

# Finnish Lapland: An Excursion in Friendship June 2023

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Karhunkierros Trail, Oulanka National Park, Finland



Figure 1: A log cabin on the Karhunkierros Trail

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## 1 Introduction

We are a group of PhD students on the Science and Solutions for a Changing Planet Doctoral Training Partnership (SSCP DTP) with the Grantham Institute for Climate Change and the Environment at Imperial College London. Although our projects are diverse - ranging from cloud physics to evolutionary biology - we are all passionate about the environment and finding ways to protect it.

### 1.1 Inspiration

In 1732, Carl Linnaeus, the renowned Swedish biologist, underwent an expansive exploration of northern Scandinavia, documenting the flora and fauna found within. The trip proved to be seminal in his career, wherein he tested out his newly developed system of taxonomy which would later become fundamental to biology.

His trip is approaching its 300th anniversary and, coincidentally, he began his trip at the same age as many in our expedition party. We therefore think the timing provides the perfect opportunity to both investigate his adventure and to forge one of our own.

### 1.2 Overview

Our route differed from that which Linnaeus embarked on; though the wildlife remained much the same, ours instead accommodated a more rugged path that was feasible within our planned 10 days. During this time, we encountered the wide breadth of Arctic wildlife that northeastern Lapland has to showcase and our route through the Karhunkierros Trail (Bear's Trail/Bear's Ring) offered the chance to hike sharp ascents (Konttainen and Valtavaara), swim in arctic lakes and rivers, and camp in scenic wilderness.



Figure 2: Kitkajoki River, Oulanka National Park

### 1.3 Technical Outcomes

Our main aim of hiking the Karkunkierros Trail was to observe and record the natural history of the region. We recorded the birds and the flora encountered during our hike and logged them on iNaturalist. Records like this are hugely important for understanding changes in biological communities over time, allowing us to understand the effects of anthropogenic threats like climate change and habitat conversion.



Figure 3: *Calypso bulbosa*

### 1.4 Personal Outcomes

As many of us are interested in photography, drawing, and writing, we decided to develop these skills by documenting our experience using a multi-media approach; one that lends itself to the three themes of science, culture, and adventure. We extensively photographed the natural landscapes, the biodiversity within, and the changes humans were having on this environment.

The physical activities planned for the trip, including white water rafting, were a fulfilling challenge and built our teamwork skills. Other activities in Helisinki/Kuusamo, such as visiting the Finnish Museum of Natural History and the Kaisaniemi Botanic Garden, developed our understanding and appreciation for the region and its inhabitants.

## 2 Meet the Team

### 2.1 Becky Ryder

**Role: Expedition Leader**

*Age at time of expedition: 25*

Academic Background:

- BSc Geography, The University of Nottingham.
- MSc Geophysical Hazards, University College London.
- Currently: Second Year PhD Student, Department of Earth Sciences and Engineering, Imperial College, focusing on sustainable water use in mining under future climate change induced water stress.

Experience:

- Team navigator for Gold Duke of Edinburgh (Brecon Beacons).
- Bronze and Silver Duke of Navigator.
- Several multi-day hikes with wild camping.
- Hiked in the USA, Canada and Colombia.
- To hike in Patagonia in late February.
- Competent kayaker, cyclist, horse rider and skier.
- Several week to two week fieldwork trips in the UK and USA.
- Previously a St John Ambulance cadet for 5 years, will update qualifications before the expedition.



### 2.2 Theodore Brook

**Role: Scientific Lead**

*Age at time of expedition: 23*

Academic Background:

- BA Natural Sciences, University of Cambridge.
- MRes Biodiversity, Evolution and Conservation, University College London.



- Currently: Second Year PhD, Department of Life Sciences, Imperial College London and Royal Botanic Gardens, Kew, studying sympatric speciation and diversification in the endemic flora of Lord Howe Island, Australia.

Experience:

- Hiking in the West Highlands, including Ben Nevis and across the Isle of Skye.
- Two months fieldwork on Mount Etna, Sicily, involving hiking to collect plant samples.
- Field season on Lord Howe Island (NSW, Australia) involving hiking Mt Gower and Mt Lidgbird to collect samples.
- Duke of Edinburgh Silver Award (Hertfordshire).
- Wild camped across the UK.
- Extensive fieldwork across the UK (Devon, Surrey, Yorkshire Dales, Yorkshire Moors).
- Competent bird identification skills and trainee bird ringer.
- Competent plant identification skills using a dichotomous key.
- Field Studies Council Young Darwin Scholar.
- Competent runner, cyclist, and skier.

## 2.3 Anna Tippett

**Role: Logistical Lead**

*Age at time of expedition: 22*

Academic Background:

- MPhys in Physics, University of Oxford.
- Second Year PhD, Department of Physics, Imperial College London, investigating cloud-aerosol interactions and timescales for precipitation development using high-resolution climate models.

Experience:

- Completed a 2 day hike of Volcan Acate-nango in Guatemala, involving a summit of 4000m a.s.l, as well as participating in several other shorter 1 day hikes.



- Bronze, Silver, and Gold Duke of Edinburgh Award, acting as team navigator.
- Completed several hikes across the USA, Brazil, New Zealand and Australia.
- Competent sport climber, kayaker and canoeist.
- Wild camping across UK (especially Dartmoor).
- First aid trained.

## 2.4 Jacob Francis

**Role:** Treasurer

*Age at time of expedition: 24*

Academic Background:

- MSci Mathematics, Imperial College London
- Currently: Second Year PhD, Department of Mathematics, Imperial College London, studying transport oriented tools for forecast verification with the MET Office UK.

Experience:

- Extensive wild camping and hiking on Dartmoor.
- Completed 35 and 45 mile Ten Tors annual challenge (Dartmoor) as team navigator.
- Previous Scout leader, trained in basic first aid, navigation and camping.
- Attended the world scout jamboree in Japan.
- Multiday hike in Indonesian over volcanoes Bromo and Rinjani.
- Multiday hike in Myanmar from Kalaw to Inle lake.
- Many day hikes in the UK, Italy and California.
- Competent skier, kayaker, scuba-diver and wild camper.



## 2.5 Sebastian Pipins

**Role: Wilderness Skills Lead***Age at time of expedition: 25*

## Academic Background:

- BA in Biological Sciences, University of Oxford.
- MRes in Ecology, Evolution and Conservation Research, Imperial College London.
- Currently: Second year PhD, Department of Life Sciences, Imperial College and Royal Botanic Gardens, Kew, researching methods for integrating phylogenetics and extinction risk data into conservation prioritisations for flowering plants.



## Experience:

- Extensive hiking including across the Himalayas, the Andes, and the Alps.
- Trails completed include the 10-day Everest Base Camp hike and the 4-day inca trail to Machu Picchu.
- Summited Kala Patthar (5,645m) in the Nepali Himalayas.
- One-month of field work in the Peruvian Amazon.
- One-month of manual labour on a farm in Croatia, living in tent.
- Completed plant identification field work in Tenerife.
- Wild camped 20+ times across England and Wales.
- Team navigator on Gold Duke of Edinburgh expedition.
- Avid half-marathon runner, cyclist, and former gymnast.

