## Nepal – Manaslu Region

**Exploration Board Report 2022** 

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### 1. I) Introduction

This expedition comprised a trekking circuit around the world's eighth highest mountain peak, Mount Manaslu. Considered one of the last untouched Himalayan mountain passes, a pre– commercial Everest or Annapurna, the Manaslu circuit provides unique opportunity to get close to the Himalayas' diverse natural and cultural treasures. Climbing well over 5000 metres in altitude, a variety of pristine habitats and communities were encountered.



Note: all photography shown in this report was taken by a member of the team on the expedition

## 1. II) Aims and Objectives

- To successfully circumnavigate and complete the 180km Manaslu circuit, with the highest point reaching 5106m.
- To complete additional treks in the Manaslu region, including reaching the Tibetan border at over 5000m.
- To observe and record the unique Nepalese wildlife & landscapes through personal photography.
- To visit the Chitwan National Park to explore the rich biodiversity of Southern Nepal and sample a divergent biological community to those on the trekking route.
- To immerse ourselves in the rich nepalese culture.
- Disseminate photography on expedition social media accounts (Instagram and TikTok).
- To minimise environmental impact throughout and provide an example of sustainable trekking, displaying such an example on trek-dedicated social media.

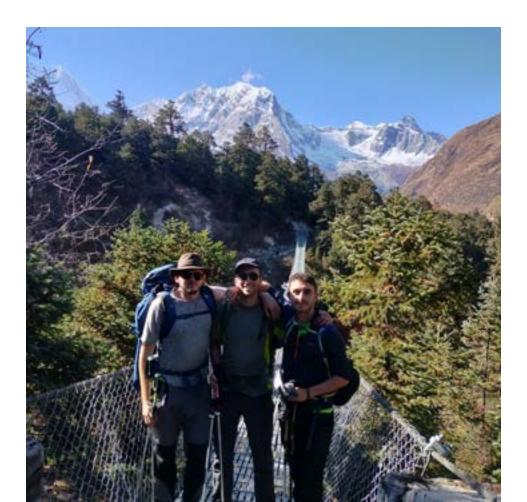


## 1. III) Meet the Team

The expedition team is made up of four people, two of which are students at Imperial College London. The team all have extensive mountaineering and trekking experience, as well as a passion for the great outdoors.

Team roles:

- Benjamin Roberts Expedition Co–leader, Scientific Officer
- Hamish Youngson Expedition Co– leader, Training Officer
- Andrew Sheat Financial Officer
- Tula Ghale Navigational Officer





## Ben Roberts

**Role**: Expedition Co-leader & Scientific Officer **Age**: 23

#### Academic Experience:

- 2017 2020: BA (Hons) Natural Sciences (Zoology), University of Cambridge
- 2021 Present: PhD Life Sciences, Imperial College London **Relevant Experience**:
- 2015 Present: Experience with tropical trekking, including in Uganda and a multi-day research trek in Borneo
- 2022: Hiking, climbing, and scrambling trip to the Black Cullin Ridge on the Isle of Skye, including summitting Sgurr Nan Gillean, and Grade 3 scrambling on the infamous Cullin Ridge
- 2016: Completed the three peaks challenge
- Keen mountaineer, summiting over 100 Lakeland Fells, as well as many Scottish Munros and Welsh Peaks, including the summitting of my first mountain >3000ft aged 5. I have also hiked in Yosemite National Park, USA
- Wild camping and trekking across Scotland, including the Inner and Outer Hebrides
- 2021: Multiple climbs in the Lake District
- 1999 2022: Keen sportsman, representing England at badminton and playing cricket to county level. Also, keen footballer, runner, and cyclist

## <u>Hamish Youngson</u>

Role: Expedition Co-leader & Training Officer

#### **Age**: 24

#### Academic Experience:

- 2016 2020: BSc (Hons) Geography and Geoscience, University of Aberdeen
- 2021 2022: MRes Ecosystem and Environmental Change, Imperial College London
- 2022 Present: PhD Environmental Geochemistry, BGS and University of Nottingham.

#### Relevant Experience:

- Considerable hiking and scrambling experience around the UK, including: Snowdonia, The Lake District, Yorkshire Dales, Cairngorms, Isles of Skye and Arran, Grampians and Highlands.
- Day and Multiday hikes in Europe: Norway, Italy and Switzerland.
- 2021 Backpacking Central America, multi–day hikes in Guatemala, Nicaragua and Costa Rica including the ascent of the Acatenango volcano (3,976 m).
- 2015:Gold Duke of Edinburgh, including expedition in North Wales.
- 2015: Rotary Youth Leadership Award.
- 2019 2020: Committee of the Aberdeen University Snowsports Society.
- 2016–2019: Member of the Aberdeen University Highland Frontiers mountaineering and hiking society
- Extensive skiing experience in the European Alps and Canadian Rockies.
- 2017–2018: Aberdeen University Officers' Training Corps
- Hobbies: Running, Rowing, Football, Photography, Fishing and Rugby.

### <u>Andrew Sheat</u>

Role: Financial Officer

**Age**: 24

#### Academic Experience:

- 2016 2019: BA (Hons) Natural Sciences (Earth Sciences), University of Cambridge
- 2019 2020: MA Earth Sciences, University of Cambridge **Relevant Experience**:
- 2018: Two-month geological mapping expedition to rural Newfoundland. Exploring and documenting a c.30km2 un-mapped area on the Bonavista peninsula
- 2021: Tribe Relay Race across Scotland (team running relay race across Scotland)
- 2020: Two-week wild camping and hiking in Glen Shiel, Scotland
- 2019: Two–week wild camping and hiking in the Cairngorms National Park, Scotland
- Undergoing a challenge to climb all the Scottish Munros, currently at c.50 (out of 282)
- 2021: Annual Ski and Winter Hiking Trip to the Alps
- Lifelong love of mountain climbing around the UK, in the Alps and Rockies

## <u>Tula Ghale</u>

**Role**: Navigation Officer (Guide) **Age**: 32

#### Relevant Experience:

Growing up in the Gorka region which surrounds Manaslu.Over 9 years of guiding experience.

Extremely knowledgeable on the surrounding nature and culture.
Experience dealing with all the logistical challenges which can occur on such hikes, ranging from avalanches to dealing with the dangerous local wildlife.



### 1. IV) The Area

### IV.1. Nepal

#### Geography:

Nepal is a landlocked country, bordered in the North by the Tibet Autonomous Region of China and India to the South, East and West. It has an incredibly diverse topography, ranging from as low as 59m to the earths highest peak at 8,848m. The Indian plate formed the Himalayan mountains by subducting beneath the Eurasian plate and uplifting land into what is now the world's highest mountain range. This Indian plate continues to move on a northward trajectory at approximately 50mm a year, making the area tectonically unstable and susceptible to earthquakes (Bilham et al., 1998), a consideration that required careful planning on our expedition. The country has six climatic zones including tropical, subtropical temperate, the cold zone, the subarctic and the arctic.

#### **Biodiversity**:

Nepal is extremely rich in biodiversity, with Paudel et al. (2012) identifying that the Himalayan nation contains 8.9% and 3.9% of the world's bird and mammal species richness respectively, despite accounting for only 0.1% of global land mass.

Not only are Nepal's 118 ecosystems highly diverse, they harbour unique communities of highly threatened flora and fauna. According to the International Union for Conservation of Nature's red list, Nepal is home to over 100 species threatened with extinction, including 29 species of mammal, such as the river dolphin, Bengal tiger, and the iconic snow leopard. However, worryingly human activities in Nepal are having pervasive impacts on native biodiversity. For example, Christensen et al. (2009) showed the detrimental impacts of human activity for tree species richness in the Annapurna Conservation Area. Such Nepalese human–wildlife conflicts need resolving, with particular attention required on the impact of the trekking industry. Proximity to hiking trails has been shown to detriment flower–visiting insects in Egypt (Kamel 2020), yet such research has been lacking in Nepal, arguably the most popular trekking destination in the world. To that end, research filling this knowledge gap and increasing adoption of sustainable trekking practices may help mitigate these threats.

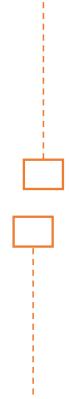




### Maps of relevant areas in Nepal

b.)

a.)



c.)



## **IV.2 Chitwan** 29/10/22 - 31/10/22

#### Biodiversity

Chitwan National Park spans over 900km<sup>2</sup> of south-central Nepal. The national park was the first in Nepal, being established in 1973. It later became a UNESCO world heritage site in 1984 (Gurung et al., 2008). It is an extremely important conservation area for flora and fauna. There are over 700 species of animal, with 68 species of mammal. The world's second largest population of Greater one-horned rhinos are hosted here and it is an important refuge for the Bengal tiger. Chitwan also has the world's highest density of Sloth Bears. The flora is largely Himalayan subtropical broadleaf forest.

#### Geography

The park represents subtropical lowland and the last remaining example of the 'Terai' regions natural ecosystem. The landscape is dominated by alluvial floodplain, grassland and subtropical deciduous forest.

#### Climate

The climate in Chitwan is characterised by a tropical monsoon climate with high humidity year– round (Gurung, 1983). The monsoon season runs from June to September.

