Greenland Trees | Kalaallit Orpii
Field activities 2023

tree propagation, Narsaq greenhouse, 2022-sewn plants (left) & 2023 plants (right)

Narsaq school engagement

filming with caretaker Eva Marie inside the Narsaq Greenland Trees greenhouse

Contents

About Greenland Trees

Since 2019, Greenland Trees has been run by scientists, most already working in Greenland for ice sheet climate monitoring and research.

The Greenland Trees mission is:

- to partner with Greenlandic society, emphasizing youth engagement and education,
- to restore the landscape in a heavily degraded former military base and other urbanized environments;
- to increase biodiversity;
- to support forest research;
- to drawdown atmospheric CO_2 into new forests and soils;
- to have a positive environmental legacy;

Greenland Trees does so with transparency, as part of the registered charitable Dasht Foundation (https://www.dasht.nl/).

Greenland Trees has sister projects. 1.) Tajikistan Trees (https://tajikistantrees.org/) that supports reforestation in Tajikistan and 2.) Denmark Trees (no web site) that supports reforestation in Denmark alongside youth engagement.

Acknowledgements

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In-kind support A special thanks is to Ingimar Magnússon and Eva Marie who have continued to facilitate the Greenhouse operation. We thank Fridrik Magnusson and Kattie Nielsen of Hotel Narsaq, Niels Sakariassen, Paul Cohen, Kim Neider, Rike Wagner, Nasdaq School teachers, Claus Pedersen, Birgitte and Jacky Simoud of Blue Ice Explorer and The Bjerge family.

Thanks to Ramon Larramendi, Teresa, Andrea, Jesus and others from Tasermiut adventure travel who donated the following zodiac boat transports:

22 Aug Narsarsuaq to Qanassiasat to Qassiarsuk, 6 passengers and bags

25 Aug Qassiarsuk to Narsaq, 6 passengers and bags

28 Aug Narsaq to Narsarsuaq, 6 passengers and bags

Narsaq resident and tree enthusiast Niels Sakariassen has also greatly assisted this year's fieldwork by giving us 15 trees for planting, loaning tools for planting.

Support for filming of Greenland Trees planting has been obtained from Earth Insight foundation (https://earthinsight.org/) via John Salas.

About this document

This document has two main parts; Spring and Fall campaigns.

Main achievements of the spring campaign

- Sowing seeds
    a. We filled trays with soil and seeds. With each tray containing 35 or 60 cells, we can grow thousands of new trees in the greenhouse in 2023.
- Repotting last year's seedlings
    a. From small planting tray cells to ~4 x more the soil volume were transplanted last year's seedlings.
- Planting last year's poplar cuttings
    a. Over 1000 poplar cuttings were placed in the greenhouse in spring 2022.
- Working with school kids
    a. Three groups of children from Narsaq school joined and helped us on different occasions. We told them about plants, trees and nature, and they helped us with planting seeds and repotting seedlings in the greenhouse, with planting trees as a windbreak for the school's future Tiny Forest, and making signs announcing the Tiny Forest.
- Narsaq school's Tiny Forest
    a. In preparation of the Tiny Forest that we are setting up with (and in front of) the school in Narsaq, we recycled materials from the local garbage belt to create signs announcing the 2024 planting of the Tiny Forest. The school put

illustrations and text in three languages on the two signs. We also placed recycled poles marking the outline of the future Tiny Forest. We measured the outside area and length of the path running through, and gathered that we should bring 170 m of fence materials in summer. The fence is to keep cows out, and to protect young trees from being trampled by humans and the occasional snow plow in winter. We also planted 75 poplars along the northern perimeter of the Tiny Forest, as a windbreak protecting the future vegetation behind them, as the northern winds are the fiercest. The school kids helped planting the trees, and we shot some nice footage of them doing so.

- Meeting and thanking the locals
    a. Eva, Niels, Paul, Lise, teachers, head of school, farmer, Permagreen people, Claus, Birgitte, Jacky, Inka, … (Or just leave this for the acknowledgement?)
- Scientific collaboration
    a. Botany Prof. Rike Wagner, Utrecht University taught us a lot about Greenland fauna, and assisted us in our activities. Likewise, we helped her with her scientific efforts, which included setting up a pollen trap in Narsaq, and taking soil, leaf, and tree samples in the Narsarsuaq arboretum and at the Qannassiassat plantation. Future collaboration was discussed at length, which may entail an upscaling of the university's efforts in the region, and students helping with Greenland Trees. A welcome side effect of this collaboration is not only the expert guidance, but also the sharing of some field expenses, thereby allowing us to be even more cost-effective with our donors' contributions.
- Greenhouse
    a. Fourth tree bed installation, adding about 40% to the greenhouse growth capacity
    b. Automated irrigation system installation
    c. Gravel floor installation
    d. We performed a visual inspection of the greenhouse and found it to be in good shape. In one place the shiplap had come loose somewhat, so we reattached it to the arches.
    e. We finetuned the orientation of one of the two cameras that we use to observe the tree growth remotely via hotel WiFi.
    f. new batteries for recording greenhouse indoor temperature and humidity.
- Qannassiassat
    a. tree cores, soil samples, leaf samples, all for laboratory analysis at Utrecht University, and made soil depth measurements.
    b. cabin maintenance, temporarily fixed the windows with plastic and a nail gun. We also cleaned the cabin thoroughly.

