



Ritt Kellogg Memorial Fund Registration

Registration No. H394-3L6B6
Submitted Jan 11, 2017 3:43pm by Carson Fritz

Registration

Aug 29, 2016-
Aug 27, 2017

Ritt Kellogg Memorial Fund
RKMF Expedition Grant 2016-2017// Group Application

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

**Waiting for
Approval**

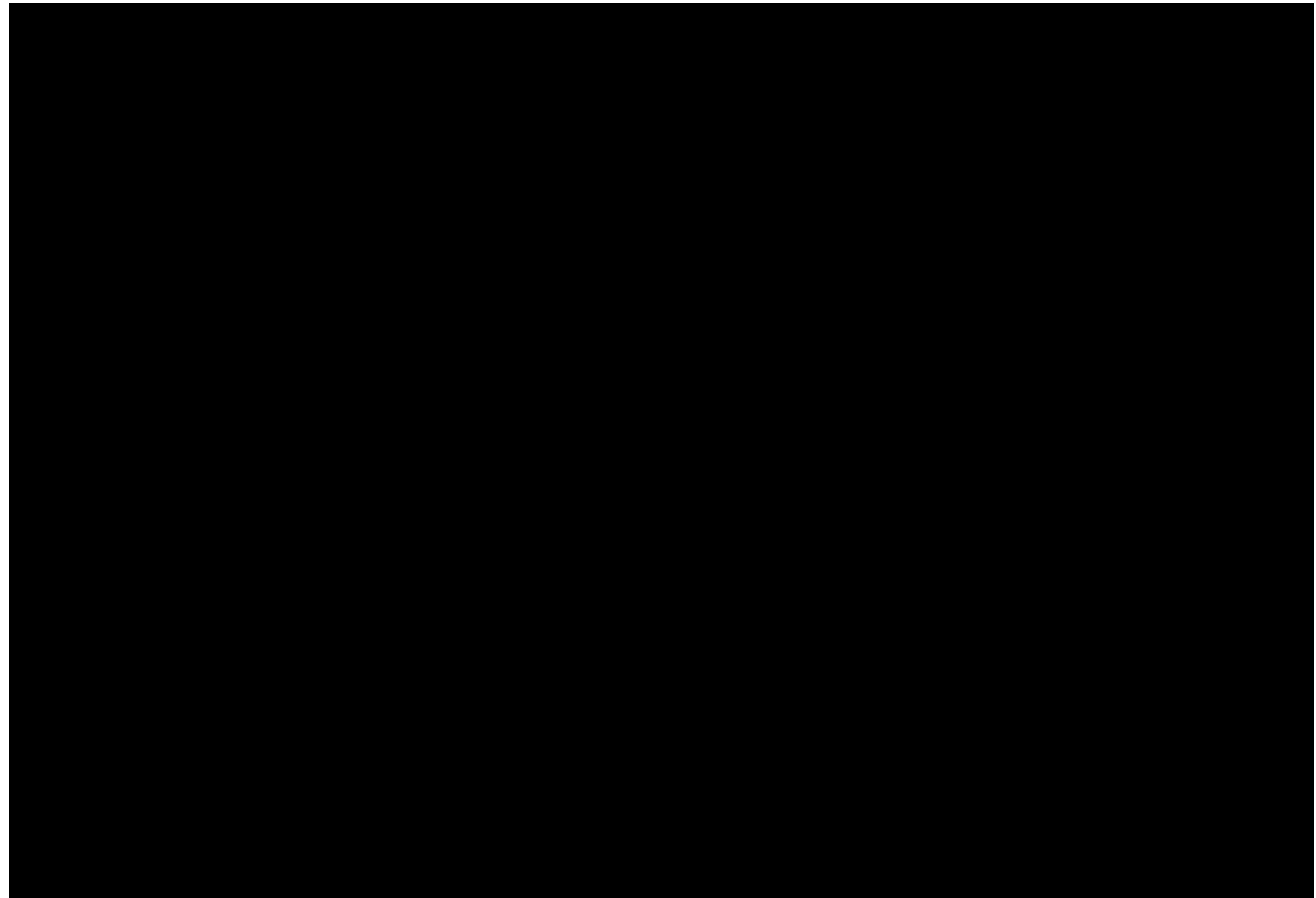
Aug 29, 2016-
Aug 27, 2017

Ritt Kellogg Memorial Fund
RKMF Expedition Grant RKMF Expedition Grant (2016-1017//INDIVIDUAL)

This is the individual application for a RKMF Expedition Grant. Each participant must fill this application out on their own. In this application you will be asked to provide important details concerning your experience and eligibility for your proposed expedition.

**Waiting
for
Approval**

Participant



I. Grant Summary

a. Expedition name:

Northern Walls: Cirque of the Unclimbables

b. What is the primary activity (or activities) of your expedition (i.e. rock climbing, packrafting and hiking, etc.)?

Rock Climbing

c. Briefly describe the objective(s) of your expedition:

Applying our backcountry, alpine, rock climbing and safety skills in a setting that is new to all of us!

Enjoying the serenity of the Cirque wilderness

Climb some of the most stunning, rarely climbed peaks in North America

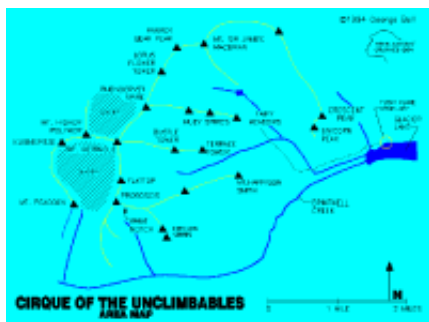
Return home having further solidified our skills as climbers, leaders, and outdoorsmen

Work out our stoke muscles

d. Describe the location of the expedition:

The Cirque of the Unclimbables is a remote satellite range of the Vampire Peaks tucked under the southern boundary of The Nahanni Wilderness in Canada's Northern Territories. Thanks to its remoteness, The Cirque of the Unclimbables is only accessible via float planes which can be chartered from a number of businesses in Whitehorse, YK. Giving scale to Canada's vast terrain, the Cirque is a remarkable 1,500 miles from the U.S. border despite its location at the southernmost tip of the Northern Territories. For this reason, flight transit is preferred when affordable. The Cirque is a beautiful destination in a unique, commanding environment that is befitting to the adventurous spirit of the RKMf. We would be honored to explore its offerings under the banner of Ritt, and the Colorado College.

Attach an area overview map.



[map_cirque.gif](#) (12KB, 750x555px)

Uploaded Jan 11, 2017 12:48pm by Carson Fritz

e. Expedition dates:

Aug 8-10 = traveling

Aug 10-23 = days in the field

Aug 23-25 = traveling

f. Number of days in the backcountry:

14

g. Describe the wilderness character of your expedition (100 words or less):

Nestled deep in the Northwest Territories, the Cirque of the Unclimbables is one of North America's most remote alpine wall-climbing destinations. Despite its healthy distance from the nearest road, the Cirque has seen a substantial amount of development as a result of climbing. With a trail from Glacier lake, the main drop point, to Fairly Meadows, as well as animal proof storage, the Cirque is not untouched. The rock has seen development, with more than 70 established routes in the area. Nonetheless, the isolated location and hike from the drop point provide a true wilderness experience.

h. Funding request, per person, in \$USD:

\$1499.11

II. Participant Qualifications

a. Participants' Graduation Date

James Smith '18

Carson Fritz '19

Jack Schrott '19

Joseph Purtell '18

b. Medical Certifications

We are all WFR certified.

Jamie's recert date is Jan 20th, 2017

Jack's recert date is May 19th, 2017

c. Additional Certifications

Jamie- Outdoor Emergency Care, 2011. Leave No Trace Trainer, 2016.

d. Training Plan

We will prepare for our expedition by solidifying our technical skills and undergoing rigorous physical conditioning.

All members of the expedition are proficient rock climbers and have climbed together often, however, it will still be necessary to strengthen our technical systems by practicing together as an expedition team. We will practice as a team in the Ritt Gym as well as outside when the weather permits. Additionally, we will review rock rescue techniques with Ryan Hammes and other experienced climbers/ guides in a controlled environment to be proficient in the case of an emergency on the trip.

