



# NORWAY

OSLO – STJORDAL 2023



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## ABSTRACT

This report includes details on the planning and completion of a bikepacking trip in Norway from Oslo to Bergen to Trondheim. It was a solo trip which covered 1,600 km and was completed over 18 days between the 11<sup>th</sup> and 28<sup>th</sup> of June 2023.

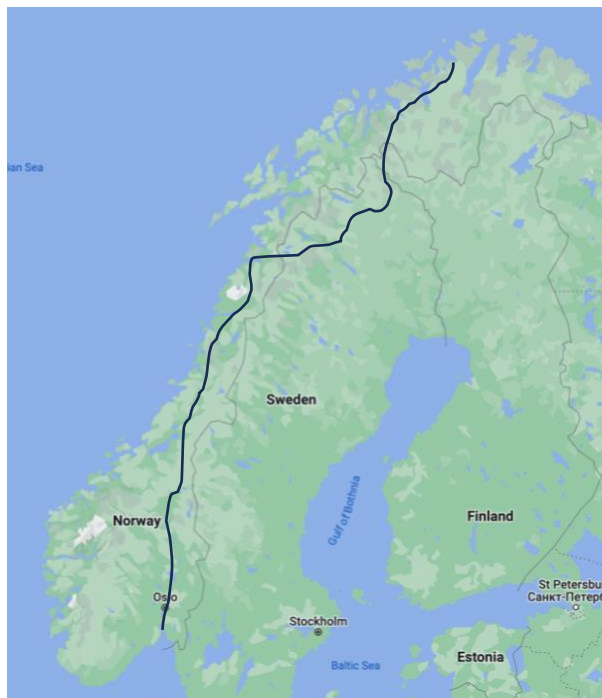
## INTRODUCTION

When I started to plan this trip, I had the aim of cycling from Oslo up to Nordkapp. Most of the route would be on road but I planned to explore gravel roads, particularly in the arctic circle and potentially in parts of Sweden. Sadly, I was unable to complete the trip I had planned however after coming up with a new route I was able to achieve the aims I had set in my plan and enjoy the time I had in Norway.

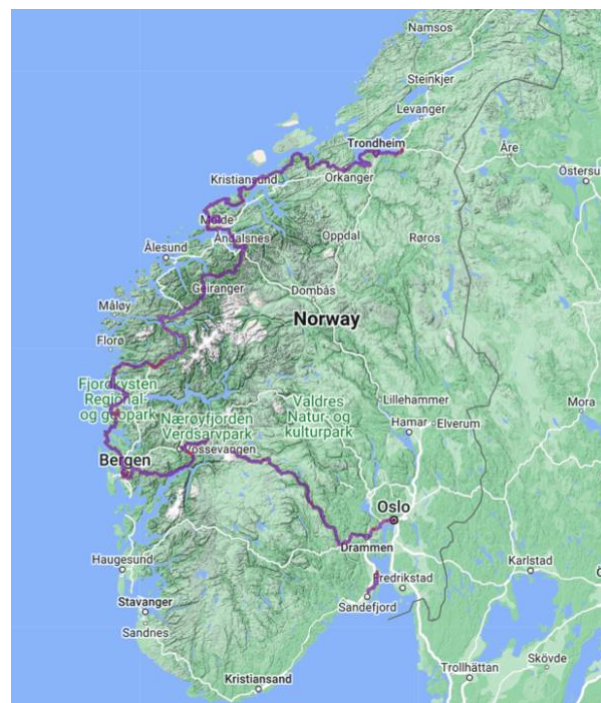
The primary focus of this trip is cycling and seeing Norway by road.

1. Improve cycling fitness and develop existing long-distance cycling ability.
2. Provide a break/ holiday for mental health
3. Inspire others, particularly young people from disadvantaged groups, to participate in cycling and outdoor activities.

The third aim will be achieved through sharing the journey on Instagram and my involvement in upCYCLE, an organisation that promotes cycling and training for young people from disadvantaged backgrounds.



Original route



Completed route

## ABOUT ME

Peter Bryan, 24, current PhD student at Imperial

### Previous Experience

2017 – Land's End to John O'Groats charity cycle ride (supported) In charge of logistics and fundraising for a 1,600-km, multi-stage charity bike ride. Successfully completed the route in 10 days raising over £6,000 for the epilepsy society.



*Mount Kerinchi summit*

### 2018 – Iceland Bikepacking (solo, unsupported)

Cycled the ring road around Iceland covering a total of 1,600 km over 13 days, all equipment including tent and sleeping equipment was carried on the bike.



*Successfully reaching John O'Groats*

### 2018 – Solo backpacking through South-East Asia

4 months spent travelling through South-East Asia and New Zealand, expeditions while travelling included a solo unsupported summit of mount Kerinchi (12,500 ft) Sumatra.



*Cycling Iceland ring road*





*Cranmere pool, Dartmoor*

### **2018 – 2021 – Hiking**

Multiple solo, 5+ night hiking expeditions in Scotland and Dartmoor.



### **2022 Bikepacking in West Africa**

Starting in September 2022 I spent 2.5 months cycling from Sierra Leone to Benin. I covered 3,200 km and crossed 6 countries. Most nights I camped in rural villages or small towns.



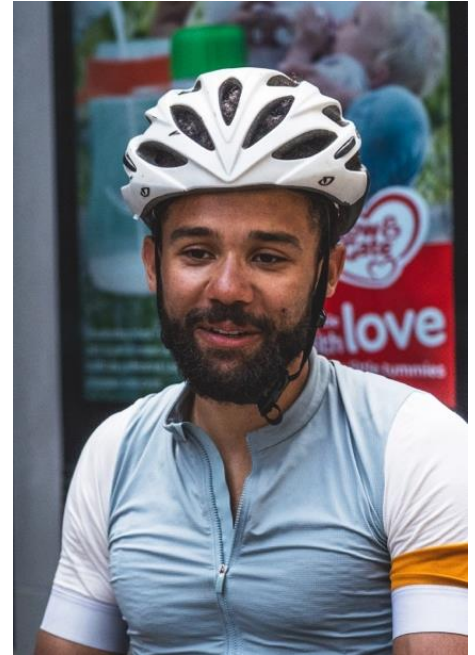
*Bikepacking West Africa*

## DIARY

The original plan for this trip was to cycle the 2,300 km from Oslo to Nordkapp however after making this plan I was invited to join a friend on the Rapha Pennine rally in the first week of June, this meant my time in Norway was reduced to less than 3 weeks. After 500km along the Pennines on gravel and road, some reoccurring knee problems started showing. This meant that when I arrived in Norway, I needed a change of route.

