



Field report from the journey to North-East Greenland 2019



Hvalrosodden – the hundred-year-old hut that was refitted and will not disappear!

It has been Nanok's most extensive field season ever with no less than three ordinary Nanok teams plus a scientist team with close affiliation to Nanok, equalling four field teams consisting of a total of fourteen participants. Each participant was sponsored by Aage V. Jensens Fonde. Read more about this and much more in this report.

29th field season

Introduction

This year Nordøstgrønlandsk Kompagni Nanok has completed its 29th field season.

It has been the most extensive field season ever in Nanok's history with no less than three Nanok teams as well as a scientist team with close affiliation to Nanok. Four field teams with a total of fourteen participants, each sponsored by Aage V. Jensens Fonde. Furthermore, the field season has covered a total of six weeks. This illustrates very well the extent and width that Nanok has become able to cover today.

Each of the four teams has been able to realise an extensive list of tasks, thanks to favourable weather and ice conditions, among other things. Directly contrary to the summer 2018, this year the North-East Greenlandic summer was long, dry and warm. Additionally, there was no unbroken sea-ice in our work area nor any drift-ice worth mentioning off the coast, which made it rather unproblematic to reach the more outlying locations by boat.

Among the four mentioned teams, two have carried out specific restoration projects. The first of these teams has refitted Nordfjordhuset [358-2] on Strindberg's Land, which is one of the three A-huts built by Lauge Koch's renowned Three-year Expedition in the beginning of the 1930s.

The second team has refitted the old trappers' station Hvalrosodden [639-1] – built in 1919 and thus 100 years old this year – as well as the nearby Alwin Pedersen Hus [639-2]. Both of these huts are of unique historical value.

The primary task of the third team, the Museum team, was to complete inspection, documentation and marking of several historical and tourism-relevant sites in the wide-ranging area between Kong Oscar Fjord in the south and Hochstetter Forland in the north.

The fourth team, a scientist team from the Arctic Research Centre at Aarhus University, with Ella Ø as base, was planned to put up automatic cameras for monitoring fauna and flora at land, set out measuring instruments at sea, measure oceanographic conditions in the fjord, as well as run in a new motorboat and furnish the appertaining boat house.

Despite the mentioned weather conditions, there have been challenges along the way, especially logistic challenges, but thanks to an overwhelming helpfulness, flexibility and kindness from many different parties, it has been possible to complete the planned activities of the summer.

It still fills one with joy and wonder to think of the unique spirit of collaboration and solution-oriented helpfulness that exists on "the Coast" across many different players – civilian, public as well as military. A trusting collaboration spirit, which even seems to have increased throughout the last number of years. That *is* inspiring!



First and foremost, a great, warm thank you to our main sponsor, Aage V. Jensens Fonde, for never-failing trust and support. Without this continuous support, Nanok would not be able to carry out its work, which can often be costly, logistically challenging and take years of preparation.

We also owe a very special thanks to a range of Danish Military units and individuals for an outstanding co-operation and ready assistance solving various logistic challenges. Many different units have contributed throughout our work, including Arctic Command, the Sirius Sledge Patrol, Station and Patrol Service Greenland, Defence Guard Mestersvig, the Royal Danish Air Force's Z-team as well as the Navy's inspection vessels.

Also, a great thank you to logistics personnel and scientists at Daneborg and Zackenberg research stations as well as GEUS for willing assistance and co-operation.

Furthermore, a very warm thank you for the great support that family and friends show the dispatched Nanok'ers, who spend their summer holiday working for Nanok. Such support and understanding from home mean the world to the individual Nanok'er.

Also, a great thank you to the large circle of individuals that continuously show positive interest in and support our work.

Finally, a warm thank you to all other good collaborators as well as private and public authorities that in different ways have contributed in making our work possible.

On behalf of Nanok

Peter Schmidt Mikkelsen

This field report is available in English and Danish at: www.xsirius.dk/nanok.html

Field report for the “Strindberg team” 2019

Tasks

The Strindberg team had the following tasks:

- complete renovation and culture historical preservation of Nordfjordhuset [358-2]
- plan new winch for "Agsut"
- install new floor in porch and kitchen in Sverresborg [232] (optional)
- inspect, count and carry out maintenance of Nanok's equipment and depot Ella Ø
- receive goods for Nanok on Ella Ø
- prepare for Nanok expedition Ella Ø 2020

Strindberg team

Team leader: Jesper Stentoft. Engineer. Sirius '97. Nanok '03, '05, '06, '13, '16.

First mate and meteorologist: Rasmus Gaj Jessen. Master carpenter.

Steward, ordinary seaman and field

photographer: Lars Bønding. Carpenter and Fire inspector. Sirius '96, Nanok '06.

Journey up

The journey began as planned departing from Billund, 7 August at 6:30. Then, together with the Museum team, we flew from Copenhagen via Reykjavik, Constable Pynt and Mestersvig, arriving on Ella Ø the same day about 19:00. The trip from Mestersvig to Ella Ø was at times in low altitude due to low clouds over Kong Oscar Fjord.

Start-up on Ella Ø

Having arrived safely on Ella Ø, we began preparing for the trip to Nordfjordhuset at Strindberg. During the first day on Ella Ø, safety equipment, including weapons, communication



Strindberg team ready for departure with “Agsut”. From left: Rasmus Gaj Jessen, Jesper Stentoft and Lars Bønding.

equipment and rescue equipment for sail, was inspected, among other things.

Agsut was inspected, and on 9 August the cutter was launched for a short test sail. Simultaneously, provisions, tools and materials were packed, however, it was not possible to pack all building materials, as we were waiting for the last materials to arrive by ship.

On 10 August at 19:00, “Malik Arctica” from Royal Arctic Line (RAL) arrived, hereafter unloading was commenced. The unloading continued until the afternoon 11 August. After only a few days on the coast, we must have looked a bit impoverished, but fortunately the chef of “Malik Arctica” remedied this with an invitation for lunch at sea.

Having received the last building materials as well as organised the equipment for Ella Ø and next year's renovation of Hamna, we went to sea on 12 August at 12:30.



*The Strindberg huts seen from Nordfjord.
From left: Siriushytten, Nordfjordhuset [358-2] and Strindberghuset [358-3]*

The sail to Strindberg

The sail of 140 km was done over two days with an overnight stay at Blomsterbugten [324]. In superb weather and calm sea, we arrived at Nordfjordhuset 13 August at 17:00. Materials, tools and field equipment were unloaded from “Agsut.” Before beginning the work, a detailed photo documentation was done of the condition inside and outside the A-hut. As a contribution to the renovation project, Sirius had put their depot at our disposal, which meant good comfort and a short distance to the construction site.

Nordfjordhuset

Nordfjordhuset [358-2] is one of the three A-huts, which were built in connection with the Three-Year Expedition lead by Lauge Koch in 1931-33. The hut was originally built as a traveller hut for the expedition’s activities in the area. Since then, the hut has been used by trappers, numerous expeditions as well as the Sirius Sledge Patrol.

Condition before renovation

At first glance, the hut looked fine both outside and inside. However, as soon as you start to scratch a bit in the surface, usually, a few things will appear, and this was no different.



Outside, the wood was screaming for new paint, and the stovepipe was corroded in several places showing large holes. It is a wonder that the hut has not burnt down when guests have been using the coal stove. Many of the strips on the gable wood needed replacement, and both front door and porch door needed work to proof the hut against bear as well as drift snow and sands. Inside the hut needed a thorough clean-up and cleaning. At the same time, it was necessary to do a careful sorting of historical artefacts, which were mixed with the leftover from previous expeditions. In the common room of the hut, the walls, floors and inventory bore witness of many years’ usage of the coal stove. Porch, hallway and garret had been plagued by several years of drift sands. In the hallway the north-facing window had been covered, and the paint hung down in strips from the ceiling.

Indoor renovation

The entire hut was cleared of inventory and stored-up effects. The bunks in the common room had been nailed thoroughly with very large nails to both walls and floor, and it took quite a while to unfasten them without damaging the original wood.



Condition before renovation.



Before renovation. Left: Common room. Right: Porch.

