

Imperial College Exploration Board:

Iceland 2021

Laugavegur Trail, Hornstrandir Peninsula

18th July 2021 - 7th August 2021

Supported by:

**Imperial College
London**



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Introduction

Objectives

We had two expeditions planned which were in separate locations. The first expedition would take us to the south of Iceland where we would trek the Laugavegur trail to Thorsmork with the option of extending this to complete the Fimmvörðuháls mountain pass that ran between the two glaciers Eyjafjallajökull and Mýrdalsjökull. This would serve as a trial for our group for the second expedition, a 7 day expedition of the uninhabited Hornstrandir peninsula in the Westfjord region. We wanted to make sure that our routines were tried and tested prior to going to an uninhabited area where there were no facilities and phone coverage.

The aim of the second expedition was a thorough exploration of the Hornstrandir nature reserve, and to observe the wildlife there which included a vast population of sea birds, arctic foxes and seals. We were hoping to find puffin breeding colonies along the coastline as we trekked between the different campsites, but this proved to be a difficult venture as quite often the puffins would nest midway on the cliff face so that it was more difficult for predators to get to them.

We intended to improve our map navigation skills, only relying on GPS where the visibility was dreadful, and also to experience one of the most remote places in Europe.

Itinerary

DATE	LOCATION & ACTIVITY SUMMARY	GENERAL NOTES
18/06/20	Fly from London to Reykjavik Keflavik	Arrive at 15:20. 45 min transport to accommodation in Reykjavik. Final equipment checks are to be performed, additional expendable supplies are to be purchased.
19/06/20	Transport from Reykjavik to Landmannalaugar	Highland bus booked from Reykjavik at 7:00 to the trailhead of the Laugavegur trail

19/06/20 - 26/06/20	7-day hike	7-day hike of the Laugavegur trail to Thórsmörk (34 miles, 4,265 feet elevation) and the Fimmvörðuháls trail to Skógar (15.5 miles, 4,230 feet elevation). See below for the route.
27/06/20	Transport from Skógar to Reykjavik	Highland bus booked from Skógar at 10:15, arriving in Reykjavik at 19:45.
28/06/20	Reykjavik rest day	Prepare equipment and supplies for the Hornstrandir hike.
29/06/20	Reykjavik to Látrabjarg cliffs to Ísafjörður	Collect hire car and drive 5 hr 45 min to Látrabjarg for a 5-hour, 3-mile hike (1,705 feet elevation) followed by a 3-hour drive to Ísafjörður
30/06/20	Ísafjörður to Hesteyri	Booked ferry at 9:00 to Hesteyri in the Hornstrandir nature reserve
30/06/20 - 05/07/20	6-day hike through the Hornstrandir nature reserve	50-mile hike (11,685 feet elevation) finishing at Veiðileysufjörður. See below for the route.
06/07/20	Veiðileysufjörður to Ísafjörður to Reykjavik	Booked 10:30 ferry from the Hornstrandir nature reserve to the mainland followed by a 5 hr 25 min drive to Reykjavik

07/07/20	Reykjavik to London	07:40 flight
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Expedition Team

Jinpo Xiang – Team Leader,

Final year Medicine, BSc Global Health

Jinpo's first experience of the outdoors was a family venture up to the top of Scafell Pike at the age of 7. Since then, he has tackled many peaks in the British Isles, (although a failed trip to the top of Ben Nevis did aid the inadvertent discovery of the joys of Morrisons' Café in Fort William). He worked his way through the Duke of Edinburgh's Award scheme, culminating in the Gold DofE expedition in a sailing boat traversing Loch Ness and conducting hydrographic observations for future sailing expeditions. Whilst at university, Jinpo enrolled with the University Royal Naval Unit (URNU), where he has been an active member for the past three years, gaining advanced leadership experience and navigation training on board the P2000 patrol ships. In summer 2019 he went on a short deployment onboard HMS Westminster whilst it was on NATO operations in the Baltic. When on dry land, Jinpo has hiked in various parts of the world, including the ruined parts of the Great Wall of China, the Italian Alps including Monte Baldo, an off season ascent of Mount Nantai in Nikko, Japan, and the Lysefjord region of Norway. Back in the UK, he regularly tackles the fells of the Lake district and mountains of Snowdonia national park. Jinpo has completed the Leadership and Crisis Management Course delivered by the Operational Command Training Organisation.



Barnabas Bagguley – Deputy team leader

Final year Medicine, BSc Surgery and Anaesthesia

ICSMFC 5 a side Captain 2019-20

Barny's camping experience has developed through time, initially starting with numerous family camping trips while he was young and just an observer, to completing Gold DofE as the chief navigator and subsequently leading multiple wild camping expeditions through the Lake District. Recently all this experience came to a climax when he completed a 5 day trek through the Hampta pass which lies on the Pir Panjal range of the Indian Himalayas.



Despite always enjoying various camping trips throughout his childhood, Barny's love for adventure really took off when he went on a trip to Mexico with two friends to explore the ancient Mayan ruins at only 18 years old. Following this, numerous backpacking trips enabled Barny to see even more of the world, including 3 months spent traveling India, 2 weeks exploring Thailand. Also as a member of the Imperial College Mountaineering Club he has become an enthusiastic boulderer and enjoyed trips to the Imperial College mountain Hut in Snowdonia with the club, whilst maintaining his fitness levels through playing regular football matches as the ICSMFC 5-a-side captain.

Joseph Allen – Treasurer, Team Medic

Final Medicine, BSc Endocrinology

Irish Society events officer (2018-19) & secretary (2019-20),

Gaelic sports secretary (2018-19)

Joe has had a keen sense of adventure from the beginning, with countless family road trips in a 1978 VW campervan that took him all across Europe and exposed him to the highs (from discovering hidden gems to witnessing GB



athletics gold in the 2004 Athens Olympics) and lows this brings, dealing with situations when things don't go to plan, such as breaking down in the Italian Alps.

He has also maintained an enjoyment in hiking, with yearly trips to Wales as well as the Lake District and further afield while backpacking through Turkey, and as part of road trips around America (including a 2-day descent and ascent of the Grand canyon as well as hikes through the Rocky mountains, Bryce canyon, Zion, Yosemite, Glacier, Yellowstone, and the Great smoky mountains national parks, including sections of Appalachian trail), Canada (such as around Banff and Jasper national parks), and Iceland.

While at university he has honed his organisational skills, acting in committee positions in the university's Irish society and Gaelic sports society while also being an active member of Imperial Medics' Hockey Club and joining the First Aid Society through which he became a member of St. John's Ambulance in order to complement his medical education and improve his provision of emergency care.

