

Yosemite Expedition 2022: Report

Imperial College London

Table of Contents

1. Introduction	3
1.1. Aims and Objectives	3
1.2. The Team	4
2. The Region:	5
2.1. Geography	5
2.2. Weather	6
3. Logistics	8
3.1. Travel and Documentation	8
3.2. Food and Supplies	8
3.3. Accommodation	8
3.4. Pre-Expedition Training	8
3.5. Permits	9
4. Diary	9
5. Walls Climbed	37
5.1. South Face of Washington Column	37
5.1.1. Olly, Izzy, and Chorley	37
5.1.2. Ed, Stu, and Alex	38
5.2. The Nose of El Capitan	40
5.3. The Prow	41
5.4. West Face of Leaning Tower	43
5.5. Regular Northwest Face of Half Dome	44
5.6. Zodiac	46
6. Budget and Funding	48
6.1. Expenses	48

1. Introduction

1.1. Aims and Objectives

The plan for the expedition was to travel to Yosemite and to climb some big walls from the start of September until mid-October. The expedition was split into two 3-week halves, with a changeover of people between the two. We flew to San Francisco then rented a car and drove to Yosemite. After six weeks of climbing, we drove back to San Francisco and flew back to the UK. The team had the following goals for the expedition:

- Develop big wall climbing skills in an accessible environment with the future objective of making first ascents and doing long routes in more remote locations.
- Develop aid and crack climbing skills, both of which are difficult to do in the UK.
- Disseminate these skills into the club so that more adventurous expeditions can be done.

Further to these, the team had the following routes identified as goals for the trip:

Free climbs:

Freeblast (El Capitan): 5.11b, 10 pitches
The Rostrum (The Rostrum): 5.11c, 8 pitches
Astroman (Washington Column): 5.11c, 10 pitches
Royal Arches (Arches Wall): 5.10b/5.7 A0, 16 pitches, 500m
Serenity Crack (Arches Wall): 5.10d, 9 pitches
Crest Jewel (North Dome): 5.10a, 10 pitches, 250m
Lost Arrow Chimney (Yosemite Falls Wall): 5.10a, 10 pitches
Steck-Salathé (Sentinel): 5.10b, 16 pitches
West Face (El Capitan): 5.11c/5.10 C1+, 14 pitches
Galactic Hitchhiker (Glacier Point): 5.11b, 23 pitches, 1300m
Snake Dike (Halfdome): 5.7, 7 pitches

Aid Climbs:

South Face (Washington Column): 5.8 C1, 11 pitches (pg. 308)
West Face (Leaning Tower): 5.7 A2, 8 pitches (pg. 434)
The Prow (Washington Column): 5.6 C2+, 11 pitches (pg. 316)
Lost Arrow Direct (Yosemite Falls Wall): 5.8 C2+, 15 pitches (pg. 290)
Regular NW Route (Halfdome): 5.9 C2, 23 pitches, 700m (pg. 350)
Lurking Fear (El Capitan): 5.6 C2+, 19 pitches, 800m (pg. 74)
South Face (Mt. Watkins): 5.9 C2+, 19 pitches (pg. 334)
The Nose (El Capitan): 5.8 C2, 28 pitches, 1000m (pg. 150)
Zodiac (El Capitan): 5.6 A3, 15 pitches (pg. 250)
The Shield (El Capitan): 5.6 A3, 29 pitches, 1000m (pg. 120)
Mescalito (Dawn Wall) (El Capitan): 5.7 A2, 26 pitches, 1000m (pg. 204)
Afroman (Washington Column): 5.6 A3+, 12 pitches (pg. 324)

1.2. The Team

Oliver Tippett (24) – 4th Year Mechanical Engineering

Expedition Leader

- Led Sport 7c, Trad E7, Alpine TD+, Aid A3, and bouldered V9.
- Multi pitch climbing up to 450m and 15 pitches in the alps.
- Multi-day alpine route experience.
 Basic aid climbing experience in the Peak
 District
 - Imperial College Mountaineering Club President 2021/2
 - Qualified outdoor first aider Level. 3
 - Expedition experience in Les Ecrins in 2021
 - Expedition Aim: Climb The Shield (5.6 A3)





Chorley King (21) – 3rd Year Aeronautical Engineering

- Led Sport 7a, Trad E3, Aid A2, and bouldered V5.
- Multi pitch Trad experience mostly in and around North Wales
 - Expedition Aim: The Nose (5.8 A2)

Stuart McClune (24) - Graduated with BEng in Computing in 2019

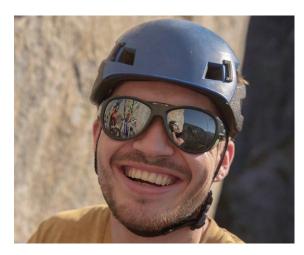
- Led sport 7c, trad E4, and bouldered V8
- Multi pitches up to 450m, up to sport 6c+ and E2 trad
- Qualified outdoor first aider level 3
- Ex ICMC vice president
- Previous expedition experience with Les Ecrins 2021 and Bolivia 2019
- Expedition aim: The Nose (5.8 A2)



Isabel Jones (21) – Graduated with BSci in Physics in 2021

- Traditional climbing up to E2, sport
 7a and bouldering V6
- Trad and sport multi pitch experience up to 300m in Scotland and Europe
- Social Secretary for ICMC 2019-2021
- Expedition aim: Improve crack climbing and big walls skills





Alex Smith (25) - Graduated with MEng in Chemical Engineering in 2018

- Led sport 7b, trad E2, and bouldered
 V5
- Multi pitches up to 300m, and up to 6c and E1
 - Alpine mountaineering up to D+
- Expedition aim: learn aid climbing and big walling techniques, Climb The Nose (5.8 A2)

Ed Chapman (22) - Graduated with MEng in Mechanical Engineering in 2021

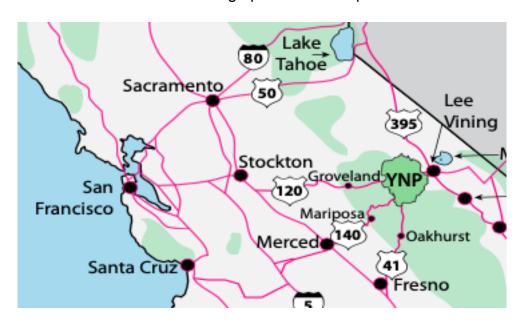
- Trad multipitch (Pyrenees, Alps, North Wales, Cairngorms) up to E3 (300m)
- Alpine Mountaineering up to TD, including South Face rock routes (alt 3500m), Mixed 4000m peak, Winter ice multipitch (fr. 4+ 300m)
- Multi-day route experience in the Alps and Scotland
- Sport multipitch up to 7a+ (9 pitches), longest route ~500m
- Climbing instructor (Westway Climbing centre)
- Qualified outdoor first aider Level. 3
- Expedition aim: gain aid climbing experience for use on bigger mountain routes – e.g. North faces in the alps, along with experience bivying mid route on a face climb.



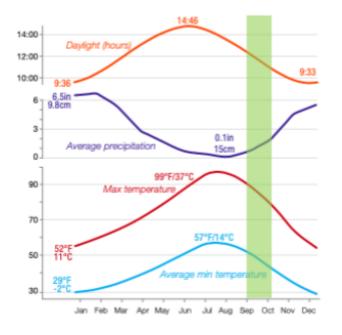
2. The Region:

2.1. Geography

Yosemite National Park is located roughly 170 km east of San Francisco, California. The UNESCO world heritage site is largely forested, being directly next to the Ansel Adams, Hoover, and Emigrant Wilderness'. One of Yosemite's main features (and of great interest to us) are the abundant large Granite faces and domes lining the valleys and canyons, cut from the Sierra Nevada Batholith by past glaciers, rock formations unlike any of those in the UK provide the perfect environment to develop our big wall techniques. Other notable geographic features of the park include a few relatively small glaciers (the largest of which being the Lyell glacier), as well as a collection of streams, rivers, and waterfalls that feed large river systems including the Tuolumne and Merced which drain large portions of the park.



2.2. Weather



During the period that the expedition took place the park experienced an average of just under 12 hours of daylight, although this wasn't much of a limiting factor due to the ability to camp out on the big walls and climb on into the night. Due to Yosemite's Mediterranean climate, reliability and prediction of weather forecasts was also not much of a problem in terms of precipitation with only an average of around 1 inch of monthly precipitation during

the expedition time frame. Although not the hottest time of year, with maximum possible temperatures reaching 80-85°F at the beginning of the expedition, we were prepared for very hot conditions especially when on the valley floor. The last major weather concern was potentially dangerous storms which can be harsh on the big walls of the valley. We aimed to not be on the walls if they were predicted, which was effective. When we did go out with rain forecast we were sometimes caught out, but only in an unpleasant rather than dangerous way.