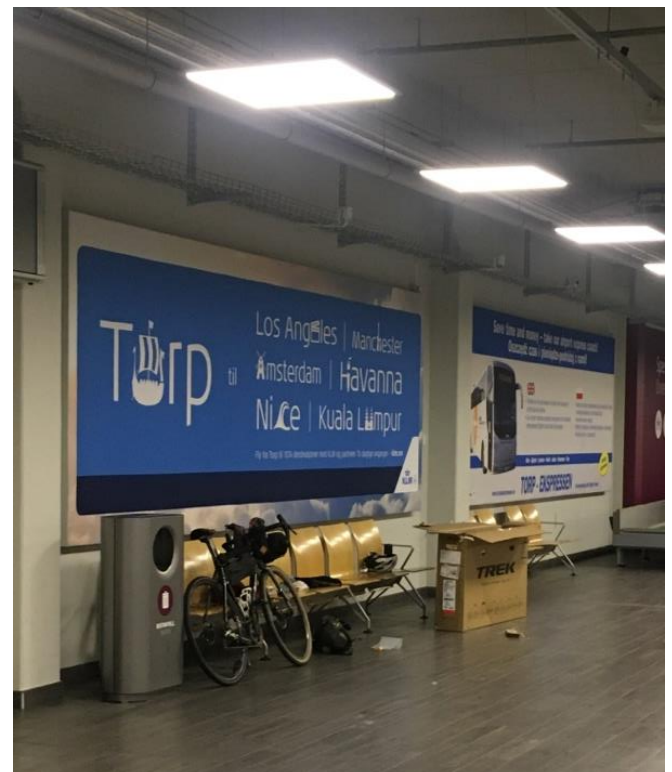


*Pennine Rally route*



*Scruffy but happy at the finish in Manchester*

After arriving and unpacking the bike at the airport I was feeling pretty down about the situation, I looked through some routes online but couldn't decide what to do and I wasn't sure if my knee could manage much riding. On top of this, while reassembling the bike I had found a crack in the seat post. I decided to head to Oslo to find a bike shop. As it was Sunday no shops were open, so I opted to cycle and camp close to a train station ready to get the train into Oslo the next day. With all the supermarkets closed I had to buy snacks in a petrol station and dinner from McDonald's. I knew Norway was expensive, but it was still an unpleasant hit to the budget and didn't help my mood. After eating I stayed to charge my phone but soon started falling asleep. Apparently 1 hour of sleep in an airport is not quite enough after 5 days hard riding! I moved outside onto a wooden bench and fell asleep in the shade of my bike.

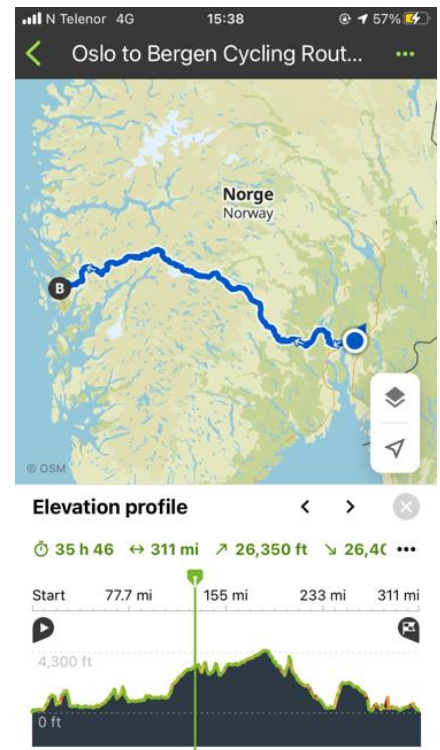
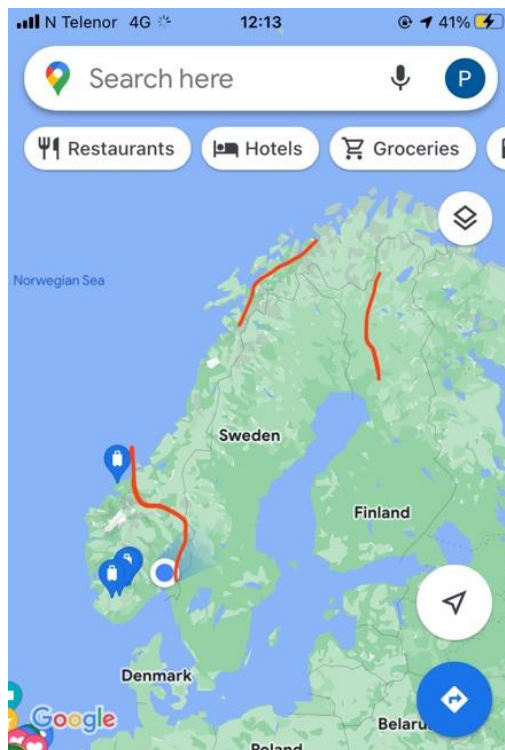




After my nap I set off to find somewhere to spend the night. In Norway “right to roam” means you can sleep anywhere (within guidelines). Cycling along the road I spotted an old empty house with flat grass around it. I turned off and leant my bike up behind the house out of view of the road. Although it was after 7 the sun was still bright so I sat and waited. With no book and too-precious-to-waste battery, there wasn’t much to do except watch cars go past, play with the ants in the grass and take in the scenery. I ate some couscous and tuna left over from the Pennine rally and after 9 set up my tent. Even though I was in the south of the country it was still bright after the sun went below the horizon, this was no match for my level of exhaustion, and I was asleep soon after laying down.



The sun was up again before 5 and a hot tent woke me up soon after. After a breakfast of cold instant porridge I cycled to a nearby shop where a stray cat came to say hi and then I continued to the station and bought a ticket to Oslo. When I arrived, I cycled to the closest bike shop to buy a new seat post. The shop actually mainly focused on selling their own adventure bikes and didn’t sell many components but I was recommended another shop. Seeing the photos on the walls of people on bike packing trips in Norway I asked for some route recommendations. The guy had several suggestions, in short, exploring the area around Oslo meant rolling hills, farmland and grassy fields, heading west or north meant mountains and spectacular views. I was tempted by rolling hills instead of mountains but the promise of adventure won and I chose a route over to Bergen on the west coast.





While we were talking another person came in, he was taking a train to Bergen before continuing cycling up to Nordkapp. After checking out his custom-built titanium bike and asking the mandatory gear questions I was about to leave when the person in the shop came back out with a seat post off an old display bike that I could have for a discounted price.

The conversations, new route and new seat post had lifted my mood and after a quick tour around Oslo I set off for Bergen. With 8,000 metres of climbing and questionable knees I estimated I would need 5 days to cover the 500 km route.

As I had set off late, I only covered 10 km that day. I had stopped to buy instant mashed potatoes and tinned tuna so after setting up my tent in a field I cooked and ate while fending off mosquitoes.



Over the next few of days I cycled through the rolling hills in the land around Oslo and Drammen before cycling along fjords and rivers and then climbing out of Rødberg onto the mountain plateau. Rolling hills were replaced by long climbs and hairpin descents.















As I was passing through Geilo, I was told that the Rallarvegen pass I had wanted to do would still be closed with snow and ice. I would have to take the road and tunnels over to Bergen. As it was coming to the end of the day I stopped by a Sandy beach for a swim and to find somewhere to sleep. While I was there a woman came out of the water after a 3km swim, we were chatting about open water swimming and bike packing trips she had been on and then she told me she had a spare room (and warm shower!) and I could stay at hers if I didn't mind sharing with the cat. While camping by the lake would have been fun, a bed and warm shower after a week and a half of camping were too good to pass.





The following day after a slow morning I set off back on the road, although I knew Rallarvegen would be closed, it is one of the most recommended routes in southern Norway, so I at least wanted to see some of it. I turned off the main road and quickly went from mountains and grass to frozen lakes, snow, and an empty gravel road. After a few hours the snow on the path was starting to increase but I could see one set of tyre marks ahead of mine. Coming through a bridge under the railway I could see a bike leaning up against some rocks, the path was blocked by a man in a digger clearing the snow. Looking around for the owner of the bike I met Harry, a guy from Leicester who was cycling from Denmark, up through Sweden and Norway and then back south. He was also heading up towards Bergen.



After the digger cleared the section of snow, we cycled past but soon hit another blocked section. We managed to walk across with the bikes and then cycled the following section of gravel. We continued like this for another 15km with the snowy sections getting longer and the gravel getting shorter. The thin (and ripped) trainers I was wearing were not ideal but despite cold toes the sun was warm, and we continued without too many issues.

We pushed and cycled until arriving at Finse, a small village with a railway station. Being a few weeks before the path really opened there was only one person around, decorating in the hotel.











After seeing the next train was in 5 hours we decided to try and push a bit further and see if we could make it to the next town. Before we had even left Finse the snow was getting much deeper and we could see dark clouds blowing in towards us. Not wanting to get stuck we chose to turn back and get a train instead. With the turquoise frozen lakes and snow-covered mountains, it wasn't the worst place to wait for a train.