## 3 Training

### 3.1 First Aid Training

In preparation for our upcoming trip, and with a strong desire to either brush up on or master the skills of wilderness first aid, we enrolled in the Imperial College Fieldwork First Aid course. This course encompassed two main components: an extensive eLearning phase that we completed before the hands-on Practical Skills session held on May 23, 2023.



During the eLearning phase, we focused on grasping the fundamental principles of first aid, particularly how they apply in outdoor settings. It provided a solid foundation, helping us better understand how to respond to various situations in the wild.

The Practical Skills session was the highlight of the course. Under the guidance of our experienced instructor, we learned how to handle different injuries, ranging from minor issues like sprained ankles to more severe conditions such as burns and fractured femurs. This practical experience not only reinforced our theoretical knowledge but also instilled in us a strong sense of responsibility for our own and others' well-being in the wilderness.

One key takeaway from this experience is that mastering wilderness first aid isn't just about acquiring knowledge; it's about continuous practice and vigilance. The dynamic nature of outdoor environments necessitates ongoing skill refinement and the constant updating of our first aid expertise. This course wasn't just an educational endeavor; it was a transformative experience that underscored the importance of preparation, readiness, and a commitment to safety when venturing into the wilderness.

### 3.2 The Seven Sister's Walk (Seaford to Eastbourne)

To hone our first aid skills and ensure the suitability of our gear for the impending trail adventure in Finland, we embarked on a one-day hike from Seaford to Eastbourne.

Our selection of this particular route was deliberate, as it presented a balanced challenge: a trail that demanded relatively straightforward navigation skills yet featured multiple elevations to negotiate. During the trek, we carried our backpacks to assess our resilience and ensure that our selected footwear was appropriate for the forthcoming expedition. We also took the opportunity to experience swimming in the Channel as part of our preparation for the chilly rivers and lakes in Finland.



Figure 4: The Seven Sisters Walk

As the day's hike concluded, we seized the opportunity to practice our camping abilities by setting up camp for a single night in Seaford. This practical exercise shed light on a few nuances of our equipment. Notably, we discovered that our tent, while not the simplest to assemble, was manageable with teamwork and practice. This revelation turned out to be a blessing, as it was far better to tackle this challenge in Seaford than to grapple with it in the midst of our actual trek in Finland.

In addition, during our camping trial, we practiced efficient use of our water filter and tested methods to hang our food supplies securely overnight, safeguarding them from the attention of bears and curious mice. This practical experience bolstered our preparedness, ensuring we were thoroughly equipped and knowledgeable for the upcoming Finnish trail expedition.

## 4 Linnean Society of London

Ahead of our trip to Lapland, which was inspired by a similar trip taken by Carl Linnaeus in 1732, we arranged a trip to the Linnean Society of London. Assisted by Dr Isabelle Charmantier, Head of Collections at the Society, we were able to see two of the fundamental texts relating to Linnaeus' trip. The first is *Flora Lapponica*, an account of the flora encountered by Linnaeus on his expedition. This seminal work, which was soon after displayed at Tate Modern, contained beautiful depictions of the flora Linnaeus' encountered and anecdotes from his travels.



Figure 5: Frontispiece of *Flora Lapponica*

The second item in the collection was the Linnaeus' diary, known as *Iter Lappnicum*, directly translated as 'A Laplandic journey'. This diary was a detailed description of his journey through Lapland and describes - although not always in a positive or respectful way - the endless support he received from the local Sámi people, without which his trip would have not been a success.



Figure 6: A Twinflower (*Linnaea borealis*) specimen collected by Carl Linnaeus himself during his expedition

Alongside visiting the collection at the Linnean Society, we also met at Imperial College with two academics, Professors Elena Isayev and Staffan Müller-Wille. Elena and Staffan are historians of science and ancient history, respectively, who are producing a new, annotated version of *Iter Lapponicum*. This meeting was really helpful in framing Linnaeus' journey in a more modern context, for example understanding the problematic way Linnaeus' engaged with the local Sámi and the environment, whilst also showing us how the local knowledge permeated throughout the works we saw at the Linnean Society. This meeting was also useful in helping us plan our journey, for example by giving us advice on using the cabins on the trail and even how to avoid the mosquitoes...

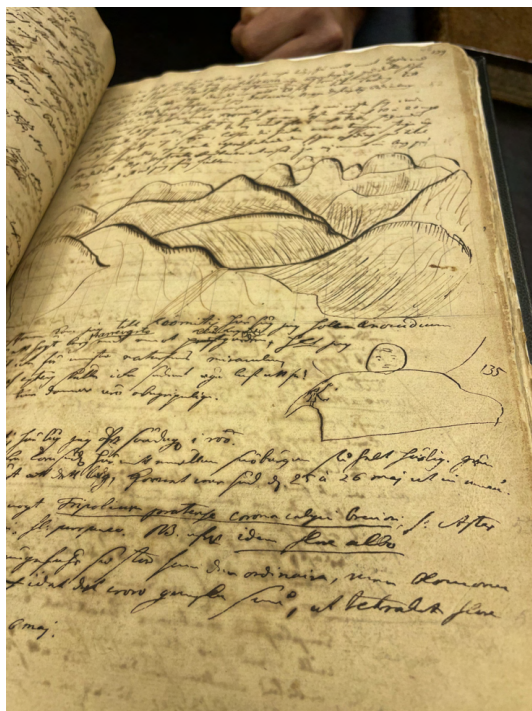


Figure 7: Linnaeus' sketch of the hills of Lapland



Figure 8: The team in the high security vault at the Linnean Society

## 5 Expedition Diary

### Day 1 (5th June)

Having just arrived in Helsinki, we eagerly embarked on our exploration of the city, our excitement and determination fueled by the morning's dose of coffee. Helsinki was a fascinating place, and we

were determined to make the most of our time there while also putting the finishing touches on our preparations for the impending expedition.

Our day of exploration began at the majestic Cathedral, where we marveled at its grandeur and intricate architecture. From there, we wandered through the city, eventually finding ourselves at the bustling market square, where the sights and sounds of local life captivated us. A particular highlight of our urban adventure was our visit to the Helsinki Central Library Oodi, a true architectural marvel that left us in awe of its design and purpose.

Our next stop was the remarkable Temppeliaukio Church, a unique and captivating structure carved directly into the rock. It was a testament to human creativity and innovation, and we couldn't help but admire the ingenuity behind such an architectural feat. Anna was so taken aback by its grandeur and serenity that she framed her experience as almost spiritual. Whilst Theo, Becky, and Jacob were unwilling to pay the small entrance, Seb joined Anna and wholeheartedly concurred.

As the day progressed, we ventured to a local market to procure provisions for our evening meal. With our groceries in tow, we decided to have a picnic in a nearby park, savoring the fresh air and the tranquil surroundings. It was during this moment that the impact of Helsinki's late-setting sun became apparent to us. The clock struck 10:30 pm, and the city was still bathed in the glow of daylight, a phenomenon we had yet to grow accustomed to. Despite the unusual brightness, we attempted to settle in for a good night's rest, all the while eagerly anticipating the adventures that awaited us on the rest of our journey.