Fluid communication between team members while on route is essential to safe passage on route. Gyms and local crags are a good place to begin cultivating this communication, but ultimately, systems must be tested in more committing environments. Consequently, our team also hopes to travel as a group to Yosemite and/ or Zion over spring break to practice moving in different combinations on longer routes.

In addition to technical skills, it will also be necessary to be in top physical condition in order to carry out our proposed expedition. Due to the length of the routes we will be attempting, endurance will be important and will be of focus throughout our training. We will all workout individually to develop and maintain the necessary physical performance we will need for the trip. These workouts will primarily consist of sustained climbing and cardio workouts, increasing in length as we get closer to the trip.

When time permits we will climb together as a group on longer routes to further develop our group dynamic. This will also be important for making sure every member is on a similar level and preparedness for the trip. Some potential routes we will complete are:

Center Route, South Platte: 3 pitches, 5.9

Wunsch's Dihedral, South Platte: 3 pitches, 5.11

Moonlight Buttress, Zion: 10 pitches, 5.12+ (5.8, C1)

Tocupit Occidentals, Zion: 7 pitches, 5.10+

The Original Route, Rainbow Wall, Red Rock: 14 pitches, 5.12-

Moratorium to East Buttress, Yosemite: 12 pitches 5.11

East Buttress of Middle Cathedral, Yosemite 12 pitches 5.10c

III. Expedition Plan**a. Land Management**

Nahanni National Park Reserve in the Dehcho Region of the Northwest Territories of Canada. Due to our trip lasting more than 5 nights we will need to purchase an annual pass in order to camp for multiple nights in the Nahanni National Park.

b. LNT Principles

Yes

Empty

All members of the group are well versed in LNT principles. We will abide by all of them and make conscious efforts to minimize our impact. A pit toilet is available for use in Fairy Meadows for impact minimization. All micro trash and obvious traces of our stay will be thoroughly cleaned up throughout the trip. We will utilize developed trails whenever possible and we will camp in established sites or in unused and durable terrain. This will prevent the development of unwanted traces in the area. All artifacts will be left as they were found and climbing booties will carefully be examined before removal. By using bear canisters/ bags we will be very cautious about unwanted interactions with animals. All of our descents from the routes are planned and we will be weary of the weather so that we can minimize erosion, creation of new trails and bailing on ditched gear. Our goal is to not only to leave the Cirque of the Unclimbables as it was, but to leave it cleaner than we found it.

c. Cultural Considerations

Yes

Empty

Nahanni National Park Preserve is located in the home territory of the Dene peoples. The area has been inhabited by pioneers and explorers since the 18th century. It is exceedingly unlikely that we will encounter any First Nations people on our trip, but we will be courteous if we do.

d. Re-Ration Plans

No

e. Expedition Itinerary

[Expedition Itinerary.docx](#) (3.8MB)

Uploaded Jan 11, 2017 12:53pm by Carson Fritz

Appendix A

f. Equipment List

[equipment list.docx](#) (77KB)

Uploaded Jan 11, 2017 12:55pm by Carson Fritz

Appendix B

g. Food List

[Food list.docx](#) (109KB)

Uploaded Jan 11, 2017 12:56pm by Carson Fritz

Appendix C

Food Storage

We will use bear hangs and odor proof bags to prevent wildlife from accessing our food while asleep or away for the day when at all possible. Bear canisters/ bags will be used due to the lack of tree coverage in the base camp area. In addition, LNT principles will be followed throughout the trip to ensure pests will not be attracted to our camp.

IV. Risk Management

a. Travel

Our itinerary outlines our means of transportation, which consists of automotive and air travel. We will meet in Portland where a large airport allows safe travel with little weather concern. A large highway connects Portland to Vancouver along which towns are common and cell phone service is available. In Vancouver, the large airport will provide safe travel to Whitehorse where a small airport that is well equipped for safe landing and the town provides a resourceful launching point. Our travel from Whitehorse to Finlayson Lake is relatively remote but all transportation comes with spare tires and our InReach device will be activated during this portion of the trip. Kluane Airways will be expecting our arrival and their lodge is available for our use (which includes phones and final provisions). The flight

from Finlayson Lake to Glacier Lake is the most dangerous portion of our travels due to the remoteness and weather variability. The pilot for Kluane Airways, Warren LaFave, is a highly experienced flyer in the area and is the head of Search and Rescue for Nahanni National Reserve. Additionally Kluane Airways permits our use of their gear shed at Glacier Lake where we can spend one night in a bear proof building before hiking into Fairy Meadows.

b. Objective Hazards

The mountains are a great passion not just for what they can give, but also what they can take. They say that true love only occurs when we are totally vulnerable to that which we love and vice-versa. This observation is especially fitting for the backcountry. While our inspiration lies in the hills, we are also profoundly vulnerable to them, and they are likewise vulnerable to us for our human impact. These will always be the facts of exploring the wilderness, but there is a way to experience the mountains responsibly so as to avoid this unfortunate truth. Potential hazards are listed and addressed below.

- **Rock Fall** - Rock fall is one of the most serious concerns when spending long days on vertical walls. Rock quality varies at different geological layers, and climbers are especially vulnerable when tethered to belay anchors or on lead. Communication is key in mitigating this hazard. Alerting the belayer when the leader enters into loose terrain, calling "rock" when holds or items fall, and being cautious about using loose holds are all necessary components of avoiding rock fall injuries. The simplest and most effective way to protect against rock fall accidents is to wear helmets at all times. This will be a mandatory piece of equipment. An almost equally important step to take is to strategically place belays out of the way of potential rock fall. Belays should be made under safe block features when possible, and out from under "bowling alleys" where rockfall funnels. All members of this team have formal training in safe anchor building and have dealt with loose rock on a variety of stone types.
- **Severe Weather** - The Cirque of the Unclimbables is notorious for its sporadic, unending storms. Climbers die every year from weather exposure in these sorts of environments. Although these storms can often be anticipated by weather forecasters, mistakes happen. As climbers, we are especially vulnerable to severe weather as we lack the option to find cover when on a long route. Weather hazards include high winds, precipitation, and, most importantly, electrical storms. Preventative decision making is the best way to avoid these situations. This means paying close attention to forecasts to choose a quality weather window, and making our own assessments of cloud patterns while on route. To receive up-to-date weather forecasts, we will carry an inReach messaging device to communicate with a designated individual with access to internet. Combined, the members of this group have nearly 20 years of experience reading mountain weather patterns in the Cascades, Canadian Selkirks, Purcells, Rockies, New Zealand, Alps, Rocky Mountains, Patagonia, and elsewhere. We also have access to instruments such as barometers should we decide they are necessary. While thoughtful decision making is effective, we still cannot rule out the possibility of getting caught in a sudden storm. In this case, we will bring adequate layering for a rapid descent. Emergency descent plans will be made for every route mostly relying on rappels off of bolted anchors. All members of this party are well aware of these potential hazards thus will be rational in the decision to bail off of a given route should the weather turn for the worse.
- **Cold** - While cold injuries in the Cirque of the Unclimbables are less common in the summer, large rock faces are especially exposed to the elements. Here wind and rain can exacerbate cold related hazards. Perhaps the most common cause of cold injuries on rock routes has to do with constricting rock shoes which limit circulation, thereby increasing the risk of frostbite. To account for this risk, we will bring adequate layering and approach shoes to make a retreat in especially cold, windy conditions. We know how to stay warm and dry in a mountain environment and will employ this experience to avoid cold injuries.

