: Telephonically; and email ...

NdB: Yes, telephone and email. But the email system at that stage was very new or limited or something, I don't know. So we had periods where it would just stop working for say two or three weeks. And then there would be no communication, telephone or email. And then after that, I would be able to contact Cheryl again and say well, this

is what happened in the last three weeks. Yes, so it was very ... it wasn't what it is now. And you could only send little text messages – 15 KB or 20 Kb – because the system couldn't handle photographs or anything. So Cheryl had no idea what it looked like from my perspective, as you would today with video clips and photographs that you could send home. It wasn't possible then.

CT: But Nico was very diligent about sending details through of every day: what he did today; who did he speak to ... So that really helped me a lot, because I could read. And I sent emails back as well diligently.

NdB: Yes, essentially what we did ... because I don't keep a *dagboek*; I don't keep a diary here, in my everyday life, but on expeditions, I always do, and I've never missed a day. So I've got a documented diary of every single day that I've spent on an expedition, be it a takeover, a year, Bouvet, or whatever. And in that first year I decided well, rather than just write this diary in a book and then copy it across to tell Cheryl what's happened, I'll just write my diary as an email.

Q: Okay ...

NdB: And so every day, I wrote my diary, emailed it to Cheryl. She could save a copy of it on this side; I could save a copy of it on my side, and it's electronic already. So for that first year The rest of the years are not; it's all documented in little note books.

Q: Okay. We already spoke about this a little bit, but what was the hardest part of the job? Was it physical exertion?

NdB: Well, I think it depends on ... again, what you're going at. So, if I had to think, as a birder ... I remember my challenge being as a birder, worrying that you're not handling the animals correctly; you know, that you may be hurting the birds, or you may be ... whatever. Because the birds are strong, but they're still birds. So I sort of felt that they're, you know, that they're fragile – which they aren't, but one has to be careful. So I remember that being a bit of a challenge. The walking is always a challenge – it doesn't matter what work you do. But the biggest challenge that first year was definitely that separation, which I think we dealt with very well, and it was very good in the end – not the separation, but what one learns out of that was very good, for the birder year. For the sealer year, by far and away, it's the physical continuous labour. It's just the waking up at five every morning until ... whatever – 12, 13 hours in the field; it doesn't matter what the weather's doing and it's hard physical work with aggressive, often high-strung, animals, many of them being very naive of humans, so again that was a challenge to not take on their aggression and revert it back on them, because that's just instinct for them. And they're not actually ... many of them are actually very shy of people, you know.

CT: It's only us that think so ... !

NdB: No, but really!

CT: I mean, I've seen videos of us working with seals, and photos. And just ... When you watch someone who's experienced, they're just calm. It's like ... It's calm.

NdB: But you have to be.

CT: You have to be calm, but you have to be alert; but calm. And if you see someone that's not experienced working with those animals, they're jittery and jump ... you know. But if you're calm, you look around you ...

NdB: That makes it more difficult as well, if you're not calm.

CT: Yes, but if you're calm, the animals pick up on that as well. So it's just ... Many people won't agree with us, but we're biased ... !

NdB: We're biased about them; yes. But in truth though, seals, while they are exceptionally aggressive during certain times of the year, especially in breeding season, they're actually pretty scared of humans. They're naive, so they're not sure, but if a human is now within a certain distance of them, then they'd rather back off than do something aggressive. But if they do turn aggressive, like Cheryl says, being calm among the animals really helps with the word, because they can sense if you are aggressive. If you're not, then they stay calmer as well, and that helps.

Q: So what was the biggest challenge for you?

CT: It's funny, because ... I'd have to say the physical part, but you become so fit later on that it's not a ... it's just a part of the job that you have to do. But during the peak or the busy times ... You have breeding season September-October, where you have to do your work every seven days, or there's a census every seven days – that's a continuous cycle, with one day in-between that's used for something else; it's not really a rest day, but ...

NdB: Definitely not.

CT: It's just a day that you don't walk yourself silly. And during that time, you become very fit, so by the end of the year you can walk up mountains; you can explore to your heart's content. But just to get there, and to know the next morning when you wake up and the rain is pouring and you have to put on your work clothes and go outside ... I think that's the hardest ...

NdB: That's the mental part of it.

CT: Yes, it's the mental discipline, or stamina, that you have to exert to get out of bed and do the work to the best of your ability, because sometimes you just don't ...