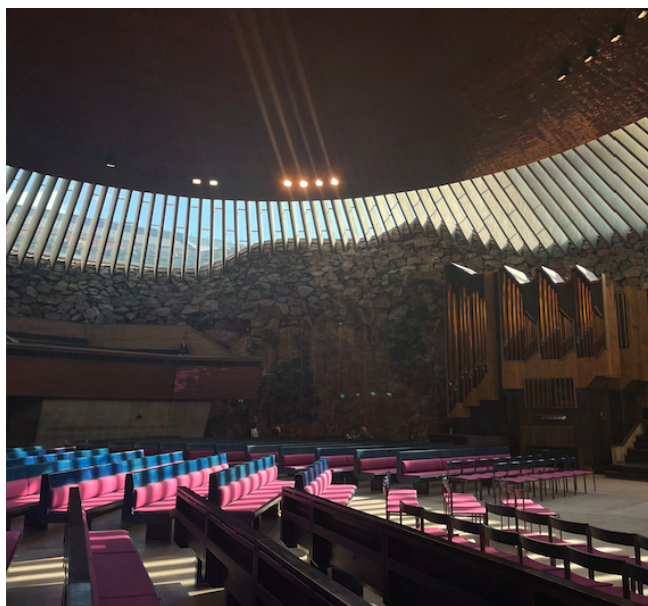


Figure 9: Temppeliaukio Church

## Day 2 (6th June)

We rose steadily after a disappointingly restless sleep. The light shining through the hostel's shutters had dimmed for a questionable number of minutes before it had flooded the room again with an even greater zeal. It was as though night had been snatched from us: dusk faded into dawn and day stole the early hours of the morning. Our trip would come to be characterised by this lack of darkness. On balance, it was a magical experience, but on this first morning it was disorienting and dubiously welcome.

Motivated by the thought of caffeine, we drifted out to the streets and collected ourselves over breakfast. Today marked our only full day in Helsinki and we were determined to fit a lot in. We

still had a few bits of camping equipment left to sort, so we headed to the shops. On impulse, Jacob and Seb picked up a disc-golf frisbee, thinking it might provide some light entertainment on the trek. What we didn't expect was the amount of air-time that the frisbee would soon receive.



Figure 10: The team outside the Finnish Museum of Natural History

Next on the agenda was a trip to the Finnish Museum of Natural History. We arrived shortly after its opening, took a group picture to mark the occasion, and entered. The standard playbook of a natural history collection is to present three dimensional freeze frames of individuals, stood in isolation from one another: a panda in a lone glass box or a collection of turtles posing languidly by signage. The Finnish Museum took a different approach. They elected to capture nature's rarely seen bursts of behaviour and the signature exploits of species interacting with each other. It made for a refreshingly buoyant experience as we meandered up and through the three floors of the building. The imagination didn't have to run far to feel the terror of a grey seal pup bending inches away from a polar bear's reach or to hear the shrieking din of guillemots and puffins nesting on dung-drenched pinnacles out at sea. Each scene was described with a block of Finnish text. There was no English translation. It didn't matter one bit.



Figure 11: It's unclear whether Jacob realised the polar bear wasn't alive...

After we had successfully inspected the entirety of the museum's contents, we headed back into Helsinki and out to the the Kaisaniemi Botanic Garden, stopping for lunch by the river on our way over. The city was surprisingly quiet. Given such an opulent amalgam of buildings, we expected to see an equally extravagant populace ambling about in droves. But most of the backroads were empty and even the main roads were scarcely inhabited. It felt like we had the city to ourselves. Eventually, we turned a corner, and behind some railing a green expanse opened up. We had arrived at the Gardens.

"Rubiaceae!" squealed Theo, running over to a plant in the coffee family (his focal group of research). Elsewhere, Seb was struggling to recite the history of the *Wollemia* pine's rediscovery as he looked admiringly at a rather shabby Australian tree. As the pair of biologists continued to exchange facts and squabble over nomenclature, the rest of the party took in the floral displays and purred their approval. There was much to behold: the tranquility of the lily pond, the draping of the vines, the lush congregations of palms. There were characters brought from all over. Carnivorous *Sarracenia* from the New World, ancient and mysterious Namibian *Welwitschia*, delicate purple *Wahlenbergia* from remote stretches of New Zealand. We read that, all-in-all, the collection was home to some 800 species. Whilst we were aware that the botanical richness of the boreal forest that were were heading for was comparatively more restricted, the Botanic Gardens certainly roused our anticipation for immersion. We departed, renewed with a fresh excitement for the adventure ahead.



Figure 12: The team at Kaisaniemi Botanic Garden



Figure 13: Another shot of the garden

The final stop on our itinerary for the day was also the most early anticipated. Finland is the ancestral home to the European sauna. We therefore felt it was only right and proper that we paid our respects to this ancient tradition. The standard treatment sees a two hour session subdivided into periods of heating and cooling off. After a quick introduction to the facilities, we de-robed and scurried off to the first sauna room, where we were immediately consumed by hot, humid air. Within a minute, beads of sweats had began racing across our skin. The conversation fell quiet, our thoughts set on endurance. We managed ten minutes, before exiting in search of refreshment. The plunge bucket sufficed. On our next round, after bearing another ten minutes, we left and noted the stairs to our right, descending out to sea. We looked at each other, grinning, knowing. Then, collectively, we ran down the stairs, to the tip of the platform, overlooking the cold coastal waters of Helsinki, and - three-two-one, we were in! Gasping and howling, splashing, swimming, flailing, beaming. The water was liquid ice and it took seconds before the lingering veil of heat from the sauna had been stripped away and the cold firmly announced itself. With sudden haste, we fled the water, darting back to the sauna and to the comfort of the heat. We repeated this cycle three times and, by the end, we knew new levels of bliss and had new heights of admiration for this most coveted of Finnish customs.

### Day 3 (7th June)

On our last day in Helsinki, after a restful night following our relaxing time in the sauna, our group collectively decided to dedicate the day to exploring the islands just off the Helsinki port. These islands, collectively known as Suomenlinna Sveaborg, held a historical military base with enduring battlements, an informative museum, and a multitude of intriguing bunkers.

We reveled in the glorious, sun-soaked day as we merrily wandered through this UNESCO World Heritage site. Originally constructed as a sea fortress in the 18th century, it served as a military base, moreover its unique dual name, with "Suomenlinna" in Finnish and "Sveaborg" in Swedish, apparently reflects the historical influence of both Finland and Sweden.





Figure 14: Suomenlinna/Sveaborg



Figure 15: Seb in Suomenlinna/Sveaborg

As the afternoon drew closer we noted that it was time to get to the airport for our internal flight to Kuusamo. Overall, our flight to Kuusamo was uneventful and smooth, affording us the opportunity to savor the distinctive offerings of Finnair, including a sweet grape beverage – although Jacob missed out on this delight as he succumbed to slumber. Upon arriving in Kuusamo, a shuttle bus awaited us to transport us to Ruka, and from there, a brief 30-minute taxi ride led us to our Airbnb. Due to Ruka’s high latitude and its customary use as a ski resort, our Airbnb boasted the added luxury of a home sauna. Here, we indulged in yet another evening of relaxation and enjoyed an early night,

bathed in the perpetual daylight, in preparation for the start of our hiking adventure.