Having cleared the common room, irregularities and loose paint were scraped off the walls and ceiling, which were then washed down. After a day of drying, the ceiling and walls were painted. While preparing for the paint job, we realised that the original walls of the common room had been painted light green. Having brought along a dark green paint, we decided to give it a lighter tone to match the original light green colour as much as possible and create a brighter room.

From the materials of the old bunks, three new movable bunks were made. The solution was a compromise, where old fronts were reused and other parts were made from a mix of new and old. The old shelves and cabinets were thoroughly cleaned, and damages fixed, before they were reinstalled.

The two windows in the south gable and the covered window in the north gable were removed and replaced with new windows. These were made with puttied glass and according to traditional methods. The old shutters were replaced with new ones to make them bear-proof. Finally, the floor was scrubbed and scoured until the wood appeared once again.



Clearing the common room.



Lars washing the floor.



Rasmus making a new bunk.



Nordfjordhuset after renovation.



Outdoor renovation. Left: Jesper replacing the corroded stove pipe. Right: The wood was screaming for a new layer of paint.

Outdoor renovation

Defect strips on both gables were replaced and then painted twice with Swedish red. Removing the old strips, it became apparent that the hut had also had a light green colour outside. However, in this case, we did not make a change of tone.

The old stove pipe was removed, and a new isolated stove pipe was mounted. The location of the stove was changed for a more suitable location in the corner.

The front door, marked by previous bear visits, was repaired with new boards. These were installed on the old frame to show how the door looked originally. The door of the porch also received new boards and was sealed with wooden strips to reduce entry of drift sands and snow. Door of garret was dismantled, and bad boards were replaced. Hinges and barrel bolts were correctly remounted, so the door could be properly locked.

All painting was done with linseed oil paint. Painting with linseed oil paint is a pleasure. The paint covers very well and goes a long way.

Considering the time available, however, it was a challenge to let the paint dry for 24 hours before applying a second layer – and even longer for the surface to be completely dry.

Renovation of Nordfjordhuset was completed in a real North-East Greenlandic spirit, i.e. a compromise of the crew's skills, available time as well as the materials and tools at hand.

Search in Brogetdal and return to Ella Ø

On 18 August we had a helicopter ride to the head of Brogetdal. Our mission was to look for building materials for the hut [907], which there in 1946 had been plans to build at Holmesø (the middle one of the three lakes). We searched the area around the lake for traces of a material site, but rather unsuccessfully. South-east of Holmesø we found a pile of coal, which could indicate that there had been plans to build a trapper's hut nearby. Brogetdal bears witness of being a wind-swept place, so it is no wonder that the mentioned hut materials have vanished in the time after 1946.



Outdoor renovation in progress.



The newly renovated Nordfjordhus.



*Left: Strindberg Land. Red mark: Nordfjordhuset. Blue mark: Location at Holmesø.
Right: Measuring the necessary tractive force for heaving "Agsut" on shore.*

On 21 August Sirius stopped by, and we took the opportunity to move out of their depot and into Nordfjordhuset's common room. How amazing it was to sleep in the newly renovated hut.

The finishing touch to the renovation was put on 22 August, where all cleaned effects were put back in their rightful place inside. The site was cleared, and "Agsut" was loaded with tools and equipment. We had collected some metal scrap during the renovation project, which Sirius helped transport to Ella Ø on their new patrol vessel.

We left Strindberg and Nordfjordhuset 23 August at 13:00 after ten good days on the location.

The return journey to Ella Ø was made in amazing weather and calm sea via Waltershausen Gletcher to our accommodation for the night, Kap Humboldt [308]. We arrived at Ella Ø on 24 August in the evening. All planned tasks were carried out, except installation of new floor in Sverresborg [232].

Finishing on Ella Ø

Time on Ella Ø, until we left on 28 August, was spent stripping "Agsut" and counting equipment, provisions and materials.

Tolvmandsmandsbarakken was prepared for winter in collaboration with Søren Rysgaard and Simon Kortegaard from Aarhus University.

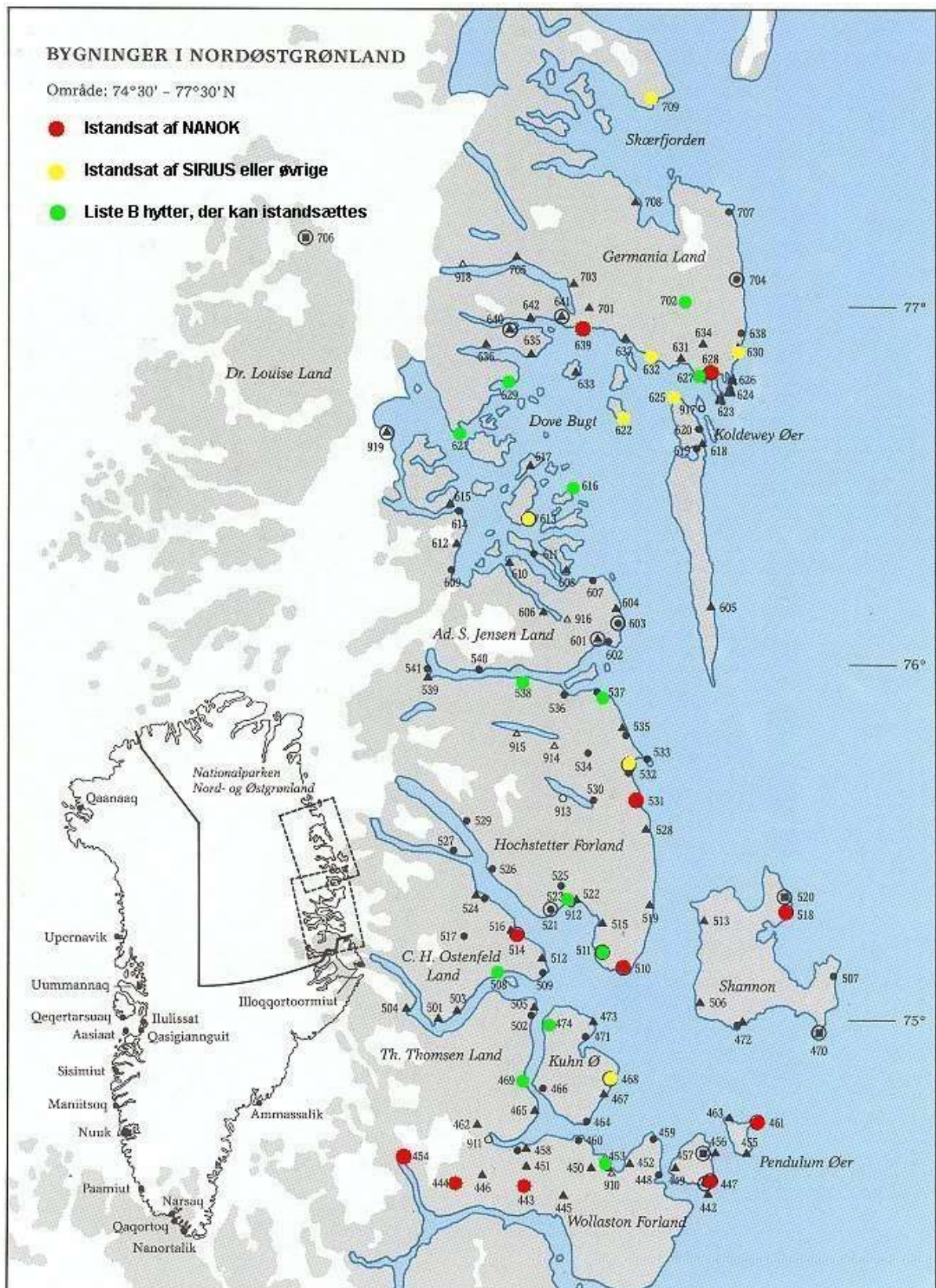
Measurements and drawings for a new cradle were made. For the purpose of dimensioning a new winch, we registered the necessary tractive force for heaving "Agsut" on shore.

Once again, Ella Ø has been the scene of a successful restoration of one of the many historical buildings in the National Park. A great thank you to Sirius for support during our stay on Ella Ø.

