

2016 The Greenland Crossing (IMG64)

Crossing the Greenland ice cap from east to west from Ammassalik to Kangerlussuaq

The Ultimate Cross Country Ski Expedition!

- Expedition Manual -



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Expedition overview

For April / May of 2016 Icelandic Mountain Guides (IMG) have organized their 10th expedition across the Greenland Glacier, the world's second biggest sheet of ice. The aim is to cross the interior of Greenland from Ammassalik on the east coast to Kangerlussuaq (Sondre Stromfjord) on the west coast. The entire expedition can take up to 5 weeks in total. So far, IMG's success rate is 100%.

Start of journey: Reykjavík, Iceland April 19th

End of journey: Reykjavík, Iceland, May 18th (+/- 3 to 7 days)

Cross-country skiing: 4 to 5 weeks.

Walking per day: 6 to 8 active hours.

Total distance: 540 kilometers (335 miles).

Altitude: 900 - 2.500 meters above sea level (2.950 - 8.200 feet).

Max elevation one day: 250 m (820 feet).

Duration: 4-5 weeks.

Further information and booking

Please contact us via expeditions@mountainguides.is for further information and bookings.

About the expedition

Expedition members need to be in Reykjavík Iceland no later than Monday, 17th of April, in time for a preparation meeting with the expedition leader in the morning of the 18th of April. NOTE: The preparation meeting is obligatory so that the expedition leader can assess equipment each member has brought and advice if anything needs to be replaced. That can then be done on Tuesday afternoon and Wednesday morning, before the flight to Kulusuk.

Luggage allowance for the flight from Reykjavík to Greenland is 20 kg. Care should be taken while packing for the flight so that expedition members avoid excess baggage. This can easily be done by wearing ski boots and outdoor clothing on the 2 hours flight.

It's possible to leave some items in Tasiilaq (up to one kg per member) that will then be sent to Old Camp (guesthouse on the west coast). This could for example be fresh clothes, basic toiletries, mobile phone etc. Those items will be waiting for us there at the end of the expedition.



On April 19th the flight to Kulusuk leaves at 11.00. From Kulusuk there is helicopter transfer to Tasiilaq, the capital of East Greenland. The group will stay in Tasiilaq for one or two nights, sorting out equipment and food and dealing with the final preparations before setting out. From Tasiilaq the group will be flown directly onto the Hahn glacier at about 900 meters (2700 feet) altitude, in a privately chartered helicopter. There the skis will take over for the next 540 km (335 miles) or so.

It takes about 10 - 15 days to climb from Hahn glacier up to the highest part of the Greenland ice sheet, at 2500m. From there it takes about a week to get to the phantom radar station DYE-2, one of the strangest buildings to be found on the planet. From there it takes approximately five days to reach land at Hill 660 at the western edge of the ice sheet. Hill 660 is in fact a nameless hill close to the glacier that measures 660 m above sea level in height. All in all we estimate spending from 22 to 26 days on the ice sheet.

A rough road leads from the hill which is beneficial for expeditions coming off of the ice sheet as both people and luggage can be driven the last 35 kilometers to Kangerlussuaq. However, a hike back to civilization may be a welcoming thought for expedition members as the landscape is quite dramatic providing brilliant contrasts to the endless snows of the ice sheet. The fauna of the area is also truly remarkable. Reindeer, muskoxen, snow hares and arctic foxes can be seen and during this period the lakes are still mostly ice covered, keeping the mosquitos away.

If the expedition has made it in good time over the ice sheet, nobody is pressed for a return flight from Kangerlussuaq, and all expedition members are still in good health, without any blisters or foot aches, there is a possibility of doing the hike, down to Kangerlussuaq carrying only a light pack. This will be decided by the guide and all expedition members once the expedition has reached Hill 660.

