

## **Diary 8 – 11 July 2011**

### **A research operation in full swing**

The number of people present at the station has now increased to 21, which means that the tundra is often covered with strangely outfitted people walking or crawling around to gather data for their research projects covering such different fields as geology, plants, mammals, birds, insects and climate change. Their outfit is by the way not only determined by the work they do but also by the amount of mosquito's present for high numbers of these tiny creatures immediately bring out gloves and mosquito nets. From time to time, there is a good cross-fertilization between projects, e.g. when researchers looking for caterpillars – noses down of course and being close to the ground – find bird nests that other researchers are interested in. A real transition is going to take place in the week to come as many bird eggs are expected to hatch shortly. That is as long as they are not found by an Arctic fox or one of the many long-tailed skuas standing on the lookout for food, including eggs or wader chicks.

The birds really make you think about a subject addressed in one of the previous week letters, being "Life and death on the tundra". The project on sanderlings reveals that over one third of the nests were predated by this time and most likely, a similar figure applies for other wader species. On top of this, newly hatched chicks are predated fairly quickly. In other words, a sanderling chick needs a fair amount of luck to survive the first weeks of its existence. A first-year sanderling on a beach somewhere in Europe or Africa later this year therefore tells us a whole story about the arctic ecosystem.

The heavy predation has a somewhat unexpected and, admittedly, a non-scientific side effect. Because there are quite many nests to be checked in the Sanderling project the birds are given names instead of numbers because names are easier to remember. Normally the birds are given names of good friends, fellow researchers, famous scientists etc. Although being human considerations it gives a particularly sad feeling if the chicks of "close friends" are predated. Therefore the idea has risen to give birds nesting at –to the human eye at least– very vulnerable places the names of politicians, dictators, notorious criminals etc. The idea behind this is, of course, that it gives much less of a sad feeling if a "dictator" instead of a "close friend" loses his or her clutch or chicks.

In many cases, a small device is placed near the nest to register when the bird is on the nest, when it leaves and when it returns, or when the nest was predated. Let us forget about the technical details of the device and sensor associated with it. The point for this week letter is that this device needs to be hidden under a stone to prevent that the bird becomes suspicious. You might think that hiding this device is easy on a hill slope full of stones of all sizes. This is, however, far from the truth. These stones need to be flat and have a certain size and, amazingly, stones of the right shape seem to be rare. Searching Sanderling nests inevitably also means searching for stones of the right shape and size that, amazingly, in most cases need to be carried uphill.

Enough about birds. Much work is also being done on plants. Many species are flowering now and for most species, this is a great help to identify the species. For the non-specialists, however, enough identification problems remain. The carexes, saxifrages' and drabaes can easily drive you mad with frustration. Even a dryas can cause problems because the two species that occur in Greenland hybridize quite easily and it is by no means always clear which

of the two you are looking at. One researcher being exhausted of counting numbers of dryas flowers sighed that he rather prefers counting the numbers of flowers on women's bikini's on a sunny beach!

What else is there to report about last week? In the first place, that last Wednesday evening's slide show covered a wide field of subjects and interests explained by the photographers and not necessarily limited to Zackenberg issues, secondly the first sighting of a Walrus. Hopefully more individuals will turn up in the days to come.

As said before the tundra is often covered by researchers, not only during normal daytime hours but also during the "evening hours" and during "night time". Despite being eager to gather as many data for their projects as possible during the 24 hours of sunlight most people tend to be back at the station at fixed times. In case you wonder why they do this, the answer is this is because of the excellent food that is always awaiting the exhausted researchers.

Jacques de Raad