#### IV.3 Manaslu Region 02/11/23 - 12/11/23

#### Location, Geography, & Climate

The Manaslu Region is situated in west–central Nepal, north–west of Nepal's capital, Kathmandu (Figure 1).

Incredibly, due to its high variation in altitude, the region spans all six climatic zones found in Nepal, from the tropical zone at low altitude to the arctic zone at high. This altitude culminates at Mount Manaslu, Earth's eighth highest peak, reaching 8163 metres.

The annual climatic profile for Manaslu is shown below in Figure 2. Our trek was completed at the start of November, when rainfall and snowfall were at their lowest, reducing the risk of snow–related disasters. However, Manaslu experienced its most deadly climbing season to date, with constant avalanches. Avalanches were frequently seen on the trek. Falling temperatures in November meant that certain precautions were required to prevent hypothermia and related dangers.

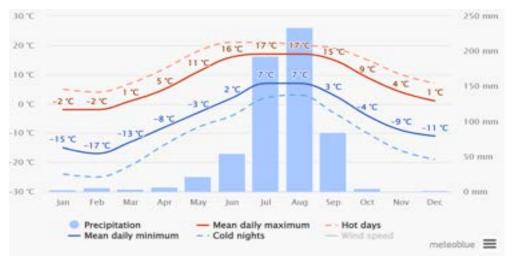


Figure 2: Annual climatic profile for Manaslu. Available at https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/manaslu\_nepal\_1283075

#### Trekking History

Mount Manaslu was first summited by Japanese explorers in 1956. However, it was not until 1991 that the Nepalese government opened up the Manaslu Region and the circuit to trekkers, and even now it is regulated heavily through trekking permits to enter the area. This circuit has frequently been described as one of the last untouched long treks in Nepal. For example, besthike.com describe this route as "like the Annapurna Circuit decades ago."

#### Biodiversity

Mount Manaslu is situated in the Manaslu Conservation Area (MCA), one of six protected areas in the country. The success of the Annapurna Conservation Area resulted in the MCA's inception, which is proving equally successful (MFSC 2016). A hunting ban in the area has resulted in the MCA comprising an effective refugium for many threatened species.

Notable flagship species inhabiting the MCA include snow leopards, red pandas, black bears, and grey wolves.

Not only that but biodiversity surveys have found high richness of birds and herpetofauna (Pokhrel et al. 2017; Thakuri et al. 2013), including the red-headed vulture, one of the vulture species which has suffered past population collapses stemming from the use of toxic diclofenacbased veterinary products.

Trekking permits, like those associated with our expedition, provide financial aid to the running and maintenance of this diverse protected area.

#### Culture & Religion

Manaslu is thought to be one of the most culturally diverse Nepalese regions. Broadly, three ethnicities are found in the region, comprising the Tsum, Nubri, and Gurung people. Two languages, Tsum and Nubri, are unique to this region of Nepal.

The primary religion, with heavy influence from Tibet in the North, is Buddhism. This has been suggested as a driving factor behind the success of conservation efforts in the region. As a result, many Buddhist monasteries can be found on the circuit, one of which, the Pungyen Gompa Monastery, was added as a side trek to the itinerary.

Every effort was made to immerse the team in the cultures and communities of the region and take advantage of this unique opportunity to learn from local customs.



### 2. Logistics & Preparation Trip Planning

#### Inspiration

For keen hikers/trekkers, it is not difficult to understand why the group had their eyes on the Himalayas. When Ben and Hamish got their heads together at the pub (Belgian Arms, Holyport – fantastic establishment) to plan their next expedition, a few options were banded around. These included the John Muir Trail in California and part of the Great Divide Trail in British Columbia/Alberta. However, the one eliciting candid excitement was heading to the Nepalese Himalayas – for people most at home in the mountains, this has always been the case.

As for why Manaslu. Mount Manaslu holds an allure, not shared by many of the 8000 metre peaks.

Having one of the highest climbing death and failure rates of any mountain worldwide, coupled with its smoky summit being steeped in Buddhist culture, gives this mountain an enormous sense of mystery. For trekkers, the region offers a huge amount. Being a far less popular choice than neighboroughing Annapurana I or Everest to the East, the Manaslu region maintains a perfect balance between trekking being feasible and uncommercialised. For the most part (landslides aside) trails exist, yet there is no overcrowding of trekkers, which so much of the Himalayas are now associated with (traffic jams at Everest's deadly Hillary Step, high in the "death zone" being a prime example). And so we decided on Manaslu.



#### Itinerary determination

The itinerary was decided on following detailed discussions between the team. We wanted to maintain the immense physical challenge of the region, while leaving enough time at each stop for wildlife photography, camera trapping, and a general appreciation of the surroundings. Plans were confirmed with Tula, our guide, during a July 2022 planning weekend in the Cotswolds. The original planned itinerary is shown in Figure 1a, with two stops allotted in Samagaun and Samdo. This is a total time on the trail of **13 nights**.

*However, unfortunately plans change.* Due to Diwali–related interruptions and, more crucially, a high and unexpected frequency of November avalanches in the Manaslu region, we had to make on–the ground adjustments to our itinerary. Manaslu had inflicted its deadliest climbing season yet due to unprecedented bad weather. As a result and after consulting our risk assessment, we felt it unwise to linger in one place, scrambling up off–paths to gather camera trap data. Therefore, we cut the extra night at Samagaun from the itinerary. We also did not want to lose our window to cross the Larkya pass and get stranded by snowfall. Consequently, we cut Lho and also Tilche from the itinerary. This left us needing to complete the same distance, now in **9 days**. This was the second fastest Tula had ever seen it completed.



#### **Equipment & consumables list**

For those attempting trekking in similar regions, we hope this equipment list will prove useful. This should be a good option for an itinerary of around 10-15 trekking days. \*=easier sourced out there

#### <u>Large survival items</u>

-Rucksack (70-100l) -Rucksack waterproof cover -Sleeping bag liner -Sleeping bag (comfort -10°C) -Survival bivvy bag -Tent -Daysack <u>Clothing</u>

-Walking boots -Socks (~x5) -Sock liners -Hiking socks (x2) -Underwear (~x6) -Thermal bottoms (x1) -Thermal tops (x2)

-Hiking trousers (x2) -Shorts (x1)
-Base layer (x2) -Fleece (x2)
-T-shirts (~x5) -Down jacket
-Waterproof jacket -Overtrousers
-Wooly hat -Cap -Glove liners
-Overgloves/mittens -Buff -Gaiters
-Sunglasses -Sliders/Slippers (comfy)
<u>Health & First Aid</u>

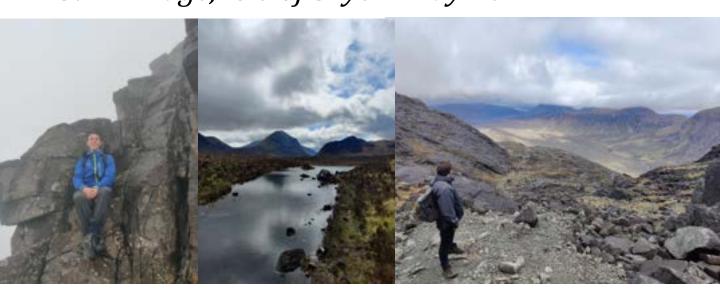
-Painkillers -Antidiretics -Electrolytes -Rehydrators -Altitude tables -Water purification tablets -Antibiotics (\*) -Joint tape & supports -Boot tape -Bandages -Scissors -(Blister) plasters -Insect repellent -Suncream -Hand sanitizer -Tissues -Loo roll (x2) -Swiss army knife -antiseptics <u>Transport & Living</u>



-Passport -Photos for trekking permits -Cash -Visa -Insurance -Soap bag -Ear plugs -Eye mask -Toothbrush & paste -Deodourant -Solar portable charger -Plug adapter -Head torch -Cards -Snacks (\*) -Journal & pen -Microfibre towel -Bin bag <u>Equipment</u>

-Trekking poles (x2) -Water bladder -Filter water bottle -Boot spikes -Camera -Binoculars -Satellite phone -Dry bags -Spare laces

# Training <u>Training trips</u> Cullin ridge, Isle of Skye – May 2022



• Svalbard – June 2022



• Snowdonia – October 2022



#### • Mount Toubkal, Atlas Mountains, Morocco – October 2022



#### <u>Training regime</u>

An increased emphasis was also put on home–based fitness work in the months leading up to departure.

Where possible, bi–weekly or tri–weekly gym sessions were maintained, with a focus on lower body muscular endurance and back/shoulder strength. Exercises included:

- Weighted uphill treadmill walk (15% gradient)
- Low-weight, high-rep squats
- Low-weight, high-rep lunge walks
- Shoulder press
- Deltoid raises
- Weighted and raised push-ups
- Single\_leg wobble cushion work
- Single-leg squat jumps
- Body weight raises /pull\_ups

## 3. Diary

#### Day 1 (28/10/22) : Arrival in Kathmandu

We arrived into Tribhuvan Int'l Airport in Kathmandu at 3am after a lengthy flight, heading straight for some shut–eye at our hostel in Thamel – the trekking and tourist hub of Nepal's capital. After a rough few hours sleep in a fairly grim hostel, interrupted by a chicken next to Hamish's pillow, we headed out. Today was for finding our feet, exploring Kathmandu, and preparing for the journey to Chitwan National Park the following day.