- In Narsarsuaq we planted 72 poplar
- We also supported Rike Wagner in her research of the arboretum
- Inspection of former Greenland Trees planting areas in Narsarsuaq revealed that many trees are alive and doing well.

Main achievements of the fall campaign

- **propagation** of thousands of young trees grown from seed in the Greenland Trees greenhouse in the town of Narsaq, south Greenland.
- **planting** 565 trees, 550 of which were the first generation of trees from the Narsaq greenhouse, grown from seeds planted the previous spring May 2022
    a. Narsarsuaq (airport settlement) planting of 367 x 2022-sown Narsaq Greenhouse trees
    b. Tasiusaq (farm) planting of 153 x 2022-sown Narsaq Greenhouse trees
    c. Narsaq (town) transplantation of 15 four-to-eight-year-old self-sewn coniferous trees to the NE corner of the Narsaq Tiny Forest
- **registration** of all 2023 planting was made using GPS and field notes of individual tree species and height. The data: https://github.com/jasonebox/GreenlandTrees
- **filmmaking** by a crew from Germany for an independent documentary for release in 2024 or 2025. See https://www.filmstiftung.de/news/film-und-medienstiftung-nrw-vergibt-548-825-euro-fuer-15-low-budget-projekte/
- **outreach and education** Narsaq primary school interaction from two University of Utrecht graduate students
- **research**
    a. obtained a third year of continuous temperature and precipitation data from the Qanassiasat climate station.
    b. University of Utrecht graduate student projects
        i. mapping of Narsaq town tree species, height and location
        ii. soil sampling from Narsaq and Qanassiasat to determine soil physical properties from 2024 laboratory analysis

Communication

- A 2023 summary video is in development
- 8 posts about the fall 2023 campaign were made to the Facebook Greenland trees page https://www.facebook.com/GreenlandTrees.org/

Spring campaign

Remote preparations

Communications

Prior to the spring field campaign we've had extensive communications with …
Eva, school, Fredrik, Niels, …

Purchases and shipment

We purchased soil and seedling trays from Upernaviarsuk via Kim Neider. He kindly shipped the pallet to Narsaq, where it was waiting for us outside the greenhouse. We also purchased some tools, tree pots and an automated watering system including a 50 m hose in The Netherlands, which we drove to Denmark and put in our checked-in luggage on the flight to Greenland.

Greenland (27 April - 18 May)

Sowing seeds

We filled X trays with soil and seeds, and placed them in the left two beds in the greenhouse. Every tray cell contains X-X seeds to enhance the likelihood of seedling germination. With every tray containing 35 or X cells, we will grow up to X new trees in the greenhouse in 2023.

Greenhouse tree population spring 2023				
Tree type	Sowed	Untouched	Repotted	Moved out
				0
				0
				0
				0
				0
				0
				0
				0
Poplar	0	0	0	722
Total				722

Repotting last year's seedlings

From small planting tray cells to ~4 x more the soil volume were transplanted last year's seedlings.

Planting last year's poplar cuttings

Over 1000 poplar cuttings were placed in the greenhouse in spring 2022. Some got planted in the summer of 2022, the others remained in the greenhouse and developed roots. After separating the poplars from the grass that had invaded the tray cells, 722 trees remained. 75 of these were planted as a northern wind break for the future Tiny Forest. Additionally, we gave 70 poplars to a farmer to grow a windbreak at his fields, 10 to local bypassers who wanted to grow trees in their garden, and 35 to the owner of the Ulu restaurant for her garden. We took 69 poplars to Narsarsuaq and planted them in the degraded US military base area. 463 poplars were left beside the greenhouse in Narsaq for locals to plant in their gardens (not in the wild), to be coordinated by Eva. The staff of the local Permagreen hardware store showed an interest in planting trees in an area near their building.

Working with school kids

Three groups of children from Narsaq school joined and helped us on different occasions. We told them about plants, trees and nature, and they helped us with planting seeds and repotting seedlings in the greenhouse, with planting trees as a windbreak for the school's future Tiny Forest, and making signs announcing the Tiny Forest.