3. Logistics

3.1. Travel and Documentation

The largest and most accessible airport to Yosemite national park is San Francisco International, a four-hour drive away from the park; team members flew to and from there. Team members applied for ESTAs to travel to the USA, which cost \$14 and allowed them to stay up to 90 days.

For transport in America, we hired a mini caravan/RV. We did this since it was cheaper to hire than a similarly sized car from a rental company, and it had the added benefit of a bed and a fridge. It was a 4-hour drive (190 miles) from San Francisco to Yosemite. We also needed a car pass for Yosemite national park which costed \$70 for the car. Free buses operate in Yosemite Valley which we used whilst there rather than driving the car.

3.2. Food and Supplies

Buying food in Yosemite Valley was expensive so we did a large shop on the way to the valley and used the Village Shop in the valley for when we ran out of things. We also drove to the shop in Mariposa twice over the expedition when we ran out of food completely.

Food was stored in bear boxes whilst camping. In terms of eating on big walls, for shorter routes we ate cold food and did not take a stove (sometimes accidentally). On longer routes when we were hauling significant amounts of food and water, we took a stove. Dried food was not necessary as we have to carry large amounts of water anyway, so tinned food or MRE rations were better. We also pre-prepared meals on the ground to take with us to eat on the first day or two (often cheesy pesto pasta).

3.3. Accommodation

We stayed at either Upper Pines Campground, the Backpacker's Campground, Camp 4, or on walls for the duration of the expedition. Olly and Izzy technically went over their 30-day annual limit, but no one checked or cared. Free showers were eventually swindled from sneaking into Curry Village or Camp 4, and laundry was done at Housekeeping Camp.

3.4. Pre-Expedition Training

We did not do much of the planned pre-expedition training due to other commitments, but Stu and Ed managed to get some aid climbing practice done in Swanage beforehand, and Olly and Izzy tried to do some medium sized walls in Squamish.

3.5. Permits

A wilderness permit was required for any overnight climbing in the park. These climbing permits are free and there are no quotas or limits. The permits were picked up in person at a kiosk in front of the Yosemite Valley Visitor Centre from very friendly and helpful climbing rangers.

4. Diary

Day 0 (8/9/22)

The expedition started very stressfully. Olly arrived in San Francisco in the morning from Canada and then went to pick up the car from Oakland. Once there the company told him they had no record of any reservation. An hour later this was fortunately resolved and Chorley was picked up from the airport. Izzy's flight from Thailand had since been delayed, so Olly and Chorley went to Denny's for a snack and to Walmart to get supplies for the weeks ahead. They drove back to the airport around the time Izzy should have been coming out, but she had been detained for



extra questioning on account of her being in the US recently for her Alaska Expedition. After she clarified that she didn't want to emigrate to the US, they let her through but her airline had lost her bags. By the time she had been picked up (sans baggage) it was 1am the next morning with still a 5 hour drive to Yosemite to go.

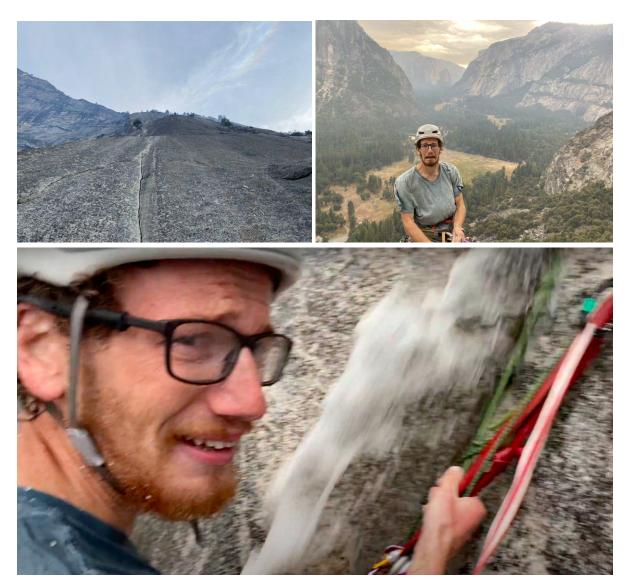
Day 1 (9/9/22):

The team drove into the valley and checked into Lower Pines. It was a fairly low psych day since no one had slept the night before and Olly and Izzy hadn't slept the night before that either. They spent the day getting their bearings around the valley. Izzy tried to work out how she'd get her bags back whilst everyone wandered around Yosemite and Curry Village to work out where things were. They went to look at Camp 4 and Midnight Lightning (f7b+) and surveyed the extortionately expensive village shop.



Day 2 (10/9/22):

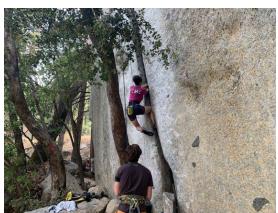
Izzy was still too shattered to climb, but Olly and Chorley were keen to get out on the rocks. The forecast warned of potential afternoon storms, but this had been the same the day before and there wasn't a drop. They decided to try to get up and down Serenity and Sons, a classic 9 pitch 5.10d, before it had a chance to rain. They started at about 9am and topped out by 1pm. As they were doing the last couple of pitches, thunder could be heard in the distance, and as they topped out there was a huge sudden gust of wind as the weather front hit. Chorley did well to pull back on immediately and climb one of his pitches after taking a medium sized clean fall off it. This was lucky as just after they finished the last friction slab it started to hail. The water all ran off the bullet hard granite and the crack system they were abseiling down turned into a waterfall. Luckily the heat before the storm had warmed up the granite enough for the water to be quite pleasant, although it was very dirty. Olly and Chorley managed to make it back to the ground and ring out their soaked clothes before heading back to the campsite. Meanwhile Izzy had a nap in the van but was woken by the rain.



Day 3 (11/9/22):

Another dodgy forecast scuppered any plans of another big day. Instead the team went to try Generator Crack, a 10c toprope less than 10m from the tarmac. It's a gently overhanging crack that gradually widens from hand stacks to squeeze chimney, so is perfect for practising wide crack technique, a style of climbing often found in Yosemite and feared by all with a nervous system/those who don't like the sound of a cheese grater water slide. Needless to say, it was not a good idea in shorts and a T-Shirt.

The team were slowly and systematically dismantled, so retreated to the nearby Arch Rock to climb something else. Unfortunately there was a 5.9 offwidth at the start of the route they wanted to do, and they didn't bring the offwidth cams so it would have been completely unprotected. They soon went back with their tails between their legs and everything hurting.





Day 4 (12/9/22):

Another sketchy forecast led the team to Glacier point for a short 5 pitch route, the Goodrich Pinnacle RH (5.9). This was billed as a 3 star classic but ended up being very adventurous (sketchy) with a couple pitches with R ratings (which mean you'd be lucky to avoid injuring yourself in a fall) and incorrect topos. After a few pitches of tricky friction slabs and no gear save a couple bolts per pitch, the route ended with a chimney, which Izzy easily dispatched. The forecast looked a little better for the next few days so bigger objectives were discussed.









Day 5 (13/9/22):

The day was spent planning and packing for the South Face of Washington Column (5.8 C1). This was said to be the best beginner big wall to practise all the skills needed for the bigger and harder ones. The team did a little shopping at the village shop for food for the wall and spent the day in the café discussing systems for hauling and planning who would lead which pitch. Olly wanted to make the most of the free refills of coffee, and accidentally had 3 cups at 5pm. In his highly caffeinated state he decided to run up the approach to the base of the South Face to dial it for the next morning. Doing this he found a pair of sunglasses that had clearly been dropped off a route, which he happily stole.