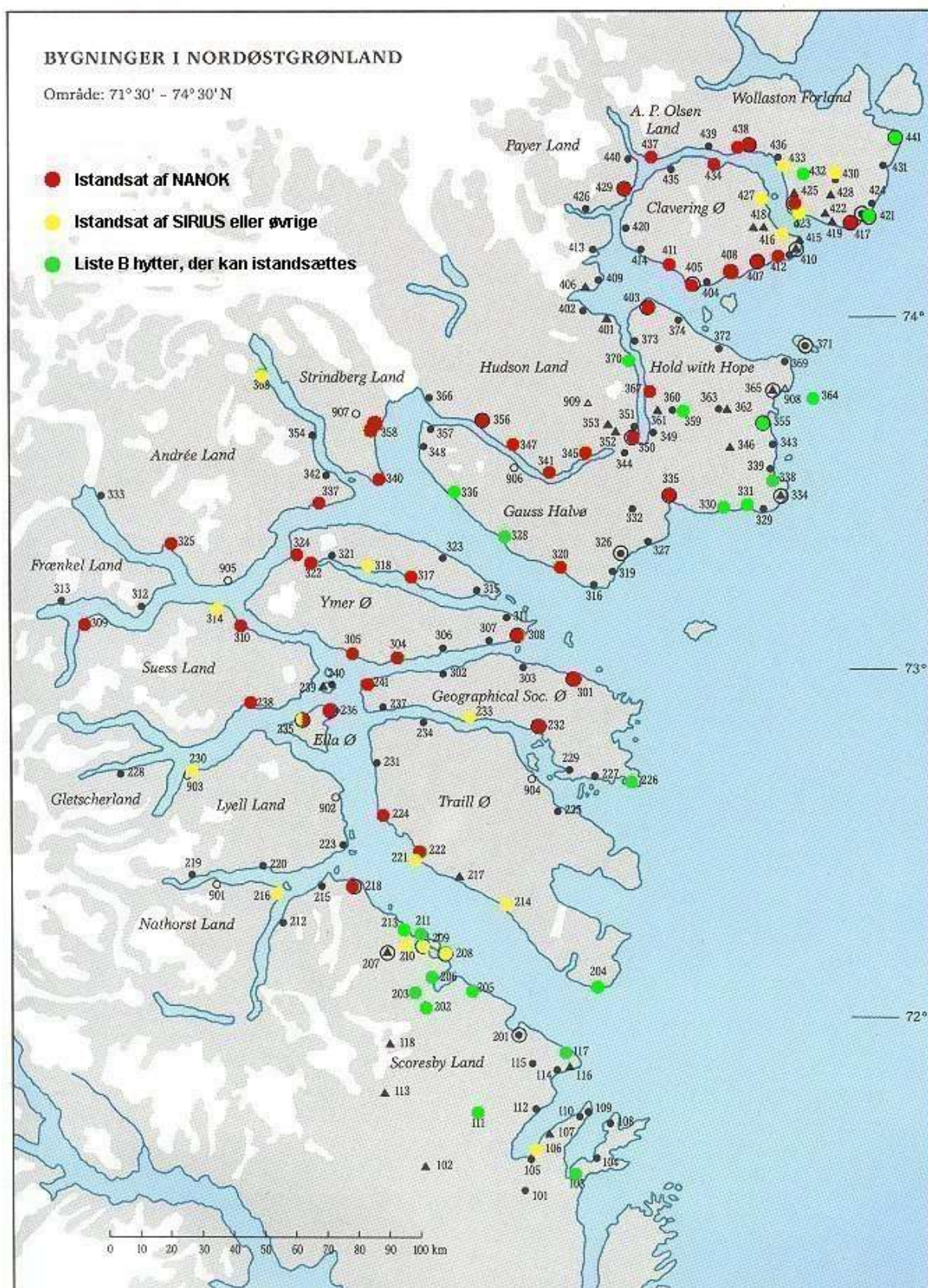
The Strindberg team resigns for now.

Jesper - Lars - Rasmus





The map shows the maintenance status for the old huts, houses and stations in North-East Greenland. The sites marked red or yellow can be expected to be in reasonably usable condition. Other sites, however, cannot be expected to be usable. Sites marked green are other huts with the classification B, which Nanok may renovate and maintain in the coming years.



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Field report for the “Museum team” 2019

Tasks

The Museum team had the following tasks:

- complete inspection, measuring and marking of tourism-relevant sites in North-East Greenland
- assist Arctic Research Centre in establishing monitoring equipment
- reconnoitre future Nanok projects
- do research for a book about Nanok
- record 360-degree pictures of huts
- receive equipment for Nanok at Daneborg
- prepare for Nanok expedition Daneborg 2020

Participants

Peter Schmidt Mikkelsen (Sirius '77)

Erik Jochumsen (Sirius '00)

Niels Gyldenlund Mikkelsen (Nanok '07)

Inge Bisgaard (museum curator)

Frants Frandsen (architect)

Journey up and arrival

Erik, Niels and Peter met in Kastrup Airport in the morning Wednesday 7 August. Here we met the Strindberg team and with them continued the rest of the journey northwards. First to Keflavik on

Iceland, then to Reykjavik Airport, from where the journey continued to Constable Pynt in Greenland. Inge had arrived here the previous day. After a short wait, Norlandair's Twin Otter was ready to take us the last distance to our destination: Ella Ø. After a short stopover in Mestersvig, we arrived at Ella Ø around 19:00. Here we landed in lovely, clear sunny weather and were kindly received by the outgoing leader of Sirius, Christoffer Sohl, and his men.

Shortly after all our brought-along gear had been put in Tolvmandsbarakken, which was in perfect condition, and after less than an hour, we had heating and running water in the hut. Everyone was in full swing, and everything worked perfectly.

Soon, we found out that we were not alone in the station. Besides our team, there were also the five Sirius men, ten participants in a camp behind the station from the Natural History Museum of Denmark in Copenhagen and from the Korean-Danish Geologist Project, as well as three men from CASP (Cambridge Arctic Shelf Programme), who were installed in Ørnereden.



Arrival on Ella Ø, 7 August 2019.

From left: Strindbergholdet: Jesper Stentoft, Rasmus Gaj Jessen, and Lars Bønding. Museum team: Peter Schmidt Mikkelsen, Erik Jochumsen, Niels Gyldenlund Mikkelsen and Inge Bisgaard.



Ella Ø [235], August 2019.

Preparation

The following morning, 8 August, we started preparation of our trip north. Erik and Niels unpacked the Buster dinghy from its tarpaulins and made it ready. Inge spent the day meticulously measuring Ørnereden outside, and Peter packed provisions and the gear needed for the trip. This took all day. We also did shooting drills for all Nanok participants in Hundeelven.

In the evening Sirius invited us for a lovely dinner – pan-fried salmon – in Pynten. The nine-men-crew of the sailboat “Tara”, who had arrived earlier that day, also participated.

After dinner, we started looking for the cause of a leakage in the Buster dinghy. It turned out to be a crack in the weld in the bottom of the hull. The

leakage was invisible, but the boat took in so much water that it pumped out water for 30 seconds every 4 minutes. We therefore brought it back to land, drilled holes in the keel and filled this up with lubricating grease. This worked rather well.

First measuring trip

Having finished preparing, past midday 9 August, we took off from Ella Ø with a full fuel tank. Soon it became clear that our load was too heavy. We were not able to get the Buster dinghy to plane and could only reach approx. 20 km/h. This was a problem. We tried different things, moved both men and equipment to the back and to the front, but to no avail. Therefore, there was no other option than to reduce the load. Consequently, we



Left: Ørnereden and Maskinhuset. Right: En route to Myggbukta, from left: Peter, Niels and Erik.



Myggbukta [335], August 2019.

made a stop at Maria Ø and unloaded as much as possible, approx. 100 kg. That did the trick, and soon we were able to plane at approx. 40 km/h. The day was saved, and in nice weather and calm sea we got on at a good speed. We made a short stop at Kap Humboldt [308] and the Sirius hut at Kap Franklin. At 19:15 we arrived at Myggbukta [335], where everything looked fine.

The next day we stayed at Myggbukta. The tasks were distributed, and we worked with our individual chores. Inge measured the hut and committed details to paper, Niels was in charge of

Google street view photos, Erik of detail photos and Peter of drone photos.

In the morning, a polar bear came by and later on another. These were the first of no less than 18 polar bears that we saw during the next few weeks.

