

Payment Summary	
RKMF Expedition Grant (2013-2014/GROUP APP.)	<i>Due After Registration is Approved</i>
2013/2014	
Total	\$0.00



Ritt Kellogg Memorial Fund Registration

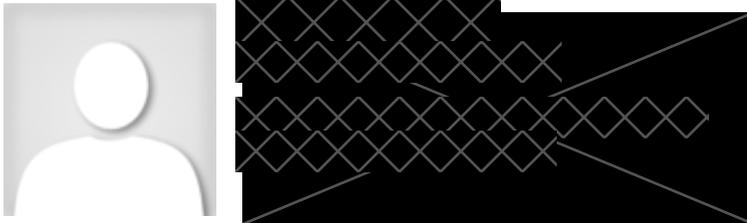
Registration

2013/2014
 Closed
 4 Enrolled
 13 Waiting

Ritt Kellogg Memorial Fund
RKMF Expedition Grant 2013-2014/GROUP APP.
 This is the group application for a RKMF Expedition Grant. If you have received approval, you may fill out this application as a group. In this application you will be asked to provide important details concerning your expedition.
 Price: No Charge

Waiting for
 Approval

Participant



I. Expedition Summary

Expedition Name

Northern Exposure: Backpacking in British Columbia's South Chilcotin Mountains

Objectives

Our chief objective on this expedition is to safely explore and navigate the wilderness of the South Chilcotin Mountains and to work as an efficient and supportive team while doing so. Our group is made up of individuals each with a variety of interests and focuses, but we share a common passion and appreciation for the backcountry and wild spaces. As geology, philosophy, sociology, and environmental science majors, our diversity of experiences gives each of us a unique lens through which we view and share our world. On this

expedition we hope to learn from each other while simultaneously becoming transformed by the beautiful British Columbian landscape.

An equally important objective is to further improve our skills in the backcountry and to gain experience that will allow us to continue our ventures into remote and exposed spaces. While we all have considerable outdoor and backcountry experience, this expedition will challenge us mentally and physically and we look forward to the lessons we stand to learn. More than an amazing experience, this expedition will be an extension of our CC educations by testing us to use our skills and judgement to safely navigate our surroundings, and to do so in an ethical way that leaves no mark on the land we cover.

Location

South Chilcotin Mountains Provincial Park, British Columbia, Canada

Departure Date

Aug 4, 2014 12:00am

Return Date

Aug 20, 2014 12:00am

Days in the Field

12

Wilderness Character

The South Chilcotin Mountains are a rugged and diverse landscape located at the boundary between the Coast Mountains and the Chilcotin Plateau. They are shaped by the multitude of geologic forces at play at this intersection. Nicknamed the Rainbow Range for the varying colors, the rock features have been formed by ancient ocean deposits, tectonic plate movement, faulting and mixing of rock layers and upwelling of granitic rocks and lava flows.

Glaciation during the last ice age has also left the area with broad dome-shaped peaks, while more recent alpine glaciation has carved the more rugged peaks such as Mt. Dickson and Castle Peak. As the glaciers recede, they expose new faces of the land to plant and animal life. Our route will take us across every part of this diverse terrain, from low-elevation river valleys to sub-alpine meadows, rocky slopes and alpine lakes.

The South Chilcotins are rich both in the human stories of First Nations groups, hunters and trappers who first used the land hundreds of years ago, and in the persistence of natural growth in the area. Over the course of our expedition, the wilderness of the South Chilcotin Mountains will humble us and we look forward to time spent in such a powerful landscape.

II. Participant Qualifications

Participants' Graduation Date

Julia Kelley, 2015
Sally Shatford, 2015
Veronica Spann, 2015
Emma Marshall, 2015

Medical Certifications

- Julia Kelley, 2015, WFR expires: 1/16/2015
- Sally Shatford, 2015, WFR expires: 1/16/2015
- Emma Marshall, 2015, WFR expires: 1/14/2015
- Veronica Spann, 2015, taking WFR in June 2014, administered by WMI

Does your group have adequate experience?

Yes

Training Plan

All four of us were tripees together on the ORC spring break leader training trip during our freshman year at CC. This training gave us the basic skills we need for leading and participating in backcountry trips. In the years since, we have each pursued various backcountry activities both on our own and with members of this group.

Veronica is taking Wilderness First Responder in the early summer and Emma, Julia and Sally already have their WFR certifications. Julia is taking the Rock and River NOLS course in June. Veronica is also planning on a month-long backpacking trip in Iceland in June. In addition to our past certifications and training, we are planning to go on one weekend backpacking trip near Colorado Springs and one five-day trip together before we leave for our Ritt Trip. On these trips we will go to Lost Creek Wilderness and another undecided location to review topographic mapping skills, cooking safety, first aid and others. We will specifically focus on improving our orienteering skills, and assessing and managing the various risks associated with different terrain types.

In addition to training focused specifically on backcountry skills, we will all maintain the fitness and athletic regimens that are a part of our lives at school in order to be as physically fit as possible for the expedition.

III. Expedition Logistics, Gear and Food

Travel Plan

Expedition members will leave Colorado Springs and travel by car early on the morning of August 4th and drive to Conway, WA (21 hrs). We plan to arrive in Conway midday on the 5th. We will camp at the NOLS Pacific Northwest branch in Conway on the night of the 5th and depart for Gold Bridge, BC (6 hrs from Conway) on the morning of the 6th. We will drive to the Jewel Creek trailhead (a few miles outside of Gold Bridge) and sleep there. We will leave from the trailhead on foot the morning of the 7th.

After completing our loop, we will return to the Jewel Creek trailhead late in the day on August 18th. We will camp at the trailhead and drive back to Colorado Springs during August 19th and 20th.

After completing the loop, we will leave from the Jewel Creek trailhead and return to Colorado Springs.

Expedition Itinerary



Re-Ration Plans

We will not re-ration during the expedition.

Food Storage

We will each carry one 11.5 L bear canister which we will use to store our food at night. Food and other aromatics will be stowed at our 'kitchen' which will be located at least 100 m downwind from our camp. Any food that does not fit in the canisters will be kept in a bear hang near the kitchen and also 100m downwind from our camp.

Food List

[Ritt_FoodList.xlsx](#) (42.9KB)

Uploaded 1/5/2014 by [Emma Marshall](#)

[Open](#) | [Download](#)

Equipment List

[Ritt_FinalGear.docx](#) (64KB)

Uploaded 1/6/2014 by [Emma Marshall](#)

[Open](#) | [Download](#)

Are all expedition members familiar with LNT principles?