The train we were waiting for kept getting delayed and over the tannoy we heard that there had been a fire on the line. By that point, even if the train had come it was too late to cycle so we chose to just spend the night in the station. We had only seen four people, one guy decorating in the hotel and three Germans on mountain bikes who had been following our tracks, they had no sleeping equipment so took a train back towards Oslo. While we were cooking dinner the person who had been decorating brought us some beers and snickers because he saw the trains were delayed.



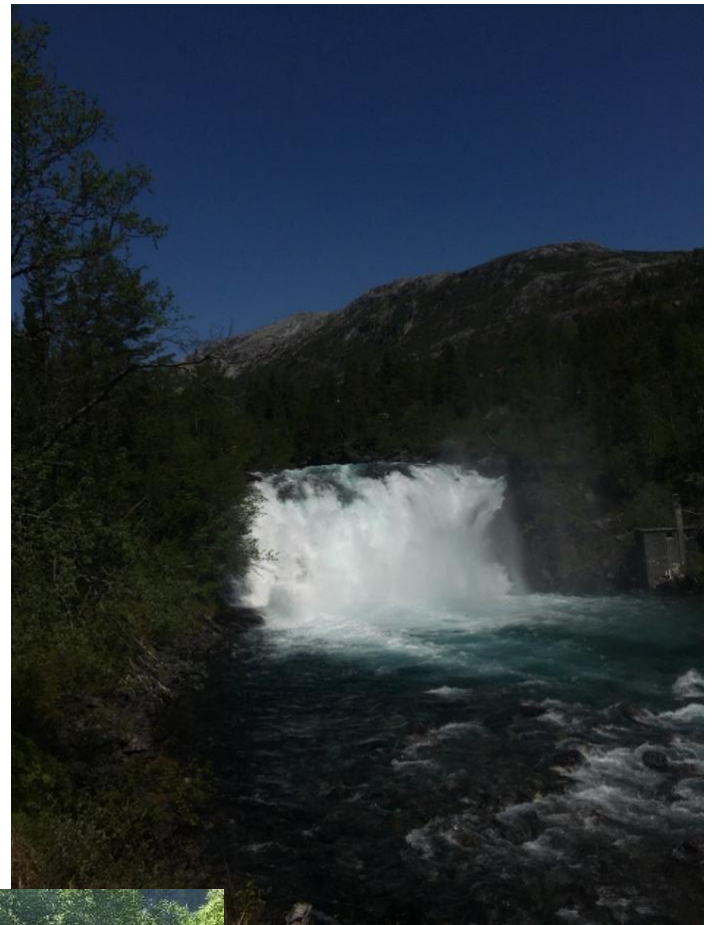
Although the waiting room was warm and dry the lights were on all night and the announcements were still going off for the night trains and freight trains. I was really tired so slept through most of it but Harry didn't get much sleep.

The next day we had to wait until 11:30 for the first train to Upsete. While we were waiting random assortments of people came into the town. There was a Scottish guy who had been riding a fixed gear bike but had to leave it in Geilo because of knee problems, a man from Germany with a 25kg bag who had come to hike on the glacier but couldn't because of too much snow, another man who had left his bike on the trail and walked across the snow to Finse. A group of women from New Zealand who were hoping to do a three day walk north out of Finse who got turned around by two Norwegian women on skis who had slept in one of the cabins. It felt like being in a child's story book!

Eventually after several delays the train arrived, and we got to Upsete. From there it was another beautiful winding road downhill to Voss. As we descended the ice thinned and the landscape became greener, we followed the train line and a bright blue river until we reached the town. We went first to the supermarket and bought food for lunch and dinner, Harry had a proper stove, so we got burgers which were a welcome change to mashed potato and pasta. When we came out my rear wheel had deflated, the sun was so hot it had melted a patch on the inner tube causing all the air to escape. After I had fixed it and Harry and been to another shop to buy gas, we continued down the road to find somewhere to swim and then sleep.



We came to a lay-by with toilets and several camper vans and met Sven and , two guys from Denmark who had also been cycling from Oslo. They were also looking for somewhere to sleep so we joined up and cycled together to find a camping spot. All of the grassy fields had no camping signs so we ended up coming back to the lay-by and putting up our tents on some grass near the road. We then cooked the burgers and after eating, cycled up the road to swim and wash in the river.



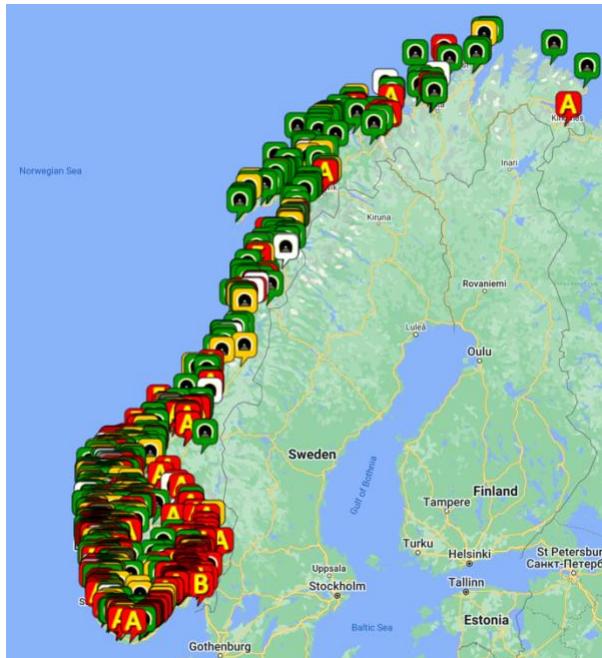
The next day a steep switchback descent led us on our way to Hardangerfjord, Harry was heading to Odda so we said goodbye at the ferry terminal and I headed on towards Bergen. After a few hours of hills alongside the fjords and rivers the road started climbing away from the water up to the first of four long uphill tunnels.











Norway is notorious for its tunnels. I had cycled in one the day before with Harry, it was over a kilometre long and the noise of passing cars echoed around and was amplified by the tunnel. Without the cars the tunnels would be fun, with the cars they are really unpleasant and make you cycle fast to get through them as quickly as possible. While there is a map showing all of the tunnels in Norway, there are so many that it is almost impossible to avoid them!

Sometimes it is possible to cycle round the tunnel on the old road but on all four of the tunnels to Bergen, these roads were blocked by fallen rocks. With lights on and wearing a brightly coloured top I set off into the first tunnel, pedalling hard I was soon through and onto the next and then the next and then the next. Coming out of the last one I was hot and sweaty but glad to be through.



The rest of the way to Bergen was a nice bike path alongside the main road, I hadn't planned to cycle the full 150 km in one day, but the call of a hot shower and some company made me push on. Also, around the outskirts of larger towns and cities there are too many houses to camp.

I spent two nights in Bergen, staying with friends of a friend. It was nice to have a day off the bike and not having to pack my bags in the morning. I spent the day amongst cruise ship passengers, looking around the museum and walking around the town. For dinner we ate scallops caught by my host that afternoon.

After a day off it was nice to be back in the bike, before leaving Bergen I took a detour to cycle through a bike tunnel. 6km of blue and red led lit tunnel with no cars was too cool to miss!