Day 6 (14/9/22):

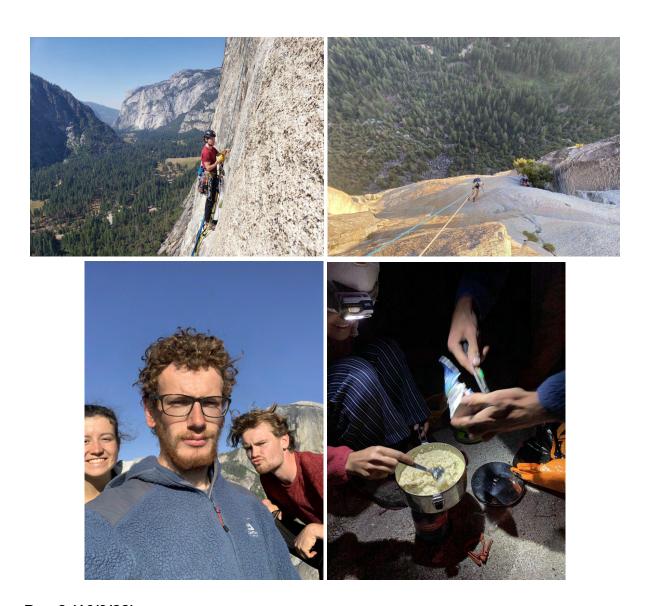
The team woke up and headed over to Washington Column, arriving at the base at about 10am. We were lucky that no other parties were on the route, which we didn't consider could be an issue. Chorley took the first pitch, before Izzy freed the 10b second pitch and then Chorley did pitch 3 as well. This took us to Dinner Ledge by 2pm, where we chilled for a bit before Olly and Chorley went to fix pitches 4 and 5 respectively. This was done without much issue, and everyone went back to Dinner Ledge for dinner just before it got dark. As we abseiled back to the ledge we saw a party had come up and had started to fix pitch 4. We ate our pre-made cheesy pesto pasta and slept well.





Day 7 (15/9/22):

The team woke up at dawn, had some quick porridge, then started up the fixed lines. Izzy took the first thin aid pitch, before Olly did the next. The rest of the pitches were supposedly easy free climbing, which were done swiftly apart from a couple falls onto old pegs from Chorley near the top. They topped out at about 5pm then abseiled back to the bags on Dinner Ledge. On the abseils down, Olly missed one of the anchors and instead of ascending back up, parked himself on a single bolt on the route to be rescued by the others when they went past. This went smoothly, and they all got back to the ledge for a second night on the wall safe and sound. They ate risotto (which was expected to be couscous) and tofu for dinner and slept on the ledge with 2 other parties.



Day 8 (16/9/22):

They woke up again on the ledge and headed back to the ground. The rest of the day was spent chilling out at the cafe, abusing the free refills of coffee.



Day 9 (17/9/22):

By this point they had moved to Camp 4. They had managed to get a last minute reservation for a week and so were able to cancel their multiple bookings for different campsites that they would otherwise have to have done. Everyone was still too tired to do any proper climbing, but the tent was pitched less than 100m from arguably the most famous boulder problem in the world (Midnight Lightning) so Olly got his shoes and tried it when he saw people with pads on it. It was hard and he got shut down.



Day 10 (18/9/22):

The team were dismayed with another dodgy forecast. They were told the weather was always good in Yosemite and it never really rained but this wasn't turning out to be true. They woke in camp 4 to find free coffee by the base of Midnight Lightning, which was exploited. It turned out to be a weekly Ranger-Climber meetup, which was interesting, and culminated in a ranger named High-Psych Jonah dispatching Midnight Lightning in his ranger uniform, shirt still tucked in. Izzy then went on the Woman's Bouldering Morning with another strong climbing ranger and her friends, whilst Olly and Chorley went to check out a crag called Church Bowl. There Chorley climbed Church Bowl Tree (5.10a/b) ground up, and Olly led an aptly named aid route, More Balls than Brains (A3), which involved sketchy rivets, bat hooks, and hand placed peckers off the ground. It was useful to realise what A3 was all about, turning out to be pretty tame with time and a strong will to survive.

Izzy turned up a little later and the reunited team all tried Energizer (5.11b). This was a fully bolted arete, which Olly did second go and the others got all the moves on, but rain prevented further attempts. Olly went up again to get the draws out at the end of the day but slipped clipping resulting in quite a big fall. They retreated to Camp 4 to find the insides of the tent's porch slightly damp.



Day 11 (19/9/22):

Another wet and rainy day killed the team's spirits. There was so much rock around that was waiting to be climbed but they were stuck in the tent waiting out the storm. It was discovered that the tent was pitched on a natural drainage channel, resulting in a stream running through it and soaking everything in the porch. Luckily the inner remained largely dry. The team milled around and did largely nothing until the late afternoon when Izzy showed the others some of the boulders she had done the previous morning. They all did some sketchy padless bouldering (lowball soloing) and then went back to camp when their ankles had had enough.





Day 12 (20/9/22):

It literally rained all day, further soaking and demoralising the team. The forecast did however promise a return of the sun in the next few days. Although they wanted more practice before doing it, they realised there was not much time for Chorley left, so decided to get on The Nose (5.8 C1). Supplies were bought and gear was organised when the rain eased. They planned to fix up to Sickle Ledge just after the rain stopped the next day so as to avoid any queues.

Day 13 (21/9/22):

Olly and Chorley headed over to El Cap with a haul bag full of water and food and supplies, whilst Izzy went into town to buy more stuff we needed (more chalk and food). Olly and Chorley made it up to the base of the Nose and were greeted by a train of teams all the way from the base to Sickle Ledge. So much for beating the queues! Whilst they racked up various non-climbing tourists came over and asked stupid questions, which were answered in a way as to tell them to go away without actually saying it. The Americans didn't understand this and asked for selfies.



Olly and Chorley scrambled up to the start away from the tourists with great haste and met two Eastern Europeans who were just climbing up to Sickle and not planning to go any higher. Although this is common, it is poor form as it clogs up the most popular route in the valley even more. We asked to pass as we were actually doing the route, but were denied so joined the queue. Olly and Chorley eventually made their way up to Sickle Ledge via some vaguely awkward aid. Olly then hauled the bag from the ground all the way up after Chorley had abseiled down to attach the ropes to it. This was concluded in the dark due to the queues and Olly then came down without a head torch. In the meantime, Izzy forgot the chalk she had just bought on the bus and went on an unsuccessful adventure to try to recover it. Everyone went back to camp to pack the other haul bag and pack up most of the camp to allow for an early start the next morning.

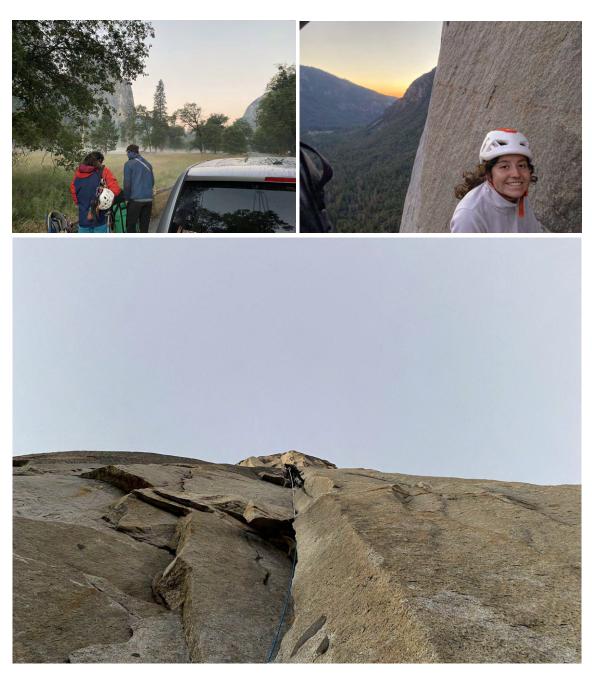


Day 13 (22/9/22):

The team woke early the next morning, packed up camp and got to the base of El Cap at about 7am. There were two other teams going up their fixed lines to Sickle, one team two pitches higher sleeping on a portaledge and one team going up fixed lines to El Cap Tower which they left when they bailed from the rain a few days earlier. It was crowded. Chorley headed up our lines first and Izzy made two trips back to the car after forgetting first her water bottle then her ascenders. Olly fixed the rope to the bags and headed up next, followed by Izzy when she got back. The team then did one monster haul from the ground and managed to overtake one of the other teams who were doing 4 separate hauls to get their bags up. This was good,

but the team had unfortunately forgotten to undo the rebelay knots, which rubbed up the wall and wore through the rope's sheath. Luckily they had a spare rope, but this taught them a valuable lesson.

The team then queued for a while waiting for other teams to start, before getting climbing. Izzy led a pitch off of the ledge, before Olly led a pitch with a couple pendulums. Chorley then got up the Stovelegs, before Olly took the last two long wide pitches up to Dolt Tower. He arrived just as it got too dark to see, which was lucky since he again didn't have his head torch on him. The rest of the team were soon up on Dolt, where they ate dinner and slept.