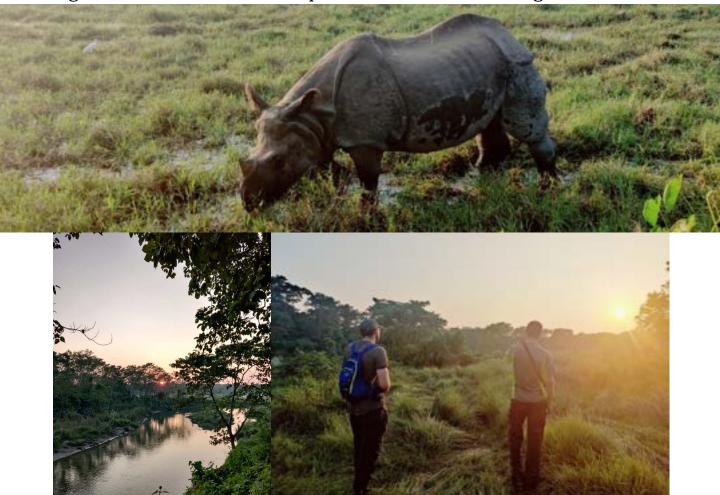
An hour in Kathmandu was enough to realise that it is a trekker's paradise – outdoor shops on every corner & the bars celebrating various summiters of 8000mers. Not only that, but travellers here seem to gauge everything about you as a person from the height you are climbing to – it is a major character currency out here – rather than "hi, how are you?" It is "hi, how high are you going?".

We stock up on antibiotics, browse some outdoor kit, and enjoy a couple of Gorkha Strongs (local beer) while we still can. We also try our first Dhal Bhat (rice & lentils) – a mistake in hindsight, as we would become very sick (luckily only figuratively) of this up in the mountains.



## Days 2–3 (29–30/10/22) : Chitwan National Park

Early start on the 29th and we were off in high spirits to find the bus to Chitwan NP in the south of the country. However, the high spirits were cut short on seeing the amount of legroom we were afforded on our rickety bus -6'5'' Andrew was struggling. Not a great start, with knees painful before we even saw the Himalayas. The six hour bus afforded us the chance to see Nepal's more rural areas – very aesthetic, with rolling hills out of the Kathmandu valley covered in rice paddies and smallholder farms. Sadly the quality of the roads put a slight downer on this – not one of us had a vertebrae which hadn't been shaken to within an inch of its life. Mid-afternoon, after stopping twice on the Trishuli River for food, we arrived in the town of Sauraha, on the border of the vast Chitwan NP, and found our hostel for the next two nights. We only had to wander to the edge of the National Park that evening and we had already seen greater one-horned rhinos, a Chitwan flagship, along with highly endangered gharials, crocodiles, spotted deer, Asian elephants. The evident biodiversity is an encouraging sign for the effectiveness of protected areas in the region.



The usual early start the following morning – mornings in Chitwan are a lovely temperature, but by lunchtime walking is unbearable. We headed out trekking in the park, which was a slightly worrying prospect given that Chitwan is famed for having the highest global density of sloth bears and a population of Bengal tigers which are doing really quite well.

This initially involved navigating primary broadleaf forests, which were bustling with insect and avian diversity. The *Dysdercus cingulatus* were impressive – a large red, albeit invasive, species of true bug. The birds were also awesome – we saw hunting ospreys and kingfishers – as were the Rhesus macaques.

That afternoon we would head further into the park, adding an Indian rock python to our species list, as well as more rhinos. We were also luckily enough to visit a Gharial breeding centre, some of the hands–on conservation work going on to prevent the species' extinction in the park.

As if that wasn't enough to boost spirit, en route back to the hostel for the night, we were treated to our first view of Manaslu catching the sunset on the horizon some 80 miles away. This was stunning, although it did emphasise the sheer scale of what awaited us to the north. And it wasn't just us that had a good day; a couple leeches had set up shop throughout in Hamish and Ben's boots, revealing lots of blood.



#### Days 4–5 (31/10 - 01/11/22) : Preparation in Kathmandu

Another early morning bus ride would take us back from Chitwan to Kathmandu on the 31st, although one where a lack of seating would see us squatting in the driver's cabin, taking discomfort to another level. As if that wasn't enough, we were left with an hours walk across Kathmandu to our hostel with our expedition bags – this was worryingly difficult given the impending trek.

The rest of the day was spent buying some last-minute trekking gear at bargain prices at one of Kathmandu's not-so-genuine outdoor shops, before exploring some of Kathmandu's many bars – the Little Buddha was a personal favourite.

The following morning we met the famous Tula, our Nepalese guide. The day was for acquiring trekking permits before the big off the following morning. We also managed to sneak in a couple of temple visits – a local man tried tried to charge us for a piece of information that Michael Palin had witnessed a holy man moving a holy rock with his holy manhood. Holy Moly!

Following this, Tula took us to the Everest outfitters – nice gear but far too expensive. Dinner that night was a nervous affair, with the three of us stressed over the physical challenge starting the following day.

#### Day 6 (02/11/22): Travel to the trailhead

Big travelling day today – we were going from Kathmandu to the start of our trail in the Gorkha region of the Himalayas, Macchakhola. Long doesn't even begin to describe this journey. We arrived at the bus station to find a bus which made the previous one to Chitwan look like the first–class cabin on an Etihad flight. Leg room was extremely lacking and the horn had about 65 different tunes which were used to communicate on the road – this made the 12–hour journey feel more like 30.

Anyhow, we arrived in one piece at Macchakhola and ate a swift fried rice before turning in for the night in our first Nepalese teahouse – not bad at all comfort–wise but we were ready for things to rapidly deteriote as we started to climb. Hamish also experienced his first squat toilet, to which he said his legs ached – again worrying as we were starting climbing in the Himalayas.



## Day 7 (03/11/22): Macchakhola (869m) to Jagat (1340m)

So the trek begins. Due to the start point being below Kathmandu, the high temperatures of day 1 took us by surprise. We got out early with a 6am start (we would have to get used to these). The big bags combined with the temperature made for sweaty work and left us bruised, scarred and with bloody shoulders by lunch. Not to fear, dhal bhat and mint tea were on the menu, which definitely helped us recover somewhat. The terrain was tropical and humid as we walked down a long gorge-like valley, which made for fantastic trekking scenery. We would be following this river for a few days, with dramatic cliffs on either side – claustrophobic and spectacular. We were passed by long trains of donkeys, which evidently had been carrying supplies to teahouses along the route (again, something that we would get used to). Tula informed us that the hairy four-legged beasts were the leading cause of death in the lowlands, pushing trekkers over the edge. Upon reaching Jagat, we slumped into decidedly less comfortable rooms than the night before – not that we cared at this point – and spent the evening playing cards and lazily exploring the rustic stone village.



#### Day 8 (04/11/22): Jagat (1340m) to Deng (1860m)

One of the worst feelings on a long trek is struggling to lift your heavy bag onto your back after it has broken you the day before; luckily for us, we got that pleasure over with at 6:30am. On the bright side it was a crisp, sunny morning, with enough blue sky for a whole fleet of sailor's trousers.

We were following the same valley as the day before. The steep sides meant that the sun was off us until mid–morning and made for a good few hours of pleasant walking. Not only that, but our first snow– covered 7000 metre Himalayan peaks – Shringi & Ganesh Himal – came into view (although Tula was cavalierly describing many of these as hills).

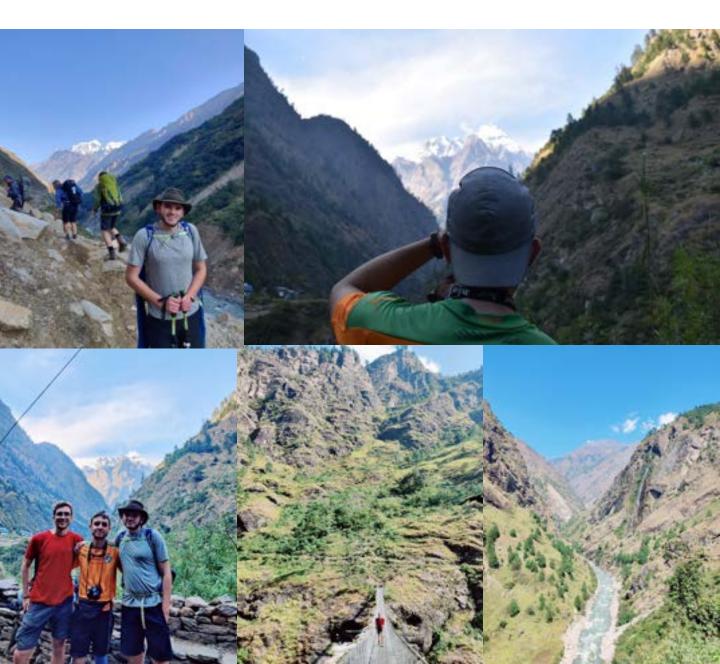
The gorge got narrower as we walked, revealing stunning waterfalls, as Ben was getting increasingly sick of sharing the walk with two Earth scientists, regailing each other with various geological features. After another top Dhal Bhat for lunch with some of Tula's relatives, the dramatic gorge–like scenery gave way to mystical alpine forest in the afternoon – we all agreed that this section was some of the best walking we'd ever done. Gaps in the huge conifers would reveal the roaring river we were following, along with cliff faces and above them, towering mountains of snow. Large skinks and vultures joined us, as we found ourselves stuck behind a "donkey jam" on the climb up to Deng.





