

Breasts on the West Buttress
Climbing the Great One for a great cause



Nancy Calhoun, Sheldon Kerr, Libby Bushell
A Ritt Kellogg Memorial Fund Proposal

Table of Contents

Mission Statement and Goals	3
Libby's Application, med. form, agreement	4-8
Libby's Resume	9-10
Nancy's Application, med. form, agreement	11-15
Nancy's Resume	16-17
Sheldon's Application, med. form, agreement	18-23
Sheldon's Resume	24-25
Ritt Kellogg Fund Agreement	26
WFR Card copies	27
Travel Itinerary	28
Climbing Itinerary	29-34
Risk Management	35-36
Minimum Impact techniques	37
Gear List	38-40
First Aid Contents	41
Food List	42-43
Maps	44
Final Budget	45
Appendix	46-47

Breasts on the West Buttress: Mission Statement

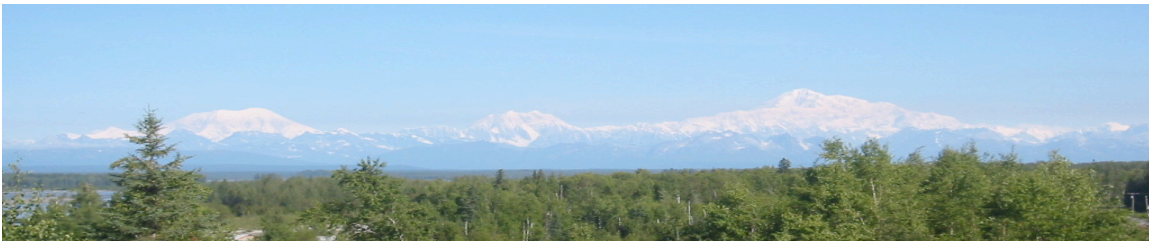
It may have started with the simple desire to climb North America's tallest peak, but with a craving to save the world a more pressing concern on the minds of three Colorado College women (a Vermonter, an NC southern gal, and a life-long Alaskan), we realized that climbing Denali could and should be only a mere stepping stone to the much greater task at hand. Thus, we've teamed up with the American Breast Cancer Foundation, an organization that is doing their part to save our world, one breast at a time, in order to do our part, in hopes of becoming role models and encouraging the rest of the world to do their part too.

So here's our plan: We are going to climb Denali (Mount McKinley) via the West Buttress route in June of 2006. In doing so, we are raising money for the American Breast Cancer Foundation*, in order to fund specific gear and training costs for our climb and raise substantial funds for breast cancer treatment and prevention.

By turning our climb into a fight against breast cancer, a disease to which no woman is immune, we will fulfill our goals of: helping to create a healthier and less breast cancer world; funding our own climb, which under our limited budgets, would be otherwise impossible; and being role models for other women to take on the task of saving the world and showing just what we can do when the stakes are high and so is the summit. We want the world to know that no task is too great for a woman, whether it's conquering a fatal disease, helping someone else battle that disease, or standing at 20,320 feet, the highest point in North America.

We are proposing a Ritt Kellogg Memorial Fund grant because the funding we hope to receive from this endowment will limit the expenses we have to deduct from the money we will have raised for the ABCF, and the more we can limit our expenses, the more lives we can save. We feel that our goals align with the mission of the Ritt Kellogg endowment in that we've challenged ourselves not only by pushing our bodies and minds to limits (and altitudes) never before reached, but that we've imagined a way to include a much broader scope of mission, allowing ourselves to be role models for all kinds of people taking on their own unique tasks and adventures.

We hope that in the pages to follow, our dedication to this endeavor will be realized. Through explanations of steps that have already been taken, as well as proposals for what needs to happen next, our dreams of the alignment of conquering breast cancer and standing atop a mountain will be conveyed.



