

Ikâsartivaq Fjord Mountaineering Expedition

East Greenland

August 2023

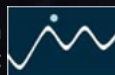
Eve MacCallum
Harry Newmark
Oliver Smaje



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Contents

Expedition summary and achievements.....	2
Team members.....	4
Calendar.....	5
Brief summary day by day	5
Locations (map) and climate.....	8
More detailed description of our mountaineering days including route descriptions and observations of possible other lines:	
- Ridge	8
- Sphinx	9
- Berg-bomb and Iceberg Slabs	12
- Little slab climb	13
- Big 'N' (both trips up it)	13
- Big mountain we didn't get to	15
- Tightrope mountain	16
Non-climbing activities (fishing, swimming, big walk, rest days).....	17
Wildlife - flora and fauna	19
Logistics	
- Travel and accommodation	23
- Food and storage	23
- Risk assessment (polar bears, medical, communications)	24
- Equipment taken	25
Reflections upon our return: We actually did it!	26
Appendix1 - Menu.....	27
Appendix 2 - Financial summary	28

Expedition Summary

In August 2023, we travelled to East Greenland on a mountaineering and climbing expedition, to attempt ridges, new routes and unclimbed peaks on the mountains around Ikâsartivaq fjord, which lies north of Ammassalik Island. The team consisted of Eve MacCallum, Harry Newmark and Oliver Smaje. We took inspiration from a recent Scottish Arctic Club expedition to the same area in 2022.

Our main objective was to make a traverse of the 26km ridgeline on the north side of Ammassalik island, from NW to SE. We summited the first two mountains on the NW end, at 940m and 1110m, requiring a few short pitches, multiple abseils and moving together much of the time over technical and loose rock, although never of any major difficulty. However, due to a severe bout of gastroenteritis in one team member, and very loose rock, we aborted our attempt by descending a gully to the south and headed back to basecamp. It was clear that for us, the very loose rock on this ridgeline and the caution required to climb it safely, would make a full traverse extremely time consuming and not feasible with our resources.

The most impressive looking peak on the ridge, a large granite tower which we nicknamed the Sphinx, caught our eye as a challenging but achievable objective. The steep, lighter coloured rock suggested to us better quality and we could see crack lines that led to the summit. We succeeded in getting to the top via the NW face, a 130m route requiring 3 pitches of technical climbing, with the final jamming crack being the crux. We graded this about E2 5c. There was no evidence of any other ascent of this mountain and we suspect this was a first ascent. Descent was by 2 abseils and downclimbing the same line.

From basecamp in Kûgarmît, we opened another route on the large north facing rock face on the mountain Asingaleq. This impressive looking crag has a slabby bottom half, and a steeper, more broken top half, with some obvious vertical cracks and corners that may be possible to climb. We climbed the lower section- taking a line of weakness on the right side of the main slab- which took 9 long pitches covering mostly easy ground on mixed quality rock, with a few tricky steps. We gave this HS 5a and named it "Berg Bomb", after the enjoyment we had swimming with washed up icebergs in the bay below. This climb finished at a snowy diagonal fault line which we followed to the bottom.

We transferred basecamp to the north side of Ikâsartivaq fjord, to an impressive cirque of peaks which has been visited a number times before. Here we hoped to repeat some known routes, with the potential of new climbs and peaks if the opportunity arose.

The closest mountain to our camp, known as Nîniartivaraq, had a fearsome rock tower making it look impenetrable from all sides. We repeated the excellent Grade 3 scramble up the NW ridge to the summit. Later in the trip, we tried to tackle the South ridge (previously climbed by Allen, Dawson and Hoare in 1975) but unfortunately were turned around as we were unable to find a route up the steep face before it got dark.

Within the main cirque lies an outlier peak, standing at about 1120m. We followed the broad South ridge to the first summit and were surprised to see a second summit, very slightly higher, 100m away along an extremely loose and knife-edge ridge. We traversed this with caution to the top. Despite having no recorded ascents, we found a very old Troll sling near

the summit, so not another first ascent after all! We descended the way we came, simul climbing until the gradient eased on the south ridge.

These were the main mountaineering achievements of our trip, however there were a few other outings that we have included in the report below that may give prospective teams useful information. In addition to the mountaineering objectives, many highlights of the trip were related to the natural environment we lived in for a month. We were fortunate to see multiple humpback and fin whales, arctic foxes, and a good variety of bird species. We foraged for berries and ate Arctic Char and Cod that Ollie was able to catch with ease. We stumbled across a magnificent display of the Northern Lights. Ultimately we stayed safe, really enjoyed ourselves, and came back as friends!

Many thanks to our sponsors - the Scottish Arctic Club, The Neil MacKenzie Trust, Austrian Alpine Club, BMC and Julie Tullis memorial award, The Jeremy Wilson Charitable Trust, LifeSystems, TentMeals, SummitToEat and Mountain Equipment. It quickly became clear in the organisation of this trip that it would not have been possible without their support.



Team Members

Eve MacCallum

My first mountaineering experience was a winter skills course in Glencoe when I was 17, and I've been hooked ever since. Shortly afterwards I left for Edinburgh University, and quickly signed up to join their Mountaineering Club. Here I learnt to climb, and served a year as Gear Secretary and Vice President. Having graduated University, I'm now working as a freelance guide in Scotland.



Harry Newmark

Originally from Inverness, Scotland, I began my climbing journey while exploring the Highlands from a young age. At university, I embraced trad and winter climbing, and I've since embarked on climbing expeditions in the UK and abroad, including high-altitude mountaineering in Bolivia and Peru. I'm currently training to become a GP in Edinburgh.






























Oliver Smaje





Having been taken climbing by my dad as a teenager, I immediately developed a passion which has taken me all over the UK, to the European Alps and to Canada. In recent years my interest in the outdoors has led me to fishing and wildlife watching as I develop a broader understanding of the natural world. I'm currently working as a naturalist on polar cruise ships.



Calendar

AUGUST 2023

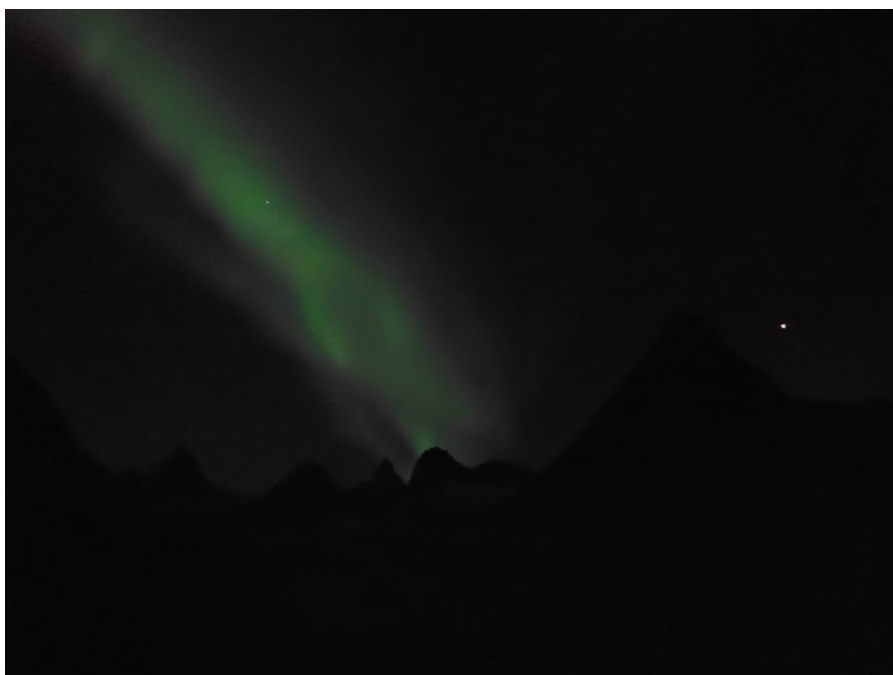
MON	TUE	WED	THU	FRI	SAT	SUN
7 	8 	9 	10 	11 	12 	13 
14 	15 	16 	17 	18 	19 	20 
21 	22 	23 	24 	25 	26 	27 
28 	29 	30 	31 	1 	2 	3