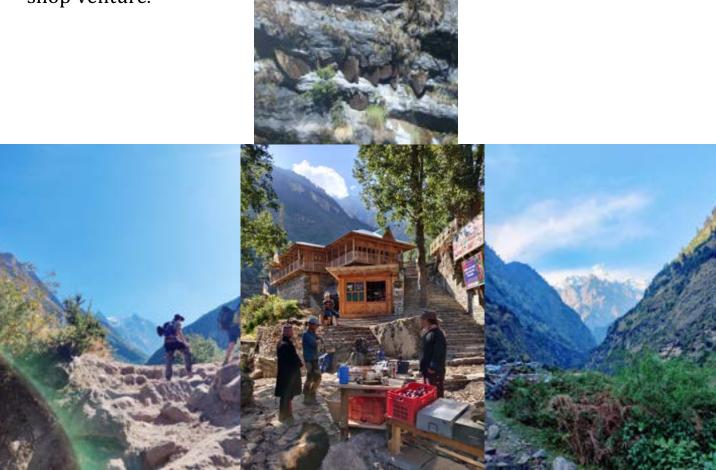


On reaching Deng, we indulged in mint tea and cards. We could feel the nights getting colder – worrying as our highest point would be nearly triple where we were – so, we settled into our respective, new SnugPak Expansion sleeping bags (<u>https://www.snugpak.com/</u> – yours for only £94.99!) for some shut–eye.



## Day 9 (05/11/22): Deng (1860m) to Namrung (2630m)

After a characteristic early start, we struck out once again. Today we would leave the valley behind and start gaining some real altitude- an exciting yet trepidatious prospect. The morning starts at a gradual pace as we start to slowly ascend from the clutches of the valley below, we are encouraged by the beautiful alpine-like surroundings, cloudless blue sky and the onlook of a group of Himalayan Tahr. Tula points out some honeycomb hanging from a treacherous looking cliff – we all agreed it would make a fine addition to our morning pancakes, though surprisingly, none of us fancied 'hopping up' to fetch it. In order to increase energy levels, Andrew offers everyone some Kendal mintcake. For most of the of the group, this confectionery nostalgically reminds us of hikes gone-by, mostly back on the green hills of the UK. For Tula, however, it conjures the most horrific of nightmares as he scrunches his face up in disgust and barely manages to swallow the extremely sweet snack. A similar reaction is received from a local lady working in the teahouse we had chosen for a break – we made note not to include it on the stocklist for our future Nepal-based sweet shop venture.



It's not long after this that Tula warns that we are about to embark on the longest and hardest ascent yet – he wasn't lying. What he hadn't mentioned however, was that halfway up this menacing climb sat a Tibetan man selling the most wonderful apple–based products any of us had ever set eyes upon, let alone taste. The rest of the day was an apple–fueled breeze and we were in jovial spirits as we set foot into Namrung.

We were expecting the teahouses to deteriorate as we ventured further into the mountains, and thus, it was a beyond pleasant surprise to find our accommodation for the night took the shape of quaint mountain chalets. The river cottage guesthouse was a delight. As we wearily took seat upon the balcony of the chalet to see the night in and observe the magnificent view, Andrew spots a group of Langurs on the rocks far yonder. We watch and photograph these fascinating creatures as they play on the rocks for nearly an hour. Our wildlife session comes to an abrupt halt as a local man with a vengeance – and a bag full of rocks – emerges from the undergrowth intent on scaring them away, though thanks to his poor accuracy no Langurs were harmed in Namrung this evening.



## Day 10 (06/11/22): Namrung (2630m) to Samaguan (3520m)

It is becoming more difficult to get out of bed each morning, a result of the group becoming increasingly tired, not helped by the cold or the altitude. The walking also isn't getting any easier. We say goodbye to the quaint village of Namrung (with heavy hearts) as a dog chases some langurs away in the scrub beside the route. Today starts off in a relatively gradual manner but before long we are struggling with the intensity. The pain of it is eased somewhat, however, by the stunning snow-capped peaks of 7000m mountains that come into view around each corner. After one such corner we come across the majestic twopronged peak of the mountain we had come all this way to see: Manaslu. Glistening in the sun and emitting what seemed to be steam from her summit, the mountain makes for a truly foreboding sight. We stop for lunch in the village of Lho, at the most picturesque of scenes- a sun-bathed chalet with exquisite views of the surrounding peaks, it was warm and the food delicious. The best Dhal Bhat yet? It was hard to leave, made even harder as many of the other trekkers (some of whom we had become quite friendly with), were staying here for the night, whilst we were only halfway through the day. We reluctantly say our farewells and gaze longingly as they tuck into lunchtime beers in the sunshine.

As the afternoon draws in, so does the forest around us. A beautiful dark green light ensues and is evocative of an almost fairytale like scene. Gnarled trees suffocated by great strands of lichen sit amongst enormous moss–shrouded boulders, the mystical setting is only sparsely pierced by beams of light from above. Just as we were wondering when Snow White and her merry encore would turn up, we hear a great jangling sound approaching us from the hill beyond. We all look up and out of the darkness a minature–yet–rotund cow charges into view, laden with gas cannisters, and careering down the hill at a terrifying pace. We quickly jump out of the way and just as we catch our breath, a man follows at full sprint shouting unintelligible rantings\* at the beast – which now looks to be the best part of the way back to Kathmandu.

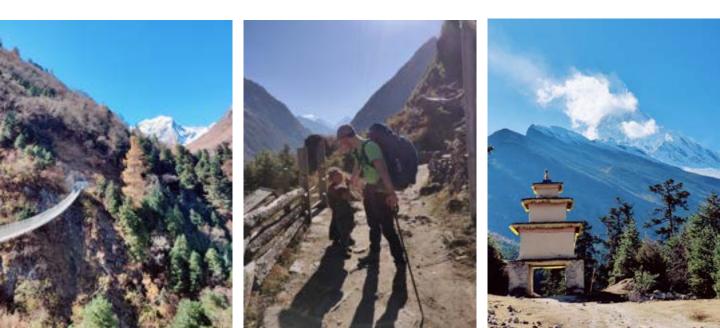


\*Also unintelligible to Tula

Not long down the trail and just as we were about recovering from this traumatising experience, we come across real trouble: two of the himalays hardest and most feared criminals. They take the shape of a 3-year-old boy and 4-year-old girl, but don't let that fool you, they are as malicious as they are cunning. Luckily, Hamish and Andrew manage to escape their clutches. However, Ben gets caught by themthey venomously grab his walking poles and demand that he pay the ransom fee: chocolate. Either out of braveness or stupidity Ben declines this demand time after time. What feels like hours later, they finally break him. He hands over a granola bar and walks away, his head hanging in defeat but in truth lucky to have walked away with his life.

The views on the final push to Samagaun (Sama) do something to rectify the situation. A quick stop for a brew in the postcard village of Syala (mountains on all sides), and the view of a local cricket game going on in the shadow of Manaslu cheer Ben up no end.

Sama is the entry proper to Manaslu base camp, with many sumiters choppering in to take on the mountain. The altitude is clear; the evening is the coldest yet and our accommodation a bleak, grey building which fails to provide much in the way of home comforts. We can't really complain though, as we watch the sun set behind the mountains beyond and the last of the light hit the Manaslu's eastern face, it truly dawns on us how lucky we are to be part of such a phenomenal scene.



#### Day 11 (07/11/22): Samaguan (3520m) to Samdo (3800m) via Pungyen Gompa monastry (4050m)

Those who have not had the joy of waking up for a 05:30 start at *many* degrees below zero in a dreary concrete structure high in the Himalayas will not know the pain this inflicts. That was our fate that morning. At altitude and cold, your sleeping bag (https://www.snugpak.com/ – other sleeping bags are available) becomes your sanctuary, your safe place. As the days progress, more and more of your possessions find their way inside the bag, preventing the need to dress in clothes with a crust of ice. If the allure of a view of Manaslu at sunrise hadn't been there, we agree we'd still be in those sleeping bags to this day. The morning was for an acclimitisation hike before returning back to Sama for lunch before ploughing onwards. When the plan is to reach quite serious altitude, progressively overloading the body's oxygen delivery and usage capabilities is a necessity to avoid issues including HAPE and HACE. We were hiking up to Pungyen Gompa monastery at just over 4000 metres, our highest point yet.

The walk out of the Sama valley was pleasant enough, until we hit a steep gorge, requiring a tough hike/scramble out onto the valley rim – Andrew and Ben passed the time by trading impressions of top legend Gordon Buchanan struggling with altitude in the Himalayas. We climbed over onto the rim of the valley, which comprised an ethereal, almost post–apocalyptic "desert" plain, surrounded on all sides by monumental walls of ice; crucially, Manaslu was there, dead ahead. The vastness of the blue sky on that plain was something else; enough to keep all the world's sailor's in legware for quite some time.