Kangerlussuaq is a small village, formerly a US airbase at the head of the 180 km long Kangerlussuaq fjord, with a small population of Inuits servicing the international airport and catering to tourists that come to enjoy the wildlife or over the Ice sheet. In the village all the basic services are to be found, such as a cooperative store, selling the basic necessities, a souvenir shop, a post office and even a swimming pool.

From Kangerlussuaq the expedition members fly to Nuuk and from there to Reykjavík where the expedition officially ends. Flights between Nuuk and Reykjavík are only operated two times a week so one or two relaxing days in Kangerlussuaq can be expected.



Itinerary overview

- Day 0: Preparatory meeting with the expedition leader in the morning of the 18th of April.
- Day 1: Flight Reykjavík Kulusuk Tasiilaq at 11:00 check in starts at 10.00.
- Day 2: Final preparation, the necessary inspection of gear etc. overnight in Tasiilaq guesthouse
- Day 3: Transfer to Hahn glacier start of the Crossing

Day 4 - day 15/20: Skiing up to the summit. It takes about 10 - 15 days to climb up to the highest part of the Ice sheet on this route, topping off at 2500 m above sea level. The gradient is gradual and the use of skins make sure that the skis move us forward.

Day 15/20 – day 24/30 Skiing down on the west side of the Ice sheet, arriving at Hill 660

Day 24/30 – day 26/31 Hiking from Hill 660 to Kangerlussuaq (optional). Flight to Reykjavík (scheduled on the 18th of May), expedition ends.

Expedition life

The Greenland Crossing is a real Polar expedition and needs to be approached as such. IMG puts great effort into making the expedition as comfortable as possible for all members and by following a certain routine, expedition life acquires its desired rhythm. Each day is divided into different walking periods. At the beginning the periods may only be few per day but as the expedition proceeds the number of periods will increase, pushing the active walking hours from 5 to 7, maximum 8 hours per day in the end of the expedition. Each walking period may vary from 1 to 2 hours, the expedition leader deciding on the length of periods in accordance with the overall condition of the expedition members.

During each period there is brisk walking and IMG recommends wearing wind stopper clothing that allows for good breathing, such as a soft-shell. Between each period there is a short break, where the expedition members can grab a snack and a drink and at midday there is a longer stop for lunch. It is not advisable to carry a backpack as all the gear should be stored inside the pulka however a small one may be ok if one chooses. The best thing is to keep all necessary gear for the day, such as the day's food, a down parka and other essentials, extra hats, gloves etc. on top of the pulka where this is easily accessible.

Each evening camp is set up, snow is melted for plenty of tea/hot drinks and a communal dinner is prepared. After a hard day it can be pleasant to get into the sleeping bag early and get a good rest since the next morning has another day in store for all expedition members. After a communal breakfast, camp is broken and the first walking period starts.



Equipment list

A detailed equipment list will be sent to all participants upon confirmation.

For those who are preparing for the North- or the South Pole, recommendations can be given regarding specialized equipment that can then be tested during the Greenland Crossing.

Food

Typical breakfast consists of muesli i.e. dried nuts, seeds, fruits, oats etc. mixed with milk powder (and/or chocolate powder) with warm water poured over.

Typical lunch consists of oat biscuit with for example butter, cheese and sausages. Also dry fish, chocolate and various different types of biscuit.

Typical dinner consists of dried food (most often from Real Turmat from Norway - http://drytech.no/).

The expedition timeframe

When choosing the correct time for a Greenland Crossing there are always certain things to consider. IMG has decided that the time period, April/May is in fact the most opportune time for the Greenland Crossing.

In the early spring the temperature is not favorable, as it is still much too cold up on the ice sheet at this time. However an expedition of this sort cannot be done too late when the

temperature has risen and the melt off on the west side of the glacier can be problematic.

The western edge of the glacier can however be difficult at all times (even impassable if the melting is great), since it is necessary to navigate through a much crevassed area on a rather steep outlet glacier. Expedition members should expect to take off their skis and wear crampons for some time in order to get off of the ice sheet and onto Hill 660.