- Altitude - The Cirque of the Unclimbables is a relatively low altitude range with the highest summits only reaching about 9,000 feet. Nonetheless, these sorts of altitudes can contribute to fatigue and must be considered. We have all spent considerable time at high altitudes without issue, including climbs up Mont Blanc (15,778ft) and many 14,000ft peaks. The best way to avoid altitude problems while on route is to establish a high fitness level before the trip and spend an appropriate amount of time acclimatizing. If a team member begins to show symptoms of AMS, we will stop to rehydrate and eat. If symptoms do not improve, the decision to turn around may be made.
- Animals: Ground Squirrels are the largest issue in Fairy Meadows so in order to reduce the risk of wildlife getting into our food we will use a combination of strategies. Where available, we will use a bag to hang food so that bears and rodents will not be able to access it. If the environment does not allow us to do so, we will have brought in bear canisters/ bags. We will put these at least 200 feet from our campsite and we will not bring food into the area where we will be sleeping. This will help to mitigate the risks of exposing animals to food that could make them sick or accustom them to getting food from humans. We will also carry one can of bear spray in case a bear becomes aggressive with us.
- Leader Fall - Leader falls are a last resort when climbing long, committing walls in a backcountry environment. Falls should only be considered on clean steep walls with good protection and even then be avoided if possible. While we are confident in our ability to navigate ledgy, low angle terrain without falls, and have only chosen routes within our grade capacity, however, we cannot rule out the possibility of a fall. For this reason, attentive belays will be mandatory to prevent the leader from hitting large features or flipping upside down. As lead climbers, we will be diligent about placing the best protection available even in easy terrain to protect for an unexpected fall due to rock breakage or human error. We all have many years of experience leading traditionally protected pitches and know proper falling technique on both the climber and belayer side.
- Benighted - While we are confident in our ability to climb our chosen routes within a day, we are also prepared to change plans if difficulties slow our progress on a route and force us to spend the night. First off we will carry headlamps on all routes we attempt. If we decide that a safe descent is possible by headlamp, this will be our primary option. If descent is made too complicated by dark, we will have the resources to spend the night on a ledge. Most of the long routes we are considering have usable bivy ledges. Information about possible bivy sites is available online, in several published guidebooks for the area, and has been outlined in our itinerary.
- In certain circumstances it can be preferable to continue on even after darkness comes. Certain routes have walk off finishes, in which case climbing a few pitches in the dark to find the walk off can be advantageous. We all have experience climbing and descending routes by headlamp. We will use good judgement to decide whether retreat or advance is the best option.
- Human Error/Other Parties - The human factor is both the hazard that results in the most backcountry injuries, and the one we theoretically have the greatest control over. Competence belaying, rappelling, placing gear, and understanding rope systems without fail is absolutely essential to climbing routes safely. Having a mutual understanding of all these systems within a partnership is the real challenge in putting one's training to the test. We are committed to building this mutual understanding by practicing our systems weekly to reinforce proper procedure as second nature. While practice is indispensable it does not reduce the need for diligence and

mindfulness on route. Regardless of how comfortable we are with a certain procedure, we cannot get cavalier about executing that procedure. Safety checks will be mandatory at all transitions. We will rappel off of extended auto-blocked devices and perform buddy checks whenever we untie and swap belays.

- Other parties are also a concern when on route. Climbers overhead can drop gear or cause rockfall and are sometimes out of earshot. To mitigate the potential for a rock fall injury from a party above, we will use good judgement about how closely to follow, when to pass if appropriate, and always wear helmets.

c. Subjective Hazards

Subjective hazards are listed and addressed below.

- **Leader Fall** - Leader falls are a last resort when climbing long, committing walls in a backcountry environment. Falls should only be considered on clean steep walls with good protection and even then be avoided if possible. While we are confident in our ability to navigate ledgy, low angle terrain without falls, and have only chosen routes within our grade capacity, we cannot rule out the possibility of a fall. For this reason, attentive belays will be mandatory to prevent the leader from hitting large features or flipping upside down. As lead climbers, we will be diligent about placing the best protection available even in easy terrain to protect for an unexpected fall due to rock breakage or human error. We all have many years of experience leading traditionally protected pitches and know proper falling technique on both the climber and belayer side. Additionally, none of the routes we have selected should require simul-climbing for speed purposes.
- **Benighted** - While we are confident in our ability to climb our chosen routes quickly within a day, we are also prepared to change plans if difficulties slow our progress on a route and force us to spend the night. First off we will carry headlamps on all routes we attempt. If we decide that a safe descent is possible by headlamp, this will be our primary option. If descent is made too complicated by dark, we will have the resources to spend the night on a ledge. Most all the routes we are considering have usable bivy ledges. Information about possible bivy sites is available online and in several published guidebooks for the area. In certain circumstances it can be preferable to continue on even after darkness comes. Many routes have walk off finishes, in which case climbing a few pitches in the dark to find the walk off can be advantageous. We all have experience climbing and descending routes by headlamp. We will use good judgement to decide whether retreat or advance is the best option.
- **Anchor Building** - When belaying followers or hanging on belays where bolts are not to be found, bomber anchors are mandatory. All anchors we build on this trip, without exception, will involve generous protection, adequate equalization, and bombproof redundancy. The CC climbing community knows all too well how important these criteria are.
- **Human Error/Other Parties** - The human factor is both the hazard that results in the most backcountry injuries, and the one we theoretically have the greatest control over. Competence belaying, rappelling, placing gear, and understanding rope systems without fail is absolutely essential to climbing routes safely. Having a mutual understanding of all these systems within a partnership/team is the real challenge in putting one's training to the test. We are committed to building this mutual understanding by practicing our systems weekly to reinforce proper procedure as second nature. While practice is indispensable it does not reduce the need for diligence and mindfulness on route. Regardless of how comfortable we are with a certain procedure, we cannot get cavalier about executing that procedure. Safety checks will be mandatory at all transitions. We will rappel off of extended auto-blocked devices, and top belay off of auto-blocking guided atc devices.

- While the Cirque is significantly more remote than most other North American big wall destinations, its offerings still can attract multiple parties during peak season. Other parties can be a very serious concern when on route. Climbers overhead can drop gear or cause rockfall and are sometimes out of earshot. To mitigate the potential for a rock fall injury from a party above, we will use good judgement about how closely to follow and when to pass if appropriate.
- Personal Hazards - Jamie's right shoulder has dislocated several times and has been repaired with surgery. Jamie is also allergic to penicillin. To avoid injury relating to either of these hazards, we will keep an open dialogue to ensure no damage is done.

d. Emergency Preparedness

Kluane Airways provides a no-extra cost satellite phone in Fairy Meadows for their customers. This will allow for emergency communication and flight change. In addition we will carry a Delorme "inReach" device on the climbs in case of an emergency mid route. This will only be used for life threatening emergencies where a descent would take too long for the circumstances.

e. Emergency Resources

Nahanni National Park Reserve of Canada

10002 100 Street P.O. Box 348

Fort Simpson, Northwest Territories Canada

X0E 0N0

Phone: 867-695-7750

Email: nahanni.info@pc.gc.ca

Kluane Airways Ltd*

Box 29008 OK Mission RPO

Kelowna, British Columbia

Canada, V1W 4A7

Phone: 250 - 860 - 4187

Summer phone number 1-867-969-2127

E-Mail: info@kluaneairways.com

*Warren LaFave of Kluane Airways serves as search and rescue for the Cirque of the Unclimbables. He has provided a satellite phone located in Fairy Meadows, and provides a helicopter service in the event of a required evacuation.

Watson Lake Community Hospital

Km 980 Alaska Highway

Watson Lake, YT Y0A 1C0

(867) 536-4444

Three doctors at: (867) 536-2565 - Parhelion Medical Services (private clinic)

Additionally, small medical centers located closer to Finlayson Lake and staffed with nurse practitioners 24 hours/day, and part-time doctors are located in:

Faro

Km 421 Robert Campbell Highway (867) 994-4444

Carmacks

Km 352.4 North Klondike Highway (867) 863-4444

V. Budget

Budget

[Budget.docx](#) (124KB)

Uploaded Jan 11, 2017 1:00pm by Carson Fritz

Appendix D

Transportation

4612.20

Food and Fuel

932.77

Maps and Books

0

Communication Device Rental

0

Permits/Fees

451.46

Gear Rentals

0

Total Funding Request

1499.11

Cost Minimization Measures

The remote nature of the Cirque of the Unclimbables provides difficulty in access. The location of the access point and our busy schedules does not allow us sufficient time to drive all the way to Whitehorse. By flying into Whitehorse from Vancouver, the plane ticket is much less expensive than flying from the U.S. and we are provided with a longer window to climb. Additionally we will hike from Glacier Lake to Fairy Meadows to reduce the cost of an additional flight to our basecamp. Kluane Airways provides a satellite phone for no extra cost for emergency communication and Jack already owns an InReach device, both of which eliminate the rental costs. Whitehorse provides a good gear organizing location where groceries are relatively inexpensive (in comparison to other Yukon towns) and other last minute gear is readily available.