Yes

Plan for Minimizing Impacts

To minimize our impact, we will follow all of the LNT principles. More specifically, we outline each principle with relevance to the South Chilcotin Mountains:

1. Plan ahead and prepare- We will plan ahead through the completion and review of this proposal. Writing this proposal helps us outline the regulations and special concerns for the South Chilcotin Mountains as well as prepare for extreme weather, hazards, and emergencies. We will also bring the necessary items listed below to keep ourselves and the environment safe and protected.
2. Travel and camp on durable surfaces- In the South Chilcotin Mountains, durable surfaces will include established trails, rock, gravel, and potentially some dry grasses. This area includes lakes and streams, so we will be sure to camp at least 200 feet from water. In the more populated trail areas at the beginning of our trip, we will walk single file in the middle of the trail, but in pristine areas, we will disperse use to prevent the creating of campsites and trails.
3. Dispose of waste properly- We will pack out any trash, leftover food and litter. We will also deposit solid human waste in holes dug 6 to 8 inches deep, at least 200 feet away from water, camp and trails. To wash ourselves and our dishes, we will carry water 200 feet away from the streams or lakes present in this region and use only small amounts of biodegradable soap.
4. Leave what you find- We will only observe natural objects as we come across them. We will also avoid building any sort of non-existing structure.
5. Minimize campfire impacts- Campfires are permitted in the Big Creek Provincial Park, but we will still be careful to minimize the impacts. Firewood is not provided, so to preserve vegetation and ground cover, we will refrain from gathering too much firewood from the area around your campsite. Dead wood is an important habitat element for many plants and animals and it adds organic matter to the soil. We can conserve firewood and air quality by keeping your campfire small, only using sticks from the ground that can be broken by hand. We will also burn all wood and coals to ash, put out campfires completely and then scatter cool ashes.
6. Respect wildlife- Wildlife in this area includes, but is not limited to mountain goats, California bighorn sheep, moose or predators such as wolves, black and grizzly bears. To protect the wildlife present in the parks, we will observe wildlife from a distance, never feed the animals, and store our food securely.
7. Be considerate of other visitors- For other visitors of the South Chilcotin mountain range, we will yield to other users on the trail, take breaks and camp away from trails and other visitors, and avoid loud voices and noises so as not to disturb the sounds of nature.

As individuals who are passionate about the environment and its protection, the Leave No Trace principles are central to our personal ethics. While traveling through the South Chilcotins, we will make every effort to erase our own impact, as well as pack out any trash that we find that may have been left by previous parties. As guests to this land, we see it as a condition of our being there that we treat the land and all natural life with respect and avoid disturbing it as much as possible.

Cultural Concerns

The area in which we will be traveling was historically used by First Nations peoples for thousands of years, and several groups still live in the region. As strangers and visitors, both to their culturally significant land and to the natural life currently existing there, we will tread lightly and carefully, and leave no trace on the land. Some parts of the South Chilcotin region, specifically Mt. Tatlo, are spiritually significant to the Xeni Gwet'in people and they have asked that nobody climb this mountain. Our route avoids areas such as this. We intend to respect the wishes of native groups in this region and adhere to their requests as to how the area be used.

IV. Risk Management

Hazard Mitigation Plan

Altitude:

The highest altitude we will encounter our trip is around 7,000 to 8,000 feet. Although we have all exceeded this elevation before and will be acclimated coming from Colorado Springs, we will be on the alert for the early symptoms of acute mountain sickness, such as a persistent headache or nausea. We plan on drinking at least three liters of water a day.

Avalanches and Rockfall:

Avalanches are more common in the winter than in the summer in BC although we still consider them a potential hazard. In the summer, we will be more weary of rockfall as the temperatures warm during the day and rocks that are frozen in place lose their bond to the mountain. We plan on being alert and aware of potential rockfall and icefall from above. While traversing scree or boulder fields, we will use safe travel techniques to minimize our exposure to potential rock fall. We will travel in a line (so that no person is ever directly above another on the slope) and travel close together except in passages where we decide only one person should travel at a time. With rockfall, as with all other potential hazards, we will evaluate the situation as a group but do not necessarily need to reach a group consensus on the side of safety (ie. even if 3 people think a certain situation is safe, if one object we will not take that path). While traversing rocky terrain, we will be mindful and deliberate of our steps to avoid placing weight on unstable rocks or dislodging rocks causing rockfall.

Wildlife:

This park teems with wildlife; we might see mountain goats, California bighorn sheep, moose or predators such as wolves, black and grizzly bears. First, we will avoid closely approaching any of the aforementioned wildlife, so as not to stress them. As for the predators:

To avoid encounters with wolves and bears, we will be sure to:

- never feed or approach either
- eliminate attractive odors by keeping what we can in air-tight containers
- pack out garbage (not bury it or leave it out)
- keep garbage & aromatic items with the food and out of reach of wildlife
- cook & eat well away from our tent
- dispose of dish water by straining it and then throwing it into a gray water pit or pit toilet
- obey all closures & warnings

If we see a bear, we will not approach it, make a wide detour without running, avoid eye contact, and report our sighting to a Park Staff at the first opportunity. If the bear approaches, we will move away, keeping the bear in view, but avoid direct eye contact. If a Grizzly attacks from surprise, we will do nothing to further arouse the bear, play dead in the cannonball position, and not move until the bear leaves the area. If a black bear attacks from surprise, playing dead is not appropriate, so we will try to retreat from the attack. If either bear attacks offensively, we will not play dead, but instead try to escape (to a car or building) or climb a tree unless it is a black bear. If neither of those are options, we will try to intimidate the bear with deterrents such as tree branches or rocks. If a bear is attacking for our food, we will abandon the food and leave the area.

If a wolf approaches, we will raise our arm and wave them in the air to make ourselves appear larger. If we do so in unison, it will help send a clear message to the wolves that they are not welcome. We will proceed to back away slowly without turning our backs on the wolf and make noise, throw sticks, rocks, or dirt at the wolf.

We will always stay as a group and never go off alone to avoid surprising a bear. While traveling we will constantly make bear calls to make our presence known and at camp we will always set up our kitchen at least 100m downwind from our camp when we are in bear country (which will likely be the majority of the time).

Weather

The temperature can drop to below freezing at night. This makes us vulnerable to frostbite. Frostbite is easier

to avoid than to treat. First, we will bring proper clothing and layer our warm clothing. We will wrap our extremities with more layers if they start to become cold. We will follow our WFR protocol with treating frostbite if it gets that far by using warm water baths and skin to skin contact, but we plan to avoid frostbite reaching that point. Weather is very variable and can change from what the forecast is. We may have to adjust our route or delay depending on the weather. On days that include alpine sections, we will get very early starts to avoid storms that could move in in the afternoon, and continue to monitor weather signs throughout the day. If we are above treeline we will have to take lightning into account (see lightning section below).