NdB: You've got to keep going.

CT: Yes, keep going.

NdB: You know, you've been going non-stop, say for two or three weeks, no rest, 13-hour days ... And to wake up the next morning, when the rain is slashing against the side of the hut, and to maintain what you've been doing for the previous three weeks ...

CT: Yes, it's more a stamina ...

NdB: Yes, it's a mental stamina; it's a mental getting up and just ignoring what you hear in terms of the weather, and being focused on the work that you have to do and getting out there and doing it. And Marion rewards; once you get out there, it's magic. But that's often the difficult part.

CT: Yes, I think we do become thick-skinned to the weather.

NdB: You have to; you have to. You can't be shy of the weather, because the weather's always bad. So you'd never get any work done.

CT: Yes, but it's lot of ... You know, if I look back on it, I only have good memories, or I only have a good experience to take home with me. And I think that's because working together we could motivate each other to carry on going as well. I don't know who did most of the motivating ... !

Q: Who did most of the motivating?

CT: Nico, having been there before, he's the stronger one ... He did ... I had to make an effort to keep up with him, but at the same time he was considerate of the fact that I'm not as strong as him, so we walked a bit slower. But we got where we wanted to get and we did what we had to do.

Q: What's the hardest part of life on the island?

NdB: In terms of the social aspect?

Q: In terms of the social aspect, or in terms of not your job.

NdB: I think the thing that ...

CT: Skivvy!

NdB: *Ag*, skivvy is part of the deal. You know, you ... I think the thing that's most difficult, and generally it didn't bother me much – definitely not in my first year, but in my second year – having one really difficult person on a team, that causes ructions without realising what they're doing, without realising the extent of the discomfort they're causing, or the unhappiness that they're causing, for other people in the team. I think that was what upset me, just to the point where you feel it's selfish of that person to ... They're just thinking of themselves and their own problems and trials and tribulations, and they forget that everyone is in that experience together. Because it's a big part of ... You have to go out of your way to make sure that the

team morale stays up. So you don't necessarily feel like joining this party this night, but you do anyway, because you're doing it for the team. And that ... In the end, that starts making life a lot easier, because people ...

CT: Relax ...

NdB: People relax about ... You know, when you make an effort, everyone else feels that they should also make an effort. And when people make an effort, things go better. So when there's one person in the mix that's a sour face or that's not making an effort, who's just concerned with their own problems and trials and tribulations, it makes ... it can make life a bit difficult. Why I say it didn't bother me too much, is because I'd just ignore it. But there are times where it's not possible to ignore it, once in a while. And then it can be a little bit unpleasant for an hour or two, but nothing that a smile can't fix.

CT: But I think another thing is that in that second year, Nico and I could talk to each other, which I think ... You know, not everybody has that luxury of venting their inner feelings or talking about how they're feeling. I mean, Nico understands when I say I miss my mom, because he knows my mom. And ... Things like that. When someone's upset me, I can go and tell Nico without any fear that is't going to come out somewhere along the grapevine or ... You know, we had it between the two of us, which was nice. I think other people might have been a bit jealous of that. And we always had someone to go out into the field with, so the two of us would walk up and explore the mountains. Not ... You know, if someone else on the team wanted to make that effort, they had to make a bigger effort to get someone to go with them, or to go alone ... And that's difficult if you don't have ... I mean, we were very lucky. I think that was an ideal situation.

NdB: Well, that was the contrast, I think. Like my first year, we had ... It was a very good team, but it was a very lonely team. So everyone just minded their own business really. And so it was difficult to get people to go out into the field with you and so on. So I did a huge amount of walking and exploring alone, which isn't ideal. But it I was going to see the island and do my work, I had to. But that's where it comes out much clearer that you need to make ... Every person on the team needs to make a big effort, even if you don't feel like it, for team morale. And so I ... That team was good; I had no issues and all that ... And neither did I have in my second year. But is also depends on your own attitude. If you let little things bother you, then they will. If you don't ... I always say: just water of a duck's back. That's the way to go through it. And if there's a serious issue, you don't go and talk to someone else about it; you go and talk to that person and sort it out. Because that's where the major problems arise, and that's one of the things that happened in the second year. Person A would be unhappy with Person B, but would then go and talk to Person C about it. And then

nobody knows really where they stand, until this thing explodes – boof! – and then the team is all upset; talk to each other and then it's sorted out. But it needn't get to that point.