Henry Foddy – Logistics Officer

MSc Neuroscience Kings College London

BSc Neuroscience and Economics

Henry has always had a keen interest in exploration and adventure, from the earliest days of camping in the forest with Scouts, to completing his Bronze, Silver and Gold DofE awards, which involved much wild camping and hiking in the Yorkshire dales, Brecon Beacons and Scottish Highlands. Henry has enjoyed climbing many mountains, from Shutlingsloe (the Matterhorn of the Peak District) to a successful ascent of Mount Fuji in Japan. His interests in other cultures

and ancient civilisations led him to undertaking a cycling trip to the Phnom Kulen National Park and Temple Complexes of Angkor in Summer 2018, where he enjoyed the opportunity to visit local villages and gain insight into the livelihoods of the local populations. Henry has previously been involved in the charity SchoolsForGambia, assisting in the construction of school buildings in Gambia. Henry is a keen sailor, participating in the National Sailing Regatta and coming 4th place. As a member of the University Royal Naval Unit, Henry has



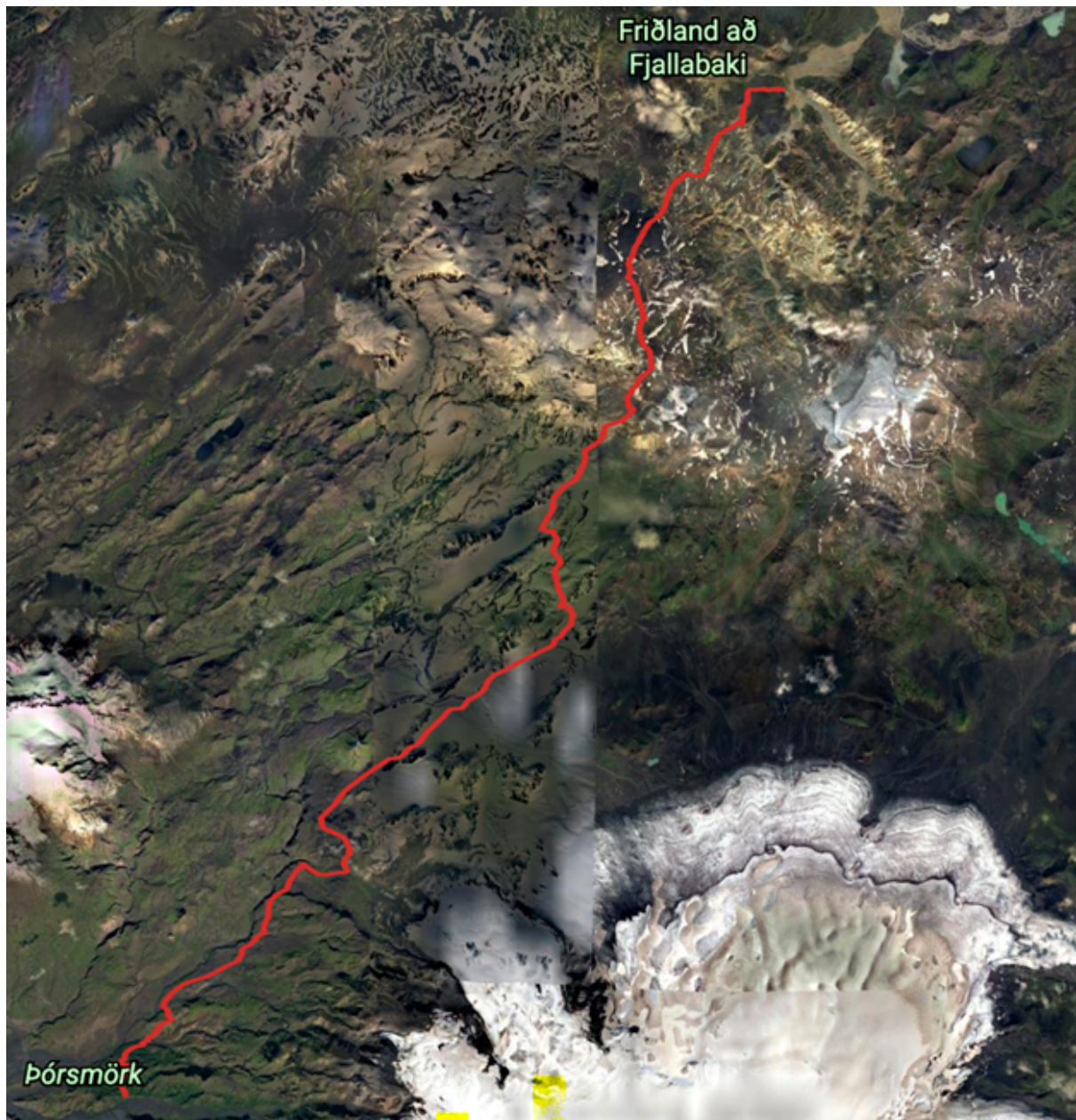
participated in adventurous training activities and received basic Royal Navy training in leadership and crisis management. He trained for the 24 Peaks charity event which raised money for the Seafarers UK Charity. In his spare time, Henry is a Stoke City season ticket holder, although in recent times he has found it to be more of a burden on his emotions as his club slides down every competitive league.

Expedition Planning

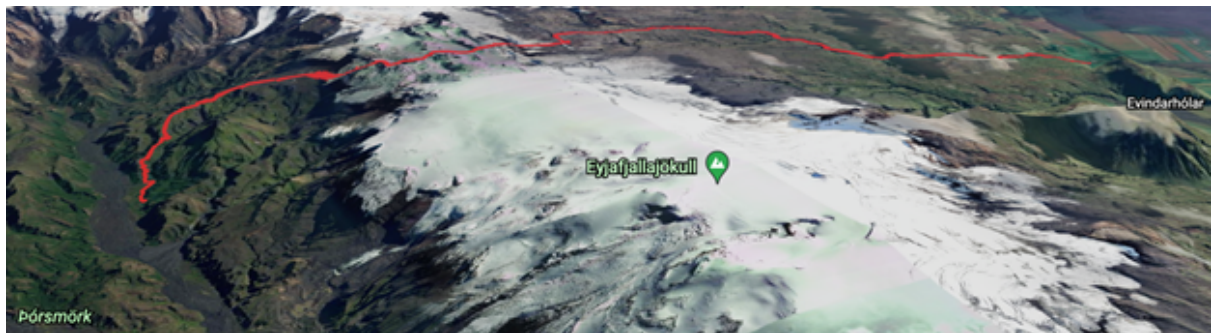
Route planning

Routes were plotted out on Outdoor active, and transferred to Google Earth. These snapshots below show the intended routes.

Overview of the Laugevegur trail from Landmannaláugar to Thorsmörk.







Our planned route of the Hornstrandir Peninsula. We took a more direct route to the first campsite at Latrar on the advice of the nature reserve warden due to difficult paths that had eroded due to recent weather on the western part of the peninsula.





Accommodation

Whilst we were in Reykjavik, we always stayed at the Hotel Orkin, a clean no frills hotel on the outskirts of town, about a 25 minute walk into the main shopping area. Staying in a quadruple room worked out cheaper than hostel accommodation and with the free breakfast, and coffee and cake at 17:00 every day, it was a no brainer to stay there on multiple occasions. During the Laugavegur trail, we had to camp at designated campsites which cost just under £40 a night for the four of us. Mountain huts were available but we chose to camp as this was much cheaper and felt like a more authentic experience.