Figure 16: A Karelian pasty, a traditional Finnish snack, enjoyed on Suomenlinna

#### Day 4 (8th June)

This marked the beginning of our exciting adventure in Lapland, as we set out from the pristine beauty of Hautajärvi, near the northern entrance to Oulanka National Park. The day began with an early rise, and we hopped into a taxi that would take us to the head of the trail.

Upon arrival, we were greeted by a friendly local working at the visitor center who reassured us that bears were not a concern in this area. We were also delighted to learn that we had timed our journey just right, as we had managed to avoid the notorious mosquito season by a mere week. With this newfound confidence, we fueled up with some last-minute snacks and, of course, took the obligatory team photo.



Figure 17: Team photo at the trail head in Hautajärvi

Our adventure officially commenced as we entered a coniferous forest and traversed through wetland areas. To our relief, there were well-placed planks that made navigating the damp terrain much easier. It wasn't long before we encountered our first rope bridge, a novelty that excited us all at that stage of the hike. Although the novelty would fade over time, the beauty of these bridges never ceased to amaze us.

Before we entered the national park, the landscape was marked by pine monoculture plantations, a stark contrast to the natural surroundings. It led us to reflect on how much this land might have changed since Linneaus' expedition and the arrival of non-indigenous people.

Undeterred, we pressed on, eventually taking a delightful lunch break by the river Savinajoki. During this pause, each of us explored our creative outlets, with varying levels of success. We then resumed our journey, noticing the changing biodiversity as we ventured deeper into the national park.



Figure 18: Creative lunch break near the Savinajoki river

It was in the heart of the national park that something truly magical happened – we stumbled upon the Venus Slipper Orchid (*Calypso bulbosa*). This discovery elicited screams of excitement from our resident botanists, Seb and Theo. In fact, the enchanting beauty of this flower left such an impression that, upon our return from the trip, Theo and Jacob decided to commemorate the occasion with tattoos of this species.



Figure 19: Venus Slipper Orchid (*Calypso bulbosa*) and Theo



Figure 20: Theo and Seb admiring the *Calypso bulbosa* with a hand lens

After photographing the orchid, we continued on to our first campsite (Savilampi), a picturesque spot nestled by the river. Here, we took advantage of the available log cabins and set up a cozy campfire. Some of us struggled a bit with wood chopping, but our hunger from a day of trekking made dinner taste all the more satisfying. It was around this campfire that we chatted with other hikers, including the German philosopher Lucas, who we would continue to bump into as we simultaneously hiked the trail.



Figure 21: Jacob's sketch of our first campfire

We wrapped up the day by hiking to a viewpoint, where we marveled at the distance we had covered. The scenery was breathtaking, and it filled us with a sense of accomplishment. As we settled into our sleeping bags inside the cabin, we couldn't help but feel fortunate to be on this incredible journey, discovering the wonders of nature in Oulanka. Even the mouse that crawled onto Anna during the night didn't deter our spirit... at least not the rest of the team's!

*The lore of Finnish bogs*

In Finland's great green garish bogs  
 Lie silver coins and frozen frogs,  
 Guarded by goblins and grumpy gnomes  
 Who see the swamps as their treasured tombs.  
 They haunt the woods in wait of rambles,  
 Who try their luck like marshy gamblers  
 And sift through soil for their golden spoil  
 Only to be foiled by the goblin's toil.  
 And when a trinket a walker sneaks  
 The goblins smirk with rosy cheeks -  
 For what gems are plucked from Finnish mires  
 Turn to stone and to dust retire.

*Sebastian Pipins 8/6/23*

We also decided to log our personal highlights (peaks) and low-points (pits) of each day on the hiking, along with an epitomising word or phrase (poignant word).

Peaks

- Jacob - sighting the Siberian Jay
- Anna - couscous tasted delectable
- Becky - Seeing Seb and Theo's orchid mania
- Theo - Axing fire wood
- Seb - Seeing the lady slipper orchid

Pits

- Jacob - waking up was a chore
- Anna - weather was drab and drizzly
- Becky - twinging her knee
- Theo - Axing firewood mishap
- Seb - the occasional biting cold moment

Poignant word

- Jacob - blessed
- Anna - peaceful
- Becky - flowing
- Theo - exposure
- Seb - verdant



Figure 22: Becky's sketch of the route of Day 4

### Day 5 (9th June)

We set off early, fuelled on flavourless porridge. The morning was crisp and grey and we noticed the clouds overhead dispersing as we settled into our stride. The previous day's walking had left us more aware of the weight we were carrying and we were keen to get some miles under our belt.

We followed the trail's bends and wiggles and chatted fondly of the spruce cocooning us on all sides. After some four hours of break-free rambling, we arrived at our lunch spot for the day, the Oulanka National Park tourist centre. It was a Mecca for hikers, stacked with shelves of energy bars and gear and all shapes of plasters. This was a relief for Theo, whose feet were blistering at rates that far exceeded our limited supply. Most welcomed was the cooked food: veggie burgers, chips, and reindeer (for the more intrepid among us). As we ate, Jacob lamented his missing shawl. We figured it must have come loose somewhere back on the trail and we reassured him that it might turn up. Not long after, Lucas arrived, shawl in hand.



Figure 23: A happy Becky enjoying the trail

Feeling sated after our mammoth lunches, we trekked on. The towering pines stood defiant, casting mosaics of dappled light on the needle-matted forest floor. With each passing rope bridge, we stopped to peer down into the surging river below and giggled our excitement. Just days before we were sat in offices and libraries, facing back pain and mental fatigue. Here on the trail, we felt renewed. Despite the physical strain and the relentlessness of the path, we were uplifted, and we brimmed with each conversation and joyful shared moment.





Figure 24: A sign detailing Linnaeus' Twinflower (*Linnaea borealis*), which we unfortunately missed the flowering of

Late into the evening, after a full day of walking, we arrived at the new campsite, which we all agreed was delightfully scenic: the river's edge flattened to a beach and overlooked an island of coniferous trees on the other side. We then busied ourselves with the tasks of fire-making and water-filtration before easing into our creative outlets. Seb and Theo couldn't resist another game of frisbee and came crushingly close to 100 successful throws, but for Seb's lapsed concentration. Theo was not impressed.



Figure 25: One of many frisbee games on the shore

Before turning in for the night, we decided to wander up to a nearby viewpoint. We waited for twilight, the darkest point of the day, and, as it came and went, we saw the light stay in abundance. Being this far north in the arctic circle, the July sun dips below the horizon for a matter of minutes before its morning rise. Our trip was only days away from the time of year when it wouldn't cross the horizon at all. That we'd miss that season was of no concern to us. We had seen the midnight sun.



Figure 26: The sun begins to "set"

As we ambled down to camp, spellbound and speechless, Anna elected for a night in the tent, not wanting another mouse-ridden sleep. Theo gave her company, whilst Jacob, Seb, and Becky were happy to find space in a fire-warmed cabin.



