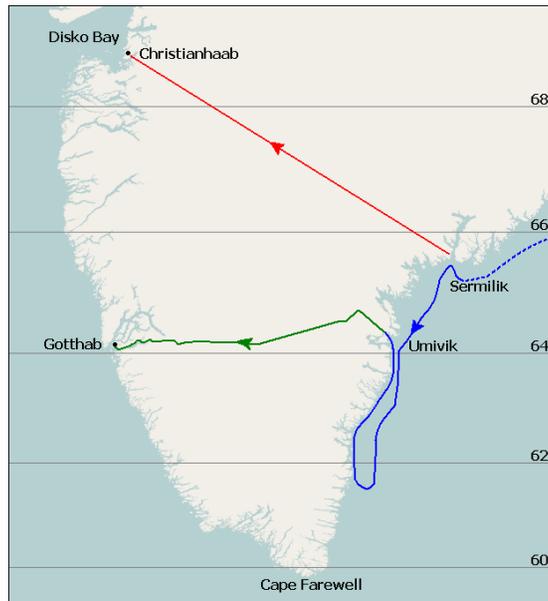


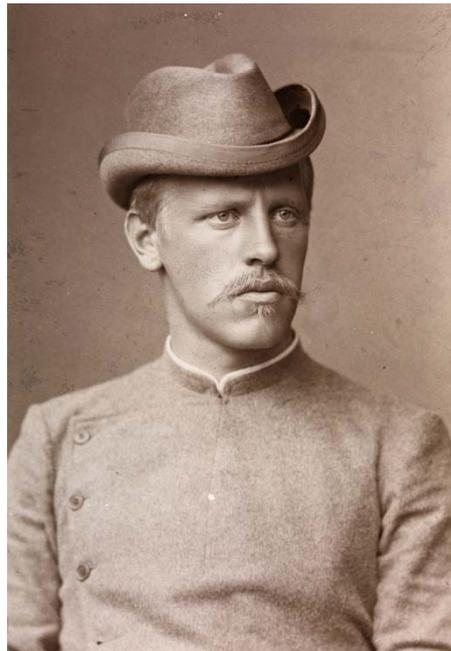
Our Ocean Backyard — *Santa Cruz Sentinel* columns by Gary Griggs, Director, Institute of Marine Sciences, UC Santa Cruz.

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Nansen's First Arctic Adventure



Map of Nansen's expedition across Greenland in 1888.



Fridtjof Nansen in 1889.

We left Fridtjof Nansen at sea in 1882 in the North Atlantic. His first extended ocean voyage, which roamed the icy waters between Greenland and Spitsbergen, lasted 5 months and gave him the opportunity to make some important scientific observations. He was able to show, contrary to previous assumptions, that sea ice forms at the surface of the ocean rather than below, and also that the Gulf Stream actually flows beneath a cold layer of surface water.

The ship he was on, the *Viking*, was trapped in the ice close to an unexplored part of the coast of Greenland. Observing the coast while confined to the ice gave Nansen the idea of exploring the Greenland icecap and possibly even crossing it. While such an adventure may not seem so bold today, we have to think back to 1882 when we knew relatively little about this part of the world. Equipment, gear and navigation equipment were pretty primitive. You could easily die on such a trip.

Upon returning to Norway, Nansen was recommended as a curator in zoology at the Bergen Museum, where he was to spend the next six years of his life. But deep down, Nansen was an explorer. His mind kept returning to the Greenland icecap and the idea of traversing the vast ice-covered island, which had never been done.

Two earlier expeditions had set out from a settlement on the west coast, heading across Greenland towards the east side. Because there were no settlements on the more dangerous east coast, and therefore difficult for a ship to meet them, Nansen reasoned that those earlier treks would have had to return to the west coast anyway.