CT: Yes, the thing is, those sorts of things sort of permeate into a small group of people. If two people have issues, it permeates, because ...

NdB: Because it's your family ...

CT: Yes, and then the other people don't really know what's going on, and they're unsure about their own situation. But I mean, that said, we had minor problems.

NdB: Minor, minor ...

CT: Compared to ... We didn't even have problems really; it's just ...

NdB: No. We had a fan... It was really a fantastic year. Both the years that I was on the island, for me, were fantastic years. But you may speak to other people on those teams who feel that this year was maybe ... that there were problems, whatever. And again, it comes back to your own attitude towards your team, your experience and why you are there. And I made a concerted effort before going – but as I do in everyday life – to be considerate towards people; to be kind, and to go with things optimistically, because that's the way that I like to do things, that make me feel nice – to be optimistic. And I think it helps as well for other team members if there's someone who's optimistic on the team. And so, in both my years ... There were other people, who were very optimistic sort of people as well, and so, if there's problems, *ag*, don't worry about, man; water off a duck's back! And then you carry on. So it depends on the person's personality as well.

Q: Would you say it helps sometimes that you have to do a lot of fieldwork? That you're not at base all the time?

NdB: Yes, that helps a huge amount; a huge, huge amount, because you ... In fact, you can't worry about the things that a lot of the base personnel worry about, because you just don't have the time to worry about it. You have to go out and do your stuff in the field. And because of that, you get out, you're experiencing this wondrous place with all its own trials and tribulations that you have to go through, and you grow as a person, enormously; whereas people who stay at base all the time, they get what is called cabin fever, you know, so they start to go ... Cabin fever is a big problem. You sit in base for ... I don't know; I've never sat at base for more than a couple of days ... But if you sit in base for weeks at a time, like what some of the base personnel do, then you're going to get upset with small things; you're going to get upset with someone not washing their coffee cup every morning. I really don't give two hoots if someone didn't wash their coffee cup, because I wasn't there! So I see it – *ag*, it's okay – for that day. And that's why I always maintain it's very important,

even for base personnel, to get out; and for field personnel to say, early in the year, to the base personnel 'come on, get out', so that the base personnel can gain some fitness, so that later in the year, when they're asked to go with a field person, it's not a drag for the field person, because now this base person is so unfit that they can't keep up.

Q: Okay.

NdB: Yes, so I mean it goes both ways. But going into the field is a major, major plus point. It's why you go; it's why I go. I would never go just as a base person, never.

Q: Let's move away from that. Tell me a bit more about the seal program that you're involved with on Marion. And was that continued at Bouvet, or what did you do at Bouvet?

NdB: Okay, it's a very big program. It was started in 1983 by Professor Marthan Bester, and it's been going along nonstop since then. Then in 2004, when I came back from my first year on the island, having experienced a bit of the seal work, I started with my PhD. And during that time, sort of, I got more involved in the running of the program. And in 2006, when I went to the island again, then I sort of became the field operations manager of what was going on in the program, under Marthan's group. And so we consolidated a lot of the new bits and bobs that were added to the program. But essentially, the foundation of the whole program, for all the 26 years, is the Elephant Seal Mark-Recapture Program – so it's marking of all Elephant Seal pups that are born on the island, every year, and re-sighting all Elephant Seals that haul up onto the island throughout the year, nonstop for 26 years. It's the biggest program of its kind for Elephant Seals; it's the only program of its kind in the world currently – the other ones that were running were stopped; the MacQuarrie Island program is not running anymore. And so that forms the foundation of what we call the population demography studies for the Elephant Seals, so to see why the population does what it does. And so, leading on from that, there's a lot of additions. So we look at the mass differences – the gain and loss of Elephant Seals over time; of pups, of adults – and this is where the photogrammetry stuff comes in; we're using photographs to weigh the Elephant Seals; looking at how the condition of mothers relate to their pups, and then of course the foraging side of things, which Cheryl is working on. Obviously, 90% of their lives they spend at sea, so we need to know what are they doing out at sea? Where are they feeding? What are they feeding on? And all that. But surrounding that, they are top predators, but they're not the only ones. There's the Fur Seal species; there are killer whales – all that are top predators in the Southern Ocean. And so we've more recently started looking at how these interact with each other. So we're looking at Fur Seal populations on their own – what their demographies are doing, but then how that relates to Elephant Seals as