Narsaq school's Tiny Forest

In preparation of the Tiny Forest that we are setting up with (and in front of) the school in Narsaq, we recycled materials from the local garbage belt to create signs announcing the 2024 planting of the Tiny Forest. The school put illustrations and text in three languages on the two signs. We also placed recycled poles marking the outline of the future Tiny Forest. We measured the outside area and length of the path running through, and gathered that we should bring 170 m of fence materials in summer. The fence is to keep cows out, and to protect young trees from being trampled by humans and the occasional snow plow in winter. We also planted 75 poplars along the northern perimeter of the Tiny Forest, as a windbreak protecting the future vegetation behind them, as the northern winds are the fiercest. The school kids helped planting the trees, and we shot some nice footage of them doing so.

Meeting and thanking the locals

Eva, Niels, Paul, Lise, teachers, head of school, farmer, Permagreen people, Claus, Birgitte, Jacky, Inka, … (Or just leave this for the acknowledgement?)

Scientific collaboration

During the last week of our stay in Greenland, we were accompanied by Rike Wagner, professor in botany at Utrecht University. She taught us a lot about Greenland fauna, and assisted us in our activities. Likewise, we helped her with her scientific efforts, which included setting up a pollen trap in Narsaq, and taking soil, leaf, and tree samples in the Narsarsuaq arboretum and at the Qannassiassat plantation. Future collaboration was discussed at length, which may entail an upscaling of the university's efforts in the region, and students helping with Greenland Trees. A welcome side effect of this collaboration is not only the expert guidance, but also the sharing of some field expenses, thereby allowing us to be even more cost-effective with our donors' contributions.

Greenhouse

Fourth tree bed

Using materials left over from the shipment of the greenhouse 1.5 years ago, we constructed a fourth wooden tree bed, adding about 40% to the greenhouse growth capacity in terms of area. We raised and leveled the ground level inside the tree bed by shoveling soil from outside the greenhouse into the bed, then placed cloth on top to prevent seeds in the soil from germinating. Now we use the bed for the repotted seedlings.

Automated irrigation system

The trees in the greenhouse need frequent watering during the warm season. In 2022, Eva X took care of this on a daily basis. In 2023, to lighten the work, we installed an automated

watering system with hoses running from the hotel to the greenhouse and through an irrigation timer.

Gravel floor

The floor of the greenhouse was very irregular with lots of tall grass growing - adding seeds to the tree soil. To flatten the area and reduce the presence of grass, we asked the Permagreen hardware store to arrange delivery of gravel outside the greenhouse. Prior to shoveling in gravel, we flattened the area to the best of our abilities with a spade. Then we shoveled about 1.5 m^3 of gravel onto the greenhouse floor with obvious results.

General maintenance

- We performed a visual inspection of the greenhouse and found it to be in good shape. In one place the shiplap had come loose somewhat, so we reattached it to the arches.

- We finetuned the orientation of one of the two cameras that we use to observe the tree growth remotely via hotel WiFi.
- The weather station in the greenhouse was outfitted with new batteries for monitoring indoor temperature and humidity.

Qannassiassat

Science

Together with Prof. Rike Wagner we took tree cores, soil samples, leaf samples, all for laboratory analysis at Utrecht University, and made soil depth measurements.

Sheep fence maintenance

We found that the sheep fence was compromised in several places; minor repairs made. Two sheep with two lambs currently reside inside the fenced area. Attempts to herd them out failed due to the large extent of the area. Luckily the sheep do not appear to show an interest in our previously planted larch, pine and … trees.

Exploring new planting grounds

We found the area south of the fenced plantation to be suitable for fencing off an approximately 1000 m^2 area for new trees, to be set in motion in summer. This is to minimize disruption of scientific activities within the main plantation by Copenhagen University. Roughly 100 m of fence materials are needed.

Cabin maintenance

The Bjerge family from Qaqortoq kindly allows us to use their cabin when working at the Qannassiassat plantation, and in return we do some maintenance and keep the place tidy. This visit we found two windows broken, presumably because of strong winds. Aware of this prior to arrival, we temporarily fixed the windows with plastic and a nail gun. We also cleaned the cabin thoroughly.

Narsarsuaq

In Narsarsuaq we planted 72 poplars, three of which were fresh cuttings. Four were planted next to the house of Jacky and Birgitte, who work at Blue Ice. The remaining 69 were planted in the degraded military base. We also supported Rike Wagner in her research of the arboretum, which may lead to a larger project in the future. Inspection of former Greenland Trees planting areas in Narsarsuaq revealed that many trees are alive and doing well.

Local preparations for the summer campaign

- Preparing seedlings to be planted in nature, placed in the rear right tree bed in the greenhouse.
- Marking and measuring the Tiny Forest area in preparation of tilling (?) and fencing.
- A tree planting device and two seedling trays were left at Blue Ice in Narsarsuaq.

