



Ritt Kellogg Memorial Fund Registration

Registration No. 6XTL-NHW94

Submitted Jan 31, 2023 10:09pm by Cade Quigley

Registration

Jul 1, 2022-Feb
1, 2023

Ritt Kellogg Memorial Fund

RKMF Expedition Grant Group Application 2022-23

RKMF Expedition Applications due by Noon Feb 1, 2023 11:00am-11:59pm

This is the group application for a Ritt Kellogg Memorial Fund Expedition Grant. In this application you will be asked to provide important details concerning your expedition.

In addition to this Group Application, **each team member must submit an Individual Application**. All Group Applications and Individual Applications must be received by 1st Wednesday of Block 5 at noon.

For more information, example applications, proposal writing tips, and further guidance, please visit <https://www.coloradocollege.edu/other/rittkelloggfund/grants/expedition-grants/overview.html>

If you have any questions please email Kacie Bell, Outdoor Education and Ritt Kellogg Memorial Fund Coordinator, at kbell@coloradocollege.edu

**Waiting
for
Approval**
Jan 31,
2023
10:09pm

Participant



Cade Qui le

Expedition Summary

What is the name of your proposed expedition?

Backpacking in the Brooks Range

If you have an alternate name for your expedition, please list it here.

Five Buddies in the Great White North

Briefly describe the objectives of your expedition.

Through this expedition, we hope to successfully plan and experience a backpacking trip in the far north: the Gates of the Arctic National Park. We will spend 15 days in the north central part of the park, an area seldom seen by man. For this trip to be successful, thoughtful planning and backcountry readiness is a necessity. The Gates of the Arctic, while stunning in nature, carries all of the challenges that come with wilderness expeditions in isolated areas. Our objective is to be able to successfully execute this trip with competency, as well as build our relationship with wild places. The Gates of the Arctic is sought after as a place of solitude and intense introspection, guided by the ways of the world. As college students, it's easy to be caught up in the whirlwind of everyday life and forget our place in nature and time. In the wilderness of the arctic landscape, we not only hope to hone our backcountry skills but also find our place with the natural world and the times we live in.

This trip was originally submitted for a Ritt Kellogg Expedition grant (Cade Quigley, Sam Cadigan, and Parker Rehmus, 2020), with plans to travel in the Brooks Range in August of 2020. The trip was accepted by the committee, but had to

be canceled due to the COVID-19 pandemic. Many aspects of this trip follow the plans set in that original trip, although two of the original members are now graduated. We look forward to the opportunity of a long overdue trip to the Gates of the Arctic.

Briefly describe the location of the expedition.

Our route will be a point to point expedition, beginning at Chandalar Outhouse and ending at Anaktuvuk Pass in the north central region of Gates of the Arctic National Park. Our proposed route will follow the Koyukuk River, the Valley of Precipices, and the Anaktuvuk River, crossing the continental divide at three locations. These river valleys feature terrain that has been nearly untouched by man, where many plants and animals of the tundra biome flourish. We will spend a total of 15 days and 14 nights in the backcountry, camping the entire time and following LNT principles. The park was created as a place for people who sought remote wilderness and solitude, hence the land we will walk upon is seldom witnessed.

Date that travel to the expedition will start.

Jun 24, 2023

Date that your team will enter the field.

Jun 27, 2023

Date that your team will exit the field.

Jul 11, 2023

Date that the last team member gets to their home location.

Jul 14, 2023

How many days will your team be in the backcountry?

15

How does your planned destination provide a "wilderness experience," and how will your expedition offer solitude and promote self-reliance and grit?

The Gates of the Arctic National Park, at 8.4 million protected acres, is one of the largest parkland areas in the world. The only management in the area is focused on maintaining the wild and undeveloped nature of the area, where wilderness recreationalists have the opportunity to experience the solitude and wildness of the area. The park features the connection between tundra and mountains. The glacially sculpted peaks of the Brooks range, which rise above many rivers and streams, bear few names. In the northern part of the park, the tundra spreads northward to the arctic ocean. While this area is not used to humans, its pristine terrain and flourishing life impact every individual who has the opportunity to visit. This quiet and isolated place offers us an opportunity to reflect on our time and our graduation from CC.

We understand the privilege it is to experience this beautiful place, but we also understand how we will be in an unfamiliar environment that has unexpected obstacles. This expedition is going to promote cooperation between group members and help us practice our following skills, but also step up and find confidence as leaders. This expedition promotes self-reliance and helps us learn how to find grit in the wilderness as we prioritize our health and safety.

Participant Qualifications

Expedition team member information

Olivia Coutre:

- WFR- Expires Jan 23, 2024

Daniel Lewinsohn:

- Recertification WFR April 8th-9th, 2023 through NOLS

Cade Qui le :

- WFR recertification January 2023

Julia Raddue:

- Getting WFR June 2023

Will Zarodzk :

- Getting WFR June 2023

Does your team have adequate experience?

Yes

Describe your team's training plan to solidify or improve technical skills, physical conditioning, and team dynamics prior to the start of the expedition.

The members of this group are athletic individuals who are involved in multiple club sports and intramurals on campus, including biking, and soccer. In addition, we regularly participate in outdoor recreation during all of the seasons. Such activities include trail running, biking, alpine and backcountry skiing, backpacking, and climbing. These activities will help us maintain fitness throughout the year and keep us accustomed with backcountry and LNT principles. We will continue to do these activities to improve our cardio. In the months prior to the trip, we will add weight training into our regiments, including hiking with heavy packs to accustom our body to carrying these larger weights.

A physically strong team is nothing without a mentally strong team. Good group dynamics are critical especially when it comes to decision making and risk management. Not only is our group composed of a web of current and past roommates, but we often spend our free time together. The 5 of us have been on block break trips together and have the utmost respect for each other. Since we understand the importance of a well functioning group, we have had and will continue to have conversations regarding interpersonal relations and overall group dynamics. These conversations have discussed our communication styles, our leadership styles, and how each of us respond to stress. Having these conversations beforehand makes us even more confident in our abilities to deal with any unforeseen hiccups or challenges.

Expedition Logistics, Equipment, and Food

Briefly describe how each expedition member will travel from home to the trailhead and back again.

On June 24th, Daniel, Olivia, Will and Julia will fly or drive from their respective homes to the Seattle Airport. Cade will drive 3.5 hours from his home and meet them there. The group will be staying at in Seattle on the night of the 24th. From the Seattle Airport, we will fly to Fairbanks, AK on the night of the 25th and then spend the rest of the night of the 25th and the night of the 26th in Fairbanks. On the 27th we will take a bus from Fairbanks to a stop near Oolah Pass and begin our journey on foot from there.

On July 11th we will end our backpacking part of the trip and fly from Anaktuvuk Pass, AK to Fairbanks, AK and then depart from Fairbanks on July 12th to Seattle, WA. We will then fly from Seattle, WA to our respective homes on the 12th.

Upload a detailed day-by-day itinerary, beginning when the first team member leaves home.

[ritt23_trip_itinerary.pdf](#) (45MB)

Uploaded 1/31/2023 9:24pm by Cade Quigley

Please paste a URL to your complete digital expedition map.

<https://caltopo.com/m/ORDKN>

If you have plans to re-ration during the expedition, describe the plan below

On Day 1 we will arrive in Coldfoot and drop our resupply food with Dirk Nickisch of Coyote Air. On Day 5, Coyote Air will meet us midday at Summit Lake. We will make sure we are at the resupply point early. If Coyote Air doesn't respond by the morning of day 6 we will need to signal an SOS on our inReach and request evacuation.

Describe how you will protect your food from wildlife.

The Gates of the Arctic National Park is featured by large river valleys surrounded by impressive mountains and a general lack of forestation. This makes bear hangs an inadequate method for food storage. The national park requires all visitors to use bear canisters or Ursacks for food storage, which will provide a more effective and guaranteed form of food storage. All food and scented items (such as toothpaste) will be placed in the canisters and Ursacks, which will be placed at least 100 meters from the tent site.

Upload a detailed food list with budget numbers and show hoe it meets the caloric needs of the expedition.

[Food List - Sheet1.pdf](#) (47KB)

Uploaded 1/31/2023 9:22pm by Cade Quigley

Upload a thorough equipment list.

[ritt23_equipment_list.pdf](#) (64KB)

Uploaded 1/31/2023 9:18pm by Cade Quigley

Upload a first aid kit list.

[ritt23_firstaid.pdf](#) (45KB)

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How will you limit and leverage your impact on this trip?

While the area we will be backpacking in has never been inhabited, and we plan to see few to no people out there, we do need to consider the impact our presence will have on others before and after we are in the backcountry. This is particularly important when traveling in small towns such as Anaktuvuk (which is known for being a bit weary of outsiders). Because of this, we plan on camping in the backcountry our last night and will only arrive in the town when it is time for our flight (with ample time of course).

Additionally, we plan on getting our food in Seattle from a couple different stores like Trader Joes, but also more local stores. We will aim to buy foods with minimal packaging not only because it produces less waste but also it will be less for us to carry!

Alaska has the highest population of indigenous residents (close to 20%) and as non indigenous travelers, it is important that we are thinking about how our privilege plays a role in our existence. The effects colonization has on the indigenous communities of Alaska can not be separated from our expedition. We are going to take our time to learn about the relationship between the people and the land that we will be spending over two weeks in. We will take intentional time before arriving in Alaska to learn about the history of Alaska, not only the land, but also its people. We know that going on this trip will challenge our understanding of ourselves, the place we will be inhabiting and our own homes. We understand that by having the opportunity to travel and see different parts of the world, we are able to better understand ourselves and our place in the world.

TOTAL COST: \$72.40 from 14.49 metric tons of Carbon

<https://docs.google.com/spreadsheets/d/1vhzbRe0EhVSSQyIs3Kk9nCPljAdtSERoqbXylQmXhU/edit?usp=sharing>

Risk Management

What are the main objective hazards of the expedition?

Risk Management

I. Being one of the greatest factors in the success of a trip, Weather is one of our greatest objective hazards. We have broken weather down into its various forms and threats that are specific to Gates of the Arctic, and how we will manage them.

a. Sun: While heat may not be the greatest issue so far north, the Sun, and over-exposure to it, can post a large threat. To mitigate the chances of getting severely sunburned we will be diligent in our application of sunscreen. Bad sunburns, or poorly looked after ones, can potentially become infected and either extend or end a trip. Presence of snow and constant sun also poses the threat of snow blindness, which is uncomfortable and dangerous to your sight. To ward off sunburns, snow-blindness, and general overexposure we will be sure to wear hats and/or sunglasses, lots of sunscreen (ideally mineral-only), and layers. It is also very important to stay hydrated!

b. Cold: Cold is perhaps one of our greatest threats during this trip, because it results from many different climatic situations. It is important to mitigate exposure to cold, because it can result in hypothermia, frostbite, both injuries that would cut a trip short. Exposure to cold can also lead to increased chance of illness, which would either cut a trip short or extend time in the field. We will have many extra layers and take preventative measure to ensure our clothes and selves don't stay wet and cold, or remain wet and cold for too long. Our sleeping bags and sleeping pads will be very pivotal in ensuring we stay warm during the nights, and having the right gear during the day will do the same.

c. Snow: As mentioned before the presence of snow in combination with sunlight can cause snow blindness. To prevent this we will be sure to wear our hats and sunglasses. It is unlikely that there will be copious amounts of snowfall or hailing that time of year, but nonetheless such weather events would potentially get our gear and selves wet, cold, and exposed. As people with extensive experience in the outdoors all of our gear is suitable for cold weather events and adaptable when exposed to moisture. Another unlikely but dangerous potential for snow is to be deceptively stable; crossing large fields of snow can be dangerous if you aren't aware of what's underneath. To avoid twisting ankles in snow-covered holes we will make sure to tread lightly.

d. Rain: much more of a realistic threat than snow and hail, rain can be quite devastating if not properly prepared for. Rain poses the risk of hypothermia, cold/illness, and drenched gear. To ensure that all of those threats are managed, we are adequately prepared with water-proofed gear and extra layers to stay warm. It is important to line/double-line backpacks with bags that ensure extra layers, food, pads, and sleeping bags stay dry. Backpacking in the rain can be perfectly safe if one is prepared, and furthermore we all know at least two techniques that can dry wet clothes even if the rain doesn't stop. It is also important to remember that if terrain becomes too dangerous in the rain, such as vision is compromised, rocks are too steep.

