

**LOG OF M/V *POLAR STAR*
IN THE WAKE OF
*THE VIKINGS***

19 September to 7 October 2010



**Text by John Harrison edited by Callum Thomson
Photos by John Harrison
Wildlife lists by Lis Unsworth and Tony Power
Map by Hannah Lawson**

M/V Polar Star
IN THE WAKE OF THE VIKINGS
19 SEPTEMBER TO 7 OCTOBER 2010

Captain	Jacek Majer
Staff Captain	Jacek (Jack) Lisiecki
Chief Engineer	Waclaw Kedziora
Chief Officer	Piotr Zengota
Second Officer	Roberto (Bobby) Sainz
Third Officer	Pawel Napiorkowski
Hotel Manager	Janet Aurelio
Head Chef	Robert Ward
Office Assistants	Irene Lao and Magdalena Jablonowska
Doctor	Michelle Foltz
Expedition Leader	Hannah Lawson
Staff	Lis Unsworth
	John Harrison
	Rrragnarr Hauksson
	Joe Koch
	Tony Power
	Callum Thomson
	Jane Thomson



Sunday 19 September

Reykjavík, Iceland

18:00 position: 64°09.0'N 021°56.3'W

Pressure and temperature: 1010mb 11°C

Wind and conditions: Variable Force 1, sunny periods

We entered the realm of the Arctic at Keflavík Airport. At the dockside in the city centre of Reykjavík, the capital of Iceland, we found our new home, the *M/V Polar Star*. Some of us had arrived early and taken time to look round the city, visit the geothermal delights of the Blue Lagoon, or perhaps taken the Golden Circle tour, featuring waterfalls, plate tectonics and nascent democracy, before returning smelling faintly of sulphur from the geysers. It keeps moths away from your clothes.

All passengers and their belongings were aboard in good time, apart from Siegfried and Elke's brief scare with delayed luggage, and we began to find our way about the ship. We found the



Observation Lounge where we met Captain Majer, Hotel Manager Janet, Expedition Leader Hannah, and the team of staff. The mandatory safety briefing from Chief Officer Piotr followed. We learned to distinguish between the orange life-jackets which we fasten round our necks, and the orange lifeboats which we do not: priceless knowledge in an emergency.

We cast off our last line at 17:00, dropping our pilot off at 17:15 as soon as we cleared the harbour. In a light bracing breeze we began our expedition, which was eventually to take us through Western Greenland, Baffin Island, Labrador and Newfoundland to St John's. Then the drill alarm sounded, we mustered under the lifeboats. It was then time to find the dining room and enjoy our first meal onboard prepared by Chef Bob and his team. Behind us, the city receded into the oncoming dusk. A faint spiral of white plumes east of Reykjavík did not signal a new eruption, just the steam

from the aluminium smelter, and the forecast was for a reasonably quiet night. Our final official act was to put the clocks back an hour buying us welcome extra time in bed.

Monday 20 September

Denmark Strait

Midday position 62°48.7'N 029°56.1'W

Pressure and temperature: 1012mb 12°C

Wind and conditions: NE Force 4, 1 metre swells

The ship made little motion during the night, and in the morning the breakfast room was busy, but not before Hannah called out for fin whales passing close on the starboard side: the second largest creature that has ever lived. Fulmars joined us to glide round the ship playing on the air currents thrown up by the hull. John began the formal presentations with his talk *Meet the Vikings*, an introduction to the Norse mariners, traders and freebooters whose influence spread east to Constantinople and west to the New World, and whose wake we follow. Joe continued the programme with his talk *Basics of Geology*, outlining the rocks and processes which formed Iceland, Greenland and Newfoundland.

After lunch the Polar Star showed *The Journals of Knud Rasmussen* a dramatised film made by an Igloolik company in 2006 about the dilemmas facing the Inuit in 1922 as outside civilization threatened their way of life. It also features the Danish Greenlandic explorer, Knud Rasmussen and his travels with the Inuit of the Arctic in 1922. Rasmussen was one of the great travellers using Native skills to survive without outside support in the high Arctic. Hannah then gave an expedition briefing, providing an overview of the voyage and an introduction to safe and enjoyable use of our versatile Zodiacs. The great boot handout followed, with unprecedented rubber-booms around the reception and dining room areas.

Happy Hour at the bar was interrupted by a sighting of a sperm whale, and we altered course hoping to get a better sighting but the animal was wary and after regular but distant views of its bushy spout we continued on our course and went into our first recap and briefing, led by

Recap Captain Jane. She showed us examples of the work of the fine Icelandic artist Johannes Kjarval (1885-1972). Callum talked about how Vikings navigated before the days of the compass, using techniques including the Biblical ploy of launching land birds to see if they return, and using the mineral Iceland spar to clarify the position of the sun. Ragnar described the life and work of the explorer Knud Rasmussen who had featured in the afternoon film. Hannah described how the mischievous sperm whale had not known it should display its flukes before deep-diving; they can descend to 2,900 metres. John closed with one of his poems about diving gannets, a bird we had seen intermittently all day. The Vikings called it 'the white bird of the herring' because it followed the shoals of that fish.

Hannah also described our route, progress and the weather: not too bad, apparently. After dinner, the evening was rounded off by a showing the first episode of *Pole to Pole* from the acclaimed BBC *Planet Earth* series.

Tuesday 21 September

Denmark Strait

Midday position 60°53.3'N 039°07.2'W

Pressure and temperature: 1016mb 11°C

Wind and conditions: SE Force 4, moderate swells



The morning was clear and bright with light low cloud, no waves, just low swells from vanished weather. This was very kind weather for the Denmark Strait. Just before breakfast a pod of pilot whales appeared on the port side.

Our lecture schedule brought us Jane's view of *Keeping Warm in the Cold*, a study of the clothing technology the Inuit used to keep out the Arctic weather.

Ragnar gave an

overview of *The History of Greenland*, a curious episodic history, with extinctions, repopulations then colonisations.

Lunch was quiet as a technical fault halted the engines briefly, engine number 4 to be precise, but we were soon under way again.

After lunch we enjoyed *Fins, Flippers and Flukes*, as Hannah explained the cetaceans, the whales and dolphins which either make the North Atlantic and Arctic their home or part of their wanderings. Finally Tony broke us in gently to a Newfoundland accent and to *Birds of the North Atlantic*, the creatures which we will visit, and which will, for fun and food, follow the *Polar Star*.

At recap Joe talked about the ocean currents which carry far more heat and energy than the winds and help control climates. John told the story of the voyage of St Brendan, first written about 800AD and extant in over 120 Latin copies. It is possible to read it as an account of an Irish discovery of the New World 200 years before the Norse. Ragnar talked about the manufacture of the warmest insulation: a process the eider duck mastered long ago. Hannah

anticipated unpredictable conditions for tomorrow, in the tail of Hurricane Igor. I worry about any wind named after Frankenstein's assistant.

After dinner there was a showing of *This is Greenland*, one of a series of short films about life in Greenland today. We went to bed keeping our fingers crossed for the weather.

Wednesday 22 September

Prins Christian Sund

Midday position 60°08.8'N 043°44.8'W

Pressure and temperature: 1004mb 11°C

Wind and conditions: Force 9-10, two metre waves and spray-spouts



I don't really know if there is such an expression as spray spouts, but that is what they looked like: whirling clouds of spray which did not quite turn into water spouts. We peered from our cabins and saw brooding peaks move in and out of the cloud above us while pale grey streaks marked the passing waves. The wind was consistently over 40 knots and would have produced high waves had we been in open water. To the west the weather map was showing hurricane force winds in the Davis Strait, the tail of Igor,

still wagging ferociously.

At 06:15 Hannah announced that conditions exceeded our safe limits for Zodiac operations, and we either got up anyway to see the show of nature, or turned over for some more sleep. At 09:15 Hannah explained that conditions were severe even for the ship, and the route west was through narrows only 3 cables (0.3 nautical miles) wide creating a passage where it was hard for the ship to maintain steerage. The best option was to sit it out for a while - the weather forecast predicted Igor would blow through in 24 hours, and perhaps recommence our sailing schedule the following day. In the meantime, there was a briefing session begun by John, who spoke about Admiral Sir Francis Beaufort's (1774-1854) famous wind scale, and the sea conditions expected as the wind speed rose. Joe talked about hurricanes and waves and recommended we sell beach properties on the east coast of North America as soon as possible. Lis closed by updating us on mineral exploration off the Greenlandic coast.

During the morning gusts of up to 55 knots were recorded, just short of Force 11, Storm Force. At one point the anchor dragged and we had to re-position.

Callum gave a talk at 11:00 on the *Rise and Demise of the Norse in Greenland* and recorded the difficulties in making life work on the edge of Europe.

After lunch Hannah and the Captain decided we could make a round trip back east along Prins Christian Sund and hope the weather would allow us some sight-seeing. On the way out the mainland was on our port and the islands around Cape Farewell to starboard. Glaciers from the main Greenlandic icecap forced their way down the sound and glowed turquoise in the spray and mist. Waterfalls cascaded down on all sides, scouring the bare rock.

At our second recap of the day Hannah brought encouraging news about the weather, which looked like allowing us to complete the schedule we should have done today. John sang the Unst Boat Song, a Norn language song whose full meaning is not known, but it is an ancient song in a Norse-derived dialect which warns of a storm coming out of the west. Callum talked about sod houses, and wondered whether they were not just winter houses but also equinoctial houses to protect families against the storms of spring and autumn. Jane talked about tupilaks, the spirits so powerful that shamans were reluctant to portray them until some years after they were converted to Christianity, craftsmen discovered there was a market in selling them to westerners. They also realised the more outlandish they looked the better they sold. Ragnar told a story about conflicts between Norse and Inuit in which arms were waved that were no longer attached to bodies. Joe wrapped up with footage of the storms we had seen passing over all day.