Lightning

Lightning poses deadly threats during the few milliseconds of the strike. Neuro-electrical damage such as cardiac and respiratory arrest, burns such as entry and exit burn wounds, fractures or soft tissue injuries, and altered consciousness are a few common effects of lightning strikes on humans. To avoid these risks we will time our visits to high risk areas by paying close attention to weather patterns and seek out safer terrain in the event of thunder before the storm is upon us. High risk areas include significantly higher areas such as peaks and ridges, standing water, lone trees, open areas that are 100 m or wider, and cave entrances. Low risk areas are obvious ravines or depressions in the terrain. If our tent is higher than nearby objects, we will exit the tent and assume lightning position. If the storm is upon us and it is too late for us to seek safer ground, we will quickly avoid trees and long conductors, spread out at 5' intervals to reduce multiple injuries, and assume the lightning position. If we are exposed to lightning, we will immediately get into the lightning position. The lightning position includes squatting on an insulator as low as possible with your arms wrapped around your legs and your feet together. In order to avoid direct lightning strikes and streamer currents we will avoid high places and open ground in the event of a storm. Ground currents occur with each strike and cause half of all lightning injuries. We will minimize our exposure to ground currents by keeping our feet close together, avoiding contact with metal objects, removing our shoes with thick rubber soles, and assuming the lightning position on additional insulation such as our foam sleeping pad or a pile of clothes. In case of a lightning strike we will give the patient a complete body survey and careful evaluation for head, spinal, long bone, or cardiac injuries. Any patient who has shown any signs and symptoms of lightning injury should be evacuated for further evaluation and treatment.

Blisters

The key to preventing blisters is to eliminate friction. We will make sure our shoes and boots are well broken in before the expedition and we will make an effort to keep our socks as dry as possible by changing them when our feet get hot and sweaty or by taking our boots off periodically to let our feet and socks dry out when we take a snack break. If this means bringing along one or two extra pairs of socks, it may be well worth a few more ounces of pack weight. We will carry a well-stocked first aid kit to deal with and cover blisters.

To properly drain a blister:

1. Clean the area with soap and water, alcohol, or an antiseptic towelette. Dry thoroughly.
2. Sterilize a needle or sharp blade, either by holding it over a flame until it's red-hot or submerging it in boiling water for 2 minutes.
3. Puncture the bottom end of the blister so gravity can help drain it. The opening should be no bigger than is necessary to get the fluid out. Starting at the top of the blister, massage the fluid toward the opening.
4. Apply antibiotic ointment to prevent infection, then wrap with the dressing or blister product of your choice.

Stream Crossings

We plan to use safe stream-crossing techniques. First, we will scout the area for potential hazards and evaluate the terrain for the best place to cross the stream. It is important to take note of strainers such as tree branches; they are easy to get trapped in and drown. Proper footwear must be closed toed and have traction-ideally, hiking boots. Next, we will unbuckle our packs, grab onto the person in front who will be standing slightly upstream. The group as a whole will cross downstream as to not fight the current upstream. This allows the person in front of you to break the current a little. Taking one small step at a time and firmly planting our feet down. Ideally, crossing the stream. If one person happens to slip or lose footing, she will regain balance. If she can't regain balance and is forced to swim she will release her pack and float on her back with her feet up. She will keep her head up and avoid obstacles and seek shore immediately. Others will continue to safely cross and find the fallen member.

Route finding

Given the variety of terrain and potential weather conditions we may encounter, route finding will play a crucial role in managing our exposure to risk on this expedition. We will each carry a set of maps and a compass. As a last resort, we will also carry one GPS for the group.

When choosing specific paths, we will utilize all the information at our disposal. At lower elevations this may mean paying attention to fresh animal tracks and scat so as to give wildlife adequate space and/or warning that we are approaching. When we are in alpine terrain, we will constantly evaluate our position with regards to potential for rock fall, exposure and incoming weather. We will stay off of glacier and snowfields as we will not be carrying ice axes or crampons and will not be on a rope team.

When route finding, although there may be one 'leader' who is walking in the front of the group, we will all discuss together the potential pros and cons of different paths so that as much information as possible is used to make the decision.

Summiting peaks (and overall Decision-making)

Summiting peaks (or attempting to) is not a central aspect of our expedition, and none of the peaks we climb will be at all technical. Despite this, our proposed route does put us in the position to attempt a few peaks that we feel are within our ability range, and we must be aware of the potential for "summit fever" or altered decision-making when we become fixed on a goal. During the ridge traverse, as well as any section, especially alpine ones, we will employ system-based rather than emotional decision-making. We will aware and vigilant on any ground that we cover and we will stay away from any terrain above third class. Using checklists, mental systems and group deliberation are all mechanism that will ensure that we are making sound and level-headed decisions.

Evacuation Plan

Each of us will be Wilderness First Responder certified by the time of our expedition. When we are training together during the spring and summer, we will run through scenarios amongst ourselves to ensure that we all know how to respond in the event of an emergency.

During the expedition, we will each carry a set of maps and a compass at all times, and we will have one SPOT personal location beacon and a satellite phone for the group so that we may call for help in an emergency and ascertain our precise location. We will each practice using both of these devices prior to the start of the expedition.

If a group-member sustains a minor injury, we will treat it in the field if we can, and decide whether or not we need to evacuate. In this scenario, we may adjust our route and head to the nearest trailhead. We will also never be more than 4-5 days hike from our car at the Jewel Creek trailhead.

In the event of an emergency or serious injury, there are many lakes in the region and we will never be more than one or two days hike away from a lake that may land a float plane on it. In some areas above tree-line, we may also be able to find a suitable landing spot for a helicopter. If this situation arises and we decide that we

must split up, one person will stay with the injured group-member. This person will become the medical lead. The other two will travel together in search of help. They will carry a set of maps as well as the GPS and before leaving they will record the coordinates of the injured party's position.

The contact information of local SAR and hospitals is provided below.

Special Preparedness

Emma has occasionally dislocated or subluxed her right shoulder during physical activities in the past. It has most frequently occurred while playing ice hockey and rugby and has happened once in the backcountry. Typically, when it happens, it goes back in immediately on its own, and is slightly sore and tender for one or two days. When it happened while backpacking before, I carried a lighter pack for the rest of the day and took some Ibuprofen and felt completely fine two days later. My teammates are aware that this happens occasionally and we have discussed what we will do if it were to happen on the expedition. I do not foresee it being a problem on our expedition. I have also been in physical therapy for the past few months to strengthen the muscles surrounding the joint, to decrease the likelihood of subluxation. My hope is that it will be completely healed by mid-summer.

Sally Shatford does not do well at very high altitudes (11,000+ feet). This only occurs when there is a drastic change in elevation (5,000+) in a day, which is not in our predicted route. So, this condition shouldn't be a problem. If it occurs, we will return to an elevation that is suitable.

Emergency Resources

Ranger Stations:

- For Big Creek area call Central Caribou FDO

(1-800-663-7867) or (604-660-2421)

- For South Chilcotin area call Cascades FDO

(1-800-665-1511) or (604-660-2421)

Hospitals:

- Lillooet Hospital & Health Centre is our closest hospital. It is approximately 50 miles from Jewel Creek trailhead. It is open 24/7 for emergencies services.