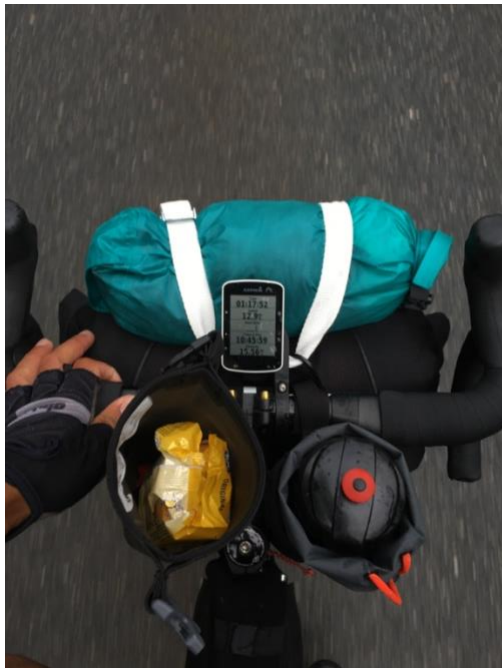
I was then headed for Trondheim, with my plane ticket home now booked I had 8 days to cover the 1,000 km with 12,000 m of climbing. My legs were feeling good after the rest and on the first day out of Bergen I only stopped after 140 km so I wouldn't be too tired the next day.

I spotted a nice patch of grass through the trees and turned off the road. The grass was longer than I had expected but it was dry and fairly flat. After walking around a bit, I found a nice spot and started moving my bags and bike across to it. As I was about to get my tent out, I noticed a small tick on my arm I brushed it off and checked my legs and found around 30 tiny ticks crawling up my legs and arms. At the same time the midges found me. I couldn't get back to the road fast enough, when I was out of the grass, I stood for a few minutes picking and scraping off every tick I could see while trying to swat away midges. It wasn't my best choice of camp spots, and I would be avoiding long grass in the future.

Two minutes down the road I found a car park surrounded by cut grass. Although there were no signs for a campsite there were also toilets and a cold shower. In that moment it felt like a 5-star hotel. I had a long shower washed my clothes and then spent another 30 minutes in my tent killing any tick I could find until no more appeared. The next morning, I picked three fat ticks off my socks, packed up and continued towards Trondheim.











Around midday I came down the hill to a ferry and met Sven and Joanna, they were from Switzerland and had been cycling for four weeks up from Hamburg. They were heading in the same direction as me so we rode together for most of the day.

Norway is really popular for cycle touring and while it can be fun to visit countries that others don't it was really nice meeting people from different places, each with different choices of equipment, pack size and way of travelling. Sven and Joanna spent as much time off the bike as on it, they carried a football, a fishing pole, and a large bag of fresh food for a cooked dinner.

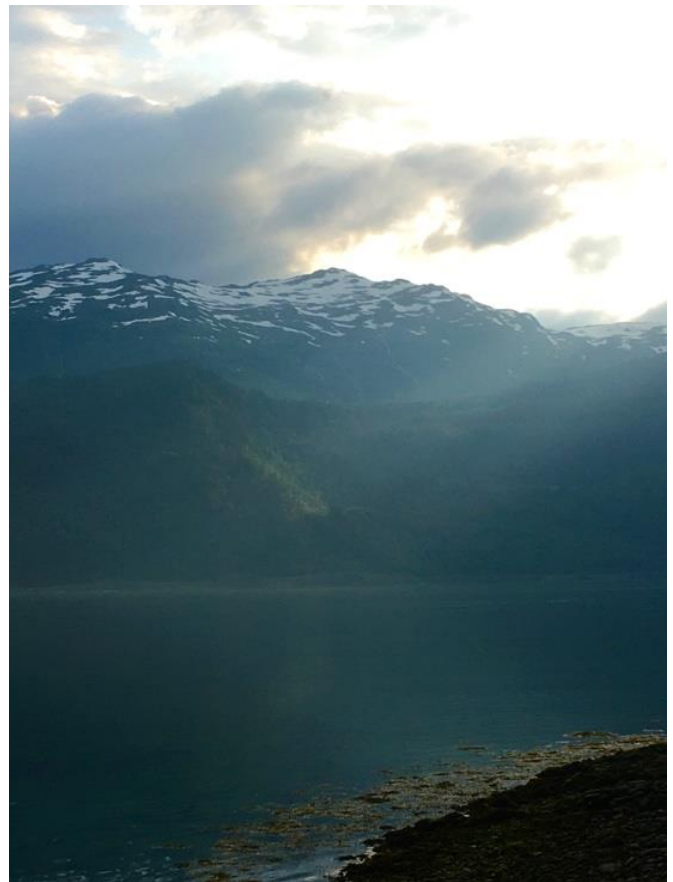
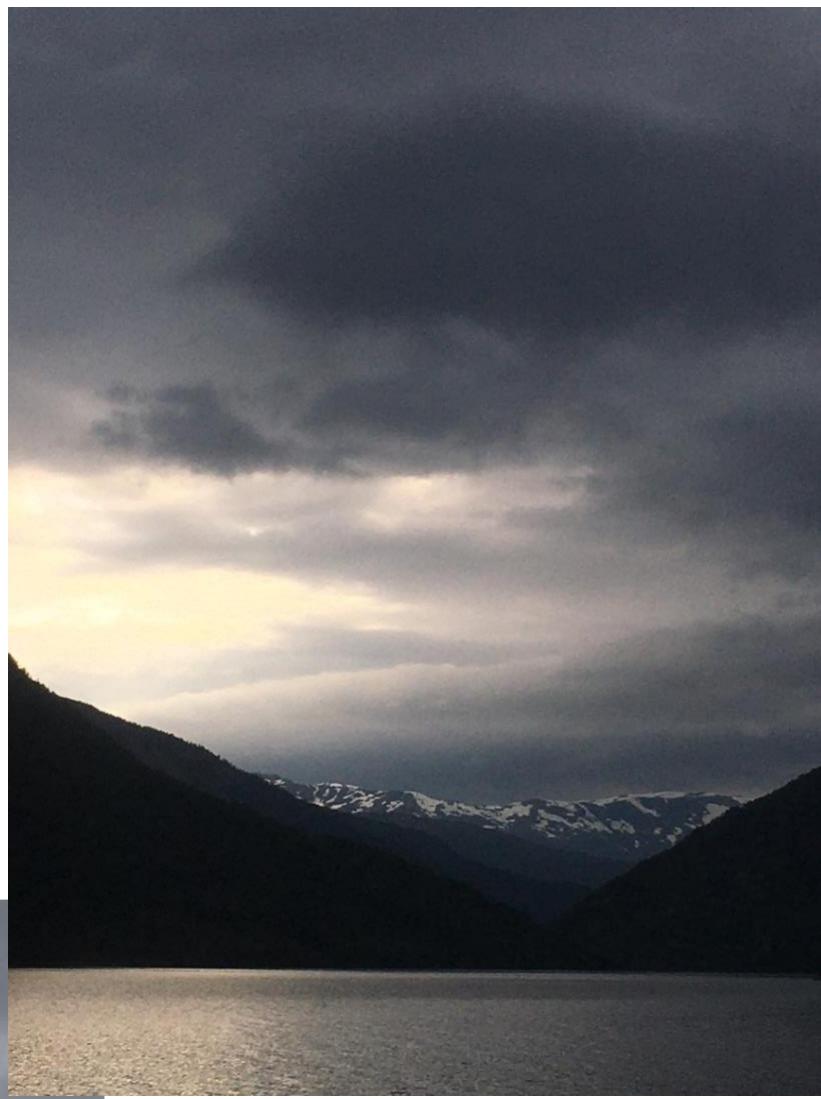
I like having smaller bags, especially going up hills but the comfort of having more space and particularly being able to cook real food did start to look quite appealing.

While we waited for the last ferry of the day Joanna caught a mackerel on her first throw. A few minutes after killing the fish and finding somewhere to wash it, Sven, having caught nothing during the trip got over the injustice and just about managed to see the funny side of it!

