

Crossing the Greenland Ice Sheet: *The Inside Track*

May - June 2016, Chris Lambert UK

To begin with a statement of the obvious: Greenland is, most definitely, not green.

Apart from a perimeter of rocky coast Greenland is covered by a giant ice sheet that straddles twenty degrees of latitude and which, at its widest point, is almost a thousand kilometres across. Exceeded only by Antarctica, Greenland's ice sheet also lays claim to the first of the 'classic' polar journeys – the Nansen Route - a six hundred kilometre coast to coast endeavour, pioneered in 1888 by the father of Norwegian polar exploration, Fridtjof Nansen, and his team.

Today, only a hundred or so people attempt the Greenland Crossing each year, hauling supplies and equipment on simple sleds along a course that just north of the Arctic Circle. Travelling in small teams, they each pull two sleds for up to a month, the journey only possible in the short spring or autumn seasons. In May of 2016 I was part of an international expedition with two other men, and three women, who set out to attempt an unsupported crossing of the ice. This is the summary of that journey.

We muster first at a remote airstrip near the village of Kangerlussuaq in the west, before transiting by dirt road to an accessible point at the ice edge, and starting the first section of our journey: the western icefall. Here the massive, flat dome of the inland ice deforms and cracks as it descends towards the coast, warming as it does so. The daily melting drives abundant streams that cut a maze of deep channels into the ice, leaving behind tall, sloping walls of icy ridges and seracs. There is no flat ground anywhere to camp.

Both the ground conditions and the weather can vary considerably from day to day, indeed from hour to hour, up on the ice. A team departing three days ahead of us encounter good snow cover and a strong layer of ice across the meltwater channels. They make easy progress on skis, zigzagging between the ridges and climbing steadily on to the wide, frozen ponds above the icefall, making it on to the first snowfields only three days after departure.

But, travelling in bright sunshine, with temperatures above freezing and with no wind, we know we will face trouble. We try to follow the network of streams but soon skis and boots puncture the weakening skins of ice above. We have no choice but to continue on crampons, climbing up and along the ice ridges to avoid the water. The sleds weigh forty kilos each, and naturally follow the easiest line. No sooner than the sleds are pulled up to the ridgeline than they plummet off the peaks and down the flanks like slingshots, threatening to pull us into the water below. Of the six people in our team, two take serious falls while bracing themselves against the frequent moments when the rope that runs from someone's harness to their falling sleds snaps tight.

Unable to see what is at the end of each ridge we often reach a dead end before having to track back, only to watch the sleds rush past, and below, us when we turn. The lines go slack when the sleds smash through the ice skins, and roll into the streams below. We spend precious time and effort hauling all the sleds out of the water, and upending them to drain the kit. But everything inside is drenched, and stays that way.

We manage only a few kilometres on each of the first four days so we soon travel more at night when the surface is more frozen, even though the sun only dips slightly below the horizon between two and five o'clock in the morning. Finally, on day five, the team emerges from the icefall onto flatter, rolling ground. But here there are streams and pools of standing water everywhere, the open water separated only by low, undulating ice. Fortunately, the islands are often linked by snowbridges, so we remove the crampons, and switch back to skis.

But the ponds increase in size, and the bigger snowbridges across the larger streams disappear entirely, too. Icy pillars, the remains of snowbridges, remain in place within the water, the pillars tantalizingly close enough together that a full ski can just about bridge them. The skis bend into the water under the skier's weight as we carefully slide one, then the other, foot across. It is a precarious business, but entertaining for those who have already safely crossed and turn to watch their teammates teetering on the eroded stepping stones that they have left behind.

Even though we head eastwards, and slowly up, the sun still blazes, and the landscape resembles an icy swamp. The early snowfields should offer a clear path ahead but are, instead, still dissected by the brilliant blue threads of meltwater that converge and grow now into rivers, hindering our progress and then halting it entirely when the first canyons are reached. We approach grey shadow lines in the snow ahead, hear running water but see no reflections. As we become closer these lines thicken - the far banks of a river channel, its glistening, white bed now carved some metres down into the body of the ice sheet. We watch, fascinated, at the crystal clear torrents that block our way, wondering how to cross the rift.