951 Murray St

Lillooet

(+1 250-256-4233)

- Ashcroft Hospital and Community Health Centre

700 Ash-Cache Ck Hwy

Ashcroft

(+1 250-453-2211)

Search and Rescue:

- BC Search and Rescue Association

715 McBride Boulevard

(+1 604-528-5539)

- North Peace Search & Rescue

(250) 793-0761

- Chetwynd Search & Rescue

250 788-3211 (SAR Hall) or 250 788-9138 (Don Wheeler)

Emergency Communication

We will carry a IsatPhone Pro satellite phone as our main device on the expedition (rented from www.satellitephonestore.com) and a SPOT 2 PLB (rented from www.lowergear.com) as a backup device.

V. Budget

Budget

[Ritt_Budget.docx](#) (91.3KB)

Uploaded 1/6/2014 by [Emma Marshall](#)

[Open](#) | [Download](#)

Transportation

\$467.50

Food and Fuel

\$744.70 (Including aquamira and bear spray)

Maps and Books

\$39.99

Communication Device Rental

\$213.92

Permits/Fees

\$20.00

Gear Rentals

\$588.00

Total Funding Request

\$2,074.11 (\$518.53 per person)

Cost Minimization Measures

We have made numerous efforts to be as economical as possible while planning this expedition. First, we are proposing to drive rather than fly to our destination. When researched in early January 2014, one round-trip ticket from Colorado Springs to Whistler was \$546.03. This would make our transportation costs in excess of \$2,000 not including further transportation from Whistler to Gold Bridge and back. By driving, we transport all four of us for \$467.50 and do not have to ship any gear.

On the drive, we will camp overnight rather than stay in hostels. We will also buy food in bulk and make any foods we can (such as granola, trail mix and dried veggies) ourselves before our expedition to save money. For items that we are purchasing or renting, we chose the least expensive model that was available.

We feel that we have designed an expedition that is very worthy of a grant from the Ritt Kellogg Memorial Fund, and if we receive funding, we will make every effort to minimize our expenses. Thank you for your consideration of this proposal.

Northern Exposure: Backpacking British Columbia's South Chilcotin Mountains

Travel Itinerary

August 4 – We will leave Colorado Springs bright and early in the morning and drive to Conway, WA (1662 miles, 21 hrs). With 4 drivers switching off, we think we can do this without stopping for the night, and we plan to arrive in Conway midday on the 5th.

August 5 – Arrive in Conway, spend rest of day food shopping and organizing gear. Camp at NOLS branch for the night.

August 6 – We will shopping for food and finishing last-minute gear sorting this morning, and depart for Gold Bridge, BC (6 hrs from Conway) by noon. We will drive to the Jewel Creek trailhead (a few kilometers outside of Gold Bridge) and spend the night there.

(Post-trip)

August 19 – Begin drive back to Colorado Springs

August 20 – Arrive in Colorado Springs

Expedition Itinerary

Notes:

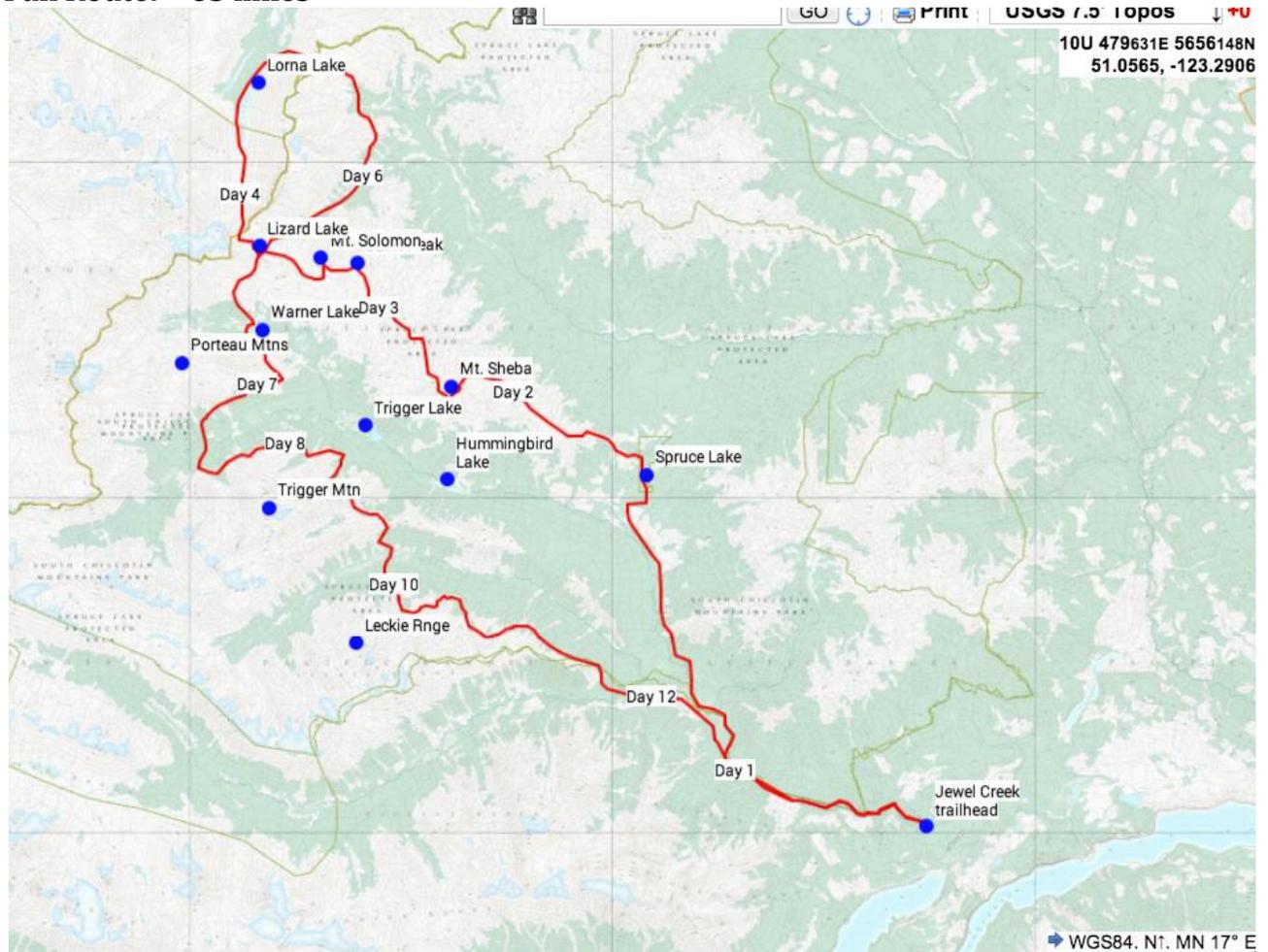
-During the expedition, we will use maps of much larger scale than those used here. As such, the proposed routes below are rough estimates. We will for the most part be following the vast network of trails in the park. However, some of these are more maintained than others so in many cases, the trail may be difficult to find or nonexistent. Our exact route will be subject to terrain and weather conditions as we encounter them.