Day 14 (23/9/22):

The day started with letting the team behind pass. They had been very annoying the day before by coming up and sharing the cramped hanging belays despite there being more of a queue in front. Olly, Chorley and Izzy were perhaps not confident enough to tell them to bugger off, so just let them head through instead. They took this as a chance to let the slower leader have a go for the first time, so they took till 1pm to get two short pitches in front. This was highly frustrating, but they got them to fix a rope so that they didn't have to spend time climbing those pitches. It did provide the team with a good rest whilst they listened to music and drank the mystery water that had been left on the ledge.

After all that Chorley led a pitch onto El Cap Tower, where the team decided to sleep. Olly and Izzy then went to fix a couple of pitches from there to give them a fast start the next morning. Olly led the Texas Flake, an unprotected 5.8 chimney, before Izzy shot up the Boot Flake. They returned to El Cap Tower, which was a fantastic flat ledge to sleep on with great views.







Day 15 (24/9/22):

Olly started the day with the King Swing, which involved lowering about 25m off the boot flake then swinging across to the next-door crack system. Izzy then led a long pitch up to the Grey Bands before Chorley took over and did a couple pitches to get up to below the Great Roof. Olly then did the Great Roof, before abseiling back to the "bivy for 1" on the pitch to Camp IV. This



was a small sloping ledge which provided a poor night sleep for Olly, whilst the others slept in their G7 inflatable ledges. Progress had been slow over the last couple days due to being overtaken by teams, and psych was low, but the top was slowly getting closer and the ground was certainly getting much further away.







Day 16 (25/9/22):

After packing up the camp, ascending the lines, and hauling the bags Izzy set off up the Pancake flake, which was awesome. This was followed by a couple awkward aid pitches for Chorley onto and off of Camp V. Then Izzy took a mixed aid and free pitch up to Camp VI, where the team planned to sleep. There was enough daylight to fix the next two pitches, so Olly did Changing Corners before Chorley did the pitch after, finishing with some 5.8 glory hand jamming on awesome rock in the dark. The team only had three pitches to go the next day, so enjoyed a beer each back at Camp VI with their meal of beans and instant mash. The water was running low so the mash was hydrated using the bean juice. The ledge was surprisingly slopey, and Olly woke up in the night hanging from his harness over the edge having slid off. He didn't get back to sleep.







Day 17 (26/9/22):

The team woke and Izzy quickly did the next aid and free pitch. Chorley then took the first overhanging bolt ladder to a stupid hanging belay, before Izzy did the last pitch and topped out. Izzy wore a Welsh flag as a cape the whole day, which was majestic. They enjoyed the summit for a bit, eating more of the food and finishing the water before descending down the East Ledges. It took a while to get down with the heavy bags, but by 7pm they were back in the meadow with the car. They headed back to Upper Pines, set up the tent, then went for beer and pizza in Curry Village.







Day 18 (27/9/22):

Unsurprisingly the team needed a rest day after their ascent of El Cap. This was done in the café, before they returned to the meadow to recreate the iconic NIAD photo (spot the difference). They then spent the rest of the day chilling.





Day 19 (28/9/22):

Izzy had been introduced to Jo, an American mountain guide from Bishop, on Instagram, who she then met in person at the café. They planned to climb together the next day whilst Olly was dropping Chorley at the airport and picking the others up. Izzy, Olly, Chorley, and Jo then went to the nearby Church Bowl to climb together on easy single pitch before committing to doing a multipitch together. They climbed Bishop's Terrace (5.8) and then tried a 5.11a slab.



Day 20 (29/9/22):

Olly drove to pick others up and drop Chorley off. On the way back they did a big shop for supplies for the second half of the trip. Izzy did Braille Book (5.8) with Jo on Upper Cathedral Rock. They had to bushwhack through the forest after not finding the path for what should've been an hour and a half, but was more like three hours to get to the base. They topped out to a fantastic sunset and glorious views of the valley before going back down in the dark with one head torch. They still managed to beat the others back to the campsite as the shop had been slow (made slower by an in-shop Dominos).



Day 21 (30/9/22):

Ed, Stu, and Alex wanted to hit the ground running, so the morning after they arrived they were planning to start up the South Face of Washington Column in the afternoon. They planned, bought supplies, and acquired permits in the morning, then headed up to the base in the afternoon. Ed free-climbed up to Dinner Ledge, pulling on a few bits of gear through the layback section of the 5.10 pitch, and getting a wonderful 3 pitch intro to Yosemite granite! The hauling was hard work - a hazing by fire - testing out all sorts of pulley systems on the first pitch cost too much time to fix any pitches above the bivy ledge before dark.

Meanwhile, Olly and Izzy soloed After Six (5.7) with Jo. This was a really fun and quite easy route up Ranger Rock. They then went to the meadow and chilled and had a few drinks. Olly then soloed Royal Arches (5.7 A0), taking some harder variations along the way and topping out just as the sun set. He managed to get down the dreaded North Dome Gully descent in the dying light without too many issues.



Day 22 (1/10/22):

Olly and Izzy decided to try to link Royal Arches (5.7 A0) and the South Face of North Dome (5.8). They decided to go fast and light, bringing less than a litre of water each and wearing only shorts and t-shirts. They simul-climbed Royal Arches,

before making the longer-than-expected walk to the base of North Dome. They then managed to get up the South Face of North Dome before it got dark enough for head torches, but by the time everything was packed up it was dark. They hadn't considered that the summit of North Dome is 1100m above the valley floor, so it became pretty cold. They decided to hike 9 miles from the summit down trails rather than scrambling down the slabs on the side of North Dome and then doing North Dome Gully in the dark.

The team on Washington Column got stuck into the aid pitches above Dinner Ledge. They found the climbing pretty challenging, ironing out a lot of mistakes both leading and cleaning. Progress was slow and it was decided at the top of pitch 6 that rather than push on to the top and have a very exhausting first objective on the trip (on top of the noticeable jet-lag), the team bailed with enough time to be back at the camp by 9pm and look ahead to the next objective.





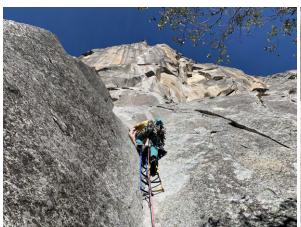
Day 23 (2/10/22):

Everyone decided a rest day would be a good idea, so another day was given to the café, where everyone filled each other in on what had happened the day before. They also planned to get one more wall in before the late three went for the Nose. Olly and Stu planned to spend a few days climbing The Prow, whilst Izzy, Ed and Alex decided to try The West Face of Leaning Tower. Olly went to get a permit for the Prow, whilst Ed, Stu and Alex went to Glacier Point to try Apron Jam (5.9++). Ed managed to climb the route cleanly on preplaced gear having had the benefit of watching the others climb.



Day 24 (3/10/22):

Olly and Stu went to fix the first three pitches of the Prow, and on the way down were convinced by a bloke starting up that they should attempt to climb it in a day rather than bivvy the next night. The others packed for leaning tower and climbed Serenity Crack without the Sons of Yesterday extension. They lead one pitch each and Ed and Alex had a steep introduction to crack climbing and Yosemite's style of free climbing. Ed found the first pitch pretty scary. Described by the Mountain Project topo as follows: 'secure gear is not available for a long, long ways' - not ideal at 5.10a. Izzy made very light work of the 10d finger crack - a theme to continue throughout the trip.





Day 25 (4/10/22):

Olly and Stu made their way up The Prow, finishing in the dark, and had an epic on the descent. The others started up the West Face of Leaning Tower and climbed to the Ahwahnee ledge. They forgot a static so Ed had to hitch back to the campsite. The walk in was brutal and made the first bolt ladder feel effortless. They also forgot gas for the jetboil, so had to eat cold food - perhaps not a mistake to make on a route any longer than 3 days. Notable experiences on the first day included Ed's first hook move on the first C3 pitch - albeit above a bolt, is that really C3? [No - Ed.]





Day 26 (5/10/22):

Olly and Stu had a rest day after The Prow. The others powered up Leaning Tower. The route was graded at C3 with most of the pitches on smaller gear and a lot of offset micro-cams. They really are amazing protection. Alex heroically led the final pitch of the day in the dark while Izzy and Ed tried to stay awake on the belay. Cold cous-cous and overnight oats aren't so bad after all. A final bivvy on a ledge 10m from the top set them up with fresh minds and legs for the challenging descent the following day.