* See Appendix (a) for up-to-date fundraiser information

Elizabeth (Libby) Bushell



Born and raised in ██████████ grew up with an appreciation for mountains and glaciers that can be classified more as a deep-felt awe and nostalgia for their inspiring beauty. Since living in Colorado, I've taken my love for the outdoors to the next level, spending as much time as I can out there, and leading others towards discovering their own appreciation that all wilderness warrants. I've explored the outdoors on every device and by every means I can think of (for the most part), and yet I find myself wanting most to be up high, suspended above the trees and valleys, having carried myself there on my own two feet. When I can see that endless expanse of wilderness that is sprawled out beneath a mountain's summit, untouched by civilization, Hummers, or smog, that's when I know I'm where I was meant to be; in the wild. It's that need that has driven me to explore and profess my appreciation and love to the wild that drives me now, to the white expanse of the Alaska Range, mountains I've stared at, longed for, and cannot wait to climb!

Wilderness Education/Qualifications:

Mount Aspiring College *Outdoor Pursuits*, Wanaka, NZ (2002): semester-long course including leadership and problem solving skills as well as mountaineering,

snowboarding, backpacking, kayaking, rock climbing and avalanche assessment skills

Mountaineering Course Wanaka, NZ (2002): One-day skills session focusing on self-arrest, snow-pro, snow climbing and avalanche assessment

Spirit of New Zealand Sailing Course NZ (2002): Ten-day leadership/sailing voyage

ORC Leadership Training Colorado College (2004): Semester-long leadership training including but not limited to: soft-skills, winter camping, stove maintenance, backpacking leadership techniques, LNT, trip-planning, gear-fitting, etc.

AVY 1, Colorado (2004)

Swiftwater Rescue Talkeetna, Alaska (2005): Three-day swiftwater rescue course including pulley systems, water rescues scenarios, first aid/CPR, risk management
Mountaineering Course (AMS) Talkeetna, Alaska (2005): 12-day course which included: winter-camping, glacier travel, crevasse rescue, expedition behavior, and lots more. (See AMS syllabus for more details).

***Glacier Travel/Crevasse Rescue** Colorado (2006): Ritt Kellogg Fund course

Outdoor Work Experience:

Talkeetna River Guides Alaska (2005): Guiding oar-rigs down class I/II rivers in AK
ORC Gear Room Colorado College (2004-present): Tuning skis, repairing stoves, etc.

Outdoor Leadership Experience:

Outdoor Recreation Committee (ORC) Colorado College (2004-present:

Positions Held: Social Chair (2004), Food Chair (2004), **Co-Chair** (2005-6)

Trips Led: Coyote Gulch, UT, 2004, int. (5 days); Tabegauche Pk, 2004, int. (5 days); Triangle Traverse (Rainbow Hot Springs), 2004, adv. (5 days); Sledding and Sand Dunes, 2004, beg. (2 days); Caving Manitou 2004, beg. (1 day); Westwater Kayaking/Rafting 2004, int. (5 days); Mt Snowmass 2005, adv. (5 days); Caving Manitou 2005, beg. (1 day)

Personal Outdoor Experience:

Numerous camping/hiking/snowboarding/telemarking/rock-climbing/rafting/mtn. biking trips on Alaska's Kenai Peninsula, the South Island of New Zealand, Corsica and the great states of Colorado and Utah, including but not limited to: Tabegauche and Shavano Peaks, CO (2 days), Pikes Peak, CO (1 *long* day), Canyonlands Maze District, UT (8 days), Woznesinski River, AK (1 day), Devil's Pass/Resurrection trail, AK (3 days), The Copeland Tramp, NZ (2 days), Matukituki Valley/Mt. Aspiring foothills, NZ (2 days), and *la Mare-e-Monti* trek in Corsica (7 days)

Medical Training

WFA Colorado (Jan. 2004)

CPR Colorado (Mar. 2004)

***WFR** Colorado (Jan. 2006)

* Indicates the future (courses in which I'm enrolled)