well. And ... And then the killer whales, of course, are *the* top predators, so they have an impact on Elephant Seals, on Fur Seals. So we're trying to find out ... just basic stuff: what ... How many are there? What's their social structure? What are the pods doing? What are these animals feeding on? So, in a nutshell, that's the Marine Mammal Program; that's the sealer program of the island. And it all has been under Marthan's leadership. And then recently, when I finished my PhD and so on, I've taken over parts of that leadership of the program, but he remains the principal investigator, being the senior scientist that he is; I'm still starting out in that sort of thing and so I need to build things up. But in a nutshell, that's what it entails, the work, the sealer work; and that's why we do what we do, to find out about these top predators in the Southern Ocean.

Q: Is that also part of what you are doing?

CT: Yes.

Q: And are you going back to Marion any time soon for a takeover?

CT: No, not in the next 10 or so years ...

NdB: We have babies ...

CT: We have babies, yes. Well, this one's on her way now, and the other one I don't want to leave; it's just a little bit too long.

NdB: He's only a year and half now, so ...

CT: Twenty months.

NdB: So for both of us to go away ...

CT: And he's a sensitive child.

Q: Okay; I understand. The other thing I wanted to ask: how would you feel about tourism to the island?

NdB: No! I think, to expand on that, there are various issues to do with this. Of course you want people to experience or to appreciate that there are these places in the world, but in the same way that I cannot go to restricted zones of Kamchatka in Russia – no matter how much I want to go there; I really want to see those areas in Russia; I want to see those volcanoes, and there's all this stuff, I can't go there, and I accept that. I can't go there and I appreciate that those restrictions are there in place to protect these areas. Because if tourists overran this place, you know, then it wouldn't be what it is. So from that perspective, I believe Marion Island should not have tourism. From a more logistical perspective ... or wait, let me just retrace to the previous point ... The value of the science is of such an order to South Africa and to the world as a whole, that the complications arising from adding tourism to the mix

are ... If you just do a basic cost-benefit analysis, you're losing scientific prowess in this place, which is a flagship scientific station for South Africa, for a few rich people to experience penguins and seals. So the cost-benefits are just ... Yes, it's a very exclusive tourism destination, so who are you actually going to benefit? Probably not 99% of South Africans; whereas 99% of South Africans are benefiting from the science, directly or indirectly, even if they don't know it. So straight on that perspective. The logistical perspective on it ... I don't believe that the logistical requirements for such an exclusive tourist destination are there. Yes, there's a nice new base, so people can stay there, but someone that's paying a R100,000 to go to the island expects immediately medical evacuation from anywhere to get to Cape Town or wherever within minutes. DEAT cannot offer that currently. It's not possible. A helicopter can't fly from Marion to Cape Town – there's no landing strip, which there shouldn't be. So just from a logistical perspective, from the tourism side of things, you cannot perform a really sustainable tourism enterprise for these really exclusive tourists without running into some very serious legal issues and other things. So no.

CT: I think the other thing is it's a sensitive environment. The terrain is fragile; the animals are fragile. So it's ... You can't predict what the impact is going to be, but it is a sensitive environment, and even as field workers, you see the impact that the field workers have in terms of walking paths and penguin breeding colonies, and if all of a sudden there had to be helicopters flying over for a large part of the year, it does impact on the ...

NdB: Massively ...

CT: On the seals, at base and ...

NdB: Yes. And I mean the tourists will say yes, but researchers have a big impact on animals. I agree there are some impacts that are very direct, which tourists won't have. The tourist is not going to go up and try and tag an Elephant Seal pup. However, if again you weigh up the benefit in terms of the scientific progress that's coming out of this, which is not to the detriment of the species, because this has been tested and published; it's not to the detriment of the species. So while there is some disturbance from researchers, I believe most of it is justified by the science. However, how can you justify – even if there's less disturbance by tourists, there are more feet, because there are more tourists – can you justify the disturbance, even if it is less than what a single researcher has versus a single tourist? Can you still justify that that tourist is causing any disturbance whatsoever, so that whoever can make money, and this exclusive tourist can see a penguin in a pretty place? You know ... So it's a difficult debate, but I'm ... on those grounds, I'm against it, because I don't believe that the benefit of it outweighs the cost.