Baggage transport

All baggage is transported in pulkas (sleds) made of plastic. At the beginning of the expedition each member should expect to be hauling a sledge weighing about 75 kg (165 pounds). This is the total weight of both the personal and the communal gear (i.e. clothes, sleeping bag, food, fuel, stoves, tents etc.). Towards the end of the expedition the weight will be closer to 45 kg (100 pounds) as team members will eat and burn away at least 30 to 35 kg of the total weight during the crossing.

Weather

Most of the time, the weather conditions on the Greenland Ice sheet are stable, but some variations have to be expected and taken into account. While climbing the east side of the Greenland glacier, one may expect steady winds from the north-west with variable wind speeds. If the wind speed exceeds more than 15 - 17 m/sec, staying outside is not advisable and in our itinerary we have planned for some weather days.

Once the expedition begins to descend on the west side of the ice sheet, katabatic winds from the south-east are to be expected. Over all, the temperature varies from 0 to -20°C during the day, getting warmer as the expeditions moves to the west side of the Ice sheet. At night the temperature can drop down to - 30°C so a good sleeping bag is essential. The radiation of the sun during the evening makes the tents reasonably warm and it is not uncommon to see -20°C on the outdoor thermometer and between +10 to +20°C inside the tents.

Snow conditions

The surface of the ice sheet consists more or less of well packed snow that the constant wind sculpts into sastrugis. Some precipitation should be expected causing blizzards, bad visibility and difficult skiing and hauling condition. One or two days after snowfall the conditions should be good again, the snow well packed and skiing easy. In the event that the sastrugis are difficult, too high to easily haul pulkas over them, it is very important that expedition members arrange their gear into the pulka in a way that prevents them from rolling over. The expedition leader will be more than happy to advise you on how best to pack things into a pulka.

The snow conditions make the use of skins necessary, when climbing up on the east side of the ice sheet. Once the steepest part is completed, it may be a good idea to cut the skins in half, and once the highest point is reached, there is no need for the skins any more. For the crossing we recommend rifled (crown) or "easy skin" skis for all participants except experienced cross country skiers

In the warmer temperatures on the lower parts of the ice sheet on the west side, there may be some complications with ski-wax, whereas rifled skis are perfect. In May there is less chance of precipitation, but some snow and even blizzards can be expected.



Daylight hours

In April/May continuous daylight is something to look forward to, especially for those who come from regions where there is little or no fluctuation in the daylight hours.

Level of experience of expedition members

As the Greenland Crossing is a real Polar expedition, participants should expect long and hard days throughout the journey. As such, the expedition is only suitable for people that are both physically and mentally prepared for a highly engaging experience. Be aware that the mental aspect is often more challenging on expeditions like this than the physical one. Therefore, it is of great importance that participants are ready to deal with unexpected and challenging circumstances, since they can be stressful.

Expedition members must be prepared to be confronted with cold weather, strong winds, fresh snow and even blizzards. Also expedition members should be ready for very challenging camping and camp life in the worst of scenarios present, not to mention dealing with the unexpected and unwanted, such as blisters and other bodily aches.

A high level of fitness is indeed an asset for everyone considering an expedition of this caliber, but endurance and self motivation works wonders as well. Prior experience in winter travel, glacier crossings and cross-country skiing is important for a successful crossing. A short résumé is required to apply for joining the expedition.

For those who need more experience or are interested in doing a preparatory tour, we recommend joining a shorter expedition with us in Iceland this winter, for example the Vatnajökull glacier crossing or the Sprengisandur Traverse of the Icelandic higlands. These tours offer a good feel for skiing, camp life, glaciers and even the weather and snow conditions that can be expected on the Greenland Crossing.

Doing The Greenland Crossing Expedition is a great way to prepare for a North and South Pole expeditions.

General preparation

The best preparation for an expedition like this is to engage in long hikes in the mountains or long days of cross country skiing, even with a backpack or a pulka. It is very important that participants are familiar with all their personal gear and equipment (skis, boots, and clothes from the bottom up as well as through all the layers).