 MOUNTAIN DAY
  FLIGHT
  REST DAY
  BOAT

The Trip: day by day

7th	We left Edinburgh and flew from Glasgow to Keflavik airport. We booked the cheapest hotel in Reykjavik for the night, and enjoyed having a wander about town.
8th	Up early to fly from Keflavik to Kulusuk then get a boat to Tasiilaq. A crazy afternoon trying to sort everything we needed in Tasiilaq.
9th	More organising things, then a boat ride first to the SE end of the ridge to stash a gun and food, then round to Kúgarmît (the NW end of the ridge) where we set up base camp in The Valley of the Waterfalls.
10th	We started off up the ridge, from basecamp to the first summit.
11th	A traverse of the ridgeline: up and over the second main summit.
12th	Back to basecamp.
13th	Rest day, including a lot of fishing.
14th	We moved from basecamp up to the base of the Sphinx to set up a camp in the valley.

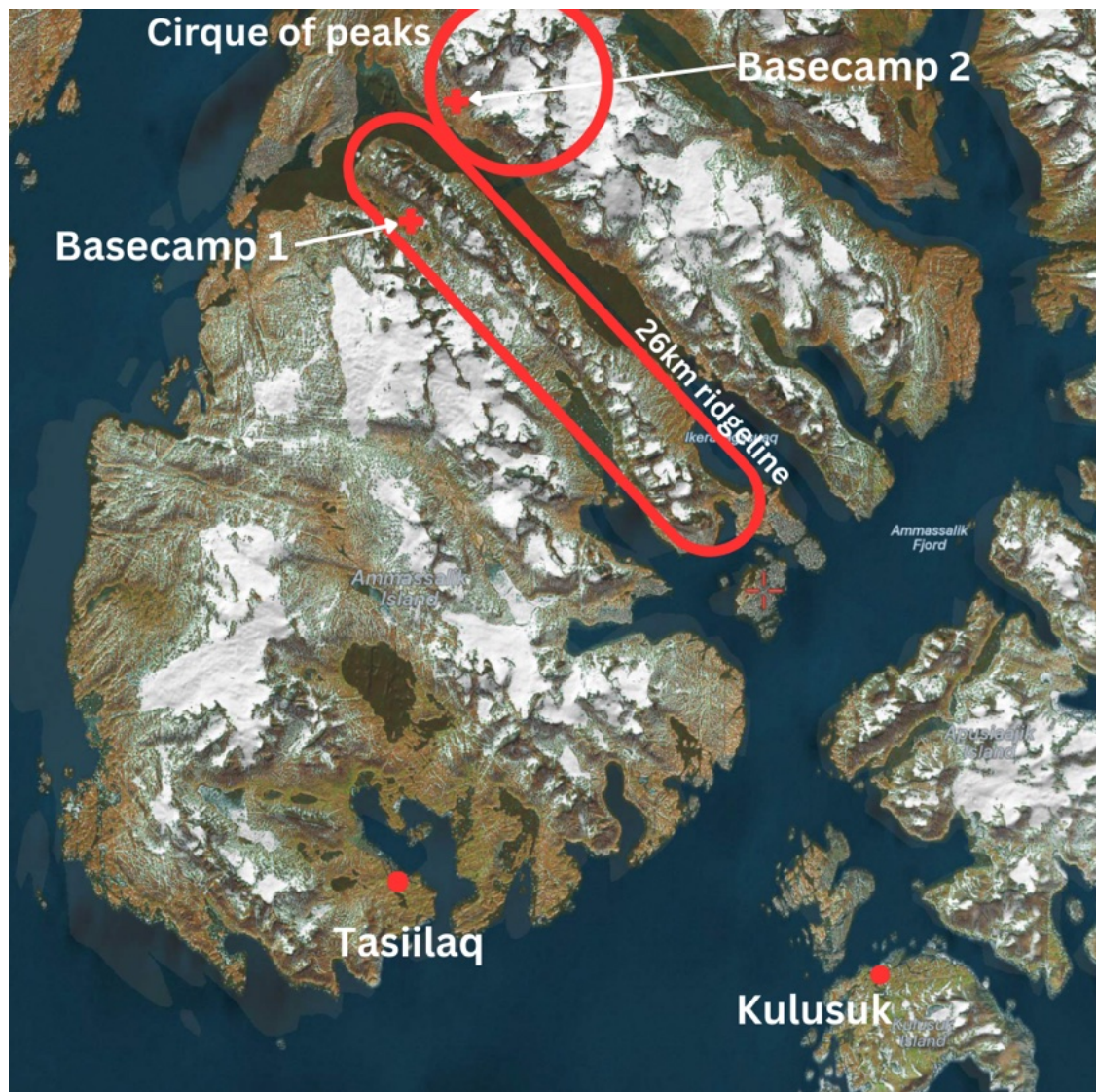
15th	We made our ascent of the NW ridge of The Spinx.
16th	One hell of a long walk to the end of the ridge and back.
17th	Back to basecamp.
18th	Rest day
19th	Put up a new 9 pitch route called "berg bomb" on the slabs near camp.
20th	Moving day: from Kûgarmît across the fjord to the Cirque
21st	Harry and Eve climbed a 3 pitch slab route. Ollie caught lots of fish.
22nd	A repeat ascent of Nîniartivaraq via a Grade 3 scramble.
23rd	Rest day, exploring glacial river.
24th	Wet day- lots of reading and writing in the tent.
25th	Attempt at a high bivvy in cirque, turned around by glacier.
26th	Ascent of "Tightrope Mountain".
27th	Rest day, more fish!
28th	Attempted route up SW ridge of Nîniartivaraq
29th	Rest day, taking in the last of the scenery.
30th	Moving day- back to Kulusuk.
31st	Storm arrived, found community hall to stay in with Spanish climbers.
1st	Flight due but cancelled, move into the hotel.
2nd	Fly back to Iceland.



Location and climate

The map below shows Ammassalik island with Ikâsartivaq fjord separating it from the mainland on the north-east side. Ammassalik island is located in East Greenland, about the latitude of Iceland. We have highlighted our basecamps and the mountains we were exploring during our trip.

The weather in August tends to be quite stable, but large storms are known to materialise quickly and without much prior warning. We were lucky with most days being warm and sunny with a gentle breeze, temperatures up to about 10 degrees in the afternoon but could feel warmer in the sun, We had one rainy day in the middle of our trip, and at the end had to evacuate basecamp a day early due to a large storm coming in (remnants of hurricane Idalia that had made it across the Atlantic). On windier, cloud-covered days it could quickly feel very cold.