Nancy Calhoun



Whether camping, hiking and exploring with friends, or being squashed into a van for dozens of grueling hours, embarking on geology field trips where exploration and personal discovery is nestled not just in the history of the rocks, but in the trees, the sky, the vistas, I am perpetually captivated by wilderness, and long to continue to learn from it. Growing up in ██████████, and attending high school at the Groton School in Massachusetts, I am now a junior and a geology major at Colorado College. The other members of BOTWB, Sheldon Kerr and Libby Bushell are two friends I've made while skiing, hiking, camping, planning trips, and learning. Our shared love of the outdoors has brought us together for many adventures. The two issues we're tackling with equal zeal and effort, are the Great Mountain and a great fight: the fight against breast cancer. To surmount this disease, we must further our knowledge of it and support those afflicted by it. To surmount Denali for me is to further flood the gates of equality for women everywhere. The opportunity to climb Denali is my way of challenging myself in a way women weren't allowed to in the not-so-distant past. Climbing Denali represents many life-goals and principles I seek and value: self-discipline, challenges mentally, physically and emotionally, and working together for a common goal. The opportunity to fight breast cancer's scary grip on women now and for the future, is a challenge of great importance and potential. As Denali looms above the clouds, breast cancer looms in my future and in the lives of all those women who surround me, and I won't accept this fear.

Wilderness Education and Qualifications:

-3-week kayak, rafting, backpacking and cultural course in Costa Rica, through Moondance Company, 2001.

-10-day rafting through the Grand Canyon (from Lee's Ferry to Phantom Ranch with Class V rapids; and hike out) w/ Grand Canyon Youth Company, 2001.

- Northern Talkeetna Range, Alaska: 110-mile backpack, 30-day NOLS course, 2002.
- ORC Leadership Training: Semester-long training with focus on soft-skills, backpacking skills, wilderness codes of conduct, and planning trips, 2003/4
- AVY 1 Training Course: March, 2004.
- 3 10-day Geology field trips (with 5 others which were 4 days or less): 1 in Grand Canyon region, 1 all over New Mexico and 1 in Colorado front range; these consisted of day hikes and camping in variable conditions (mostly partial car-camping mixtures).
- *Glacier Travel-Crevasse Rescue: 5-day course in CO through Ritt-Kellogg Fund (Jan. 2006)

Outdoor Leadership Experience:

- Canyon country, UT: 5-day ORC Trip, Muddy Creek Loop, 2004.
- Ouray, CO, Twilight Peak FOOT Trip: 5-days; (1 of which was in an unexpected snow storm; so chose to do alternate route in Great Sand Dunes Nat'l Park).
- The Maze District, Canyonlands, UT: 8-day canyoneering and backpacking, self-led trip, 2004.
- The South Island, New Zealand: The Routeburn, Greenstone, Copeland, Jackson's Bay and Matukituki River Valley tracks and trails (15 days total, all self-led); 2005.

Personal Outdoor Experience:

- Summitted Mt. Antero, CO 14er (Class III/IV): 4-day Pre-orientation trip.
- Summitted Castle Peak, CO 14er (Class II): day hike.
- Maroon Bells, CO: "3 Pass Loop", 5-day (FOOT Trip), 2003.
- Mt. Sneffles Area, CO: 5-day backcountry ski trip, 2004.
- Big Sur, California and Joshua Tree, California: 3-day backpacking loop and 3-day loop respectively w/ ORC, 2005.
- Lake Powell, AZ: hiking/backpacking adventure 5-days, 2005.
- NW New Mexico, 5-day backpacking trip, 2004.

Medical training:

- WFR Certification: WMI Issued: 1/14/2004; Expires:1/14/2006
- CPR Issued: 1/14/2004; Expires: 1/31/2006
- *WFR Recertification: HMI course: 1/11-1/13 2006

*Indicates the future (courses in which I am enrolled)

Sheldon Kerr



I find myself with an important role to fill as I join this expedition. I am the Vermonster. This means that I come from a place that manages to cultivate a profound respect for the earth while navigating ice storms that last weeks and temperatures that plummet to well below negative thirty five (not to mention a mud-season that renders attempts to reach school, grocery stores or gear co-ops futile for a few weeks of Spring). This is also the land of peace, love and tofu. It is a place that engenders humility while also demanding great accomplishment. So the Green Mountains have pointed me to the Great One and these great women. The lifetime of relying on friends, neighbors and family to get through those winters has brought me to my climbing partners, Libby and Fancy. And, perhaps most importantly, the experience of coming-of-age in a place where the well-being of myself is inextricable from the well-being of my fellows has brought me to Breast Cancer. This disease is a great one; especially for those who are not acknowledged as deserving of care because of their gender, race, nationality or socio-economic status. When I stand on top of that peak with those two women that I am so proud to call my teammates in this climb and teammates in this fight for our lives, I will be doing it as a woman, as a climber and as a Vermonster; an outdoorswoman hell-bent on recognizing climbs within contexts: contexts of male-dominated sports and male-dominated health. I want to climb this mountain to say women deserve to climb and women deserve to overcome disease. I want to hand people their own sets of tools: mammograms, chemotherapy reconstructive surgery. And in order to do this, I am asking the Ritt Kellogg Fund to look at its own tool belt and see if there are weapons that it could lend us in this fight so that we might climb the Great One for this great cause.