We passed yaks en route to the monastery, although there was not a person in sight. At altitude, the heat of the sun can be quite intense, although as soon as the shade hits you're in trouble. So, we basked on the steps of the monastery, and had a group meditation – the point of which was slightly lost on Hamish, who was struglling with what to think of. This tranquility was disturbed only by the crashing of huge avalanches above our heads on Manaslu's treacherous slopes. As we walked back across the desert plain, we all agreed that, staring up at smoky Manalsu, it had been the greatest wee of any of our lives. We raced back down to Sama, feeling the thick broth of oxygen hit us, for a quick lunch of thenthuk (warming soup with pasta and potatoes). Getting going that afternoon was a struggle, not aided again by other trekkers showing up having finished their day, which comprised a leisurely stroll from Lho to Sama (lightweights). The walk to Samdo was low-key, three hours of sensational views, although maybe we're getting habituated to them. Samdo is a bleak settlement, where our biggest fear was needing a wee in the night; this would require putting on some serious layers to avoid joining Prince Harry with a frost-bitten extremity.

That night, the weather closed in. Thus–far we had not seen any of the weather fronts which make Himalayan climbing, Manaslu in particular, so dangerous. However, that evening we watched a carpet of wispy, ocean–grey cloud meander down the valleys, seemingly innocent enough. However, one minute you're staring at a horizon of jagged peaks, and the next you can't see five yards in any direction – a testament to the unpredictable nature of the region's weather, which has claimed the lives of many a climber.



## Day 12 (08/11/22): Acclimitisation trek to the Tibetan border (5030m)

As we woke for another 5:30 start to the day's hiking, there was a real air of excitement ahead of the day's proceedings; for we were heading on a long acclimitisation hike to the Tibetan border before returning back to Samdo, removing the neccessity for lugging our huge expedition backpacks onwards. So, day–sacks on, we headed for Tibet, as you do.

The start to the morning was tough. Intense cold, and the lack of any sunlight hitting us yet, meant that everything was freezing (water and body parts) as we walked. We were also faced with a steep uphill to get us out of the Samdo basin – not fun at many degrees below zero. After this, a relatively unused path took us along a dramatic valley, far away from any trace of human presence, un–named peaks passing on either side. We were in snow leopard country. While walking there were many signs of the illusive feline: leopard–sized scat (poo) filled with yak hair (snow–leopard food) and the odd frozen and crusty pug–mark on the frozen riverbanks.

After a couple of hours, we reached the end of the valley, with an impassable wall of rock straight ahead. Instead, Tula turned 90 degrees to his right and started making his way up a semi–sheer gorge between two peaks, which he promised would lead to the border. Tula had attempted this hike several times but had been unsuccessful on each, due to inclement weather or a struggling team. But after around a week of hiking we were all in (relatively) good shape, so ploughed on.



Another couple of hours passed, in which our efforts to hike and scramble up this incline had left us battered and bruised. It was then that we reached the snow-line and things got really treacherous. In parts knee-deep, this icy-snow left us on our backs ten yards further down the mountain at times. Further to the gradient and snow, the final challenge of altitude was starting to hit. The snow-line hit at around 4700m, 700m higher than we had previously been. Almost simultaneously, the headaches and heavy breathing started to hit.

It was one of those climbs where each summit would yield another one 100m further up. However, it was when things were getting psychologically rather bleak that we passed one of these false summits and saw the Chinese flag blowing on the horizon, at the top of the steepest part yet.

After a final push we stumbled rather ungracefully up to the flag, which revealed a crude barbed wire fence stretching to the peaks left and right of the border pass. Absolutely thrilled, we agreed it had been the toughest hike any of us had done to-date. Not only that, sharing the moment with our guide, and it being the first time any of us had stood in that spot, was really special.

There was an amazingly ethereal view over the Tibetan Himalaya on the horizon, as far as the eye could see. We crossed the border and took some windswept photos, having infiltrated China at over 5000m. Before descending, we all relieved ourselves and unanimously agreed it had surpassed the previous day as the best wee ever.

The hike back down the gorge was extremely sketchy and fatigued. We saw one other hiker near the bottom, a British woman with her guide. We later found out from her guide that they had not made it to the border. The walk back to Samdo was a slog, but we passed the time merrily enough chatting about the food back home we were craving the most.

Much stretching was required that night, but after a great great day we went to sleep buoyed by how well we were coping with the altitude. Sleeping at altitude is often associated by short stretches of sleep followed by sudden waking gasping for breath; however, none

of this for us. So far at least.



# Day 13 (09/11/22): Samdo (3800m) to Dharamsala (4460m)

An unexpected lie–in today. It felt rather surreal starting the day at the dizzyingly late hour of 7am, we might still have been dreaming. Feeling rested and cocky, we swanned out of our sleeping bags for a quick bit of breaky before hitting the trails again.

An easy days walk today. Only three hours from Samdo to Dharamsala in glorious sunshine surrounded by mountain giants. There was some tricky footing around waterfalls with our heavy bags, but other than that it was bliss. Huge groups of vultures circled in a congregation nearby, presumably having spied a recent snow leopard or tiger kill.

We arrived rather anticlimactically to Dharamsala, seeing where we were staying for the night. The best way to describe it would be a shipping container, providing negligible warmth, with four paper–thin mattresses on the floor.

After a lunch of warming thenthuk, we settled ourselves in the sun for the afternoon and passed the time listening to music and

photographing the mountains surrounding us. This gave the muscles a bit of a break before tomorrow, where would summit the pass.



As soon as the sun fell behind the ridgeline it became dangerously cold; the running water source at camp froze solid, and we retreated to the safety of our shipping container and our sleeping bags. We were only willing to leave the warmth for food, so we shivered our way through a few thenthuks. While we were eating, we had to endure a highly annoying trio of Canadians "hypothesising", if you can call it that, about black holes, although in reality all they were doing was plagiarising the movie Interstellar in its entirety. The other camp occupants did not seem to be enjoying this either, a group of the grumpiest looking French men we had ever seen. No longer able to take anymore of this, we left their company and wandered outside. The view was incredible. The moonlight was visibly wafting down a valley from the East, with no sign of the moon, and catching the snow-covered peaks. Eventually, the moon broke the horizon and bathed us all in an ethereal light. Magical.

We turned in, ready for the altitude-affected sleep ahead of us.



#### Day 14 (10/11/22): Dharamasala (4460m) – Larkya La Pass (5106m) – Bimthang (3720m)

Just as we had been getting used to the 5:30am starts, a 3:30am day was thrown at us – talk about progressive overload. Luckily, due to the cold of Dharamsala forcing us into our sleeping bags at 7pm the night before, we weren't far off a full 8 hours of, albeit altitude– affected, sleep. No one sleeps well at Dharamsala. The lack of oxygen means getting off is a struggle and, when successful, you wake up after 30 minutes gasping for air. However, we all agreed in the morning that this allowed us to get through a fun amount of dream content in short story format. It was like having Netflix on shuffle mode.

Things got considerably less jolly on leaving sleeping bags. The cold in the middle of the night here means that water instantly freezes on going outside; this means that, unless an antifreeze is used, climbers are generally without water until the sun surpasses the high "hills" late morning. The cold as we woke up and had a dreary breakfast was like nothing we'd ever felt. All extremities were shrinking back into gloves, walking boots, or other items of clothing. It is easy to see how frostbite can quickly nip at you up here.

Head-torches and down jackets on, we were faced with a steep dark incline first thing. Style of walking changes slightly when in such cold; hikers adopt their own pace and generally do not stop. So, we were treacherously finding ways to overtake slower trekkers on the narrow goat track. We later compared notes and realised we simultaneously adopted coping strategies to motivate ourselves up that tough incline. Hamish and Ben were imagining friends back home, as the early start meant that they would just be heading to bed. Meanwhile Andrew, who had lucked out on the first shift with the lighter bag, was free to admire the moon-kissed, snow-covered mountain tops; he later told us they were very impressive. Not much chatter.



After an hour or so of freezing ourselves up that hill, we hit the permanent snow-line. Foot placings were very difficult and deliberate, to avoid sliding down in the direction we had just climbed. We eventually climbed over a hump and hit a vast plateau in between two high ridgelines. The amount of snow and ice on the plateau was staggering. The shapes that these frozen structures make in the landscape were stunning and terrifying; if you've made it reading this far, google "Khumbu ice-fall close-up" – it is that sort of thing, but on a smaller scale. Khumbu is, of course, the glacier in between base camp and Camp I on Everest.

We took a deliberate path through the ice-field, skirting around minicrevasses. At one point, Tula stacked it and fell into one such crevasse. Being the shortest of the group, he quickly fell to chest-level. After we had got him out and brushed him down, we had a look into the crevasse, now no longer deceivingly covered in snow, and saw he had been very lucky not to have been swept away entirely. It was vast. Walking on that plateau was exhausting, constantly sinking into the snow when you miss a foot-placing. This was somewhat salvaged by the sunrise which was breaking over the icy ridge behind us. Sunrise in the Himalayas is a bonkers time – a vast, deep blue sky, with the sun breaking into one side of the valley, in an epic show-down with the moon in the other side.