Mountaineering Objectives

North Ammassalik Ridge 10th- 12th August

We set off up the ridge in the early afternoon. We decided on a route up a vegetated zigzag that avoided the worst of the boulder field for our way up the initial peak. It was hot, sweaty and steep. We clambered up a short steep gully onto some amazing granite slabs. The slabs steepened into a buttress above, which we passed on the right where we passed a stream we could fill up from. From here the ground turned loose and bouldery, and up ahead was a steepening expanse of boulders finishing in a cliff band. We moved left and found a way up the looseness to the broad ridge crest.

There, we were greeted with phenomenal views of the Greenland ice sheet, the cirque of peaks to the North, and the icebergs in the Sermilik fjord. We continued with our spirits buoyed by the spectacular views, until we were confronted with a chossy notch we had to pass: time to get the ropes out. Harry won rock paper scissors and chose to lead. We scrambled into the notch and Harry led about 5m of reasonable but loose ground (~ Mod) to the top and we optimistically put the ropes away. Alas, after 5 minutes the ropes were out once more, this time to traverse a wider chasm in the ridgeline. We all made it across, although the Sam-Splint on the side of Harry's bag slipped out and was lost to the ravine.

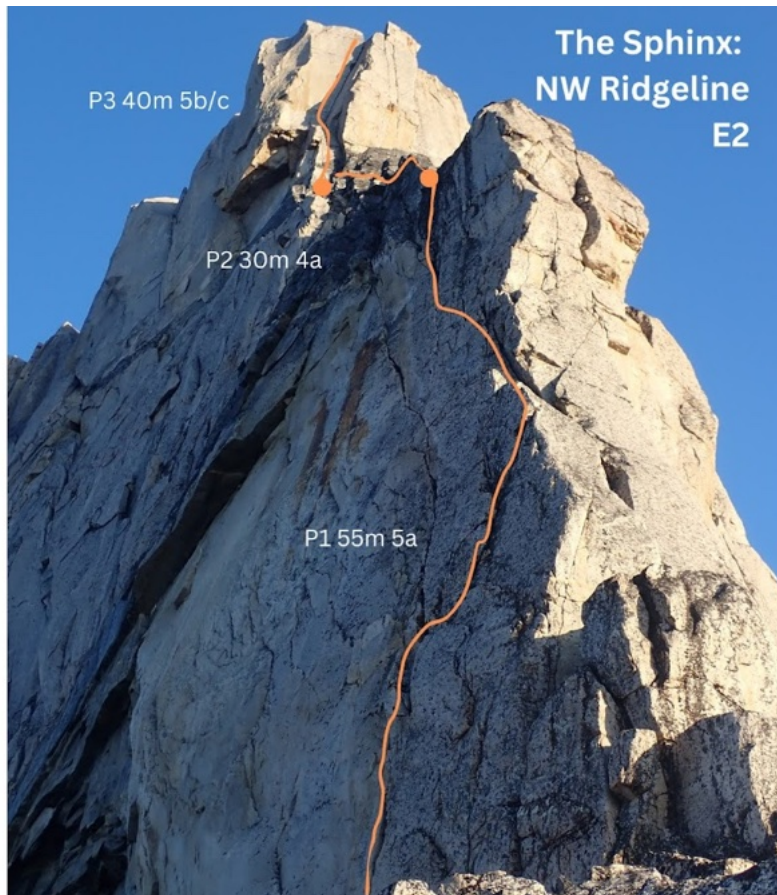
At this point the sun was low in the sky, and we found a gravelly spot next to a snow patch to setup camp. We tucked into a Summit to Eat Beef Stew, enjoyed watching the sun sink into the ice sheet, and went to bed. During the night, and again at dawn, Eve was sick, and was unable to keep down anything more than a few sips of water. She felt well enough to continue, so we set off at 9am. Soon hit another loose gap, which we descended into and climbed back out of to gain a near knife-edged ridge. Then the ground steepened again into a very loose pitch, before easy bouldery slopes led to a sub-peak. Ahead, yet another deep cleft separated us from the main peak. On the far side of the cleft was a 5m steep, loose, continuous, mean looking wall. After careful consideration we spied a line down scree to join the gully South of the cleft. We crossed the gully- kicking steps into the snow- and traversed across to another ridge which provided some tricky, but less chossy scrambling. Eve was feeling very weak, and by the top she needed to stop and try to nibble some food before she felt she could keep moving. Harry and Ollie ate lunch on the summit and we rested, using our sleeping mats to give us some shade, until Eve felt strong enough to start the descent.

We decided then it was best to head down and find somewhere to camp, then the next day head back to basecamp. For one thing, after a long day of mountaineering feeling ill and with no fuel in her body, Eve needed to rest. But aside from this, the ridge so far had been so loose and steep you needed to move incredibly slowly to be safe. Given the distance we'd gone, how much further we'd have to go, and how much food we had with us, we decided a whole ridge traverse may not be a feasible objective, and certainly not an enjoyable one.

Abseils, scrambling, and downclimbing brought us to the next col, where further technical descending brought us to a patch of green with a shallow enough gradient to sleep, and a snow patch to drink from. The next day we picked our way down to basecamp, and Eve took a well-needed nap.

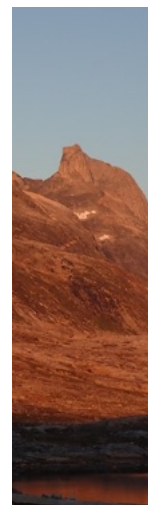
North West Ridge of 'The Sphinx' 15th August

"The Sphinxter Twitcher" ~E2 5c
Aka The North West Ridge of The Sphinx



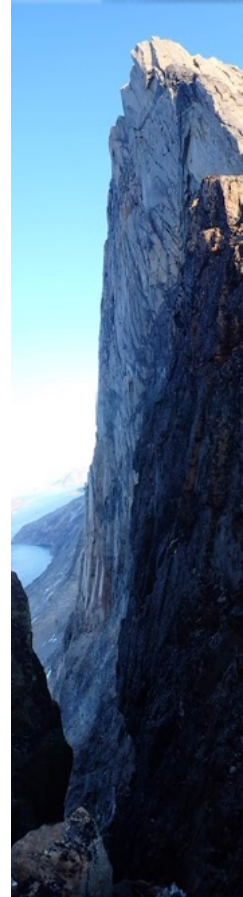
We'd abandoned the idea of traversing the whole ridge, but we still had a burning curiosity about the pale granite tower which we nicknamed the Sphinx. The north west ridge of this peak seemed likely to be the technical crux of a ridge traverse, and made of the most solid rock. We set off on August 14th to camp at its base, giving us the best possible chance to make a one day ascent. From this camp we spent a long time looking for possible lines on the ridge, as well as possible approaches, the route to the ridge being blocked by smooth slabs.

We set off from our higher camp on the morning of the 15th, rounding the lake and crossing a small snowpatch. From here we worked upwards through a heathery bay until we reached a large downwards pointing spike which we'd identified from afar as being at the left hand side of a likely traverse line across the slabs. We simul-climbed rightwards, ~100m of easy climbing landing us on the vegetated slopes on the far side. We ascended these and the boulders above to the col north west of the sphinx.



With impressive drops to the north, we simul-climbed the ridge towards the tower, looking for the line of least resistance as we approached. A ledge gave access to the north side of the ridge, where there was a promising crack line.