Figure 27: Becky's sketch of the route of Day 5

Peaks

- Jacob - Lucas returning the sarong
- Anna - “the English language is descriptive not prescriptive” - Theo. And the delicious Reindeer burger
- Becky - being sat around the camp beach
- Theo - sending a post card
- Seb - veggie burger and chips for lunch / realising Theo is a common British seagull at heart

#### Pits

- Jacob - not having a canoe
- Anna - night time visit from the mouse, struggled to recover from lack of sleep
- Becky - leg spasming on the morning walk
- Theo - being referred to as a common British seagull
- Seb - an anticlimactic greeting from fellow campers

#### Poignant word

- Jacob - majestic/bully
- Anna - densely sparse
- Becky - meandering
- Theo - serene
- Seb - pine

### Day 6 (10th June)

We began the morning with the usual struggle to shake off last night’s fatigue and embraced the excitement of another day’s adventure. Although this day promised a slightly longer stretch, we felt well-prepared after replenishing ourselves with yesterday’s nourishing lunch. While our campsite at the previous night was one of the most stunning, situated on a meandered beach facing an even more picturesque shore on the opposite bank, the breakfast we had that morning lacked the same allure. Forgetting to pack sugar or salt for the porridge, we attempted to infuse some flavor into our necessary sustenance by combining it with baked beans. Regrettably, this experimental fusion was not met with enthusiasm from the group, and only a few of us dared to sample the concoction. Truthfully, it wasn’t as bad as we anticipated, but next time, we’ll be sure to pack the essentials.

This day began with a fast-paced walk through the coniferous woodland, as we knew we were approaching halfway. Throughout the expedition, various games kept our company. The majority were cheerful encounters but for one particularly notorious spell of 20 questions. On this occasion, we had to call the activity off altogether, reaching an impasse as to whether Bilbo Baggins qualified as a concept and the degree to which tiredness was a tangible phenomenon. We then tried silence, finding it a much less contentious game to play.

Before we knew it, we were halfway! The trail had signposts every 1km, which was a great way to keep track of our progress, even though we didn’t always believe the signs when the distances between

them felt like much more than 1km... Fortunately, a couple reached the halfway point - going in the opposite direction - at the same time, allowing us a perfect photo opportunity!



Figure 28: Halfway!



Figure 29: Just around the river bend

The rest of day's trek followed the breathtaking meander of the river as it carved its way through the landscape. This was a particularly tough day of walking that required us to go up and down a number of steep climbs. This was followed by a rather treacherous path that ran along the bank of a fast-flowing river. Upon reaching our camp for the night, we were thoroughly exhausted from the day's hike. Sadly, the campsite we planned upon was besides a stagnant lake, and we were besieged by a swarm of mosquitoes. Moreover, the nearest source of fresh water lay further upstream. Despite our exhaustion, we collectively decided to refuel, take a brief rest, and continue on to the next camp which, a mere 3km away, we knew hoped wouldn't pose much of a challenge.



Figure 30: Jacob's drawing



Figure 31: Becky's drawing



Figure 32: The river section sketched by Jacob and Becky above

Arriving at the second camp was a moment of both exhaustion and exhilaration. Facing us was a massive waterfall and pool, surrounded by nature's lush greenery. Wooden steps led down to a tranquil pool, while just a short distance away, an immense waterfall created a torrent of water cascading from the ledge above before flowing downstream. However, the pool itself seemed almost still, contrasting with the turbulent natural beauty that surrounded us.



Figure 33: Anna and the river Kitkajoki



Figure 34: The river Kitkajoki

As had become routine, we deliberated on sleeping arrangements, since the cabin was not spacious enough for all of us. Two of us slept in the cabin, while the rest set up a fire and a tent. With the water's gentle flow no longer providing a breeding ground for mosquitoes, everyone slept peacefully, serenaded by the soothing sounds of the river and the eternal glow of the dawn light shimmering on its glossy surface.



Figure 35: Becky's sketch of the route of Day 6

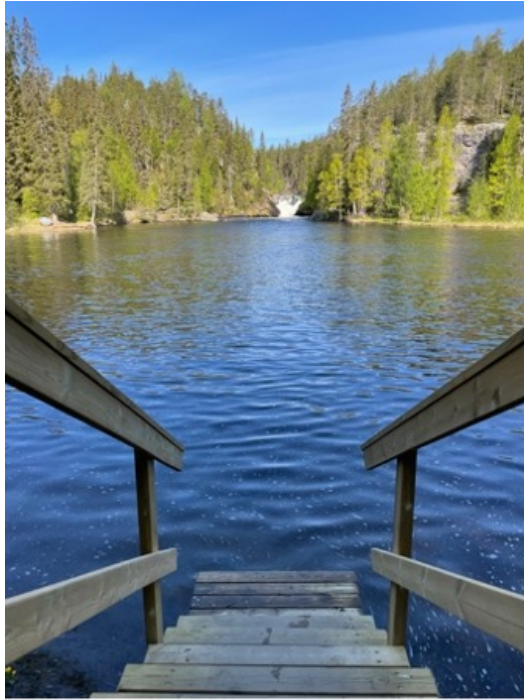


Figure 36: Campsite number three

#### Peaks

- Jacob - nude morning wash
- Anna - lunch time lake swim
- Becky - meandering boardwalks through the trees in the morning
- Theo - connecting with nature in a deep way in the evening
- Seb - the carousel of games played along the way (name the country, 20 Qs, etc.)

#### Pits

- Jacob - realising that the first camp site lacked beauty and basic amenities and needing to push on
- Anna - stubborn leaf litter hanging on to microfibre towel
- Becky - the afternoon's arduous terrain
- Theo - huge bulbous blisters
- Seb - upsetting Theo

#### Poignant word

- Jacob - postcard-esque



- Anna - playful
- Becky - idyllic
- Theo - recreation
- Seb - endurance

## Day 7 (11th June)

This day marked a shift in our hiking adventure, as the weather became even warmer. Seb and Becky, eager to take advantage of the later start due to a shorter day of walking, kicked off the morning with a refreshing dip near the waterfall, the sun already high in the sky. The trail ahead promised an easy stroll, allowing us to savour the sunny weather.



Figure 37: Our penultimate day of walking, here across a bog

During our walk, we encountered an unexpected companion – a reindeer leisurely making its way up the trail. We followed it from a distance, appreciating the quiet beauty of the moment, trying to stay silent instead of our usual chatty stride. Soon, we reached a point where our intended path diverged from the main trail. Leaving our heavy backpacks behind, we continued towards a nearby café in Juuma, passing Myllykoski Old Mill. The café, with its friendly staff, sunny balcony, and scenic views, quickly persuaded us to stay awhile and relax. We indulged in a leisurely lunch, relishing the sun's warmth and reminiscing over our journey so far. Our break made even better by the delicious food, much enjoyed after some questionable camp food the previous night. We also, thanks to the keen eye of Jacob, managed to spot a Golden Eagle (*Aquila chrysaetos*), making the lunch even more fulfilling.



Figure 38: The Myllykoski Old Mill

Post-lunch, we retraced our steps, crossed back across the swaying suspension bridge, and retrieved our backpacks. We enjoyed a well-marked gentle path through the trees. Our destination for the day was a campsite featuring two cosy cabins perched above a river. With plenty of time on our hands, we delved into our creative pursuits, inspired by the natural surroundings. We also enjoyed the company of Siberian Jays (*Perisoreus infaustus*) and a White-throated Dipper (*Cinclus cinclus*), the latter feeding a nest of chicks underneath a nearby bridge. As the temperature had rose, the notorious mosquitoes we had been warned about started to come out but weren't too bothersome.