CT: Are there any other sub-Antarctic islands that have tourism?

NdB: Yes, there are – MacQuarrie and South Georgia and so on. But it's very historical tourism as well. But also, the other thing is, those islands have had whaling stations. They've had human occupation in a much, much greater context than what Marion has.

CT: And they've got a lot more invasive species.

NdB: Yes, they've already got invasive species, so the conservation impact of tourists is not worsening the situation. Marion Island ... Prince Edward Island is quite possibly the most pristine sub-Antarctic island that's out there. With its proximity to Marion, even if you don't allow tourists to go to Prince Edward, you're still running a risk of Prince Edward being affected. Marion on its own is still very pristine relative to Amsterdam Island, MacQuarrie Island ...

CT: Kerguelen...

NdB: Kerguelen... All these places. And so, you know, from a conservation perspective, I don't think it's justified if you compare it to say the tourism that's say on South Georgia or on MacQuarrie. We don't have rabbits and all the rest of it running around; they do. South Georgia has got reindeer, you know; I mean, we don't have that. And also, South Georgia's enormous, so the great majority of the island is out of reach of anybody, never mind tourists; whereas Marion Island is tiny. So all these things I think are very problematic for tourism to take place.

Q: In a similar vein, how do you feel about the artefacts on the island of human history, say for instance sealer sites – do you think they should stay there *in situ*, or should they be brought to South Africa and put in a museum?

CT: It's a difficult one ...

NdB: Yes, I think ... The thing is, over the years that I've gone even, I've seen deterioration of artefacts in the field. So yes, romantically speaking, it's wonderful to leave the artefacts out in the field, but the gun that was there, in the Swartkop's little cave, eight years ago looked different to what it looks today. It's rusting away – in X number of years it's not going to be there anymore. So by all means, I think ... you know, store these ... Don't just store them, display them in a museum. But, having said that, then the museum needs to be properly planned, because there are millions of artefacts that have left the island, supposedly to be put in museum collections, that are now in private possession and that are probably not lasting – you know, they're probably being ... because they went into the top of a cupboard or something ... And so there's a very serious need, I believe, to establish a link with a leading museum, like Iziko or whatever, the South African Museum, and saying guys, let's do this seriously; let's have a serious sub-Antarctic/Antarctic display area – a large room

that you can have a whole old hut, cut in half, put into this, so that people can see this what it looks like; this is ... You know, if you go into other museum of Antarctic exploration, it's magical, around the world. South Africa, we have a legacy of Antarctica, but we don't have any museums to display it to the public. And this comes back to the tourism point: if we don't even have museums to display what we have, why open the island to all the threats and disruption that tourism would entail, for a few people, when you can actually have a proper museum display for school kids, for thousands ... for millions of people, right here in South Africa, which will benefit South Africans, unlike exclusive tourism.

Q: Okay. You mentioned that Marion is very important for science and science is very important for Marion. Can you elaborate on that?

NdB: Yes, okay ... So ... It's a long one to answer ... From a purely scientific point of view, South Africa has gained a huge amount – and any nation wins a huge amount – out of scientific prowess. Marion Island contributes enormously to the scientific status of science in South Africa, put it that way. Take away Marion Island's science, and you take away a very large proportion and a very large impact of South African science. So just in that context, science on Marion is very important, because it's productive; it's got global impact, and it's important to dealing with knowledge of not only applied science – concepts of the impact that humans have and all this sort of thing; so applied stuff – but also just that age-old quest for knowledge; so pure science, for the sake of knowing how things work out there. From a human resources point of view, many, many scientists, young, aspiring scientists, have gone through the Marion Island system and have come out tops – they are now employed in major departments around the world; academically, governmentally ...

CT: Technically, logistically ...

NdB: ... logistically ... All of it. So there are people who are in very high scientific positions around the country. For example, Sam Ferreira, who's very high up in national parks' science, he was a Marion Island cat hunter. And there are many others as example. So you know, these are the ... From a human resources point of view, the development of scientists through the Marion program – there's been hundreds, and solid; these are solid people that are being "bred" really, if you want to call it that, in terms of science as a whole. Then from the point of view of conservation, it's vitally important, because of the conservation of the islands, and conservation hypotheses and theories for other systems that are similar to Marion, or where one can apply what you've learnt on Marion to other systems. And the extent of that is immeasurable. You can't actually ... You know, there's ... If you just look at the citations on all the publications that have come out from Marion Island, thousands of publications from around the globe ... So take away all the citations and all the

knowledge that was gathered in Marion Island, and a whole chunk of international science starts to break down; starts to fall down. So it's a long and difficult question to answer, but that I would say, in a nutshell, is ... You know, the scientific legacy of Marion Island is of such a calibre, such a magnitude, that it's immeasurable. You can't actually measure what it would be like if it was gone.