So he proposed going the opposite direction- starting from the more isolated east coast- assuming that he could find a safe location where his expedition could be dropped off by a ship, and then making a one-way journey towards the more populated west coast. His team would have no way to retreat to a safe base, and could only go forward- which he found to be the perfect challenge. The boat he was later to attempt to reach the North Pole in, the *Fram*, means forward in Norwegian.

This became his exploration strategy. His thinking, planning and preparation for this first expedition was to foretell how he would undertake his next bold foray into the Arctic. But he had to get across Greenland first.

Nansen rejected the idea of a complicated plan with lots of people, supplies and equipment, which had been the approach used previously. Instead he hand picked

five experienced adventurers, all adept snow travelers who were skilled in cross-country skiing, as was Nansen himself. They designed most of their own gear, sleeping bags, cooking stoves, and clothing, and then built lightweight sledges that they would tow themselves.

Nansen had great difficulty obtaining financial support because the Norwegian parliament and many others thought it was simply too risky and had little chance of succeeding. He ultimately did receive help from a Danish businessman, and through a fundraising effort organized by the students at the university. Just before the expedition departed, Nansen sat for his Ph.D. defense, but he left without knowing the outcome of the examination. His priorities were clear at this point and he was dedicated to his first major expedition.

In early June 1888, Nansen and his team sailed from Iceland to the eastern edge of Greenland on a sealing vessel, the Jason. Things from that point on didn't go smoothly or exactly as planned, but Nansen and his crew took it in stride. Thick pack ice kept them well away from the coast, but after several weeks of trying to find a route to shore, they departed in several small boats to row into Sermilik Fjord, which was their planned starting point for their trek across Greenland.

Nasty weather and sea conditions for the next two weeks, not totally unexpected around Greenland, kept them offshore and also swept them about 240 miles south of their starting point. For much of this time they were camping on the ice as they felt launching the boats again would be too dangerous. The entire expedition was clearly dangerous, but this was deemed too dangerous.

When they finally reached the coast on July 29, Nansen felt they were way too far south, so he ordered his crew back into the boats to begin rowing north. He was a clearly a bold, confident and inspirational leader, and was able to keep his men motivated. For 12 days they toughed it out, battling the weather and navigating around ice bergs. On August 11, 1888, they had covered about 120 miles, or about half-way back to their intended starting point. They entered Umivik Fjord as Nansen decided if they didn't depart soon the weather would make the journey extremely difficult if not impossible.

So after a few days of rest and preparation, they set out on a course for Christianhaab (now Qasigiannuit), on the west coast of Greenland, about 370 miles away. To say the least, the journey was not easy, safe or particularly pleasant. The weather was described as generally bad with violent storms and

almost continuous rain. They had to ascend treacherous terrain with many deep hidden crevasses in the ice, in the middle of lousy weather and freezing cold.

After almost two weeks of tough sledding, Nansen realized that their northwesterly path was too far to allow them to make it to Christianhaab by mid-September when the last ship was due to leave. Always the objective realist, and perhaps contemplating mutiny from his men, he decided to alter their plan and head almost due west to Gothaab (now Nuuk), which was about 93 miles closer and, importantly, at least remotely attainable.

By early September they had climbed to the summit of the Greenland icecap at an elevation of almost 9,000 feet above sea level, where temperatures dropped to 50 degrees below zero at night. But they had those great homemade sleeping bags to keep them warm.

The worst was over, although it had taken them about four weeks to get this far. Pulling their sledges was considerably easier now that they were heading downhill, and by late September they reached the head of the fjord along the southwest coast of Greenland. Nansen managed to construct a boat of sorts out of some local willows, parts of their sledge and their tent. They then rowed down the fjord to Gothaab, arriving four days later on October 3, 1888.

The first crossing of Greenland had taken 49 days and they had collected careful meteorological, geographical and other observations throughout their expedition.

They were greeted by the town's Danish mayor who informed Nansen that his Ph.D. committee had approved his thesis and awarded him his degree. This was an unexpected surprise, but balanced somewhat by the news that the last boat had just left and the next vessel wouldn't arrive until the next spring, seven months later.