Figure 39: Becky's sketch of the last hut



Figure 40: The team on one of the many rope bridges



Figure 41: A low quality photo Theo took of the dipper through his binoculars

As night fell, we gathered in one cabin, our final night's shelter. The day's warmth lingered and a badly managed fire made the night surprisingly hot. Despite this, we enjoyed chatting about our shared experiences of the trail, thinking of our highs and lows so far. The river below provided a soothing soundtrack, lulling us into a peaceful sleep. To some of our horror, a few mice joined us, leading to us feeling even more cramped; however, the last night was still a great conclusion to exploring Finland's camping huts.



Figure 42: Becky's sketch of the route of Day 7

*Musings on pine*

The forests are filled  
With Finnish Scots pine  
That stretch to the day  
And smile with the shine.

Each tree is a theatre  
To a chorus of life  
With each species a note  
To the listener's delight.

Each trunk is a bristle  
And the woods are a comb  
That rake through the clouds  
Like fingers through foam.

Each needle knows company  
When it drops to the ground  
To find needles galore  
And to each one is bound.

Each cone is a lantern  
Hanging bare in the night  
And beaming in the day  
Bringing joy to each sight.

In the presence of pine  
No stroll feels bereft  
As marooned in their grove  
With friends I am left.

*Sebastian Pipins 11/6/23*

## Peaks

- Jacob - the chill vibes, highlighted by the chill vibe at the Cafe
- Anna - morning swim freshness
- Becky - reindeer ecstasy
- Theo - finding his "Anam Cara" (soul friend) at the café
- Seb - musing by the serene camp stream, connecting with nature, the dipper, the pines, the poem, and the great company

## Pits

- Jacob - walk could've been prettier, quite exposed with man made tracks
- Anna - nausea all day
- Becky - the morning steps with residual camp coldness
- Theo - blisters bulging bigger still

- Seb - body aches in the morning (the only negative)

Poignant word

- Jacob - pottering
- Anna - calm
- Becky - babbling brook
- Theo - ephemeral
- Seb - ponderous

### Day 8 (12th June)

On this final day of our trek, we embarked on a journey that would push our physical limits, testing our determination and endurance. Leaving Porontimajoki at the break of dawn, our spirits were mixed with excitement and trepidation as we anticipated the challenging terrain that awaited us.



Figure 43: The team on one of the ridge leading to Konttainen hill

The day's path wound through the rugged landscape, presenting us with the formidable Konttainen and Valtavaara Hills. With every step, the weight of our backpacks seemed to increase, and we could feel the strain in our legs and the ache in our knees intensify with every descent. The climbs were relentless, but the breathtaking views of the Finnish wilderness that unfolded before us were worth every drop of sweat and every protesting muscle.



Figure 44: A lonesome hut towards Ruka

Reaching the summit of Valtavaara was a monumental achievement. Standing at a towering 491 meters above sea level, we felt on top of the world. The azure skies above, the lush green forests below, and the pristine lakes in the distance created a scene that will forever be etched in our memories.

Lunch?

As the day came to a close, we descended to the Ruka ski resort, our bodies exhausted but our spirits soaring with the knowledge that we had conquered these mighty peaks. We indulged ourselves with a well-deserved, healthy-sized portion of chips at a local restaurant, savoring the simple pleasures of satisfying our post-hike hunger. We relived the memories from our expedition, reflecting on the highs and lows we had experienced, and eagerly anticipating the adventures that awaited us on our approaching final day.



Figure 45: That's a lot of stairs...



Figure 46: The end is nigh

After the satisfying meal, we returned to our cozy Airbnb, where the promise of a soft, welcoming bed beckoned us. It would be our first night in a proper bed in four nights, and the prospect of a deep, restful, and mouse-free sleep was incredibly enticing.

As we drifted into slumber, we couldn't help but smile, knowing that our weary bodies had earned their reprieve. Tomorrow held the promise of new adventures in Oulanka National Park, but for tonight, we would relish the comfort and relaxation that only a proper bed could provide.

Our journey had been grueling, but it was a testament to our determination and the rewards of pushing our physical and mental limits. The memories forged on this day, as well as the days that preceded it, would forever remain etched in our hearts.



Figure 47: The team celebrating the finish!



Figure 48: Becky's sketch of the route of Day 8



Overcome with finishing, we forgot to log our thoughts on this day. Well, besides Seb.

Peak

- Seb - Getting giddy with great friends

Pit

- Seb - Sunburnt nose :(

Poignant word

- Seb - bittersweet.

## Day 9 (13th June)

After a restful night in the Airbnb just outside Ruka, our post-hike spirits were high as we geared up for our much-anticipated adventure day. A small group of us ventured into Ruka, where we arranged for a taxi to transport us back to the familiar café in Juuma, the same spot we had enjoyed just two days before. This café doubled as an outdoor sports center, and our chosen activity for the day was white-water rafting.



Figure 49: The team in the appropriate white-water rafting attire

Upon our arrival, we swiftly got down to business, receiving a comprehensive safety briefing by the water's edge. Eager and a bit nervous, we paddled across the calm lake, heading towards the rush of the fast-flowing Kitkajoki. The initial rapid (Niskakoski) was a gentle Grade II rapid, giving us a chance to learn how to navigate the frothy, white water. As we continued downstream, the river

quicken, taking us past the familiar mill house nestled beside a formidable rapid (Myllykoski, a Grade III rapid). Our hearts raced as we tackled the penultimate rapid, but there was no time to catch our breath before we encountered the colossal stretch of rapids, a Grade IV rapid known as Aallokkokoski. This is the highest grade rapid that tourists can go to in Finland! Despite the fierce currents, we managed to stay in the boat, albeit drenched to the bone by the end. We then paddled to the side of the river, ensuring we didn't end up down the mighty Jyrävä, the waterfall we camped near on Day 6.



Figure 50: Aallokkokoski rapids on the Kitkajoki river

After heading back to the café, we indulged in another satisfying lunch, finally treating ourselves to the long-awaited ice cream. Returning to Ruka, we explored the semi-deserted ski town until we stumbled upon a chair lift leading to the top of tobogganing run. The run ran down the side of a steep ski slope, allowing a long and steep run down the hill. Excitement bubbled up within us, and without hesitation, we seized the opportunity. With a few minor tumbles and no major mishaps, we completed our adventure day with big smiles.



Figure 51: Nice to take the weight off our feet!



Figure 52: The tobogganing ride

As the day drew to a close, we headed back to our Airbnb, where we prepared and savoured yet another home-cooked meal. The evening unfolded in relaxed contentment, a perfect ending to a day filled with adrenaline, laughter, and shared triumphs.

## Day 10 (14th June)

After a fun adventure day in Ruka the night before, we had a slow morning - complete with an obligatory sauna in the accommodation - and headed back into the town to catch the bus back to Kuusamo. After indulging in some treats at the tiny airport, we caught our return flight back to Helsinki. It was in Helsinki that we returned to the same hostel that we spent our first nights in Finland in. Safe to say we had a very early night, as we were all exhausted.

## Day 11 (15th June)

With us all feeling sad to leave Finland, we had a nice early start and enjoyed a final Finnish coffee. We then headed back to Helsinki airport and took our midday flight back to London.