On 11 August we continued on. We started in low clouds and fog. Right off of Vestersletten, we encountered polar bear number three, who was observing us from a floe. We stopped at Kap Franklin to pick up two drums of petrol, which Sirius kindly had put out for us. Then we



Myggbukta. Left: Erik baking buns. Middle and right: Interior in Myggbukta.



Left: Inge, Niels and Erik during a short break at the Von Krogh hut [328].



Right: The Huttetu hut [348] at Sydvestpynten almost completely covered by drift sands.

continued along Gauss Halvø. Near Smedal [320] we saw a mother bear with two cubs at land. Number four, five and six. We stopped briefly at the Von Krogh hut [328], where we also met the CASP-people, and later at the Huttetu hut [348] at Sydvestpynten, before we arrived at Hoelsbu [356] in the afternoon in beautiful sunny weather and calm sea. We spent a couple of hours at Hoelsbu photographing and assessing how the hut might be lifted up and levelled. Around 17:00 we continued towards Strindberg, stopping by the impressive Waltershausen Gletscher, before we arrived at Strindberg around 19:15. Inge and Erik went fishing around 20:00 and until midnight non-stop. There were lots of fish, but none that let themselves be caught, neither with fishing line nor with hand. They were simply too big and snapped the line several times.

On 12 August we completed measuring and photographing of Strindberghuset [358-3] and Nordfjordhuset [358-2]. At 13:30 we sailed towards Ella Ø in a beautiful weather. We made a lunch break at Varghytten [324] by the Blomsterbugten and from there continued directly towards Ella Ø. In Antarctic Sund we met the Strindberg team in "Agsut" on their way north

towards Strindberg. After a quick chat, we continued our sail in fresh wind and to Maria Ø, where we collected our "depot". We arrived at Ella Ø around 18:30, anchored Buster and had a good time in Tolvmandsbarakken the rest of the evening. In the meantime, there had been a RAL (Royal Arctic Line) supply ship on Ella Ø. The



First measuring trip from Ella to Myggbukta, Hoelsbu and Strindberg, a.o, total of 460 km.

Nanok equipment and the new ARC (Arctic



Hoelsbu [356]. The hut is now tilting in such a degree that Nanok is considering a rectification in 2021.





Left: Interior in Dødemandsbugten [408]. Right: View over Loch Fyne station [350].

Research Centre) container had been received and put in place.

Preparing for and transport to Daneborg

13 August at Ella Ø was spent stripping and preparing for the journey to Daneborg. Batteries were charged, and Erik worked the entire day to seal the crack in the weld in the bottom of the dinghy. Job well done. Niels assisted all-round, and Inge worked on measuring and drawing the interior part of Ørnereden. Peter took care of the rest. Next day, 14 August, we completed the remaining tasks and were ready when the Twin Otter came to pick us up at 19:00. We had a brief

opportunity to say hello to Søren Rysgaard and Toke Høye from ARC, and Simon-Martin Kortegaard from MOPA Både, who arrived with the plane, accompanied by our fifth participant, Frants Frandsen. He was to assist Inge on the rest of the trip, and with Frants on board we immediately continued towards Daneborg, where we landed around 20:00. Here we had a friendly reception from "M.O.", the new Leader Sirius, and were soon installed in Sandodden [425-1]. Erik, Inge and Frants in the common room, Niels in the attic and Peter in Skindskuret.



Eskimonæs [405]. The red circle marks the site of fire from the original Lauge Koch expedition hut that was burnt down by the Germans in World War II. The site contains many metal leftovers, and to better protect these against curious and light-fingered tourists, the ruin was marked as a "no-go"-zone with a square of white-painted rocks.



The two building experts. Left: Inge drawing one of innumerable detail drawings. Right: Frants.

Second measuring trip

We spent 15 August preparing at Daneborg, find and pack different gear and make our two RIBs (dinghies with firm hull) ready for the trip. The following day we set out 11:00 after some delay caused by a defect propeller in one of the RIBs that needed a replacement. We reached Dødemandsbugten [408] easily, where Inge and Frants made inspection. From here on to Eskimonæs [405], arriving at 17:30. Both Dødemandsbugten and Eskimonæs were photographed using different equipment, and at Eskimonæs Inge and Frants marked the site of fire

from the old expedition hut as a "no-go"-zone with a circle of rocks, painted in white paint. The following day, 17 August, we left Eskimonæs towards Loch Fyne. It was a grey day, but it cleared up as we were arriving at Loch Fyne [350], a lovely station and a fine location. After that we set course back north. After a short break at Breivik [404], we stopped at Elvsborg [407], which was also photographed and measured inside and out. Then quickly back to Daneborg and Sandodden, arriving around 20.30, just as the Saturday-mik at MarinBasis was beginning.



Hansa Bugt [457]. Left: The red circle marks the ruin of the "Alte Hütte" site. The ruin was marked as a "no-go" zone with white-painted rocks. Right: Leftovers at "Alte Hütte".



Left: Germaniahavn [447-3] with Hvalros Ø in the background. Right: Frants measuring the hut.



Hochstetter "Nanok" station [510], August 2019.

Third measuring trip

18 August we prepared for our third measuring trip. In the meantime, the MarinBasis crew had kindly sailed two drums of petrol to Germaniahavn for us in "Aage V. Jensen I". On the occasion of Sirius' 69th birthday, we were invited for a delicious cake in Sirius' quarters.

Next morning at 09:15, we were northbound with course directly towards Hansa Bugt [457] on Sabine Ø. Similarly, the sites of fire around the two huts (Alte Hütte og Neue Hütte) were marked "no-go"-zones and photographed. Then we continued to Bass Rock [461], where we, unfortunately, were not able to get ashore due to high swells. Back to Germaniahavn, where we anchored in the harbour and installed ourselves in the hut. During that day, we saw four polar bears, one at Kap Borlase Warren, two along Wollaston Forland and one (no. 11) at Bass Rock.

On 20 August we started with a walk from Germaniahavn to Vestre Havnenæs. At 12:15 we loaded the RIBs and sailed towards Hochstetter.

It was a bit windy and chilly. From Kap Berlin the water was fine, but it was so foggy that we had to continue the trip to Hochstetter using GPS. Hochstetter [510] was in good condition and nice to visit.

On 21 August the plan was to make a trip to Shannon, but we gave this up due to a warning of wind east off Shannon. Instead, we made our way to Kulhus [511], spending four-five hours thoroughly measuring and photographing. The idea is to renovate Kulhus in 2021, and we were able to determine that this will take a good deal of work. A good part of the wood of the house is rotten and needs to be replaced. That aside, it was a beautiful sunny day, where a polar bear (no. 12) visited us at Hochstetter.

On 22 August we set out with two alternative destinations. If Shannon was shrouded in a dense fog, we would go to Ottostrand; however, if Shannon was visible, this location would be our aim. Shannon it was. Shannon appeared nicely from the fog, as soon as we were past Kap Rink, and in calm, clear water we set course directly



Kulhus [511] at Ardencaple Fjord, August 2019.



Left: Alabamahuset [518], August 2019. Right: Peter and Niels in Alabamahuset.

towards Kap Copeland. From here onwards to Kap Børgen, where we spotted two little bears in the water. After Kap Børgen, the fog began to increase and we followed the coast, first to Kap Sussi [520], where we made a short stop to inspect the site, and then to Alabamahuset [518], where we had lunch and photographed. The historical hut still looks amazing after Nanok renovated it in the summer 2016. Meanwhile, the fog lifted a bit and suddenly it was nice weather. From Alabama we set course south towards Kap Philip Broke, but from Kap Pansch fog, wind, ice and sea increased severely. We had to navigate with GPS and around drift ice that was pushed towards the coast, so it took quite a while to reach Kap Philip Broke [470]. When we finally arrived, we had to give up getting ashore due to rough sea and strong wind. We could only get a glimpse of the hut from a distance, and it was just then that we met our 15th bear. A huge bear, swimming in the water. From Kap Philip Broke we set GPS-course directly to Kap Davy Gray. Little by little, the fog lifted, and halfway the fog cleared, but the sea was still too rough to get ashore. Thus, we continued directly towards Kap Tramnitz, where we made a short stop on the beach to stretch our legs, before continuing to Hochstetter, arriving past midnight. Off of Sirius' Kap Rink Depot – a few kilometres east of the Hochstetter station –

we met two Sirius patrol vessels and had a short but sweet catch-up with many old acquaintances. In the end, it was a long but interesting day, and the team were tired but in good spirits, when we finally arrived at the Hochstetter station.