Wilderness Education/ Qualifications:

Merrowvista Outdoor Education Center, New Hampshire: Five summers as a participant in outdoor-leadership based curriculum and expeditions. This included multi-week rock climbing, backpacking, white water paddling and road biking focused on cultivating technical skills, risk management, group work and wilderness education in the White Mountains of New Hampshire.

Glacier Travel/Crevasse Rescue Course Colorado (2005): Ritt Kellogg Fund course.

Mountaineering Course (AMS) Talkeetna, AK (2005): 12-day course which included winter-camping, glacier travel, crevasse rescue, expeditions behavior, risk management, health concerns and Denali tutorials specifically geared towards a three-woman expedition (not to mention hula-hooping lessons from Alli Barker).

AVY 1 Colorado (2005)

AVY 2 Utah (2006*)

Outdoor Work Experience:

Merrowista Outdoor Education Center, New Hampshire (Summer 2005): Leader in the Trailblazer Program and Outdoor Skills Specialist. Responsibilities included teaching windsurfing, rock climbing, and wilderness skills as well as leading multi-day backpacking and canoeing trips for groups of ten.

Alaska Mountain Guides, Alta, Utah (Winter 2005/06): Winter internship. Responsibilities include assisting guides on backcountry skiing, winter camping, ice climbing and mountaineering trips as well as general administrative office work.

Outdoor Leadership Experience:

Outdoor Recreation Committee, Colorado College (2004-present): Leader through the independent training program. Led trips with both Libby Bushell and Nancy Calhoun, which included a five-day freshman orientation trip in the mountains near Ouray Colorado, a three-day Sand Dunes backpacking trip in Colorado and a ten-day backpacking trip in Big Sur California.

Personal Outdoor Experience:

Paddling: 10-day kayaking trip on Lake Champlain of Vermont in the summer of 2002; Day trips white water kayaking on the Arkansas in Colorado; Overnights in the Chesapeake Bay area, and along the Maine Island Trail

Biking: Two-week trip along the coast of Maine in the summer of 2001; Century days touring in Vermont; One month spent cycling the perimeter of Nova Scotia in the summer of 2001

Backpacking: Week-long trips on the Appalachian Trail of New England; Through-hike of Vermont's 280+ mile Long Trail in 28 days (solo) in the summer of 2002; Various overnights in the Green and White mountains as well as the Rockies; 5-day trip in the Sangre de Cristo Mountains of Colorado, Spring 2004; Many summits of Colorado 14ers; 5-day trip in Coyote Gulch of Escalante, UT

Climbing: 10-day trail building and climbing trip in the Spring of '04 through the Rocky Mountain Field institute; Day trips in the Garden of the Gods; Ice climbing trips in Little Cottonwood Canyon and Provo Canyon of Utah

Winter Camping: Overnights in the Wahsatch of Utah; Overnights in the Rockies

Backcountry Skiing: Single day trips in Grizzly Gulch of Utah and Pikes Peak of Colorado; 5-day telemarking hut trip in the Mt Sneffles area of Colorado

Medical Certifications:

WFR, Colorado (January 2005)

Lifeguard, New Hampshire (June 2005)

CPR, Colorado (September 2005)

Travel Itinerary
(Including predicted costs)

Duration of trip ensures adequate rest, so that we're in top shape by the time we get to Talkeetners

Mon. May 22: Graduation in C. Springs, buy non-perishable foodstuffs

Tues. May 23 – Fri. May 26: Drive to Homer, AK. Buy boot liners at AMH and remaining food items in Anchorage.