All campsites on Hornstrandir were free with very basic latrine facilities and good streams for water sources nearby. We stayed the night before travelling to Hornstrandir at a hotel/hostel in a former Salvation Army building and on our return in a hostel. On the way back to the UK, we elected to stay at the Kef Hotel Guesthouse which was in Keflavik, a few kilometres from the airport as we needed to be at the airport very early the next morning.

Food and Drink

Rations were kept basic for the duration of the trip. A brief glance at the price tags at any local supermarket was enough to deter the purchase of anything but the essentials. A good percentage of the food consumed was purchased in the UK prior to departure, as we had put some forward thinking into planning our meals.

Thankfully, plentiful freshwater supply is available around the island, and we were able to simply take water bottles and a large water platypus, to fill at appropriate streams along our routes. While we did take water purification tablets as a safety measure, they were not needed. Because of the daily ascents made throughout the trip, fresh stream water was routinely available. All team members had an individual water bottle of at least 750ml in size, and larger 2L communal water bottles, as well as the aforementioned water platypus remained topped up throughout the day. We must comment that the water quality was superb, perhaps the best we have tasted. Had we taken a small bottle of concentrated fruit cordial, it would have gone unused.

Breakfast

The first hike was very much a test run for our new diets. We had made the decision prior to entering the country that we would take an egregious quantity of Belvita biscuits to supply our breakfast for the trip. This was, at least theoretically, a brilliant and efficient way to supply energy-dense calories in the early hours - and would leave us ample time to pack away our tents

and be on our way. Furthermore, they would be a lightweight option. While not something we would have changed with hindsight, moving into the second hike we opted for something more substantial. To warm the cockles, most mornings would regardless start with a fresh pan of coffee, and so in reality extra time over the stove was not all that consequential. Coffee was consumed either from fresh grounds, or from freeze-dried sachets.





Moving into the second hike, as mentioned, we opted for a more considerable breakfast to start to the day. Once we had affirmed that water was plentifully available from streams but also from campsites, we set out to the local supermarket. After adjusting calculations for backpack weight and losing some otherwise unnecessary kit, we purchased 2kg of Oats, as well as some dried dates, and a large 1kg bottle of honey. This was a much heavier option but provided above and beyond the nutrition required. Oats were prepped

daily with water; the dried dates were added towards the end to rehydrate, and finally this was adorned with a generous glaze of honey. In the future, this would be the preferred diet. It should be noted that we were snacking throughout the day, and this supplemented breakfast greatly, reducing the dependence on those calories to get us through to lunch.

Something that was integral to our time there was multivitamins, which were taken each day alongside a dose of vitamin D. This helped somewhat to compensate for the lack of green vegetables in our diet.

Lunch

Our midday meal was routine and did not change throughout the trip. That being said, it was always looked forward to. This was the classic peanut butter and jam wrap, which while you may not find at your local Pret A Manger, was superb in every way needed. Packed with calories and sweetness, and oozing with fresh Icelandic jam, this was a lunch hard to beat. A pack of 8 wraps fed the four of us each day and was light and simple to pack. Around 1tbsp of both the peanut butter and jam was used per wrap, although midway through the second hike we upped this to 2tbsp. Variations in jam flavour were key, and although quite bulky in the bag, the containers were useful for storing other rubbish as the days progressed, as we were unable to offload it on the trails. Using peanut butter from the UK made this lunch an awful lot cheaper.

This was the only lunch we ate, with the exception of a few days. One sunny day on the first trail we were ahead of schedule, and so were treated to a riverside feast of excess ramen noodles lightly garnished with peanuts. Alternatively, on the second trail, a tin of tuna was used occasionally as a wrap filling. This turned out to be quite messy and inefficient, however with a gentle intertwining of some velvety mayonnaise and spicy sriracha we had managed to acquire, this was a rather lovely meal.

Dinner

Our evening meals were always a treat – served warm without exception, they were the largest and most enjoyable of the day. Here, the culinary excellence of Joe really shone. We made sure to pack ample food, giving at least one day of extra in case of an emergency. This was the most exhaustive time for our gas supply, and this was a factor when deciding what to consume.

Rice was taken, but only as boil in the bag so as to not waste precious heat. Pasta was a common choice as it cooks quickly. Our favourite choice of carbohydrate came in the form of ramen noodles. Perhaps it was the nostalgia for our time as students, or the powerful forces of Asian persuasion running through our team, but this was a unanimous favourite. Regardless, they were especially cheap in comparison to other choices, cooked in less than 3 minutes, and often came with a small sachet of flavouring. Each night would consist of a carbohydrate of choice, which was then mixed with one of a variety of sauces or tins available.

Protein was somewhat of an issue on the trip. We had taken the decision to purchase some polish sausage as a supplement to our evening meals. This would be purchased in the appropriate size so as to only use one per meal, to avoid the meat spoiling, and to stop our bags and kit smelling any worse than it already did. How long these could be stored safely was questionable, and towards the latter days of trip this would not have been a viable option. This sausage was cut using a pen knife and often accompanied either a pesto pasta, or ramen noodles. Whether this can be described as a form of culinary fusion was a matter of much debate on the trail. On occasion, dishes were accompanied by a small tin of vegetables, as an aside to the daily vitamins we were already consuming.



Outside of our sausage, we relied on heavy tins of chilli, chicken, and curry. This was perhaps not an advisable measure, due to the weight of the food. Yet this was a cheap and quick way to consume considerable amounts of protein that would not perish. In more arduous conditions it would be advisable to take freeze-dried meals, however under budget constraints we opted not to go down this route. In hindsight, perhaps some protein powder would have been an advisable option. We managed to distribute the weight of the meals between the four of us, and because of this we did not struggle tremendously with the weight. A further downside was having to carry to



empty tins around following consumption, although this annoyance was offset by the gradually lightening load.

We would not have changed the way we managed the evening meals. Despite heavy weight, the eagerness of consuming a hearty evening meal was in large part what inspired us during the latter part of the day. The advantage of doing the two separate expeditions was that we had the ability to refine and streamline the way in which we operated in the later walks, our evening routine did not change.

Sweets and biscuits

Snacks were integral to our trip. Mostly carried across the border on arrival, what can only be described as a mountain of sweets and biscuits were sorted through prior to each trip. Regular snack breaks were taken throughout, acting as motivators, and helping us to feel more satiated between meals. Having such snacks on hand and readily available was important to keeping momentum and morale.

An important and underrated snack was nuts. Not only were they perhaps of more calorific importance, but they were incredibly versatile, often accompanying dinners as a garnish. A possible improvement here would have been to take almonds as well, as these would have been excellent in our morning oats. Expense was again a limiting factor. Iceland has a beautiful array of fish jerky which would have been an excellent snack, however even a small bag of this would have sent us into overdraft before you could say "Landmannalaugar".