Thursday 23 September

Serermerunerit and Nanortalik

Midday position 60°00.0'N 044°31.8'W

Pressure and temperature: 1001mb 12°C

Wind and conditions: SSW Force 2, waves 0.5 metres

Morning brought a welcome calm and the waves in our sheltered fjord diminished as quickly as they had risen. There was light rain which eased as we lowered the Zodiacs into the water, which took longer than usual as they had to be drained of the storm water which had ponded up in them. Our one hour cruise took us across the fjord to the Serermerunerit hanging glacier on the northern mainland side, which descended just to the water. In a year or two it is likely that it will no longer reach. It immediately began spilling avalanches from the top, cascading down the smooth bare rock face, then from the base into the water.

On the opposite shore was a waterfall fed by the storm water, descending by a dozen ways from the hanging valley where a rag of old ice could be seen in a corrie, the last remnant of a shrunken glacier. Little life was seen in the silty water; a young harp seal frolicked briefly below the falls, and wheatears and snow bunting flitted swiftly along the shore. Above us, glaucous gulls passed up and down the



sound and a pair of ravens made their ragged-winged way along the sides of the crags.

By 09:35 we were sailing west through Torssukatak under lifting cloud, revealing magnificent walls of rock rising 5000 feet from the water to the sky. We passed the small fishing settlement of Augpilaktoq and went out into the widening waters towards Herjolfnæs, the most southerly Viking settlement in Greenland. There are remains of farm buildings but the site is famous for woven garments found in the church graveyard in a marvellous state of preservation, replicas of which we would see in the museum at Nanortalik.

The weather continued fine just long enough to get us into Nanortalik before winds of thirty knots were making life difficult for the Zodiac drivers. We came ashore at the town harbour which offered more shelter than the others, but also a close-up of the hunting life, with porpoises, and seals, bodies and skins, in the water.

More cheerily we visited the community centre where local children danced and sang. Some of the Greenlandic repertoire shows its roots in British, especially Scottish, folk culture, brought here by sailors and missionaries. We were then free to visit the splendid museum in a collection of old harbour warehouses and stores, augmented by open air features such as the sod house, tent frames, and the odd rock with a staircase to its top offering views over the town. Callum led a walk along the shore out towards the old location of the town. Lis botanised, the wind began to fall again and dusk was well advanced as the last of the Zodiacs made their way back to ship at 18:30.

After dinner we had recap and briefing for a busy final day in Greenland. Hannah talked about the marine mammals which had been hunted and stored in the town harbour. The Inuit have allied a traditional hunting subsistence economy with modern technology and external market to impact heavily on some species. Joe talked about the powerful melting power of rain on glaciers and compared the glacier four years ago to the reduced one we see today. What we mostly do not want to see are the scenes in Joe's videos of destructive waves caused by ice calving or rolling. Lis listed 23 species of plants including a dwarf birch growing farther south than the textbooks allow. In all Greenland had 400 flowering plants. Ragnar talked about the umiak in the attic of the museum, and a fossil one from around 1450 with oak and iron nails, possibly scavenged or traded from the Norse.

Friday 24 September

Hvalsø, Qaqortoq and Brattahlid (Qassiarsuk),

Midday position 60°42.7'N 046°02.0'W

Pressure and temperature: 999mb 10°C

Wind and conditions: SE Force 3, overcast, light rain

Many awoke when the anchor went down and the engines went into reverse to bring us to rest off Whale Island or Hvalsey, sometimes spelled Hvalsø in the Danish fashion. Those who went forward could hear the wind whistling round the bridge and the First Mate Piotr reported winds



gusting up to Force 8. Hannah waited until daylight then, with slightly lighter winds took a scout boat to shore. We decided to go for it and have a quick pre-breakfast landing - if you didn't count Danish pastries in the Observation Lounge as breakfast.

We came in with a bow landing at a small modern pier, with a high tide. Callum, Ragnar, Jane and later John took us round the

ruins explaining their structure and history. The fjord is the site of a Norse settlement granted

to Thorkell Farserk, cousin of Erik the Red, and contains the best preserved Viking church in Greenland. The church was built around 1300, or soon after, in the Norwegian style. Few finds have been associated with it, due in part, to unfavourable ground conditions and also to the crudeness of early investigations on the site. The last records we have for the site recall the wedding in 1408 of a prosperous Icelandic couple, Thorstein Olafsson and Sigrid Björnsdóttir on 14 September, who were only here because their ship had been blown off course. They later returned to Iceland. More sinisterly, there are records of a trial and conviction for witch-craft which resulted in the conviction of Kolgrim for using sorcery to make a married woman, Steinum, sleep with him. She went mad shortly after he was burnt at the stake. At one end of the building complex was a formal hall where the most important resident would entertain his guests. At the other was the dolmen under which Thorkell Farserk is supposed to be buried, still a pagan, though no bones have been found.

It seems from archaeological evidence that the settlement persisted for perhaps fifty years after the last written documents, but its end was quiet and a little mysterious. Later visitors found not a soul here, the farm animals were wandering wild, and there were few bodies or recent graves



to suggest either strife or epidemic had ravaged them. They may have left willingly for Norway, Iceland or even Vinland (if it was Iceland, there is no record of them arriving *en masse*). The Norse were living on the edge, not adapting to local conditions significantly, and suffered as the climate deteriorated. They barely bothered to fish, though young cod still swim all over the bay.

At 08:30 we set sail for our next destination, the town of Qaqortoq, formerly known as Julianehåb. A bouncy Zodiac ride took us to a small floating jetty among the fishing vessels, small cargo ships and pleasure craft. We were met at the quay by our local guides who led some on a town tour while others explored on their own.

The town has a seal tannery where incoming fresh seal skins are transformed into the raw material for fashion garments. The traditional 'woman's knife', like a herb-chopper, (called *Tsaker* in Greenlandic and *ulu* in Inuktitut) was still used to ease the

blubber from the hide. The small museum contained many interesting artefacts about local life, including a fine photographic exhibition. In the rear garden there was also a replica of a traditional winter house, made from turf, with a flat roof. The walls were over four feet thick, and the simple interior was surprisingly snug and clean. Raised wooden platforms made comfortable beds with sealskin spreads beneath the bedding. The souvenir shop also had a good range of books for those starved of fresh reading material, and there was a supermarket for more earthly needs.

We sailed at 12:10 trying to pack in as much as possible, and used two engines to boost our speed to up to 14.8 knots. Among familiar fulmars and glaucous gulls we had sightings of graceful greater shearwaters struggling to maintain their glide in the moderate breezes.

We then anchored in a placid fjord overlooking the settlement now called Qassiarsuk but famous the world over to Norse enthusiasts as Brattahlid, the home of Erik the Red, coloniser of Greenland, and his son Leif, one of the two strong candidates for discovering Vinland and hence the New World. (The other was Bjarni Herjolfsson, who was mocked on return from a cruise where he got lost and observed the coast but made little or no effort to land.) We landed on a beach to reduce the walk to the historic sites, and Ragnar, Callum and John led us on tours of the extensive site.

We saw the main farmhouse, once attributed to Erik the Red because of its superior size and wealth. It is now only lines of low walls, in classic Norwegian longhouse style. It is now known to be later in date. The oldest dwellings lay above the modern church but nothing can be seen on the surface. Yet over its flagstone step passed the men who are now chiefly credited with the first European account of seeing Baffin Island, Newfoundland and Labrador, and meeting the *Skraelings*. Nearby we entered the replica of the church built by Leif's mother Tjodhilde, and a reconstructed farmhouse, their locks open using large Viking-style iron keys shaped like runes. The original church, the first in Greenland, is now just a U-shape in the grass, but its significance was immense. Leif had returned from the court of King Olaf Tryggvason in the year 1000 with a mission to Christianize Iceland and Greenland. His mother Tjodhilde, possibly an Irish woman already familiar with the new faith, embraced it and turfed out her husband Erik from house and bed until he was baptised. He soon managed a sufficient display of faith to share her bed; perhaps she missed him too, but he was never an active Christian.

The farmhouse, although a partial reconstruction of a more complex dwelling, was nevertheless a fine and attractive looking home, with central heating from the hearth, and raised beds snug with seal and reindeer skin.



The door gave out on a long vista down the fjord that Erik and Leif would have seen whenever their restless eyes turned seawards.

At recap Hannah outlined our crossing to Iqaluit in Baffin Island, the capital of Nunavut. Callum talked about kayaks, and the way young Inuit progress from toys to the real thing. John read the Venerable Bede's touching story of King Edward of England hearing Paulinus of York preach Christianity. The king's minister likened our limited knowledge of the world to a sparrow on a winter's night flitting through the light and merriment of a mead hall before flying out again into the cold darkness. Lis talked about non-native plants in Greenland, including a coniferous tree seen that day. Jane described the origins of the driftwood used by the Inuit.

Saturday 25 September

Crossing the Davis Strait

Midday position 60°51.8'N 051°46.7'W

Pressure and temperature: 996mb 12°C

Wind and conditions: E Force 5-6, 4-5 metre waves, irregular ship motion

A following wind made for good sailing conditions over breakfast but it would back round to come from the side of the ship in the second half of the day giving us our first feel of real motion. Jane took our minds off it with her lecture on the curiously well-preserved *Greenland Mummies*, found in a stone burial beneath an overhanging cliff where the weather barely touched them. They are now in the National Museum at Nuuk. Lis then guided us through some of the Canadian and Greenlandic plants which survive these high altitudes and bring the tundra to life. Meanwhile some birds followed the ship, especially the fulmars, kittiwakes and great shearwaters. Others were sighted in passing: little auks (also known as dovebies) and a pomerine skua.