Q: Anything you would like to add to that?

CT: No, I think Nico has said ...

NdB: Sorry, Cheryl ... !

CT: No, but it's good. I think it's easier if someone, one person, puts it into words. But I agree with Nico; there's nothing that I want to add.

Q: What changes on base during takeover?

CT: During takeover ... Well, it depends on whether you're coming or going.

NdB: Good point, yes; very good point.

CT: If you're going and you arrive on the island, obviously the base that you experience during takeover is the first experience that you have. And it's crazy. There's ... It's crazy in terms of the number of people that are there, the schedule that is set up to try and accommodate all these people ... You have to deal with sharing a room, sharing a bathroom ... So it's becomes cramped.

NdB: Crowded, yes.

CT: Well, it is crowded. And that's your first experience, which I must say I think it makes going to the island a little more difficult, because for six weeks you've got no idea what it's actually going to be like. That's the ...

NdB: That's where the old saying comes from of you haven't been to Marion, you haven't experienced Marion, if you haven't been there for a year. And it's because the takeovers are so tremendously different from the rest of the year.

CT: When that ship leaves, you ... It's like just an enormous amount of pressure that gets relieved. All of a sudden, you've got space for yourself; you've got freedom to eat what you want to eat, when you want to eat; you've got freedom ...

NdB: If the team leader allows it ... !

Q: Do you find that everything is in the spirit of one is learning from one another?

CT: You've got freedom to ... you know, to shower when you want to shower ... No one's competing with you for ...

NdB: Yes, you're your own boss.

CT: Yes ... for a washing machine or anything like that.

NdB: It's just magical.

CT: Yes. And it's just ... no pressure from anybody else; and that's really nice.

NdB: Yes. For example, in takeover, if you want to eat a rack of ribs for breakfast, you can't, because there's a chef that dictates what you have to eat. During the year, if you wake up and you really feel like a rack of ribs, then you go and get one out of the freezer and you go and make it.

CT: Yes.

NdB: And that's the sort of freedom that is just fantastic; it really is.

CT: Yes. When the ship left, we put all our tables together in one big table in the dining room, and everyone sat around the table when they ate. So that also changes. All of a sudden, you become a family. You interact more with your team, you know, and then your year starts moving along, which is nice. And then, if you're leaving, it's like an invasion into your home, and ... But luckily ...

NdB: Yes, that's difficult; yes.

CT: It's difficult in the beginning, but then, as the takeover progresses, then you start getting excited about packing your things and you go ...

NdB: Seeing your people at home, yes ...

CT: Seeing your people at home.

Q: What's the most difficult thing about coming back? Or the nicest thing?

CT: I think for me it's a little bit sad in terms of the prospect of ... I don't know when I'm going to get to go back again, which, luckily, Nico hadn't had to deal with.

NdB: And hopefully won't ...

CT: Hopefully won't deal with it.

NdB: Yes. No, that for me is ... That's the ... I cannot think ... I can't imagine never going back. It would break my heart, you know. It's so much a part of who I am. I think the most difficult thing for me of leaving is leaving the island. I mean, the lifestyle is just so magnificent. Even though you work so hard and you've got the challenges of missing family and friends at home, the life ... It opens your eyes to what is really important in life. It is not important what Paris Hilton is wearing currently; it is important that you have a warm shelter with food in your stomach at night; and the feeling in your heart of having done your best with your work for that day, and having loved it. Those are the most important things in life. And coming back, there's a lot of complication added to your life; and that sucks.

CT: Yes, you have to start paying again ...