Travelling in Iceland

For the Laugavegur trail, a bus company called Reykjavik excursions offered 'highland bus pass' tickets where travellers can be dropped off at the start of the trail and picked up from the end of the trail. We used this option, especially with a 10% discount on Icelandic National Day. There is a bus network in Iceland, but to get to the more remote parts of the country, a hire car is almost essential. Whilst we were planning our Hornstrandir expedition, we debated whether to fly from Reykjavik to Isafjodur or to hire a car. The big disadvantage of car hire was that we would only use the car for getting to Isafjodur and back to Reykjavik as there is no vehicle access for Hornstrandir. When assessing the total costs, it was about the same price to book flights and baggage as it was to hire a 4x4 car which was essential for the F Roads common in the westfjord area. Ultimately we decided to drive a hire car there, as this would also give us the opportunity to take a small detour to the cliffs at Latrabjarg to see the puffin colonies there and offer more flexibility in case we were delayed by the ferry or weather. Driving was very safe in Iceland and all roads were maintained in excellent condition. Petrol veered on expensive but when a burger and chips costed around £12, paying 10 pence more per litre for unleaded seemed a minor sacrifice.

Communication and Language

Icelandic is the official language of Iceland. It is an Indo-European language, belonging to the sub-group of North Germanic languages. It is closely related to Norwegian and Faroese, although there are slight traces of Celtic influence in ancient Icelandic literature.

Icelandic is an insular language, and as such, has not been influenced greatly by other languages. As a result, the language has changed very little from when the country was settled in the ninth and tenth centuries. It did not become markedly different from Norwegian until the 14th century, when Norwegian became increasingly influenced by its neighbouring languages, Swedish and Danish.

English is also widely spoken in Iceland and from anecdotal advice there should not be any problems with communicating whilst in Iceland.

Currency

The Icelandic Krona is the official currency, most campsites and shops will accept prepaid debit card but to be cautious, we all took out money from ATMs at the beginning of the trip on the off chance that a card machine may not be working.

Weather

June is the third warmest month of the year and also has the least rainfall. June, July & August are the official summer months in Iceland. Daily sunlight hours are extremely long and the average temperature is 9 degrees Celsius, reaching spikes of 15 to 20 on occasion. We would expect the climate to be cold, windy and cloudy around this time. The climate is quite unstable due to cold winds from the north pole, interacting with ocean breeze and the mild gulf stream. There can be sudden changes in weather and temperature, but with a limited temperature range, both between day and night and between winter and summer. Calm and sunny periods are rare. The northern coastal area is colder than the southern one because it is not reached by the Gulf Stream.

Precipitation is more abundant on the southern side, where it exceeds 1,300 millimeters (50 inches) per year, and reaches up to 2,400 millimeters (95 in) in the most exposed areas ,

while it's much more scarce on the north coast and on the north side of the inner plateau, so much so that it descends below 500 mm (20 in) per year, although it is well distributed throughout the year. Along the west coast, the amount of precipitation is at an intermediate level; for instance, Reykjavik, receives about 800 mm (31.5 in) of rain or snow each year. On the southern slopes of the highest mountains, precipitation, which almost always takes the form of snow, can exceed 4,000 mm (155 in) per year.

It's worth noting the almost total absence of trees, as well as the presence of sandy soils in inland areas, where strong winds can cause dust storms.

In inland areas, there are plateaus and mountains, where the temperature naturally decreases with altitude. Because of the cold summers and the heavy snowfalls, snow only melts at low altitude, so the snowline is low, around 700 meters (2,300 feet) above sea level. However, Iceland's glaciers are shrinking due to global warming.

During our time on the Laugavegur trail the weather was extremely variable, with the first day being somewhat drizzly in the morning turning to a light snow storm in the afternoon and evening. The weather improved greatly and the latter two days of the trail we were blessed with clear blue skies and it was very warm. We were extremely fortunate that there was no rain at all during our time on Hornstrandir, and for all but one day we were greeted with clear blue skies and mild temperate weather around 12 degrees celsius during most of the daytime, falling dramatically after 22:00.

Travelling during COVID pandemic

As we were fortunate enough to be travelling to a green-listed country, our experiences with the Covid-19 travel restrictions were brief and modest. With the exception of one member of the team who had to quarantine in a government supplied facility for 5 days, the team was able to enter the country without much hassle. All members took a PCR test both before travel and again on arrival, and a lateral flow test was performed upon exit. Once confirmed negative, the team were allowed back into the UK and merely had to perform a Day 2 test when safely home.

In spite of the eye-watering forcefulness of the testing at the Keflavik airport, the team were in good spirits for the trip. The quarantine hotel, while an inconvenience, was at the time unavoidable due to the nature of the UK's vaccination policy at the time. It was a pleasant stay, with a nice bathroom and amenities to watch the opening Euro 2020 fixtures on a delayed BBC broadcast. Food was often cold but pleasant, and of course, totally free of charge. PCR tests in quarantine were done on Day 1 and Day 5 and following the confirmation of a negative Day 5 test, one was free to leave the facility.

Once in Iceland and tested, we were taken aback by the normality of the country. Mask mandates, which were strictly enforced back home at the time, had been lifted two weeks prior to our arrival. Bars and events were open, our quarantining team member had a rather enjoyable and eventful evening on his night of release – as it was National Iceland Day. While somewhat muted, the festivities had placed the city in a buoyant mood, and it felt very welcoming for the weeks that followed.

Some Covid restrictions that remained in place were mask mandates on public transport. This was observed when taking the bus to and from our first hike, as well as on the bus to and from the airport. The airport itself and of course the aeroplane journey all required a mask. This was happily observed by all members of the team.

Outside of a few days in the city we had in between trips, which was mostly spent prepping food and supplies, we spent the majority of the time isolated from much of the country. As you can imagine, Covid restrictions on a hiking trail are almost non-existent. Furthermore, the hiring of a car allowed us more freedom in travelling while also being a much safer and affordable option. It allowed us to steer clear of excessive mixing and allowed us to focus on the task at hand without fear of infection.

Overall, we felt very safe and comfortable within the country. The heavy testing and border rules, and of course the hard border of hundreds of miles of ocean, made the chances of an unexpected Covid-19 breakout unfathomably low.

Nature Reserve Access Permits

As we visited Hornstrandir during the summer months, there was no mandatory requirement for access permits. We did however submit our plans and intentions via the environmental agency website for our own safety in case of emergency.

Expedition Diary

Laugavegur Trail

21/06/21. Day 1: Landmannalaugar to Hrafninnusker



First day of the trail, we set off from Reykjavik on the Highlands bus which would take us to Landmannalaugar. The journey took around two and a half hours, departing the BSI bus terminal in Reykjavik at 07:45. Arriving in Landmannalaugar around 10:45. The weather was drizzly and overcast. Temperatures were quite frisk although we would soon be getting a lot colder throughout the day. With all equipment accounted for, we set off in high spirits for the 12km walk uphill to the campsite at Hrafntinnusker. We had heard reports from other travellers that there had been an unusual retention of snow on higher ground along the trail. As we ascended, the patches of snow covering the ground gradually increased to eventually form a thick blanket of white across the whole terrain. As the weather was cold and wet, we did not stop properly for lunch, resorting to snacking along the way, demolishing a bag of Morrisons' mixed chocolate, nuts and raisins.