II Injuries/Illness

a. Every member of our group is WFR certified, and one member additionally has their EMT certification. Because of our training we are aware that even the smallest of blisters or cuts can quickly become a huge issue in the backcountry. Infections whilst hiking can result from poorly addressing smaller injuries, or from larger accidents. Injuries such as strains or sprains will be assessed and managed accordingly. In the event that an injury or infection occurs that is too severe to continue, we will use our training to best stabilize the group member and assess whether or not we should evacuate. While we are trained WFRs, there is no need to risk someone's health and safety to complete the trip, and part of our training is to know when a situation is beyond our training.

i. Wildlife: The wildlife we should be aware of and prepared for includes bears and caribou. Wildlife in such a remote area of the world is not used to humans, and is more likely curious than malicious. Nevertheless, curiosity can still lead to unwanted encounters. To ensure little to no contact we will make sure to regularly make loud noises, such as singing, whooping, or shouting to announce our presence. Furthermore, using bear canisters and minimizing use of smelly things such as deodorant will reduce our chance of bear encounters. It is important to look for signs of bears when trekking, such as fresh tracks, presence of carcasses, scat, or digging (bears, apparently, dig). One of our group members has experience backpacking off trail in Alaska, and knows how to spot signs of bears, and the importance of carrying bear spray. We will be sure to pick campsite far away from fresh signs of bears, and to always keep our food at least 100 meters from where we sleep. In the event that we encounter a bear, it is important to assess the situation: if the bear is far away and doesn't notice you, it is best to keep it that way. If a bear is with its cubs, never get between them, and stay far away if you can help it. If on the off chance the bear is very close to the group, we know bear protocol, which entails getting together, looking big, making a lot of noise, and standing at the ready with bear spray. Avoiding caribou is also important, because one can never be too sure an animal won't attempt to trample/harm you. In general it is best for the group to be heard and not seen when it comes to wildlife.

III. Terrain and off-trail backpacking: Gates of the Arctic National Park is home to various terrain that include steep topography, wide rivers/riverbeds, bogs, and tundra, all terrain we are prepared to handle but must be mindful of. Because there are no designated trails within the park we must pay close attention to our set route, making sure to keep our navigation skills sharp in the backcountry. Mixed terrain and off-trail backpacking poses the threat of us getting lost, which would not only potentially extend the trip but also strain resources. Getting lost occurs for many reasons, but one way we plan to better navigate terrain is to limit our mileage each day to below 7 miles. We believe that not exerting ourselves and trying to "bag miles" will maintain morale and keep our skills sharp in the challenging topography of Gates of the Arctic. Each group member has well-developed navigation skills and previous experience backpacking off trail. We understand the importance of regularly checking maps and not hesitating to take a moment to use a compass and get our bearings. We have also designated certain days to be lighter than others, or simply act as rest days. We were informed by a Park Ranger that our intended route could be done in 8 days if one were moving quickly, but we instead are extending the time in case there are any injuries, unforeseen weather events, or simply needing an afternoon of rest after a steep climb. It is convenient that we won't have to be too concerned about navigating in the dark or reaching a planned campsite before sun-down, and water will be in abundance considering we are backpacking/navigating almost primarily along a river.

IV. River Crossings: Although snow melt and therefore water levels shouldn't be as dangerously high as they are in the early summer, we all have experience in river crossings and understand the importance of patience, communication, and safety when doing so. Seeing as we are backpacking along a river, we will regularly be crossing it, making sure to only make the crossings when safe and appropriate. We will make sure to WADE (wait assess decide execute), which involves looking at depth, width, current, and presence of rocks. If we decide a river crossing is not a good idea at a particular location, we will either hike upstream until we feel comfortable, wait until the next morning to cross when snowmelt is decreased, or a combination of both. Once we have decided to make a river crossing, we will remember to always leave packs unclipped, verbally confirm what method we will use to cross the river (Tripod method or solo), and

once in the river constantly be re-assessing conditions and morale. To prevent trench foot, or other wet/cold related injuries, we will be prepared to change into dry socks after a series of river crossings throughout the day and regularly inspect our feet at longer breaks and at campsites.

Along with objective Hazards it is important to point out subjective hazards that we will manage throughout the trip. Mood and group energy: Part of a successful trip is having a good relationship of respect and communication amongst group members. Anyone should be able to speak up about how they are feeling, if they need a moment to rest or have questions and concerns about any choices being made throughout the day. Without good communication activities such as river crossings can become extremely dangerous. On a less serious note, not having a good group "vibe" can just make a trip not as fun!

Rest and self-care: Although there will be sunlight (of varying levels) 24 hours a day, sleep is incredibly important not only for our energy levels but also to ensure we have sharp decision making skills throughout long days of trekking. Other forms of self care include hydrating and eating well. Although the mileage may not seem like a lot, we will be navigating intense wilderness. To prevent injuries we will regularly stretch and warm up our bodies before hauling our packs onto our backs. It is also important to constantly stay hydrated and energized to protect our bodies and our minds.

Describe your self-evacuation plan in the event of an emergency.

For consistency and safety, our evacuation plan will remain the same for the duration of the expedition. In the event of a serious injury requiring immediate evacuation, we will first contact the National Park Service Emergency Dispatch. This resource is responsible for the entire National Park Service for Alaska, and will be the most reasonable option for immediate evacuation to the nearest hospital located in Fairbanks. In the case that we are unable to contact the NPS emergency dispatch, we will contact one of the emergency resources listed below, all of which will already be inputted directly into the SAT phone before the departure of our trip. If the injury, illness, or problem is less serious, we will evaluate the situation and decide on a plan of action based on the seriousness of the situation. Foot evacuation may be necessary and medical treatments will be provided based on our medical experience. In the case of minor injuries such as blisters, minor contusions, or scrapes, we will have a first aid kit that can be used for treatment throughout the trip. Our trip itinerary will be shared with the Gates of the Arctic park ranger, and in the case where we are overdue by one day without any prior communication, instructions have been given to call search and rescue.

Discuss any measures taken for teammates with medical histories which warrant special preparedness.

Everyone on the trip is aware of the signs and symptoms of an anterior shoulder dislocation and has familiarized themselves with the different methods of relocating an anterior dislocation. In the event of a dislocation, the severity of dislocation would be assessed and a decision would be made to either relocate the shoulder or leave it dislocated. In either scenario, this situation would warrant an evacuation and we would begin to follow our emergency protocol.

List the emergency and rescue resources available in the vicinity of your expedition.

Julia has a SAT phone that we will use to communicate with the front-country in the case of an emergency and/or evacuation.

List of Useful Emergency Contacts:

Emergency Resources National Park Service Emergency Dispatch: 907-683-2276

Air Force RCC: 907-551-7230; if we are overdue the toll free number to call is 800-420-7230

Fairbanks Memorial Hospital: 1650 Cowles St, Fairbanks, AK 99701; Phone number: (907) 452-8181

Park Service: Anaktuvuk Pass: 3030 Main St, Anaktuvuk Pass, AK 99721; Phone number; (907) 661-3520

Bettles, AK (907) 692-5494

Fairbanks: Dalton Hwy, Fairbanks, AK 99701; Phone number: (907) 678-5209

List the emergency communication devices you will be carrying on your expedition. If none, explain why.

Julia has a satellite phone that we will be bringing along the trip. In the case of an emergency, we will contact one of the emergency resources listed under the Emergency Resources section.

COVID-19 Preparedness

What is the current COVID-19 situation in the area where you are intending to travel?

Looking at Fairbanks, Alaska, 63% of the population is vaccinated and 82% of those over the age of 65 are vaccinated. COVID rates in Fairbanks have been relatively low since their last peak in January of 2022. Given the current rates of COVID in Fairbanks and the high vaccination rate, we don't anticipate our risk of contracting COVID to be significant before entering the backcountry. More importantly, with the high vaccination rate among the older members of the population, the risk of us infecting those who are most vulnerable around us is relatively low. There are currently no backcountry travel restrictions. The Fairbanks Memorial Hospital has 13 ICU beds. We will monitor changes in COVID rates and bed capacity through sources such as The New York Times. Source: The New York Times.

How do you intend to mitigate the risks of exposing yourself and your teammates to COVID-19 while traveling to your trailhead?

To prevent contracting and spreading COVID-19, we will wear masks while traveling in shared vehicles such as cars, buses, and planes. Additionally, all group members are fully vaccinated and intend to wash their hands frequently to prevent the spread of COVID-19.

How do you intend to mitigate the risks of exposing the residents of the area(s) where you will be traveling to COVID-19?

To prevent spreading COVID-19 to those around us, we will wear masks in small, enclosed spaces. Additionally, we will ensure we wash our hands frequently to prevent spreading COVID to those around us.

How do you intend to mitigate the risks of COVID-19 while in the field?

By testing before we go into the backcountry and being diligent with our mask-wearing while in transit to the backcountry, we don't anticipate the risk of contracting COVID in the backcountry to be significant. However, we intend on having a COVID test in our first aid kit and intend on distancing ourselves (to a reasonable extent) from anyone who tests positive. Distancing would include having them hike in the back of the group while everyone wears masks and keeping our distance while at camp. Since there will be 5 of us on the trip, if one member gets sick, we will have four people squeeze into one of the tents and allow the sick person to isolate themselves in the other tent. Depending on the severity of the sickness, we might determine it is appropriate to evacuate.

If someone on your expedition develops COVID-19 symptoms, how will you handle it?

It will be necessary for all of us to be observant of our health so we can identify any developing symptoms to allow us to be proactive with our decision-making. If someone begins to show COVID symptoms, we will follow the isolation protocols stated above. We would wait to see if their symptoms worsen, and only then would we use our COVID test to determine if they have COVID. This will prevent accidentally producing a false negative while symptoms are still mild and the viral load isn't high enough to be detectable. After a positive COVID test, we will pause our trek and take a few rest days while isolating the sick member of the group. We will closely monitor symptoms, and if symptoms worsen, we will immediately begin an evacuation and follow our emergency protocol.

Budget**Upload a detailed and complete expedition budget.**

[ritt23_budget.pdf](#) (47KB)

Uploaded 1/31/2023 9:48pm by Cade Quigley

What is the total funding request for your trip?

\$7500

What is the funding request per person?

\$1500

Describe what measures you have taken to minimize expenses for your expedition.

The following measures will be taken to minimize costs:

- Before and after lodging: We will camp or stay at a combination of [REDACTED] houses before and after the trip. Airbnbs or hotels in the area would be 200-\$250 per night meaning by staying at friends houses we will be saving \$700.
- No permits or fees: Gates of the Arctic National Park is one of the only national parks that does not require any permits or fees for entering and staying in the park's area.
- Parking: We will be parking our vehicle in Seattle at a friend's residence so we do not need to pay for long-term

parking.

- Late night flights: Most of our flights are late night and non direct, saving cost. All flights are cheapest flight listed

- Driving instead of flying: Daniel and Cade will be driving from their homes [REDACTED]

- Taking the bus instead of a bush plane: Instead of riding in the bush plane to Summit Lake we will be taking a bus to drop us off by the Chendalar Outhous which saves us \$1,500.

- Personal gear: We will be using our personal gear throughout the trip which is the majority of the gear that we will be bringing. This will reduce costs that would have otherwise gone towards gear rentals.

- Ahlberg Gear House: We will be using the Ahlberg Gear house for the rental of our food storage equipment. As part of the Ritt grant we can rent this equipment for free, again reducing costs that would have otherwise gone towards gear rentals.

- Food: We will be buying our food in the Seattle area before departing to Alaska, where the food prices are much less than up north.