-All alpine sections of the route are necessarily subject to a number of factors. While we have found considerable information online that indicates all of the alpine sections we have included are mid- to hard- 3rd class and well within our abilities, we keep open the possibility that due to weather, loose rock, rock fall hazard, group energy levels or another factor, we may decide to move down and follow a different route. In making these decisions, we will strive to reach group consensus, but if one person feels that a situation is too risky, we will always err on the side of caution when selecting our route.

-We have been intentionally conservative in some of our mileage estimates to allow for the possibility of time-consuming routefinding, especially along alpine sections.

www.caltopo.com used to map this route.

Full Route: ~ 63 miles

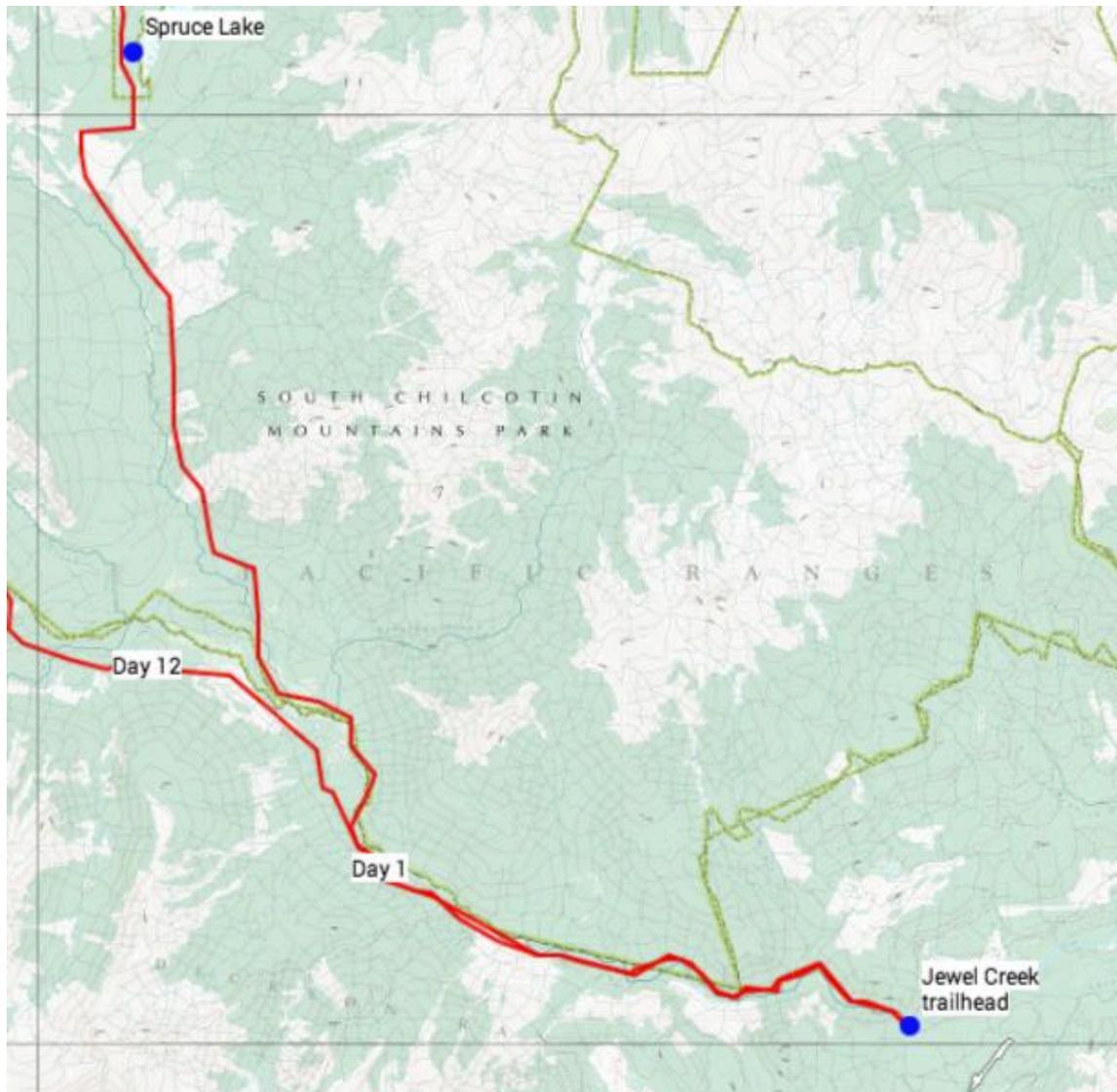


August 7, Day 1

From the Jewel Creek trailhead, we will follow the Gun Creek Trail along Gun Creek until we meet up with the Spruce Lake trail, which will bring us to Spruce Lake, where we will camp.

Distance traveled: 11.5 miles

Elevation gain: ~ 2,340'