# 6 Finances

## 6.1 Budget

Prices for accommodation and flights are at the time of looking (beginning of February); provided we get the funding we will book these immediately so that prices do not go up.

Item	Price (£)	Quantity	Total (£)
<b>Transport</b>			
Flight: London - Helsinki (Return, checked bags)	195 pp	5	975
Flight: Helsinki - Kuusamo (Return, checked bags)	215 pp	5	1075
London airport transfer	20 pp	5	100
Helsinki airport transfer (Bus)	4 pp	5	20
Kuusamo airport to Ruka transfer (return)	20 pp	5	100

Ruka to trail head transfer (Hautajärvi)	15 pp	5	75
<b>sub-total</b>			<b>2345</b>
<b>Accommodation</b>			
Helsinki Hostel (2 nights)	45 pp per night	10	450
Ruka Hostel/Hotel (3 nights)	40 pp per night	15	600
<b>sub-total</b>			<b>1050</b>
<b>Food - Hiking provisions</b>			
Dehydrated foods, (3 meals for 6 days + snacks) <sup>1</sup>	5 pp per meal	18 x 5	450
Fresh foods (2 shops for fresh supplies)	50	2	100
<b>sub-total</b>			<b>550</b>
<b>Equipment</b>			
Map of trail	17	1	17
First Aid Kit	16	2	32
GPS	<i>From Board</i>	1	<i>Free</i>
Phone with Finnish minutes	<i>From Becky</i>	1	<i>Free</i>
Satellite Phone	<i>From Board</i>	1	<i>Free</i>
Satellite Phone Minutes	144	75mins	144
Stoves	<i>From becky</i>	1	<i>Free</i>
Fuel for stoves (per 450g canister)	15	3	45
Chlorine tablets	11	3	33
Finnish Lapland wildlife guide	26	1	26
Water Filters	<i>From the board</i>	1	<i>Free</i>
Solar battery	<i>From Board</i>	1	<i>Free</i>
<b>sub-total</b>			<b>297</b>
<b>Training</b>			
First aid course	<i>Free from Imperial</i>	5	<i>Free</i>
Training on the South Coast (travel cost)	150	1	150
Training on the South Coast (campsite cost)	20	5	100
<b>sub-total</b>			<b>250</b>
<b>Research, Activity and other</b>			
Helsinki Museum	18	5	90
Travel Insurance (Post Office)	35	5	150
White water rafting	100 pp	5	500
<b>sub-total</b>			<b>745</b>
<b>Grand Total</b>			<b>5,232</b> (1,046.40 pp)

## 6.2 Funding

We were very grateful to receive funding from the following sources:

- The Imperial College Exploration Board - £2500 (plus £149.75 for insurance)
- The Royal College of Science Association - £1000
- Old Centralians' Trust - £2000
- Royal School of Mines Association - £250

<sup>1</sup>We will be asking for discounts, though here we illustrate full prices

We would like to extend our immense gratitude for all the above organisations for their support of our trip. It wouldn't have been possible without this generosity.

## 7 Risk Assessment and Safety

P = Probability; S = Severity; R = Risk Factor

Hazard	Symptoms	Consequence	Prevention	Response	P	S	RF
<b>Hiking Related Hazards</b>							
Getting lost	NA	Running out of food/water, risk of exposure at night.	Have emergency camping equipment so if huts cannot be reached before dark, we can set up camp. At all times, carry a physical map and a GPS. Ensure all team members are familiar with map-reading and the route before the start. Agree regular check-ins with emergency contacts.	Stay as a group. Call 112 and await response. Use a satellite phone if there is no signal. Set up shelter if night is approaching and ration food/water supplies.	2	3	6
Ankle Injury	Pain and/or swelling	Inability to carry on walking	Exercise caution at all times, particularly on uneven terrain and use poles where necessary.	Stop as a group, carry out first aid and rest. If necessary, seek further medical treatment.	3	2	6
Foot problems	Pain, swelling and/or itchiness	Blisters, infections and/or unable to carry on walking	Ensure everyone has appropriate and broken-in footwear. Carry and use blister plasters before blisters fully form.	Apply blister patches or antiseptic cream based on symptom and rest. If necessary, seek further medical treatment.	3	2	6
Major trauma i.e. broken bones	Pain, inability to move	Long-term inability to walk	Exercise caution at all times, particularly on uneven terrain and use poles where necessary.	Evacuation to medical facilities to receive treatment.	1	4	4

Hazard	Symptoms	Consequence	Prevention	Response	P	S	RF
Caught in storm	N/A	Wet and increased risk of getting cold, slipping on wet terrain and hit by lightning. Risk of getting lost with difficult navigation.	<b>Weather Related Hazards</b> Check the weather forecast each morning. Do not hike if there is risk of lightning, stay in one of the shelters available along the trail. All carry waterproof clothing and sturdy waterproof boots. Refer to compass and GPS units frequently and carry spare batteries.	Take extra care whilst walking and use poles to improve stability. If lightning begins, estimate distance, and if closer than 10km, take necessary precautions. If necessary, set up camp and change out of wet clothing.	1	3	3
			Flood season is in May so we specifically planned the trip to avoid this. Check weather forecast and trail conditions leading up to departure and if severe flooding is still occurring we will postpone.	Get to higher land and get shelter and change any wet clothing.	1	5	5
Caught in flood	N/A	Wet and/or stranded on higher land					
Sunburn/sun stroke and hyperthermia	Headache, fatigue, thirst, tiredness, dizziness, high temperature	Burnt skin, confusion, loss of consciousness	Wear suitable protection i.e. hats, long-sleeve clothing and sunscreen). Remain well-hydrated. Keep observant of team members.	Rest in a shaded area. Cool down the unwell team member, using water soaked clothing and fans. Supply fluids and electrolytes. If no improvement or unconsciousness, seek medical attention.	2	4	8
			Remain hydrated and consume electrolytes. Remain aware of water supply and have a list of drinking sources.	Rest in a shaded area. Rehydrate with water and electrolytes. If symptoms do not improve, seek medical attention. Several team members will have water filters or tablets to allow us to consume freshwater in an emergency.	2	3	6
Dehydration	Thirst, headache, fatigue, dizziness, dry mouth and dark urine	Confusion and/or loss of consciousness.					