Expedition Agreement

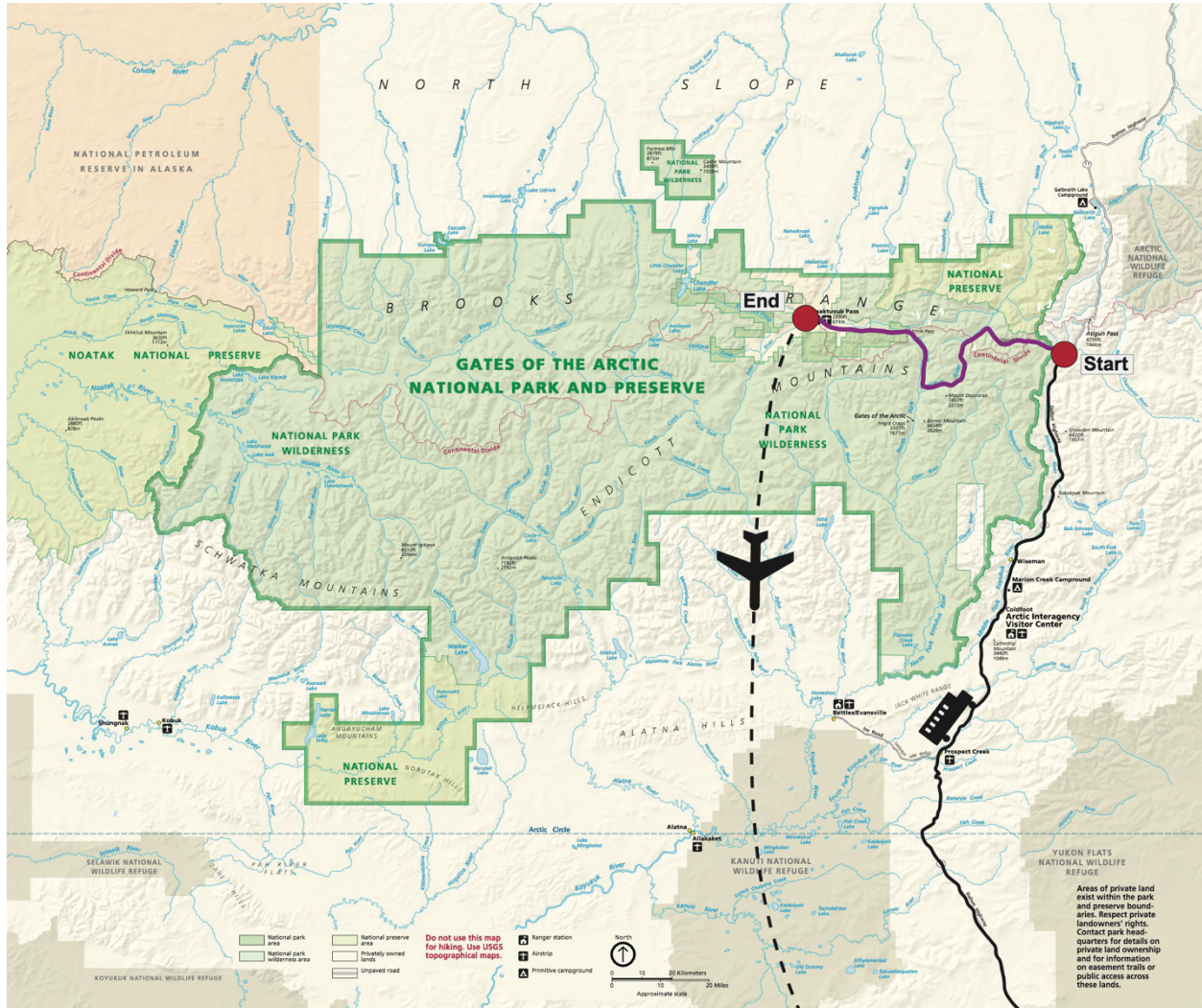
The Expedition Agreement must be printed, read, and signed in ink by each member of the expedition team. Once the Agreement is filled out, it should be scanned into PDF format and uploaded here. The group application will not be considered complete until this form is submitted



The Return of the Arctic Adventure: Trip Itinerary

Cade Quigley, Olivia Coutre, Julia Raddue, Daniel Lewinsohn, Will Zagrodzky

Overview



The Gates of the Arctic National Park and Preserve is one of the most isolated and seldom seen areas in the United States. Residing in the Brooks Range of Northern Alaska, the entirety of the National Park is above the Arctic Circle: for 30 days in the summer, the sun never sets, and for 30 days in the winter the region is engulfed in darkness. The expedition proposed here (purple line) will take us from the Dalton Highway, through the headwaters of the Itkillik River, along the North Fork of the Koyukuk River, and down the Anaktuvuk River to Anaktuvuk pass, crossing the Continental Divide three times. In total, we will cross 75.68 miles over 15 days, with 9,961' ft of ascent and 10,370' feet of descent.

It is important to note that while this itinerary displays our route very precisely, there are uncertainties that we cannot address until we are out in the field. For instance, our campsites are chosen to be close to water sources and on relatively flat ground. Yet, we will not know for

certain if an area is adequate for camping until we can see it. If a campsite is inadequate, we will try and find a campsite within 200 meters of the original site. The same goes for our route. Our route involves many stream and river crossings, hiking through alluvial fans, and across steep and potentially loose or wet ground. While we have taken many considerations into the making of this map, we will not know if a stream crossing, hillside, or marsh will be crossable at the time of our trip. We have purposely put in rest days into our itinerary in case we run into possible hazards along our route and need to take cover for a day or reroute our progress. In any case, we will closely follow the itinerary laid out here and be conscientious of the possible hazards along the way.

Pre-Trip (06/24 – 06/26)

Daniel Lewinsohn, Julia Raddue, Olivia Coutre, and Will Zagrodzky fly from their respective homes to Seattle. Cade will drive to Seattle from his home and pick up the group, where we will all go shopping for food. We will all fly out of Seattle at 9:30 p.m. and arrive in Fairbanks at 12: 30 am.

During the day of the 26th, we will buy bear spray, fill our camping gas, and buy remaining food we couldn't acquire in Seattle. We will also receive a mandatory backcountry briefing about Gates of the Arctic National Park at the Public Lands Information Center in Fairbanks. We will divide out a 4.5 day ration of food for each member and store the remaining food in bear bins for our resupply.

Day 1 (06/27): The Adventure Begins

Depart Fairbanks at 6:00 a.m. on the Dalton Highway Express, a bus service along the Dalton Highway. The bus arrives in Coldfoot at 2:00 p.m., where we have arranged to drop our resupply food with Dirk Nickisch of Coyote Air. From Coldfoot, we will continue north on the Dalton Highway Express for another two and a half hours. We have arranged for the bus to drop us off at the Chandalar Outhouse around 4:30 p.m., where our trip will begin.

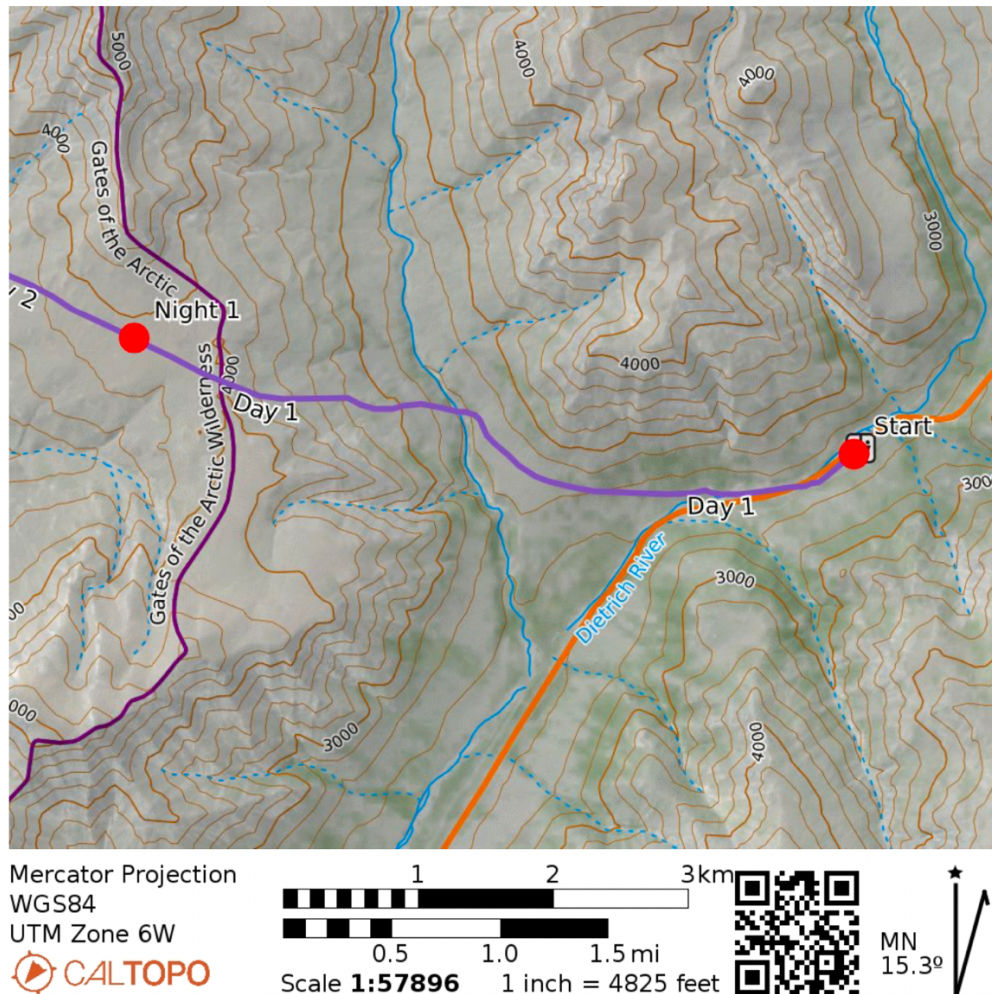
Excited by the views along the way and eager to get out of the bus, we will begin to hike. It will be important for us to take it slow at first to get our legs warmed up, and to check if there are any spots in our backpacks or boots that are causing noticeable discomfort. Along the way, we will have a stream crossing where we can practice proper crossing techniques in preparation for larger crossings in the future. Watching our footing will be key to help prevent rolls or sprains. At this time, we will be without cell service for the remainder of the trip, so if an emergency arises, we will need to use the inReach to enable an SOS signal or test with other persons in a non-emergency situation. We will camp on a bluff and try and find surfaces which will minimize environmental impact. There will not be a stream nearby so we will need to have water packed with us. Luckily, there will be 24 hours of light for our first few days of the trip, so we can take our time on the way up.

Alternate plan: If there is bad weather or the bus is running late, we can camp somewhere near the road for the night. We have designated day 3 as a shorter day, so we can use that day to catch up on our original plan.

Primary Hazards: Fatigue, Wildlife, Creek Crossing, Weather, Bugs, Dehydration/malnutrition, Uneven Terrain

Day Mileage	3.58
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Elevation Gain/Loss	+1750' -349'
Camp Coordinates	68.04128, -149.79219 6W 0383514E 7550100N

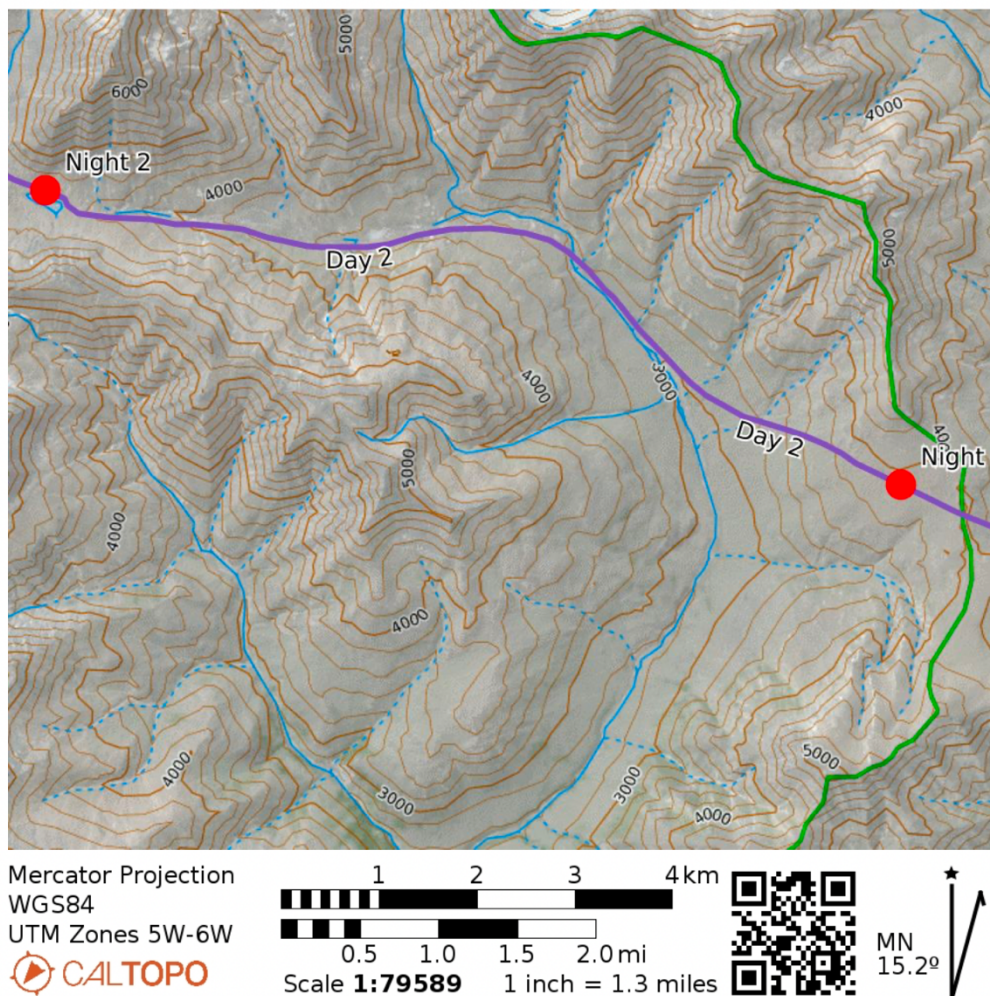


Day 2 (06/28): Kuyuktuvuk Creek Valley

We will begin our day with a descent into the Kuyuktuvuk Creek Valley. Most of the days in our trip will be around 6 miles, so this day will be an important in seeing our speed of travel, pacing, and physical shape. We will get an early start in case the travel is much slower than anticipated. There will be a gradual climb up the valley as we approach Oolah Pass. If we are walking through vegetation, we will make sure to not follow each other in a line to limit damage to the delicate Arctic vegetation. There will be options to refill water as we are near the creek, and we will have another opportunity to practice river crossings on a small creek. We should be mindful of blisters, hotspots, and bug bites so that we don't inhibit our travel so early in the trip. Camp will be set up at Oolah pass near the lake. We will find a surface that causes the least harm to the environment.