Return to Daneborg and stripping

As the previous day had been long, we decided to postpone the return journey to Daneborg one day, to 24 August. We waited for swells and wind at Hochstetter to decrease. They did around midday. From Hochstetter we first sailed to Kap Bremen, then to Kap Maurer and on to Kap Berlin. Here the wind started rising from the south, and instead of sailing through Claveringstrædet in headwind, we decided to go north around Sabine Ø and through Pendulumstrædet to Germaniahavn – in headwind. After a short break at the harbour of Germaniahavn to collect our empty petrol drum and receive the weather forecast from Daneborg (where they had no wind), we decided – based on a suspicion that poor travelling weather was on its way – to continue directly nonstop towards Daneborg. It was a trip in continued strong headwind and rough sea; but, finally, we entered Young Sund, where the waves calmed down.

At 00:30 we arrived at Daneborg, where we got RIBs and gear ashore. It was nice to have arrived and get rid of the salty taste of sea with a beer.



During our journey, we saw no less than 18 polar bears, both at land and at sea. The reason is probably the reduced amount of drift ice off the area's coasts in the summer 2019, forcing the bears to go to land, instead of, as normal, stay at sea in the drift ice.

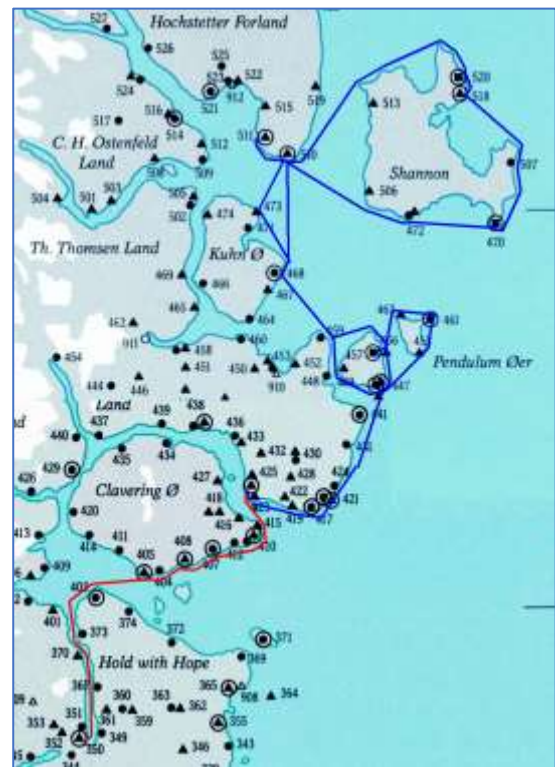
The highlights of the trip were three bears, one south of Kap Wynn, another south of Dronning Augustadalen and the third at Haredal. That was the summer's polar bear number 18.

The rest of the days, which were cloudy, rainy and windy, we had more than plenty of work stripping equipment and furnishing our new twenty-foot container. Most of the stocked provisions and gear in Sandodden was moved into the container. A great part was discarded and disposed of. Additionally, Sandodden was thoroughly inspected and measured for the renovation and rearrangement, planned by Nanok to take place in 2020. The hut should no longer be (mis)used for leaving expedition equipment for an undefined period of time, but instead be an accessible historical and practically functional hut.

On 28 August we were ready for our return journey. The weather was again clear and beautiful, and we enjoyed the sight of the new dusty layer of snow on the peaks of the surrounding mountains, left by the previous days' weather. Autumn had begun. At 12.30 we boarded the Twin Otter and after a short layover at the research station in Zackenberg [438-5], we flew directly to Constable Pynt, where we met with the Strindberg team and Søren and Simon. Together we continued on to Reykjavik, where we stayed one night, and on 29 August, we returned to Denmark after a nice summer in North-East Greenland.

Conclusion

During the three weeks we carried out all planned tasks plus a lot more. We received very ready and



Second measuring trip (red). Total 235 km.

Third measuring trip (blue). Total 590 km.

kind assistance from many parties, not least from Sirius on Ella Ø and Daneborg, Station and Patrol Service Greenland, Arctic Command, the inspection vessels "Hvidbjørnen" and "Ejnar Mikkelsen", Defense Guard Mestersvig, MarinBasis, GEUS and the Zackenberg logistics. We remain very grateful for this assistance.

Peter - Erik - Niels - Inge - Frants



View over Daneborg. In the front from the left Sorte Skur, Sandodden and Skindskuret.

Field report for the “Hvalrosodden team” 2019

Tasks

The Hvalrosodden team had the following tasks:

- complete renovation and culture-historical preservation of Hvalrosodden [639-1] and Alwin Pedersens hus [639-2]
- potentially inspect, count and maintain Nanok goods and depot Danmarkshavn

Participants

Torben Jeppesen (Sirius '98)

Henrik Skjoldhøj Nielsen (Sirius '98)

Jonas Nørregaard

Journey up

For Torben and Jonas the journey started on 26 August from Airbase Aalborg with C-130 to Keflavik. On Iceland Henrik joined the party. His point of departure was Alta in Norway. We spent the day in Keflavik purchasing fresh food as well as controlling and packing the building materials that had been unloaded from "Hvidbjørnen," which originally had been meant to sail both us and gear to Hvalrosodden.

On 28 August we departed towards Mestersvig, where we landed in sunshine and were greeted by the ResSir-men (the Sirius Reserve), who were on their way home. We spent the day once again

packing and preparing building materials and provisions. This time we went by Twin Otter. We were treated like kings with nice bedrooms and good food. In the evening we drove out to Nyhavn and inspected the buildings and our depot. Torben couldn't help himself and made a few quick reparations.

The Zulu-team of the Danish Defence, who had been our companions since Aalborg, tested their drones with a couple of daring flights around some icebergs in Kong Oscar Fjord. The Zulu-team consisted of three men, assigned with the task to reconnoitre the area north-east of Hvalrosodden for potential C-130 emergency landing strips. These nice guys eventually helped us transport the remaining building materials all the way up to Hvalrosodden, as our own Twin Otter had reached cargo limit. The Zulu-team had set up camp in the large flat area north-east of Lakseelv.

Arrival at Hvalrosodden

29 August we headed north towards Dove Bugt and Hvalrosodden. We departed in the late morning and enjoyed the nice view the first part of the trip. We got sight of Hvalrosodden and landed. Kit, provision and building material were unloaded in no time. Also, we had to push the plane half a meter backwards, as it had landed right next to a big rock.



Hvalrosodden (top) and Alwin Pedersens hus outside and inside upon arrival. Both huts have unique historical qualities – but needed a thorough inspection and refitting.



Renovation of the roof on the appertaining shed.

Left: The old roofing felt is removed. Right: Reparation of the roof construction – seen from the air.

Having said our goodbyes, we went exploring in the fine old station. Even before we had left Denmark, we had heard a story (via Sirius) that a bear had been through the roof of the workshop and had had some fun there. The story was one hundred percent true. The bear had gorged itself on paint, tar and other delightful things. An emergency reparation of the roof had been done, but it was clear that a great deal of water had entered anyway. The workshop was swimming with a magnificent mixture of paint, nails, screws and water.

The small depot/coal storage to the left of the entrance was intact. Main room, kitchen and sleeping room were filthy and sooty, but otherwise in a good condition.

Alwin Pedersens small hut, located approx. 35 metres north of Hvalrosodden, was more and less in the same condition, as when Pedersen left it in 1939. The interior of the hut, including miscellaneous research equipment, was in a good state. The roof looked almost watertight. The exterior of the hut – except for a few boards here and there – was in good condition, too.



Atmosphere inside Alwin Pedersens hus after Nanok cleaning, clearing-up and gentle restoration. The interior of the hut is possibly in almost the same condition, as when the zoologist Alwin Pedersen left it in 1939, - that is, 80 years ago!



A red Sirius standard hut has been built right next to Hvalrosodden. In Nanok's opinion, a bit too close.