Fall campaign

Remote preparations

Purchased and shipped 170 m fence materials

Trees planted

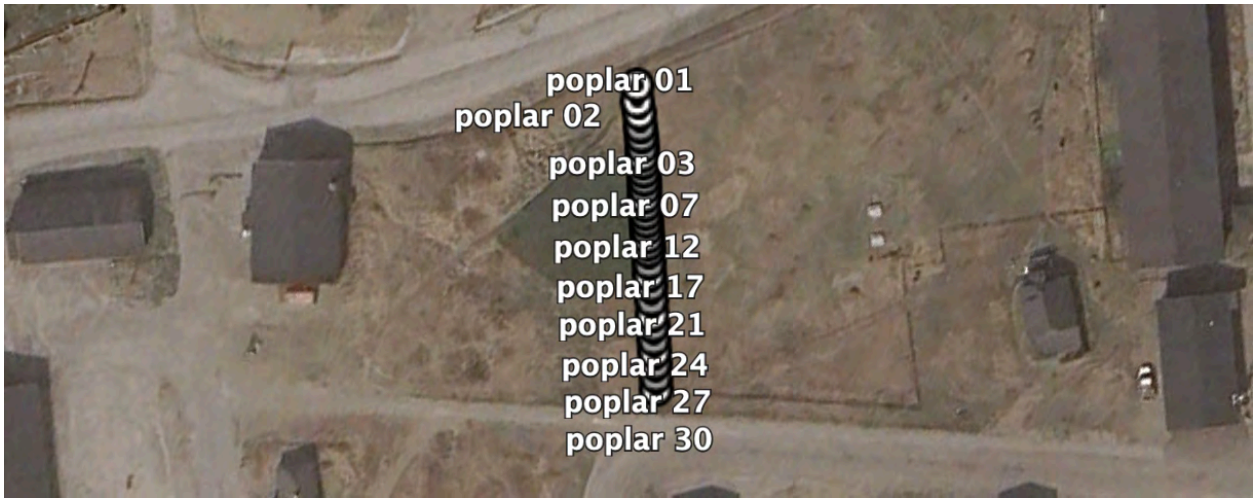
2023 summary of planted saplings by date, species and location

date	n. trees planted	notes	location
Wednesday, May 24, 2023	30	poplus 30	Narsaq Tiny Forest
Saturday, August 19, 2023	15*	engelmannii 3 larix 10 contorta 2	Narsaq Tiny Forest
Thursday, August 24, 2023	124	engelmannii 41 larix 36 contorta 31 alnus 16	Tasiusaq
Friday, August 25, 2023	29	engelmannii 3 larix 2 contorta 2 alnus 22	Tasiusaq
Monday, August 28, 2023	76	engelmannii 39 contorta 37	Narsarsuaq
Tuesday, August 29, 2023	96	sylvestrus 38 alnus 58	Narsarsuaq
Sunday, September 3, 2023	76	sylvestrus 38 alnus 38	Narsarsuaq
Tuesday, September 5, 2023	119	engelmannii 40 sylvestrus 39 alnus 40	Narsarsuaq
Total	**565**		

** 15 plants were from Niels Sakariassen's garden, larix are from Qanassiasat, transplanted August, 2022*

2023 summary of planted saplings, by species

species	count
alnus	174
engelmannii	126
sylvestrus	115
contorta	72
larix	48
poplus	30
Total	**565**



45 Narsaq School Tiny forest sapling planting locations[1] as part of the spring and autumn 2023 field campaigns

152 tree planting locations[2] as part of the 2023 field campaign, in Tasiusaq

[1] a planimetric shift of 2 to 20 m to the south is evident in the Google Earth projection from apparent lack of accurate orthometric correction

[2] a planimetric shift of 2 to 20 m to the south is evident in the Google Earth projection from apparent lack of accurate orthometric correction

134 tree planting locations[1] as part of the 2023 field campaign, north of the runway in Narsarsuaq

38 tree planting locations[1] as part of the 2023 field campaign, near the mouth of the 'hospital valley' in Narsarsuaq

196 tree planting locations[1] as part of the 2023 field campaign, near hotel Narsarsuaq

Persons involved in GT field activities August/Sept. 2023

link to spring campaign log

Persons participating the August/September field campaign

name	initials	nationality	description
Jason Box	JB	🇺🇸	GT co-founder, field assistant while already in Greenland for glaciological work
Jakob Jakobsen	JJ	🇩🇰	volunteer, GEUS engineer
Mette Hansgaard	MH	🇩🇰	volunteer, artist
Michael Strassburger	MS	🇩🇪	Documentary Filmmaker based in Cologne, Germany - Research Tour South Greenland. Connected to Bergwald Projekt Switzerland.