John Davis



The Davis Strait is named after an Elizabethan seaman as well known in his own day as Francis Drake, Walter Raleigh and John Hawkins. Another Devon man, he made improvements to the primitive cross-staff used to make measurements of the altitude of the sun, and invented the back-staff, which avoided altogether the need to stare at the sun to take a reading. Instead the captain turned his back to the sun and read where the shadow of a cross-staff fell on a calibrated scale. This took all the eyestrain out of the observations, which had resulted in many old captains being half-blind. Davis was an expert in astronomy which was then bound up closely with astrology, and he was chosen to determine the most propitious day for Elizabeth's coronation in 1558.

He was the first seaman to meet Inuit and trade on West Greenland, landing there on 29 or 30 July 1585. The locals had not come prepared for trading, but to obtain iron and other articles, they sold the clothes they stood in and the kayaks they arrived in. In 1592 his reputation was unfairly ruined when, in terrible weather, he was separated from the ship of court favourite Sir Thomas Cavendish with whom he was sailing in the South Atlantic. Knowing he had to run before the storm, he did not try to maintain contact and, after sighting the Falklands, the first navigator to clearly do so, he recovered his course and returned to England. Meanwhile Cavendish, a dandy who once celebrated capturing a Spanish galleon by entering Plymouth under silken sails, had perished on Ascension Island. Perversely, England and Elizabeth never forgave Davis for saving his own neck. His wife and two sons abandoned him, he went back to sea and was killed by pirates in 1595 off Malacca.

After lunch the film *Winged Migration* was shown following the annual movements of migrating birds around the world. The day's lecture programme closed with *Nansen Crosses Greenland*, with John charting the first great expedition of Fridtjof Nansen, the Norwegian who set the pattern for successful polar travel.

Happy hour followed, then Hannah briefed us on another, probably slightly rougher day at sea. She then gave a recap on Nansen the artist. He had proved his drawing skills as a medical student and made fine illustrations of his journeys. Tony spoke about the bird life and reported a snow-bunting hitching a lift on board. Jane spoke on the Inuit spirit Sila, which had a multiple role, and showed the work on imaging Sila by the Inuit artist Manasie Akpaltapuk. Lis spoke about the plant species list. Ragnar spoke about the danger of whalers getting caught in leads; one 1777 disaster off East Greenland took from August until March the next year for the few survivors to escape from Greenland. John closed with one of his poems about our companionable birds: the fulmars.

The ship was now going into the waves and sending up spray into the searchlights. After dinner the day closed with *Fram - One Ship - Three Expeditions*. It told the story of the best polar exploration vessel from the Heroic Age. Designed by Briton Colin Archer she was used by Nansen, Amundsen and Sverdrup. Clocks then went back to give us an extra hour to sleep in our bumpy bunks.



Fulmar photo Hannah Lawson

Sunday 26 September

Crossing Davis Strait

Midday position 62°11.0'N 060°30.5'W

Pressure and temperature: 1006mb 6°C

Wind and conditions: WNW Force 5-6 visibility good, 3-4 metre swells

The sea was a little more comfortable in the morning and glaucous gulls made circuits of the ship. Callum kicked off the day with *The Joys and Perils of Arctic Archaeology* describing a long career in remote and sometimes hostile locations. John gave a writer's perspective on the *Sagas* describing, their origins, their place in society, and highlighting the quality of writing and drama in a favourite: the *Laxdaela Saga*.

After lunch *The Shipping News* was shown. Based on the novel that made E. Annie Proulx famous, it tells the story of a father and daughter moving from New York back to a family

home in a small Newfoundland village. She researches fanatically before writing her novels and to write *The Shipping News* she rented a house which lies along our future route from St Anthony to L'Anse aux Meadows. Ragnar's talk closed the afternoon, comparing *English, Greenlandic and Inuktitut*. He compared and contrasted, as they say in exam questions, the genesis and structure of the languages. We have borrowed few words from the Inuit but we would not want to be without kayak, parka and anorak.

Martin Frobisher

The three voyages of Martin Frobisher are among the strangest episodes in the troubled history of a search for the North West Passage through which European ships could sail to the markets of the Orient. The real motive of this ex-pirate was to look for gold. His first voyage in 1576 began with three ships, but one was lost in a storm and a second turned back after taking a strong dislike to the pack ice off south east Greenland. Frobisher sailed into the bay that bears his name and collected rock samples. Back home he announced that he had gold ore, and that the bay he had stayed in was the mouth of the long sought-for passage. After several attempts, he persuaded some assayers to 'confirm' the ore as gold. He returned the next year, and then, in 1578, overwintered with a massive expedition of 400 men and fifteen ships. The Queen paid half the cost and waved goodbye to his ship from her Greenwich Palace on the River Thames in London. She was also waving goodbye to her money. He planned to winter on Kodlunarn Island on the north side of the entrance to the bay; it means White Man's Island. He returned with 1,350 tons of rock of no value whatsoever. Discredited, he had made his last voyage to the Arctic.

Soon Happy Hour came round again before recap, where Hannah briefed us on our landing at Iqaluit. It seems waterproof stilts are the recommended footwear to cope with the enormous tides; over 8 metres of change are expected tomorrow. Immigration forms were distributed and it was clearly explained that Brattahlid was an archaeological site and not a farm, and any difference of opinion could be discussed with Hannah according to strict rules: 12 three-minute rounds, three pinfalls, two submissions or a knock-out. In recap Jane talked about selecting good and authentic Inuit art, with special reference to the problems of shipping it home. John memorialised the sailor and scholar John Davis in whose strait we had been sailing. Callum spoke of Martin Frobisher's strange expeditions seeking gold, promoted under the banner of finding the North West Passage. We would soon be sailing past the island called Lok's Land after the largest financier of the expedition, a third generation London merchant called Michael Lok. It has been argued that because the Earl of Oxford, patron and possible lover of Shakespeare, lost money badly on the project, the playwright called the miser of *The Merchant of Venice* Shylock as a barbed reference to the Londoner. The final entertainment was Knud Rasmussen's 1933 film documenting East Greenlandic life before the Europeans: *The Wedding of Palos*.

I like those clocks, they are going back again.

Monday 27 September

Iqaluit, Baffin Island

Midday position 63°43.2'N 068°30.4'W

Pressure and temperature: 992mb 7°C

Wind and conditions: SE Force 3, overcast



Morning broke calm but misty in Frobisher Bay standing off from Iqaluit. It was hard to imagine that the tides in this basin have the second largest vertical movement in the world. Our entry into Canada required Customs and Immigration clearance. No one claimed to have been on a farm and it passed smoothly, leaving staff the job of racing us ashore while there was still water in the bay. We landed on the south west shore opposite the town, where buses awaited to take us on a tour of the town and its environs.

We drove through town and out to Sylvia Grinnel Park. The low-lying tundra hills stretched away into the distance, divided by fast flowing rivers making their way to the sea. This park is popular with the locals for hiking, fishing and camping, and being able to take advantage of such an expanse of empty land would be fantastic. Our local guides then took us up the hill for an overview of the town, with our home, the *Polar Star* looking rather small in the vastness of the bay. Our next stops were the Tourist Information Centre and the excellent museum next door, where fine carvings and jewellery were for sale. After our short walk we passed or strolled through the Legislative Assembly and arrived at the Francophone Centre where lunch was served: a delicious Arctic char chowder.

Heading out of town towards Apex Beach, it was strange to learn of the apartheid that was practised here so recently, but pleasantly ironic to hear that the former Inuit township was now the residential area with the best ambience. On the shore above Apex Beach were the reminders of the English company which opened up many of Canada's remote northern areas for trade: the Hudson's Bay Company. One passenger was lucky enough to find a stone carving which had obviously been through a few tides and buffetings, but was strangely moving.



From Apex Beach we headed back towards town, again taking in the view from one of the high points. From our vantage point it was now possible to appreciate the immensity of the tidal range – stretching out before us was a vast expanse of mud flat which had been covered by water when we first arrived.

There was time to look round town and shop before we headed back to the landing site. Despite gloomier conditions, we were back on board without incident by 17:21 and the ship sailed at 17:56.

After Happy Hour and dinner, Hannah introduced Jim Martin, our Parks Canada ranger, who will accompany us when visiting the Torngat National Park, before she described, to great anticipation, tomorrow's Zodiac cruise through the heart of the Savage Islands. Lis described some of the interesting plants of the day, and Joe did a multi-faceted round up of natural phenomena like tides and waves. John sang two shanties and read a poem of his own about leaving Frobisher Bay. Ted Ryan sang an Irish melody and various groups formed for a while, remembering old favourites.

There was another night call for the Northern Lights, which were mostly low key but really turned on the fireworks for short periods, for those who persevered with the cold.

Tuesday 28 September

Frobisher Bay and Lower Savage Islands

Midday position 61°46.2'N 065°49.0'W

Pressure and temperature: 1017mb 3°C

Wind and conditions: Force 5 NNE, overcast, low swells

By breakfast we were slowly approaching the north shores of the Savage Islands, though the two channels which cut right through them were not yet visible. The rocks were mostly pink-tinged gneisses of a mere 1.8 billion years, shaved smooth by glacial action. There were gulls, including the agile kittiwakes, feeding on the turbulent waters thrown up by the currents, but general avian life was surprisingly scarce. We scanned the hills hoping for polar bears, and soon found an Arctic hare looking like a ball of cotton wool sitting high up near the skyline.

The wind was gusting up to 35 knots, equivalent to a Force 8 gale so lowering the Zodiacs here was not possible. The ship made a circumnavigation of the islands, but it was always likely that the other sides of the islands would be even more exposed, and so it proved to be. We headed for the south shore of Frobisher Bay, looking for shelter.