Eventually we reached the summit of the Larkya pass. Prayer flags covered the ground, mystically marking the spot. We stopped for a few photos, but the cold rapidly hit us and meant we had to head down the other side of the pass rather rapidly.



The descent was extremely treacherous. The early start is so that the ice is still firm and less slippery. However, this was small comfort, given we were still crawling and slipping our way down the mountain. Very tough and very bleak. The silver lining was that by the time we made it down, the sun had de-frosted our water bottles, meaning we could enjoy a well-earned sip of water. Never tasted so good.

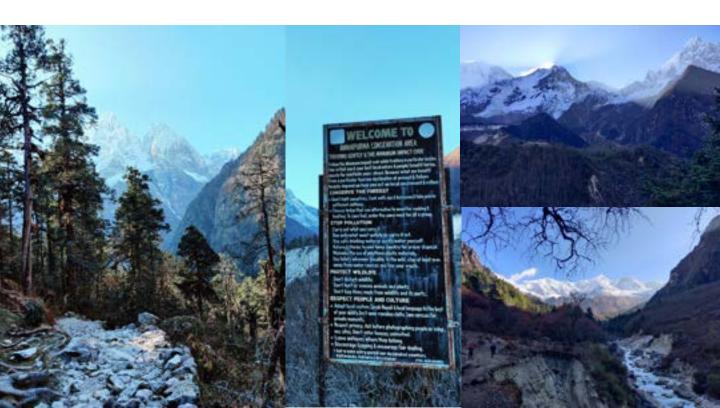
We were the first hikers off the summit that day, with a French team coming in half an hour behind. We rewarded ourselves with a cup of tea at the edge of the snow–line. Then, relatively speaking, we had a chilled out descent to Bhimtang, where we were staying that night, although after an intense day, the knees were moaning.

Rather ominously, as soon as we reached Bhimtang, it started to snow.



#### Day 15 (11/11/22) : Bimthang (3590m) -Dharaphani (1860m)

As we departed Bimthang, we also began departing the snow and the cold. It had been stunning, but we were all glad for some sun our backs and some oxygen in our lungs. Today represented a serious descent of almost 2000m in one day. This was evident in the hugely varied landscapes and vegetation; we had started off in snowy tundra esque conditions and ended the day in lush tropical forest. The sections between were landscapes made of the most beautiful pine forests- white snow-tipped peaks could be spotted through gaps in the canopy, making for an extremely scenic walk. The fact it was 'all downhill from here' really lightened the mood and we practically skipped the way down. Halfway down, our spirits were lifted even further as we came across an extremely eccentric American gentleman who joined us in a sing-along of one of our favourite scottish tunes. Loch Lomond. Not long after we stopped for lunch in a sun-basked glade surrounded by tiny colourful wooden chalets. Here, we came across what must have been the 20th German couple of the trek.... and true to form, they were a delight.



We joyfully shared anecdotes over warm bowls of thentuk and then continued on with a parting gift of German sweets. Overall, the group found this downhill segment a 'walk in the park' compared to the treacherous sections encountered earlier in the trek. However, we discovered that the stuff the group is made of varied greatly in regard to its sterness. It turned out that Benjamin was made of the least stern stuff of us all and he was very much struggling by this point (due to what he claimed was a former 'knee injury'). Nontheless, we eventually reach Dharaphani and the group rejoiced with some delicious Gorkha strong beers. The Manaslu trail was complete.



#### Day 16 - 18 (12/11 - 14/11/22) : Pokhara

The highs of the previous day, having finished the trek and had our first Gorkha strong for a couple of weeks, had not worn off when we rose for a swift breakfast of Tibetan bread and egg. However, the smiles were quickly wiped from our faces when we saw our transport out of Dharaphani. Today was for making our way to Pokhara, Nepal's second largest city, and the first leg of this epic journey was in a comically small 4x4. The comedic value wore off, however, when we saw the number of people who needed to get in. After over 10 days in the Himalayas, with just about three clean t-shirts between us, the only word to describe the back of that car was *pungent*. The drive to Jagat (not that Jagat) was just over three hours of being thrown around battling against steep gorges, and fighting the body's urge to vomit down said gorge. The tracks were barely fit for donkeys, let alone a jeep. But hey ho we made it. At Jagat, we said our farewells to Tula over a final, highly emotional bowl of noodles, and then boarded another tiny bus, with far too many clients. Leg room was severely lacking, but we gritted our teeth for the 6–7 hours it took to reach Pokhara. Rewards included a tasty plate of pakoras and stunning views of the Annapurna Massif as we cruised (crashed may be a more apt word) into Pokhara.

We had heard many things about the illusive town of Pokhara; it was supposed to be stunning, with the hostel–y area situated on the banks of a great lake, bustling, and altogether more chilled–out than hectic Kathmandu. A taxi took us to our hostel, where we could finally wash our clothes (it's bizarre how major and surreal things like this feel after spending time away from civilisation). The endless possibilities of things to do in a city that night went straight to our heads. We went to a pizzeria, ordered many meat pizzas (everyone is vegetarian on the trails), woo woos, and pornstar martinis. These had never tasted so good. The ecstasy was shortlived, however, as after this we became rather acquainted with the toilet bowl. Following this, we went to a bar on Tula's recommendation, *the busy bee*, for a couple of beers and some people watching.

Visitors to Pokhara fit broadly into two categories: trekkers en route to/from a trailhead, or gap yah youths on a mission to "find themselves" and proceed to tell everyone exactly where/how they found themselves. Needless to say, none of them seemed particularly perturbed by the fact that supposedly they had previously lost themselves. After this low-key evening, we turned in, although the busy bee was just getting going with an eclectic mix of clientel, from 17 year olds Nepalis to 70 year old French families. Going to bed that night was bliss in a duvet rather than a sleeping bag; the lack of shivering was also a novelty. We woke early the next day, ready for a fantastic day. If the Tibetan border was a dreamy mountain day, then what we had planned was certainly a dreamy city day. We started it at a café next to our hostel and enjoyed some strong coffee and Nepali pastries. While sat in the garden with our espressos (all very civilised – until the toilet dash after our first coffee for some time), we agreed that our bodies were severely battered after so long in the high Himalayas. The only solution it seemed, was to indulge in a traditional Nepali massage. It is very hard to articulate just what happened during the couple of hours at the massage parlour. Andrew had his own room, which he later said was terrifying having never had a massage before. Meanwhile, Ben and Hamish shared a room, which was far too much hilarity for two immature young adults as they put on their disposable underwear. The massage itself was an extremely relaxing hour; a magical place where dreams come true, according to Andrew.



Following this, we settled into a little restaurant next to the lake where they were showing the cricket world cup final (England vs Pakistan). What a way to spend a post–expedition afternoon in Nepal, folding into a comfortable seat following a massage, being brought many pakodas, momos, and cocktails, and watching Jos Buttler's England bring the CWC home. Very surreal stuff.

Celebration was in the air, meaning that the evening quickly decsended into utter debauchery, which we shall not digress fully here. Some highlights, however, include a 65 year old gap yah "youth" DJing a techno rave, Hamish joining a young Nepali band on stage and singing Coldplay, and introducing the Pokhara public to Scottish folk music – Skippinish can thank us for their sudden spike in Nepali interest.

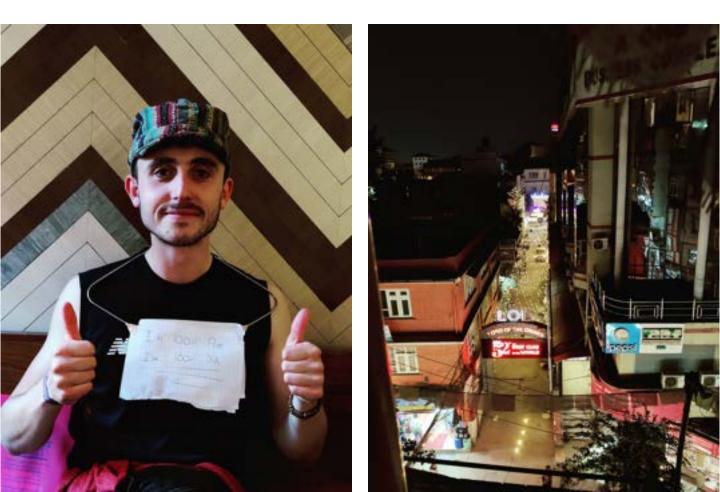
The following morning was rather a slow one and with extremely heavy heads we left our hostel in search of coffee. We then spent the day on Pokhara's spectacular Phewa Lake. We took a little canoe and rowed across it away from the city, stopping for a quick bite to eat at a lakeside shack. We then passed the afternoon hiking up to the World Peace Pagoda, involving a steep wander up through rainforest to the top of the ridgeline surrounding the Pokhara area. Ben, having a much weaker resolve (and stomach) than the others, couldn't face the short ascent up the hill and decided to nurse his health at a small bar beside the lake. Thus, he missed out on some stunning views of Pokhara as well as the opportunity to be in a Danish documentary on Nepal. Andrew and Hamish eagerly await the opportunity to bask in their inevitable newfound Scandinavia fame. After a swift row back across the lake, in which Hamish kept villainously turning the canoe around so Ben would have to do all the work, we headed out in search of our final dinner in Pokhara. Mango lassis in hand (it was far too soon to even look a beer in the eye), we were all very contented. We would miss Pokhara – a fantastic city.