Near the beginning of the trail, we were treated to the multicolour splendour of Iceland, from verdant mossy greens to the spectrum of mineral hues interspersed with evidence of ongoing geothermal activity and increasing quantities of snow from the remaining due to an exceptionally cold summer period.



As a result of the tough weather and walking conditions, we took multiple small breaks on our way to the campsite. Despite having waterproof shoes, the deep snow eventually got through to our feet. The misery and unmistakable downtrodden expressions adequately convey the tough circumstances of the first day on the trail.



Upon arrival at the campsite at the conclusion of the first day, we were informed by the wardens that no other hikers had attempted to camp due to the inopportune weather conditions and rather had sought refuge in the huts.

Wanting to minimise expedition costs, alongside architectural visions of the igloos from the hit children's TV show Pingu, we began excavating vast quantities of snow and flattening it down in order to construct some semblance of a viable camping area within the thick layer of snow. The wardens kindly lent us one shovel and one crowbar and a valiant hour and a half was spent on our record attempt to become the first campers of the season at Hrafninnusker. Sadly this did not materialise. The wardens must have thought we were either very brave or extremely foolish, but either way, we were offered an undisclosed discount on staying in the hut that night. This turned out to be an extremely fortunate turn of events as we could dry our shoes, clothes, tents, and ourselves.



22/06/21. Day 2: Hrafninnusker to Álftavatn

Setting off from Hrafninnusker, conditions remained unfriendly surrounded by snow in all directions, with visibility becoming exceptionally poor.

Unable to see the next route marker on many occasions, it was necessary to consult the GPS maps we had downloaded to stay on course. This was the first of many occasions that the use of "Outdoor Active" phone GPS maps turned out to be invaluable for navigating in poor visibility. Trekking conditions were unideal, the snow fields whilst white and pristine turned out to be very exhausting to walk across, combined with a strong wind and fog caused us to stray off the trail a few times in the morning. A few hairy situations crossing small rivers which would otherwise have been a simple jump but had widened as the snow began to melt. Once we had got back onto the trail, we sat down for a rewarding lunch of peanut butter and jam fajita wraps and multivitamins. To illustrate the low temperature, tinnocks caramel wafers at this point were frozen solid, as well as the custard part of the Morrison's custard creams we had carefully packed.

However, as we descended through the valley and approached Álftavatn lake, visibility began to improve somewhat and the remaining trail was reasonably uneventful, on a well marked and reasonably flat path. Camping at Álftavatn was a chilly experience. Despite



wearing multiple layers and hats and gloves to sleep, this was not enough to stay toasty through the night.

23/06/21. Day 3: Álftavatn to Emstrur

Come the beginning of the third day, conditions were markedly improved, with stunning views of Álftavatn lake and the surrounding area as we embarked on our third day. We encountered our first river crossing of the expedition, wading across the Bratthálskvísl river.



We hiked through the Hvanngil campsite and continued on through decreasing quantities of snow which transitioned to expanses of black sand deserts.



Approaching the end of the third day, we had to tackle the significantly deeper and faster flowing Bláfjallakvísl river, which was a more challenging task, before pressing on to Emstrur to finish our highest mileage day. The campsite at Emstrur was much drier, and we had a pleasant evening on a picnic bench eating a solid no frills meal of reduced price Pitta breads from Netto and a tin of baked beans each. There was a lovely feeling of camaraderie with other hikers on the trail who we would touch base with every night.

24/06/21. Day 4: Emstrur to Þórsmörk

Day 4 commenced with a stunning trail along the Syðri-Emstruá river gorge, then proceeding on, culminating with a final notable river crossing immediately prior to the lush verdant valleys of the Þórsmörk nature reserve marking the end of the Laugavegur trail.



Unfortunately, on arrival at the Volcano Hut campsite in Þórsmörk, we were informed of a severe storm that was approaching the area, affecting our planned 2-day continuation of adding the Fimmvörðuháls trail to Skógar. Due to extremely high winds (100km/h) and heavy rainfall, we were advised in no uncertain terms that it would be unsafe to proceed with the intended extension and had to return to Reykjavik from Þórsmörk.

Hornstrandir Peninsula

Day 1: Ísafjörður to Hesteyri to Látrar

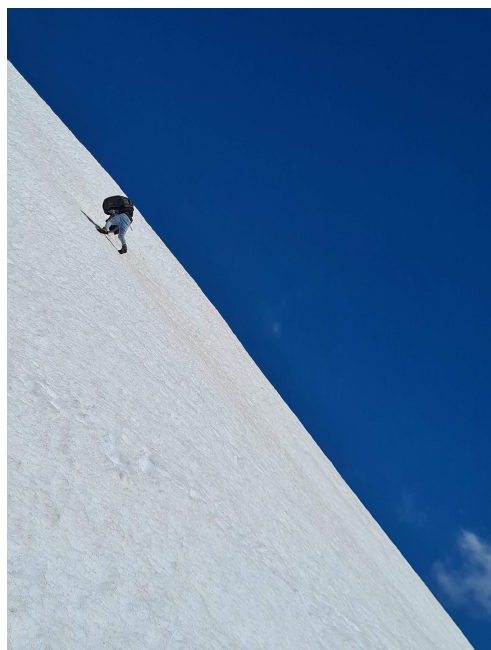
After a long drive to Látrar which afforded amazing views of the picturesque surroundings and the opportunity to show off our newly-acquired experience of crossing rivers with the first river crossing of the peninsula. Confusion over where the best point to cross the river resulted in the group splitting off in two, with 2 of us crossing the river where it was extremely wide (but thankfully very slow moving water and shallow), and two group members heading



off to the river mouth where they were battered by sand being churned up by the incoming sea wind. Our first Hornstrandir campsite at Látrar was situated at the northern edge of a large bay, shielded on three sides by mountains. There was a latrine and a stream to get water. Of note, there was a gravel short runway for aircraft, and some evidence of American military activity (foundations of barracks and a track) from the height of the cold war in 1958 when a radar surveillance station was built on the mountain to track Soviet aircraft.

Day 2: Látrar to Glúmsstaðir

In retrospect this was the toughest day on Hornstrandir. The day started off at a leisurely pace, and we took some respite in the form of porridge oats and honey. The first 2 kilometres walking out from Látrar was relatively easy going and flat. However, the steep ridge at Halsar cut short our stroll in the nature reserve. As we found out later, the mountain pass was recommended to be 'closed' by the nature reserve wardens. Despite the warm sunny weather, there was still snow covering the majority of ground above 300 metres. Initially it was possible to carefully climb up the loose rock and scree but when there was a steep snow field in front of us, it became very difficult.