Ulf Behrens	UB	🇩🇪	cameraman
Shinya Kitamura	SK	🇯🇵	soundman
Anna van den Broek	AB	🇳🇱	masters student at Utrecht University
Reinder Hemstra	RH	🇳🇱	masters student at Utrecht University
Eva Marie	EM	🇩🇪	greenhouse caretaker
Niels Sakariassen	NS	🇬🇱	Narsaq resident, tree enthusiast with backyard tree nursery, works for Royal Greenland

Day-by-day activities

Tuesday, August 15, 2023
Anna and Reinder arrived Narsaq

Wednesday, August 16, 2023
activities

Thursday, August 17, 2023
JB filmed around hotel Narsarsuaq where Greenland trees have been active, finding a high fraction of trees surviving from the 2019 planting campaign.

success in growth, now easily visible from the bottom of the slope are more than 60 trees planted in 2019 in the Gene Box plantation in Narsarsuaq

One of many 4+ year-old plants from the 2019 Greenland trees planting campaign on the slope behind Hotel Narsarsuaq

Fall 2019, Ole Guldager had planted 4 trees from Niels Sakkariasen that Greenland Trees was part of organizing, idea being instead of cutting down a tree each year and placing it in a metal cylinder (see photo below) decorate planted trees.

Substantial growth of Niels Sakkariasen's trees that Ole Guldager planted. Greenland Trees was part of the organizing.

Friday, August 18, 2023
JB filmed around 'IKEA'

15.30 Diskoline to Narsaq

arrived Narsaq Friday 4:30 PM, stayed in orange house

Saturday, August 19, 2023
Met Jim and Jørgen Matthiasen of Permagreen to receive fence materials and organize their transport to the Tiny Forest (TF) location.

In the TF, we found plenty of the ca. 30 poplar that we planted last year with Eva and the Narsaq school kids.

Despite our best efforts, the fence project couldn't proceed on Saturday. Installing fence posts is confronted by issue of rocky layer below 30 cm of soil. Given the freeze depth is lower than 30 cm, water would be getting under the fence and push it out over time. We tried Kovacs ice auger to drill and found it very difficult to drill one hole. We did not have the drill's screw-in side

brace. But still, I think the drill system would fail at tip, at the motor, the chuck and one would get very sore arms. So, hand-drill-augering is not something to plan for.

Alternatively, an auger mounted on the back of a tractor could do 30 cm holes if not deeper. I spoke with Jørgen and Jim from Permagreen and they both thought a back-hoe digger was the way to solve our problem. At the time Aug/Sep 2023, no digger was available.

A digger would be needed for at least a work day. So, the cost for the fence is a concern.

Through the process, Jason came to believe the fence idea was a mistake. While there is probably some foot traffic coming through the tiny forest area, he thinks it is not too much.

Jim from Permagreen thought a digger would work to install the 46 fence posts. The two diggers that Permagreen have are not working, the new one they ordered is to arrive 28 August and has a lot of people wanting to use it. Using the digger to make the fence and clear willow and grass would take at least 1 day and I guess cost 10k DKK.

—

To accomplish something, we pivoted to planting and registering from Niels's garden 15 x 4 to 10-year-old trees, mostly larix, into the NE corner of the Tiny Forest, where ~8 poplar from last year are happily growing along with ~30 poplar planted May 2023 along the north side of the fence. We filmed several of the steps in the process. The Niels plants were those we took from the Qanassiasat shoreline last year. They were growing well.

Sunday, August 20, 2023

Narsaq

Worked on a Greenland Trees video

Monday, August 21, 2023

9 o'clock interview with Swiss journalist Aurelie

inside greenhouse with 2022 sewn left and 2023 sewn right

Jason filmed in the greenhouse

Registered poplar that Paul Cohen had planted in the autumn of 2022. Paul received a Greenland Trees t-shirt

Film in tiny forest

pack plants

Tuesday, August 22, 2023

from Narsaq to Narsarsuaq, 8.50 arrival

We visited Qanassiasat on the way over to Qassiarsuk, had only 35 minutes which was sufficient to gather the three soil samples for RH, change the battery and the temperature in precipitation recorder, now have three years of continuous data.

filming the gathering of data and battery replacement at the Qanassisat plantation climate station

I gathered our shovel, the metal marker tag kit and my Honda generator from the cabin.

Use red truck, gathered PROMICE cargo from harbor, gathered food and shovel from Blue Ice container, gathered glacier safety gear form Air Gl cargo, got old hotel reception and loaded in boxes there, organized what we needed for next days

13.30 picked up MS, UB, SK, JJ from Narsarsuaq airport

Film team prepared their equipment in Narsarsuaq hotel depot.