So we wander far upstream to the headwaters in search of bridging points, sending first one person across with a rope to scout ahead and test the current. Once a route is found, and others make it over, too, the sleds are tied together in groups of six and hauled across en masse. Manpower fights the meltwater in a cold, wet tug of war. As soon as the sleds enter the water they run away downstream, gathering pace, before the rope line tightens and they must be dragged back up towards the bank against the current. It is a slow process.

Occasionally, in the distance, we hear the sound of rivers turning into waterfalls as they cascade over fault lines in their beds. Or, more rarely, the dangerous, deeper rumble when a river drops vertically down a sink hole in the ice, and is never seen again.

We all become immersed in cold water many times making river crossings, either out of necessity or from simply falling through the weak ice of a bank or bed. Sometimes the riverbed is solid and secure; at other times it gives way to water, and – usually – another bed beneath. When the skis do break through the ice a thick body of slush forms in the water below, resisting attempts to pull the skis back from under the intact ice ahead, and to lift them clear of the water. Everyone operates on their own unless the water is unexpectedly deep, or someone falls back in up to their neck in slush. It becomes the new normal.

We jog in circles to reheat our woollen base layers, and to drain the excess water from our clothes. Feet also begin to blister inside wet boots but, thankfully, the wind stays away and the sun continues to shine. It's eminently manageable unless the day's chocolate runs out too soon.

Then, after a week, we reach the first unbroken snows, and the water disappears. We make steady progress thereafter, adding layers of clothes as the daily temperature drops to around fifteen or twenty degrees below.

It will now take ten days on these western snows to reach the high, mid-point of the route. During this stage, the weather increasingly comes into play. Daily weather reports are delivered by text to our satellite phone but the wind's strength and direction is always different and unpredictable. The sun barely appears, despite the promises by text. To manage expectations we learn to ignore everything it says, except for the storm warnings.

In fact, during this entire section of our journey, we see the sun for no more than a few hours in all. The sky is either overcast, or clear above but with a dense layer of fog at ground level through which we slowly march. Learning to navigate accurately by compass in enduring whiteout conditions becomes a key skill we all rapidly acquire to avoid frequent, chilling stops and course corrections. Whichever hand holds the compass gradually goes numb and, often, we navigate purely by the angle made by the lines of loose spindrift snow blowing across our skis. We stop every hour for ten minutes to cram food and water down, everyone cocooned behind facemasks and hoods, perhaps listening to music or simply thinking of elsewhere, everyone concentrating on ticking off the hours and pushing on until the eight or nine legs are completed for the day, and the comfort of sleeping bags and tents can be enjoyed.

During whiteouts the intensity of the light often changes, too. Sometimes the fog clears for a few minutes and there is the opportunity to take a bearing on a distant cloud, or brighter patch of ice. Brief moments of blinding sunlight suddenly illuminate the snowfield in a dazzling spectrum of Arctic blues and white, and then, just as suddenly, are gone. Mostly, we simply try to plot a course across the grey ground ahead by aligning the low, curving tops of the sastrugi, the small waves of windsculpted ice that not only act as minor beacons but which warn of the energy-sapping snowdrifts lying in wait on their leeward sides. We follow such improvised dot-to-dots for miles on end, the accuracy of

our course coming and going with the changes in the fog and the angle of the sun. Once a leader's hour is done, to the back of the line they go, to rest and follow a blessedly smooth trail made flatter by the train of sleds in front.

To all intents and purposes we spend the second week travelling towards the summit in an eerie, monochrome world.

That said, the days are never dull. Every minute requires concentration: to maintain the pace; to regulate one's temperature; to balance on uneven ice; to stay focused on the greater goal. Discomfort is a given, too. Hunger pangs typically arrive as we approach the hour marks; blisters reopen unexpectedly; the wind changes, straight into your face; sweat cools when you stop, and soon begins to freeze.

And there is always the promise of at least one extraordinary moment on the ice sheet every day. It might last only a few seconds, like skiing through a broken ice pool with its giant, glinting crystals strewn like butcher's blades across the ground. Or the two incredible May mornings when the sun rises behind a veil of high, translucent ice clouds that refract the light into a ring around the sun and create golden haloes that fill a quarter of the sky.