VI. Expedition Agreement

Expedition Agreement
[agreement.PDF](#) (68KB)

Appendix E

Appendix A- Expedition Itinerary

Expedition Itinerary

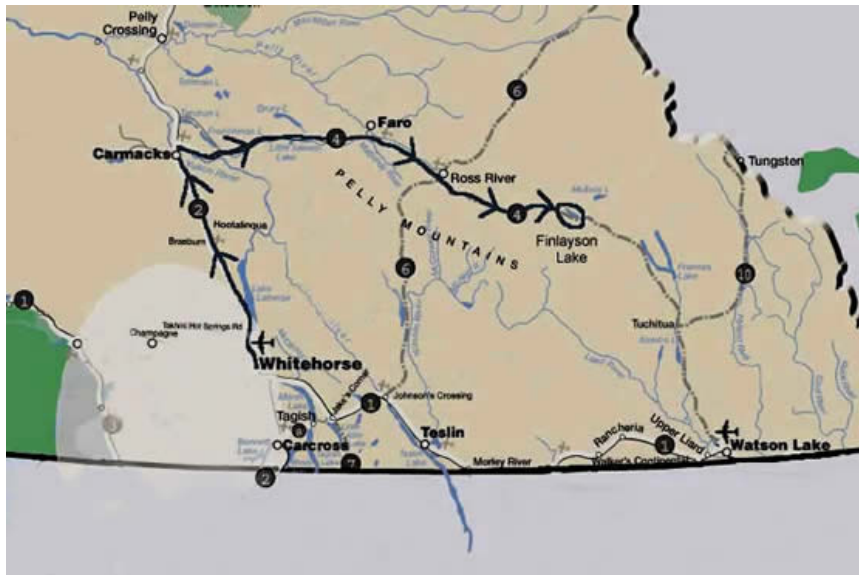
*Due to the rainy nature of the weather in the Cirque of the Unclimbables, all route dates are subject to change. This itinerary provides a best case scenario schedule but we understand that more than likely the weather will not cooperate. The routes are arranged in order of priority, so routes that come later in the itinerary will be the first that we drop if weather does not cooperate.

**Part of the beauty of having a team of four is that several team options are possible. Although we are very proud of each member's individual resumes, we acknowledge, that we all have different and unique strengths. For some routes, it makes sense for a particular pair within the team to act as partners. Consequently, some days we anticipate splitting up to conquer different objectives that fit our skill sets.

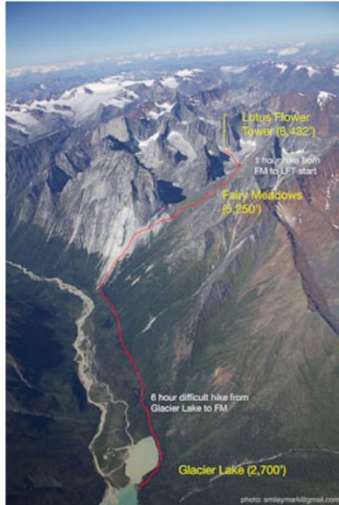
***We are confident in our ability to climb the routes we have proposed in this grant, but as is prudent with any tick list, we will use our experiences on the first, easier routes as a litmus test for what is to come. From these initial climbs, we can more accurately decide whether our other objectives are appropriate. For this reason we will be open to opting for easier routes should our initial objects turn out to be too lofty.

Day 1 - August 8th: Drive from Portland to Vancouver, fly to Whitehorse,

Day 2 - August 9th: Rent car, drive to Inconnu Lodge (7 hour drive)

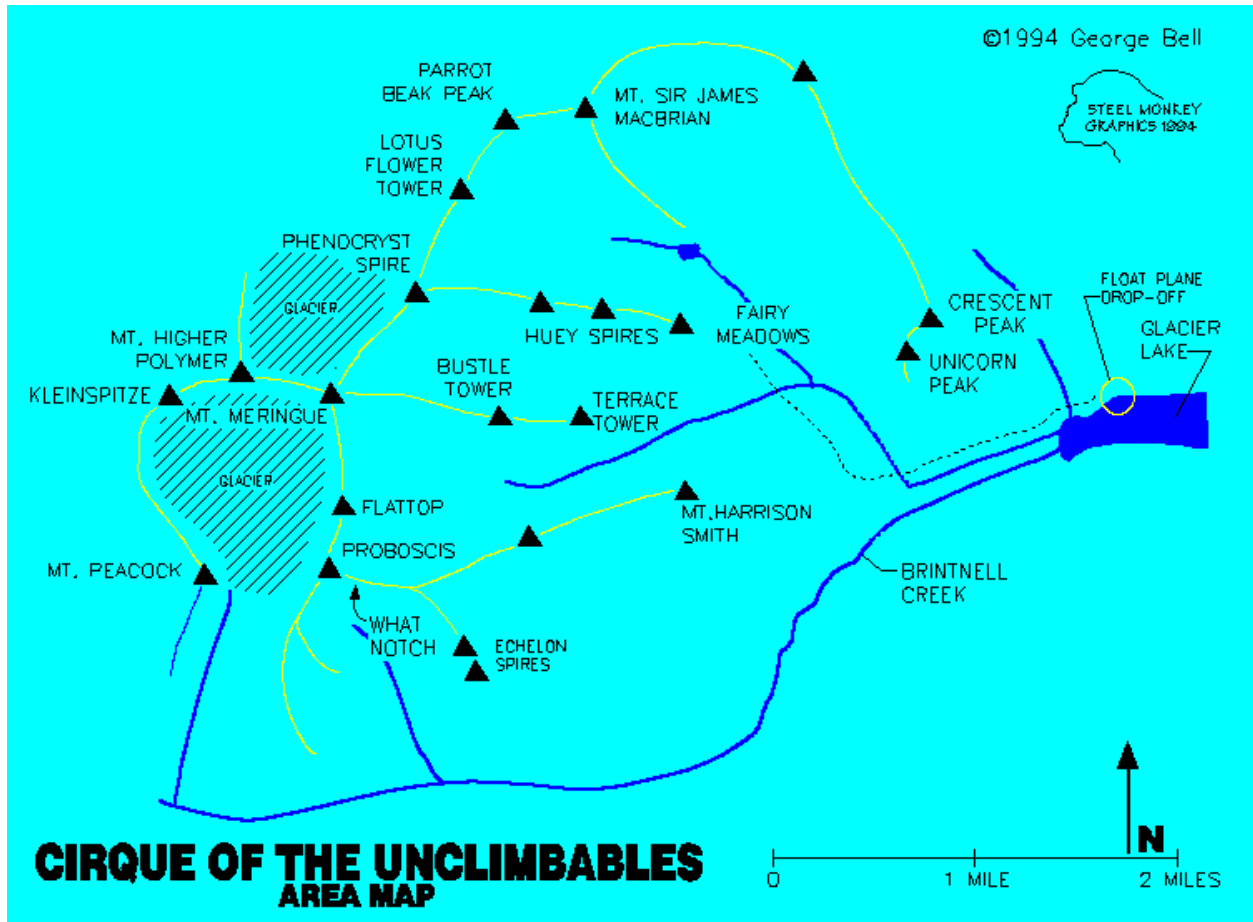


Day 3 - August 10th: Fly to Glacier Lake via Kluane Airways, then hike to fairy meadows



The trail is well worn and will take between 3-7 hours from Glacier lake to fairy meadows. The trail follows the bottom of the valley for ~1 hour. It then quickly steepens through a talus field, ~2500 vertical foot gain. Once at the top, fairy meadows opens up and we will choose a base camp location.