As we found out, walking poles and Joe Allen's sturdy shoes were no substitute for crampons and we had a handful of slippery moments attempting to climb through the snow field. Not all heroes wear capes, but our hero came in the guise of Henry in his ill-fitting Red Cross charity shop shoes. Seeing we were not going anywhere except sliding downwards, this fine team member picked up a large rock and started compacting hand and foot holds into the snow for us to use. This made climbing up a lot easier. Eventually climbing to the top we rested, wringing out our wet gloves and tipping snow out of our shoes. Hoping this would be the end of our troubles, we walked on along the higher ground, stopping briefly for the no frills lunch of fajita wraps, peanut butter and jam. We descended the mountains at Tungudalur, and after refilling our water bottles from the melting snow started to tackle the final part of the day. A punishing and damp walk along the base of the mountains surrounding the Fljot lake. The wardens and other trekkers warned us it would be marshy, and they were certainly right. It took us around 3 hours to walk through the marshy wetlands, arriving at the Glúmsstaðir campsite tired and soggy around 23:00 at night. The long days with no darkness were quite deceiving. We would be walking at 22:00 in the evening and it would not seem that late, the only telling sign was how cold the temperatures dropped in the evening as the sun went low in the sky. The day was gruelling but we were rewarded with a stunning campsite where we were the only campers. Geese with their huge outspread wings flew orbital laps of the lake late into the night, the only noise coming from the Primus Omnifuel and the cascading waterfall behind the campsite.

Day 3: Glúmsstaðir to Álsfell

Now we were getting into a good routine, and knowing what to expect of the terrain, the latter days yielded few unpleasant surprises. Two river crossings were needed to get around to the other side of the Fljot lake. River crossings were not difficult unless the river current was particularly fast, however they did slow us down greatly, and this was not something we had really taken into account when planning our schedules and estimating the length of each day. Another steep climb took us over the mountain summit at Hvannadalshorn, the day finished with a gradual incline descent to the coast, skirting around the pebble beaches and drift wood culminating in a large mouth of



river crossing by the sea, which took us into the picturesque campsite at Álsfell. As we put up our tents, we heard a faint shrill cry, and sure enough, followed by a curious arctic fox scuttling amongst the tents and then running off into the sand dunes. This was our first encounter of the arctic fox. The campsite was situated next to the beach, again enclosed on three sides by uninterrupted mountains. We were alerted by our new trail friends Michael and Niklas (a father and son expedition duo from Cologne) that the river where we could get potable water from had a dead whale carcass submerged and we needed to go upstream of the whale carcass. Unfortunately we mistook a large piece of driftwood for the whale carcass, and as we discovered the next morning, we were getting water from too close to the decomposing whale carcass. It turned out we did not see the whale carcass in the water as in the soft evening light, the tranquil still waters of the river reflected the surrounding mountains so we did not see it. Thankfully no imodium was required in the ensuing days.

Day 4: Àlsfell to Höfn

The fourth day began continuing along the coast before a significant elevation gain, although this mountain pass looked intimidating from the campsite below, it was in fact a breezy walk in the park compared to what we had encountered on previous days. The only difficulty



encountered was at the very top where the path was prone to being very slippery and muddy as the snowy mountain tops were melting quickly. We passed through a viewing point where we were able to cross paths with another of Hornstrandir's arctic foxes, but better known as the site of Hornstrandir's most recent encounter with a large hungry polar bear that had drifted across on ice from Greenland. We once again skirted the coast, running into a group of wildlife photographers with cannon sized canon lenses. We continued further along the coastline to the campsite at Hofn. The weather descended on us and for the first time in 4 days, the visibility became poorer as fog rolled in from the sea. This gave the remainder of the walk a darker eerie atmosphere as we made our way across the large boulders on the beach. Whilst descending one of the cliffs, the rocks buckled under Jinpo's tremendous weight and he started sliding down the loosened rocks and soil in a dustier reprise of Joe Allen's slip on the slippery slope from Day 2. You can see the abject fear in his eyes as he makes an uncontrolled descent to the beach.

The campsite at Höfn would act as a base for the remainder of our hikes on the peninsula. The campsite was relatively luxurious with two real flushing toilets and a sink. It served as a base camp for guided expeditions, and a film crew for a documentary on arctic fox cubs had also pitched up a large inflatable base for their filming. Initial anger at the misuse of BBC licence fee payers' money to fund film crews' stays in large tents which had ventilated indoor stoves soon melted away when they offered us coffee and we found out they were in fact working for a famous online streaming website.

Day 5: The Horn peninsula

Beginning with another river crossing, our exploration of the Horn peninsula began by following the coast to the tip of Horn before climbing up the Hornbjarg cliffs and the steep ascent to Kálfatindar before pressing on to the Drifandi waterfall and over Dogundarfell. This day unexpectedly turned out to be one of the longest and most challenging, despite not carrying tents or camping equipment with us.



We had our standard lunch on the most northernmost point on the Hornbjarg cliffs, accompanied by the constant cackling of sea birds and one mischievous arctic fox that decided to watch us munch on our PB&J fajita wraps.



We summited the highest point on the Horn peninsula and got our first taste of 4g phone signal in 5 days, finding out about the Euro 2020 quarter final results. We decided to extend our walk and see the three waterfalls at Latravik. The visibility was extremely poor as we made our return to the Hofn campsite. Dense fog had rolled across the peninsula at this point and when we descended the mountain ridge for the river crossing, it was only possible to see about 20 metres in front of you. We returned to the campsite around 02:00 in the morning after a very long day.



Day 6: Rekavík cliffs

After the long previous day, the sixth day was a shorter hike along the coast to the Rekavík cliffs in the hopes of spotting puffins.

Arriving at the cliffs is heralded by the increasing sounds of birds which peak at a cacophony when venturing out on the jutting cliff surrounded by water and the cliffs which are lined top to bottom with nesting birds that swarm overhead. While visibility was poor, within the mass of birds speeding past, it was possible to catch glimpses of the unique silhouette and flight pattern of a puffin.



Day 7: Höfn to Veiðileysufjörður

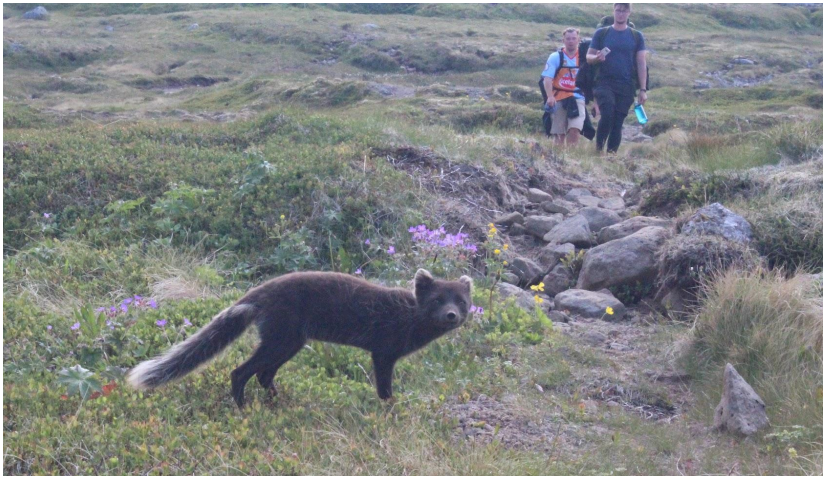
The final day on the peninsula began with a long press uphill, but with the time pressure of a boat that needed to be met and bags the lightest they had been for a long time, we made very good time despite the wind and poor visibility through the snow. As we descended, conditions improved and we reached Veiðileysufjörður two hours ahead of schedule and spotted our last wildlife of Hornstrandir: a seal. At this pointer we were exhausted but felt a sense of achievement covering 74km walking the Hornstrandir Peninsula over the previous week.