The *Polar Star* nosed slowly towards a potential anchorage, then we saw a bear family on a hillside ahead. We moved in slowly against the weather, and another group was sighted on the hillside to port. They moved in and out of sight as they crossed ravines and went behind rocks. The group ahead soon stayed in clear view and we could see a mother and cub climbing slowly, probably browsing for the slim pickings of the autumn berries: sweet, but not much to fill a bear's belly.

The wind was variable. with many spells of gusts over 30 knots, hitting just over 35 knots: gale force 8. This was above our working limit for Zodiacs but lulls of 25 knots fed hope we could find a window to make a Zodiac cruise or find a place to land. After observing the scene Hannah and Callum took a scout boat to reconnoitre, but it was obvious straight away that conditions were too wild for safe operations with passengers, and the wind speed soon returned to speeds well over 30 knots. Our next day's destination was close enough to allow us to sit out at our secure anchorage hoping for improved conditions. Hannah gave a talk on *Polar Bears* and after lunch, with conditions unchanged, we



showed the upbeat penguin movie *Happy Feet* and looked at life at the other pole, where our autumn is their spring. The *Polar Star* will soon be there.

At 17:00 we held an event so contentious that it makes international peace conferences look like family picnics: a quiz. Teams were formed, alliances forged and we fielded questions about information shared on the cruise. One team named themselves *skeraelings*, the Norse word for Inuit, meaning wretches, but they did well. Helen was the captain of the winning team and made a fair impersonation of an Oscar speech, acknowledging the role of God and the book of Genesis in her early development, and gratefully accepting the keyring prizes that will remind team members forever of their services in the cause of omniscience. She had always deserved the moral victory since suggesting the previous name of the *Polar Star* visible on the stern, was *Twin Screws*.

At recap Lis talked about the aurorae seen the night before, and the green colours caused by the solar particles striking oxygen molecules, and the violet produced when more energetic rays hit nitrogen. John described the first 100 years of HBC, the Hudson's Bay Company, known to its wry employees as Here Before Christ. Tony described the aristocracy of the ducks: Lords and Ladies, or harlequin ducks, and many other species seen during the day and the depths of the night. Not only does he never sleep, I am not sure I have ever seen him in a mirror. We lifted anchor at 20:12 and left the shelter of our bay, heading south west for Akpatok Island. Callum closed the day with a talk on the *Archaeology of the Eastern Arctic*, something he and Jane have contributed to for many years. The ship began to encounter the conditions we would have experienced all day if we had not stayed in shelter. The wind rose to Force 8-9 and the sea was forming over 5-6 metres out there in the Arctic darkness. The ship made violent motions and we headed for our bunks and offered up a prayer to Hypnos, the Greek god of sleep, or the western sleep God, pharmacology, or anyone who could help or console. It continued into the early hours before subsiding to a more comfortable Force 3-4.

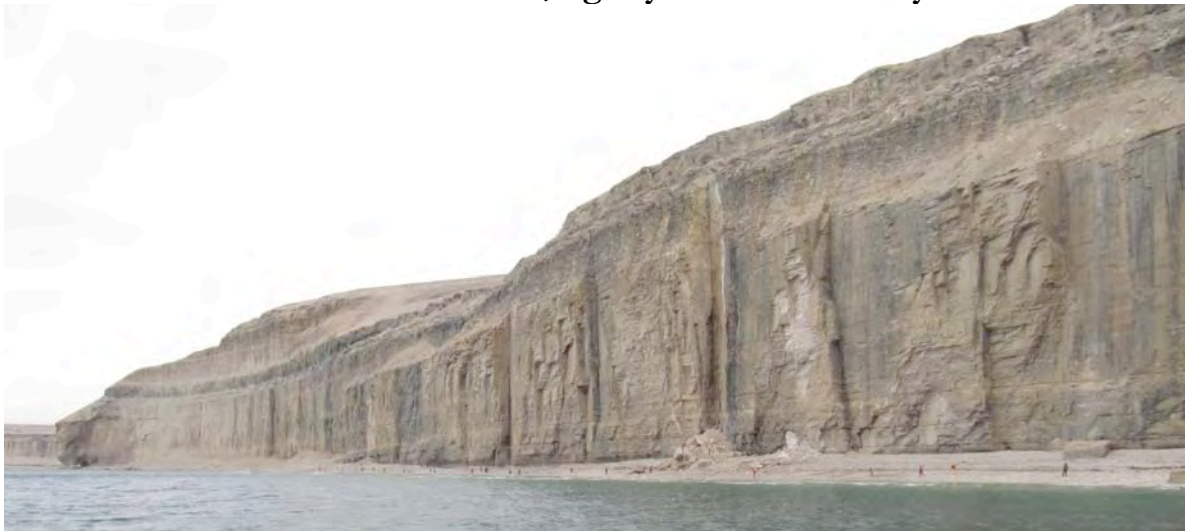
Wednesday 29 September

Akpatok Island, Ungava Bay

Midday position 60°17.1'N 068°02.4'W

Pressure and temperature: 1010mb 4°C

Wind and conditions: W Force 2-3, lightly overcast and dry



As breakfast finished we arrived at the lonely island of Akpatok, meaning thick-billed murre or Brünnich's guillemot. It lies in the north of Ungava Bay and measures 25 miles by 12.5 miles. The sea had moderated and the waves were shadows of those which had made sleep so challenging. Even before we loaded the Zodiacs, Jim from Parks Canada had spotted something moving in a gully onshore. Binoculars revealed a bear, moving across and down the steep valley. We loaded seven Zodiacs for a cruise along the dramatic cliffs of Akpatok Island. They mark the transition from the Cambrian age to the Ordovician, some 550 million years ago. The limestone was still almost exactly horizontal with strong bedding planes and vertical lines of weakness, causing neat failures leaving clean rock faces, as if someone had prepared the cliff for carving a monument.

We first crept close to the shore below the bear and got clear views of it. Despite our caution it behaved warily and began to climb, passing over the ridge and out of sight. Going along the coast to the north east we landed and posted rifle bearers at each end; the landward side was protected by the steepness of the cliffs. The shore was rich with fossils from a time so remote that the land was devoid of life and the seas swarmed with unfamiliar beasts like the ammonite

of which we found an internal cast. Like the modern nautilus shell it was a swimming shell with a squid-like creature enjoying the protection of the spiral shell. Joe talked through the geology and the fossil critters. There were few birds about, owing to the lateness of the season, just a few gulls, but a bearded seal was seen by some.

We rounded up the last unwilling Zodiac around noon and went on our way to mainland Labrador. After lunch many headed to their bunks in search of the sleep which had evaded them the night before, emerging refreshed to listen to Joe's talk on *Climate Change*. Joe made the case for human activity influencing the natural processes of climate change.

At recap Tony talked us through birds like the white-winged scoter, the island's namesake bird the Brünnich's guillemot, and even a peregrine falcon which had been seen during the day. Callum asked that we treated all landings as if they were protected sites, collecting nothing. Then he described wartime incidents in the area, when in 1943 Peter Schrewe in U-boat 537 set up a weather base in the Hutton Peninsula. He then described sleuth work by Jane to locate the position of the lost HBC base of Fort Lampson, which Callum found during his 1985 field project. John read a short poem about his first good sighting of a polar bear. Ragnar told the tale of Jens Munck's abortive voyage into the north-west, while Joe did corrections and clarifications about the fossils we had seen during the day. Hannah described our plans to visit, Nachvack, and Ramah Bay, in the Torngat Mountains encompassing over 6,000 years of history. A BBQ sounded a good way to finish the day.

After dinner the Polar Star Odeon showed *Shallow Seas*, a BBC production following a humpback whale mother and calf from the tropics to the Polar Seas.

Thursday 30 September

Torngat Mountains, Nachvack Fjord, and Ramah Bay

Midday position 59°05.4'N 063°80.7'W

Pressure and temperature: 1011mb 3°C

Wind and conditions: SSW Force 2, fine

The morning found us turning into Nachvack Fjord surrounded by peaks shining in overnight snow. We anchored off a small bay called Schooner Cove and a scout boat went in to check for bears and reconnoitre this seldom-visited site. Lis botanised on the shore as we assembled for hikes. Callum and Joe led a strenuous hike up the right hand side of the valley while Ragnar and Jane led a medium hike to the left, both groups taking in old Inuit remains: tent rings, caches and, a scatter of Ramah chert from the late Dorset period, a caribou ambush,



and a grave. A few stayed on the shore and found new friends: small rodents were shooting around in the undergrowth, and one found the group of rocks it was sheltering in so reassuring it allowed itself to be photographed and videoed for twenty minutes. These were small animals with a big Latin name: meadow voles, or *Microtus pennsylvanicus*. Two less fortunate visitors were a bearded seal which had died or been killed just above the beach, and a young polar bear. The seal was stripped bare but still had maggots on it. The bear was perhaps four months old when it died and was now nothing more than a skin over a skeleton.

We had three hours' sailing to reach our afternoon destination before we slipped into Ramah Bay a little before 15:00. To the right Callum pointed out the scree slopes where the widely traded Ramah chert, actually a very fine quartzite, was mined for use as tools. Our landing position was soon in sight as was a large polar bear, waiting on the beach. It immediately began to hasten along the beach towards the head of the fjord. We launched our Zodiacs but did not approach the bear, which slowed to a swift walk. It was a good reminder how quickly they can



travel. When we could form a convoy we headed up the fjord then crossed back to the shore. The bear continued to follow the shore until we were in the rock-strewn shallows at the top of the fjord, where the bear began to climb away and we left it in peace. As we did so Hannah spotted a black bear in the far distance, only a dot, but it was an official bear dot.