The only made-made object that we come across, in the early hours of the morning of the twelfth day, is a bizarre, disturbing sight, an alien structure that has lain silent for almost thirty years. With the fog clearing from the colder, night time air, a white golfball appears on the horizon - the radar dome of a defunct Cold War radar station, two hundred kilometres from anywhere. Inside the structure, aside from the dome itself with its giant, latticed radar arm, there is just the scattered debris of a long abandoned military station: tins of flour, code books, mattresses, old magazines and - ironically - a scattered copy of the board game Risk.

The next day we continue our journey east through a minor storm. But, during the slow climb toward the central summit, one of the team begins to break and can barely pull their sleds. We simply split their kit between us, and continue with the march.

The evenings and mornings in camp take on a familiar routine. We operate in pairs, together erecting the tent before one person heads inside to start the stove and melt some ice, while the other shovels snow around the tent to pin it down against the wind. Once we are both inside we eat straight away: a dehydrated ration pack, perhaps followed by some instant soup or hot chocolate. More ice is melted for the following day, stored in flasks deep inside our sleeping bags to prevent both them, and us, from freezing overnight.

We remove outer layers, turn them into makeshift pillows, and slide into our bags. There is little else to do, now - write up the day, listen to music, repair fraying threads, piece together more fragments of each other's lives back home. Strangers gradually become friends as we share more experiences together with every day that goes by.

Despite the glow of the midnight sun through the yellow walls of the tent sleep usually comes readily, the timing of the morning alarm sometimes determined by the temperature and the need to depart when the short night is at its coldest.

On the seventeenth day we reach the nominal summit where the air is at its thinnest: we force the old air from our lungs with deeper breaths to limit hyperventilation. We breathe constantly through open mouths to gulp enough air down; tips of tongues go numb, tastebuds become freezer-burned and take weeks to work properly again.

The summit is, as we knew it would be, an anticlimax - just another flat snowfield amid all the others. There are some brief 'high fives', and a quick group photo, but this is no place to pause for long - the wind is steady and strong, cutting across our path with a force six, rising seven. Minus fifteen is a pleasant temperature when we are moving but the wind drops it by another ten to fifteen degrees. Two week-old beards are now long enough to trap icy breath, and whiskers freeze to facemasks. Any exposed flesh becomes white and swollen whenever the wind picks up, and needs quickly to be rubbed alive again. Noses that develop icicles are the main offenders.

Our next target is only a week away. If the skies are clear the tops of the East Greenland mountains should come into view, placing us a mere hundred kilometres from our destination. Our days become brighter, too. So bright, in fact, that in the chill wind we fail to notice the burning effect of the intense sunlight. Sun cream proves inadequate: skin burns, lips blister, eating becomes awkward. We cover up again. Each night we compare medical notes, and help each other out. For the most part, everyone's relaxed.

The visibility is good, though. Whenever I take the lead following a break I try to depart alone some minutes ahead of the team, walking fast to build a gap. Ideally, when I stop for breather after the first fifteen minutes there is a distance of a kilometre or more to the next skier in the line. Sufficiently remote now, I slow the pace and allow myself time to enjoy the isolation and take in the vast hemisphere ahead: the sky, the snow, the shadows and the silence. I now understand the fundamental difference between loneliness and solitude, and appreciate the immense beauty of this place.

As we approach the end of week three, and the four hundred kilometre mark, the wind strengthens and we are held tent-bound for two days. We could probably continue but would expend more energy than the benefits we would gain. We tried it one day, earlier in the trip, but quit after the eighth kilometre, exhausted.

Lodged in the tents for the extra hours is, we must admit, a rare luxury. An abundance of sleep, time for journals, an opportunity to lift the lids further on each other's lives. We become creative, too, manufacturing national flags in anticipation of the finale. I cut up a blue plastic bin bag to make the base of the Union Jack, add strips of sports tape for the white Saltire, and chop up a red dry bag for the St George's Cross. I am quietly proud – I may be the only Briton to cross the ice sheet unsupported this year.

It remains cold until the last three or four days, and then the terrain begins to descend down a series of concave snowfields, their edges curving slightly to cast the kind of long, sweeping shadows we have not seen before.