Primary Hazards: Wildlife, Creek Crossing, Weather, Bugs, Dehydration/malnutrition, Uneven Terrain, Blisters/hotspots

Day Mileage	6.08
Elevation Gain/Loss	+1528' -1036'
Camp Coordinates	68.06824, -150.00235 5W 0624906E 7553504N



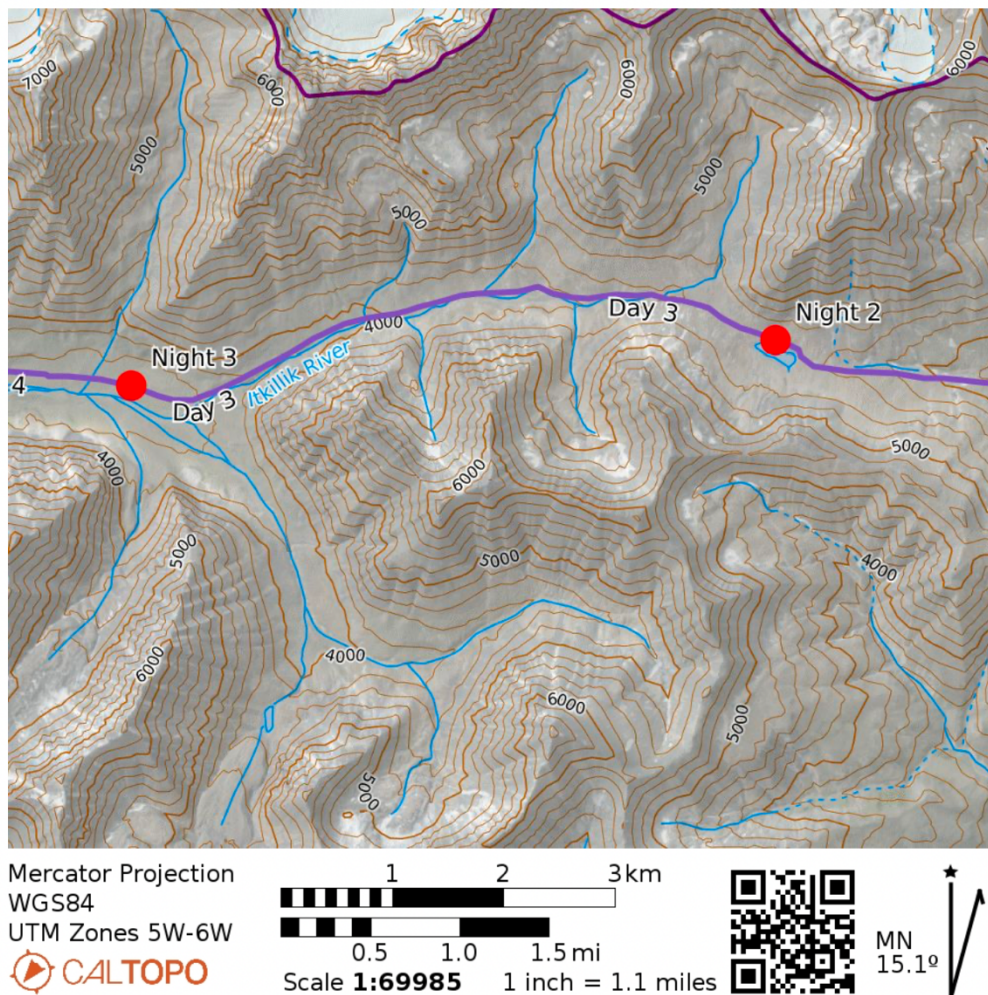
Day 3 (06/29): Oolah Pass and Itkillik River Headwaters

Backpacking down into the Itkillik River valley. This day will be relatively short and mostly downhill. Based on our pacing and physical exertion from the previous day, we may want to chill out at Oolah Pass for the morning and make our way down into the Itkillik River valley in the afternoon. While it may be tempting to split up, we need to make sure there are always at least two people together for bear safety and emergency situations. We will have radios so that if people want relative solitude, we can split up into a group of 2-3 and be within radio reach. If we were unable to hike on the first day, this will be the day to catch up with the initial plan. We will be camping by a tributary of the Itkillik River. Throughout the trip, we will need to be conscientious of our position relative to the river, so that we are not in flash flood territory.

Prior to descending into the Itkillik River valley (day 1 and 2), one evacuation option for minor injuries would be descending back to the Dalton Highway, a 1-2 day hike out. However, after day 3, our best option for rapidly evacuating is enabling SOS through our satellite phone.

Primary Hazards: Wildlife, Creek Crossing, Weather, Bugs, Dehydration/malnutrition, Uneven Terrain, Blisters/hotspots

Day Mileage	3.8
Elevation Gain/Loss	+98' -987'
Camp Coordinates	68.06459, -150.14165 5W 0619124E 7552822N

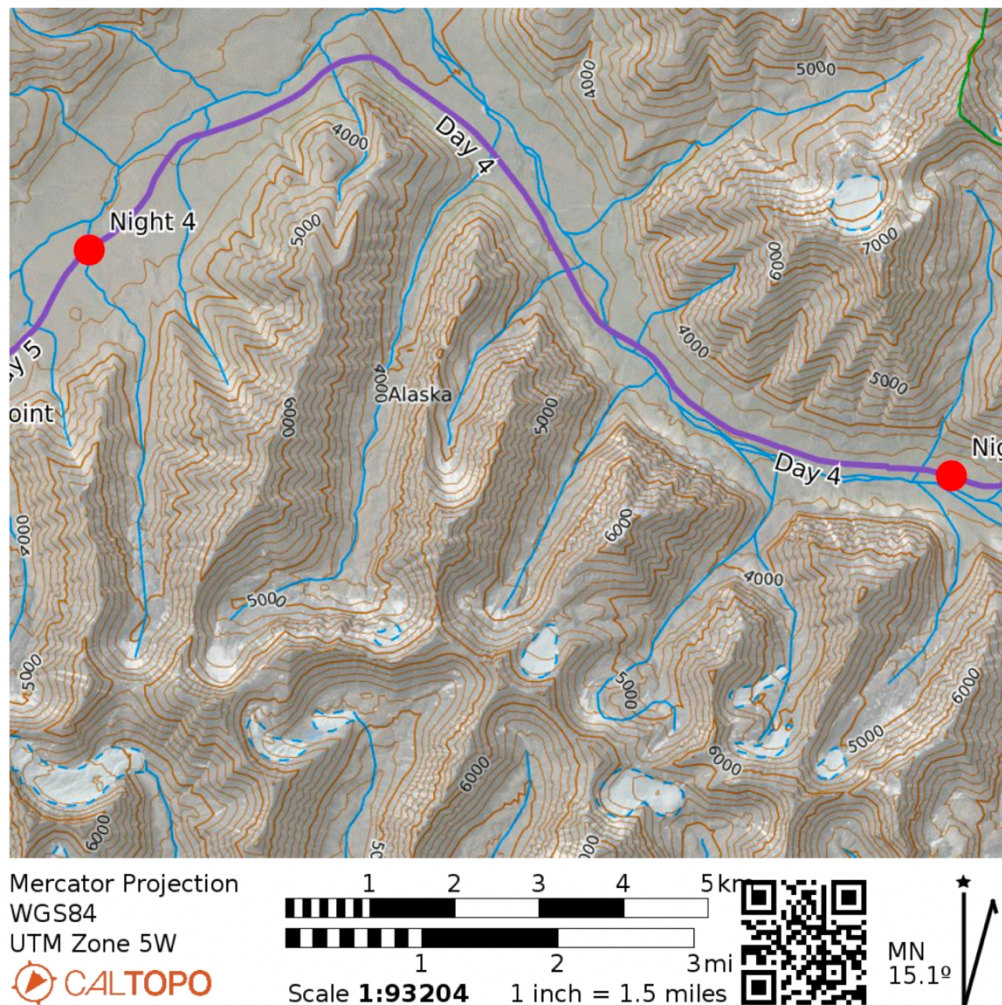


Day 4 (06/30): Itkillik River Valley

Backpacking through the Itkillik River valley. This valley is flanked by steep mountains that should be very awe-inspiring. Still, we will need to be conscientious of possible falling rock and uneven terrain. This is a longer day, so it will be important to get an early rise and keep a steady pace throughout the day. We will be camping near a stream on a surface which will minimize environmental impact.

Primary Hazards: Uneven terrain, Fatigue, Blisters/hotspots, Wildlife, Creek Crossing, Weather, Bugs, Dehydration/malnutrition

Day Mileage	8.17
Elevation Gain/Loss	+778' -867'
Camp Coordinates	68.08862, -150.38704 5W 0608789E 7555047N



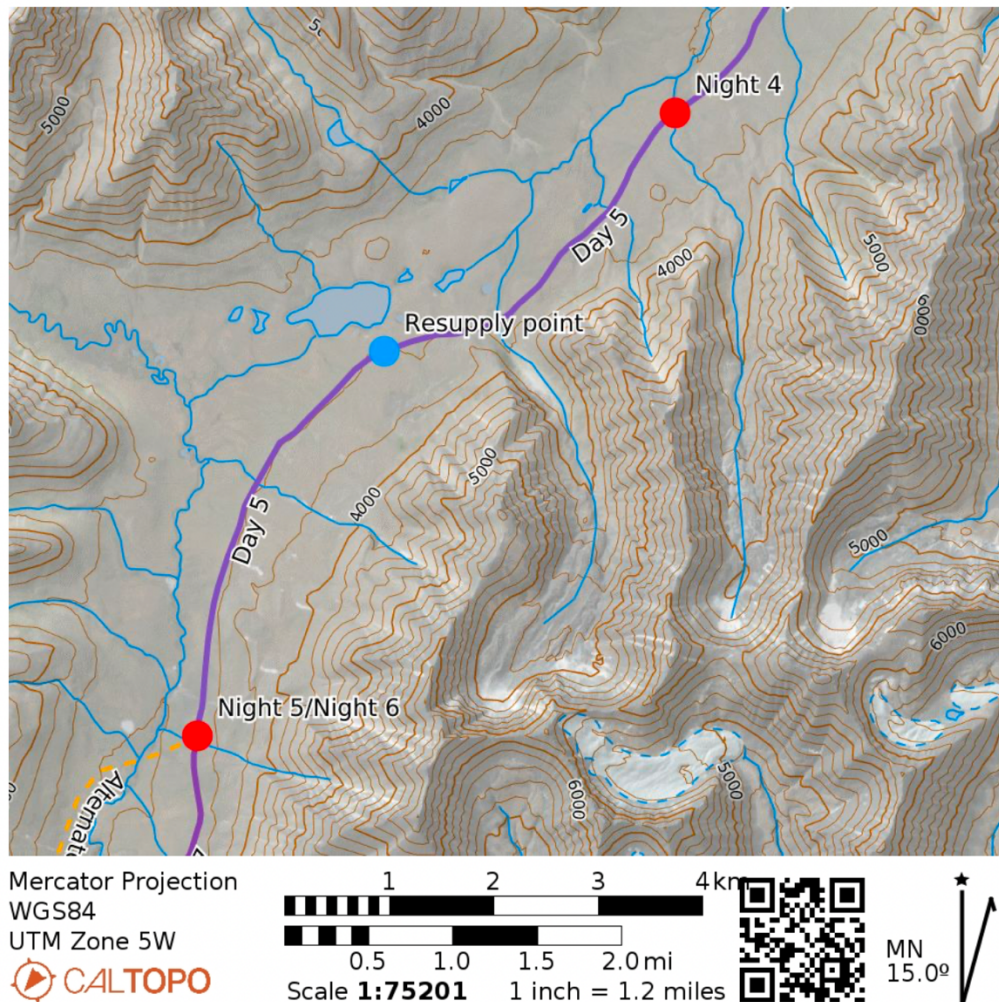
Day 5 (07/01): Summit Lake and Resupply

Hike to Summit Lake and resupply our food. We have arranged for Coyote Air to meet us midday at Summit Lake. We will need to get up early and make sure we are at the resupply point early. Once we have retrieved our food, we will continue along the North Fork Koyukuk River. This will not be a challenging day, but rationing will take a substantial amount of time.