Sat. May 27-Mon. May 29: Break in liners, dehydrate/divvy up food, last minute stuff

Tues. May 30: Drive to Talkeetna. Stay at friends' places. Say hi to AMS folk.

Wed. May 31: Register, get permits, check in with T.A.T., Do last minute stuff.

Thu. June 1: Proposed date of flight to Kahiltna Base Camp.

Travel expenses and reasoning behind them:

-Total driving costs (CO Springs to Homer to Talkeetna to CO Springs) = \$687

Expenses calculated by: Number of miles (3511 + 323 + 3317) divided by gas mileage (25 mpg avg. on Nancy's Subaru*) divided by average gas price (USA, December avg. = \$2.21/gal. We calculated the number \$2.40 to make up for heightened gas prices in Canada and possible price changes in June)

One-way ticket back to Denver = \$175 for Sheldon who is taking a B block course, and needs to get back to CO sooner than we would be able to drive.

Total travel costs (not including Air Taxi service) = \$862

Air Taxi (from Talkeetna to Kahiltna Base Camp and back) = \$425 each = **\$1275** total
(Prices for Talkeetna Air Taxi)

Total travel expenses = **\$2137**

Efforts to reduce costs:

-When compared to costs of plane tickets (\$360 per person, roundtrip, American Airlines is \$1080 total), by driving, we're saving \$218, a significant chunk of change.

-Nancy's is the most fuel-efficient of our three vehicles (although Libby's is the coolest)

Climb Itinerary

Day 1: Arrive in Talkeetna the previous night, purchase any last minute items, check in with air service for departure time.

Day 2: Talkeetna to Kahiltna Base.

Elevation: 7,200feet

Distance from Talkeetna: 60 miles (6,850 ft gained)

Dress for the glacier, register with NPD, pay fee and pick up the glorious CMC's, organize gear at air service for flight in; fill out fuel card; fill bottles, fly with TAT to Kahiltna base, register with camp manager, collect fuel. We will leave a three-day cache of food and fuel buried deeply behind the base manager's tent in anticipation of weather, which might delay our departure at the end of the climb. We will also attempt to begin our switch to night schedule by sleeping during the day and preparing to climb at night.

Hazards: Crevasses have been known to open in camp, although it is unlikely. We will stay within the confines of the established camp and probe. The second hazard is one of a great altitude jump from Talkeetna. To prevent any altitude-related illness or discomfort, we will consume a lot of water upon our arrival and spend a night acclimatizing before moving up the mountain.

Human Waste: We will use the pit latrines and adjacent pee holes in camp taking care not to create additional unsightly yellow spots about camp.

Day 3: Spend the day practicing crevasse rescue; anchors, load transfer, ascending...etc. Go to bed early to prepare for an early start.

Day 4: Kahiltna Base to Ski Hill

Travel 7,200-7,800 ft

Distance: 5.5 miles (600 feet gained)

Travel: We will leave camp by 3:00 am and descend from Kahiltna base down Heartbreak Hill. The route goes wide where the southeast fork meets the main Kahiltna, in order to avoid the crevasses, which exist on the south side of Mount Frances. After this junction, a decision will be made between a direct route through the crevasse field immediately west of Mount Frances or traveling further west, staying on the un-cracked center of the ice flow. We will make this decision depending upon the condition of the glacial cracks we find.

Hazards: When icy, Heartbreak Hill can be a mess for skiers new to roped travel. We will head off the frustration and potential for injury by practicing skiing roped-up with sleds on icy terrain long before we get to Alaska. The lower Kahiltna should be avoided during the hottest parts of the day (especially in June when we plan to climb). We will consequently plan our day to arrive at camp by 10:30 in the morning. Another reason to travel at night is that this section has the largest crevasses and snow bridges which will be firmest during the coldest hours. We will have to pick our route carefully, probe when necessary and, as everywhere on the mountain, pay close attention to preventing crevasse falls (picking good routes, scanning for crevasse evidence) and being prepared should they happen (good rope tension and communication, gear slung in the correct fashion, warm layers on the top of the pack, prussics tied ...etc).

Camp: We will set up camp at the very base of ski hill in the compression zone of the glacier which is less prone to crevassing due to its concave formation. We will probe carefully and wand our camp.