Work starts

As the first thing, Jonas thoroughly photographed all buildings. Then we moved in. As there were only two beds in Hvalrosodden, as agreed with the Defence, Torben installed himself in Sirius' standard hut, which is situated right next to Hvalrosodden (a little too close in our opinion). Jonas and Henrik each took a bunk in the kitchen of the "Odden."

The morning after the first night, on 30 August, we distributed tasks, so that Henrik and Jonas began by washing the common room in Hvalrosodden. It resulted in many, many buckets of coal-black water, before we finally finished. Actually, it was our assessment that it may have been the first time anybody had washed the ceiling. Meanwhile, Torben had thrown himself on "Alwin's hut"; primarily stripping old roofing felt and taking out nails.

The following day we started painting the common room. We had brought along a nice "Hvalrosodden White" linseed oil paint and painted the first coat. Torben was putting the first layer of roofing felt on the north side of Alwin's house.

The afternoon we spent clearing up in the workshop, where the bear had roamed. Paint and dung had to be mucked out. The workshop also held nice antiquities, which generally were in a muddle of Sirius' leftovers and equipment from Danmarkshavn.

Next day, 1 September, we gave the common room the second coat. This time everyone was painting, as it was 30 knots and rainy outside. It should be added that, even though linseed oil paint reaches incredibly far, and the coat is thinner than thin, living and cooking in a newly painted room is not without challenges. Fact is that sleeping bags and other equipment literally will be marked far into the future.

In the afternoon the wind slowed down, and we went for a walk along Lakseelven. From a terminal moraine plateau we had a good view of Sælsøen and could also see the camp of the Zulu-team with two yellow tents about 4-5 km away on the eastside of the river. On the way, besides several muskox and reindeer antlers, we saw a horse cranium at the foot of the southwestern part of the terminal moraine that we had walked on. On the way back we were wondering, how a horse could have ended up there. Maybe it was one of the J.P. Koch expedition's horses?



Traces from past times.

Left: Mørkefjord [641] station was used in the years 1938-41. Today the hut is in such a poor condition that it probably can't be renovated. Right.: Henrik with a horse cranium, possibly from "the 1912-13 Danish Expedition to Queen Louise Land and across North Greenland's Inland Ice," led by Johan Peter Koch.



*Renovation of Hvalrosodden.
Top: Minus degrees and some days with wind and snow.
Below: Windows were taken off and repaired.*



Hvalrosodden indoor after renovation. A living room with lots of atmosphere and history.

Renovation continues

The next day the weather changed for the better, meaning almost no wind and clear sky. Due to a small accident and consequently a bend rib, Henrik stayed indoor and put provisions and things in place in the kitchen. Jonas and Torben carried on with Alwin Pedersen's hus.

Hvalrosodden is located on a flat sandy terrain, which means drift sands, and both Alwin Pedersen's hus and Hvalrosodden needed to be dug out. During the digging, a lot of fun little pieces appeared from the sand around Alwin's

hut. A pile of sticks for fox fall-traps, but also an old pipe, a pair of wooden shoes, several boxes, and so on. We took care of them all and put them inside the porch of the hut.

The following days the work on Alwin's hut continued in fair weather. Henrik quickly recovered and came to join in on the work. Together we completed the job over the next few days. Inner and outer roofing felt, cleaning, new glass in the windows, as well as levelling of the large piles of sand.



Bear visit. Observing, studying, and photographing – before you part ways peacefully as friends.

Bear visit and fishing trip

One night, just as we were turning off the last head lamp light and putting away the book, Henrik discovers – he was installed in the top bunk and thus had the view – that a mother bear and two large cubs were staring through the window. We jump out of our beds and grab our cameras.

The fuss caused the mother bear to slowly slouch away. When we realised that the family was retreating, we woke up Torben, and he joined us outside and participated in the photo-mik. An amazing experience – especially for Jonas, who never before had experienced polar bears.

As Alwin's hut now generally was done – a little window painting was still due as well as construction of and mounting shutters – we began the work on Hvalrosodden. Again, we removed old roofing felt and nails to get an overview of the damages to the roof construction. We stripped most of the roof from the part of the building that covers the workshop and were quickly able to establish that new rafters were needed.

Torben skilfully made new substitute rafters, which we installed. To secure this seemingly

delicate part of the hut, we reinforced the roof with new boards as well as a layer of roof plates. One night, we prepared the fishing rods and went for a small walk up Lakseelv to try our fishing luck. Only a short time passed before the first Arctic char was landed, and soon another three Arctic chars joined the first on the shore. We decided that enough was enough, even though the nice evening with low sun and no wind was tempting. We prepared the fish for curing as well as for the pans.

The following days we continued working on “Odden”, attaching roofing felt, painting the gable, new rakes, window frames, etc.

Trip to Mørkefjord

Sunday it was a nice weather, and we made a small expedition in to the Mørkefjord station [641] and Mørkefjordhytten [642], situated approx. 6 km west of Hvalrosodden. It was a nice trip and interesting to discover the old buildings. The station is in a very poor condition. We took the time to thoroughly photograph both buildings. On the way back along the beach, we encountered well-defined wolf tracks. Not more than a few days old.



*The first snow and autumn atmosphere.
Left: Alwin Pedersens hus. Right: Hvalrosodden at dusk.*

As we were enjoying a nice pan-fried trout one night, another white bear appeared outside the big window, where we were eating. A fine and well-nourished young bear. Also he had his picture taken; but became a bit too inquisitive and had to be scared off with a warning shot.

The finishing work

While we were freeing the gable of Hvalrosodden from sand, we encountered a lot of exiting pieces. Lots of cartridge cases from 1923-33 and 1938, sticks for fox fall-traps, fox bones, the remaining of an old rifle and not least another horse cranium. The skull was buried under almost one meter of sand, at the southwestern corner of the hut.

We had been anticipating finding out, what the weather would be like during this rather late trip, and the last part of the stay did give us a taste of the coming winter. There was frost in the air, and many stormy days with poor sight and snow.

Both melting on roofing felt and painting outside with linoil produced some challenges, as the weather shifted. But we went at it with a will, and two days before return journey, we managed to burn on the last roofing felt. Each piece and scrap of the outer felt was utilised. We wanted to use some of the old felt, which was already in "Odden", when we arrived, but it turned out to be completely porous and broke, when we attempted to roll it out.

The last days – where the weather was on our side in every way – were spent clearing up, cleaning, sorting out, finishing paint work and other little projects, including mounting flag pole and two new nameplates. Torben had had made one from home for Hvalrosodden and Jonas carved one for Alwin Pedersens hus.



Departure with Twin Otter.

Journey home

When the Twin Otter appeared in a distance, the shutters were mounted, Dannebrog was lowered, and we waved goodbye to a Hvalrosodde, where the last layer of paint was still shining in the sun. The journey home went via Daneborg, where we had a warm welcome of the Sirius men. M.O. (Leader Sirius) made accommodation for us in "Aktiviteten". We put tools, weapons and provisions in the Nanok containers and had time for a small stroll past Sandodden and Hotel Karina. In the evening we did a mini talk for the Sirius men with some before-and- after pictures from "Odden" and told stories about our adventures there. The next day we flew via Constable Pynt to Iceland.

Amazing three-weeks-trip at Hvalrosodden, which hopefully will withstand until the next big anniversary.

Torben - Henrik - Jonas



Work done and ready for home journey!

From the left: Torben Jeppesen, Jonas Nørregaard and Henrik Skjoldhøj Nielsen.

Field report for Ella Ø scientist team 2019

Tasks

The Ella Ø scientist team had the following tasks:

- Put up automatic cameras for monitoring plants and insects on land
- Put out measuring instruments at sea
- Measure oceanographic conditions in the fjord
- Run in new motorboat and construct new boat house on Ella Ø

Participants

Søren Rysgaard (Arctic Research Centre, Aarhus University)

Toke Høye (Arctic Research Centre, Aarhus University)

Simon Kortegaard (Mopa Både, Vilsund, Thy)

Journey up to Ella Ø

Before our journey up to Ella Ø, we were informed that there might be trouble getting from Mestersvig to Ella Ø, as the airstrip was rather uneven and soft. Nevertheless, we stuck to the schedule. After an easy journey up from Tirstrup via Island, where we met Frants, we continued with Dash-8 to Constable Pynt. Here we changed to Twin Otter and landed on Ella Ø in superb weather on a rather uneven airstrip. We were received by Nanok's Museum team (Peter, Niels, Inge and Erik) in the "airport". After a short briefing, the others went north to Daneborg, where they had to continue their tasks. They had put the coal stove in Tolvmandsbarakken to work, and soon the scent of coffee and freshly baked bread filled the air. Great to be back on the coast again.