We went back towards the ship and landed at a small wedge of land formed by a

raised beach. On it were the remains of sod houses, and a Moravian Mission. In 1868 there had been a short-lived mission established at Nachvack Bay. After HBC opened a store alongside them, in competition, the Moravians relocated here in 1871 to Nullartok Bay between Hebron and Killinek, and named it Ramah. It closed in 1908 due to financial difficulties and overlap with a new mission at Killinek, built in 1904.

We went ashore in fine conditions and Callum, Jane and John guided us around the various ruins. Much must have been salvaged and taken away, for nothing remained above the foundations. The evening was already drawing in and a moody twilight settled. The lights of the *Polar Star* were shining clearly.

Hannah outlined our plans for a morning at Shuldham Island in Saglek Bay, followed by a visit to Hebron in the afternoon. For recap Tony spoke about bards and docks, which we now knew were not Welsh poets and port facilities, but birds and ducks. Callum described native fox traps and John gave a potted history of the rise and beliefs of the Moravian Church. Joe took a look at geological faults, showing how features seen at lunchtime continued at quite different levels either side of the faults.

Chef Bob and his team now had our BBQ ready. Conditions out on deck were now damp but some die-hards still braved the seating outside the Observation Lounge. Afterwards there was an open mike for whatever anyone fancied doing: song, joke or recitation. Passenger Helen McArthur stole the show with the story of Cinderella told in Spoonerisms (swapping the first letters of words in a sentence). John led some shanties and sang a Cornish love-song and Orty told jokes in a way that meant the punchlines didn't matter. Music then followed but when they started playing Abba I went to bed so you will have to compose the rest of tonight's log for yourself.

Friday 1 October

Saglek Bay and Hebron

Midday position 58°30.6'N 062°46.8'W

Pressure and temperature: 1011mb 12°C

Wind and conditions: NE Force 2, light cloud, light swells



A clear dawn just after 06:00 saw the sun rise out of the sea into a near cloudless sky. Our destination was Shuldham Island, which Callum and Jane used to call home, when they were excavating some of the group of traditional sod houses. There is evidence of human occupation for at least 6000 years, and once we were on shore, Callum described their finds. Radio-carbon dating showed that Dorset culture continued long after the 1000AD end-date which derived from other areas, and continued in Labrador a further 500 years or so and overlapped with the Thule culture.

Thule Culture

The Thule people are named after a settlement (also called Avanersuaq) in the extreme NW corner of Greenland. They were the last of three main cultural waves which migrated into Greenland from northern Canada having made their way, over centuries, from Alaska and before that, Siberia. They may have arrived as early as 1000AD, but they became the prominent culture between 1300 and 1400 AD. Thule people's descendants are modern Inuit and Greenlanders, who sometimes still use original sites today. In Greenland, some Thule people settled where they landed, but they also moved north and then down the east coast, as well as south down the west coast where they met the Norse. Relations seemed to be largely co-operative but the Norse disdained the Inuit dismissing them, as they did all northern and American Natives, as *Skraelings*, meaning wretches. The 'wretches' survive today, while the Norse settlements ultimately failed.

There were eiders and golden eye ducks on the lake and caribou tracks over the meadow between. Cloudberries were abundant here as were crowberries and partridge berries. Callum then led a walk round his old estate detailing the finds. We saw caribou antlers, found broken and discarded tools, and traced the old habitations on the ground. There were caches for meat and a burial construction with the femurs visible in the half-light. A communal talking ring is a possible explanation for one larger construction: a place to chew things over on a nice day. We followed a dramatic storm beach out to a point offering views up another channel. On the way back an Arctic char, that on the way out had been holding its place in a trickle of water coming from the lake, was still there.

Those who were back a little earlier had time for a Zodiac cruise in the calm of the bay and we were all back on board for 11:45 to set sail at 12:05 for Hebron.



We sailed swiftly to our anchorage in the bay off the abandoned Hebron Moravian Mission, arriving a little after 14:30. We slipped the Zodiacs between low rock islands and reefs and landed below two properties half-demolished by the weather. A short trail took us to the main mission building where John pointed out the principal sights. Alongside the mission, the burnt ruins of a number of buildings were apparent. There had been a fire just over a year ago, which had burnt down one historic building, probably a store, and all the modern huts and store buildings erected to assist with the reconstruction. The wind was blowing away from the church and mission, or else it would also have been consumed.

The main mission buildings had been under renovation for five years; it is only practical to work on it in the summer months. Construction began in 1829 and was forcibly abandoned by Government order in 1959. Its people were resettled at Nain and Hopedale to make it cheaper to provide public services; isolated small communities are not cost efficient. The Government has since apologised, but with the emphasis being on how it was carried out rather than admitting the resettlement was wrong. However representatives of the displaced and their descendants have accepted the apology. Across the little valley, two Moravian cemeteries lay below ancient Inuit burials under loose stone cairns, where occasionally, the bones of old hunters could be glimpsed.

The sun, vanishing behind the mountain still, sent dramatic light into the clouds as we planed back under dark skies to the *Polar Star*. At recap Hannah reported the prospect of a late breakfast and a morning's lectures before landing at a living Moravian-based community: Hopedale. Jane showed beautiful Inuit art by Ruth Qualluardjuk representing the four seasons on the tundra. Lis reported 40 species of flower seen yesterday and identified some of the plants whose photos she had been shown. She also passed on Ranger Jim's permission to eat a few berries in the national park. Joe described the varieties and origins of the clouds we had seen around Saglek Bay and Callum told the sad tale of the crash of a B26 bomber on the mainland opposite Shuldham Island. It came down on 10 December 1942 below the later Dew Line centre. Not knowing they were only 30 kilometres from Hebron, most of them stuck by their plane waiting for a rescue that never came. After dinner Jane introduced the Moravians

and Orty talked movingly about his family connections, a grandfather and great-grandfather who lived on the missions.

Now we were heading eastwards it was time to pay for some of the extra hours by losing an hour.

Saturday 2 October

Cruising South and Hopedale

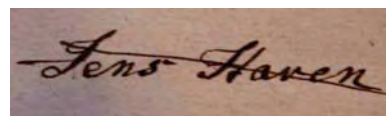
Midday position 55°27.2'N 060°12.3'W

Pressure and Temperature: 1007mb 7°C

Wind and Conditions: NW Force 4, grey with rising cold wind

New weather: fog. But not too bad to slow us down, and the sea was calm. After breakfast we joined Jane for a talk about *Inuit Art*, explaining Inuit shamanism and showing us examples of shamanistic practices through contemporary art works. Despite limited materials Inuit peoples have always excelled in decorating commonplace objects with great skill, and have taken to modern art materials with flair. This was followed by Ragnar talking about a subject close to the heart of any Icelander: *Cod*. It was part of a rich economy that spread across the North Atlantic from the fifteenth century onwards, and was important enough for Britain and Iceland to come to blows over it in the 1970s. It was sobering to hear Ragnar's appraisal of current stocks before being offered it as an option for the evening meal. In the modern world there can seem little connection between personal action and wider problems.

By late morning we saw a very different landscape outside our portholes: lower lying and lush. We tried to remember the name for the tall green things: trees. At 12:15 we stood off the harbour of Hopedale, a place the Inuit know as Arvertok, or place of whales. In grey and breezy conditions, we sped in to land on the swirling gneiss rocks at the community of Hopedale, established in 1782 by Moravians and now inhabited by around 600 people, the majority of whom are of Inuit descent. Our guide David, accompanied by children enjoying the leisure of their Saturday afternoon, greeted us at the dock. He took us to the church, completed in 1865, and gave us an introduction to the Moravian Mission movement and the founding of the community. It was begun in the first wave of settlements under the direction of Jens Haven. David took questions about life past and present in Hopedale. We were then free to visit a craft exhibition upstairs in the mission house next door, the museum, Labradorite plant and all other points of interest, including, at the back of the church, one of the oldest buildings east of Quebec. The museum told the story of the Moravians and the community of Hopedale, and its fishing and fur trades. After an initial tragedy, where six men were lost, presumed murdered, the Moravians were welcomed by the Inuit who proved receptive to their message and pious servants of the church.



We also said goodbye to our Parks Canada warden Jim, who was returning home having protected us from ursine assault. It is also the end of the country in which polar bears are likely.

The Moravian Church

Jan Hus was a Prague priest born in 1369 who preached against the established Catholic Church, saying it must reform and be a servant of the people, not their master. The sacrament of taking wine and bread must be available to all, and the Bible should be available in the language of the congregation, not hidden behind the barrier of Latin. He was burnt at the stake at Lake Constance (Bodensee) in 1415, but his teaching radicalised many who were offended by the Church's preoccupation with worldly wealth.

Adopting the name they are still formally known by today *Unitas Fratrum*, the Union of Brothers, they created a stronghold for dissidents in Moravia, in the modern Czech Republic, and commonly became known as Moravians. They received the protection and support of Count Zinzendorf of Saxony, who used his connections with the Danish Court to promote Moravian missions around the world. They were especially interested in bringing the Gospel to native peoples who had never heard it. The missionaries' study of Inuit language and culture in Greenland soon brought them to Labrador, where numerous missions were set up from the late 18th century.

As we closed our operation the wind had a bite to it but local children were happy in T-shirts and hoodies. Besides, the local forecast had been for winds rising to 60 knots so we had



escaped any serious poor weather. To enjoy the coastal scenery as we continued south recap and briefing were saved until after dinner. Hannah and Callum briefed us about two sites we planned to explore tomorrow. Orty described the rodents and insectivorous shrews which were having a good year in the ground layer. Joe talked about the rare mineral Labradorite and its internal reflections, from an odd plagioclase or feldspar mineral. He then talked

about tree-limits and tree-lines. Tony showed pictures of a palmated plover - meaning its feet were only half webbed. Lis rounded up with pictures many of the plants we have been seeing during the trip.