Wildlife on Hornstrandir







Equipment List

Item	Quantity	Note
MSR Hubba Hubba tent	2	2 x 2man tents
Collapsible shovel	1	Wasn't actually used during either expedition because all campsites had either toilets or latrines
Groundsheets	2	
Vango Saucepans	1 Set	Not actually non stick
Collapsible trekking poles	1 Set	Useless and would disassemble itself when used in the snow
Trekking poles	3 sets	Valuable for river crossings
Water purification tablets	20 packets	Not actually used
Insect repellent	3 bottles	Very useful especially on Hornstrandir
Primus Omnifuel	1	Excellent stove
Gas bottles	2	Penguin brand camping gas
Bin bags	24	
Satellite phone	1	Kindly lent to us by the Exploration Board
Eye masks	4	Necessary as constant daylight
300mm camera lens	1	Useful for wildlife photography
Rucksack covers	4	
First aid kit	1	
Heavy duty hiking boots with ankle support	3	
Charity shop bought boots	1	Henry did not realise there would be snow in Iceland
Waterproof trousers	4	
4 season sleeping bag	3	
Tesco extralite sleeping bag	1	Joe Allen's purchase from tesco served him well at 66 deg north

Roll mat	4	One roll mat was luxury inflatable and another was a yoga mat
Solar charging kit	1	Extremely useful especially since all campsites had no electricity
20000mah battery pack	5	

Equipment Review

The equipment taken on the trip was adequate for the conditions. Research and a well-planned kit list meant we were ready for most weather conditions and eventualities. We packed extra food, clothes, bandages, and shoes. Much of this kit we did not end up using, for example the spare Bivvy Bag. As we were fortunate enough to split the trip into two shorter hikes, we were able to reassess midway through our time there and adjust for any mistakes in packing we had made.

Groundsheets: Perhaps the biggest blunder made was failing to check the tents we had kindly be given for groundsheets. This problem was only discovered when attempting to assemble the tents onto a large patch of snow we had painstakingly dug into the mountainside. Thankfully, we were able to use the accommodation at the site that evening, granted at some extra cost. The wardens here it must be noted were stunningly kind and impressed by our determination and shovelling prowess. We shared laughs over some cups of hot water; so engrossed were we that this blunder was soon forgotten. In the end this turned out to be a blessing in disguise, not least because of the morale boost of the night's festivities, but because it allowed us to dry our boots off from the snow that had soaked in the day before. Despite all members taking certified waterproof footwear, the thickness of the snow was such that we all had wet feet by the end of the first day. While we had taken bin bags to place inside our shoes to prepare for such an eventuality, this turned out to not be needed as the snow was greatly reduced in the days that followed. A series of pleasant days and the use of the remaining binbags as makeshift groundsheets meant we comfortably survived the remainder of the first trip. Despite a blunder in our preparation, the ingenuity of four devilishly intelligent young men prevailed, and we returned in good health and spirit. Groundsheets were hastily purchased on return from our first hike.

Crampons: At times, climbing was rough in snowy conditions. Crampons were not a necessary addition to our kit but may have been advisable where snow was worse than expected.

Shoes: Despite taking a spare pair of shoes as advised for the river crossings, the process was still painful and perhaps some of the more dangerous activity on the trip. We made well over ten river crossings during the trip, and a slip by any member could have resulted in wet kit, or perhaps a more dangerous situation. While precautions were taken, such as unclipping bags, proper shoes sufficient to deal with the rocky riverbeds under high currents should have been prioritised. This was perhaps exacerbated at the time that we visited the country, as a large volume of snow was in the process of melting and contributed to much

more dangerous crossing conditions through a much greater rate of water flow and overall water volume.

Gloves: Some gloves taken were unsuited for snowy conditions, however we carried spares.

From the items we should have perhaps taken, to those that we could have done without:

Clothes: While we carefully and efficiently packed many spare layers of clothes, we felt after the first hike that we did not need as many spare T-shirts, fleeces, and underwear, as originally thought. Weather conditions were mild, although not without some rain, yet coats and overlays stopped much of the weather affecting our clothes. Furthermore, due to the cold conditions, these clothes were not retaining perspiration as rapidly. We often made use of nearby lakes to bathe in, and this kept us clean enough to get by with only a few changes of clothes, and of course the important spares. Fresh socks were however mandatory every day.

Hiking Poles: Hiking poles were carried by some members of the team, but not used by all on the first hike. During the second hike, only one pole was taken for emergency use.

Shovel: A shovel was taken on the trip, but on neither of the hikes when it was confirmed that there would be access to latrines at all locations

Aside from this, we were very well prepared for the trip, and packed very efficiently. A criticism mentioned previously in the report could be the taking of large tins of food, instead of more efficiently packed and lighter camping food. We stand by this decision as food was a large motivator for the hiking of the day, and the tins could be flattened using a rock to save space. All of our waste was contained in a large triple-bagged binbag, which was attached to the rucksack of a different team member each day.

Waterproofs all worked as expected, all members had thick hats, gloves, buffs and a variety of accessories to keep the conditions out. Sunglasses were used at times to block the sunlight reflecting off the snow. All rucksacks performed well, and we were careful to sort adjustments and strap configurations before leaving. We also weighed each bag to ensure equal distribution of weight. An important but under-considered feature to the rucksacks was the waterproof covers, these were crucial at times and allowed bags to be carefully placed onto snowy conditions while regular breaks took place.

Once the tents were waterproofed with a sturdy groundsheet, they were very comfortable despite being more suited to the summer conditions. Careful placement on thicker shrubbery at the allotted campsites blocked out much of the wind. Sharing the tents provided much needed heat, and despite being cosy they were adequately wide for two people with bags placed under the shelter of the outer layer, just outside the side entrances.