P1: 55m Climb this, moving right, then back left, to climb a lichenous groove to a ledge on the ridge.



P2: 30m Climb loose rock to the base of the corner on the north side of the ridge.

P3: 40m Climb the corner via twin cracks, pulling over to the scoop at the base of the final corner, then ascend this strenuously to the summit plateau.



We descended by abseiling the route, simul-climbing down P2 to avoid getting the ropes stuck on the easier angled loose rock. We then retraced our route back to the valley, wishing we'd built a cairn to mark the end of our traverse-line across the slabs.



We think that this is the easiest line on the northwest side of the mountain, with only the southeast side potentially offering an easier route. Accessing the col to the southeast of the peak looks to be quite challenging however. The climb was harder than we expected it to be, with stunning exposure all the way to the fjord below, hence the name.

We believe this is the first ascent of this peak, as we've found no prior record, it involves technical climbing, and there was no sign of human presence on the mountain. Amid the jubilation of reaching the top, and our worries about the descent, we took a moment to reflect on this, and to appreciate our surroundings. We felt thankful for the opportunity to have such an otherworldly experience.



Berg-bomb on the Iceberg Slabs 20th August

“Berg Bomb” ~HS 5a NNE facing

Approach: From camp head SE around the sea loch. Cross the river then walk along the shore back towards camp until you can pick a rising line up the green slope. Leave your gun under an obvious boulder and make a rising traverse across the boulder field. Hit the lowest part of the slab and walk right along its bottom. Pass under a cave part way up a corner then head up on scree to the base of the cliff. The route starts at the stepped groove to the rights of the main gully.



P1: 60m Follow the groove until gear runs out and it's possible to step left to pick up another crack up the slabs. Belay on scree covered large ledge.

P2: 60m Climb up slabs fairly directly above. Move left into the line of weakness that runs the full length of the cliff.



P3, P4, P5: all 60m Climb the slabs just left of the groove.

P6: 55m Climb up the clean corner above to where it steepens. Surmount this and gain the slabs on the left. Follow easy ground to belay below a mossy looking corner before it steepens.

P7: 20m Pick a line into the narrowing steepening groove. Pull over a couple of steep steps to gain a mossy crack in the back of a corner.

P8: 60m Make a hard move across the left wall of the corner up onto a slab. Climb the slabs easily until you can gain a left facing corner. Climb this until it ends then step rightwards onto a hanging slab. Traverse this rightwards to belay at a flake at its right end.



P9: 20m Step down then traverse right until you can pull over a lip to gain the descent gully.

Descent: Descend the gully on rock and snow with care until you reach the scree slope. Now go and try to find that really obvious boulder you put your gun under!

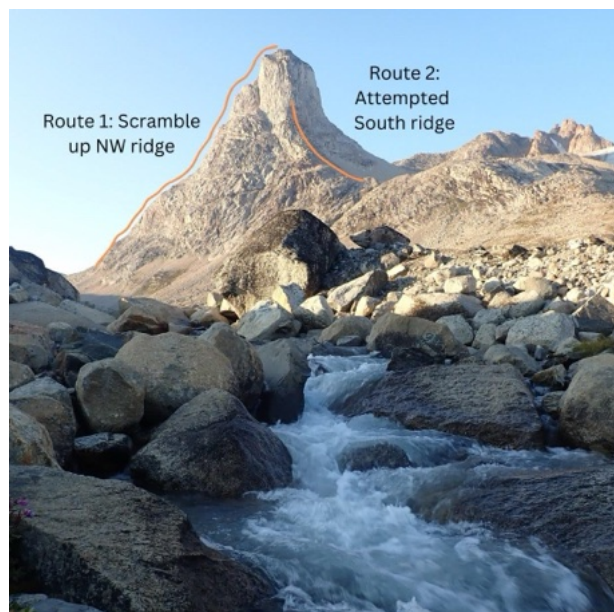
Little slab climb 21st August

On the first day in our new base camp, Harry and Eve set off to explore a slabby crag a short walk along the coast to the NW. Ollie came along for a fish, and really it was the fish that stole the show that day. Within the time it took Eve Harry to walk to the base of the crag, choose a line, and lead up a pitch, Ollie had caught five Cod! Realising we couldn't possibly eat anymore than that he set off back to camp with his reward, and left Eve and Harry to it.

The route was three pitches of easy slab climbing, trending leftwards up the wall, with quite a few diversions along the way, as it was challenging to know which areas of rock would be grippy and which would be incredibly slippery. It was a fun afternoon's activity, and a nice opportunity to climb something relatively small and uncommitting.

Nîniartivaraq - The Big 'N'

The closest mountain to our camp, known as Nîniartivaraq, or the Big 'N' for short, was an impressive looking mountain with a granite rock tower, making it look impenetrable from all sides. It has been climbed multiple times by a variety of routes, the easiest being an improbable-looking Grade 3 scramble up the North-west ridge. We had a brilliant day repeating this line - first following the



river up a lush, flowery valley before striking up right to hit the ridge. Multiple possible lines followed beautiful granite slabs and steps, eventually steepening near the top but always with a way past. The top offered stunning views of the cirque and down Ikâsartivaq fjord, and we spent a while planning other possible mountains and routes, and taking pictures to scrutinise later. The downclimb was fairly straightforward down the same route, and ropes were not needed (although I would still recommend taking one if you plan to do this).



Later in the trip, we decided to attempt the South ridge, which has previously been climbed by Allen, Dawson and Hoare in 1975. Reaching the base of the ridge is a straightforward walk, first north-east up the glacial valley before striking up the steep grassy, bouldery, scree slope to the north, circumnavigating some steep slabs. We roped up soon after starting the ridge