Sunday 3 October

Indian Harbour and Winter Bay, in Groswater Bay

Midday position 54°26.6'N 057°14.2'W

Pressure and temperature: 1011mb 6°C

Wind and conditions: NW Force 4, showery turning sunny and warm

Breakfast had barely hit our bellies before a Zodiac was skimming ashore in freshening conditions, into Indian Harbour, an old, abandoned fishing outpost (a port with no land connections to other settlements). It was forcibly closed by the government of Newfoundland-Labrador in the 1960s to reduce the cost of servicing remote settlements. We landed on a rock slab on a shore scattered with huts, heavy cast iron objects, some of which had clear uses: a grinder and a stove, and others rather mystifying, likely to be involved in fish processing. It had once been the site of a Grenfell Hospital, but its location was no longer obvious. Jane had a photo locating under a characteristic block of rock in the ridge, and some concrete foundations, which put it next to the cemetery, where it was convenient to bury their mistakes. Two lone burials, one dating from the 1918 Spanish Influenza epidemic, lay on the hill, the matt surface of the marble bright in the growing gloom. We picked around the huts, still poignantly littered with old-fashioned shirts on hangars, waiting for a long-postponed return, and magazines and calendars from 1987, suggesting it was still used for summer fishing until twenty years ago.

Birds were still few and far between, surprising given the riches of the berries, but snow buntings flitted around, and out in the bay guillemots and loons (divers for English birders) could be spotted. One rock pool was the home, for one tide, of a large red jellyfish and ctenophores drifted by. This is a group of animals shaped like ribbed, translucent bladders. They are separate from jellyfish, filter food from the water, and are capable of lighting up spectacularly with bioluminescence. The sky



darkened and the wind was ratcheted up until it was cold, and kicking up short steep waves in the bay. As the last Zodiac left if it wasn't hail, it was very tough rain. We left shortly before 12:00 to make good steaming time to our next stop, and lunch was taken early, at 12:30, but not before whales had made an appearance around the ship: a sei (probably) and a Minke, the latter lunge feeding athletically.

The afternoon landing was near Rattlers Bight, but this is no country for snakes. In lightening conditions a Zodiac ride down-wind took us to a point where we bow-landed from deep water and walked to a prominent rock at one end of a neck of land where Callum was standing proudly brandishing yet more Ramah chert. The landform was ideal for a settlement with water both sides and flat land near the shore. Along this coast many sites were excavated by William Fitzhugh, naming the cultures after meaningful local features. Possible burials and house outlines were pointed out.

The real stars were the weather and the vegetation. Autumn colours and contrasting leaves were complemented by fresh green micro-copses of conifers, a few metres across, and bedrock supporting crisp flakes of dark lichen. Many climbed to the ridge to obtain fine views of the land, the islands and the coves and bays, Joe led a geological tour and Lis botanised. Berries were everywhere, including cloudberries, not common at most previous sites.

We came back to ship and once again were treated to Minke whales feeding. Hannah presented the plans to make an early start to allow us to make two exciting landings in one day: Battle Harbour and Red Bay. She then talked about the feeding Minkes we had seen. Joe previewed the photo CD which seems relatively free of tectonic plates, Ragnar talked about the politics of the names Eskimo and Inuit. Callum added some details to the sites we had seen today, including a burial site, two tent-rings sites, a blind and a food cache. John described drama at Trader Croucher's Store, Battle Harbour, just over a hundred and one years ago. Robert Peary gave a conference to 32 members of the world's press, claiming to have reached the North Pole. He hadn't and he knew he hadn't. Liz identified the missing plant from the night before, Tony described some of the new birds he had seen on his migration southwards and homewards. After dinner John gave a talk on *Early Whaling* with special reference to the Basque sites and later remains we would see the following day.

Monday 4 October

Battle Harbour and Red Bay

Midday position 51°58.8'N 055°39.0'W

Pressure and temperature: 1019mb 8°C

Wind and conditions: N Force 5, overcast, brightening

'Salmon is salmon, but cod is fish!' - Battle Harbour saying



As early morning calls go, 06:30 wasn't so bad and by 07:30 off we bounced through islets and reefs to Battle Harbour, or as we would soon learn to say: Baddullarber. We were able to enter the tickle, as any tight sea passage is known here, before tying up. We were met at the little wooden pier by the friendly local employees and volunteers of the Battle Harbour Historic Trust, which formed in

1990 and took over the village from its last commercial operator after the moratorium on cod-fishing put an end to the traditional economy. Some have family homes here but no one winters in Battle Harbour anymore; most live at St Mary's.

The place was first opened up by the firm of John Slade from Poole, Dorset, on the south coast of England, who came here in 1775 and by 1785 had established it first as a sealing centre. The guides still showed clear traces of rural southern English accents of the nineteenth century. Thomas Hardy's characters may not have talked so differently. We were given a tour of the restored warehouses and workshops that took in the fresh cod, gutted, headed and dried it on the stave 'flake' behind. Fresh water would injure the drying fish, so it had to be brought in when it rained. It took five sunny days to dry out the fish, but it might be five months before you had five sunny days.

This tiny place came to world attention in September 1909 when the American explorer Robert Peary, fresh back from his attempt on the North Pole, held a press conference here, in the loft

of the salthouse, then Trader Croucher's Store, after the Marconi telegraph had signalled Frederick Cook's rival claims across the Atlantic from Copenhagen. Posterity has generally decided that Cook definitely did not get there, and Peary got close but not actually there, and he secretly knew it. The public dirt-slugging muddled the rest of both men's careers.

Our walk took us along the boardwalk and up to the church/schoolhouse, designed by English ecclesiastical architect William Grey in 1848 but not completed until 1857. Arkadii and Jane played some hymns from the church books. The tour took in the bachelor hut of the Newfoundland Rangers, spurned when the married men of the RCMP took over duties. Because of the long sail to Red Bay, last Zodiac was at ten, and we reluctantly left the sunshine behind. Engine room tours began; half of the *Polar Star* is below the waterline.

Recap and briefing prepared us for our visit next day to St. Anthony and the Norse archaeological sites and reconstructions. Jane described the work of using fabric and wool remnants to make or 'hook' pictures. Before bedtime we moved the clocks forward half an hour to SNT (Standard Newfoundland Time).

Tuesday 5 October

St. Anthony and L'Anse aux Meadows

Midday position 51°21.9'N 055°34.8'W

Pressure and temperature: 1009mb 12°C

Wind and conditions: SW Force 6, cloud lifting, becoming sunny

We arrived on a chilly morning in the fine natural harbour of Snantny which for some reason is spelled St. Anthony. A short Zodiac ride took group 1 passengers to a floating dock adjacent to



the Grenfell Centre where our coach was waiting for the trip to L'Anse aux Meadows and Norstead. Group 2 passengers came to the Grenfell Centre and were free to explore the various exhibitions and historic premises, memorials to the selfless work carried out by Doctor Wilfred Grenfell who came to Newfoundland in 1892 and brought hospitals and schools to the fishing communities of Newfoundland. He died in 1940, and his house is now being continually improved as artefacts with a connection to him and his family are garnered from round the town, from wider Newfoundland, and his grandchildren in the USA. The modern Charles S Curtis Memorial Hospital was visited by the healthy to view the Jordi Bonet murals, interestingly located as a trainee local guide once told Hannah, on the walls.

From the bus, the countryside looked different because it had a regular supply of trees. Licences are granted to cut small areas, five or six cords might see you through a winter. Danny Keats, the bus's owner and driver, provided a unique poetic commentary on local life, reminding us that since 1949 Newfoundland has taken on the burden of administering Canada. We passed the house rented by author E. Annie Proulx when she was researching and writing her award-winning book *The Shipping News*, and were soon at the original Viking site of L'Anse aux Meadows. In 1960,

lawyer and diplomat turned writer and adventurer, Norwegian Helge Ingstad, followed up suggestions by locals that there were old Native remains just above the beach. He was investigating the theory first put forward by Newfoundland businessman William F Munn, that the sagas *Erik the Red* and *The Greenlanders' Saga* (together known as the Vinland Sagas) described real voyages to the New World nearly half a millennium before Christopher Columbus, and that Erik the Red had landed and stayed for a time at somewhere like L'Anse aux Meadows. The latter was one of a number of bays which answered the rather vague descriptions of the sagas. His wife, professional archaeologist Anne Stine Ingstad excavated the site and unearthed eight buildings, including a smithy. In one hearth was a bronze pin made only in Norse Greenland which held together not just clothing, but the theory. L'Anse aux Meadows is now a UNESCO World Heritage Site.

From here, Erik's men had explored the coast, encountered the locals they called *Skraelings*, and, in typical Viking fashion, made enemies of them by needless violence. They would have found it hard to live self-sufficiently: the English failed to do so at Roanoke over 500 years later, and for the same reasons: they were too few in number, too far from their supply of goods, and unskilled in living effectively off the land. The footprints of the buildings lie on a terrace, now about a hundred metres inshore, but a thousand years ago it was just above the beach. In a smithy, iron was extracted from the bog-ores, eking out 2.5 kilos of iron during their stay, just enough for running repairs. The lack of wear and tear or any other changes to the buildings, (apart from the final, perhaps deliberate fire) and the small size of the middens, suggest a brief stay of just a few winters.

A bonus of visiting the park is that hunting is forbidden and older wiser moose know this and are fond of regarding visitors with the kind of sanguine superior stare that a French head waiter would be proud of. Both groups had good sightings and whichever group you were in let me assure you that you saw two more than the other group.

In the Norstead reconstruction we could see the *Snorri*, a replica *knarr* or trading vessel, very stoutly built, in Maine, USA. After one abortive attempt ended with a broken steerboard (a primitive rudder), it sailed successfully from Greenland to the New World. It is named after the son of Gudrid Thorbjarnadóttir and Thorfinn Karlsefni, the first European child known to be born in the New World.