Food logbook

Hike 1	Breakfast	Lunch	Dinner	Snacks	Beverages
21-Jun	3x Belvitas (Twin Pack)	2x Artisinal Peanut Butter & Jam Wrap	Pesto Pasta	Bourbons, Haribos	Icelandic Galcier Water, Coffee, Coca Cola
22-Jun	3x Belvitas (Twin Pack)	2x Artisinal Peanut Butter & Jam Wrap	Tomato Pasta w/ Polish Sausage	Custard Creams, Peanuts	Icelandic Galcier Water, Coffee
23-Jun	3x Belvitas (Twin Pack)	2x Artisinal Peanut Butter & Jam Wrap	Ramen Noodles w/ Polish Sausage	Haribos, Peanuts	Icelandic Galcier Water, Coffee
24-Jun	3x Belvitas (Twin Pack)	Assorted Ramen Noodles w/ Peanuts	Canned Beans & Torn Flatbreads	Malted Biscuits, Dried Fruit & Nut Mix	Icelandic Galcier Water, Coffee
25-Jun	3x Belvitas (Twin Pack)	2x Artisinal Peanut Butter & Jam Wrap	Ramen Noodles w/ Polish Sausage	Haribos & Toffee	Icelandic Galcier Water, Coffee
Hike 2	Breakfast	Lunch	Dinner	Snacks	Beverages
29-Jun	Oats w/ Chopped Dates & Honey	2x Artisinal Peanut Butter & Jam Wrap	Ramen Noodles w/ Polish Sausage	Icelandic Jelly Sweets, Custard Creams	Icelandic Galcier Water, Coffee, Pepsi Max
30-Jun	Oats w/ Chopped Dates & Honey	2x Spicy Tuna Wraps	Tomato Pasta w/ Polish Sausage	Bourbons, Mixed Nuts	Icelandic Galcier Water, Coffee
01-Jul	Oats w/ Chopped Dates & Honey	2x Artisinal Peanut Butter & Jam Wrap	Ramen Noodles w/ Polish Sausage	Maryland Cookies, Haribos	Icelandic Galcier Water, Coffee
02-Jul	Oats w/ Chopped Dates & Honey	2x Spicy Tuna Wraps	Pesto Pasta w/ Tinned Vegetables	Haribos	Icelandic Galcier Water, Coffee
03-Jul	Oats w/ Chopped Dates & Honey	2x Artisinal Peanut Butter & Jam Wrap	Chilli Con Carne w/ Rice	Maryland Cookies, Haribos	Icelandic Galcier Water, Coffee
04-Jul	Oats w/ Chopped Dates & Honey	2x Artisinal Peanut Butter & Jam Wrap	Chicken Korma w/ Rice	Toffee, Malted Biscuits & Haribos	Icelandic Galcier Water, Coffee
05-Jul	Oats w/ Chopped Dates & Honey	2x Artisinal Peanut Butter & Jam Wrap	Beef Curry w/ Rice & Tinned Vegetables	Haribos, Custard Creams	Icelandic Galcier Water, Coffee

Financial Report

The expedition was funded from three main sources. The three Imperial students were given a grant of £750 each by the Imperial College exploration board, and each expedition member received £550 from the Lord Mayor's 800th Anniversary Awards Trust. Any additional costs would be self funded, as well as a small shirt/equipment sponsorship from Strength Asylum gym. Below is a full cost breakdown of the expedition. We had to budget some extra money to spend on lateral flow/ PCR testing for return to the UK. We under-estimated the cost of travel between Reykjavik and the Westfjords for car hire, however other costs we overestimated, such as victuals, as we did buy the majority of non perishable food items from the UK, and additional items from the Bonus supermarket; Iceland's very own budget no frills supermarket. We stayed at the same hotel in Reykjavik each time we were in Reykjavik, at the beginning of the trip, between expeditions and returning from the Hornstrandir component of the expedition. The Hotel Orkin, run by the Faroese charity for seafarers, was extremely good value for money, costing little more than hostel accommodation and providing free breakfast for us.

ITEM	COST (£)	ADDITIONAL INFORMATION
4 x Return flights	739.67	Average cost of flight was £184.92 including 23kg of hold baggage. Not all expedition members flew back to the same airport.
Airport Flybus to Reykjavik x4	88.76	£20.92 per person
Hotel Orkin Stay (Reykjavik)	201.02	19th to 20th June
Highlands Bus pass	201.14	Reykjavik to Landmannalaugar
Campsite night 1	35.37	Hrafninnusker
Campsite night 2	35.37	Alfatv
Campsite night 3	35.37	Emstrur 23/6/21
Campsite night 4	40.22	Volcano huts 24/6/21
Hotel Island	108.01	25/6/21 for one night only
Hotel Island Breakfast	18.87	Impromptu breakfast
Hotel Orkin (Reykjavik)	256.60	26-27/6/21
Car hire (one day)	90	Kia Picanto
Car hire (Hornstrandir)	642.68	Dacia Duster

Isafjodur Managisting Guesthouse	175.69	
Isafjodur Hostel	151.04	Return from Hornstrandir
Hotel Orkin Return to Reykjavik	130.10	06/07/21
Kef Guesthouse Airport	113.66	
Camping Gas Laugevegur Trail	9.45	
2 x maps	25.82	
2 x groundsheets	15.99	
4 x Hornstrandir ferry	617.08	154.27 per person
Water purification tablets	4.29	
Vango Saucepans	32.50	
JX Food shopping UK	45.23	
BB Food shopping UK	42.37	
JA Food shopping UK	36.81	
Laugevegur Food shop	41.20	Bonus
Hornstrandir Food shop	79.16	Netto
Lateral Flow tests pre departure	93.60	£23.40 each
Camping gas Hornstrandir	8.76	
Petrol for Dacia Duster	128.49	
Luton Shuttle Bus	4.80	
London to Luton Train	28	
Global Telesat SimCard	115	

Total Cost = £4572.72

Total Cost of expedition per person: £1143.18

Conclusion

Both expeditions were completed in the 21 days that we were in Iceland. We trekked through a variety of landscapes, from the snow fields and colourful mountains on the Laugavegur trail to the wild flower meadows on Hornstrandir. We met our main expedition aims, and feel that we have improved our ability to tackle more difficult expeditions in the future. We were pleased to have kept the cost of the expedition reasonably low considering the length of time we were in Iceland, which is one of the more expensive countries in Europe to visit. This was achieved with some unconventional expedition food menus, doing away with any kind of pouch meal/ration packs which were costly food options.

We have reflected on the elements that we could have done better, for example checking all the equipment thoroughly before going to Iceland, and making sure all team members had the correct equipment. At no point during the expedition were we in any danger although certain things could have been done to reduce the risks further, for example getting more reliable weather updates from the hut wardens and finding out exactly which mountain passes were closed to avoid heavy quantities of snow without the proper equipment.

Seeing the wildlife on Hornstrandir was a great highlight of the trip, getting up close in the arctic foxes' natural habitat was a great privilege for all of us. In addition, meeting new people whilst travelling, unattainable in the last 12 months due to the COVID pandemic.

On multiple occasions, in poor weather and horrendous visibility. We would be questioning how enjoyable the experience was, however in retrospect there is no doubt at all that this was a most enjoyable expedition despite the physical challenges. We are incredibly grateful that we had this opportunity for the expedition in 2021, in times which are so uncertain for travel.

Acknowledgments

We would like to thank **Dr Lorraine Craig**, **Dr Phil Power** for their support and guidance which were invaluable to us during the planning stages of the expedition. We would also like to thank the **Imperial College Exploration Board** for approving our expedition at such short notice and lending us equipment for the expedition. **Captain Maurice Blaber** for acting as our monitor, **Mr Richard Martin** and the trustees of the **Lord Mayor's 800th Anniversary Awards Trust**, and **Mr. Andrew Parker** the director of **Strength Asylum** for their support towards our expedition.