#### Day 19 - 20 (15/11 - 16/11/22) : Kathmandu

Alas, we knew the day would come, but it was with a bitter hearts and slightly bitter heads (due to the unwillingness of the previous day's hangover to relent), that we left behind beautiful Pokhara, signalling the end of our trip. Our final 10-hour perch upon some rumbling, jarring wheels of torture – occasionally referred to as a 'bus' in Nepal - transported us back into the tornado of chaos that is Kathmandu. We quickly found a hostel and tucked ourselves in for the night, the bus having rather taken the wind from our sails. We now had one final day to spend in the capital before catching our 2am flight. To entertain ourselves, we set a challenge. We each set off with 200npr  $(\sim 1.25 \text{ GBP})$  and one hour, in which we were tasked with purchasing the best (loosely interpreted) gift for another in the group. By the time we met in the authentic German-style Pumpernickel bakery for lunch, Andrew was the new proud owner of a shop sign stating that he was '100% pure' along with a rather fetching hat; Ben could be seen sporting a very 'Gap yah' style flat cap and Hamish a beautifully coloured buff.



Reunited and with mixed feelings regarding our new possessions, we headed out to explore the city together for the afternoon. Not five minutes had passed when we heard a deeply accented 'hallo' from across the street. We all turned and our eyes met with our very favourite German couple from the trek: Chris and Camilla. We made a plan to meet for dinner and then explored for a few hours, picking up some very questionable 'North Face' and 'Arcteryx' rip-offs along the way. Dinner with Chris and Camilla was delightful and after a few beers we decided to venture to a Karaoke bar around the corner. After some woeful singing (\*cough cough\* Hamish) and some sad goodbyes, we found ourselves sat in a tiny taxi tearing towards the airport. The beers that evening must have taken their toll on Ben and Hamish, as much to Andrew's dismay, they sang and danced their way through check-in and security. About an hour into the flight, however, spirits quickly plummeted as each of us started feeling very nauseous.... "what a time to contract Giardia". Fortunately, it turned out to be a benign stomach bug and we all recovered with relative swiftness. We headed our separate ways, with a promise to meet soon and plan our next trek, secretly hoping that the gracious exploration board would be kind enough, once again, to place their trust and funding in our hands.

Keep yakking: X



### 4. Budget & Finances

Ben and Hamish were awarded £850 each from the Exploration board and £550 from the Lord Mayor's 800th Anniversary Awards Trust. All other funds for the expedition were raised from personal contributions.

Item	Cost (£)
Accommodation	256
Food	452
Insurance	418
Flights	2550
Permits	561
Guiding costs	532
Equipment	910
Transport (buses/jeeps)	54
Total Cost	5733
Total Grant Contributions	2800
Personal Contributions	2933



### 5. Health & Safety

The following risk assessment for the trip was conducted. We hope this is useful for future groups persuing future itineraries. NOTE: this was specific to our trip and will need tailoring to the itinerary. Also, as ever, the best risk prevention strategy was listening to local advice. Even after all the preparation in the world, the local guides and communities know the areas and it's dangers far better than we ever could.

Risk	Consequenc es	Prevention	Solution	Likelihood x Seriousness	Risk Score		
Communicable Di	Communicable Diseases						
Malaria	Fever, Headaches, Dysfunctional joints, nausea, diarhoea, hospital stay, death	Risk is low in Nepal, especially at altitude. However, when in Chitwan common bite avoidance practice will be followed	Hospital and combative medicine	1 x 4	4		
Cholera	Diarrhoea, vomiting	Only bottled or treated water shall be drunk	Hospital	1 x 3	3		
Hepatitis A/B	Vomiting, fever, joint pain etc	Vaccines will be up to date; basic precautions will be followed (e.g. no needle use)	Hospital	1 x 3	3		
Japanese Encephalitis	Sometimes brain swelling, coma, convulsions, death	If advised by travel clinic, vaccine will be obtained; Common bite avoidance behaviour	Hospital and repatriation	1 x 5	5		
Rabies	Fever, itching, cerebral dysfunction, death	Vaccination; Bite avoidance	Hospital and repatriation	1 x 5	5		
Typhoid	Headache, diarrhoea	Vaccination; good hygiene; only bottled water	Hospital	1 x 3	3		
COVID-19	Fever, cough, fatigue, breathlessness	Common avoidance behaviour (distancing, masks etc)	Monitoring, isolation, and possible hospital	2 x 2	4		

Risk	Consequenc es	Prevention	Solution	Likelihood x Seriousness	Risk Score	
Terrorism and Crime						
Crime (mugging, pick- pocketing, sexual assault etc)	Possible injury; loss of equipment/pe rsonal items	Basic precautions (stay together, don't draw attention to ourselves etc)	Treat any injuries, claim losses on insurance	1 x 3	3	
Terror Attacks	Injury or death	UK government advise vigilance and follow local advice	Treat any injuries	1 x 5	5	
Kidnapping	Fear, discomfort, prolonged disappearance , injury, death	Basic precautions (stay together, don't draw attention to ourselves etc)	Make immediate contact with UK and travel insurance	1 x 5	5	
Natural disast	ters					
Earthquakes (last in Manaslu 2015)	Severe injury, death, separation	Follow local advice and take basic precautions	Treat any injuries, instantly regroup and contact UK	1 x 4	4	
Monsoon	Injury, death	Travel in November minimises monsoon risk	Treat any injuries, instantly regroup and contact UK	1 x 4	4	
Transport						
Internationa I flight	Injury, death	Use reputable airlines	Treat any injuries, instantly regroup and contact UK	1 x 5	5	
Car crash	Injury, death	Use reputable drivers and routes, stay vigilant and flag any dangers	Treat any injuries	2 x 4	8	

Risk	Consequenc es	Prevention	Solution	Likelihood x Seriousness	Risk Score		
Trekking-related	Trekking-related dangers						
Acute Mountain Sickness	Malaise, headaches, breathlessness, nausea, dizziness	Acclimatisation days are built into the itinerary; steady pace will be maintained; preventative drugs may be taken	Treat with acetazolamid; rest; descend if necessary	3 x 2	6		
High altitude cerebral/ pulmonary edema (HACE/ HAPE)	HACE: Headache, malaise, nausea, hallucinations. HAPE: Blue lips, chest tightness, breathing difficulty.	Acclimatisation days are built into the itinerary; steady pace will be maintained; preventative drugs to be taken (Acetazolamide)	Descend immediately; treat with dexamethasone (HACE) or nifedipine (HAPE)	2 x 4	8		
Loss of direction	Time wasting; use of unsafe paths	The route will be studied in detail; detailed maps used; guide used	Retrace steps to last familiar place; do not continue on unknown route	2 x 1	2		
Exposure/ hypothermia	Shivering, blue extremities, irrational behaviour	Ensure sufficient waterprood/win dproof cllothing	Depending on severity, apply extra layers or shelter and make camp	2 x 3	6		
Fatigue	Increased injury risk, angry behaviour	Rigorously planned itinerary prevents over- exertion	Rest	3 x 2	6		
Dehydration/ hunger	Loss of concentration, irrational behaviour, loss of consciousness	Ensure adequate water/food supply; resupply at every stop	Rapidly apply emergency rations	2 x 3	6		
Injury	Physical impairment	Itinerary prevents over- exertion; route minimises dangerous scrambles/climb s	Apply first aid; rest; hospital	2 x 4	8		

Risk	Consequenc es	Prevention	Solution	Likelihood x Seriousness	Risk Score
Trekking-related	dangers				
Avalanche	Injury; death	Follow local guide advice and avoid dangerous seracs; use avalanche transceiver	Regroup; treat injuries; hospital; descend	1 x 5	5
Sunburn	Pain; leads to sun stroke	Apply sun cream; sensible clothing choices	Apply aftersun; stay hydrated	2 x 2	4
Slips/Falls	Injury; death	Guide advice will be followed; dangerous scrambles/climb s minimised	Treat injuries; hospital	2 x 4	8

### 6. Acknowledgements & Summary

We would like to extend our most sincere thanks to two main supporting groups of this trip. Firstly, the Imperial College Exploration Board. Without their generous funding for trip expenses, insurance, and contribution towards equipment, this trip absolutely could not have gone ahead. We enjoyed the trip so much, there are no words to show how grateful we are.

Secondly, the Lord Mayor's Association's generous contribution to trip expenses was enormously valued. These trips are so valuable to students, meaning funding bodies like these are so important. Thank you.