But we also run low on food, too. Weather delays have eaten into our resources and we now need to average thirty five kilometres a day. The sleds are much lighter but the snow becomes wetter, and the going is sluggish at times. Old injuries resurface, people are on the lookout for wandering polar bears, and a day of complete whiteout three days from the end drives us nearly mad. I take the lead for the final hour and somehow manage to navigate a steady line. Set a bearing, shuffle the skis in parallel, and count off fifty paces: check the bearing, adjust the skis, repeat.

And then, on the morning of the penultimate day, the black peaks of the East Greenland mountains finally come into view. We know we will complete the Crossing but there is no euphoria yet; we just want it safely done. Some people have more food left than others - bartering now begins. One bar of chocolate requires three packs of instant soup, or there simply is no deal. There certainly are no handouts.

It all changes later in the day - the sun comes out, we crest another snowfield and there, straight ahead of us, is the sea. But not only the sea: within the arm of a wide, rocky bay are sheattered several hundred icebergs, the terminal fragments of coastal glaciers that have been swept up by the wind to become grounded in the bay. The icebergs are all shapes and sizes: mostly angular, irregular blocks lodged at crazy angles, each one startling in its own right but still less impressive than the broad, flat-topped tabular bergs that stand serenely among the chaos, their chiselled faces reflecting the blue of the water so perfectly that an optical illusions form, large parts of them suddenly vanishing from view.

For the first time in almost a month we eat our evening meal together outside on the snow, pretending to enjoy the final ration packs that we shan't really miss at all.

We sleep for four hours, and then rise at half past ten in the evening for breakfast, before a midnight departure to maximise the chances of a final, frozen surface for the skis.

The last stage begins well, a gentle, smooth descent for a couple of hours over grainy, but continuous, snow. Then the ground steepens suddenly, and we enter a treacherous, dark bowl a couple of kilometres wide where the ice compresses and stretches across the rocky landssheete somewhere underneath. Crevasses, initially only an inch or two wide, run in parallel lines across our path every ten metres. Soon, the meltwater streams return, and the rotten snow bridges, too. The tension becomes palpable.

The snow disappears entirely, and we travel now only on a nasty, grey surface where the ice has melted and refrozen into a treacherous rubble without any predictable form or grip. We skitter and jog on our skis, talking to ourselves aggressively to maintain

concentration. Everyone falls frequently, skis and sleds snagging on lumps of ice. Holes appear in the snowbridges over the ever-widening crevasses as we stomp cross, too tired to try to glide and spread our weight. It's pure luck nobody disappears.

The rocky shore never seems to become much closer, either. Another crevasse field always opens before us as we complete the last but finally, after ten very nervy hours, a halt is called. According to the GPS, there remains less than a kilometre of ice to cross: a fragment of the Crossing.

But we are in no hurry. We are just desperate to relax, and to be able to enjoy the finale later.

For a few moments we stand and stare at the remaining stretch of ice, before the whole team lie down on their sleds and, within minutes, everyone is asleep.

Later, sometime around midday on the twenty seventh day, we complete our journey. Some step deliberately, and ceremoniously, from ice on to rock. Others stop near the ice sheet's edge, sort out their equipment, and barely acknowledge the transition before sitting on a boulder to take it all in. One person kneels alone on the final stretch of ice, and prays.

Certainly the journey has been a chance to gain some insight into the trials and tribulations of the early, pioneering explorers who crossed this place, and others like them, who did it without recourse to GPS, satellite phone or the outside chance of rescue.

Of course, this was never about 'conquering the ice', nor trying to complete a famous Arctic journey from A to B in the shortest time.

The Crossing provided a rare chance to invest a month of one's life deep within a wilderness, with few decision to be made, and simply existing in that vast, unique space *between* the A and B.

After so long a time on skis, just following the routines, it seems strange to walk on rock at last and, suddenly, to pack the skis away. This place is addictive, too, perhaps because of the simplicity it demands.

We leave later in an open boat, though the iceberg bay. The last we see of the inland ice is a glint of sunlight off the final snows, high above the shrinking, eastern icefall.

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