NdB: You have to start ... But aside from that, it's just ... paperwork and admin and ... You know, you have to deal with people that are not concerned about your daily situation, whereas on the island everyone knows what everyone else is doing every day. And so you can come home and you can share that with people. Whereas here you ... I remember ... A thing that struck me, coming back from the island – and it really struck me after my second year especially – is coming back and looking at Cape Town and thinking my goodness; this is a big base! And you get there, and the thing that strikes you first and foremost, for me, is how impersonal it is. There are millions of people and nobody gives a damn what everyone else is doing. So you look at people driving by, and it's like ants. What are they doing? Why are they doing what they're doing? And that is very, very difficult; that getting back into daily life in South Africa. Of course, it's wonderful to see people again, and if you like food, you know, to eat different foods and whatever else; and go to the movies and ... Little ... One or two creature comforts, but those sorts of things die off sort of after two weeks back; then you just want to go back to the island again. Now you've seen people, now you've experienced all this stuff; now you want to go back. Well, for me, that was it.

Q: And for you?

CT: Yes, I'd say just coming back and the "busyness" of everything. Although you're busy on the island, it's not a chaotic busyness; it's a busyness where you know what to expect from day to day. And back here, you just sometimes feel like you're not able to ... you know, able to sit down and think about things really. You just have to carry on going.

NdB: And of course the natural aspect, and that's major. I hate the city. I really do. But I love my work. And so, if it wasn't for my work, I wouldn't be in the city; put it that way – which is ironic, because my work is not city-based in terms of what I actually do, but the institutions that support what I do are obviously universities, like here. And I really enjoy the University, but I don't like the city. So if the University was elsewhere, somewhere in the Bushveld – that would be the best – that's the ideal. Because you really miss nature. You miss just looking out, being able to go 'oh, I'm so tired of everything; I'm just going to go for a walk. And you go for a walk and outside there's an Albatross breeding, and there's a Fur Seal lying on a beach ... And it's so calm and peaceful; and beautiful, you know. So that's really ... That I miss. The city has always been a thorn in my side – a necessary one, unfortunately.

Q: Lastly, I would like you to talk more about the mammal lab and the place the mammal lab occupies on the base.

CT: It's our home! It's our little ... It's your ... Well, for us, it was our sanctuary. So every morning, we'd go up to the mammal lab, and then you'd make a pot of coffee. All your things are there, and it's the last place that you leave from before you go out

into the field. So our backpacks stayed there; our gumboots stayed up there; your field clothes stay up there. And that's also the place that we came back to before we went down to base, to unpack everything. So it was our little ...

NdB: It's magical.

CT: ... Yes, sanctuary. And it was quiet, warm ...

NdB: That's the thing: it's ours; it's yours. So it's your space that you can work in. It's quiet. It's removed from base, which helps, because you're not bothered too much by people. It's nice to have visitors, but if you're in the bird lab, it's just a step across the catwalk, and then people can come in and visit you and then you're bothered, you know. It's like people walking into your office all day, if you're sitting the lab trying to work. But it's more. The mammal lab is more than just an office; it's more than just a place of work. It's a little house, a little Karoo house, on the hill, and it holds ... You know, you see it from when you're coming back after a long, hard time in the field, and it's just ... It's like the Hilton Hotel, you know; you're like 'yes; the mammal lab! Ooh!' And you can go in there and you know there's your beer waiting for you there; there's your ... All that. And the camaraderie that goes with it ... So there's a lot of history, for the sealers, in that lab. There are little bits and bobs stuck up on the walls; and the lists of legends, which is all the sealers over all the years; and there's the cohorts of Elephant Seals since 1983 that you ... It's the lists there ... It's just got such a feeling of home. You walk in there and you know where you are; you know what it's about. And you feel the legacy that has gone before you and you want to make an impression for the ones that come in the future as well. So it's much more than just a place of work; it's a ... Yes, it's an institution, just about.

Q: Okay. My last, last question ... When you were on Marion, did you have to meet people and live with people who ordinarily you would not have met or be friends with here? And how was that?

CT: I think so, because you ...

Q: Just because of the different walks of life ...

CT: Yes ... Just ... There's a couple of people that I haven't even seen, you know. So you say goodbye, and you don't even see them; you're just busy with your own thing from day to day. And coming back here, also your family – well, our family ...

NdB: Takes precedence ...

CT: Takes precedence. So that ... You know, it's visiting granny and grandpa and aunties and uncles ... So it's difficult to maintain that feeling of family, because everyone else also has their things that they're doing. So you do meet people that you wouldn't

normally meet, and you just have to be adaptable in terms of ... You have to have some manners, really ... yes.