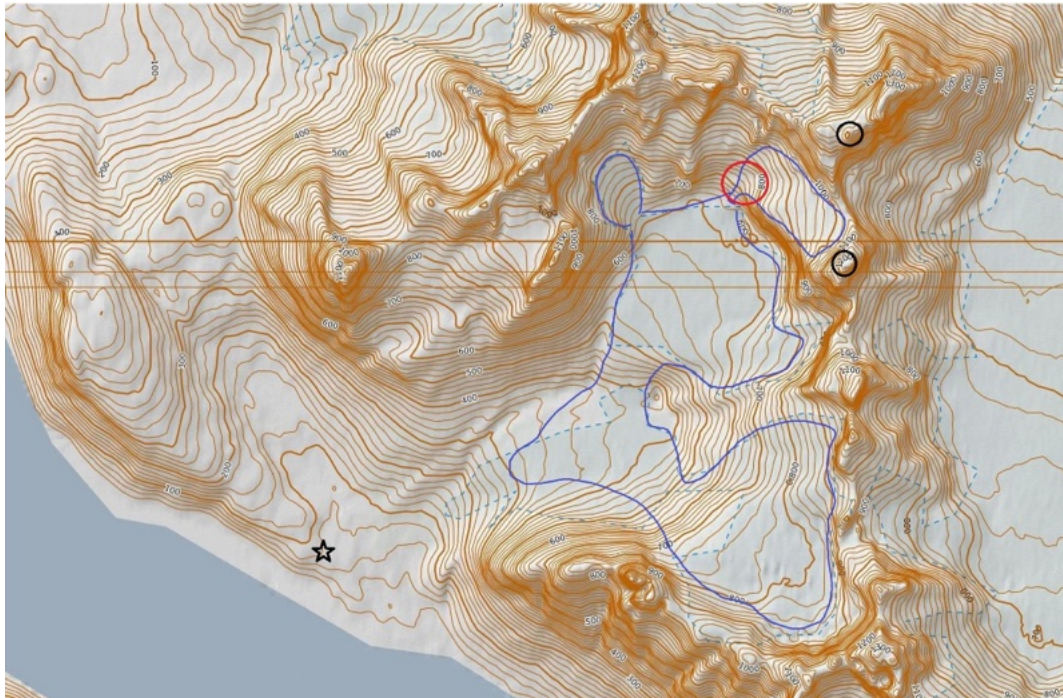


proper and pitched a few easy steepenings and steps, eventually reaching a left facing corner. This looked amenable from the bottom, but after 5m of climbing it became a steep unprotected slab, so I backed off quickly to the stance. Traversing to the right and trying again - still no luck. Eventually I found a way through at the far left side of the broad ridge. After a pitch of climbing, the cliff above looked difficult and bold, so we did a traverse pitch back to the right to regain the crest of the ridge. At this point time was getting on, and we were near the bottom of

the steep climbing (see picture, we were at the top of the line drawn for route 2). There were no obvious cracks or lines of weakness for us to follow above, and the climbing looked difficult. We made the decision to retreat, and after a few abseils we were back at the bottom of the ridge. We underestimated this ridge, and it proved to be very challenging with difficult climbing and route finding. We never had a chance to try again, but after a month of climbing and living outdoors, we were happy leaving it be!



Attempt on highest mountain in the cirque, Peak 1438



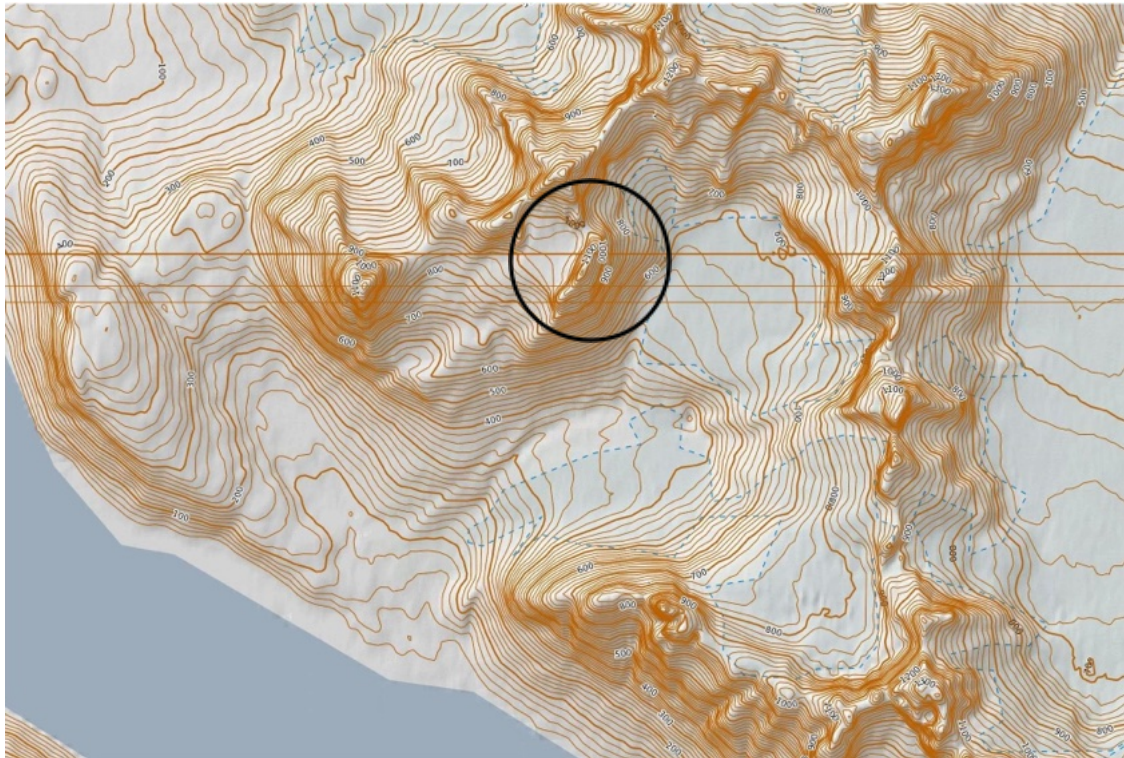
Key: Star - Basecamp, Blue outline - glaciers, Red circle - where we were unable to pass steep glacier, Black circles - attempted peaks.

We were eager to attempt the highest mountain in the cirque, impressively towering over the rest at 1438m. Previously climbed by Rowlands and Straker in 1975, there are very few details other than they ascended via the West ridge. We were interested in trying both Peak 1438 (the upper black circle) and Peak 1230 (the lower black circle) from the col between them. We followed the left hand side of the glacier from our basecamp (represented here by the star) into the cirque in ominous misty weather. Unfortunately, our path to the col was blocked by a steep glacier spilling over the corrie and our intended way up. We have drawn a blue line around the glaciers and the red circle where we were unable to pass. This was too steep for us to attempt with just a walking axe each and 3 ice screws. In addition there was a lot of rockfall, indeed a large boulder came crashing down as we contemplated having an attempt, swiftly making the decision for us to return.



Here you can see the two peaks (1438m on the left and 1230m on the right), with the col between them and the glacier tumbling down.

Tightrope mountain



This mountain looked very amenable both from basecamp and when we surveyed it from the summit of the big 'N', and we did not think it had been climbed before. It had a broad southerly ridge which steepened near the top and led to a summit ridge.

We left basecamp around 07:30 am on 26/08/23, heading north-east on a rising traverse line above the glacier. This took us over heather, scree and boulders to reach a col at the base of the ridge after about an hour of walking. After resting and refilling water bottles we started up the ridge with easy scrambling over mixed quality rock to begin with. This gradually steepened, and the rock became looser. It was that annoying angle where fine scree collected on every ledge making it feel treacherous underfoot, and you could not trust any handhold. A slip here would be fatal, so we roped up and started simul climbing, with Eve leading the way. We took it slowly, trying to find the best way up the broad ridge, placing gear where the rock appeared more solid. Soon the ground started to level out and we reached the first summit. We had thought this might be it, as our map



indicated this as the higher peak, but the second peak, about 100m away along a knife-edge ridge, looked slightly higher to us. We spent the best part of an hour picking our way



carefully along this crumbling, undulating, and razor thin ridge to the second summit. Our altimeter confirmed this to be slightly higher and we celebrated reaching the top with our chocolate rations. We did, however, find a very old and worn Troll sling near the summit, proving that someone had been here before. It was slightly unclear why they had decided to abseil off the top, down what looked like a steep and dangerous gully, but I guess we will never find out. We returned the same way we came without much issue, downclimbing all

the steps. We did find a couple of equalised nuts on the way down, which we have since worked out most likely came from the 2022 SAC party who attempted the mountain.