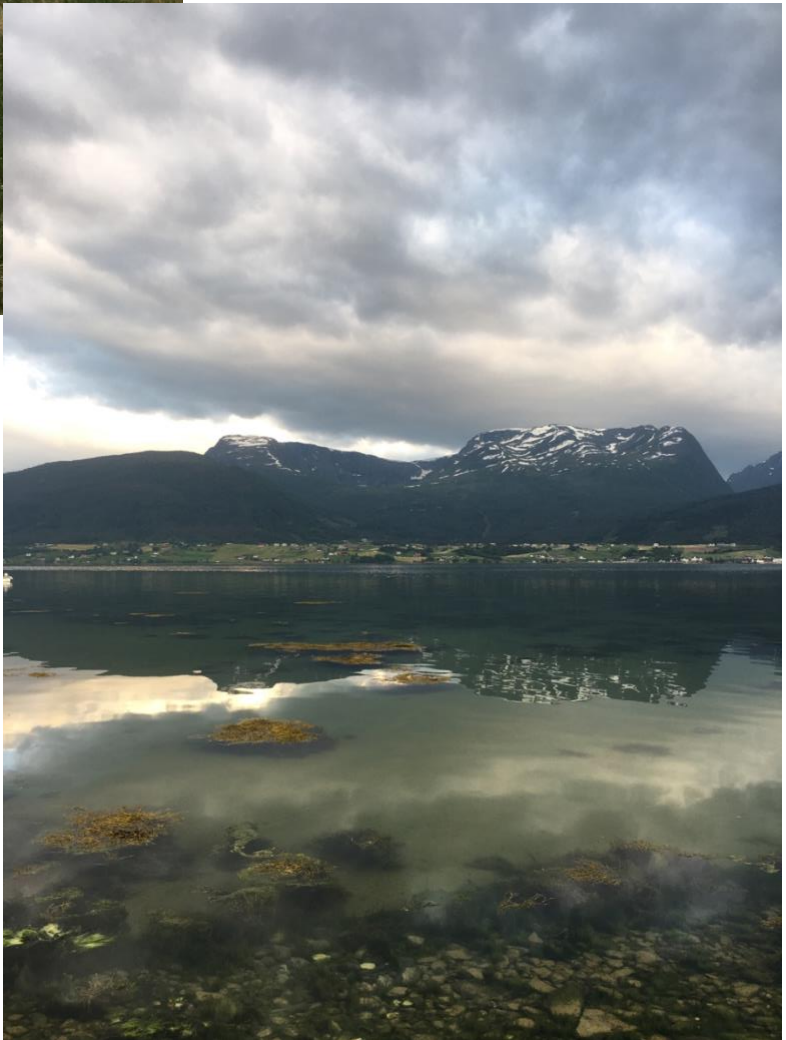


As we got off the ferry in Askvoll there was a free camping place with beach volleyball and showers. Sven and Joanna were definitely not going any further! With another 48 km to do, we shared contact information and parted ways. That evening I slept on some short grass (after a long and careful look for ticks) next to a fjord.

For the first few days out of Bergen I had been following the Atlantic route - a popular cycle touring and caravanning route that follows the coast from Oslo to Nord Kapp. However, I also wanted to cycle over Trollstigen, an 850-metre-high mountain pass with eleven hairpin turns next to waterfalls. This meant heading away from the relatively flat coastal road and back into the mountains. The first day on the new route mostly ran alongside fjords, I had a taste of the weather I had expected for the whole trip and my raincoat stayed on for a lot of the day.





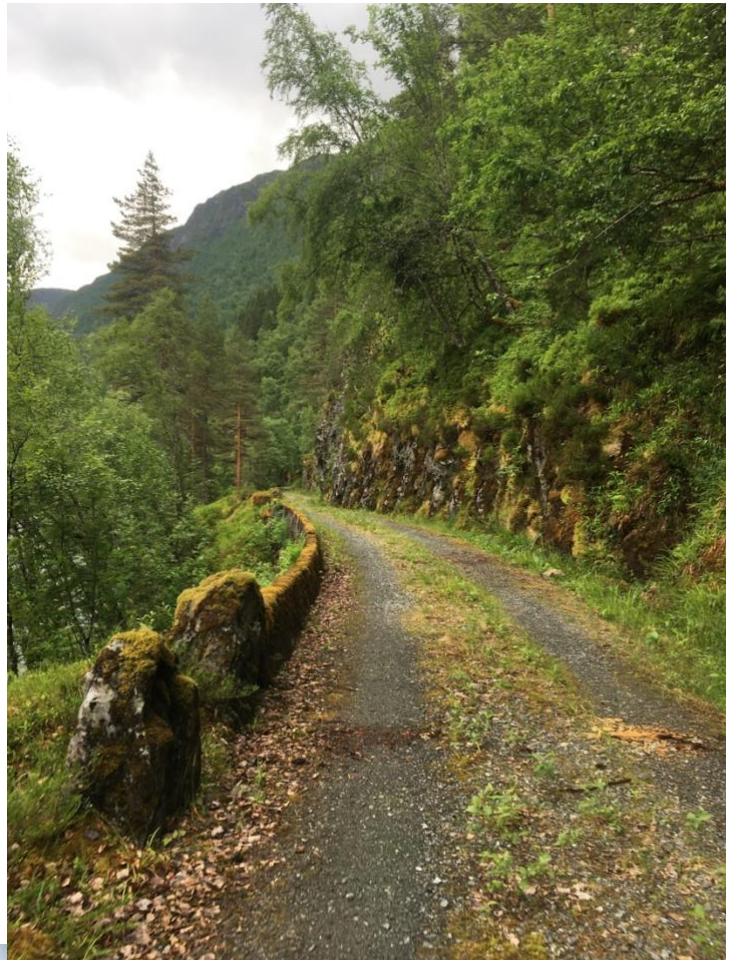




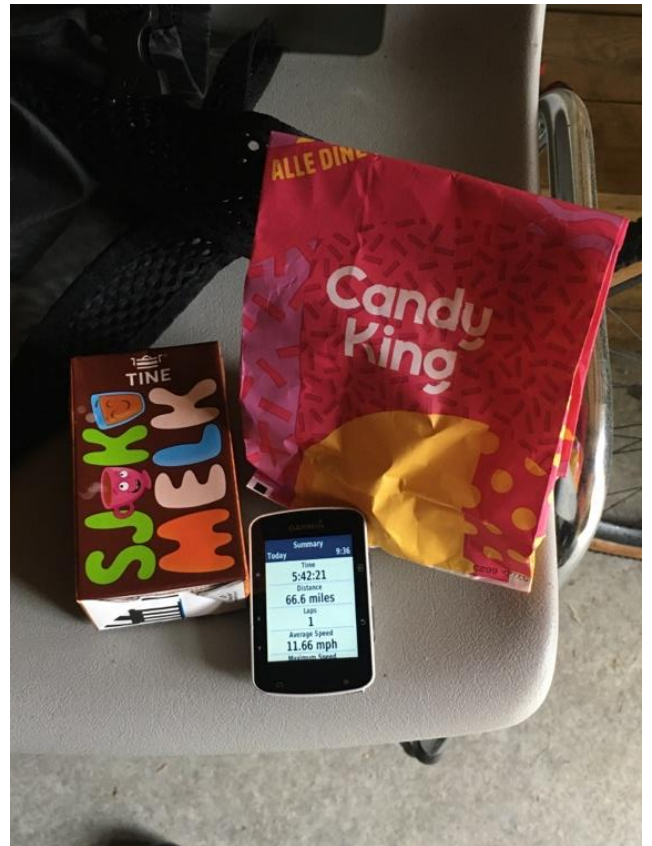
Due to the Gulf Stream bringing warm air, Norway has a surprisingly temperate climate and I had seen several places growing fruits. My camping spot for the night was next to rows of apple trees and fields of salad leaves.

The next day was a mix of ferry's, big climbs, supermarket food and 5 tunnels. Most of the tunnels were okay but coming out of Hellesylt were two tunnels, back-to-back, each uphill and 4km long. At both, I explored the side road but found it completely blocked by landslides, I had to go through. Although there wasn't much traffic, I could feel the effects of the exhaust fumes as I got to the end of each tunnel. Without GPS signal I was counting down the kilometre markers on the side of the road.