Hazards of Camp: Very few hazards exist at this camp, however, we will fortify our camp with snow walls in preparation for bad weather and make to sure to stay hydrated.

Human Waste: We will bag our solid waste and deposit it in a crevasse not far from ski hill. Any travel outside of our camp will be roped. Additional garbage will be carried to 11,000 feet and cached.

Day 5: Ski Hill to below Kahiltna Pass

Travel: 7,800-9,700

Distance: 2.5 miles (1,900 ft gained)

Travel: From camp, the route travels up the less-crevassed center, angling slightly north at the top toward Kahiltna Pass. We will wand this section well to aid in the descent and then ascend the following day. We will cache at the Upper Kahiltna Glacier and then return to previous camp.

Hazards: This is another section which necessitates night travel in order to avoid soft snow and heat fatigue. Weather will be a concern as air masses from the north and south funnel through Kahiltna Pass. Whiteouts are common as conditions worsen the further up-glacier one travels. It is easy to stray too far east (right) and expose ourselves to serac fall so we will be paying close attention to ensure that that does not happen. A north-south bearing in a white out will help to ensure serac avoidance (we will position the compass-reader in the back and charge her with keeping the team in line).

Day 6: Ski Hill to below Kahiltna Pass

Travel: 7,800-9,700

Distance: 2.5 miles (1,900 ft gained)

Travel: Following the same route as the previous day, taking up wands along the way.

Camp Hazards: This area has high winds, which necessitate fortified walls. The crevasses are not exceptionally visible in this area but do certainly exist and as such, careful probing and wandering will be necessary. We will also take care to avoid exposure to ice falls along the east flank of the glacier.

Human Waste: We will deposit our waste into crevasses found near camp or along the base of the ridge to the east.

Day 7: Kahiltna Pass to Motorcycle Hill

Travel: 9,700-11,000 feet

Distance: 1.5 miles (1,300 feet gained)

Travel: Follow the route gradually rising until winding around a corner to the east, then ascending steeply east and then north into camp.

Hazards: There is an avalanche debris zone coming off the ridge to the north and south, which will need to be avoided. In a white-out, making the turn is very difficult and is made more-so by errant wands.

Camp: Camp is found in a small basin at the base of Motorcycle Hill.

Camp Hazards: As this is a staging area for surpassing Windy Corner, it tends to fill with expeditions as people wait their turn to go up. This social scene may cause climbers

to adopt a casual attitude, which inspires them to walk about to visit each other un-roped. We will not be so brazen, we assure you. This camp is also the place for pulmonary edema so we will keep a watchful eye for any signs of that. Icefall hazards also exist east of camp and will inspire us to camp farther west to avoid an encounter. The ridge west of MH has had slab avalanches so we will choose a protected location below a vertical rock band on the face.

Human Waste: There are deep crevasses northwest of camp that will suit us just fine.

Notes: We will cache one day's supplies for the return trip and may also cache our skis depending on the snow conditions. Snowfall here is great so markers must be tall. CB radios may be rendered useless from this point on.

Day 8: Rest day.

Day 9: Motorcycle Hill through Windy Corner

Travel: 11,000-13,500

Distance: 1.75 miles (one way) (2,500 feet gained, then lost)

Travel: The route to our cache at 13,500 begins by climbing straight up Motorcycle Hill. After that steep pitch, the route snakes west and skirts below (north of) the rocky summit of Squirrel Point. The route then climbs to a plateau before windy corner. This stretch is .5 miles and traverses the base of the West Buttress to its southern (right) corner; Windy Corner. If we turn the corner further up to the buttress we will be better able to find the route through the crevasse field that lies ahead. The 13,500-foot camp will become apparent on the right. We will cache here and head back down to the previous camp for a push past this camp the next day.