We nick-named the mountain 'Tight-rope mountain', for a section of balancing along a large thin rock on the summit ridge. More difficult than expected and most challenges came from the chossy, loose and precarious rock

Non-climbing activities (fishing, swimming, big walk, rest days)

Our downtime on this trip was as much a delight as the climbing. The weather was almost always brilliant- sunny, some days with light clouds, a gentle breeze. The first half of the month it would often be warm enough to relax by the river in a t-shirt in the afternoon. Both basecamps were in idyllic settings, with crystal clear streams forming bathing pools and waterfalls, flowers and berries lining the water, and great jagged rocky peaks towering above. To the West we could always see the Greenland Ice sheet, and from both camps we could relax and watch icebergs float gently past along the fjord.



We were lucky that we only had one enforced rest day due to bad weather the whole trip, so for the rest of our non-climbing days we were able to enjoy ourselves taking it easy, swimming (well, briefly submerging ourselves in water and spending much more time sat on

the rocks warming up again, endorphins from the cold plunge rushing through us), fishing, washing our clothes, tidying our camp, reading and writing.



The moving days also fall into this category, which were a lot more work, but thankfully went by without a hitch.

A walk along the valley and back

This leaves just one day that stands out from the others. We weren't climbing, but we certainly weren't relaxing. It was the day after we'd climbed the Sphinx, the 16th, and we were camping a few kilometres from the NW end of the valley. Our job this day was to walk to the far SE end of the ridge and collect the supplies we'd stashed there when we intended to attempt a whole ridge traverse. The maps said this would be about 20km there and 20km back again, and there was a path shown, so we expected a big day, but certainly do-able.

We set off with stunning scenery and beautiful slabs underfoot. Before long we reached a big lake, and realised we'd unnecessarily gained height and walked onto a small peninsular. At least this gave us a view of where we needed to go, although it wasn't great news: down and back steep slabs to water level, a traverse across a steep slope covered in loose small boulders, a section of huge boulders to climb up, over, under and around, then another ~300m hill to go over. We ascended the next hill, taking a steep sided riverbed that cut off the very top and provided a pleasant route to the sea. Soon enough, we got a glimpse down to the bay, and all along the coast we'd have to traverse to the end of the ridge. I felt like

sitting down and giving up at that view: a steep boulder field rose straight out of the sea as far as we could see, the coast went on and on and on.

Despite our realisation that this 40km day wasn't going to be a walk in the park, we had little choice, so we stopped for a snack, nibbling on rations which still left us hungry, then continued plodding. We'd been taking it in turns carrying the shotgun, which was really awkward, but once we reached the shore Ollie found some washed up rope and fastened a sling for it. The loose broken uneven boulder field began, we put our heads down and walked.

We did eventually make it to the end, and we were chuffed to find our rations very easily. We were even more chuffed to find we'd left ourselves a bonus bar of chocolate! Fueled on this and a box of nuts, we headed on back.

It got dark somewhere along the big lake, and it didn't take long for us to make it underneath the sphinx. We therefore knew our campsite must be in the imminent vicinity, but just as we began scanning around for our tent we hit water in front of us. Swinging our head torches around there was water as far as the eye could see to our left and to our right! What the hell had happened? Where were we? In our exhausted state, having been walking for close to 15 hours, we stopped, sat down, and ate the last of our chocolate. Then we attempted to apply logic and reasoning to the situation, and figured we couldn't be far away, and the laws of Physics still held, so if we just kept following the edge of the lake with the water on our right we would reach our tent. Sure enough, it wasn't anywhere near as far around the water as our tired brains had deceived us into thinking. Within half an hour we were huddled around a roaring stove, and not long after that we were all asleep.

Wildlife - flora and fauna












Flora

Whilst at a first glance at the landscape it didn't look like there was much flora about in Greenland, upon closer inspection we found a diverse array of brilliant trees, mosses, flowers and berries. At the bottom of valleys, along watercourses, on seeping slopes, even in small quantities on top of mountains, we found greenery.

I think it's safe to say our favourite plant we found was a juicy blue berry, which often stopped us in our tracks when we found a particularly good patch. On our rest days you could often find us crawling slowly along the ground, pushing a shotgun along with us, eating berries as we went. These are the bog blaeberrys. They were found in small clusters in amongst the blanket of crowberry bush which lined much of the ground. I didn't actually eat a crowberry once, the bog blaeberrys were so good!



We also frequently came across polar and dwarf willows, and dwarf birch, getting no more than a few centimetres off the ground, but growing along it. There were many types of moss- I remember seeing a lot of sphagnum moss and some club moss. We found a fair few plants we were familiar with from the mountains of Scotland, like sundew, moss campion, and mountain sorrel, and there were many more that were new to us. The dwarf fireweed in particular we thought looked stunning, as it added fantastic colour to the rocky landscape.

?	Bog Blaeberry  Vaccinium uliginosum	Moss Campion  Silene acaulis	Dwarf Birch  Betula nana	Arctic Dandelion  Taraxacum arcticum	Polar Willow  Salix Polaris
Dwarf Fireweed  Chamaenerion latifolium	Scottish Bluebell  Campanula rotundifolia	?  ?	?  ?	Mountain Sorrel  Oxyria digyna	Dwarf Willow  Salix herbacea

Whales

Within an hour and a half of being in Greenland we saw a humpback whale! What a start- we thought we'd be seeing them every hour and a half for the rest of the trip! That wasn't quite to be, but we did get three sightings of humpback whales from boats, including seeing their tails as they sounded. We also got a glimpse of a minke whilst fishing, and watched a fin whale swim down the fjord from our camp on our last day.



Arctic Foxes

We knew there were arctic foxes in the area of our second base camp before we arrived, but we didn't expect to see them. One day our wooden spoon went missing. No big deal, we carved a new one from driftwood. Next, it was our washing up sponge. Hmm, foxes were definitely the prime suspects now. The next day, Ollie was crouched by the river when a fox walked straight past him, bold and confident. He ran over to us to tell us what he'd seen, but

before he reached us the fox popped out from the boulders and stood there, as curious about us as we were about them. After our garlic, and saucepan lid became the next victims to the fox's curiosity (we found both a few metres away) we heightened our security, and made sure everything was in the food bins at all times. We went to bed thinking all of our possessions were safe. Overnight, Harry said he heard a snuffling noise, but thought nothing of it and went back to sleep, the next morning, one of my shoes was missing! We found it before long, although it stank of fox wee. The next night, he heard the noise again, and this time looked out to find they'd got hold of a tent peg and were playing with it on a rock. The night after, and it was Ollie's boot laces that were the target of their games.



In the morning, I went to the toilet a hundred metres or so from the camp, and on my return found some string on the ground. Assuming it was litter, I picked it up, and started to reel it in as I walked. I followed it closer and closer to our tent. I thought it was a bit strange, it seemed to be leading me straight back to camp. Then I realised what it was, it was the spare fishing wire from the bear fence. Sure enough, the loose string lead me to the corner of the fence, where the spool it was once wrapped around was missing. This time the fox's game left me with the fun game of trying to detangle almost 100m of fishing wire! As if to own up to the crime, the fox appeared behind a rock, then another one popped up, and another- there were three of them! They began frolicking about, playing with each other, and we soon realised they were three kits. The remainder of our evenings we got to watch them play, although we did our best to scare them off if they got too close as we didn't want them to either get too comfortable around people or to keep stealing our things.

Birds

We saw a variety of birds in Greenland, with Snow Bunting and Wheatear greeting us as we walked from the airport to the pier in Kulusuk. These two species would be constant companions for the remainder of the trip and we enjoyed their presence at both base camps and even up in the mountains. Another two common species were the Lesser Black-Backed Gull, and Glaucous Gull, which were often sighted along the coast.