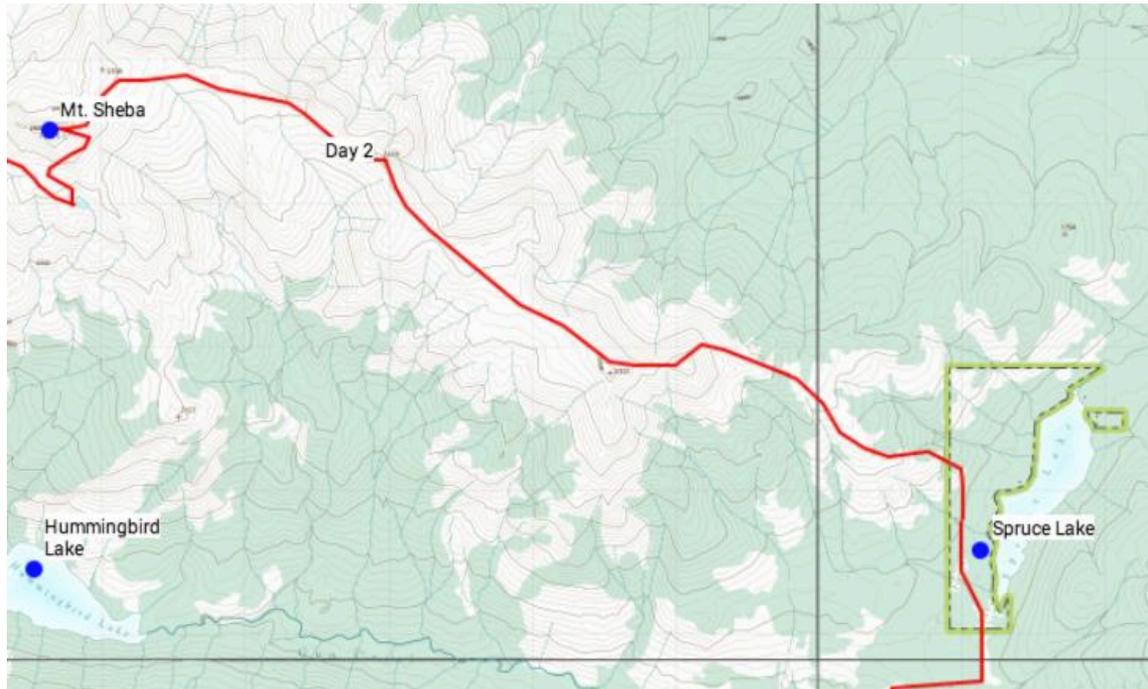
August 8, Day 2

From Spruce Lake, we will begin the traverse of the Mt. Sheba ridge that extends from just past Spruce Lake to Lizard Lake. We will travel up the ridge from Spruce Lake and tentatively plan to camp at an alpine lake several hundred feet below the Mt. Sheba summit. We have read of other parties camping here, but will reserve the option of camping at a lower elevation depending on weather, exposure to rockfall, water availability and other conditions we encounter.

This day's travel includes the option of attempting to summit Mt. Sheba (8,740'), which is a non-technical scramble we believe to be well within our abilities. While we'll hope to summit Mt. Sheba, we will continually assess the situation as we proceed along the ridge and potentially descend and travel lower down if we deem the high route to be too risky.

Distance traveled: 5.5 miles

Elevation gain: ~3,460'

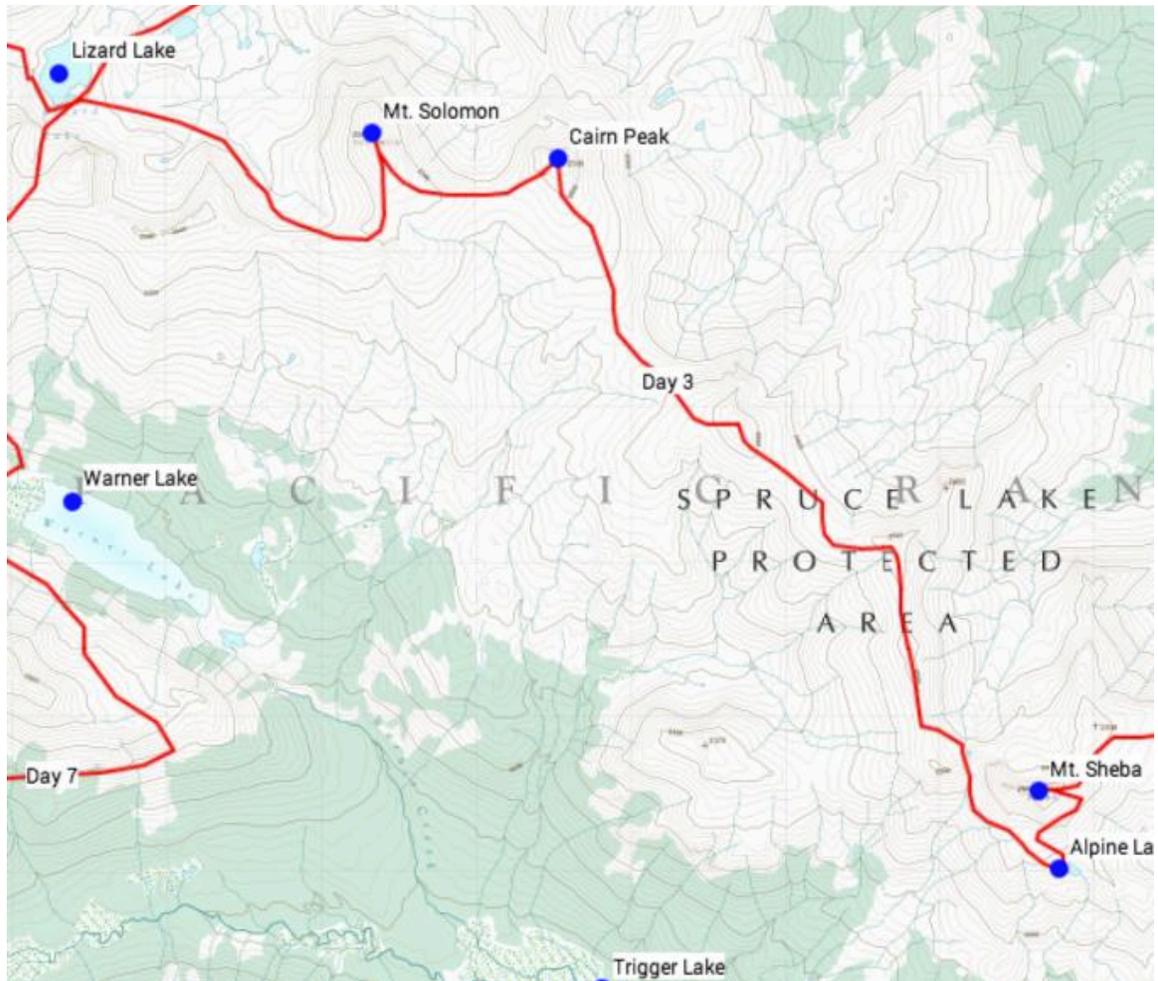


August 9, Day 3

From the alpine lake camp below Mt. Sheba, we will continue along the ridge until we descend to Lizard Lake where we plan to camp. This route includes the option of summiting Mt. Solomon (8,494') and Cairn Peak (8,418'), which are a part of the ridge system in between Mt. Sheba and Lizard Lake. In keeping with the plan of the day before, we will plan to stay high, but will descend at any time if weather moves in or the situation changes for any reason.