15.30 Tasermiut zodiac to Qassiarsuk to drop most of cargo

16.30 to Qanassiasat, just 35 minutes so Tasermiut zodiac could get back to Qanassiasat for other transits, skipper Cezar

On site, we met Kim Neider was tending to the 900 or so engelmannii to plant

I gathered from the cabin, my Honda generator, cable, plant markers/kit

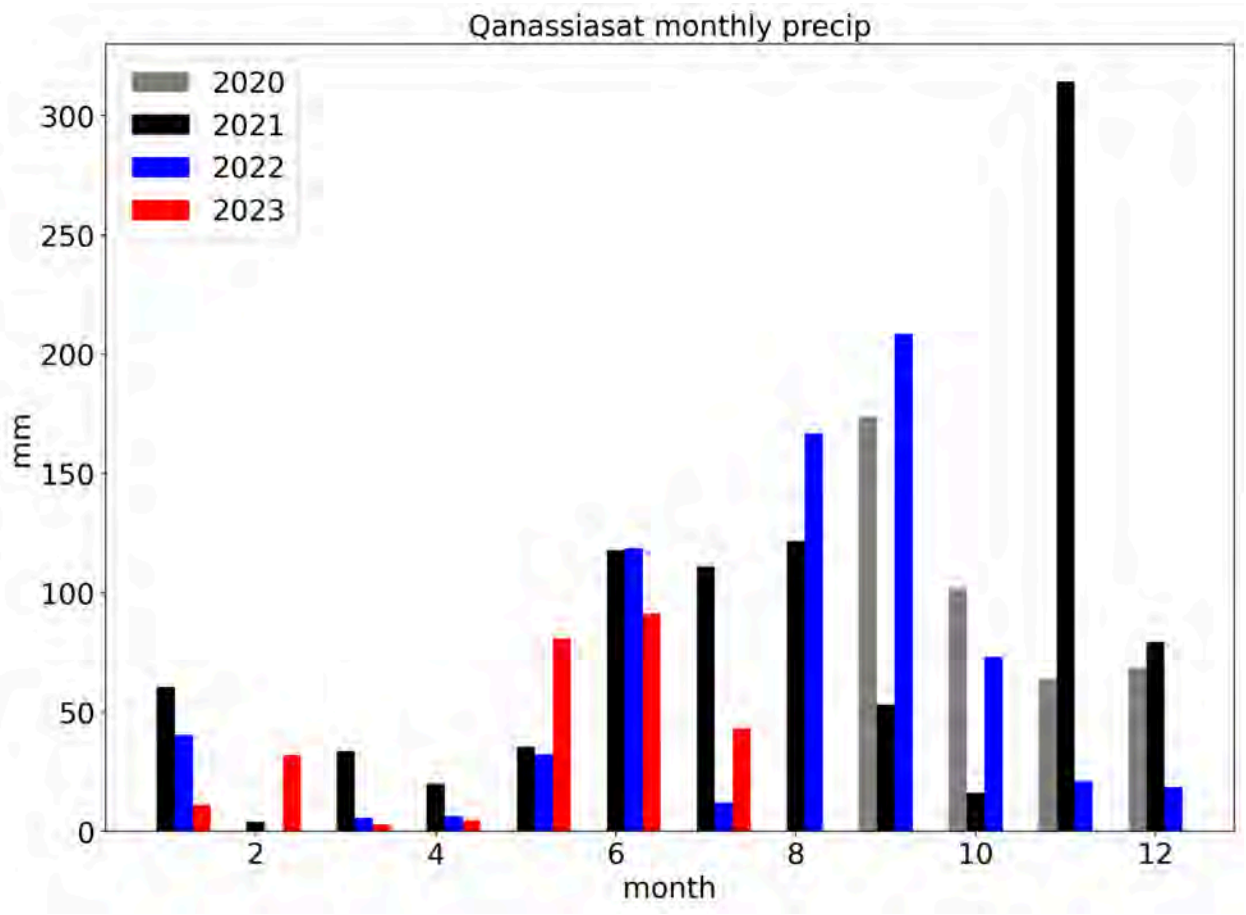
JJ and MH obtained soil sampling for Utrecht University at 3 locations: shore, forest, grassy planting field

JB gathered data from the temperature precipitation logger, set in a new battery, relaunched.