We saw a variety of waterfowl, with Canada Geese seen near both base camps. We were joined in fishing on the river at Kûgarmît by Red Breasted Mergansers, and had a flyover by two dark ducks which I believe to be Common Scoters. This is interesting as they've only been recorded as accidental in Greenland, but I sadly didn't get any photos. While waiting

for our final boat transfer to Kulusuk we saw three male Eiders in eclipse plumage on the fjord.

We saw Ravens often, including circling close while Eve was recuperating from her stomach bug on the ridge- fine motivation to look lively again! Rock Ptarmigan were another common sight, often bursting from cover underfoot. We spied falcons high on the ridge on our return from recovering our stashed gear. As much as I was hoping to see Gyrfalcons, I believe these were Peregrines, and still an awesome sight.



Fish

Fishing provided both a great rest day activity, and some valuable fresh food! We caught cod in the fjord and arctic char from rivers. A small tin of lures, a spool of spare line, and a telescopic spinning rod proved to be a perfectly adequate setup. I would recommend letting lures hit the bottom while cod fishing as many bites were very deep, and the substrate in the fjord seemed entirely snag free (I suspect it's plastered in silt from the glaciers). I would additionally suggest exercising restraint when fishing rivers, as it seems likely that overharvesting in these small rivers could put a significant dent in the local populations.



Insects

We were very lucky to not encounter anything that bit us the entire trip! And I am usually someone that gets bitten by everything. We did spend some delightful time with these flies that loved to fly in our ears if they had a chance, mostly at our camp under the Sphinx, so we sat around with our hoods up. We also saw some spiders.

Logistics

Travel and accommodation

We flew from Glasgow to Reykjavík where we spent a night. While costly, it was nice to enjoy an evening exploring the city and mentally prepare ourselves for the month to come. It also reduced the chance of our bags getting lost in transit by lack of rapid connections, which would've been even more annoying and expensive than usual! We arrived in Kulusuk the following day with all our bags and were met at the harbour by Rasmus from Tasiilaq Tours, with whom we had organised our boat transfers. He proved to be reliable and communicative in our dealings, and we would highly recommend enlisting his services.

Rasmus took us straight to Tasiilaq (briefly stopping enroute to watch a humpback whale), and helped us to contact the Red House, where we stayed that night before our onward travel. We were able to communicate with Rasmus using our inReach device while we were away to organise our transfer to basecamp 2 and to organise pick-up at the end of our trip a day early due to the approaching storm.



In Kulusuk, we camped for one night in the village, but the locals were kind enough to put us up in their community hall with a group of climbers from Spain as the storm approached - unfortunately the hotel was fully booked. When our flight was cancelled the following day, we were put up in the hotel with full board free of charge.



Food and storage

Thank you very much to Summit to Eat, Wild West Beef Jerky, and Tent Meals for sponsoring our expedition and providing free or heavily subsidised food. From Summit to Eat we had a wide selection of dinners, and a few breakfasts and puddings. From Tent Meals a great variety of 800 calorie porridges and dinners, and from Wild West many packets of Beef Jerky (the best Jerky I've ever tasted!). On top of this we took some teabags from home (of course we did!) and a whole load of cereal bars. This amount left us needing to get about 10 dinners and breakfasts, and all of our lunches from Tasiilaq.

We'd heard the supermarket in Tasiilaq was good, and you could get all the usual things there, apparently cheaper than you can in Iceland (the country). Fab, we thought, we'll get all the rest there. This turned out to be more stressful and challenging than we thought. Sure, the supermarket sells the quantity and variety of food you'd need if you were staying there, but getting food to cover our near month long trip was a lot more touch and go. We just about managed, but we had to really get a bit creative, and we realised it was close- if another group went in anytime from when we did to when the next delivery arrived, there really wouldn't be much for them to work with at all. We managed to get a bargain on oats, so breakfast was sorted. For dinner we found spaghetti, rice, onions, garlic, paprika, basil, salt and pepper, and a few tins of tomatoes (no puree sadly), so that was ok too. Lunch was

a lot harder: we cleared them out of wraps and had only enough for 1 each per day, so we added some rye bread to this (although it didn't stay together very well) and some cinnamon crackers, just in case. We found nuts, sweets, chocolate and biscuits ok but it really was very expensive. It was better just to compare prices between products, as translating to gbp was painful! Eventually we had what we thought was enough. We couldn't buy much fresh at all, but we did find onions and oranges, of which we treated ourselves to 3: one per week.

Our brains were working hard in that supermarket, it was one of the most difficult and high pressure shops I've ever done: trying to buy enough food to last 3 of us 26 days which needed to be compact and light enough to carry, and not go over budget. We were trying to make sure we had enough calories, variety, nutrients, protein, sweet things, salt. We had to make sure we would like eating what we bought and that it wouldn't go off. It was a balancing act that would've been so much easier at home before we left.

For anyone planning a similar trip in the future I would say it is indeed possible to buy what you need in Tasiilaq, however there is no guarantee what will be available. If you are relying on getting a lot of food there I'd recommend having more than 24 hours in town, looking into ordering ahead, or being prepared to have to adapt to what they have. Another option would've been taking another hold bag full of food, which may not have been all we needed, but would've taken all of the strain out of the Tasiilaq shop. A third option is to get things shipped well in advance, but for 3 of us for 26 days I don't feel this was necessary.

To store our food we hired yellow storage bins from The Red House in Tasiilaq. Blue barrels are another common alternative. They worked well- holding out against fox encounters- and 2 was just enough for us so long as we left tins, fuel bottles, and oil outside (for these items we built a "rock stash" in each camp (see photo)). To buy blue barrels would cost you a lot of money, so I'd recommend hiring them. It probably would've been worth trying to secure them in advance, although I'm not sure if that would work, they seemed to be available on a first come first served basis. Of all our food, only open hummus tins and garlic cloves went off (in the last few days), so the bins also seemed to do a good job of keeping everything cool.



Risk assessment (polar bears, medical, communications)

Polar Bears

Polar bear encounters were a real risk and very important to prepare for. Polar bears were sighted in the area we were camping 2 weeks prior to our arrival, and a kayaking party we met found footprints. Prevention was always preferable, and we went to great lengths storing our food away from camp in a sealed container and keeping a tidy camp free of strong smelling scents. We used a tripwire fence connected to blanks to alert us of any unwelcome visitors while we were sleeping. Other larger teams we spoke to had a nightwatch rota, but this was not sustainable for 3 of us. We carried a shotgun with us at all times while not in the mountains, loaded with birdshot and slugs. Birdshot to shoot in the air first to scare the bear and the slugs if this did not work. We had two shotguns which were useful when we wanted

to split up, although we would have preferred a rifle. Unfortunately, the shotguns were not particularly reliable, and on testing the round didn't always fire, the firing pin leaving a very small indentation on the primer only. We raised this issue with the renters and we recommend testing rented guns prior to leaving.

Medical

Fortunately we had no medical issues during our trip other than a couple self limiting viral illnesses. We took an extensive first aid kit, and given the remote location we made sure to have additional items including a suture kit, dental kit, strong painkillers and antibiotics which could go a long way to preventing evacuation and termination of the trip.

Communication

We used a Garmin InReach device for satellite communications. It was useful to buy this in advance and spend time becoming familiar with its interface and testing its functions. It was indispensable as a communication tool, liaising with Rasmus for boat transfers, and sending check-in messages home to family.