Distance traveled: 6.75 miles

Elevation gain: ~1,100'

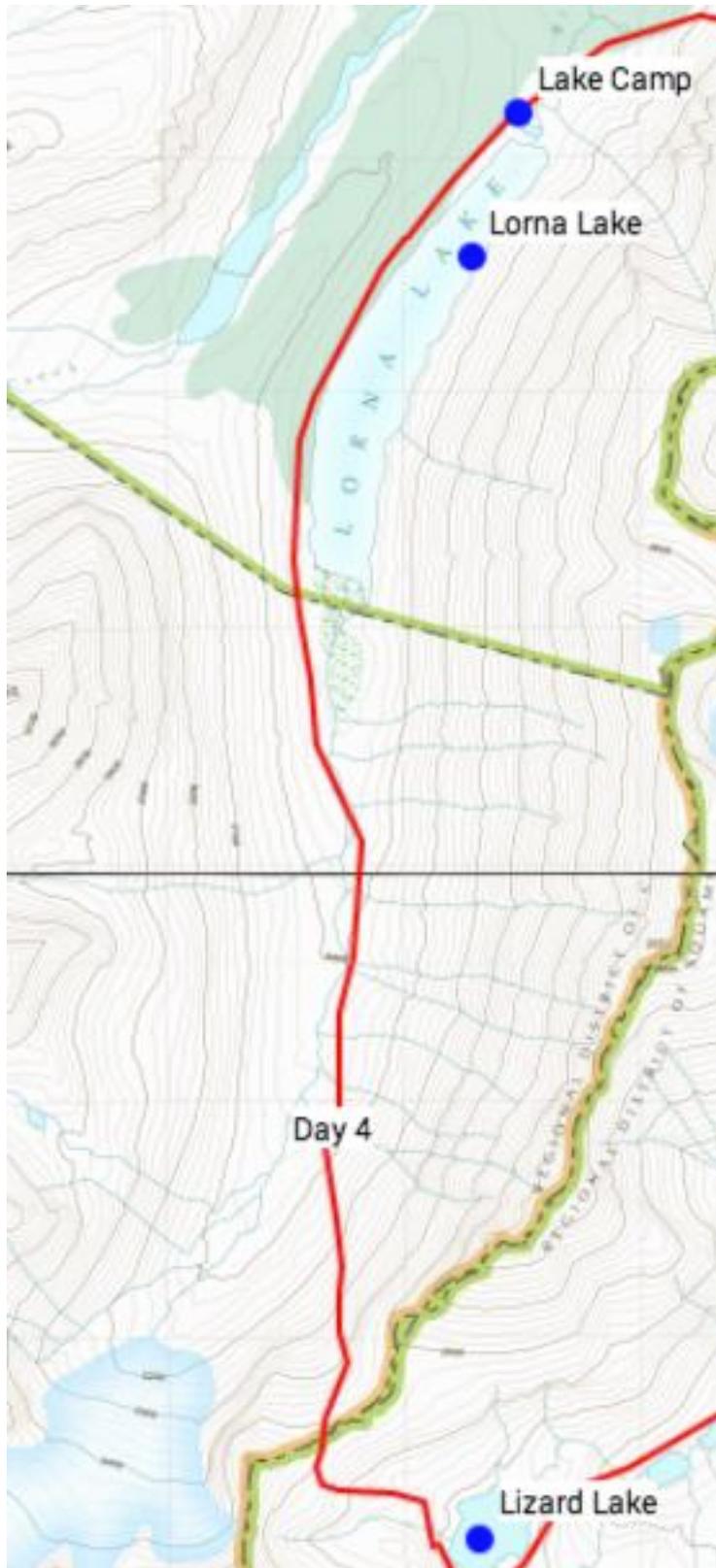


August 10, Day 4

From Lizard Lake, we will hike up and over the pass to our north (approximate elev. gain 600'). We will then travel down the Lorna Lake valley toward Lorna Lake. We plan to hike along the western side of the lake to the north head and camp there.

Distance traveled: 4.5 miles

Elevation loss: ~2,050'



August 11, Day 5

We will not move camp on the fifth day and will instead go on a day hike in the area surrounding our camp at Lorna Lake.

August 12, Day 6

From Lorna Lake, we will hike up and over the pass to the east of the lake and drop into the Tyaughton-Lizard Creek valley. We will then hike up Lizard Creek and approach Lizard Lake from the northeast. After passing Lizard Lake, we will drop down from the ridge and camp at Warner Lake.

Distance traveled: 8.75 miles.

Net elevation loss: ~200'



August 13, Day 7

From Warner Lake, we will approach the Porteau Mountain massif and travel around it. We will then drop into the valley and camp at a small lake near Gun Creek.

Distance traveled: 4 miles

Net elevation loss: ~600'

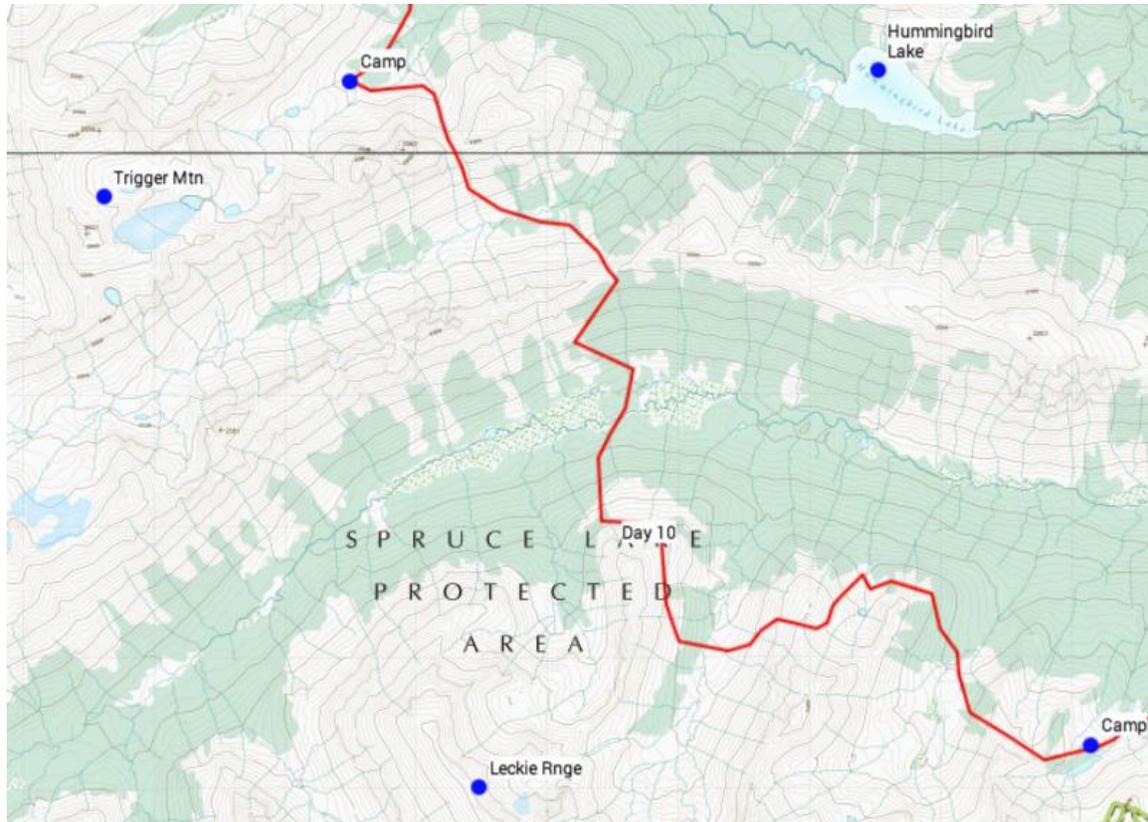


August 14, Day 8

From our Gun Creek camp, we travel around the base of Trigger Mountain. We will camp along the creek flowing from an alpine lake on Trigger Mountain.

