

GREENLAND – A BRIEF GLIMPSE OF PAST AND PRESENT

By Hans Schreuder
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Greenland, like Iceland, Alaska, Tibet, Mongolia, Patagonia and Antarctica, is a region on our planet that brings to mind images of extremes of weather, especially cold weather, with snow and ice and deep-freeze temperatures; as inhospitable as it gets on Planet Earth..

To experience some of these extremes at first-hand I travelled to Greenland in April 2008 at the invitation of Svend Hendriksen of the Greenland Art Review, website www.glar.gl

The quickest way to get there is by Air Greenland from Copenhagen and I can highly recommend the airline as the on board service was splendid with excellent food and friendly staff.

Courtesy of Air Greenland I can paint a brief glimpse of its recent past and I quote from their in-flight magazine Suluk, issue #02.2008:

“About 1,020 years ago, Erik the Red led 14 ships to Greenland from Iceland. The ships carried men, women and children together with their livestock and household goods. Many years before, Gunnbjørn had found the west coast of Greenland and now Erik wanted to start a new life in beautiful, lush South Greenland. He established the settlement of Brattahlid (Eastern Settlement) not far from present-day Qaqortoq. Gradually, as the population grew, more settlements were founded along the west coast. Further to the north was the Western Settlement situated at the head of Nuup Kangerlua (Godthåb Fjord).

The Norsemen made a living from their animals and a little farming. They had cows, pigs, goats, sheep, horses and dogs. They fished and hunted birds, seal, whales and polar bears.

When the Norsemen first came to Greenland, most believed in Odin and Thor. Eric the Red's son Leif later helped convert the Norsemen to Christianity and Erik's wife, Tjodhilde, built the first church in Greenland. Another famous Norse church - Hvalsey Church - is pictured here.



Hvalsey Church, where the last known wedding took place on September 16th, 1408

At the beginning of the Norse period, the Inuit lived further to the north. Inuit and Norsemen met each other when the Norsemen travelled north to hunt marine animals for their skins and tusks. The surplus of their hunt was traded to Norwegian merchants. This is how the Norsemen acquired things they could not make for themselves. As time passed, the climate got colder and colder. The Inuit followed in the path of the animals they hunted and moved slowly southwards. Although the Inuit and the Norsemen met more and more often, they did not have much to do with each other because their lifestyles were very different. The Inuit managed, but in the long run the Norsemen slowly succumbed to the colder climate because they could not adapt.”

More detailed history is to be gleaned from a fascinating book by Ole Bennike et al, called Ilulissat Icefjord, ISBN 13: 978 87-7871-136-6. Allow me to just quote some population information from that book, to illustrate the ebb and flow of humanity in tune with the continuously changing climate, from mild and green to cold and white:

Saqqaq group of Palaeo Eskimos	from ~2400 BC to ~900 BC
Dorset group of Palaeo Eskimos	from ~800 BC to ~0 BC
No known habitation until	
Norsemen in South-West Greenland	from ~985AD to ~1450AD
Thule group in West Greenland	from ~1000AD to ~1200AD

Right now the climate in Greenland is mild in the short summer months, but bitterly cold in the months of winter, with Kangerlussuaq registering a near record minimum at -46.8°C this year.

Last month a Plymouth-born explorer was forced to abandon his bid to become the fastest man to walk solo and unsupported to the North Pole. Ben Saunders, 30, had to be rescued after his equipment failed in 'appalling' ice conditions: "The ice conditions I have encountered have been the worst I have ever seen, and worse than I could have imagined."

My own experiences of the cold weather were limited to a wind-chill factor of -11°C in town, even though we were already well into Spring, whilst on the icecap itself the air temperature at midday was a 'mild' -5°C but with an equally cool wind-chill factor making it feel like about -15°C. To see and literally feel the icecap is an experience that I can recommend to all. To see the vigorous impact of solar radiation whilst at the same time seeing the inaction of 'greenhouse gases' - atmospheric moisture included, of which there is little in the Arctic - makes a mockery of carbon dioxide as a threat to the ice. Just the Greenland icecap alone is estimated to contain about 2,9 million cubic km of ice, equivalent to a mass of some 2,9 million Gigatons. That's 2,900,000,000,000,000 tons. If that ice were already at -0°C it would still take a further 232,000,000,000,000,000,000 calories to turn into water at +0°C. All that energy from a few extra molecules of carbon dioxide? "Me thinks not!"

Enough of the science, it's picture time. There is a selection already online but I am including some special ones here. http://www.ilovemycarbon dioxide.com/Greenland_ice_cap.html



Not quite a glacier, just one of the many edges of the icecap. Some of the ice will melt in the summer months, but then advance again during the 8 months of winter in an ever ongoing battle of Nature between an Ice Age and an Interglacial Warm Period.

More pictures on the next page.



Two examples of the peaks of a “pingo”, an ice column that is pushed up through the permafrost and remains frozen despite being exposed to the full power of the sun *and* the atmosphere *and* covered in dark material, which one would expect all helps to melt it quickly. Wrong!



The source of ice is snow, which melts in the direct sunlight, then refreezes in the cold Arctic night. Pictured on the left are newly refrozen melt-water droplets; on the right a bigger version of the same process. Some melt-water lakes are huge, some drain through cracks, others melt and refreeze in an ongoing cycle between the power of the sun and the dry, cold Arctic air at night.



Ice as far as the eye can see, close to 2 million square km of it. On the left, more frozen lakes and some moraine from past melting and re-freezing; on the right a glistening top layer of ice with the thinnest of films of melt-water due to direct solar radiation on a cool, crisp April afternoon.

Feel free to ask for more photos or information,

Hans Schreuder, Ipswich, UK
hans@tech-know.eu