In the longhouse, church and forge, we could also talk to real Vikings who, since tourism has grown, now speak excellent Newfoundlandese. Most priceless was Lamby the alternative



lifestyle Viking, born in a Grenfell orphanage, a self-trained visual artist and a performance artist to put Gilbert and George to shame. We took our bus back to town, via Dark Tickle stores, laden with replica Viking goods of every description. At 17:35 we set sail for our final destination, slipping below the massive headland guarding the harbour of St Anthony. At recap Hannah described a busy

morning tomorrow at Bonavista, Joe talked of Avalon, the Isle of Apples in Arthurian legend, but also a slice of Newfoundland geology. He then described how bog iron forms, helping to keep Viking vessels shipshape. Lis talked of butter and eggs, and crackerberry; both are plants, Ragnar took up on a guide's comment that a Greenlandic corpse had an American arrow in it and showed how the sagas reported a killing from an arrow shot. It need not have been an American in Greenland. John read out his poems about a burial at Battle Harbour, Vikings at L'Anse aux Meadows, and sang a song of farewell to Newfoundland. To close the evening the Polar Star Odeon showed the film *The End of the Line* about over-fishing in the oceans of the world, an issue facing many Newfoundlanders every day.

Wednesday 6 October

Bonavista

Midday position 48°38.9' N 053°07.4' W

Pressure and temperature: 1013mb 10°C

Wind and conditions: NW Force 5, sunny, moderate swells

Our morning improved steadily from grey to bright and clear, even before we reached Bonavista. Our approach to the harbour was dramatic as the captain eased us deep into the middle harbour where we enjoyed shelter from some lively swells. We departed on a Zodiac



ride into the marina for a tour of Bonavista and its environs. We were met by Cyndy the head of tourism, and two school buses to take us out along the coast road to the heritage lighthouse of Bonavista. There were fine views of the coast and a circular walk taking in the statue of John Cabot still staring out to sea. I wouldn't tell Cyndy, but there is limited evidence for Bonavista having any special role in the voyage, however they have worked harder than anyone at interpreting the voyage so they deserve the tourism.

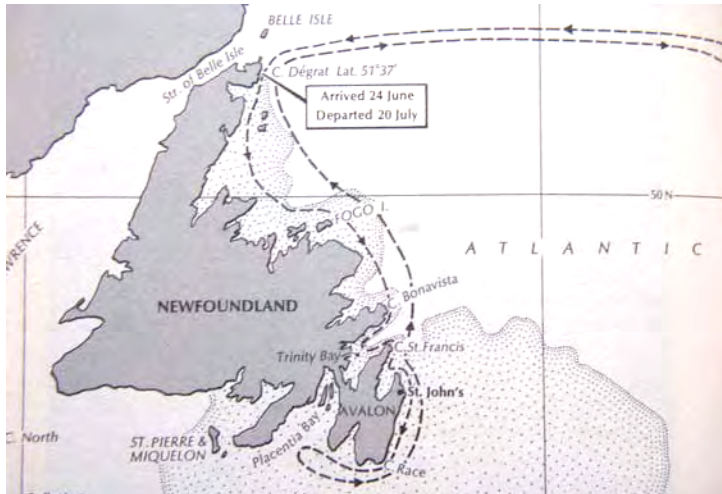
Then there was a tour of the Ryan Premises, giving a history of the sealing and cod industries, a commerce of international importance in its heyday. As much money was made from these oceans as the Spanish extracted in gold and silver from their American realms. We tried to help by visiting the gift shop. The premises were restored by carpenters, many of whom had retrained on being made redundant after the fishery collapsed

when a moratorium on cod fishing was imposed in 1992.

Our final attraction was a replica sailing ship from the fifteenth century. Safe inside its winter quarters we found the *Matthew*, protected from the tail of Hurricane Igor which struck here on 21 September taking one life and causing widespread damage, mainly through flooding from the 252mm of rain which fell in 24 hours. This was John Cabot's ship in a voyage of 1497 which deserves to be better known. It was one of a number of professionally executed expeditions, including that of Frenchman Jacques Cartier into the St Lawrence, which, if they had been

seized on by their monarchs, would have resulted in a very different history for North America. Instead they were distracted by wars of religion.

John Cabot



John Cabot was the first visitor to North America after the Norse. We have no portrait of him, no written description, no letter, no scrap of handwriting, or signature. What happened on his first voyage is largely surmised, and he vanished on his second voyage, in 1498. No shipmate left an account. All our information is third hand.

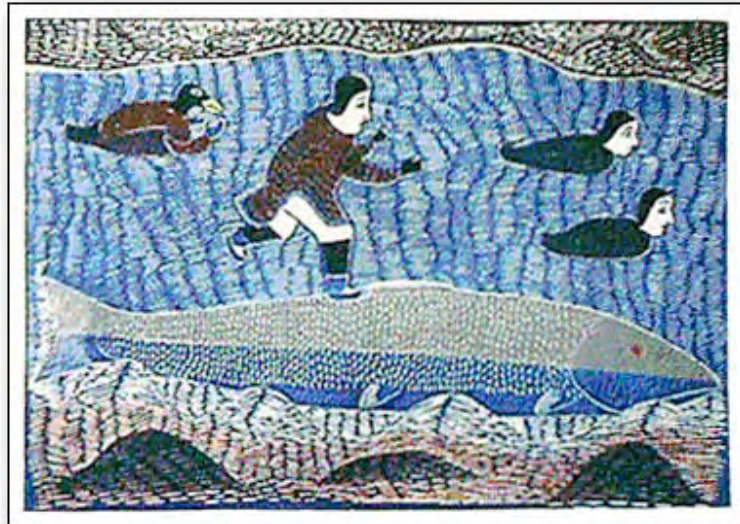
He was born by 1453, possibly in 1451, like

Columbus. He was certainly Italian, probably Genoese; in that dialect, Caboto means a coastal trader. He couldn't interest Seville or Lisbon in a shorter, high-latitude route to the Indies, so he went to London which was at the priciest, western limit of the Spice Route trade. The omens weren't good; Henry VII had turned down Columbus. Cabot was at the English Court in late 1495 and obtained Royal letters of patent granting him authority over new lands discovered, subject to the Crown taking 20%: the Royal Fifth. But the king invested no money. Cabot settled in Bristol, Britain's second port, with 10,000 people.

On his first voyage, he took just one small ship, the *Matthew*, 50 tons. They left around 20 May 1497, and went there and back in 11 weeks, a record which stood for a century. It took 35 days to sight land, on 24 June 1497. 300 years later a voyage of 40 days was still considered good. He arrived in north Newfoundland, close to L'Anse aux Meadows, 496 years after Erik the Red. They landed, took possession for England, and while he saw no people, he observed snares and fish-nets. He admitted he dared not explore farther than the cover which could be provided for his men by cross-bows from ship, and never landed again.

Last Zodiac was 13:50 and then we began the last leg of our odyssey. There were galley tours, whales to be spotted, bills to be settled, boots to be rescued from the wet room, diaries waiting for an update and suitcases unwilling to accept all the stuffed seals, polar bears, puffins and Labrador dogs that seemed essential items at the time of purchase.

After final briefing and the delights of the Captain's Farewell Dinner, there was a last chance to air some old favourite songs in the Observation Lounge.



We sailed over 3228 nautical miles and took a similar number of photographs.
Many happy hours going cross-eyed on our computers lie ahead.

Bon Voyage from your *Polar Star* team

May your God and your luggage go with you.

PLANTS NOTED IN GREENLAND AND CANADA

Numbers refer to locations and are keyed to the right

Flowering Plants

Angelica *Angelica archangelica* 1,5,14, 15
Alpine Azalea *Loiseleuria procumbens* 2, 3
Alpine Hawkweed *Hieracium alpinum* 3, 4
Alpine Lady's Mantle *Alchemilla alpina* 2, 3, 4
Alpine Milk Vetch *Astragalus alpina* 7
Alpine Mouse Ear *Cerastium alpinum* 2, 3, 5, 6, 7
Alpine Rockcress *Arabis alpina* 7, 10
Annual Stonecrop *Sedum annum* 3
Arctic Cinquefoil *Potentilla hyparctica* 2
Arctic Lynis *Melandrum affine* 6
Arctic Lupin *Lupinus arcticus* 4
Arctic Poppy *Papaver radicum* 2, 10
Arnica Ragwort *Senecio pseudo-arinea* 15
Beach Pea *Lathyrus maritimus* 5,12,13, 15
Bistort *Polygonum bistorta* 4
Blue Flag *Iris setosa* 15
Butter and Eggs *Linaria vulgaris* 15
Bog Rosemary *Andromeda polifolio* 6, 10, 11, 12
Broadleaved Willow herb *Chamaenerion latifolium* 9
Clover – Red *Trifolium pratense* 4, 15, 16, 17
Clover – White *Trifolium repens* 4, 14, 16, 17
Common Chickweed *Stellaria media* 4, 15
Common Sorrel *Rumex acetosa* 11, 14, 15
Common Scurvy Grass *Cochlearia groenlandica* 3, 13
Creeping Buttercup *Ranunculus repens* 14, 15, 16, 17
Curled Leaf Dock *Rumex crispus* 4 (introduced)
Dandelion sp *Taraxacum* 2, 3, 4, 5, 7, 11,14, 15, 16, 17
Diapensia *Diapensia lapponica* 10, 11, 12, 13
Entire leaved Mountain Avens *Dryas integrifolia* 8
Eyebright *Euphrasia frigida* 11, 16
Harebell *Campanula rotundifolia* 7, 11
Hemlock Parsley *Conioselinum chinense* 14, 15
Fireweed *Epilobium angustifolium* 7, 8, 9
Greenland Yellow Rattle *Rhinanthus groenlandicus* 2
Labrador Cat's-Foot *Antennaria ekmaniana* 7
Labrador Tea *Ledum groenlandicum* 11,13, 15
Large flowered Wintergreen *Pyrola grandiflora* 6, 7
Livelong Saxifrage *Saxifraga paniculata* 3
Many rayed Goldenrod *Solidago multiradiata* 7
Meadow Buttercup *Ranunculus acris* 2, 3, 4, 5,
Meadow Cranesbill *Geranium pratense* 4, 15
Moss Campion *Silene acaulis* 6, 7, 9
Mountain Heather *Phyllodoce coerulea* 7, 9
Mountain Sorrel *Oxyria digyna* 5, 7
Northern Labrador Tea *Ledum palustre* 7, 9, 10,11,12,13