Day 27 (6/10/22):

Olly and Stu went to try to link Middle and Upper Cathedrals via the East and North-East Buttress routes. They got up the East Buttress of Middle Cathedral before lunch, but pre-bailed on the NEB as Olly felt a bit under the weather, they didn't think they could finish in the light, and they couldn't be bothered. The others spent the whole day getting off Leaning Tower. The abseils down the huge leaning tower chimney were slow going - the team was being very careful, managing 3 bodies and a haul bag in a loose and narrow gully. Some



sections had to be abseiled with the haul bag on someone's back to avoid displacing the loose rocks underfoot. They were relieved to make it to the ground safely.

Day 28 (7/10/22):

Everyone had another rest day whilst Ed, Stu, Alex and Jo planned and prepared to start climbing the Nose the next day.



Day 29 (8/10/22):

Stu, Jo, Ed, and Alex started up the Nose and climbed to Sickle. They finished hauling the bags at 2am, by which point Ed had ascended the distance from the ground to Sickle Ledge 3 times to orchestrate the hauling effort. Some of the team were feeling exhausted near the end of the day which put doubts in all of their minds about whether they were on track to get up the route. Izzy had a day chilling and reading, whilst Olly soloed Sunnyside Bench (5.4), went for a swim



in the pools at the top of the waterfall, soloed Munginella (5.6) and Selaginella (5.8), had a shower in Camp 4, soloed Swan Slab Gully (5.6), went to the Meadow to look at the others on the Nose, then went back home.



Day 30 (9/10/22):

Olly and Izzy spent the day walking up the death slabs to the base of Half Dome. This was incredibly long and arduous, and Izzy felt a little ill. They fixed the first pitch and bivvied at the base. The El Cap Crew climbed to Dolt Tower. Ed and Alex, setting off from Sickle first, managed to reach Dolt Tower around 30 minutes after dark. A NIAD team passing cost some time at the start of the day, and unfortunately left Stu waiting on Sickle ledge for around 6 hours that morning before ever moving - not fun. Ed and Alex were able to leave a fixed line in the last pitch up to Dolt so the others could whiz up the last pitch of the day and get into bed a bit sooner. Stu and Jo had found the



hauling difficult (having to space haul each pitch to cope with the very heavy bag, which Jo simply could not move with her bodyweight alone) which added to the challenge of letting Ed and Alex climb ahead.



Day 31 (10/10/22):

Olly and Izzy climbed to the top of the RNWF, spending 19 hours on the route. A hugely impressive achievement (though they might be too modest to use those words themselves). On top of Dolt Tower the teams discussed different bailing options. The last two days climbing had been very taxing. Most of the team had doubts in their mind as to whether they were psyched enough to continue. In the end Alex decided to descend which facilitated the option of a team of 3 continuing with all

of the food and water from both teams combined. In hindsight, having one rest day between a 3 day ascent of Leaning Tower and a proposed 5 day ascent of the Nose was a huge undertaking. Stu led a block from Dolt Tower to El Cap Tower, making quick progress through the nasty off-width. Setting up camp in the daylight, with the perfectly level ledge of El Cap Tower all to themselves felt good. There was daylight left to get a headstart on the following day by climbing and fixing the Texas Flake and Boot Flake. No one really wanted



to climb Texas Flake. It's not possible to aid climb the pitch - the only way is to free climb the unprotected 5.8 chimney, all the time looking down at the catastrophic 40ft fall to the leg-breaking ledge at the bottom. Ed climbed the pitch and felt that for him, it was the one moment of the trip that was irresponsibly dangerous. Standing on the top of the flake before clipping the anchor was also the only moment he felt the knee trembling exposure of El Cap. The team had a bit of a sing-along, keeping spirits high as Ed continued up the Boot Flake into the dark, managing to avoid the cam hook move with one of Jo's very very small BD micro-cams.



Day 32 (11/10/22):

Olly and Izzy descended the death slabs and went to the cafe. Alex met them there and they all caught up. Jo led the block up to Camp IV, having a real battle with the King Swing (and ended up running the "El Cap mile") - though it might have been worth it for the amazing photo taken by the famous Tom Evans with his telescopic lens on the valley floor. Stu cruised across the Great Roof in the dark, taking Ed with him to fix ropes for the next day.



Day 33 (12/10/22):

The El Cap team climbed to Camp VI and fixed one pitch above. Ed started the day with an onsight of Pancake Flake and continued aid climbing up to the Glowering Spot. From here Stu led to Camp VI, and after dinner onwards up Changing Corners in the dark, of course. After 5 hard days on the wall, the awkward aid on the second half of the pitch felt like a true test of psych. Olly, Alex, and Izzy went for another big shop in Mariposa, then went and tried to climb Generator Crack again. Alex got close, whilst Olly climbed from the tree at the start to the top, but cheated by using the tree.





Day 34 (13/10/22):

Olly and Alex went for some cragging on the Cathedrals, which ended up being chossy and not particularly good. After belting out a rendition of Happy Birthday for Jo in the early hours, the others topped out from El Cap in the afternoon. Descending the East Ledges was very slow going due to faff, it getting dark, dwindling head torches, and two very heavy haul bags. The team topped out with a considerable amount of food left over (including an unopened tub of peanut butter!). This added several kilograms to the weight of the bags - an experience not to be repeated. They celebrated Jo's birthday in the meadow and got back to the campsite very late, eating a second dinner thanks to the others' leftovers.





Day 35 (14/10/22):

Olly fixed the first 4 pitches of Zodiac. The others rested, wandering around the valley thinking about climbing but too tired to climb anything. They ended up going on a bear hunt.









Day 36 (15/10/22):

Olly set off up Zodiac and climbed two pitches to Pearly Gates Ledge. The others climbed the East Buttress of El Cap. There was a huge rockfall between the routes which psyched everyone out a bit, and coated the East Buttress teams in a thin layer of dust.





Day 37 (16/10/22):

Olly climbed to a hanging bivvy above The Nipple on Zodiac, the others had a rest day.



Day 38 (17/10/22):

Olly climbed to Peanut Ledge and fixed one pitch. The others attempted to crag at Lower Yosemite Falls but psych was still low. Alex and Ed went swimming.



Day 39 (18/10/22):

Olly topped out Zodiac, ate a leisurely lunch on the top, then walked down with his 45kg haul





bag. Izzy and Stu climbed up the Higher Cathedral Spire, and Ed and Alex climbed Royal Arches. They all woke up early so as to be able to greet Olly on his return to camp with lots of beer.



Day 40 (19/10/22):

Everyone was physically destroyed, so had a rest/cafe day.

Day 41 (20/10/22):

Alex and Stu headed to Lower Falls Amphitheatre to try hard on some 5.12d sport climbing. Perhaps unsurprisingly, they were both shut down. Ed and Izzy climbed Mr Natural (5.10c) and Ten Years After (5.10d), two classic finger cracks.



Day 42 (21/10/22):

After the whole group happily allowed the cafe to consume yet another half-day, Stu and Izzy enjoyed a solo jaunt up After Six - a nice farewell to the valley. Everyone then reconvened to sort the mess of all the gear and pack all the bags ready to be squeezed into the car. The drive out of the park was extremely uncomfortable, but the delicious Mexican meal for dinner went some way to making up for it. They then headed out into the sticks to the final campsite of the trip, relieved not to be greeted by a shotgun.

Day 43 (22/10/22):

The team woke in the morning to the sound of gunshots, before packing up and heading to the nearest IHOP for a cultural experience. They then drove back to San Francisco and returned to the car before flying home.



5. Walls Climbed

5.1. South Face of Washington Column

5.1.1. Olly, Izzy, and Chorley

We woke up at around 6:45 in the morning to pack up camp after having spent the previous

evening packing and preparing food, haul bags and gear. We were already a bit delayed leaving camp because we had to go and collect Izzy's lost bags that had just turned up in the valley. The plan was to climb the first three pitches up to Dinner Ledge, which was a comfortable bivy ledge for up to 6 people. The plan was to camp there then spend the second day climbing the last 8 pitches to the summit, before rappelling back down to the ledge for a second night and finishing the descent the next morning. After a sweaty 45 minute approach whilst swarmed by insects, Chorley led pitches 1 and 3, and Izzy led an awesome 5.10b second pitch. Ollie had



fun experimenting with space hauling (something we would later find to be extremely useful).