The more comfortable you are with your gear the easier everything becomes when adjusting to the communal gear and the expedition as a whole.

Hauling a pulka for hours for many days can be very straining for the lower back and it is recommended that participants engage in exercise that will strengthen both the abdominals and the back muscles. Strong back muscles make hauling easier, as well as shoveling when the necessity for building protective walls for the tents arises. Tent life can also be hard on the back and the better we prepare ourselves the better the outcome will be.

The value of all general exercise in preparation for an expedition of this kind should not be underestimated!

Booking and payment

Expedition members will have to confirm their participation by paying a confirmation fee of 300.000 ISK by **Dec 1st 2015**. This fee is not refundable unless Icelandic Mountain Guides need to abort the expedition. Full payment needs to be paid by **Jan 8th 2016** the deadline for signing up for the 2016 crossing. After paying the confirmation fee, expedition members are required to send in a résumé of their mountaineering experience for prior assessment by the EL to ensure a successful crossing for all the expedition members.



Included in the expedition price

- Guiding service by IMG expert guides
- Expedition permits and insurances (obligatory permits for the Greenland Crossing as well as a Search and Rescue (SAR) and Evacuation insurance) and other organizational requirements
- Transfer from guesthouse to IMG's headquarters where the preparatory meeting with the expedition leader will take place and assistance with last minute shopping after the meeting if needed
- Transfer from guesthouse in Reykjavík to the airport when leaving for Greenland
- Flights from Reykjavík to Kulusuk
- Helicopter transfer from Kulusuk to Tasiilaq
- Airport taxes and handling fees (including flight changing fees)
- Sleeping bag accommodation for two nights in Tasiilaq
- Transport of personal items (up to 1kg per member) from Tasiilaq to Kangerlussuaq (guesthouse Old Camp)
- Helicopter transfer with a privately chartered helicopter directly to the Hahn glacier
- Transport of participants* and luggage from Hill 660 to Kangerlussuaq
- Accommodation for two nights in Kangerlussuaq or Nuuk
- All food during the expedition, from leaving Reykjavík to arrival in Kangerlussuaq
- Pulka, pulka harness and a bag around luggage on the pulka
- Tents, cooking equipment and fuel, toilet paper
- Maps
- First aid kit

- Satellite phone, SPOT-beacon and emergency beacon
- Solar panel to charge the satellite phone (priority) and other gadgets
- Flight from Kangerlussuaq and all the way to Iceland
- Regular news updates on the web for friends and family to follow

Not included in the expedition price

- The flight to and away from Iceland, where the expedition begins and ends
- Hotel and personal expenses in Reykjavík
- Personal gear (clothing, gear, etc.)
- Personal travel insurance and trip cancellation insurance
- Any excess baggage (anything more than 20 kg) on the flight to Kulusuk / Tasiilaq, East Greenland and from Kangerlussuaq back to Reykjavík.
- Accommodation and food in case of irregularities/delays longer than two nights in the flight from Tasiilaq to the ice cap and longer than two nights in the flight from Greenland back to Iceland.
- Any costs associated with leaving the expedition early
- Personal use of satellite phone
- Everything not mentioned in the "Included in the expedition price" list

Permits and insurances

There are quite a few permits needed for an expedition across the Greenland ice sheet. All necessary permits for the Greenland Crossing as well as a Search and Rescue (SAR) and Evacuation insurance is included in the expedition price, however we recommend that all participants also have their own travel insurance. The included insurances cover evacuation costs from the icecap to the nearest town or hospital. A personal travel insurance should cover the loss of equipment due to evacuation and any medical costs in hospitals and towns. Most regular travel insurances should be sufficient.

^{*} Hiking from Hill 660 to Kangerlussuaq is an option; this is done only if the group has done the crossing in good time, expedition members are blister free and eager to enjoy the wildlife and vegetation of the area. This hike takes 2 days.



All expedition photos by Róbert Þór Haraldsson