I was rewarded by a long (but wet and cold) descent to the last ferry of the day. On the other side a short climb led into a small village, I asked a couple walking a dog if there was somewhere where it would be okay for me to camp and they directed me to a wooden shelter. Inside was a fire pit and space to sleep. There was also a toilet nearby which had a socket inside. I ate my dinner with warm toes and enough smoke to keep the midges away.









After packing away in the morning and sweeping the shelter I was back on the road towards Trollstigen. I had 850 metres of climbing over the next 32 km so tried to settle into a rhythm early. A couple of stops were needed for food and to take pictures of white water that looked fun for kayaking.

Leading up to Trollstigen I met another cyclist, talking about our trips and work took my mind off the gradient and soon we were at the steepest section. A few km later and we were at the top. Thick cloud cover meant we didn't get the panoramic view we hoped for, but the cold wind meant we weren't going to wait for it to clear up. Further down the road, just before the start of the descent and first hairpin turn we got our first view of Trollstigen. The stunning pass not only attracts cyclists but also lots of tourists and there was a long slow line of cars buses and caravans snaking down the mountain. Thankfully the corners were only wide enough for one bus at a time so it was easy to overtake with a bicycle. I slowed to take a couple of pictures but I was much more keen to just enjoy the ride down.



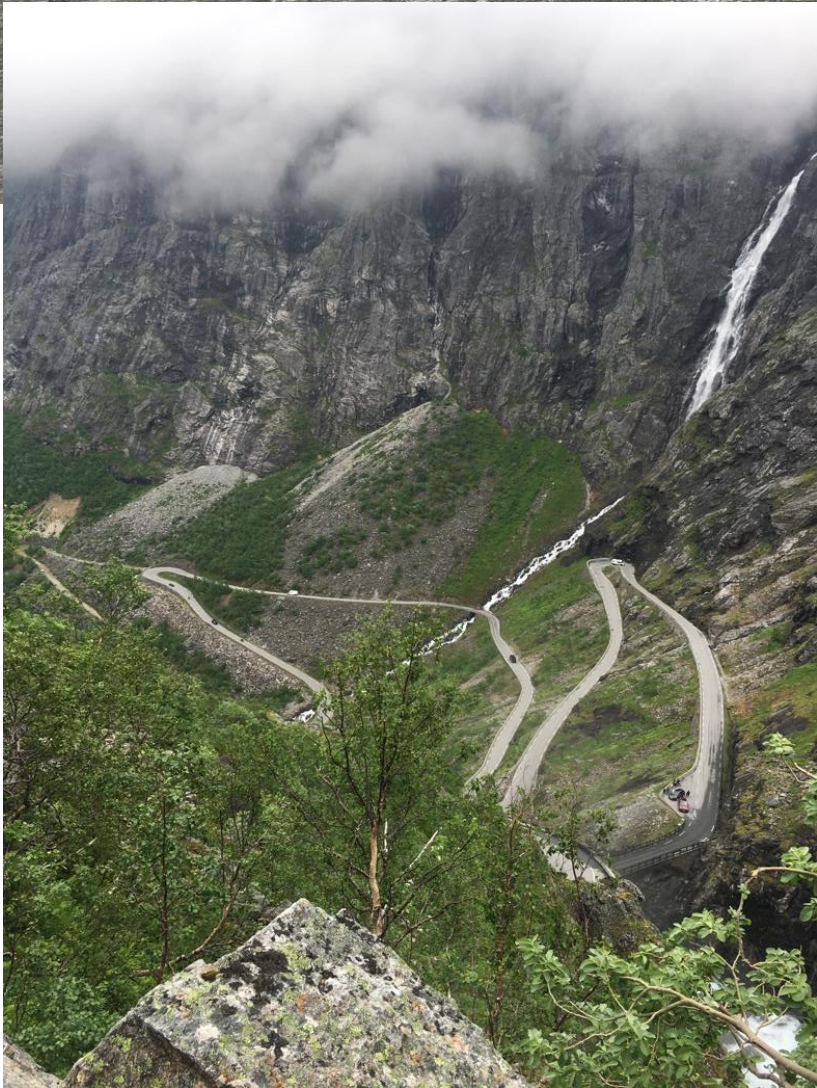


















At the next town I stopped at a supermarket for lunch and dinner before continuing around the fjord. Another 4 hours of riding and I started looking for somewhere to sleep. Even while I was still riding the midges had started to bite, with the sun and after 130 km I was uncomfortable but couldn't find a good camping place. Coming into a small village I saw some people outside their house and hoping to replicate the previous night's success I asked if there was anywhere to camp.

One of the people was a very drunk older man, after asking a couple of questions he said I could camp on his lawn - it would be "no problem". He told me to leave the bike there and follow him, we walked round the corner to another house where his family were having a BBQ. After being introduced I was given a plate and told to help myself! A few hours, several plates of food and a warm shower later we were sat in the garden with some other neighbours, one of which said they had a guest room I could sleep in that night. I was also invited back for breakfast in the morning provided it was after 10am. As the sun doesn't set until after 11pm and it never gets dark it didn't really matter when I started cycling. Also, a lie in and proper breakfast sounded very appealing.



The next morning, after several rounds of eggs, toast, baguette and jam I started cycling at around 1 pm. I was now back on the Atlantic route and the day was spent cycling over bridges and next to the sea. My campsite that evening was a grassy jetty next to a quiet road.

The road to the next town (Kristiansund) included a 5 km tunnel, half of which was a 10% climb. Unsurprisingly cycling was not allowed so I would have to wait for a bus, however because it was Sunday it was a 4 hour wait for the next one. Based on previous attempts to hitch hike I expected to have to wait but managed to get a lift from some cyclists with a van.



After breakfast in Kristiansund it was a 10-minute ride to the only ferry of the day. Just before the ramp went up another cyclist came down the hill and onto the ferry. He was also heading to Trondheim and we ended up riding together for the rest of the day. Although I had another 4 days to cover the 300 km to Trondheim I rode 140 km that day giving me time to comfortably get to the airport even if something went wrong. I found a flat rock next to the sea for my tent.

The following day was the last proper day of cycling: 130 km and one climb. Although the climb was fairly short, and I started early in the morning it was very hot. It was also out of the wind so there were lots of flies, they didn't bite but were constantly landing on my arms and buzzing around my head. As long as I kept moving it was manageable, but I was very glad to get to the top and start going fast enough to escape them.



At the bottom I found a picnic bench by the side of the road and had a breakfast of tuna wraps. Later in the day I went past a nice-looking gravel road, checking the map I could see it re-joined the route after about 10 km, so I decided to take it. The first few kilometres were a lot of fun and I was glad of the change from tarmac. On rough surfaces you have to pay a lot more attention to what's in front which distracts you from tired muscles. After going past some houses, the track got a bit smaller but was still very manageable however it gradually got more and more grassy until there was no gravel left. At a fork in the path I checked my phone and took the route that looked like a short cut. In the shelter of the trees I had noticed a few flies following me and a few more when I stopped to look at my phone. Soon I realised that I was no longer on a path but instead was following some old sheep trails. Before long the ground became softer, and I had come out into a marshy field.



By this point the ground was too soft and rocky to ride on and I was pushing the bike, the number of flies had also significantly increased and even half running I had hundreds of flies around me. After pausing for a second to put on my head net and check the route I could see that what I had thought was a shortcut was actually not a path. At that point I just wanted to get away from the flies, it was difficult to think but I decided to head back to the gravel track and continue from there. Running where I could I got back to the track but after several steep slippery hills that I had to walk up and the constant flies I decided to bail and go back to the road. Back on the tarmac I continued to Trondheim, my thirst for gravel truly quenched.