Equipment taken

Listed below are some of the major or more specialised items that we took that may be of interest to other parties planning an expedition to this area. This is by no means a comprehensive list of everything we took.

- Large 3-man tent for basecamp. We altered the tent by sewing in squares of fabric to the edge of the outer to facilitate weighing down with large rocks. The rocky ground meant pegs were often not very effective.
- Ultra-lightweight 2 man tent and bivi bag for trips into the mountains
- Primus Omnilite Ti multi-fuel stove and small gas stove. 4L petrol and canister gas bought in Tasiilaq. We would not recommend relying on purchasing gas in Tasiilaq, we were lucky in obtaining the last 3 cans in the town. 2 multi-fuel stoves would have been preferable. We also took a maintenance kit with spare parts.
- Full climbing rack with 2 lightweight half ropes.
- B2 boots, crampons and walking ice axe each
- Crevasse rescue kit
- 50m of 5mm abseil cord - most of this was used and could have easily needed more.
- Tripwire fence (purchased from <http://icebearalarm.com/>) and blanks
- Solar panel with multiple power banks. This proved to be extremely useful and allowed us to use cameras and phones without worry
- Garmin InReach messenger
- Repair kit with duct tape, tenacious tape, sewing kit, epoxy, cord, spare tent parts and pole sheaths, lots of hairbands proved to be very useful.
- We took cash but most of the larger shops took card and there was an ATM in town
- Fishing rod and lures (permit required for fishing in Greenland)
- Binoculars (very useful for spotting wildlife and studying routes)
- Shampoo bar free from sulphates and soap (it actually did a surprisingly good job at cleaning given it was advertised as having nothing in it!)
- Biodegradable soap was used sparingly and always discarded away from a water source.
- Maps - combination of printed open maps and commercially available maps of the area

Reflections upon our return: We actually did it!

How is it that Greenland feels like a distant memory already, like a vague dream? How does time just keep moving you on so fast? Already, normality feels normal again. I've eaten the foods I dreamt of, drank the drinks I craved, got used to sleeping in a bed again, and sitting on a toilet. It's already worn off: that incredible effect an expedition has to alter your view on the world, to shift your experience, to let you feel immense satisfaction in the most mundane things on your return.

Only it doesn't last long. Once you're back, and a few days have past, you remember all the years you've lived in this world, and it no longer seems strange. The expedition bubble has burst. You can cling onto it for a wee bit longer: writing reports, posting photos, sharing stories of your adventures with friends, but this soon dwindles out too, and you realise it's over.

Thinking back: to when the idea for the first trip was first born, to the moment we committed and booked flights, to the time we were frantically applying for funding and grants, even to the very real moment we boarded the flight to leave Scotland, I still can't quite believe it's over and done. We did it. We actually fucking did it. As the expedition was wrapping itself up my primary feeling was of some sort of jubilant relief. That my dream had happened, that we were safe, that we were still friends, and that we'd actually achieved something!

One of the best parts of the whole experience was sitting in the hotel in Kulusuk after our flight had been postponed, talking to the other climbers and kayakers who'd also been on expeditions along the East Coast. A lot of these climbers were what we thought of as proper wads: international mountain guides, sponsored athletes: the kind of people I would've been intimidated to chat to, or not even put myself in the same league as. But here we were, all as equals, all having made it here, finished a trip, all put up new routes, and all chatting about our time. It felt good, and it helped me realise what I had achieved; that we'd had the balls to go and do this trip as relatively complete amateurs. That we'd done it safely, had a great time, and that we'd too managed to put up new routes, to climb into uncharted territory.

I've learnt that a lot of what's needed to take on expeditions like this isn't at all related to the grades you can climb. Sure, having more grades in hand opens up more route possibilities to you, but not climbing E6 certainly doesn't mean that going is out of your league. Really what it's taken is spending a long time with a conviction that it could work, finding a good team, and thinking everything through. It's been about planning, reaching out to people, applying to funding, backing ourselves, analysing risks, and just getting ourselves there. It helped to reduce the pressure on ourselves when we got there: to remember job number 1 is to stay safe and look after each other and job number 2 was to have fun. Then once we were comfortable and enjoying ourselves, guess what, we managed to go climb some cool things!

I can see why people go back for more; committing to a long and remote expedition and coming home having enjoyed yourself is really pretty satisfying.

Eve MacCallum

Appendix 1
Menu

KÛGARMÎT MENU

AUGUST 2023

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BREAKFASTS

CAMP PORRIDGE

Oats cooked with glacial meltwater, with a sprinkle of raisins and wild berries and a dash of milk powder

TENT MEALS PORRIDGE

Always packed with calories, texture and flavour. If you're lucky you'll find a Blueberry burst!

SUMMIT TO EAT

Will it be a protein packed scrambled eggs or a creamy porridge?

SNACKS

BISCUITS

3 Digestives per day. 1/3 pack custard creams per week.

CHOCOLATE

2 strips per day

BEEF JERKY

1 pack every 2 days

SWEETS

Number to be negotiated

BANANA HIGH 5 BAR

More than you want to eat

PEANUTS

4 Handfulls per day

LUNCHES

LUNCH PIECE

Choose between Rye bread (4 slices) or wraps (1.5).
Fillings : 4 slices salami each, hummus and mayonnaise

CAMP STEW

A delicious assortment of dried vegetables and beans boiled in crystal clear spring water.

CAMP MEAT

An extra special addition to the stew: spam, or if you've spent your morning fishing, Arctic Char or Cod!

DINNERS

CAMP SPAGHETTI

Oily salty spaghetti cooked with onion and garlic with a touch of basil and paprika

CAMP SPAGHETTI ALLA TOMATO

Camp spaghetti with a tin of tomatoes

TENT MEAL MAIN MEAL

Moroccan, Italian, Almond Jalrezi or Thai Green curry

SUMMIT TO EAT MEAL

Spicy Pasta Arrabbiata, 5 Bean Cassoulet, Bolognese, Chicken Fajita, or Beef Stew

Appendix 2

Financial summary

OUTGOINGS

Transport and accommodation

Flights	£3500
Bus transfers to Glasgow	£50
Iceland accommodation and transfers	£254
Boat transfers in Greenland	£1606
Tasiilaq accommodation	£90
Carbon off-setting	£41

Safety and communication

Rescue and medical insurance	£1000
Shotgun hire x2	£400
Polar bear tripwire + blanks	£210
Garmin inReach + subscription	£302

Food and supplies

Food in Iceland	£77
Food bought in Greenland	£428
TentMeals	£193
Petrol and canister gas	£48

Total expenditure: £8199

Equipment

Personal climbing and camping gear was taken for this trip and no grant money was spent on equipment. However, we did have to purchase quite a few important items as a team including:

2 lightweight half ropes. 50m of 5mm abseil tat. Large first aid kit (see medical risk assessment for details). Multi-fuel stove. Tent adaptations - pieces of fabric sewn onto the edge of the outer to facilitate using large stones to weigh down the tent. Solar panel. Large power bank

INCOME

Grants and sponsorship from the Scottish Arctic Club, The Neil MacKenzie Trust, Austrian Alpine Club, BMC and The Julie Tullis Memorial Fund, Jeremy Wilson Charitable Trust

Total sponsorship	£6400
Personal contributions	£1799

Total income £8199