After chilling a little on Dinner Ledge for lunch, Ollie and Chorley fixed the next two pitches.

The first of these was Kor's roof which was led by Ollie who decided that bolts where cheating and was extremely proud of himself after finding a "bomber" pecker placement.



Chorley seconded this and got his first proper experience of free hanging jumaring in the strong afternoon winds. This resulted in a minor "how did I get here" moment as he found himself spinning uncontrollably without anything to grab onto to stop him. Izzy found this amusing from the ledge below and proceeded to take photos. After making it up and only dropping one cam, which he very skillfully dropped perfectly onto the bivy ledge, Chorley led pitch 5, which was relatively exposed C1 involving a pendulum which made Ollie very jealous. They both descended back to Izzy on dinner ledge where they quickly consumed the

pre-prepared cheesy pesto pasta and turned in for the night.

We woke up at sunrise on day 2 and after eating breakfast we ascended our fixed lines. Izzy led the next thin aid pitch, followed by Ollie leading the next two, the first of which had some of the most sandbagged "5.10" free climbing we had encountered. The second was a very awkward chimney, which was especially awkward for Izzy seconding with the backpack. Chorley and Izzy took it in turns to lead the remaining few pitches with Chorley "bounce testing" a peg or two along the way (turns out they were bomber). After topping we enjoyed our first view of the whole valley from the top of a big wall, took some selfies, and then prepared for the descent back to Dinner Ledge. The 6 abseils down to the ledge mostly went well with the only mishap being Ollie rapping past an anchor and ended up with him being stranded hanging on a single bolt. This provided a great deal of entertainment for Izzy and Chorley. After the amusement had worn off, they redirected the abseil to retrieve their newly nicknamed climbing partner, and continued down as the sun set. They enjoyed their couscous (risotto) tofu dinner which was wonderfully prepared using Chorley's nut key as a knife for the Tofu (Chorley wasn't happy about this) along with another party who were heading up the next day. The last day was fairly relaxed with only three abseils, although they were quite awkward to do with the haulbag. The team eventually made it to the base quite exhausted and largely unhappy about being reminded of the existence of the forest insects (huge swarms of flies), so headed straight to the cafe.





5.1.2. Ed, Stu, and Alex

As soon as we arrived in the valley we decided to hit the ground running. And so, on our first morning, we were already planning to head up our first big wall that same afternoon. We sorted out the rack, packed a haul bag and 2 day packs, picked up a permit, and were soon on our way. The approach was pretty arduous but we eventually made it to the base of the climb, with knees just about intact. Here we were greeted by the best crag swag of the trip someone had dropped a black totem cam right at the start of the route! Stu took the haul bag up the 4th class scramble, then Ed took the lead up the first real pitch - a lovely looking corner crack - and dispatched it without too much bother. Stu ascended the haul line, and

started to bring the bag up behind him. With this being the first time any of us had hauled, and the line being slabby with occasional roofs, this took a very long time. Seizing the learning opportunity, Stu and Ed tested out various different hauling setups whilst Alex made his way to the bag to help it over all the terrain it kept getting caught on. After we finally finished hauling the bag Ed continued his block up the next 2 pitches to Dinner Ledge, mostly climbing free, with only a few spots of aid. The only real hiccup on these pitches was the sun setting, which slowed things slightly. In order to climb the route in 2 days most parties would then aim to fix ropes on the next 2 pitches, but it was late and we were severely jet lagged, so we decided we would have to make do without. We all enjoyed the bivvy on the spacious Dinner Ledge with the milky way above us - not a bad campsite given it's half way up a big wall!



The next morning Alex led us up the Kor roof - an imposing and fairly slow aid pitch. Stu jumared up the free-hanging haul line, thinking he had drawn the short straw, whilst Ed started cleaning the pitch. As it turns out Ed had drawn the short straw. He battled hard with 2 nuts that had been bounce tested and thus welded into the crack under the roof, before having to admit defeat due to not us not bringing a hammer. He lowered out through the

roof without issue, but was then faced with the rising traverse just above. Having not had much opportunity to practise cleaning similar ground before, this put up a big fight. Finding solutions to these logistical puzzles proved to be a valuable lesson for all, and it was better learned here than on the side of El Cap. Pitch 5 was another slow aid pitch, involving a very reachy section through a small roof up to a completely blind cam placement. In hindsight maybe we shouldn't have sent the smallest member of our party up this on the lead... After this was a pendulum and then a bit more aid to the anchor, after which Alex was understandably mentally



exhausted, so handed over the sharp end to Stu for pitch 6. Stu shuffled up the rising traverse, following a crack under a roof, before following a thin crack more vertically. The pitch ends with a mandatory 5.7 free move which shouldn't have caused any issues, but without the topo on him Stu struggled to figure out where this actually was and didn't really fancy questing off into the unknown. After a lot of shouting back and forth over the wind about what was and wasn't on the topo Stu still had no idea where he was going but was fed up of sitting in his harness, so finally committed to leaving the crack and traversing around a bulge, immediately being greeted with the sight of the anchor.

Despite the rest of the pitches being much faster free climbing, it was at the top of pitch 6 that the team decided to bail. We figured we wouldn't learn much by continuing to the top, so the tradeoff of a guaranteed epic was simply not worth it. We began the abseils, hoping to be back on ground and have dinner at a reasonable time. We were quickly back on Dinner Ledge but, as it turns out, rappelling with a haul bag is a total faff. After 3 more slow rappels and a downhill slog with heavy bags, we returned to camp at around 9pm though, given our jet lag, it felt more like 3am.

5.2. The Nose of El Capitan

See the diary sections for a detailed description of what happened on each team's ascent. Whilst almost all of us managed to make it up El Cap via The Nose, it was not the experience many of us hoped for. It is for sure one of the proudest lines on one of the best chunks of rock in the world and has many great and classic pitches, but it has become a victim of its own success. In the season there are constant queues on it, which substantially takes away from the feeling of adventure that you would expect whilst questing up a 1000m cliff. Also most of the people on it are beginners, learning the skills as they go up. Whilst one team doing this is normally fine (what happened with us) when multiple teams are all punters, it gets more dangerous/slow/unpleasant. We certainly contributed to this, and I would recommend anyone in the future who wants to do The Nose to get more experienced before attempting it, not because you can't do it as a punter, but you'll enjoy it far more to be quick and efficient on it.

It has ultimately become to climbing what Everest is to walkers; a flashy tick on Instagram, but in reality no harder than the stuff in the UK.

5.3. The Prow

Olly and Stu were planning to climb The Prow of Washington Column by spending one night on the wall half way up. This would involve fixing three pitches the day before. They got to the base to fix by mid morning and were glad to see that the crowds were all queuing for the South Face, not the Prow. Stu started up the first 10a free pitch, and ended up aiding it at C1. This brought them to a belay on a slab. Olly then led the next two pitches, a short C2+ followed by a short C1 pitch. He short-fixed to speed things up between the two pitches and realised how much it saved time. This technique involves the leader rope soloing the start of the next pitch (belaying themselves) just after they've completed the previous pitch and fixing the rope for the second to ascend. This effectively removes the time it takes to clean

each pitch so long as the second can get to the anchor and put the leader on belay before the leader runs out of rope. The aid on these pitches was fairly straightforward, and the two were soon on Anchorage Ledge. They fixed their ropes and started abseiling down. On the way down they chatted to some people who were starting up to fix the first pitch. They noted that Olly and Stu had managed those pitches (including supposedly the crux pitch of the route) in under 4 hours, and wondered if they were going to do the other 8 in a day the next day. This made Olly and Stu change their plan from bringing a bag and sleeping on the wall to going fast and light and climbing the rest of the wall all the next day.



Olly and Stu planned for a super early morning, but ended up with just a slightly early morning after dropping the others off at Leaning Tower. They got to the base of the Prow just after it got light and ascended the ropes to their high point from the day before. Stu then led an intermittent bolt ladder with some short tricky C2 sections between. He had his first experience using both a cam hook and a copperhead within a few moves of each other, which scared him a bit but he got through it and realised after it wasn't so bad. He did need a mental rest after that pitch, so Olly took over leading. He led a similar bolt ladder, before going up a thin C2 pitch with a few bolts on it. He took a small daisy fall when a poorly placed cam ripped out when being tested, but aside from that the going was easy. The route was very steep, so it was hard to get high up in your aiders to place the next gear high, which meant that progress was slow. Olly then did the other C2+ pitch of the route up the 'Strange Dihedral', followed by a pendulum, a thin beak crack, and some rope draggy 5.6 to Tapir Terraces. After a bit of lunch he then led a thin C1+ pitch. A combination of tiredness after three pitches and overtrusting his gear trying to move quickly led Olly to weight an offset cam that he knew was very poorly placed without testing it, with his lanyards slack to the piece below. The cam blew, resulting in a full length factor 2 daisy fall onto the piece below, which was slightly jarring. He got back on and finished the pitch, happily giving the lead back to Stu.