#### Summary:

Distance walked: 224km Elevation change: 26,117m Walking days: 9 Dhal bhats: 2,679,094

#### Social Media:

<u>Instagram</u>: the\_\_wombling\_\_yaks <u>TikTok:</u> thewomblingyaks

## 7. Gallery I) Wildlife









































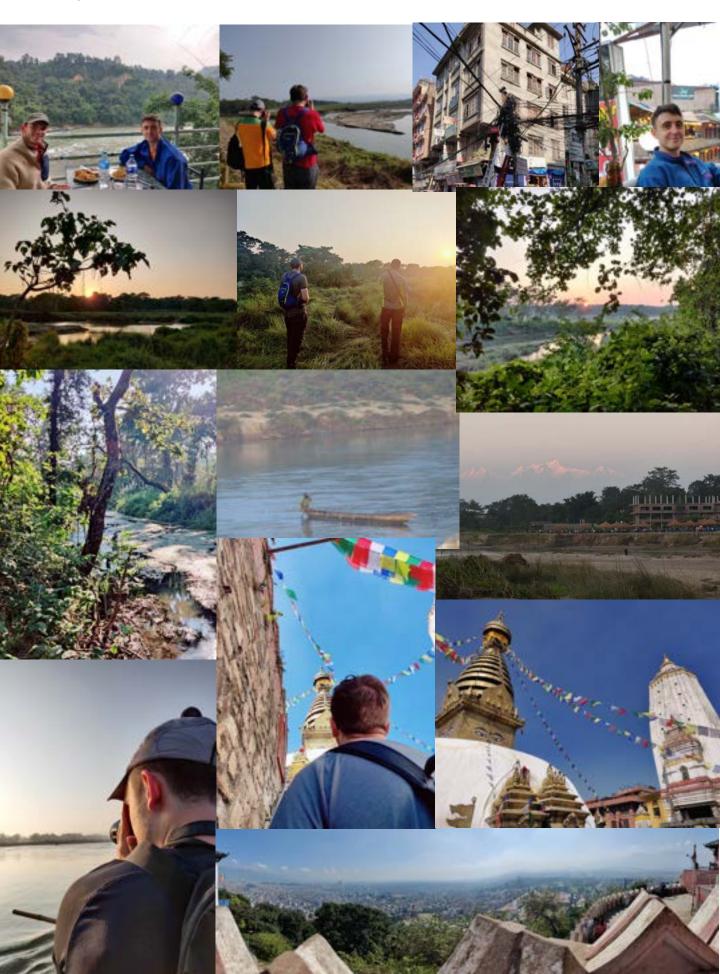




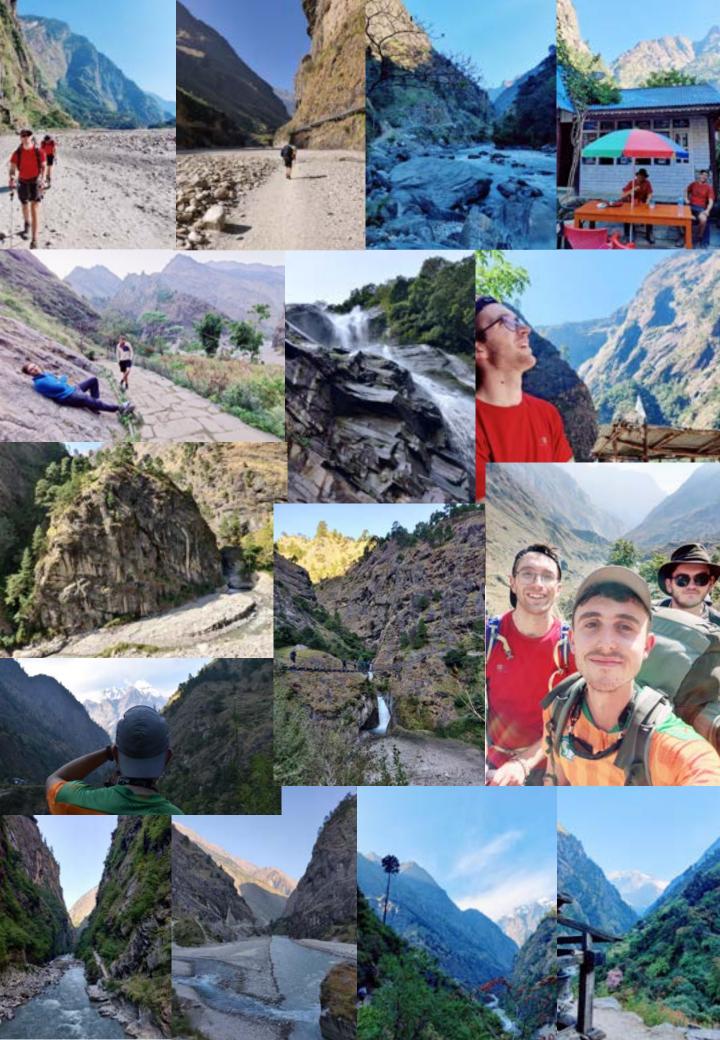




### II) Team & Landscapes







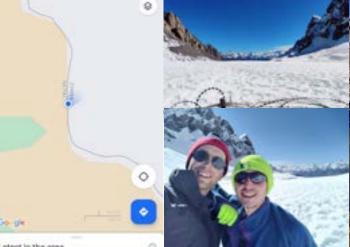






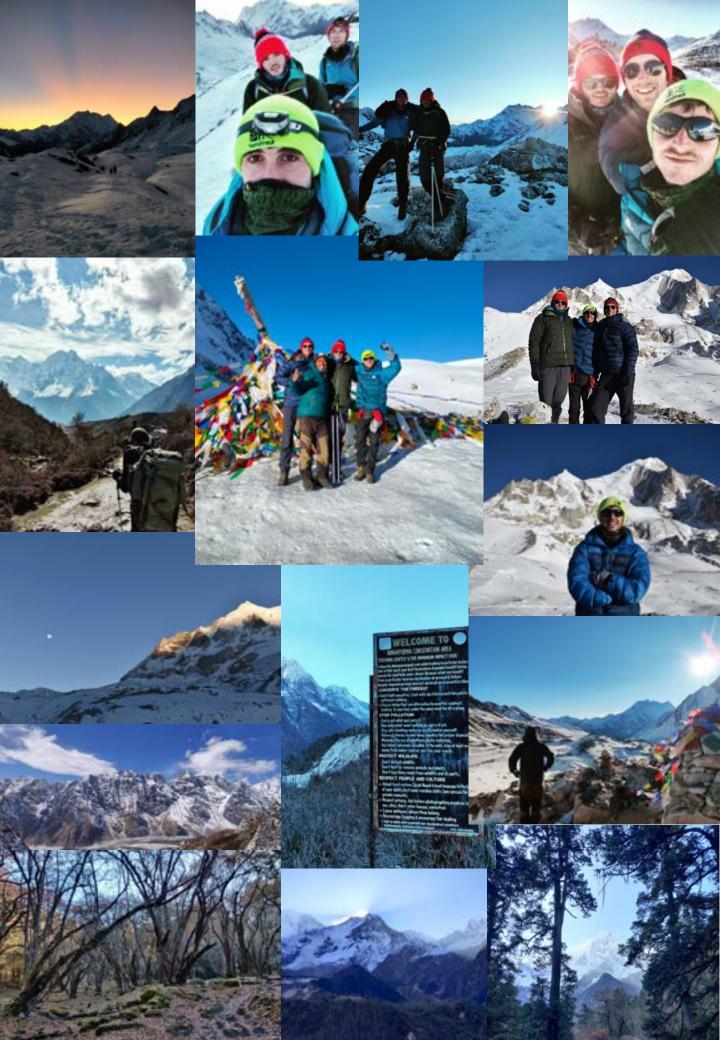












# 12. Bibliography

- Bilham, R. et al. (1998) 'Geodetic constraints on the translation and deformation of India: Implications for future great Himalayan earthquakes', Current Science, 74(3), pp. 213–229. doi: 10.1002/j.2161– 1920.1971.tb01267.x.
- Gurung, B. et al. (2008) 'Factors associated with human-killing tigers in Chitwan National Park, Nepal', Biological Conservation, 141(12), pp. 3069– 3078. doi: 10.1016/j.biocon.2008.09.013.
- Gurung, K. K. (1983) Heart of the jungle: the wildlife of Chitwan, Nepal. Smithsonian Libraries.
- Kamel, M. (2020) 'Impact of hiking trails on the diversity of flower-visiting insects in Wadi Telah, St. Katherine protectorate, Egypt', The Journal of Basic and Applied Zoology, 81(52). doi: 10.1186/s41936–020–00188–6.
- Kindlmann, P. (2012) Himalayan biodiversity in the changing world, Springer. doi: 10.1007/978–94–007–1802–9.
- Ministry of Forests and Soil Conservation (2016) Conservation Landscapes of Nepal. Kathmandu.
- Pokhrel, G. K. and Thakuri, S. (2016) 'Herpetofaunal diversity in Manaslu Conservation Area, Nepal', Our Nature, 14(1), pp. 99–106. doi: 10.3126/on.v14i1.16448.
- Thakuri, J. J. (2013) An Ornithological Survey of Manaslu Conservation Area. Kathmandu. Available at: https://www.google.com.np/search?q=ornithological +survey+of+manasalu&oq=ornithological+survey+of+m anasalu&aqs=chrome..69i57.10042j0j4&sourceid=chro me&ie=UTF-8.