If we are at Summit Lake and our resupply doesn't come, we will immediately reach out to Coyote Air about our resupply. If Coyote Air doesn't respond by the morning of 07/02, we will need to signal an SOS on our inReach and request evacuation. We are not capable to live off of the land and our dwindling supplies for the remaining 10 days.

Primary Hazards: Uneven terrain, Fatigue, Blisters/hotspots, Wildlife, Creek Crossings, Weather, Bugs, Dehydration/malnutrition

Day Mileage	5.01
Elevation Gain/Loss	+368' -309'
Camp Coordinates	68.03512, -150.49680 5W 0604463E 7548897N



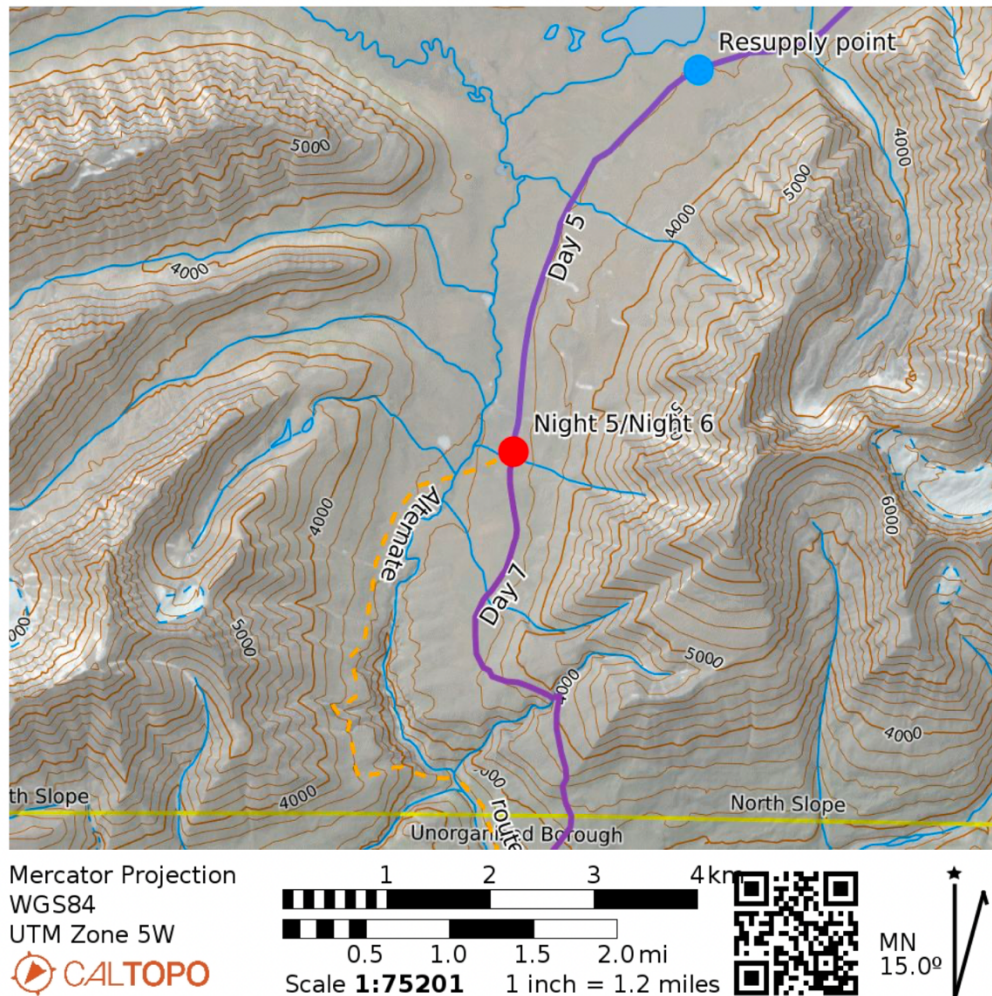
Day 6 (07/02): Rest Day 1

The Rest Day will be spent enjoying each other's company, reading, writing, and exploring short distances around the camp. A primary concern this day, as with every other day, is separation. As mentioned before, we must always be with at least one other person, and if two people decide to roam off they must communicate it with the rest of the group and carry radios and bear spray. Almost a week into our trip, we will need to be conscientious about group dynamics. It is always important to have open communication and be clear about concerns. Our campsite will stay the same as the previous night unless weather changes our plan. If we are behind on our trip's itinerary, this day is a good opportunity to catch up so that we can be back on schedule for the remainder of the trip.

Primary Hazards: Bugs, Separation, Wildlife, Weather, Group dynamic

Day Mileage	0.0
--------------------	-----

Elevation Gain/Loss	+0' -0'
Camp Coordinates	68.03512, -150.49680 5W 0604463E 7548897N



Day 7 (07/03): North Fork Koyukuk River Descent

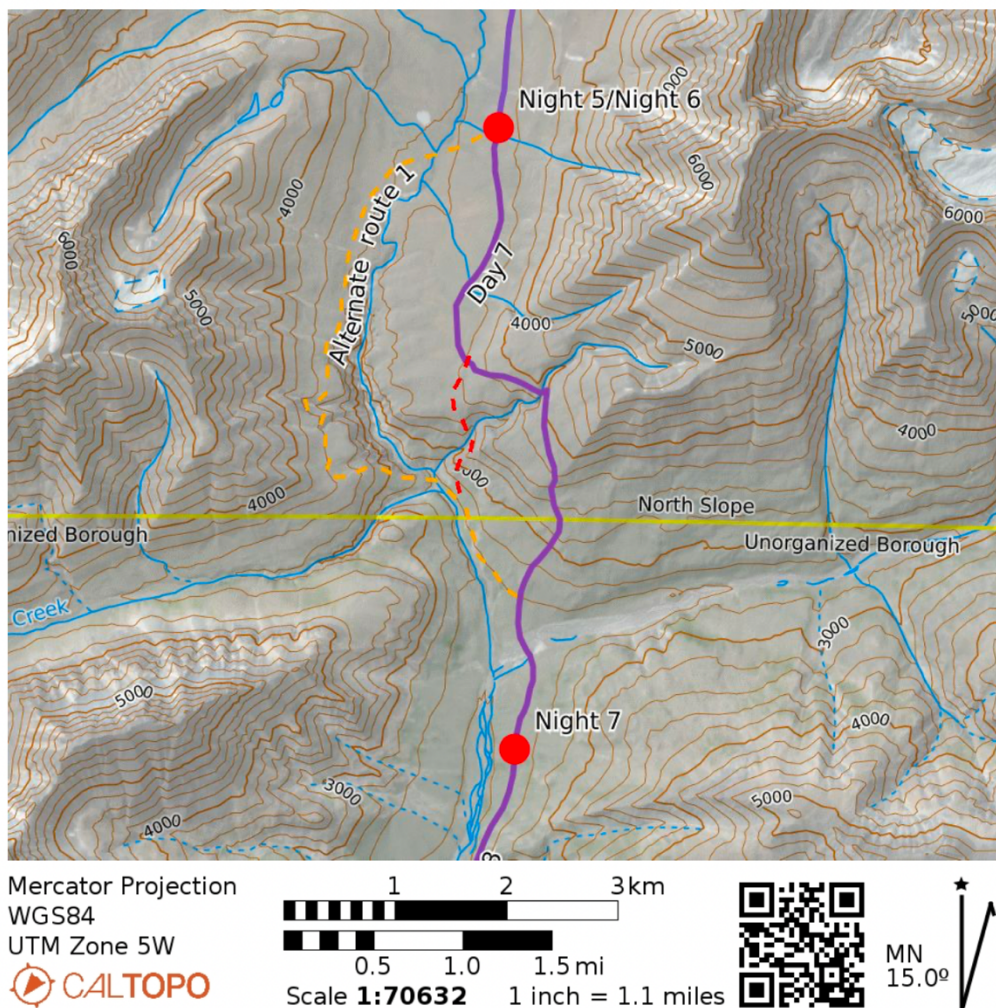
This day will be the most challenging terrain of the trip and we have specifically kept the total mileage short. In this area, the North Fork Koyukuk River begins to drop quickly in elevation, creating steep banks on both sides of the river. The streams which join the river also have steep embankments which will make travel in the region slow and will increase the risk of injury. We have created three potential routes to get us through the section in the safest way possible. The primary option traverses a ridge and stays on generally shallow terrain. We will begin the day following this route, until we reach the steep area where we will assess the situation. Using visual aid alongside the topo maps, we will determine the safety of the terrain below. If we encounter any class 4 terrain, or if any group member feels uncomfortable, we will differ to an alternate route. If the terrain is class 3 and everyone is comfortable then we can descend using appropriate techniques.

The primary alternate route (orange) is on the other side of the river and traverse's ridges above the valley and would allow us to pass above the steep sections before descending in to more even/manageable terrain. The second alternate route (red) is a direct route down a shallower part of the face. It is unlikely we will take this route unless the terrain is much shallower than anticipated. Again, if we encounter any class 4 terrain or a group member is uncomfortable, we will turn around. In the unlikely event we cannot find a route down (multiple parties a year backpack through this region), we will enable SOS on the inReach as we cannot safely reach our exit point and no other evac points exist within our range.

Once the steeper terrain is passed, a short hike will follow to the camp site. We will have one final stream crossing before camp which we will need to use extra caution due to our level of muscle fatigue. Our camp will be along the Koyukuk River.

Primary Hazards: Steep terrain, Navigation, Uneven terrain, River Crossing, Fatigue, Wildlife, Weather, Bugs

Day Mileage	4.01
Elevation Gain/Loss	+630' -1637'
Camp Coordinates	67.98512, -150.49338 5W 0604832E 7543332N

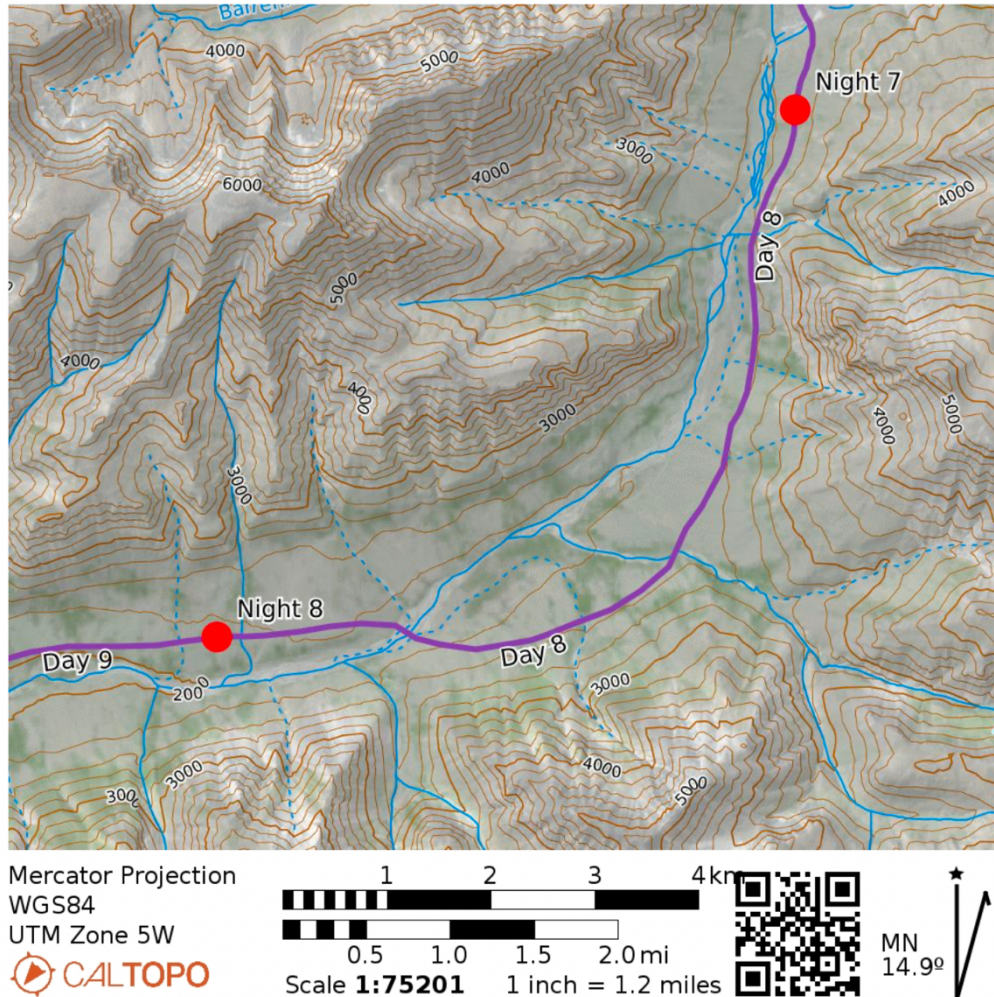


Day 8 (07/04): North Fork Koyukuk River Valley

We will follow the North Fork Koyukuk River down through gently sloping shrubs. We will need to cross the river in order to get on the north side of the valley. The river crossing should be easy as we are closer to the headwaters, but we will need to be conscious about flash flooding or flooding due to excessive snow melt. We should also be mindful of how our bodies are handling the weight, food, and conditions after 8 days in the backcountry. Camp will be set up near a small stream on a surface which minimizes environmental impact. Hopefully, we will have great views of Mt. Doonerak at the campsite.