Towards the end of the day, I knew I was nearing Trondheim but wasn't checking the map. I went past one paid campsite but thought I had far enough before the city that I could find somewhere to sleep however for the next 15 km there was a rocky cliff into the sea on the left and steep forest on the right. By the time I could see Trondheim I still hadn't found a place and there were now houses and businesses alongside the road. I was too tired to go back to the campsite so went down a quiet looking road towards the sea. At the bottom there was a house with a small garden overlooking the water, I knocked on the door and asked if I could sleep there. It was student accommodation, part of NTNU but the guy who answered the door said his mum owned part of the building and after checking with her said it was okay for me to sleep there. I was allowed to use the toilet but because the building was being renovated, there was no shower but there was a hosepipe outside. After setting up the tent I followed a rusted metal walkway down to the sea and found a good spot to jump in off the rocks. The hosepipe had been sat in the sun all day, so I had a nice warm shower, put up my tent and ate some mashed potato and mackerel before going to bed.



I had realised a couple of days before that my flight from Trondheim was actually a flight from Stjordal – a town 32 km northeast of Trondheim. The plan for the second last day of the trip was to spend the morning looking around Trondheim and then cycle most of the way to Stjordal to find a place to sleep. Trondheim is a very small city but there were a few nice historical sites and nice shops to look around.

At the top of the very steep hill up to Kristiansund fortress I realised that there was a bike elevator on the side of the road, you put your left foot against a plate, and it pushes you up the hill. It would have been nice to see it at the bottom of the hill but I promptly cycled back down to try it out.









After 16 km cycling round the town, I bought food for lunch and set off towards Stjordal to find a place to sleep. 8 km before the town I found a quiet car park near a beach. After setting up my tent on the grass I went down to the sea for my final swim and dinner of mashed potato and mackerel.

The following day, 18 days and 1,600 km after leaving Oslo I arrived in Stjordal. The flight was at 6 pm but I arrived in the morning to pick up a bike box and pack the bike away. It didn't feel right to visit a country and only eat supermarket food and McDonalds, so I asked in the bike shop for somewhere to try some Norwegian food and was recommended a café on the top floor of the mall over the road. I arrived in the café just as they started serving their all you can eat lunch buffet and was able to try several different Norwegian foods.



After eating and walking around the town I collected my bike and cycled with the box under my arm to the airport. The strong winds didn't help but after several stops to rest my arm I made it to the airport where I spent a couple of hours dismantling and packing the bike and bags in the box.

An uneventful journey later I was on the train from Gatwick to London with a reassembled bike thinking about what I needed to pack for the kayaking trip I would be leaving for in a couple of days.





## ADMINISTRATION AND LOGISTICS

### Training

As I had already completed several long-distance cycling trips I was not worried about my ability to spend long days on the bike. The main concern was the condition of my knees, in the months leading up to the trip I was regularly having to take time off the bike due to tendon related knee pain. In order to try and manage the problem I focussed primarily on strengthening and stretching the muscles that act over the knee while continuing with low intensity cycling. While this definitely helped, I did not have a sufficient ramp up to the Pennine rally and so on the fourth and fifth days I had significant ITB issues that caused knee pain. Through stretching, reducing intensity and managing inflammation I was able to complete the Pennine rally and 18 days of riding in Norway without causing further damage to my knee.

### Funding

I received a total of £750 from the exploration board. The travel insurance was covered from a trip last year and I have already received first aid training. No equipment was borrowed from the board for the expedition.

### Travel

Flight from Manchester to Oslo

Flight from Trondheim to Heathrow

Train from Finse to Upsete

Train to Oslo

Ferries

To take my bike on flights I used cardboard bike boxes that can be found at most bike shops and left at the airport after arrival. It takes around 1.5 hours to partially disassemble and pack the bike into the box and 30 minutes to unpack. On trains in Norway a ticket is required for the passenger and the bike. Ferries are free to foot and cycle passengers.

### Visa

UK citizens are able to spend 90 out of every 180 days in Europe without a visa.

### Communication

Most areas that I cycled through had good phone signal so I could communicate with contacts at home. Some areas had little or no signal but as this was uncommon and I travelled mostly on roads there was no safety concern.

### Accommodation

Allemannsretten (every man's right) means that you can camp on any public land in Norway for free. As usual leave no trace guidelines apply and it is important to follow local advice. During my trip I stayed with friends for two nights and people I met along the way for another two nights. The other nights I camped in fields, by the sea and near carparks. I did not have any issues from property owners.



## ENVIRONMENTAL IMPACT ASSESSMENTS

While it is not possible to undo the environmental harm caused by emissions from air travel I have been mindful throughout the planning of the trip of reducing my impact on the environment.

The choice of Scandinavia was significantly motivated by this aim. The trip is less than a month and so I did not feel a long-haul flight was justified. The flight from London to Norway is under 3 hours and the emissions are far less than longer flights. A trip to Mongolia was previously considered during the initial planning phase however this was ruled out for environmental considerations. During the trip my form of transport will be a bicycle so my only emissions will be the flights.

As I will be spending most of my time outdoors it is also important to consider my impact during each day. The following steps will be followed to ensure I have no negative impact on the wildlife, flora and fauna, and residents of the country.

1 Through choosing fresh produce, not using single use plastic bags, and cooking my own food I will limit the amount of rubbish I produce. As some waste is unavoidable, I will be careful to ensure that everything is disposed of at proper recycling facilities.

2 Human waste can be harmful to the environment if not responsibly managed. Whilst camping, when no toilets are available, I will dig a hole and bury any waste. A small trowel will be carried for this purpose. Water will be used instead of toilet roll in order to further reduce waste/pollution.

3 A stove will be used to heat water and cook food during the trip. Norway has many areas that are prone to wildfires and so care will be taken to mitigate the risk from the stove. I will always cook on clear ground or on a stony surface. During cooking I will stay next to the stove and ensure no fire is spread. No campfires will be started in areas with fire bans.

4 While camping I will be careful to avoid disturbing/ damaging habitats and vegetation. As always I will follow *leave no trace* while camping, this includes only setting up camp later in the evening and leaving early in the morning.

Through the steps highlighted above and a continued consideration of my environmental impact I will ensure harm from the trip is kept to a minimum.



## RISK ASSESSMENT

Risk	Consequence	Mitigation	Likelihood	Severity	Risk factor
Minor damage to bike	Unable to ride for 2 hours while the bike is being repaired	Carry spare parts and tools to be able to repair minor bike damage	4	1	4
Major damage to bike	Unable to continue riding	Know the location of bike shops where spare parts can be sourced	2	4	8
Minor injury	Pain, potential infection, discomfort	Carry first aid kit, medical training to be able to treat injuries, ensure proper wound cleaning	3	2	6
Major injury	Unable to continue, long term injury, death	Always have phone charge, emergency action plan in place, emergency contact, known location of hospitals, emergency contact numbers written down	2	5	10
Stove damage	Unable to cook,	Carry some foods that do not require cooking, carry stove maintenance equipment and know how to clean service stove	2	3	6
Run out of fuel	Unable to cook	Carry some foods that do not require cooking, carry multifuel stove, know where to find stove fuel	3	2	6