Stu then led a long C1+ pitch with an "easy gully" at the top, which ended up being more of an offwidth scramble. He followed this up with an awkward pitch of C1 to a belay just below the top. By now it was dark and Stu was knackered so Olly led the final short C1 step before scrambling to the top. Stu noted after that it would have been less effort to lead that then to jumar it. They spent a little time at the top drinking their water, eating some food and enjoying the summit before starting down the dreaded North Dome Gully descent. Many climbers have needed to be rescued or even died on this descent over the years, and route finding is particularly hard. Olly had done it before and found it to be mostly okay, so was confident it'd be fine. It wasn't.

After a couple hours of bushwhacking and dodgy scrambling on scree with the void below, endlessly going back on themselves and finding and losing paths, they arrived at the top of the actual gully to descend. This was then taken too directly, which led to several hundred metres of death slabs which they started down. Realising their error they traversed off to the side to rejoin the actual path. This was slowly followed down for ages before they returned to the valley as broken men. Stu's head torch had run out of battery long ago, which did not help with finding the path, but neither of the pair died, so all was well. The descent was genuinely harder than the route.



5.4. West Face of Leaning Tower

Whilst Stu and Olly were climbing The Prow, Alex, Ed and Izzy went to climb The West Face of Leaning Tower. As its name suggests this was a very steep route. Our plan was to climb it over two days, climbing to Ahwahnee Ledge and fixing two pitches from there on the first before continuing to the top the next day. We took an extra evening's food and some spare water in case we needed to bivy on the top.

After packing the night before we made an early start, loading nearly everything into the car and getting a lift from Olly to the approach. Moments after Olly drove away we realised the first mistake we made of the route; we had forgotten the static rope. Ed started walking and hitchhiking back to the campsite whilst Alex and Izzy started walking the haul bag to the base of the route. After losing the approach a couple of times and shuttling loads through the boulderfield, Ed caught up with the Haul bag and we continued to the traverse onto the route. Here we used the fixed lines that

were in place and dragged the haul bag along the narrow ledge, hauling for sections when required.

Ed took pitch 1, a long bolt ladder with a couple of moves on hooks and some small cams in the middle. After reaching the top in fairly good time we got our first feel for just how steep the route was as Izzy was lowered out on the haul line ending up several metres from the belay, she then ascended the haul line. Once Izzy was at the top of the pitch she and Ed prepared to haul and Alex released the haul bag, lowering it out, then ascending the lead line cleaning the route. Alex then took pitch 2, a straightforward bolt ladder. followed by Izzy leading pitch 3 an A3 pitch with a few moves on copperheads that were thankfully already in place, to take us to Ahwahnee Ledge. After the delays and long approach we decided to not fix the next 2 pitches as it was already starting to get dark. We set up camp and got our stuff out to cook dinner where we realised our second mistake, we didn't have any gas. Fortunately the cold curry wasn't too bad and the couscous was soaked in cold water. We added water to our porridge, left it to soak and went to bed.

The next morning we ate our cold porridge and Ed somehow enjoyed some cold instant coffee before setting off to lead pitch 4. Pitch 4 started off with a pendulum into some A3 terrain traversing up and right before the next pitch traversed back left. Both of these pitches were hauled together with Izzy staying with the haul bag, leaving it at Ahwahnee ledge required a massive lower out. This turned out to be longer than our lower out line so Izzy had to take a massive swing into space whilst riding the haul bag. Ed then started climbing



whilst Izzy ascended and hauled to try and speed up our climb. Following this, Izzy led the penultimate pitch after which it was starting to get dark. The final pitch was led by Alex with the help of some music to distract from the fear brought by the dark. At this point we decided to bivvy at the top of the route and enjoy our cold couscous and tofu.

The next morning from the bivvy ledge we climbed and hauled the final few metres to the top and then abseiled with the haul bag into the gully off the back of the route. from here we were told that you could walk down to some pools and walk off from there but without any info about where to go we decided to take the guidebook descent, which involved around 10 abseils down a horrible loose gully (anyone doing this in the future should find out more about the potential walk off). After managing to avoid dislodging rocks onto each other, sending the person with the haulbag first, we reached the ground and trudged down to the base of the route and to the nearest bus stop. Descending this route somehow took us nearly an entire extra day, we were all very hungry and clearly looked extremely broken as we managed to get our food in the village grill for half price.

5.5. Regular Northwest Face of Half Dome

The Regular Northwest Face of Half Dome was unlike any of the other walls climbed on this trip. It was 23 pitches and roughly 700m long, but the route traversed backwards and forwards over some loose rock, so hauling a bag is poor form (although some still do). The normal way to climb it is to go fast and light, and try to get from the bottom to the top in a day. That way the second can carry a light backpack with just enough to survive a shiver bivvy on the ledge on pitch 17 in a worst case scenario.

Izzy and Olly walked up the Death Slabs with way too much food and water, making the 800m of vertical ascent up scree and fixed ropes much harder than expected. It took the better part of the day to get up to the base, but Ollie managed to get the first pitch fixed with ease before it got dark making them more confident of the coming day. They then ate a large meal of pre-cooked cheesy pesto pasta before going to sleep.

They woke at 4am the next morning, and after a slightly pesto flavoured porridge, got climbing. They left their bivvy stuff and extra food and water hanging from a tree at the base so the wildlife couldn't get to it. Several pitches of stiff 5.9 up a buttress to the side of the main face led them up to some scrambly pitches traversing onto the sheer face. Almost all of these pitches were French Freed, which involves pulling on gear sometimes instead of natural handholds and stepping on bolts to make the climbing easier. Whilst this wasn't so necessary in terms of getting up the pitch, it made progress a lot quicker with less effort, which was vital for getting to the top that day.

At this point they had caught up with a team that was hauling on the route and doing it over three days. Olly went up one of the aid pitches to pass them. It turned out one of them was actually really experienced and had done the route in under 3 hours, whilst the other was a total beginner. The fact that the more experienced climber was so experienced didn't excuse the hauling, rather it made it more inconsiderate as he would have known about the risk of knocking rocks down on people below (which happened to us).

By now Olly and Izzy were 10 pitches up, and after a couple more aid pitches they arrived at The Chimneys. These two pitches were linked by Olly, but were a nightmare to squeeze up and were less well protected than previous pitches. After these, Izzy led up the next three pitches of cool French free climbing to Big Sandy Ledge at the top of pitch 17, arriving at about 5pm. Olly then led the Zig-Zags, which are three C1 aid pitches in a row that can eat up a lot of time. He short-fixed each pitch and moved fairly quickly, and both he and Izzy were at the top of them just after it got dark at about 6:30pm.

Only three pitches remained, but they were both very tired by this point. The first was Thank God Ledge which had a 5.9+ chimney at the end, which Izzy decided to lead because although she wasn't confident climbing chimneys (she'd fallen off many 5.6 chimneys the weeks before), there were rumours online that you could aid it with nuts and Olly was tired after The Zigzags. Thank God Ledge was a thin ledge that narrowed to less than a foot wide, with a bulging wall above it, meaning that most people crawl along it. This was absolutely

terrifying for both Izzy leading and Olly seconding. Izzy thought: "Thank God it's over", until she found herself wedged in the 5.9+ chimney. Izzy had to do a head jam to get on top of the chockstone in the chimney, and once she was there she found herself with an arm bar and a crimp holding her in place between two slightly overhanging tight walls. There was no further gear above her but she was tantalizingly close to the top of the chimney, a bomber cam just below her feet. "Where are the nut placements???" she thought. She saw some in-situ nuts around the corner to the left, but there was no way to get to them from her position. It was a decision between going for it and trying the few moves to get to the top of the chimney and risking what would've been a fairly safe but large fall onto the bomber cam, or downclimbing and building a belay just below her feet and bringing Olly over to try aid climb to the left, as if he tried the chimney from the intermediate belay and fell, he would've hit Izzy. The darkness made a potential whipper more scary so they decided Olly would do the aid pitch. From the belay, he downclimbed and pendulumed across to a thin crack which was climbed on old in-situ nuts and camhooks, back cleaning the whole way so Izzy could ascend up the regular route.