Day 4 - August 11th: Scout approach/ first few pitches of Lotus Flower Tower.



Day 5 - August 12th: Lotus Flower Tower, SE face.

Leave camp at 2:30 to arrive at base by first light.

Beta from Mtn Project: The climb is all about uniformity. The first three pitches climb a well-defined left facing corner. The next five or six pitches climb a long chimney. Then, the fun starts. After a short left facing corner, the last ten pitches or so climb cracks and knobs on the exposed and narrowing face.

Pitch 1: Climb a left-facing corner to a fixed belay. 5.8

Pitch 2: Continue up this corner to a fixed belay 5.9

Pitch 3: Follow the corner until it's end and exit right, skirting below a large roof. This pitch is often wet, but when dry, the exit moves feel about 5.10a.

Pitch 4: Since you are on the face now, wander up the face to the base of a long chimney. 5.7

Pitches 5-9: Climb up the 5.7 chimney. The chimney is long but secure. It's possible and advisable to simul-climb this section, especially if you're doing the route in a day.

Pitch 10: Wander up and right to a large ledge. This ledge is big enough to park a school bus on, well, probably a short bus. 5.8 This ledge is an excellent bivy, as it's totally flat.

Pitch 11: Climb a big left facing corner, 5.9+, to an amazing small ledge at the very edge of the face.

Pitches 12-15: Follow parallel cracks up the face of the tower. Though you protect in the cracks, the preponderance of strange diorite knobs encourages face climbing. There are many ways to ascend this section. Just follow knobs to the base of an unmistakable roof. 5.9

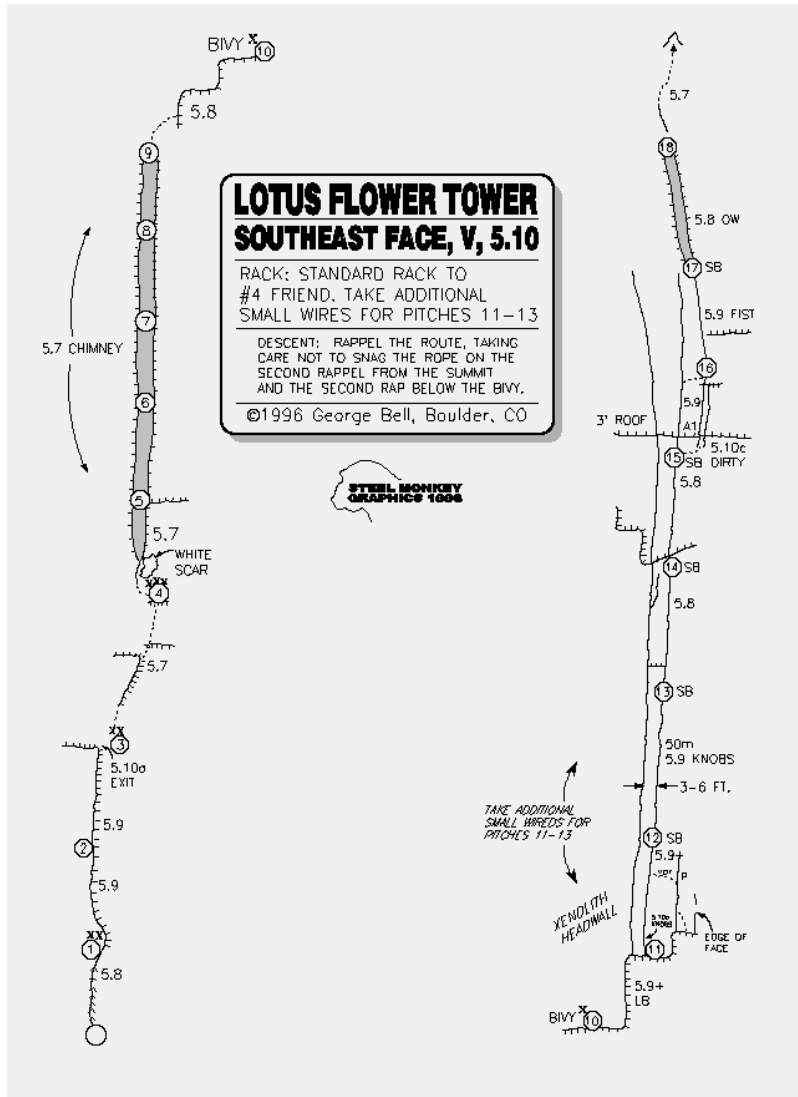
Pitch 16: Climb past the obvious three-foot roof. This move is easily aided, making the route 5.10 C1. Otherwise, expect a 5.11- pull past the route. This move is much more difficult than any other move on the route. It is possible to traverse right and climb a splitter hand crack through the roof, but this may present its own set of problems. Sustained 5.9 cracks lead up to the belay.

Pitches 17 and 18: Gradually widening cracks lead to the summit. The last pitch contains some 5.8 offwidth climbing, but it's really not too bad.

Descent: Rap the route. The upper part of the route has fixed belay stations, so rapping is straightforward (just be careful about snagging your rope on the knobs). Once you reach the ledge, the rap route diverges from the climbing route and heads down the face. There is a serious epic potential here as the stations are tough to find on the big face. Stay out of the chimney at all costs. I know. If you end up rapping back into the chimney, you're in for a long and slow descent as your rope gets hung up on every possible feature.

Specific Beta for 1 day ascent:

1. Use 60 meter ropes.
2. Push pitch (4) higher to get the next pitches closer together.
3. Run Pitches (5) - (9) into three 60m pitches. Basically go till you run out of rope as the climbing is very easy.
4. Push pitch (11) to the edge of the face in order to be able to move pitch (12) higher. It's a more comfy belay for (11) too!
5. Push pitch (12) about 10 meters higher and setup your own belay. This enables you to skip (13) entirely and go straight to the anchors at (14) if you followed step number 1.
6. Run pitches (17) and (18) together on the LEFT side of the face where the climbing is a bit easier than the OW section of (18).
7. Enjoy the extra daylight you have to do the rappel. [Added 2/2000 GB: There is now a bolted rappel line right (NE) of the chimneys on pitches 4-10. It leaves the NE end of the bivy ledge and goes all the way to the top of pitch 3. You can also rap from the top of pitch 3 to the top of pitch 1. Take note of rap anchors on the headwall as you go up.]



Day 6 - August 13th: Rest and scout approach for Brent's Hammer

Day 7 - August 14th: Brent's Hammer, Terrace Tower

This route takes on the steep NE face of the Terrace tower and features entertaining 5.11 climbing through a system of splitter hand cracks and dihedrals. Brent's Hammer (IV, 5.11+)

6 pitches up the SE Face consisting mostly of clean hand jamming.

The route begins left of an overhang and black section of rock.

The first four pitches are 5.10 and the last two 5.11.

Rack: standard plus triple Camalots #1 and #2, optional #4 or #5

Camalot for the last pitch. Scramble left up the grassy ledges leading to a loose gully, 5m after the gully step up and right.

The first pitch ascends an arching, right facing corner.

From here more or less head straight up the main crack system

(see photo). Descend by rappelling the route with two ropes,

using fixed belays at the tops of pitches 6, 5, 3 and 1.
FA: A. Mawson, D Lavigne, J. Lavigne, July 2005



1. 35m 5.10 Step up and left on mossy dirty ledges, solid stemming on good gear leads to small alcove. Continue up the corner until the crack thins and step right on a sloping rail to a flake and pin. Pull the exposed mantel onto a mossy, dirty ledge. Belay to the right. Fixed belay.
2. 25m 5. 10 Climb the left hand crack on knobs to a large grassy ledge, fire straight up the thin crack with an exciting exit move. Traverse right with poor pro to a small roof in a right facing corner. Gear Belay.
3. 30m 5.10+ Let the hand jamming begin, trend left in the splitter crack, then a finger crack leading to a ledge. From the ledge trend right up the left facing corner to the steep groove. Fixed gear belay.

