

Fortrose Academy – Greenland Expedition 2013

Location: Head of Tasermuit Fjord, Nanortalik, Western Greenland

Dates: 15th July to 6th August 2013

Group Leader: Mr Donald MacRae (teacher)

Group: Mrs Emma Blake (teacher), Miss Emma Houston, Miss Katie Houston, Miss Eleanor Leggatt, Miss Libby Powers-Jones, Miss Zoe Brown, Mr John Kremer, Mr Niall Ferguson, Mr Finlay Matheson, Mr Andrew Hall, Mr James Ross and Mr Lachlan Cowie.

Objectives

- To explore and map Sermitsiaq Glacier.
- To observe and collect samples of the Greenlandic Seed Bug (to aide in an on-going study in the University of Stirling)
- To observe the hydrology of a glacial river

Summary

After a successful departure from Fortrose on the 15th the group spent the first 3 days exploring Iceland. This included a visit to Thingvellur, Geysir, Gullfoss and an exploration of the ‘hot river’ north of the town of Hvragerdi on the South coast of the island.

The group then flew from Iceland to Narsarsuaq and then by chartered boat to Nanortalik and then along to the head of Tasermuit Fjord.

We set up base camp on the East Side of the Fjord near to the outflow of the Sermitsiaq Glacier.

During the first days the group established camp routine and recce the area including the Sermitsiaq Glacier. The terrain, whilst typical moraine did prove arduous to cross with much loose rock. The route to the glacier involved a strenuous climb of over 100 metres on often well-polished granite terracing.

After acclimatising to the large number of mosquitos the pupils carried out a number of studies on the lichens along a transect line and across a well formed trim line. Another group carried out a study of rock erosion using Power’s scale of roundness.

A mapping study was carried out of the Sermitsiaq Glacier using a handheld GPS. We were unable to take readings from part of the glacier due to a fast flowing river flowing from the snout and frequent calving episodes. However a number of useful GPS readings were taken along with photographs.

A three day trip was taken to an unnamed valley to the immediate South of our base camp. The purpose was to summit a mountain to the South side of Sermitsiaq Glacier. After setting up a second base camp we were unable to summit the mountain as a considerable bank of snow in a critical location blocked our path. We did however succeed in exploring a further glacier that feed into the river system we were to go on to examine. The pupils got the opportunity to trek across this glacier and study its features.

It was from this unnamed valley that we collected specimens of the Greenlandic Seed Bug. The insects were far more elusive than first imagined and collecting them amongst a large population of mosquitoes was challenging. However samples both alive and preserved were collected and taken back to Stirling University.

Our hydrology study examined the water and air temperature along with flow rate and suspended solids in a known point in an alluvial river. The study was a repeat of work carried out by Prof. Tim Stott during a BSES expedition to the area in 2009. As well as some daily readings the group carried out a 24 hour study.

The weather was rather cool and overcast for the first 10 days but then improved to a cloudless sky as a high pressure built over us. Air temperatures ranged from 6 to 12°C at base camp. Only two days were katabatic winds recorded with only some small damage done to one tent.

Problems with our stove fuel during the first few days caused the loss of a third of our stoves which had an impact on our operations. It transpired that we were possibly given fuel with water in it. A hastily arranged (via satphone) shipment of gas was very quickly despatched.

All the pupils enjoyed the venture and took away not only many happy memories but many challenging experiences. Some were 'bitten' by the Arctic and aim to return one day. For all they have had the privilege of experiencing the changing world that is the Arctic.

Donald MacRae, Group Leader



Sermitsiaq Glacier, Tasermuit Fjord, West Greenland



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