Start-up

From home Simon had prepared a Mopa Expedition boat and trailer, so that it fitted in a



Scientist team in Constable Pynt. From left: Toke Høye, Simon Kortegaard and Søren Rysgaard

twenty-foot container during transport by ship from Aalborg to Ella Ø. The first day was spent unpacking the container with boat and research equipment for the research projects. Motors were mounted, and the boat was prepared for start-up. We soon found good positions for the camera systems on land northwest of the station and up towards the airstrip. The plants that we had hoped to find in dense covers grow here. Especially eightpetal mountain-avens (*Dryas*), purple saxifrage and yellow saxifrage. Tripods, batteries, solar panels, fox-proof cables and electronics for six different groups with a total of 26 cameras were to be carried out into the field and put together.

At the same time, instruments for monitoring hydrographic conditions in the sea were assembled and programmed for start. One instrument was placed off Tolvmandsbarakken at 11 m depth (72°52.716N; 025°06.542W). The instruments are 6 m below surface and can be seen with the naked eye. A 30 m line has been put at right angles to land so it can be drained easily.



Left: Who needs a fitness centre, when you can dig earth? Middle: Container opened with angle grinder and used as roof for the extension. Right: Extension on the 'boat house'. Newly attached felt, drainage system and grout ought to keep it snow-proof. In addition, weather station with solar cells mounted.



Left: Simon mounts engine and hydraulic control on the Mopa boat. Right: Finally unpacked and ready for the actual research work. From the left: Simon, Toke, Søren and the Mopa boat.

The plan is to take up the instrument next year and put out a new.

Preparing for boat house

Sirius had made ready a spot for the container with a firm surface of gravel, and we dug a few ditches around the container to transport meltwater away during the thaw next year. We also made an extension building on the container, for the boat with motor and trailer to be driven into straight after use. Trailer shaft can be shortened to make space for boat and motor in the new boat house. This will make it easy to launch the boat, when one arrives to Ella Ø. Next year a small winch should be installed in the back of the container, so that trailer and boat can be driven in directly after use. This means that Nanok can launch and take up boats ourselves, without assistance from Sirius. The bay at Ella Ø station was clear of ice, and during the entire period, the Mopa was swinging with a rope to land, so it was easy to set out for measurement trips in the fjords. We had a 12 kg anchor with 5 m chain lying at 6-

7 m depth outside Tolvmandsbarakken. At the end of the chain was a ring with a rope to land through it. To the rope we had fixed a 4 m line to the Mopa, which then could be swinging and, when it was time for a sail, pulled ashore. Next year we should mount a bollard moulded into a 200 liter drum ashore to fasten the boats, when they are swinging.

The following days

As the weather became a bit unsettled with wind and swells, we only did measurements in the near proximity of Ella Ø and focused on setting up the camera systems on land as well as prepare for setting out the underwater buoys. Buoys for Kap Humboldt and further in Kejser Franz Joseph Fjord were made ready, but for the moment we had to postpone reaching the mouth of Sofia Sund due to wind and high swells.

18 August we were invited to Sirius' birthday at the station including a three-course dinner with talk of dogs, ice and fjords. Two of us



Left.: Example of underwater buoy measuring light, temperature, pressure, salinity and chlorophyll all year round on the three localities. Right: Søren prepares CTD for oceanographic testing along the sections throughout the fjord.

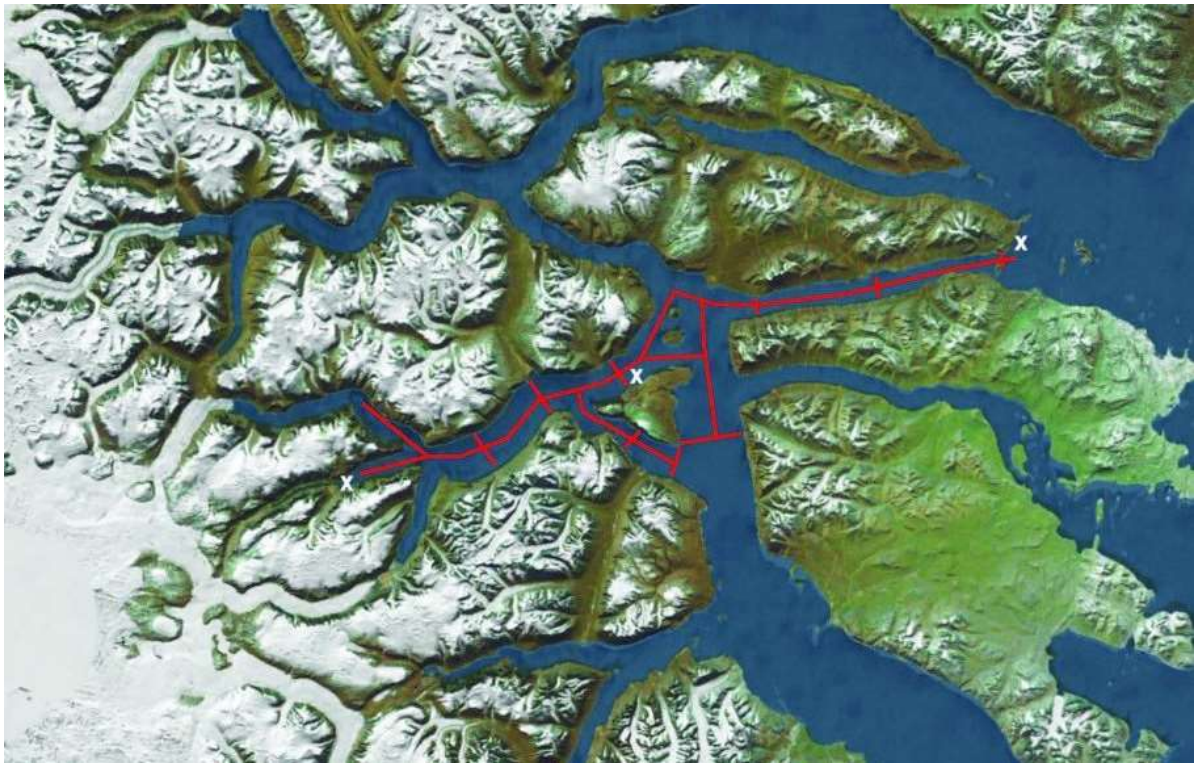


Toke's automatic cameras for monitoring of plants and insects on land.

The camera tripods consist of aluminum pipes and mounts, and the camera is protected by an aluminum screen to decrease the effect of rain and snow. Four cameras are connected to a minicomputer, a large gel battery and a solar panel. Among other things, the computer keeps track of time, so that the cameras turn on around snow melt (1 June) and start taking photos. Each minute throughout the summer, one photo is recorded, and data is stored in each camera. The system is waterproof and able to withstand the Arctic winter. The plan is that data will be retrieved around 15 August 2020, where also the systems will be inspected, as there is no previous experience with this type of camera system overwintering.



*While putting up the camera equipment, it was possible to do the first recordings with the cameras that are meant to map bloom time and insect visits of the individual flowers. Here are examples of withered plants of three focus species: eightpetal mountain-avens (*Dryas octopetala*), purple saxifrage (*Saxifraga oppositifolia*) and yellow saxifrage (*Saxifraga aizoides*).*



Map of the Ella Ø area. Oceanographic sections and samples (pressure, salt, temperature, chlorophyll and water isotopes) made from the Ella Ø fjords inmost branches to the outer coast. The map shows the sections and the route. Samples were made in 30 localities, and a total of 396 miles was sailed. In addition, 3 underwater buoys (white x's) were put out. They will measure until next year, with a plan of put out new instruments.

wound up cleaning the dishes after a contest on who could stack the most stones on top of each other fastest – without the pile tilting. It seems the Sirius men master this disciplin better than us. We suspect they have been practicing.