4. 25m 5.10- Continue up the right facing corner through blocky roofs, step right and belay in the splitter hand crack. Gear Belay.
5. 30m 5.11+ Steep hand jamming leads to a cruxy flare and a roof. Bust through the roof and cruise the 15m's of perfect overhanging hand jamming. Fixed belay.
6. 35m 5.11+ Step left pulling gently on the paper-thin flake. Climb the right facing corner to a wet off-width, do what you can to pull through this nasty section then trend right through overhanging terrain. Pull over the crest of the arête and scramble to the top. Fixed belay.

Day 8 - August 15th: Rest Day, scout out the approach to Bustle Tower and the beginning of Club International.

Day 9 - August 16th: Club International, 5.11b, 12 pitches.

From Mountain Project: *On the Southeast face of Bustle tower. 12 pitches of quality granite up one of the most aesthetic towers in the cirque. Named after route topo drawn on a girly magazine of the same name found in a waterproof case at the bivy site in Fairy Meadows. Left of the SE Face Route. Follows left facing dihedrals over a big drippy roof on pitch six. Goes free at mid 5.11, if pitch six isn't too wet. Do it in a day, or fix the first few pitches then fire it the next day.*

The Approach is an easy 1 hour hike from fairy meadows to the base of the southeast face of Bustle Tower. The squeeze chimney on pitch one and the roof on pitch 6 will be our indicators for finding the beginning of the route. We will begin hiking 1 hour before sunrise to ensure we have as much time as needed to climb and descend.

Pitch 1, 5.8, begins with a squeeze chimney and climb up and right. Pass a bolt and set up a gear belay.

Pitch 2, 5.10, climbs a left facing corner, over a small roof, continues on another left facing corner and then tops out to a fixed belay.

Pitch 3, 5.10, climbs double cracks in a right facing corner to a gear belay.

Pitch 4 climbs a 5.10 hand crack in a right facing corner to a belay consisting of one bolt and gear in the crack.

Pitch 5 continues up this crack until it peters out, when the climber must step left into a technical, mid 5.11 crack that is broken up by a 5.9 section. Fixed belay at the top.

Pitch 6 also goes free around mid 5.11 and climbs out the glorious roof and up to another fixed belay. A rope is meant to be fixed above and below the roof here for the descent. That way it's possible to get to the next rappel station station.

Pitch 7 climbs 5.9 terrain to a one bolt and gear belay on a ledge.

Pitch 8 climbs more 5.9 in a left corner that transitions into a right facing corner. In the middle of the corner is a bolt where gear can be placed to set up the belay.

Pitch 9 continues up the crack, which becomes low 5.10, and past a small roof. A gear belay can be set up on a ledge or on the rappel station that is on the face to the right.

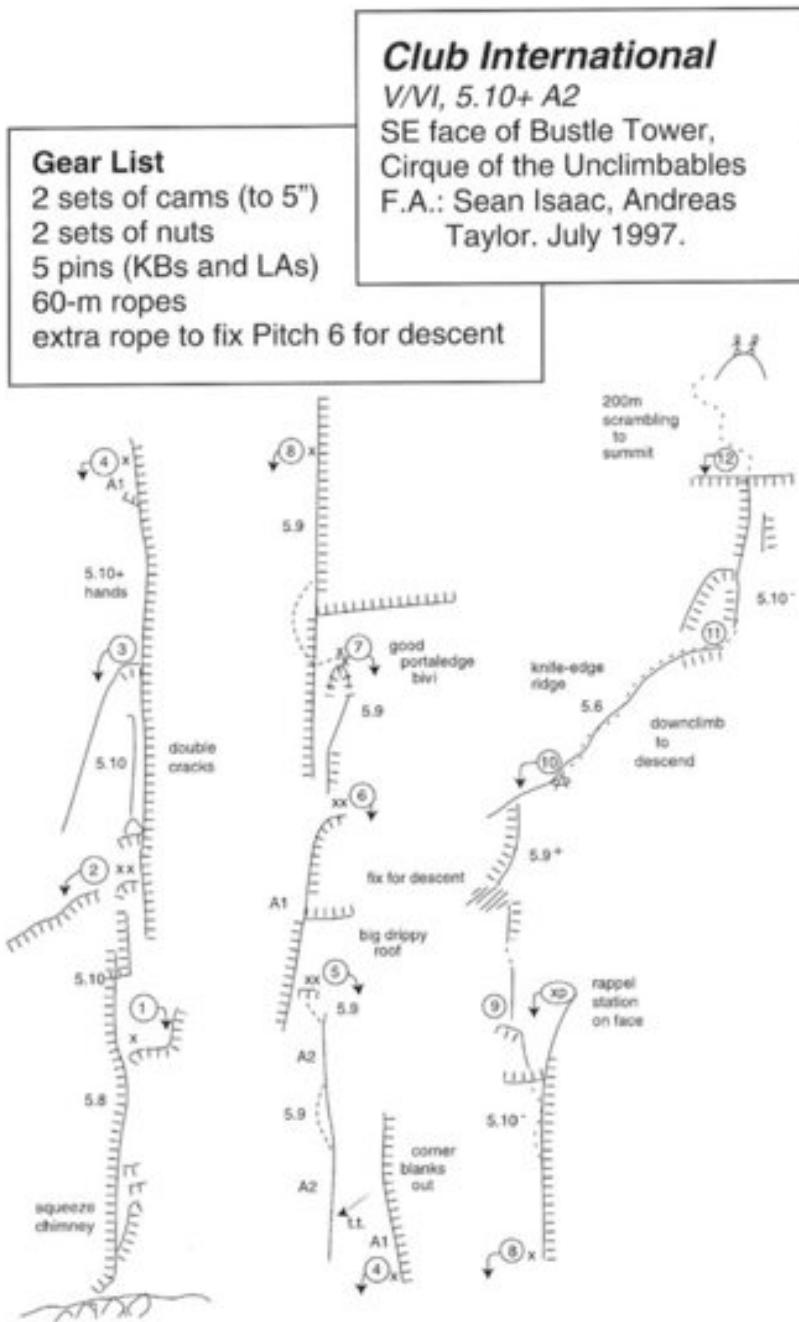
Pitch 10 climbs up a face crack and into a right facing corner. Gear belay at the top on a ledge.

Pitch 11 goes up a 5.6 "knife edge ridge" that trends right to a gear belay on a ledge.

Pitch 12 climbs a right facing 5.10 corner to a fat ledge. From here, it is 200m of scrambling to the top.

The Descent rappels the route at each belay station. The 5.6 ridge must be downclimbed. (We will use short roping techniques, down lead, and rappel whenever possible for this ridge section).

Gear Beta consists of (2-3) sets of cams from #00 to 5", (2) sets nuts, lots of long runners, and an extra 60m rope to be fixed for the pitch 6 rappel.



At this point, we will be splitting into two teams of two so we can tackle separate objectives that suit our individual skill sets better.

Day 10 - August 17th:

(Jack and Carson) Hike to Proboscis and Bivy - This approach involves a somewhat technical ascent up a sometimes icy ridge leading to the proboscis basin. We exchanged emails and had several phone calls communicating with CC grads David Fay and John Collis to gather beta about this tricky approach. At its worst, this ridge climb can involve several hundred feet of low angle ice (most the season it is snow). After talking with John and David, we decided that we would each carry one steel axe and strap-on crampons with the leader wearing steel crampons. John and David were able to ascend this section with only one steel axe, one aluminum axe and one set of aluminum crampons between the two of them, but per their advice, we have opted to all bring steel axes and wear crampons. We anticipate pitching this section out if the slope is in fact entirely ice. According to John and David, rock gear is available and they thought ice screws were not necessary. We plan to bring two 16cm screws as a precaution.

(Joe and Jamie) Restin'

Day 11 - August 18th:

(Jack and Carson)

Climb Proboscis, Women at Work - CC pride!