Primary Hazards: River Crossing, Uneven terrain, Fatigue, Wildlife, Weather, Bugs

Day Mileage	5.74
Elevation Gain/Loss	+429' -780'
Camp Coordinates	67.93972, -150.62634 5W 0599468E 7538053N

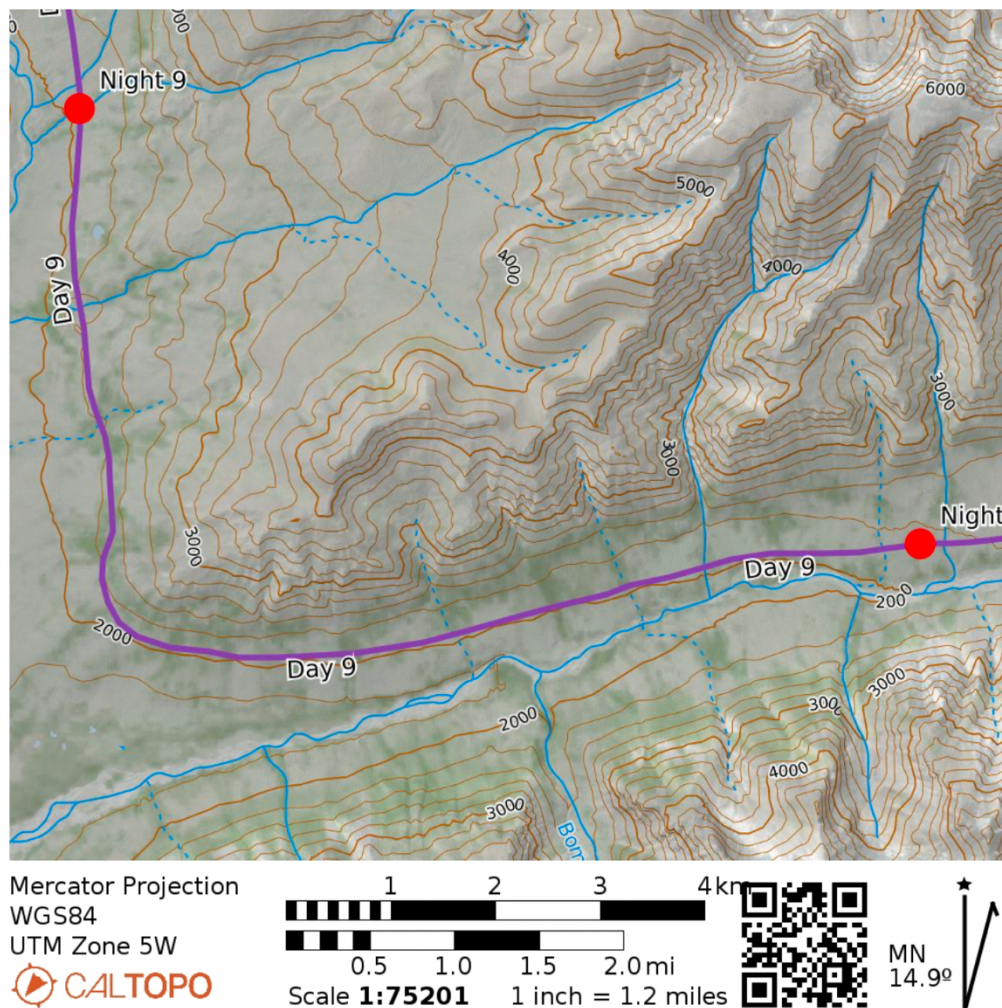


Day 9 (07/05): North Fork Koyukuk River Valley (continued)

A similar day to Day 8, we will be backpacking up the North Fork of the Koyukuk River Valley. A slightly longer day, we will need to make sure to start early and pace ourselves well. Near the end of the day, we will turn north into the Ernie Creek Valley. We will camp near a small stream on a surface which caused minimal harm to the local environment.

Primary Hazards: Fatigue, Blisters/hotspots, Uneven terrain, Wildlife, Weather, Bugs

Day Mileage	7.98
Elevation Gain/Loss	+744' -865'
Camp Coordinates	67.97698, -150.81825 5W 0591282E 7541910N

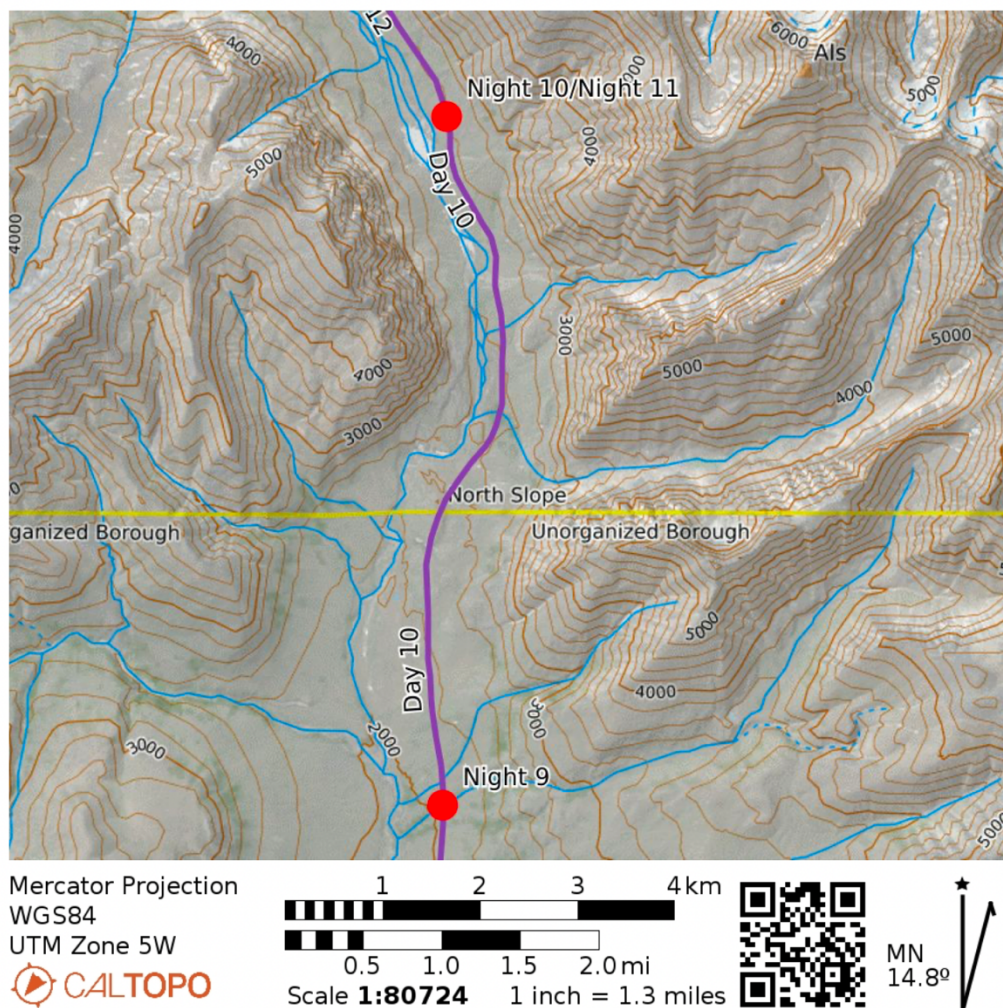


Day 10 (07/06): Ernie Creek Valley

We will follow Ernie Creek up into the Valley of the Precipices. We will be ascending a gentle and consistent slope. The day will be relatively short as we go into our second rest day. Camp will be established along a seasonal stream. If it is not flowing, we can get water from Ernie creek a few hundred feet away.

Primary Hazards: Fatigue, Blisters/hotspots, Uneven terrain, Wildlife, Weather, Bugs

Day Mileage	4.59
Elevation Gain/Loss	+749' -183'
Camp Coordinates	68.04043, -150.81739 5W 0591068E 7548981N

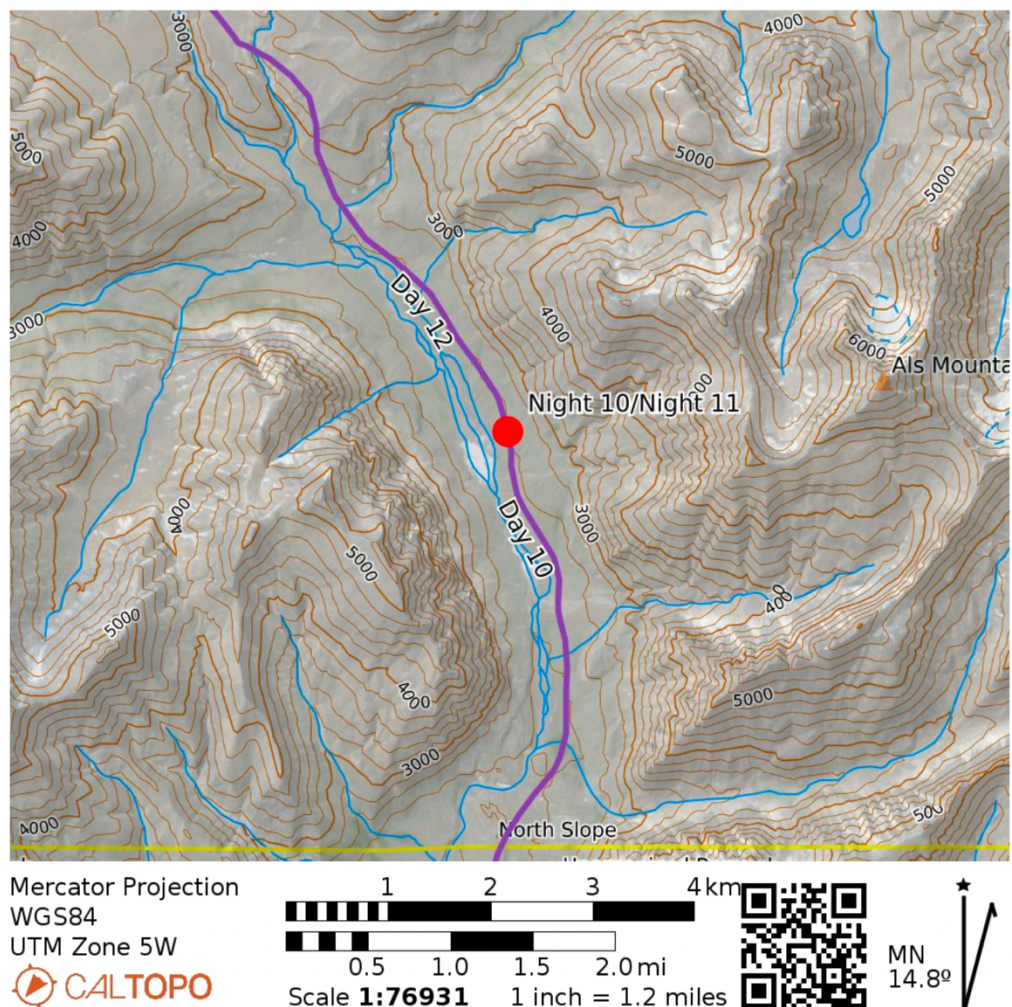


Day 11 (07/07): Rest Day 2

This day will be spent recovering after the last week of travel. Activities may include exploring around the campsite, reading, journaling, or sleeping. If we had to take another day off due to weather, terrain, or slow pace, we will use this day to get back onto the original plan.