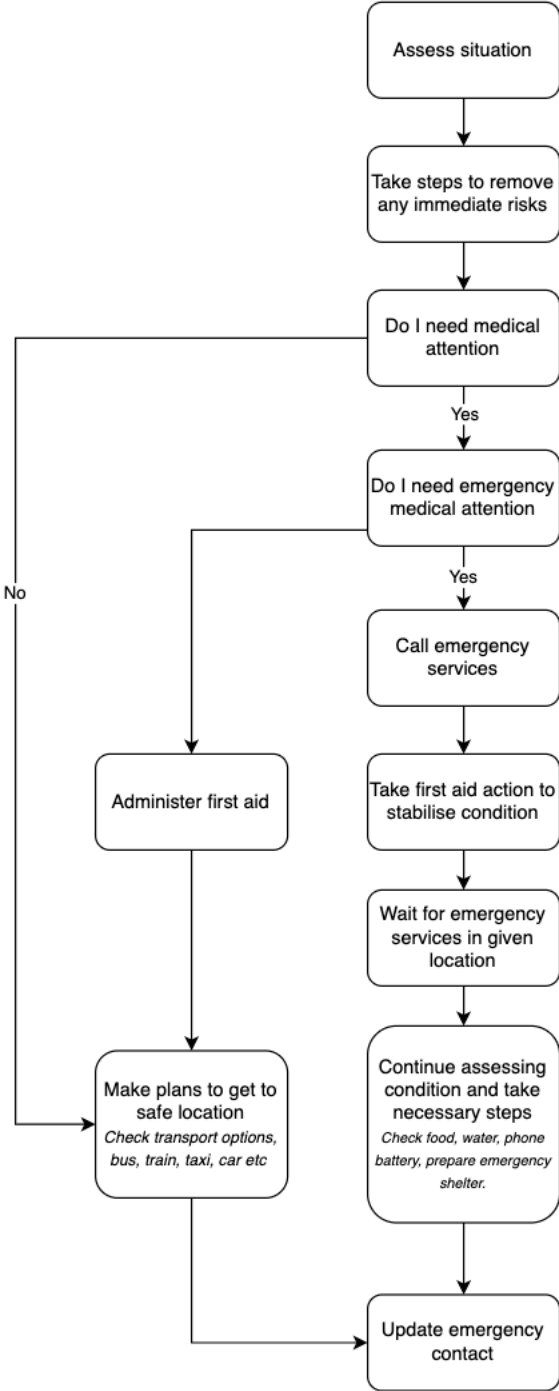


Water filter damage	Unable to filter water, waterborne illness	Visual inspection of filter before use, follow correct filter use instructions, proper cleaning of filter	2	2	4
Burn from stove	Pain, infection	Follow instructions for stove use, use correct fuels	2	3	6
Damage to tent from stove	No shelter, exposure	Don't use stove in or near tent	1	3	3
Dehydration	Dizziness, fainting	Carry enough water, know where possible filling points are	2	2	4
Exhaustion	Unable to continue,	Always carry some food that doesn't require cooking. Monitor eating to ensure I am eating a balanced diet.	3	2	6
Tent/ sleeping mat damage	No shelter, exposure, cold during the night	Carry repair kits for important gear	2	3	6
Tendonitis	Pain/ discomfort, unable to continue, long term injury	Follow gradual increase in cycling intensity leading up to the expedition, also increase distances during the expedition, take rest days if symptoms occur	3	2	6
Hand issues	Pain, discomfort (numb hands), long term nerve damage	Ensure the bike is comfortable before leaving (train on expedition bike), wear cushioned gloves	4	2	8



Traffic accident	Damage to bike, injury, death	Use lights at all times, particularly in tunnels and in darker hours, ensure lights are charged and carry spares. +Wear high visibility clothing. Use a rear-view mirror to know when vehicles are approaching. Do not cycle in low light/darkness.	3	4	12
Animal attack	Injury, death	Follow recommended actions if approached by any potentially dangerous animals, follow any local advice given including staying out of an area	2	4	8

# EMERGENCY ACTION PLAN





## CONCLUSION AND RECOMMENDATIONS FOR FUTURE SIMILAR EXPEDITIONS

Despite the initial disappointment of having to reduce the length of the trip it was an amazing expedition in a beautiful part of the world. Meeting people from different countries on their own adventures was a highlight of the trip and something I will look for in future rides.

Equipment and route are often the biggest concern and focus when planning a trip like this, for people planning similar expeditions for the first time I would recommend doing a few short trips with equipment that you already have in order to work out what you need and what you can do without. This reduces the amount of money you will spend on buying expensive equipment that you might not need and helps you cut down pack weight. Some people like to completely plan out their route with shops and campsites which is a good approach but takes time and doesn't work for everyone. In countries like Norway it is not difficult to create the route as you go however it is important to carry enough food so that you are safe and self-sufficient. In other areas it may be necessary to have a more detailed plan especially when travelling near areas that could be unsafe or require travel documents.

## ACKNOWLEDGEMENTS

Thank you to the exploration board for supporting this trip both through funding and giving invaluable feedback on my plans.

## APPENDICES

### Links and resources

Contact me:

<https://www.instagram.com/peterjbryan/>  
peterbryan21@imperial.ac.uk

Website with tunnels in Norway

<https://www.cycletourer.co.uk/maps/tunnelmap.shtml>

Cyclenorway

<https://cyclenorway.com/>

Matthew Norway

<https://www.youtube.com/channel/UCglGIEAlo8XpGIh58E5K2lw>

Cycle tourer UK

<https://www.cycletourer.co.uk/cycletouring/norway.shtml>

On her own video link

[https://www.youtube.com/watch?v=OV6836VprNI&t=1165s&ab\\_channel=WiebkeL%C3%BChmann](https://www.youtube.com/watch?v=OV6836VprNI&t=1165s&ab_channel=WiebkeL%C3%BChmann)

Warm showers (free accommodation for cycle tourers with locals)

<https://www.warmshowers.org/>

Couch surfing (free accommodation with locals)

<https://www.couchsurfing.com/>



## Equipment

### **Bike**

- Gravel Bike
- Lock

### **Bags**

- Handlebar bag
- Frame bag
- Large saddle bag
- Dry bags
- Folding backpack

### **Tools and repairs**

- Pump
- Multitool (pliers)
- Spare inner tubes x2
- Puncture repair kit
- Spare gear cable
- Chain lube
- Quick chain link
- Needle
- Thread
- Tape

### **Sleep system**

- Tent
- Sleeping bag
- Inflatable mat

### **Personal**

- Sun cream
- Toothbrush
- Toothpaste
- Micro fibre towel
- Bar soap
- Chamois cream
- Lip balm (+SPF)
- First aid kit\*
- Trowel

### **Clothing**

- Helmet
- Sunglasses
- Cycling shoes
- Cycling bib shorts
- Full finger gloves
- Padded gloves
- Walking trousers
- T-shirts x2
- Socks x2
- Underwear x1
- Thermal top
- Shoes
- Raincoat
- Fleece
- Down jacket
- Buff

### **Food and water**

- Water bottles
- Water filter and bag
- Jetboil stove
- Lighter
- Spoon
- Knife

### **Documents**

- Passport
- Other form of ID

### **Tech**

- Phone
- Portable charger x2
- Adapter
- Cycling computer
- Front light
- Rear light

### **\*First aid kit**

- Bandages
- Gauze (wound dressings)
- Wound closure strips
- Antiseptic wipes
- Sling
- Plasters
- Tic remover
- Scalpel blades
- Rehydration powder
- Pain killers
- Foil blanket

### Food

Buying food in restaurants and petrol stations is very expensive in Norway so for the majority of the trip I bought food at large supermarkets. The cheapest were Kiwi and Rema 1000, the other slightly more expensive options were Bunnpris and Spar.

Due to having very limited bag space and not wanting to wear a backpack I stopped at at least one supermarket on most days (closed on Sundays). I would typically buy breakfast and some snacks at the first supermarket I saw each day and then stop later on to buy and eat lunch and also buy food for a meal in the evening. The evening meal on most days was mashed potato powder and a tin of tomato mackerel or tuna. A balanced diet is very important on multi day trips, I would have at least two pieces of fruit each day, yoghurt, and a bag of spinach. The main snack for eating on the bike was fruit and nut. I would easily have enough food spending at most £15 per day in supermarkets, it would be possible to cut this cost down if you can carry more food.

I always carried one dehydrated meal with me in case of emergency. I did not need to use it throughout the trip.