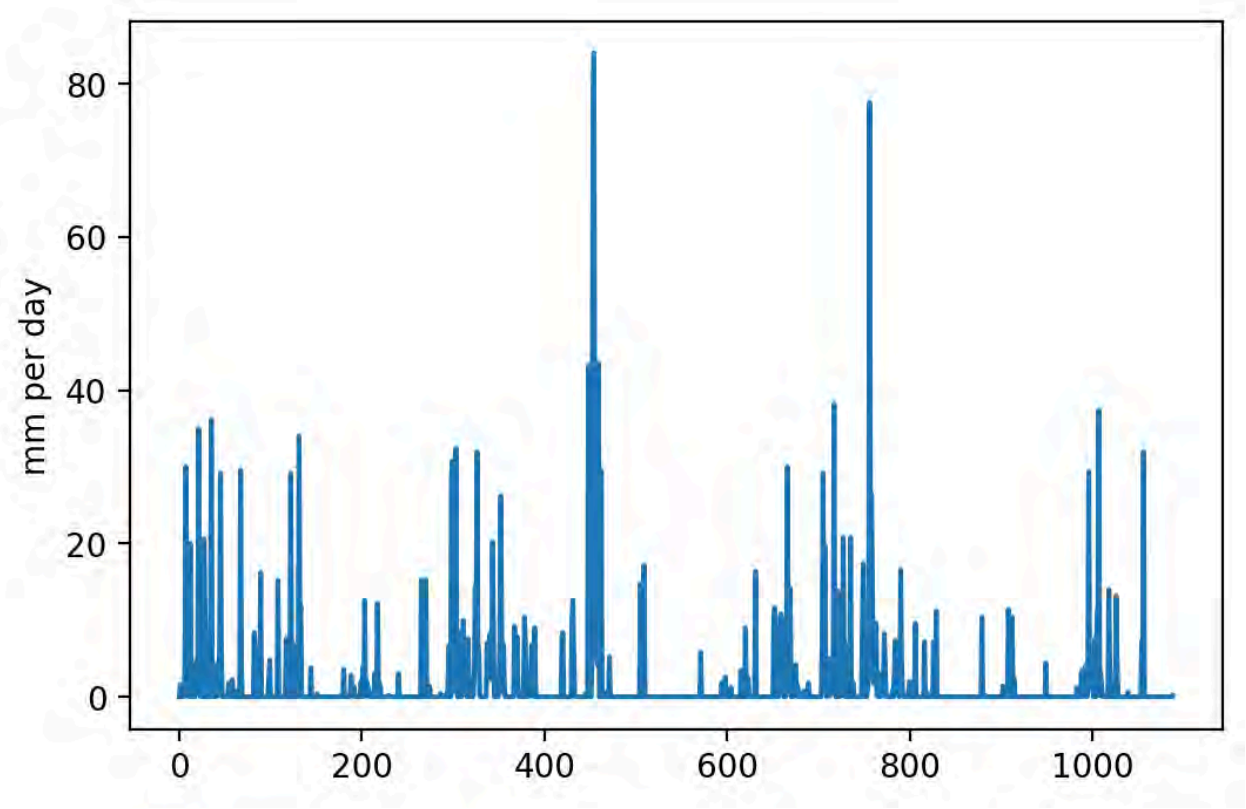
The filters captured the action.

Qanassiasat temperature and precipitation

That makes 3 years of continuous temperature and precipitation data from Qanassiasat. I started to analyze the data, finding most precipitation in the second half of the year, with high variations in September, October.



Daily precipitation up to 80 mm is recorded



tent-camped at Tasiusaq, light rain started in the evening…

Wednesday, August 23, 2023
Light to moderate rainfall the whole day.

Ramon has a green colored house east of the hostel. A guy called Jesus works at the hostel for Ramon and lives in the green colored house.

Thursday, August 24, 2023
Tasiusaq

Rain throughout the night stopped around 11 o'clock this morning.

While waiting for Aviaja to return from work at the school, we planted 5 trees in between boulders east of the hostel. Then, JB planted six small pinus saplings 670 m west of the hostel. We later showed Aviaja these planting locations.

filming planting of six saplings 210 m west northwest to the shoreline in Tasiusaq[3]

Planting, taking photos and heights from all. These were the first planted saplings sown may 2022, grown from seed in the Narsaq greenhouse.

we took photos of many of the plant registrations in Tasiusaq

[3] GPS IDs, species, heights: 9 larix 10 cm, 10 contorta 8 cm, 11 engelmannii 11 cm, 12 engelmannii 8 cm, 13 larix 11 cm, 14 contorta 10 cm

filming Aviaja Lennert at Tasiusaq farm

Mette and Jakob planting above the cultivated area at Tasiusaq farm

Friday, August 25, 2023

Mette planting in Tasiusaq a windbreak to shelter the Lennert family home

Jason plant registering height type and position

The tree planting in Tassiusaq was a success, 153 plants registered, 4 trays, planted in the vicinity of Avijaja Lennert's farm. We had 36 hours of rain right before the planting, approximately 20 mm, something that made everybody happy because there were ca. 45 days without rain before that.

I registered all of the plants with GPS, heights, photos of each, except the Alder this day.

The film crew recorded all of the steps of the process on the ground and from a drone. And they interviewed the farmer, Ramon, myself talking about the project there, and some of the drama of not being welcome at Qanassiasat.

planting location along the road above the Tasiusaq farm

1 o'clock departure from the hostel over to Qassiarsuk, zodiac to Narsaq, checked into the Hotel Narsaq's orange house and guest house.

Saturday, August 26, 2023

We filmed with Eva at the greenhouse and prepared for more trays of plants to bring to Narsarsuaq.

filming with caretaker Eva Marie inside the Narsaq Greenland Trees greenhouse

Sunday, August 27, 2023

Narsaq School Tiny Forest sign

~90 cm high Narsaq School Tiny Forest poplar all along the northern boundary obtained from 2022 spring cuttings planted in 2023 springtime

Mette with poplar planted in 2022 in the Narsaq School Tiny Forest

Monday, August 28, 2023

packed up two large buckets with 3 trays of conifers (30 x engelmannii, 30 x contorta?, 30 x sitka?) and 1 tray of 60 x alnus.