Izzy then started up a contrived pitch with some free climbing to two bolt ladders and a pendulum between. She couldn't quite figure it out and didn't bring any offset cams or small nuts because the topo implied they weren't needed, so she returned to the belay and Olly had a go. He utilised his long arms and the offset cams that he had hoarded to get across the pendulum, before some hooking to get up to the final belay of the route. Izzy then led the last pitch, using another intermediate belay after the rope got stuck. They arrived at the top at 00:30am the next morning, with the last three pitches taking roughly 6 hours.

They chilled at the awesome summit, unsurprisingly having it all to themselves, before descending the cables and skirting around back to their bags at the base of the wall. They got back at about 3am and bivvied in the same place they had woken up at, almost 24 hours ago. They woke up late the next morning and walked down back to camp. They were very tired.

5.6. Zodiac

One of my [Olly] main goals for the expedition was to solo a route on El Capitan. Initially I thought Lurking Fear would be a good route to do since it's relatively short and very easy, but I also wanted to do Zodiac at some point. No one else wanted to do any A3, so it made sense to link both objectives. I had previously rope soloed bolted routes in Wye Valley and the Peak District, as well as a (small) big wall in Squamish, but with limited hauling. Zodiac seemed like a culmination of all the climbing I had done over the summer.

I got up early on the first day and got the first bus to El Cap Meadow, before walking up to the base. This all took a little longer than expected, and I arrived at the base at about 10am. I was just fixing the first four pitches that day, so only had to carry my rack and ropes up. I started up the first pitch, a thin crack leading to a belay below a large roof, which some guides say is the C3+ crux of the route. Although the gear was small and there were occasionally some hand placed peckers, I found this pitch to be pretty mellow and very safe. I abseiled back down to the ground to then clean the pitch. The next pitch traversed

underneath the roof and was pretty easy C1. It was made slightly scarier since I needed to back clean (place no protection) for about 10m on the traverse to make cleaning it easier. Getting back to the previous belay after a traverse is always interesting and it involved abseiling down the haul line before ascending back up the other side of it. The third pitch had a few bolt ladders with some hard to work out hooking between, whilst pitch 4 was fairly straightforward with a section of 5.6 free climbing followed by easy C1. Once at the pitch 4 anchor, having cleaned the pitch, I tied both ropes together and abseiled back down to the ground. I got back down at about 4:30pm, and was given 4 gallons of water by another team who had just bailed, meaning I wouldn't have to carry it up the hill the next day.

The next day I carried my haul bag with all the stuff to live on the wall for 5 days up to the base. I started walking as it was getting light and I could see head torches on the route. When I got to the base I saw a team on pitch 2, who I briefly chatted to before starting to ascend up the fixed lines. I decided to do two hauls instead of one monster haul since there was a roof just below the first anchor. This meant that once I had ascended the second section and set up the hauling I had to abseil back down to release the bags then reascend the line. This could have been avoided had I done one big haul since the bags were hanging in free space and the roof wouldn't have been an issue.

After all this jumaring and hauling I was a little tired, and the team on the route had arrived at the belay above pitch 3 and were getting ready to start. Being on a comfy ledge I decided to let them pass as they should have been faster than me (soloing is slow). It took quite a while for them to pass due to the next pitch being long, and it was into the afternoon before I could actually get climbing. As I began another team came to the belay who were fixing the first 4 pitches and were planning to do the route in a day from there the next day. As I was climbing pitch 5 a huge rockfall happened to the east, which was scary. Luckily the pitch was one of the easiest of the route. I had to wait a little longer at the next belay for the team ahead even after cleaning the previous pitch since it was seemingly quite tricky. Eventually they finished the pitch, and it was my turn.

Pitch 6 was the crux of the route for me. It started with some relatively easy C3 (probably more like C1+) up the Black Tower, which was a slabby tower of dark rock. Then there was an A3 beak crack above the tower which the guidebook says many people have broken their legs falling off trying to climb it without using a hammer. I tried to climb it without using my hammer and fell about 20ft when a hand placed beak ripped through the crack. I hit the slabby tower on rope stretch. If I had been any higher or if the tiny black totem cam would have ripped, I would have probably broken my legs half way up El Cap. I pulled back up and hammered the beak back in until it was ringing like a bell. Confident that this was as good as a bolt, I continued up to Pearly Gates Ledge. The team above were stopping there for the night, and neither them nor I could be bothered to fix the next pitch as we had both planned. I shared some of the beers I had brought up with them and we chatted for a bit before going to sleep.

The next morning the other team bailed. This made sense as it was the last point at which you could easily go back down before the route became too steep to abseil without down aiding and/or pendulums. This made me consider bailing as well as it felt very committing to

keep going, but I told myself that I could only bail if I had an actual legitimate reason for it. I started up pitch 7 shortly after packing everything up. This was another A3 pitch and the first in the iconic Great White Circle. It was fairly heads up with quite a few peckers, this time more easily hand placed. Once I finished the pitch and returned to the ledge, the ZIAD team soon joined me. It made sense to let them pass there on a 4 bolt belay with a big ledge for me to sit on rather than the next hanging belay. I let them use my gear fixed in pitch 7 so they could do it more quickly, but then they took a little while to lead pitch 8, with one of them taking a huge whipper when a cam hook came out. I chilled on the ledge until they had moved off the belay. After cleaning my pitch and hauling the bags, I began pitch 8, "The Flying Buttress". This was a 50m pitch of sustained A3, with very occasional good bits of gear, but it was mostly dodgy. It took a while to lead as I was moving slowly and testing everything a bit more after my fall the previous day. I struggled to trust cam hooks after seeing the other team a few moments earlier, which also slowed progress. Finally I made it to the base of "The Nipple" pitch, and could mentally rest whilst cleaning and hauling the bags.

The Nipple is possibly the most classic pitch of the route. It involves traversing a thin crack at the back of a roof, which then widens rapidly to an offwidth. Normally this traverse is back cleaned the whole way and inverted cam hooks are used for progression, however I had to abseil the pitch afterwards anyway, so could leave pieces for protection (which would normally be hard for the second to clean) and clean them on abseil. This mellowed out the pitch considerably. There were no rings through bolts in the anchor, so to clean the pitch I had to take a big swing out into free space with over 400m of air below my feet, which was very memorable. At the top of The Nipple I set up my hanging bivy for the night on the sheer vertical section of wall.

The next morning I led the Zorro Roof, the steepest pitch of the route, followed by the Devil's Brow and an easy pitch to Peanut Ledge. This marked the end of the hard climbing on the route. I arrived at Peanut Ledge at about 2pm and chilled for a bit and ate some food, before fixing one pitch. This pitch demonstrated the flaws in the aid rating system since it was rightly C1, but every placement was a #5 cam, of which I only had two. This meant I couldn't place any gear for almost the whole pitch as I needed both to progress. This was fine when the placements were visibly good but became scary when the crack became wider and more flared. This was followed by an exposed traverse to a belay, which was easy. I then returned to Peanut Ledge for more food, beer, and sleep.

The last day concluded with two relatively easy short pitches, leading me to top out just after midday despite having a lie in. I tried to eat as much of the spare food as possible and left my spare water under a rock for other parties who might have run out. I then walked off with all my stuff in one load, which I weighed when back at camp and it turned out to be 45kg! (Don't try this at home)

The whole experience was pretty special and memorable (and scary) and has ignited my psych for harder walls. I'd ideally like to find partners for future walls, as the physical load from doing everything over the same time that most parties of 2 or 3 do it in gave me some mild carpal tunnel syndrome. I'd like to go back to Yosemite in the near future to climb my initial goal of The Shield, as well as getting on Mescalito, Tangerine Trip, Afroman, Lost in America, and Aurora.

6. Budget and Funding

6.1. Expenses

Item	Expenditure
Car Hire	£ 3038.88
Fuel	£349.63
Accommodation	£1181.87
Food	£1330.12
Flights	£4172.72
Insurance	£2655.91
Total	£12,729.13

Many thanks must go to the Imperial Exploration Board and the Old Centralians Trust for helping to fund the expedition for the current students. Thanks is also due to the Harlington Grant for providing most of the specialist equipment that allowed this and future expeditions to be possible. It became clear on the expedition that such generosity is unique not only across universities in the UK but also in the world, as equivalent US institutions would never fund such an activity for fear of litigation.