Hazard	Symptoms	Consequence	Prevention	Response	P	S	RF
Hypothermia and Exposure	Erratic or irrational behaviour, uncontrolled shivering, pale and blue extremities and low body temperature.	Cold and risk of encountering dangerous wildlife. Hypothermia and death	Staying at huts along the trail. Extensive research done along the trail to ensure that the huts used are a realistic days hike away from each other. Everyone pack sufficient spare layers that are waterproof and windproof.	If huts cannot be reached before dark, emergency tents will be set up and food supplies secured away from camp.	1	4	4
<b>Equipment Related Hazards</b>							
Stove breakage or loss of fuel	NA	Inability to cook or boil water. If fuel leaked there could be risk of fire or explosion causing regular injury.	Frequent checks of stoves and fuel bottles. Huts provide cooking equipment so stoves are only for emergencies or if hot lunches are required. Stoves to be checked before departure. Repair kit to also be packed	If injured, treat with first aid kit and if necessary seek additional medical attention.	1	3	3
Tent loss, or leakage or breakage	NA	If tent not available for emergency use then exposure may occur.	Several team members to assist with tents when being set up in emergency situations/bad weather. Carry repair kits. Tents to be checked before departure.	Repair tents. If lost, try to buy a new one. Ensure that adequate huts are available for the rest of the journey.	1	3	3
Hut fire	NA	Serious injury or death	Ensure stoves are used well away from huts. Ensure all stoves are turned off if brought inside and fuel is correctly stored.	Call 112 and await response. If possible treat any injuries with first aid kits.	1	5	5



Hazard	Symptoms	Consequence	Prevention	Response	P	S	RF
Brown bears, Moose and Wolves	NA	If attacked, serious injury or death	<b>Location Related Hazards</b> Bears: make noise whilst hiking, stay away from dead animals, cook and store food away from shelters, stay as a group. After camp is set up, blow the whistle. When setting up camp, if the huts are not available, we will position our tents in open area, away from denser trees and bushes and away from the trail which the bears may use at night. We shall also cook and store our food away from the camp in bear proof containers or in suspended bags downwind. However, if we are able to stay in the huts we will store our belongings inside. Moose: if spotted, do not approach. Wolves: do not travel in low visibility or dark conditions. If spotted, do not approach. If camping, cook and store supplies away from the camp	If injured, seek medical attention. Whilst waiting for attention, treat injuries. Set up the emergency camp to shelter injured person. Move supplies away from site. Remain as a group, making noise and keeping an eye on your surroundings.	1	5	5
Insect/tick bites	Irritation of skin, redness.	Risk of infection or spread of disease	Loose-fitting, long-sleeve clothing will be worn at all times and insect repellent will be applied to any exposed skin such as hands and neck. The team will also all wear hat nets when necessary. We will also avoid areas of long grass and stagnant water to reduce the likelihood of ticks, mosquitoes and blackflies, respectively.	Within our first aid kit we will carry proper tick removal equipment and tipped tweezers in case proper removal does go wrong. We will monitor any mosquito bites for infection, and regular disinfect any bites. If any of the team get bitten and start to get a high fever or other worrying symptoms, we shall seek medical assistance. Tents will remain zipped when we are not in them to try and keep out as many insects as possible. Due to the time of year of the trip, bites are likely and therefore we will also carry bite and sting relief cream to help with any milder symptoms.	3	3	6

Hazard	Symptoms	Consequence	Prevention	Response	P	S	RF
Canoeing or ingestion of water	NA	Drowning, death, hypothermia, sickness	<b>General Travel Hazards</b>	We will remain as a group and will be wearing life jackets.	Remain calm, keep breathing steady, one of the team in their canoe with use their throwbag to bring the person to safety. Once out of the water, change in to dry clothes and check for shock. If water has been swallowed, expel as much water as possible and monitor them for symptoms of secondary drowning. If necessary, seek further medical treatment.	3	2 6
White water rafting accident	NA	Head/back injury, drowning, death, hypothermia, cuts and trapped fingers	Wear wind/waterproof clothing and helmet/lifejacket and follow instructors guidelines	Follow instructors guidelines and treat any injuries with first aid kits. If necessary, seek further medical treatment	1	5	5
Theft and Mugging	NA	Loss of property and/or personal injury	Remain vigilant whilst in public areas, use common sense, do not keep valuables in public site and keep a card/cash separate to other monies. Buy required insurance.	Report to the police and treat injuries with group first aid kits. If necessary, seek further medical attention.	1	3	3
Physical/Verbal Abuse	NA	Personal injury	Be aware of local customs. Learn Finnish to a basic level to improve communication with locals.	Report to the police and treat injuries with group first aid kits. If necessary, seek further medical attention.	1	3	3
Car Crash	NA	Serious injury or death, loss of equipment	Use official transportation. Where driving might be necessary, only use a team member fully confident to drive in an unfamiliar environment.	Treat injuries with group first aid kits and if necessary, seek further medical attention.	1	5	5
Food Poisoning	Nausea, vomiting and/or diarrhoea	Unable to hike and dehydration	Drink clean water and ensure all water sourced from non-potable sources is purified or filtered. Exercise common sense with food.	Rest and rehydrate with water and electrolytes	2	2	4
Infectious disease, inc Covid-19	NA	Short or lasting health impacts	Remain up-to-date with Covid-19 recommendations. No vaccines required for Finland and Malaria not currently seen as a risk. Avoid contact with needles, blood or body fluids.	Thoroughly clean all wounds and monitor for infection. If necessary, seek further medical attention.	2	2	4

## 7.1 Further information: Bears

Further information regarding bear safety: Though bears are present in the region, they exist at very low densities. If noticed, remain calm, talk to the bear in low tones and slowly wave your arms, do not turn and run or make any sudden movements or noises. If the bear is stationary, move slowly away sideways, avoiding direct eye contact and leave the bear an escape route. If the bear approaches, remain tight as a group, looking as large as possible. If attacked play dead and protect the neck, remaining on your stomach until the bear leaves.

We shall take a bear container however we shall all be aware how to also hang food above ground incase we need to do so. The following video provides information on how to do this, <https://www.youtube.com/watch?v=izsczsMCf.o>. We shall practise suspending food on one of our training walks before the hike itself.

## 7.2 Emergency Procedure/Emergency incident plan

In case of any emergency use the satellite phone to call the emergency number which is 112 for mobile, for satellite phones **+3589 2355 0545** - we shall save this number on the phone beforehand and have a written version on us. The park recommends using the 112 Suomi phone app which automatically sends your coordinates to rescue services, hence we shall each install this app too. If there's a signal problem, two are to stay with the injured individual, two should go to the closest service point, there are signposts at 1 km intervals, which show the distance to the trail ending points in Hautajärvi and Ruka. The closest services and rest spots are also marked on the signpost. Whilst finding signal, those staying should refer to their first aid training (which we shall all refresh - booked 23rd May) to help at the scene.

## 8 Conclusions

It's safe to say we had an absolutely fantastic trip, one that allowed us to delve deeply into the wonders of Lapland, its people, and its rich biodiversity. By disconnecting from the distractions of the outside world and immersing ourselves in the natural beauty of the region, we not only learned about our surroundings but also gained valuable insights into our own selves and the bonds we share with one another. The physical and mental challenges of our hike pushed us to develop our resilience, leaving us with a sense of personal growth and accomplishment.

We have uploaded our observations to iNaturalist. Alongside this travel diary, we are also hoping to produce a report for the Grantham Institute/SSCP DTP newsletter, and we hope to share some of our pictures with the Linnean Society of London.



Figure 53: Seb enjoying the view

## 9 Acknowledgements

We would like to extend our gratitude to the Exploration Board for their generous donation, without which we would not have been able to embark on this transformative adventure. We would also like to thank the Old Centralians' Trust, the Royal School of Mines Association, and the Royal College of Science Association Fund for their additional contributions. Thanks also to the Linnean Society for their generosity in guiding us through their archives and to Professors Elena Isayev and Staffan Müller-Wille for their stimulating discussion. The insights gained from these experiences helped us understand the historical significance of Linnaeus generally and within the context of our own journey. Finally, we would like to thank all the wonderful people we meant along the journey for their kindness and hospitality.

## 10 Contact details

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## 11 Picture gallery