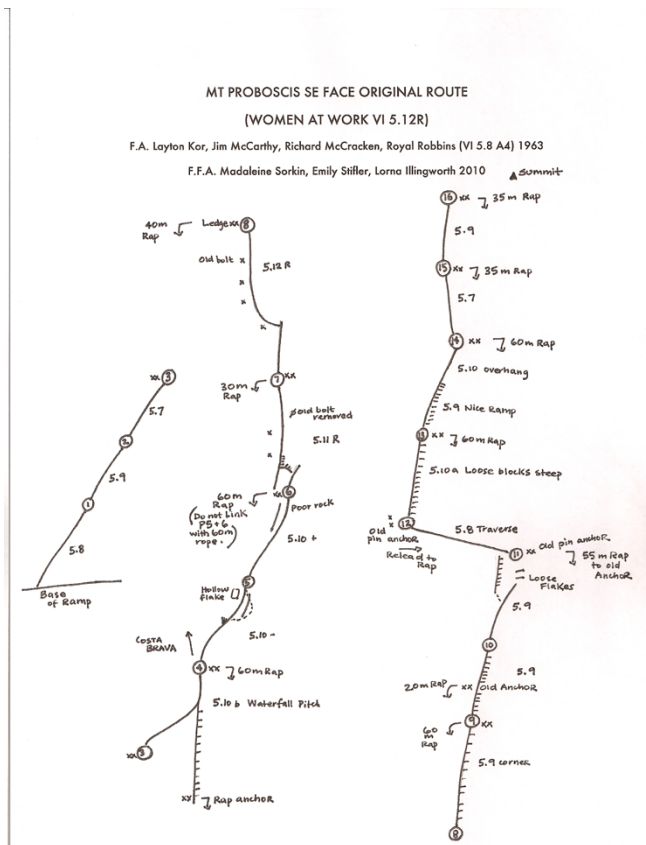
Women at Work (VI, 5.12 R) 16 pitches

This team was motivated to free climb the Original Route (13). After the route was completed, it was discovered that the Original Route goes straight up after pitch 11, while 13aa follows 13a left.

Hence 13a is 13 freed through pitch 11. It differs from 13a in pitches 5-8 (see photo).

FA: Madaleine Sorkin, Emily Stifler, Lorna Illingworth, 2010

FA (all free in one day): Katie Lambert, Ben Ditto, 2012



(Joe and Jamie)
Climb West Ridge East Huey Spire

Head around the left side of East Huey Spire from the Meadows, shooting straight up the grassy slope once you see the opportunity to go around the tower. Avoid excessive talus hopping. Once you reach the gully spilling out with snow you've found the start. After locating the gully on the southwestern side of East Huey, start making your way up it or the moss slabs to it's left. Your goal is the eventual arrival at the notch between East and Middle Huey Spires. It may be wise to rope up for sections of this approach if the moss is wet or the gully is icy. To gain the actual start we had a few very short technical roped pitches.

- P1) The beginning of the climb is easily identified as a wide easy corner at the notch. Move up this corner and continue climbing the mossy face to a small ledge. Look for a nut marking the last rap. (60m)
- P2) Climb out through flakes and face trending up past a large blocky system on the left. Make your way towards a large weakness above. Note the slung horn overhead for the rap. (60m)
Move belay above loose rock in the weakness to next face.
- P3) Shoot up and out the fun cracks (5.9), aiming for the top and easier climbing. (60m)
- P4) Easy fifth class takes you along the ridge to the summit block.
Descend the route.

Beta Photo:



Day 12 - August 19th: Carson and Jack hike back from Proboscis, Joe and Jamie rest

Day 13 - August 20th: Rest day/ built in weather day.

Day 14 - August 21st: Rest it up/ another budget weather day, also check out Terrace Tower approach.

Day 15 - August 22nd

(Joe and Jamie): White Tower, Terrace Tower, 5.11a, 7 pitches, III

From Mountain Project: *The aptly named White Tower climbs up the left side of the prominent white pillar on the east face of Terrace Tower. This route has become a popular (for the Cirque) day route as it is relatively uncommitting and holds great climbing on good rock. The first two pitches are throw-away, but the next four pitches up the steep wall more than make up for the bummer start.*

Pitches 1 and 2: Follow a weakness up and left to the base of the white pillar. 5.6

Pitch 3: Climb a wonderful crack in a left facing corner formed by the left side of the white pillar. This pitch has no real crux but the endurance pump feels about 11a.

Pitch 4: Climb through a dark overhang. When we climbed this pitch, it was dry which allowed us to free it at about 11a. Because of the dark rock, it's easy to imagine the pitch wet and therefore unfreable. If dry, grunt up the chimney using chicken wings. For pro, I remember less than optimal stoppers placed behind a wedged block.

Pitch 5: Climb steep cracks up the face. Belay on the left side of a huge ledge that is one pitch below the top of the wall. 5.10+

Pitch 6: Follow the same crack system up deteriorating rock to the top. 5.9

Descent: Rap the route using two ropes.

Gear Beta: 2 sets of cams with a few extra hand pieces. Set of nuts. Extra slings and double ropes.



(Jack and Carson) Light in August, Terrace Tower, 5.12-, 8 pitches, IV

From Mountain Project: *Light in August* climbs the right side of the prominent white pillar that makes up the east face of Terrace Tower. The White Tower climbs the left side of the same pillar. It seems a number of routes in the Cirque were named after magazines that were left for "male entertainment" in Fairy Meadows. *Light in August* was named after a book by William Faulkner.

Start as for the White Tower and climb two pitches of loose uninspiring rock to the base of the thin crack on the right side of the white pillar. 5.6

Pitch 3: Climb thin, highly technical cracks up a steep white wall to a fixed belay station. 5.12-

Pitch 4: Follow a widening crack into a strange, strenuous chimney that defies a free climbing rating (5.10+) and belay on a huge block.

At this point, it is possible to continue up the right side of the pillar up a grungy-looking right-facing dihedral. *Light in August* heads left up steep cracks in the center of the pillar.

Pitch 5: Climb a steep hand crack through a number of roofs until you can arrange a gear belay at a less than vertical stance. 5.11

Pitch 6: This is a short pitch and could be combined with the previous one. The hand crack becomes a thin flared, bottoming crack and splits a roof. Make cruxy moves over the roof and belay on a good ledge. 5.11+

Pitch 7: Follow the crack, which becomes easier as the rock becomes more featured, to the huge ledge 100 feet from the summit. 5.11-

Pitch 8: Move the belay to the right along the big ledge and climb the big left-facing corner, 5.8. A difficult mantle move guards the top. 5.10+

Descent: Rappel The White Tower, which tops out about 30 feet to the left of Light in August.

Gear Beta: 2 sets of cams and a set of nuts. Double ropes for rappelling.



Day 16 - August 23rd: Hike down from Fairy Meadows, catch the float plane out to Inconnu Lodge. We are provided with a complimentary stay at Inconnu Lodge on our way out where we can rest in a bed and call family members/ Ryan Hammes to inform them of our safe return.

Day 17 - August 24th: Drive from there back to Whitehorse.

Day 18 - August 25th: Fly back from Whitehorse to Vancouver, drive back to Portland, sleep in our cozy beds.