Distance traveled: 4.5 miles

Net elevation gain: ~1,000'



August 17, Day 11

On day 11 we will not move camp but will instead go on a day hike around the base of the Leckie Range.

August 18, Day 12

We will hike from our Leckie camp around the southeast tip of the Leckie Range, where we will meet up with the Slim Creek trail. We will follow the Slim Creek trail until it meets the Gun Creek Trail, which we will take back to our car at the Jewel Creek trailhead.

Distance traveled: 11 miles

Elevation loss: ~3,000'

Expedition Food

	weight (lbs)	price (\$)
Oatmeal	5	12.5
Granola	5	20
Cream of wheat	3	5
Dehydrated hashbrowns	0.5	3.75
Pancake mix	1.5	5.8
Bagels (24)	6	15
Tea	50 bags	5
Hot chocolate	0.75	3.05
Tortillas	6	20.95
Peanut butter	3	14.3
Summer sausage	2	13.3
Dehydrated hummus	0.3	4
Jelly	1	5
Granola bars (24)	1.32	3.5
Raisins	2.5	9.38
Dried apricots	2	12.84
Peanuts	2.5	12.38
Gorp mix	4	22
Candy bars (12)	1.5	10
Beef jerky	1	8.5
Brown minute rice	2.5	4
Dehydrated beans	1.85	7.4
Quinoa	5	25.8
Pasta	5	8.35
Dried tomato sauce (6 packet	0.19	9.48
Dried pesto mix (6 packets)	0.19	9.48
Mozarella	2	15.9
Cheddar	3	23.85
Butter	2	7.28
Dried veggies	3	19.95
Olive oil	0.2	4
Garlic	2 cloves	2.5
Carrots	2	4.78
Tuna (8 pouches)	1.5	8
Sun dried tomatoes	0.5	5
Spice kit	1	5
Gatorade mix	1	5
Chocolate chips	2	9.9
Pretzel snack mix	1.5	6
Brown sugar	1	4.93
Dehydrated milk	1	8.65
	Weight (lbs)	Cost (\$)
Total:	85.3	401.5
Weight per person:	21.33	
pppd:	1.77	
\$/person/day:	8.36	

This ration list should provide us with approximately 3,000-3,500 calories per day, which will adequately sustain us on our expedition.

Equipment List

Group gear

At Camp

- 2 2-person 3-season tents
- 2 lightweight ropes
- 1 trowel
- 1 tarp
- Bug spray
- 2 Counter Assault Bear Deterrent Spray canisters
- 4 BearVault BV500 Food Containers (rented from REI)
- 4 bear bells

Cooking

- 1 whisperlite stove
- 1 pot
- 1 pan
- 1 spatula
- 1 pair pot grips
- 2 oz. Dr. Bronners soap
- 4 liters white gas fuel
- 1 first aid kit (contents specified below)
- 1 repair kit (contents specified below)
- Plastic zip-lock bags (for maps etc.)
- Wilderness medicine reference book

Repair kit

- Duct tape (store on water bottles or trekking poles)
- Sewing kit
- Tent repair kit
- Patch kit
- Gorilla glue/Silnet
- Nylon cord
- Leatherman/multi-tool

First aid kit

- 1 pair latex-free protective gloves
- Scissors
- Tweezers
- Irrigation syringes
- Patient assessment forms
- Pen

Safety pins

Bandages:

3x4" non-stick pads (2)

2x2" gauze pads (8)

3"x4.1 yd. gauze roll (2)

¾ x 3" adhesive bandage (5)

1x3" adhesive bandage (10)

Butterfly bandages (10)

Blisters

Tincture of benzoin

3x4" Moleskin

1"x10 yd. tape (2 rolls)

Sprains etc.:

3.75 x 30" SAM splint (1)

3" elastic bandage (2)

Medication:

Acetamaphine (50)

Antacid (50)

Ibuprofen (100)

Antihistomine (50)

Antibacterial:

Antibacterial wipes

Triple antibiotic ointment

Hydrocortisone

PVP iodine wipes

Cotton swabs

Waste bags

Individual Gear

90+ L internal frame pack

Sleeping bag (rated to 15°F or below)

Compression sack

Sleeping pad (+ compression sack if inflatable)

Daypack (if pack brain doesn't detach)

Headlamp

Batteries

Aquamira

Lighter

Toothbrush

Toothpaste

Chapstick
Sunscreen
2 water containers (total 2L capacity), can be bottles or bladders
Compass
Sunglasses + retainers
Bowl w/ lid
Spoon
pocketknife
Plastic trash bags (2 large, 1 medium)
Bandana or buff
Watch
Hand sanitizer
Camp shoes
Sturdy backpacking boots with good ankle support
Mosquito net
Trekking poles (optional)

Clothing (all non-cotton)

3 pairs wool socks
liner socks (optional)
2 pairs non-cotton underwear
1-2 sports bras
1 set long underwear (top + bottom)
1 synthetic T-shirt
1 mid-weight top (fleece-weight)
1 insulating jacket top
1 Rain top
1 Wind jacket (optional)
1 mid-weight bottom
1 Rain bottom
1 pair hiking shorts
1 pair hiking pants
1 pair wool or liner gloves
1 baseball/sun hat
1 warm hat

Budget Proposal

Transportation

Roundtrip gas expenses for travel from Colorado Springs to Jewel Creek trailhead outside of Gold Bridge, BC (3,324 miles) calculated on www.gasbuddy.com

Total: **\$467.50**

Food, fuel etc.

Expedition food: \$401.50 (See food list for details)

Travel food: \$9 per person, per day for two days of travel to and from trailhead (Aug 4,5,6 & Aug 18,19): \$9 x 4 people x 5 days = \$180

Expedition fuel: 1 gallons (~4L) of white gas at \$11.50/gallon = \$11.50

Water purification: \$14.95 per Aquamira purification set x 4 people = \$59.80

Bear Spray: \$45.95 per Bear Spray x 2 = \$91.90

Total: **\$744.70**

Maps and books

Etopo British Columbia Topographic map and satellite images:

Total: **\$39.99**

Communication device rental

3-week IsatPhone Pro rental from www.satellitephonestore.com = \$111.86

3-week SPOT 2 GPS, PLB rental from <https://www.lowergear.com> = \$102.06

Total: **\$213.92**

Permits

Parking fee: **\$20.00**

Equipment rental

Bear canisters (4): \$168.00 (rented from REI)

Pack rental: We each own 65-70 L packs but plan to rent larger (90L) ones from the NOLS Pacific Northwest branch, in order to accommodate the equipment and rations required for this expedition.

\$105 price for 3-week pack rental x 4 packs = \$420

Total: **\$588.00**

Total budget request: \$2,074.11

Cost per person: \$518.53