Primary Hazards: Wildlife, Bugs, Weather, Group Dynamic

Day Mileage	0.0
Elevation Gain/Loss	+0' -0'
Camp Coordinates	68.04043, -150.81739 5W 0591068E 7548981N



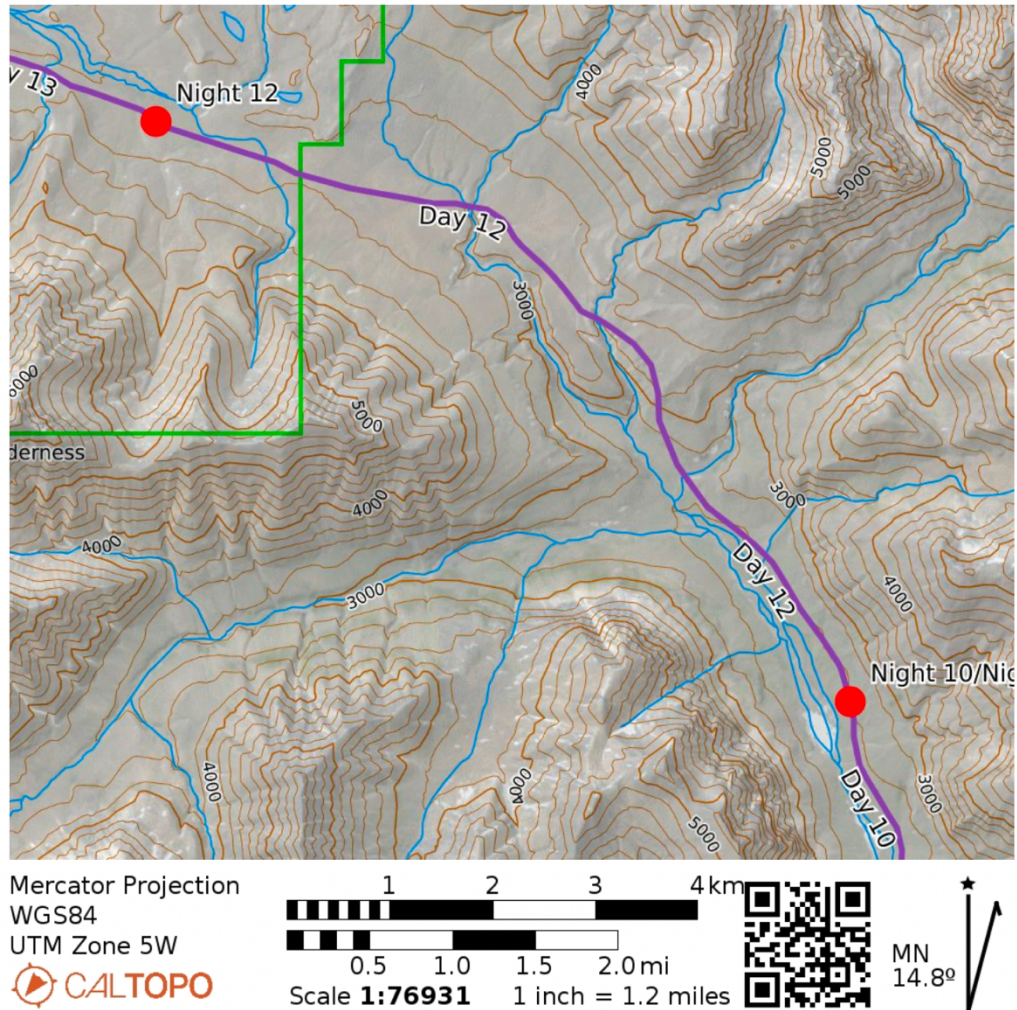
Day 12 (07/08): Ernie Pass

After our rest day, we will be ready to tackle the last leg of the trip. We will hike out of the Valley of Precipices up to Ernie Pass, which will be the final time we cross the Continental Divide during the trip. The terrain is gradual up to Ernie Pass, after which we will descend slightly to our camp. Camp will be made beside a small stream.

Once over Ernie Pass, evacuation decisions could more readily include hiking out to Anaktuvuk Pass, roughly a three-day hike to reach town. However, for a rapid transport, enabling SOS is still by far the best option until reaching Anaktuvuk Pass.

Primary Hazards: Blisters/hotspots, Bugs, Weather, Wildlife, Uneven terrain.

Day Mileage	5.88
Elevation Gain/Loss	+1224' -535'
Camp Coordinates	68.09105, -150.97961 5W 0584117E 7554392N

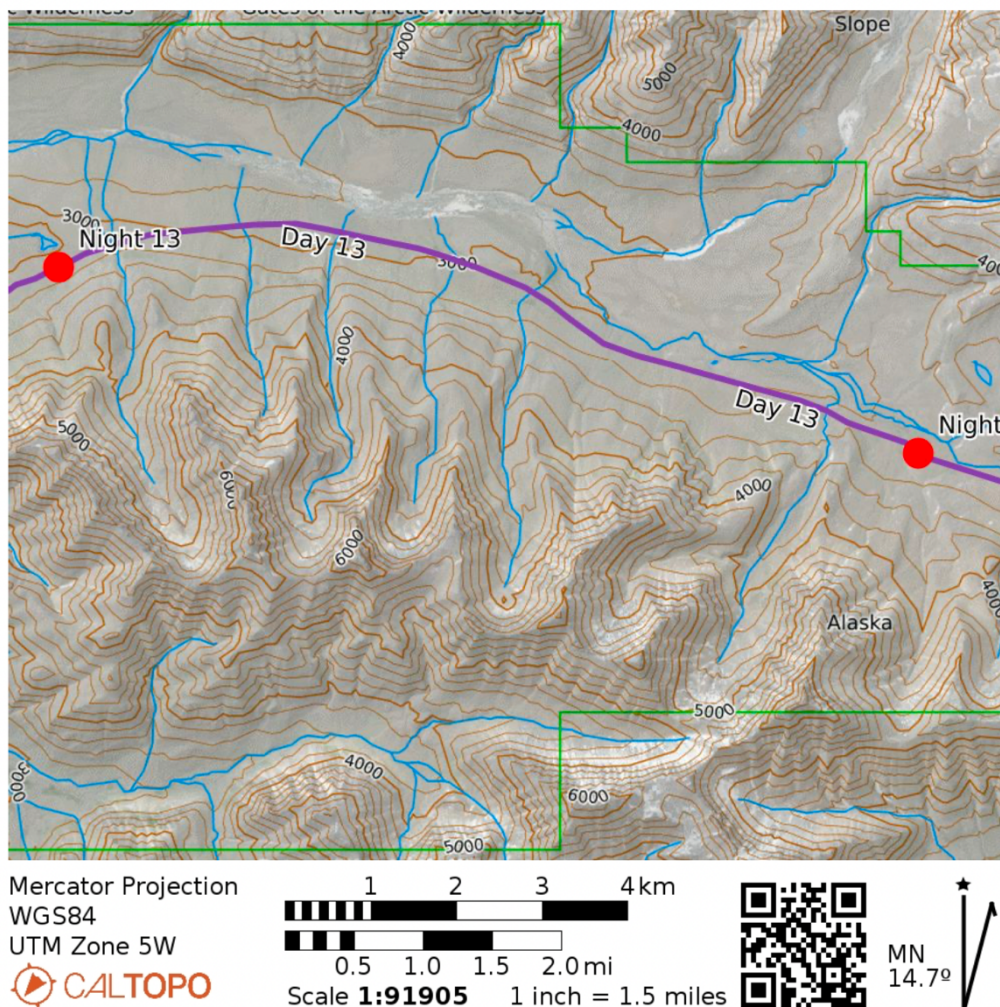


Day 13 (07/09): Anaktuvuk River Valley

We will be gently descending the Anaktuvuk River Valley with some occasional ascents. All stream crossings should be small and easy. The main concern at this point in the trip is group mentality and avoiding disagreements that could damage group cohesiveness.

Primary Hazards: Blisters/Hotspots, Bugs, Weather, Group dynamic, Fatigue, Wildlife, Uneven terrain

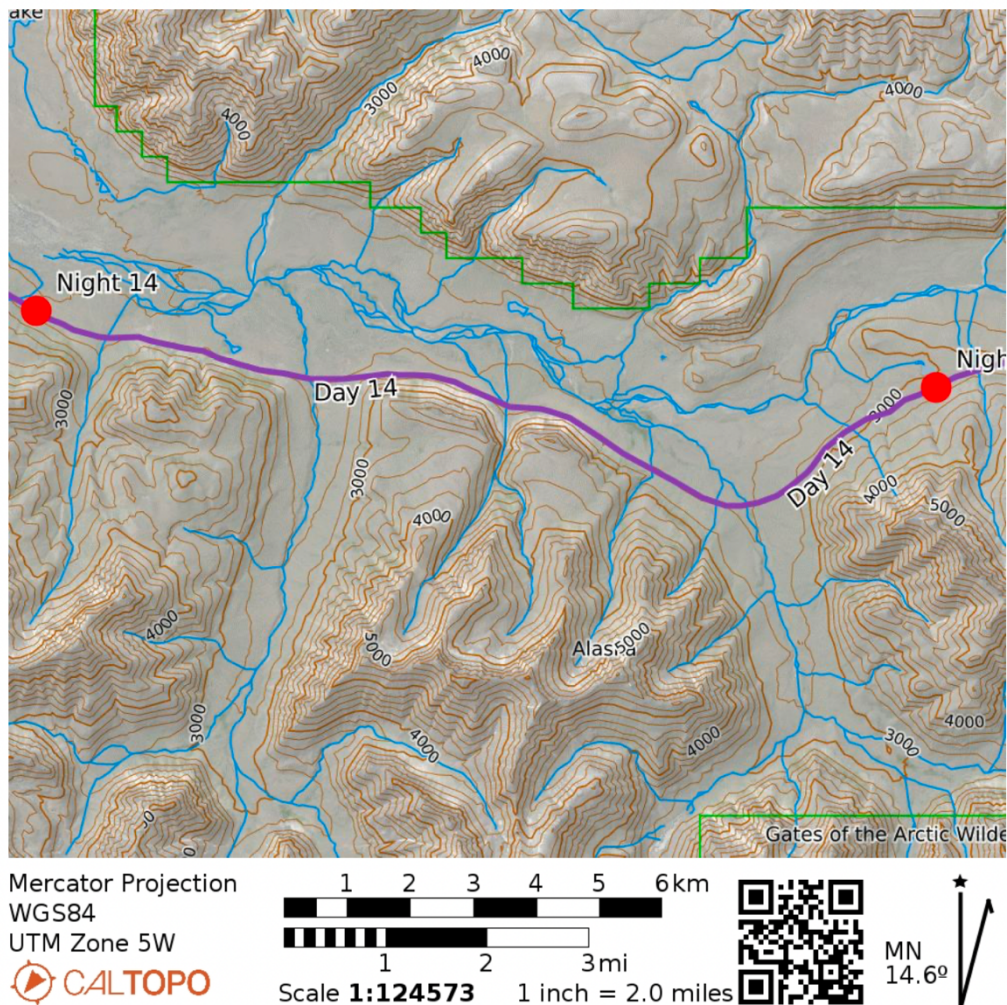
Day Mileage	6.63
Elevation Gain/Loss	+529' -729'
Camp Coordinates	68.11045, -151.22097 5W 0574009E 7556245N



Day 14 (07/10): Anaktuvuk River Valley (big day)

We will continue to hike down the Anaktuvuk River valley, staying on the south side of the river so that we don't have to deal with any major river crossings. This day is long, but mostly descending with some small ascents. We need to make sure we make it to the campsite on this night, otherwise we may risk being late for our flight on day 15. To do this, we will need to have an early start and have a consistent pace throughout the day.