3 PM Tasermiut zodiac transfer to Narsarsuaq f JB, JJ, MH and Phillip.

5 PM planting for 2 hours behind the hotel 30 x contorta with average heights of 11 cm? and 30 x engelmannii with average heights of 8 cm, both at the base of the G.E. Box plantation, in

safe-looking places around some fest areas and on flat areas.

Tuesday, August 29, 2023

planting on both sides of the road between IKEA and the Hospital valley

Philip (left) had the honor of planting the last tree that day

Wednesday, August 30, 2023

finding plenty of 2019 poplar behind hotel and to the south of even the clothesline

In the evening was plenty of rain, welcome for the plantings we had done the previous day

Thursday, August 31, 2023
no GT activities

Friday, September 1, 2023
no GT activities

Saturday, September 2, 2023
contacted Filip at Hotel Narsaq to request two boxes of saplings.

Sunday, September 3, 2023
received two boxes of saplings packaged by Filip and Ingimar Magnusson at Hotel Narsaq and put on Blue Ice targa, arriving ca. 4 PM.

JB and JJ planted 40 pinus sylvestris (Scots pine) and 40 Alnus Betulaceae (Alder) in the IKEA area of Narsarsuaq. MS, UB and SK filmed the planting activity. The IKEA location is interesting for two points: 1) degraded land / land restoration and 2) visiting the site of ca. 60 year old trees that have self-sewn offspring beneath them.

2023 09 03 Narsarsuaq planting southwest of the 'IKEA' building

Along the river channel, ca. 60 year old trees (background, top right) that have self-sewn offspring beneath them (foreground).

Monday, September 4, 2023

no GT activities

Tuesday, September 5, 2023
Wednesday, September 6, 2023
Thursday, September 7, 2023

Activities to consider for 2024

1. Continue to coordinate with Upernaviarsuk (Kim Neider) for guidance.
2. We aim to obtain area allotments pre-approval
3. We plan to plant no more poplar, is not wanted according to Naalakkersuisut.
    a. Martin Schiøtz. <MASC@nanoq.gl>
    b. The Department of Agriculture, Self-Sufficiency, Energy and Environment would like to point out that poplar trees are NOT naturally occurring in Greenland.
    c. Pursuant to § 33 of the County Council Act No. 29 of 18 December 2003 on nature protection (Nature Protection Act), animals, plants and microorganisms that do not occur naturally wild in Greenland may not be released or bred in the wild.
    d. On the basis of a nature impact assessment, Naalakkersuisut can grant permission for stocking and breeding. Naalakkersuisut can set conditions for the protection of nature in connection with a permit.
    e. [Danish original text: Departement for Landbrug, Selvforsyning, Energi og Miljø gør venligst opmærksom på, at poppeltræer IKKE er naturligt forekommende i Grønland.
    f. I henhold til § 33 i Landstingslov nr. 29 af 18. december 2003 om naturbeskyttelse (Naturbeskyttelsesloven) må dyr, planter og mikroorganismer, der ikke forekommer naturligt vildtlevende i Grønland, ikke udsættes eller opdrættes i naturen.
    g. Naalakkersuisut kan på baggrund af en naturkonsekvensvurdering give tilladelse til udsætning og opdræt. Naalakkersuisut kan i forbindelse med en tilladelse fastsætte vilkår til beskyttelse af naturen.

4. revisit IKEA area planting sites (we have GPS data) in Narsarsuaq to hopefully confirm successful planting, and question whether soil conditions were OK. Poplar engel
5. plant poplar along farmland in Narsaq, Quingua, work through Niels, Ellen to establish, on northern side of farm, need fencing if sheep
6. repeat photography simply by identifying nice e.g. 2019 photos, print them or use a field computer, and remake those specific photos.
7. Copenhagen University intern via this program https://skovskolen.ku.dk/english/intern/
8. visiting Kussuaq in Tassermiut Fjord (60°16'N, 44°43'W) in the vicinity of Nanortalik.
9. We are preparing a series of activities for the school kids in Narsaq, when it is ready we can share it with many other schools there and have GT to provide them with trees/seeds, etc. Activities like:
    a. Research the plants around your school, in two different seasons
    b. Growing plants under different conditions, researching, measuring
    c. Making a herbarium of plants, different places or moments
    d. Collect and grow seeds
    e. Washed-up seeds, link with ocean currents and plastic in the oceans (Erik van Sebille)
    f. Seed research, what falls/fly better
    g. History of the Vikings
    h. More about precipitation and drought and the link with plants and climate (MSc project)
10. Obtain support from Utrecht University for the above points. They already have enough educational materials as they are doing for NL schools.