After testing in the field, the camera systems on land were set up and made ready for beginning the photo series next spring with one picture per minute throughout the enitre groth season. We worked late the last everning to complete the setup; Toke had to return home the next day after eight days on Ella Ø. Simon and Søren continued the marine work.

The weather cleared off the coast, and it was then possible to sail to Kap Humbolt [308] and place

sea measurement intstrument off the hut ($72^{\circ}55.932\text{N}$; $024^{\circ}44.327\text{W}$, 11 m depth) as well as do the hydrographic measurements on the way back through Sofia Sund. The following days we tried to reach Isfjord several times without luck due to wind and high swells. After a talk with Sirius, who also had attempted to sail the same way, we assessed that, considering the time available to us, it was better to place the measuring instruments at the bottom of Röhss Fjord. Isfjord measuremets must wait until next year. We placed instruments in the bottom of Röhss Fjord ($72^{\circ}52.709\text{N}$; $025^{\circ}06.595\text{W}$, 11 m)



Tolvmandsbarakken – a good base. Left: Simon. Right: Søren



The new Mopa boat, "Vagn Forring".

and did measurements in Kempe fjord, Narhval Sund and Kong Oscar Fjord instead.

The oceanographic measurements reach from the Inland Ice to the Greenland Sea with several measuring stations across the fjord system. The aim of the project is to get basic knowledge on oceanographic conditions (e.g. temperature, salinity, tide, light, chlorophyll, turbidity, water isotope and mixing processes) in connecting fjords between the sea and the Inland Ice. Finally, we try to understand the local fjord wind, and how sea and atmosphere interact in these Greenlandic fjords. The Ella Ø wind system acts differently than other fjords (Young Sund and Nuuk Fjord), which we have studied through time – why, is still unclear. We established a weather station on Ella Ø, but there should be installed more weather stations along the fjord from the Inland Ice to the outer coast to really understand this fjord wind.

Packing and journey home

The last two days were spent taking up the boat, changing oil, doing service, counting and packing. In total we sailed 396 sea miles with the new Mopa boat and spent around 200 litre petrol. The Mopa Expedition boat is a comfortable and fast way to get around in the fjord systems and a perfect platform for oceanographic measurements.

We set up the planned instruments and completed the intended oceanographic measurements in Ella Ø fjord area except those in Kejser Franz Joseph Fjord. Given the available time for our ambitious plan, we are content with what was achieved. We hope to continue the work in the area in the coming years, and that the collaboration with Nanok develops to cover the rest of the coast. The aim is that Nanok in the future will assist bringing back data from the measurement stations. Tolvmadsbarakken worked as a perfect base and with Sirius as the friendly neighbours. A few days before heading home, Nanok's Strindberg team arrived, and we helped each other finish the packing. This resulted in some nice days with communal cooking, cosy evenings and stories from the old days.

We have named the Mopa boat after Vagn Forring, son of Aage V. Jensen. We are very grateful for the support we have received from Vagn through time, and hope that that the Mopa boat "Vagn Forring" can help preserve the memory of his work. Vagn was a kind man with interest in and thought for others, and – like his father – an enterprising man with a global vision.

Søren – Toke - Simon

On Nanok

Nordøstgrønlandsk Kompagni Nanok is a private, non-profit organisation founded in 1992 upon the former *Østgrønlandsk Fangstkompagni Nanok A/S*, founded in 1929.

The mission of Nanok is *to contribute to disseminate knowledge of North-East Greenland and its cultural history and to contribute to securing the cultural monuments and buildings in the area*, a.o.

Nanok consists of a private group of seven persons, the Board. These are Peter Schmidt Mikkelsen (managing director), Jens Erik Schultz, Tommy Pedersen, Palle V. Norit, Søren Rysgaard, Fritz Ploug Nielsen and Jesper Mølbæk Stentoft (treasurer). Nanok's accountant is Aka Lynge. Torben E. Jeppesen assists with purchase of assets. Nanok's logistics centre is managed by Kristian Nevers. In addition to the above-mentioned, a number of private individuals actively participate in Nanok's work. All work in Nanok is voluntary and unpaid.

Each summer, Nanok dispatches a field team of typically 6-10 participants divided into 2-3 teams who work in North-East Greenland for 3-5 weeks. The results of this work are documented and published in a field report. The expedition participants are chosen by the Board. In the years 1991-2019, a total of 186 Nanok'ers – or more than 75 private individuals – have been dispatched to North-East Greenland.

To perform its tasks, Nanok controls a considerable amount of expedition assets. However, Nanok possesses no property in Greenland.

Nanok's work is financed by the Aage V. Jensens Fonde.

Among Nanok's many loyal partners and supporters are: Norlandair, Arctic Research Centre, Arctic Science Partnership, Greenland Self Government, The Greenland National Museum & Archive, Greenland Institute of Natural Resources, Arctic Command, The Sirius Sledge Patrol, Defence Guard Mestersvig, Station and Patrol Service Greenland, Royal Arctic Line and TELE Greenland.

Since 1991 Nanok has renovated and maintained more than 50 culture historical buildings. For this work Nanok has gained considerable recognition and support from the Greenland Self Government, among others. Since 2010 Nanok has had a formal cooperative agreement with The Greenland National Museum & Archive in Nuuk.

In the years 2003-2007, encouraged by the Greenland Self-Government of the time, Nanok worked out a new, unique structural survey of all culture historical huts and stations in North-East Greenland. Extensive data from these surveys, incl. photos and GPS positions, is published in "*North-East Greenland 1908-60. The Trapper Era – and its traces today*" (Mikkelsen 2019).

You can experience a range of the old North-East Greenlandic huts in Google Street View via a link from <http://www.xsirius.dk/>



List of North-East Greenlandic stations and huts renovated by Nanok 1991 - 2019:

No.	Name	Renovation year	No.	Name	Renovation year
201	Antarctichavn	2001 (crushed 2002)	358-2	Nordfjordhuset	2019
209-2	Nyhavn	2007	358-3	Strindberghuset	2013
218	Kap Peterséns	1998	367-2	Mellemhuset	2010
224-2	Kongeborgen	2001	403	Krogness	2010
222	Holm Bugt hytten	2001	405	Eskimonæs	1998
232	Sverresborg	2014	407	Elvsborg	2007-2008
235	Ørnereden, Ella Ø	2015-2019	408	Dødemandsbugten	2013-2014
235	Tolvmandsbarakken	2015-2019	411-2	Norma hytta	2010
236	Maristua	2008	412	Dahl Skær hytten	2010
238	Mineralbukta	2010	417	Kap Herschell	2002
241	Svedenborg	2011	425	Sandodden/Karina	1994-2000, 2007, 2009
301	Laplace	2009	429	Moskusheimen	1994
304	Arentz hytten	2008	434	Leirvågen	2008
305	Namdalshytten	2010	438-2	Zackenbergt	1991-1992
308	Kap Humboldt	1997	438-4	Fiskerhytten	2008
309	Rendalshytten	2010	437	Bjørnnesstua	2008
310	Bjørnheimen	2008	443	Blæsenborghytten	2017
317	Brøggers hytte	2012	444	Antonsens hytte	2017
320	Smedal	2012	447	Germaniahavn	1999
322	Noa Sø hytten	2008	454	Fjordbotten	2013
324	Varghytten	2002, 2007	461	Bass Rock	2019
325	Renbughytten	2010	510	Hochstetter	1996, 1998
335	Myggbukta	1999, 2002, 2011	514	Ny Jonsbu	1995
337	Ragnhilds-hytten	2008	518	Alabamahuset	2016
340	Kap Ovibos hytten	2000, 2007, 2012	531	Ottostrand	2009
341	Halle	2011	628-1	Villaen, Danmarkshavn	2017
345	Bråstad	2011	639-1	Hvalrosodden	2019
347	Petrahytten	2011	639-2	Alwin Pedersens hus	2019
350	Loch Fyne	1993, 2007	---	Kap Moltke /Brønlundhus	2001
356	Hoelsbu	1999, 2000, 2007			

Source of hut numbers and names: Peter Schmidt Mikkelsen: *North-East Greenland 1908-60 The Trapper Era – and its traces today*. Xsirius Books 2019.