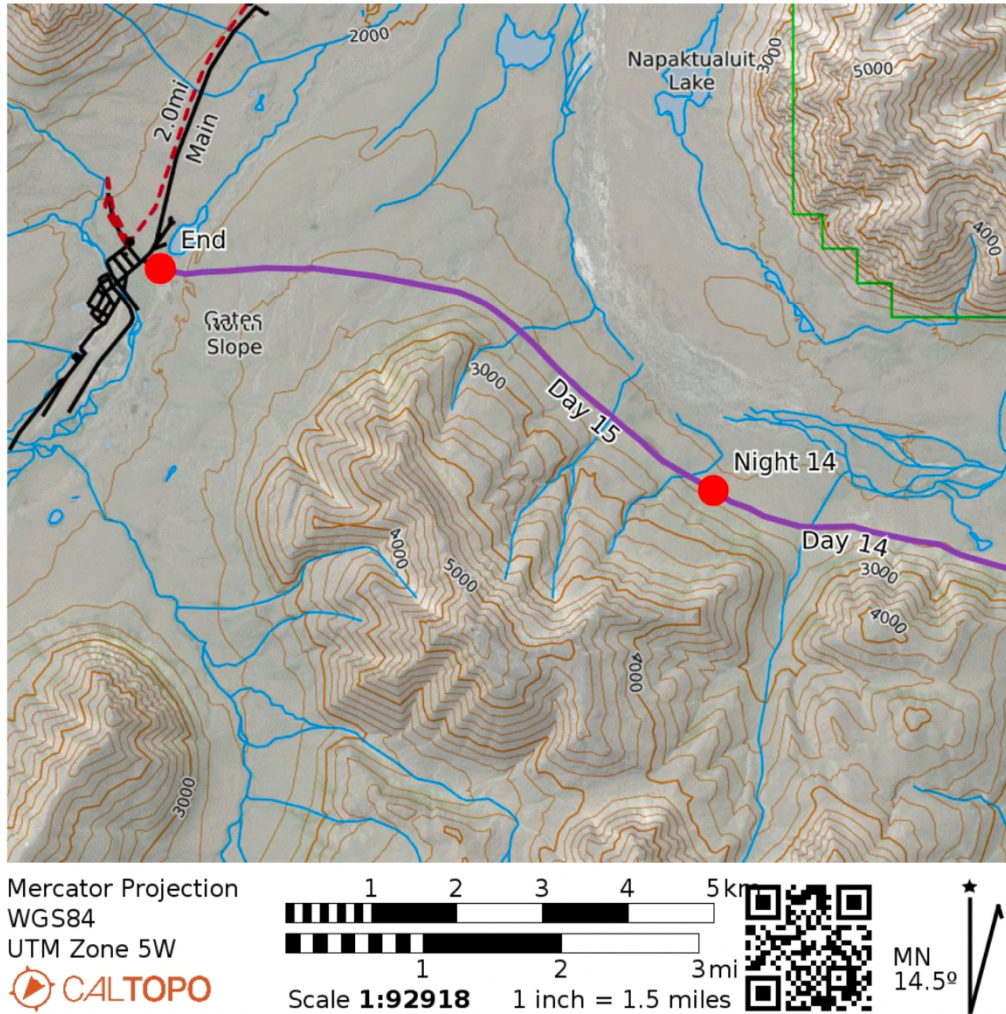
Day Mileage	9.66
Elevation Gain/Loss	+707' -1493'
Camp Coordinates	68.12133, -151.56464 5W 0559686E 7557086N



Day 15 (07/11): Last Day

Last day of the expedition, we will need to wake up early and walk the last 4.55 miles into town. Ideally, we will arrive in town around noon. The last mile will be on trails or roads. If we have time, we would like to visit the Simon Paneak Museum in Anaktuvuk Pass. At 3:00 p.m., we fly out of Anaktuvuk Pass with Wright Air back to Fairbanks.

Day Mileage	4.55
Elevation Gain/Loss	+477' -650'
Exit Coordinates	68.14468, -151.72076 5W 0553141E 7559545N



Post trip (07/12): The return

After arriving in Fairbanks in the evening of 07/11, we will spend the night in an AirBnB. On 07/12, we will donate our bear sprays (hopefully unused) to a friend in the area. At 3:40 p.m., we will fly back to Seattle where we arrive at 8:17 p.m. At this point, we will sadly part ways as Cade drives home and Will, Daniel, Julia, and Olivia fly home.

Equipment List

----- Group Gear -----	
<i>Cooking, camping, and safety gear to be dispersed among group</i>	
Quantity	Equipment name
2	Three person tent
1	Pot with lid
1	Pan
1	Spatula
2	Pocketknife
2	Whisperlite
4	Full Fuel Bottles (white gas)
3	Lighters
5	Bear sprays
5	Bear Canisters
2	Ursacks
1	Trowel
1	First Aid Kit (contents listed below)
2	Sunblock
2	Bug Spray
1	Satellite Phone
2	Radios
1	Altimeter
1	Compass
1	Steripen
5	Aquamira (sets)
----- Personal Gear -----	
<i>Camping, trekking, clothing, food, miscellaneous</i>	
----- Camping Gear -----	
1	Backpacking Backpack
2	Trash Bags (1 for water proofing backpack, 1 for containing trash)
1	Sleeping Bag (20 degree)
1	Sleeping Pad
1	Sleeping Pad Repair Kit
1	Sleep mask (block the light)
----- Trekking -----	
1	Hiking boots (waterproof)
1	Camp shoes (or sandals)
1	Trekking Poles
1	Gaiters
1	Rain Jacket
1	Rain pants
----- Clothing and Layers -----	
1	Puffy Jacket
1	Fleece Pants
1	Long Underwear (wool or synthetic)
4	Underwear (wool or synthetic)
4	Wool socks
3	T shirts
2	Hiking pants

1	Bug net (upper body and face)
1	Warm gloves
1	Thin gloves
1	Warm hat
1	Cap or Sun Hat
----- <i>Food and Toiletries</i> -----	
1	Toiletries (toothbrush, toothpaste, toilet paper, feminine hygiene products, personal medication)
1	Food utensils (bowl, spoon or spork)
1	Metal coffee mug
----- <i>Hydration and Miscellaneous items</i> -----	
3	Water Bottle (1 liter)
1	Batteries
1	Multi tool
1	Book/Journal
2	Waterproof Pen or Pencil
1	Sunglasses
1	Headlamp
----- Gear House Rentals -----	
5	Bear Cans *Free of Charge
2	Ursacks *Free of Charge

First Aid Kit

Quantity	Equipment name
1	NOLS Wilderness Medicine Field Guide
1	Medication Histories for Cade, Will, Daniel, Julia, and Olivia
5	Soap Notes
1	WFR Guidebook
5	Latex gloves (pair)
1	Sam Splint
2	Triangular bandages
8	Safety Pins
1	Athletic Tape (1" x 10 yards)
1	Ace Bandage (3" x 4.5 yards)
1	Moleskin
----- Wounds Management -----	
10	BandAids (medium)
4	Wound Closure Strips
	Combine Dressing (8" x 10")
1	Gauze Pad (4" x 4")
1	Gauze Roll
1	2 nd Skin (2" x 3")
1	Op-Site
1	Eye Pad
1	Povidone-Iodine Prep Pad
10	Antiseptic Wipes
1	Tourniquet
----- Medications -----	
1	Ibuprofen (20 pills)
1	Diphenhydramine (Benadryl: 5 pills)
1	Pepto Bismol (10 pills)
1	Anti-Itch Relief
1	Hydrocortisone Cream
1	Tincture of Benzoin Swab
1	Triple Antibiotic Ointment
1	Aloe Vera Gel
----- Tools -----	
1	Tweezers
1	Oral Thermometer
1	EMT Shears
1	Irrigation Syringe
10	Q-Tips (sterile applicator)
----- Miscellaneous -----	
1	Whistle
10	Tampons
1	Resealable Plastic Bag
3	Pencils
2	Space Blanket
1	Liquid bandage (bottle)

DAY #	Breakfast	Dinner	breakfast list	quantity	price per	cost	Lunch list	quantity	price per	cost	Dinner list	quantity	price per	total	Other SL	quantity	price per	cost	Spice kit	quantity	price per	cost		
1	bagels with cheese	stir fry with rice bell pepper and onion snap peas and tempeh	brown sugar	1	4	4	tortillas	5	4	20	annies mac and cheese	4	2	8	gummy bears	4	4	16	salt	2	2	4	for lunches we will do an assortment of the "snacks" we have on that list	
2	Kodiak Cakes	annies mac n cheese with broccoli	craisins	2	5	10	dried hummus	4	8	32	broccoli	2	2	4	chocolate covered fruit	4	8	32	pepper	2	2	4	x - already in another column	
3	bagels with cheese	potatoes with cheese, scallions, microwave	raisins	2	5	10	beef jerky	6	5	30	potatoes	6	0.5	3	nutritional yeast	2	5	10	chilli powder	1	2	2		
4	hashbrowns with cheese and sausage	burritos - dehydrated beans, quick brown rice, tortillas, cheese, taco seasoning	apples	10	1.25	12.5	summer sausage	5	7	35	cheese	6	9	54	tea	40	1	40	spike	1	3	3	Grand total:	1443
5	cheese and grits/sweet grits	Poleinta and chicken and pesto	nuts	6	10	60	Chocolate	10	6	60	scallions	4	2	8	hot chocolate	2	6	12	hot sauce	4	3	12	per person	96.2
6	oatmeal	ramen/noodles	seeds	3	8	24	salami	2	7	14	microwave bacon	2	4	8	instant soups	4	2	8	summin	1	3	3	per person per day	19.24
7	Kodiak Cakes	rice and lentils	coconut flake	2	4	8	dried mangos	6	5	30	potenta	2	3	6	electrolytes	2	10	20	garlic powder	1	2	2		
8	mashed potatoes	burritos - dehydrated beans, quick brown rice, tortillas, cheese, taco seasoning	kodiak cake mix/gluten free?	4	8	32	dried apricots	4	4	16	chicken packets	x	x	0	miso soup	4	3	12	all purpose seask	1	6	6	note to self: gluten free pasta test day	
9	oatmeal	noodles with curry	dehydrated hashbrown	4	5	20	sweet trailmix	4	6	24	pesto packets	8	2	16	marshmallows	2	2	4	cinnamon	1	6	6		
10	hashbrowns with cheese and bacon	pesto pasta with salmon	cheese - big blocks	6	9	54	spicy trailmix	4	6	24	ramen	20	0.5	10		sum	154	soysauce	1	2.5	2.5			
11	oatmeal	noodles with peanut sauce	bacon bits	4	8	32	peanut butter	x	x	0	GF noodles	6	0.5	3				eath balance butt	6	6	36			
12	Grits and cheese/sweet grits	rice and lentils	grits	4	3	12	bars - pack of 12	3	13	39	instant rice	5	2	10				mayo	1	4	4			
13	Kodiak Cakes	GF orzo/salmon & sun dried tomatoes	summer sausage	2	7	14	nuts	x	x	0	lentil packets	10	4	40				mustard	1	4	4			
14	oatmeal	burritos - dehydrated beans, quick brown rice, tortillas, cheese, taco seasoning	dehydrate blueberry & strawbe	4	5	20	pittas	2	4	8	tortillas	x	x	0				nutritional yeast	x	x	0			
15	hashbrowns with cheese and bacon	-----	oatmeal (boxes of instant)	7	4	28	baybell cheeses	2	6	12	dehydrated beans	3	5	15				rice wine vinegar	1	3	3			
EXTRA	oatmeal		almond butter	4	9	36	olive packets	8	2	16	taco seasoning	3	2	6				olive oil	2	9	18			
			peanut butter	7	8	56	tuna packets	10	2	20	curry paste	1	3	3				zip lock bags	2	10	20			
			potato pearls	1	2	2	chicken packets	15	2	30	GF pasta	4	4	16				sum			125.5			
			sum			434.5	salmon packets	15	3	45	salmon packets	x	x	0										
							wheatthins/ GF crackers	2	4	8	tuna packets	x	x	0										
							peanutM&Ms	4	2	8	peanut butter	x	x	0										
							sum		471	orzo - GF	4	4	16											
											sundried tomatos	4	3	12										
											tempeh	2	6	12										
											bell pepper	4	1	4										
									snap peas	2	2	4												
											sum			258										

Budget

----- Flying to/from Seattle -----	
<i>Price</i>	<i>Details</i>
\$488	
\$501	
\$238	
\$1,227	Total price
----- Flying to/from Fairbanks -----	
\$299 x 5	Seattle -> Fairbanks: leaves 9:40 pm June 25 th – arrives 12:18 June 26 th Fairbanks -> Seattle: leaves 3:40 pm – arrives 8:17 pm July 12 th
\$60 x 5	Overweight bags
\$40 x 4	Miscellaneous gear ~ 4 bags
\$1,955	Total price
----- Bus Ride to Brooks Range -----	
\$216 x 5	Dalton Highway Express to Galbraith Lake
\$1,080	Total price
----- Flight from Anaktuvuk Pass to Fairbanks -----	
\$1025	Anaktuvuk Pass -> Fairbanks: leaves 3:00 p.m. – arrives ~7:00 p.m. (**quote**)
\$1,025	Total price
----- Food -----	
\$1,443	Total price
----- Food drop -----	
\$750*	Coyote Air food drop to Summit Lake confirmation *waiting for
----- Miscellaneous -----	
\$72	Carbon offset
\$60 x 5	Bear spray
\$30	Camp fuel: 1.5 gallons
\$14.95	Gates of the Arctic National Park and Preserve Map (National Geographic Maps)
\$416.95	Total price
\$7,896.95	Total Cost
\$7,500	Total Amount Requested