

Diary 14 – 28 July 2014

For the past three weeks, Kathryn Adamson (a lecturer at Manchester Metropolitan University, UK) and I have been exploring Zackenberg and the surrounding valleys investigating the past and present limits of ice caps and valley glaciers (mapping moraines, ice moulded bedrock, and areas of blockfield). This will help us to assess changes in ice cap size over time, and also to look at the types of sediments they produce (sand, silt, clay) over a wide area, and through time. Despite some days of less than perfect weather, we've managed to collect a good amount of data from a series of day trips and one longer camping trip to western Store Sødal, about 25 km to the west of Zackenberg station.

The past week here has been quiet - in comparison to the bustle of the past two weeks at least. Having finished their work in the Zackenberg Valley, the large team of Jacob, Signe, Oskar, Sigrid, Urs, Lærke, and Katrine have moved to Blæsedal, close to Daneborg where they are camping. This has left only 16 people in the station! Quite a change to the 25 or so we had a week ago.

Last week we waved goodbye to four colleagues: Catherine (University of Birmingham) and Simon (Aarhus University) who managed to finish their work with a week of good weather; Jørn the assistant logistician who was heading off to help restore Trapping Stations; and Lars from BioBasis, who is going home for a few weeks before returning to Zackenberg in August. The plane, which took them home, brought in two new arrivals: the ever-smiling Jonas to replace Jørn; and Anders, an IT specialist tasked with upgrading some of the communication within the station and with some of the climate monitoring equipment. The departure of Lars left Jannik to take control as the deputy scientific leader for several weeks, a role he is clearly naturally suited to. Within a day of his reign over Zackenberg, he appeared to be constructing a large moat around the station to keep out intruders/other scientists/undesirables. This actually turned out to be part of Anders' work, burying a series of cables between the houses to improve communication and connectivity in the future.

Kirstine and Laura have spent the last two weeks training Line up as the newest member of the GeoBasis team, teaching her the ins and outs of the monitoring equipment she needs to become familiar with! They also took her on a hike up to the top of Zackenberg Mountain to check some camera equipment and monitoring stations, so she should definitely be well prepared for the work. Jannik and Palle continue to work on their BioBasis projects, walking around the valley everyday collecting data, searching for birds, and counting flora and fauna. The look of concentration on Palle's face as he bends over trying to count flowers and buds is a sight to behold - a painstaking but important task. Much less difficult for the eyes is Musk Ox counting. These tend to be larger and more mobile, though discerning them from boulders can be tough. I've often scared myself coming upon a very close Musk Ox, only to realise it's simply a large boulder. Palle has also been completing long transects across the valley, measuring the "greenness". Though he's had some disagreements with the batteries he managed to finish the work (for now I think...)! Meanwhile, when Jannik isn't counting birds, he is hatching plans to construct a Mount Rushmore-style BioBasis statue of Lars, Palle, and himself, carved into the side of the Zackenberg Mountain.

Mikko has continued his work with the pollinators, and with just a week left he has begun to clean and bring his traps and other equipment so that they can be put away for the next year. The rest of the time he's found with a plate of cake - given how good Helle's baking is I don't blame him (and normally have some too)! Laura has been tirelessly and diligently working on her samples in the field every day, and she remains as smiley in the evenings as she did three weeks ago when we arrived! On Sunday she became an honorary Team-Sanderling member, and headed off with the telescope laden group to find some chicks.

Speaking of the Sanderling-ers, Jeroen, Tom, and Moray will be leaving on the plane with us, having had a very busy, but productive, last week, with a number of nests hatching. This has meant lots of chicks to ring and broods to follow, so they have continued to rack up the miles day in day out! It's always been great to hear their stories at dinner-time and find out about the day's near misses, successes, and chance encounters. Sometimes we have to hear the sad news of chicks being predated, but it's all natural and all data for the team, even if it is sad! Kirstine will also be on the plane home with us this week. This year was her 5th and final field season in Zackenberg (for now!). To celebrate, Laura created a Saturday night Kirstine-quizen, so we now know about Kirstine's favourite place in Zackenberg (the thermokarst), her favourite terrain to climb (boulders) and descend (vegetated patches), and the number of river samples she's taken from the Zackenberg River (about 300!). On a similar note, if anyone wants to buy Kirstine a present, she prefers Salomon boots, and doesn't like Fjällraven trousers!

The whole experience here has been thoroughly enjoyable, and whenever we've been walking through a bog, or up steep, unstable scree we've made sure to take a moment to look around at the view and remember how lucky we are! The ZERO station is a very well-oiled machine, made even better by the fantastic people in the Zackenberg family. Everyone's hard work is only possible thanks to the fantastic food prepared by Dina and Helle, whose meals, cakes, and cookies keep us all going during the long field days. The tasty dinners and excellent conversation always give us something to look forward to in the evening, and make the final walk along the muddy road easier! Kenny, Spanggård, Jørn, and Jonas have been great logisticians, working to ensure the station runs smoothly. Hopefully we'll be back soon; I can see why so many people return. In the meantime, we will be putting a full report of our stay on www.climatica.org.uk, a website run by myself, Kathryn, and Richard Selwyn Jones, a colleague at Victoria University, New Zealand. Check it out when you're next on the internet J

Tim Lane - *Laboratoire de Géographie Physique, CNRS, Paris*