NdB: I think what's both nice and not nice is that you meet people from categories that you would never previously have met ... from walks of life that you would never otherwise have met; they would never have crossed your path. And those people make an impact on your life, either negative or positive; but again, it depends on you to take away the positive from that. So yes, I agree with what Cheryl says. You ... Obviously you are going to meet people that you don't like and that you probably will never see again in your life, but that in itself teaches you a lot. So it you go in with that mindset of wanting to make the best out of this experience no matter what, then you learn out of these things; it's a positive experience. But then also, you ... Because of this, you meet people that, if they had not been thrown into the mix like this ... I mean, these are diesel macs and electronics experts and ... People that are totally out of our field – we never would have met them. But then you meet someone there that remains a friend for life.

CT: Yes, even though you don't talk to him that often.

NdB: Yes. Our team leader, Kobus; he ... We really got on very well with him on the island, and since then we've remained friends. Even though we don't talk to him often, we've remained very, very good friends – and it's someone we never would have met otherwise. And he's made a big positive contribution to our lives. And, the big thing is, you learn how to deal with people from different walks of life. So it improves you as a person, because you have to make an effort with people that you don't like; people that you do like; people that you don't agree with; people that you do agree with ... People that have a totally different viewpoint of things that you thought was common knowledge, but that isn't; that you realise this person thinks differently about it or doesn't even know about it, or ... So it's a very, very good, big learning curve. Yes, for yourself; for self-improvement as well.

Q: Is there anything you would like to add in general?

CT: No, no.

NdB: I don't think so, no. I think the magic of Marion lies in its ... the history of the people who have gone. It's part of the deal, when you go, you know who has gone before, and that drives you to greater heights. It drives you to want to be part of that – if you want to – list of legends; you want to show that you can also do this and you want to experience this like they described how wonderful it was for them. And so I think that anyone that goes to Marion Island that doesn't want to deal with the people, shouldn't go. You ...

CT: Yes, I think that you do sometimes get characters that go and want to escape from life here ...

NdB: Problems ...

CT: And problems ... And then what happens is, they go with an attitude of not wanting to share any personal details, which is frustrating for me as a person, because I like to know ... I like to get to know people. I don't like to know people on a shallow ... Especially for 13 months – if they expect you to only ...

NdB: Be a family, yes.

CT: Yes ... They only want to give you shallow or impersonal details, then you just have to talk rubbish for 13 months.

NdB: It's not possible.

CT: It's not possible and it's not nice. It's ... So I don't know ...

NdB: But also for those people, if you're trying to escape your problems here by going there, it's the worst thing you can ever do, because you're confronted with them there, in your face. Here you can escape, because there are hundreds of other things to distract you; there, there aren't any. There's nothing to distract you from your own problems. So don't go there to escape problems. Of course, everyone may have a problem or whatever, on itself, but go there because you want to go to the island; don't go there because you want to escape.

CT: And you've got to have something to do.

NdB: Yes. Hobbies, work ... whatever. But I think that's ... I think what it comes down to for me, always, is Marion has got such a legacy ... The huts are so magical; the huts, for me ... you know, that's Marion: out in the field and the huts. Marion base is just a base, and I think the history of the people, the stories that you hear I was fortunate to be, my first year, with Greg, who could tell stories of the past, of cat hunters ... of whatever else. So you're sitting in a hut at night and you're listening to the stories of some guys that burned, you know, that exploded a can of chicken breyani and what happened; what this all entailed. And those sorts of stories are just magical ... Or a piece of graffiti on the wall that's got some enormous history to it, because some guy had some experience out in the field. And that makes the experience so much more than just going to a pretty place. And I think that ... And so what you're doing is magic, you know. If you can get the stories out of people, that's what one really wants. Of course, lots of stories will remain hidden, unless you're in the right position, in the right place at the right time on the island – because a lot of the stuff will only come out on the island, especially with the senior guys. You know, you're sitting in a hut with someone that's been there for 30, 40 years, and this will

spark a memory of some cat hunter that did something crazy ... And that's the only place you learn about those sorts of things, so ... But that's a major part of Marion, I think.

Q: Thank you; thank you very much for your time.

NdB: *Nee, dis reg.*

CT: *Dis 'n groot plesier.*

END OF TRANSCRIPTION