Appendix B- Equipment List

Equipment List

Backpacking: Individual Gear

Upper Layers

- 1-2 Synthetic T-shirts
- 1 Base Layer (Long Underwear Top)
- 1 Fleece
- 1 Soft Shell
- 1 Heavy Insulated Jacket (Puffy)
- 1 Raincoat (Goretex)

Bottom Layers

- Synthetic Underwear
- 1 Base Layer (Long Underwear Bottoms)
- 1 Pair of Fleece or Insulated pants
- 1 Pair of Rain Pants
- 1 Pair of synthetic pants

Footwear

- 1-2 Pairs of Wool Hiking Socks
- 1 Pair of Approach Shoes
- 1 Pair of Camp Shoes (closed-toe sneakers or crocs)

Miscellaneous Clothing

- 1 Sun Hat or Baseball Cap
- 1 Fleece or Wool Hat
- 1 Pair of Fleece or Wool Gloves

Sleeping Gear

- Sleeping Bag (rated to 0-15 degrees Fahrenheit)
- Sleeping Pad
- Sleeping Bag Compression Stuff Sack

Packs and Bags

- Internal Frame Pack (Volume of 5,000 to 7,000+ cubic inches)
- Small Stuff Sacks (optional)
- 1-2 Waterproof Bag Liners (trash compactor bags) OR Rain Cover for Backpack

Miscellaneous Items

- 1-2 Bandanas
- 1 Waterproof Watch with Alarm
- 3 Headlamps with extra batteries (one of which will be in climbing pack)
- 1 Pair of Sunglasses
- 1 Compass with Mirror
- 1 Whistle
- 1 Camping Bowl
- 1 Plastic Spoon
- 1 Insulated Mug
- 2-3 1-Liter Water Bottles

SPF Lip Balm
Toothbrush/Toothpaste

Group Gear:

1 4-person tent (body, rain fly, stakes)
Tent repair kit
P-chord
Dromedary
Duct tape
Small sewing kit
1 MSR Whisperlite stove
Whisperlite repair kit
3 20 oz. fuel bottles(filled with white gas)
3 Lighters
1 Pot
1 Pan
Cooking utensils
Pocket Knife
4 bear canisters/ bags
Sunscreen
Hand sanitizer
1 can bear spray
1 trowel
Water purification- 7 bottles of iodine
Maps
Topos
InReach Device

First Aid Kit

General Supplies

Nitrile Gloves: 5 pairs
12 cc irrigation syringe: 1
Trauma shears: 1
Tweezers: 1
SOAP notes: 5
Safety Pins: 6
WFR Book: 1
Ziplock bag: 4
Emergency Blanket: 2

Drugs/Meds

Ibuprofen: 60 pills
Pepto Bismol: 30 pills
Acetaminophen: 30 pills
Tincture of Benzoin: 5 ampules
Iodine towelettes: 10
Triple antibiotic ointment: 1 tube

Wound Care/Bandaging

Antiseptic towelettes: 25

3" conforming gauze roll: 4
3 x 3" sterile gauze pads: 5
2 x 3" non-adherent dressings: 3
3 x 4" sterile gauze pads: 5
Trauma Pads: 4
Transparent Dressing: 4
Closure strips ("steri-strips"): 3 sets of 4+ strips
Ace Elastic bandage: 3
Triangular bandage: 5
2nd Skin 2 x 3 pad: 6
Band-aids: 10
Butterfly bandages: 5
Sterile Cotton Tipped Applicator: 10
1" tape roll: 1
1.5" Athletic tape roll: 2
Moleskin 2 x 3: 6

Group Climbing Gear

4 70M twin/half climbing ropes
1 extra 60m rope
2 racks of singles of BD Camelot C4 .3-4, with Doubles of.5-3
2 racks of single set of TCU's (or equivalent small cam)
2 Set of stoppers (1 set tapered, 1 set offset)
4 20 ft 7mm cordelette
14-16 locking carabiners
8 quickdraws
20 alpine draws
2 16cm ice screws (for Proboscis approach, see itinerary for details)
Helmets for everyone
Approximately 60 ft of 5mm accessory cord for making emergency rappels, and performing standard rescue rope procedures (ie. spider anchor buddy rappels, escaping belays...) also for the bear hangs
2 small knives (for cutting accessory cord or pre-existing cordage on route if necessary)

Individual Climbing Gear:

1 harness
1 helmet
1 pair of climbing shoes
1 ATC Guide or Reverso with locking HMS carabiner
1 Personal Anchor System (PAS)
1 Prussic cord, triblock, or both
1 Double length runner
1 Extra Locking carabiner
1 Chalk bag
1 nut tool
Athletic tape
1 10L-20L climbing pack
1 pair crampons (for Proboscis approach, see itinerary for details)

Appendix C- Food List

FOOD	POUND	PRICE/LB	TOTAL(\$)
Breakfast:	Pounds	Price/LB	Total(\$)
Granola	8	\$5.04	\$40.32
Hash Browns	4	\$5.33	\$21.32
Oatmeal	4	\$3.80	\$15.20
Lunch:			
GORP Mix	4	\$7.22	\$28.88
Dried Apricots	6	\$8.41	\$50.46
Cashews	2	\$8.16	\$16.32
Dried Mangoes	6	\$7.50	\$45.00
Beef Jerky	10	\$10.69	\$106.90
Chocolate	2	\$9.94	\$19.88
Summer Sausage	4	\$9.40	\$37.60
Sharp Cheddar Cheese	4	\$22.00	\$88.00
Dinner:			
Rice	8	\$2.70	\$21.60
Indian Fare	11	\$9.70	\$106.70
Potato Pearls	4	\$3.00	\$12.00
Dried Veggies	4	\$7.82	\$31.28
Pinto Bean Flakes	4	\$6.74	\$26.96
Pasta	4	\$3.00	\$12.00
Sauce Mix	2	\$4.00	\$8.00
Drink Mixes			
Coffee	4	\$7.50	\$30.00
Electrolyte Mix	4	\$8.30	\$33.20
<u>Totals</u>	<u>103</u>		<u>\$751.82</u>

Appendix D- Budget

Budget

Transportation: 4612.20

Transportation is without a doubt one of the main cruxes of this expedition. The Cirque of the Unclimbables is remote, and geographically far from the U.S border making transport expensive and multifaceted. All told, there will be four stages of travel before we arrive at our basecamp.

- First we will meet in Portland Oregon where we can make final gear preparations, and get packed up.
- Once packed up, we will drive to the Vancouver, BC airport (approximately 5-6 hours depending on Seattle traffic)
- From the Vancouver airport, we will fly via Canada Air to Whitehorse, YT. From here it is a relatively short trip to the rendezvous point for Kluane Air, which can be made via car rental or shuttle.
- Once in Whitehorse, we will rent a car and drive to Kluane air's operation base on Finlayson Lake. This takes about 5 hours
- Once at Finlayson, Kluane air can charter us into the Glacier lake drop off point at the base of the Cirque of the Unclimbables. From Glacier lake, it is a 7 hour hike to the fairy meadow base camp area.

Car Rental: \$600 (for small car)

Round trip flight to Cirque: \$2,812.20

Flights from Vancouver BC to Whitehorse: approximately \$275 each, so \$1100 total

Fuel round trip from Whitehorse to Finlayson Lake- 660 miles x ~25 miles/gallon x .91 cents/liter x .264 gallons/ liter = \$100

Food and Fuel: \$932.77

Bear Bag Rental (\$31.00/ bag rental x3)- \$93.00

Iodine (4 L/per/day x 2 tablets/ L x 4 per. x 14 days / 50 tab/ bottle= ~7 bottles, \$6.95x7)- \$48.95

Stove Fuel (3 x \$12.95/ 32 oz. bottle)- \$ 39

Food (see food list)- \$751.82

Maps and Books

Professional Alpinist Mark Smiley published a short pamphlet about transport and general strategy in designing expeditions to the Cirque. This has been a useful resources and is available online for free. George Bell's Guide to the Cirque of the Unclimbables is another online resources that has links to route lists, topos, and several articles published by climbers regarding climbing strategies and logistics info for the area. NAD GPS Maps of the Cirque can be attained in Portland, Online, or in Whitehorse.

Communication Device Rental- N/A

Permits/Fees- 451.46 = 112.86 x 4

A backcountry camping permit will be necessary due to our extended stay. The most efficient permit usage will be to purchase the annual pass for the Nahanni National Park Reserve.

Total Funding Request: \$5996.43

Per Person- 1499.11

Cost Minimization Measures

The remote nature of the Cirque of the Unclimbables provides difficulty in access. The location of the access point and our busy schedules does not allow us sufficient time to drive all the way to Whitehorse. By flying into Whitehorse from Vancouver, the plane ticket is much less expensive than flying from the U.S. and we are provided with a longer window to climb. Additionally we will hike from Glacier Lake to Fairy Meadows to reduce the cost of an additional flight to our basecamp. Kluane Airways provides a satellite phone for no extra cost for emergency communication and Jack already owns an InReach device, both of which eliminate the rental costs. Whitehorse provides a good gear organizing location where groceries are relatively inexpensive (in comparison to other Yukon towns) and other last minute gear is readily available.