Places: Greenland

1. Prins Christian Sund
2. Nanortalik
3. Hvalsey
4. Qaqortoq
5. Brattahlid

Canada

6. Iqualuit
7. Nackvack Fjord
8. Ramah Bay
9. Shuldham Island
10. Hebron Mission
11. Hopedale
12. Indian Harbour
13. Winter Bay
14. Battle Harbour
15. Red Bay
16. L'Anse aux Meadows
17. St Anthony

New York Aster *Aster novi-belgii* 16
 Oxeye Daisy *Chrysanthemum leucanthemum* 16, 17
 Pacific Silverweed *Potentilla egedii* 7
 Pearly Everlastings *Anaphalis margaritacea* 17
 Pineapple Mayweed *Matricaria matricariodes* 5, 11, 15, 16, 17
 Prickly Saxifrage *Saxifraga tricuspidata* 7
 Procumbent Pearlwort *Sagina procumbens* 3
 Purple Saxifrage *Saxifraga oppositifolia* 7, 11
 Red Alpine Campion *Viscaria alpina* 8
 Roseroot *Rhodiola rosea* 3, 8, 15
 Rough Hawkbit *Leontodon hispidus* 15, 16, 17
 Rough-stemmed Goldenrod *Solidago rugosa* 16
 Scurvy grass *Cochlearia officinalis* 12
 Seashore Chamomile *Matricaria maritima* 2, 4
 Seabeach Sandwort *Honckenia peploides* 6, 13, 15
 Sea Lungwort *Mertensia maritima* 13, 15
 Scotch Lovage *Ligustum scoticum* 11, 12, 14, 15
 Silverweed *Potentilla anserina* 5, 16, 17 (introduced)
 Slender Gentian *Gentiana tenella* 7
 Sneezewort *Achillea ptarmica* 4 (introduced)
 Star Gentian *Lomatogonium rotatum* 17
 Stitchwort *Stellaria crassifolia* 7, 15
 Tansy *Tanacetum vulgare* 4
 Thrift *Armeria maritima* 2, 5, 7
 Tufted Saxifrage *Saxifraga caespitosa* 4, 6, 8
 Violet *Viola* 2
 White Arctic Bell Heather *Cassiope tetragona* 6, 10
 Whitlow Grass *Draba* 2, 3 (19 different species)
 Wood Forgetmenot *Myosotis sylvatica* 17
 Yarrow *Achillea millefolium* 2, 5, 11, 12, 14, 15, 16, 17
 Yellow Rattle *Rhinanthus crista-galli* 11, 15

Berries

Alpine Bearberry *Arctostaphylos alpina* 6, 7, 8, 9, 10, 11, 12, 13
 Arctic Blueberry *Vaccinium uliginosum* 2, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16
 Arctic Raspberry *Rubus acaulis* 7
 Cloudberry *Rubus chamaemorus* 9, 12, 13 also called Bakeapple
 Crowberry *Empetrum nigrum* 1, 2, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16
 Crackerberry *Cornus canadensis* 11, 12, 13, 15, 17
 Rock Cranberry *Vaccinium vitis-idaea* 6, 7, 8, 9, 10, 15, 16, 17

Ferns, Mosses and Lichens

Fragile Fern *Dryopteris fragens* 2

Alpine Club-moss *Diphasiastrum alpinum* 2

Fir Clubmoss *Lycopodium annotinum* 10

Stiff Clubmoss *Huperzia selago* 10

Common Horsetail *Equisetum arvense* 7, 17

Dwarf Horsetail *Equisetum scirpoides* 7

Peat Moss *Spagnum* 2, 13, 15

Red Moss *Bryum cryophyllum* 2

Reindeer Lichen *Cladina rangiferina* 2

Pixie Cup Lichen *Cladonia* 2, 7, 8, 11, 12, 13, 15, 17

Rock Tripe *Umbilicaria* species 11, 12

Map Lichen *Rhizocarpon geographicum* 1, 12

Various Fungi including Puff Balls, Boletus 2, 3, 5, 7, 10, 12, 13, 16, 17

Trees

Arctic Willow *Salix arctica* 2, 7, 8, 10, 11, 12, 13

Common Juniper *Juniperus communis* 2, 15, 16, 17

Dwarf Birch *Betula nana* 2, 3, 7, 10, 11, 13

Dwarf Willow *Salix herbacea* 6, 7, 6, 9, 10, 11, 12, 13

Green Alder *Alnus crispa* 4, 7, 8, 10, 11, 14, 15, 16, 17

Glandular Birch *Betula glandulosa* 13, 17

Northern Willow *Salix glauca* 2, 3, 4, 7, 8, 10

Larch 11

Black Spruce 11, 17

Balsam Fir 13, 16, 17

White Spruce 13

Mountain Ash *Sorbus decora* 17

Grasses, Sedges, Cotton Grass

Alpine Meadow Grass *Poa alpina* 2

Lyme Grass *Elymus arenarius* 4, 7, 8, 11, 12, 13

Heath Rush *Juncus* 2

Arctic Cotton Grass *Eriophorum scheuchzeri* 2, 7, 10

Common Cotton Grass *Eriophorum angustifolium* 6, 10, 11

The species name for the dandelion, whitlow grass and rush have not been determined. Trees have only been noted in the tundra.

List compiled by Lis Unsworth

BIRD AND MAMMAL LIST – Iceland – Greenland – Labrador, September & October 2010

BIRDS	September/October	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6
		Reykjavik	At Sea	At Sea	Pron Christian Sund	Pron Christian Sund & Nanortalik	Hvalsey & Qaqortoq & Brahalid	At Sea	At Sea	Igaluit	Savage Islands	Akpatok	Torgat Mountains	Hebron	Hopedale	Groswater Bay	Battle Harbour	St Anthony's & L'Anse aux Meadows	Bonavista
1.	COMMON LOON <i>Gavia immer</i>					X							X			X	X		
2.	NORTHERN FULMAR <i>Fulmarus glacialis</i>	X	X	X		X	X	X		X	X			X	X			X	X
3.	STORM PETREL <i>Oceanodroma leucorhoa</i>																		
4.	GREAT SHEARWATER <i>Puffinus gravis</i>		X	X		X	X	X											
5.	SOOTY SHEARWATER <i>Puffinus griseus</i>		X			X	X												
6.	NORTHERN GANNET <i>Morus bassanus</i>	X															X		X
7.	GREATCORMORANT <i>Phalarocorax caro</i>	X															X		
8.	DOUBLE CRESTED CORMORANT <i>Phalarocorax auritus</i>	X														X			X
9.	MALLARD <i>Anas platyrhynchos</i>	X					X												
10.	TUFFED DUCK <i>Aythya fuligula</i>	X																	
11.	AMERICAN BLACK DUCK <i>Anas rubripes</i>															X		X	
12.	NORTHERN PINTAIL <i>Anas acuta</i>																		X
13.	COMMON GOLDENEYE <i>Bucephala clangula</i>													X		X			
14.	GREATER SCAUP <i>Aythya marila</i>													X					
15.	COMMON EIDER <i>Somateria molissima</i>	X									X	X	X		X	X	X		X
16.	HARLEQUIN DUCK <i>Histrionicus histrionicus</i>										X	X							
17.	SURF SCOTER <i>Melanitta perspicillata</i>										X								
18.	WHITE WINGED SCOTER <i>Melanitta fusca</i>										X	X	X	X		X			
19.	RED BREASTED MERGANSER <i>Mergus serrator</i>												X	X					
20.	CANADA GOOSE <i>Branta Canadensis</i>												X				X		
21.	GREYLAG GOOSE <i>Anser indicus</i>	X																	
22.	PINKFOOTED GOOSE	X												X					
23.	WHOOPEER SWAN <i>Cygnus cygnus</i>	X																	
24.	PEREGRINE FALCON <i>Falco peregrinus</i>												X			X			
25.	ROUGH-LEGGEDHAWK <i>Buteo Lagopus</i>						X												
26.	WHITE-TAILED EAGLE					X													
27.	NORTHERN HARRIER <i>Circus cyanus</i>															X			
28.	PURPLESANDPIPER <i>Calidris maritima</i>							X											
29.	WHITE RUMPED SANDPIPER <i>Calidris fuscicollis</i>								X					X					
30.	SEMPALMATED SANDPIPER <i>Calidris pusilla</i>																X		
31.	SEMPALMATED PLOVER <i>Charadrius semipalmatus</i>														X			X	
32.	RED NECKED PHALAROPE <i>Phalaropus lobatus</i>																X	X	X
33.	GREATER YELLOWLEGS <i>Tringa melanoleuca</i>																X	X	



Reykjavik

Iqaluit

Lower Savage

Akpatok

Nachvak

Ramah

Saglek

Hebron

Hopedale

Groswater Bay

Red Bay

Battle Harbour

St Anthony's

Bonavista

St John's

Brathalid

Nanortalik

Prins Christain Sund

In the Wake of the Vikings
A voyage from Reykjavik to St Johns
19th September to 7th October 2010