Hazards: The section around Squirrel Point and the rise before windy corner may be icy enough to warrant the use of running protection. Windy Corner is, of course, a hazard as well. The wind in this area can be as strong as 100 miles per hour. The long tails of snow blowing off Squirrel Point will indicate the presence of high winds at Windy Corner. In stormy conditions, we will lay low at our Motorcycle Hill camp until the weather clears. The plateau before the corner is riddled with crevasses covered by only thin layers of wind-blown snow so we will travel with caution and be prepared for a fall. Around the corner, we will be incredibly exposed to wind and a steep, icy slope. This, coupled with the fact that sleds pull a person off balance (we will lessen this effect by using crampons, ice axes, and packing our sleds lightly), means that running protection will be used (we will take the prussic knots off the rears of our sleds to help speed the process of passing through running protection. Another concern is rock fall and avalanches off the buttress. As most climbers begin to feel the effects of altitude at this point in the climb, we will be lessening the load by caching and doubling back, as well as staying very well hydrated, and watching for signs of altitude-related illness.

Camp/Cache: The camp is located .5 miles east of windy corner between large parallel crevasses.

Camp Hazards: The area is greatly crevassed. There is risk of glacial advancement, collapsing bergschrunds, and buttress avalanches.

Human Waste: The deepest crevasse on either side of camp will be used for this purpose.

Day 10: Motorcycle Hill to Basin Camp**Travel: 11,000 to 14,200****Distance: 2.75 miles (3,000 feet gained)**

Travel: We will repeat the previous day's route past our cache at 13,500. The climb from our cache will be short and moderate. Depending on the stability (or existence) of the snow bridge over a huge crevasse immediately before camp, we may either walk across the crevasse straight to camp or go the left, northern, end of the crevasse to cross into camp.

Hazards: Same as previous day.

Camp: Camp is nestled in a large plateau. There is relative protection from the wind and as such makes a great spot to hang for four nights or so to acclimatize.

Camp Hazards: Weather conditions can be extreme at this point on the mountain. Many of the storms have 50 mile winds and 3-5 feet of snow may fall during the course of a day. At night, the temperature may drop as low as -20. The crevasse danger within camp is nil but any place with a casual attitude and an unwaded perimeter should raise suspicion. We will spot probe our site and any paths we intend to use to other camps, the latrine or the NPS camp. Avalanches from the West Buttress are also a danger in this camp. This altitude will be the place where we start to feel mild AMS symptoms (headache, nausea, sleeplessness, shortness of breath). We will leave a well-marked cache with sleds, food and fuel for the descent at this camp.

Human Waste: We will use the two pit latrines and adjoining pee holes located at this camp.

Day 11: Pick up cache at 13,500 feet.

Day 12: Play volleyball.

Day 13: Basin Camp to Ridge Camp**Travel: 14,200 to 16,200****Distance: 1 mile (2,000 feet gained)**

Travel: After a moderate climb of 12,000 feet, an 800 foot 40-55 degree slope presents itself. This is the headwall, one of the steepest climbs of the entire route. Once we reach camp and cache, we will head back down the route to our 14,200 camp to continue acclimatizing.

Hazards: This area involves fixed-line ascension, which means flustered people and bottlenecks. If someone loses an ax or is having difficulty with an ascender, a traffic jam ensues. In preparation for this, we must be efficient when our turn to climb comes and dress warmly when our turn to climb seems like it may never come. There is also icefall and bergschrund at the approach to the base of the fixed lines. After a large storm, the entire headwall can slab off so should be avoided. There are crevasses between 14,300 and 15,500.

Camp: We will set up a cache at this camp, planning on camping only in an emergency. It is not an optimal location due to its exposure to wind and the challenge of building a site on the steep, icy slope.

Camp Hazards: Strong winds and great exposure to icy slopes make this camp a bit sketchy. We will likely clip into a fixed line while caching and cache deeply because the strong winds may erode the snow

Day 14:

Rest day at 14, 200 camp.

Day 15: Basin Camp to High Camp

Travel: 14,200 to 17, 200

Distance: 1.75 miles (3,000 feet gained)

Travel: We will follow the same route up to our 16,200 cache and move past the cache. The route then works its way north of the ridge line (below the ridge line) and weaves through rocks. There may be a fixed line on a short section below Washburn's Thumb.

Hazards: This climb is steep and exposed and as such may warrant the use of running protection. This ridge line also receives extreme winds from all directions so we will not attempt it under stormy conditions because we'd like to keep our fingers and toes, thank you very much.

Camp: The snow here is hard and icy making block-cutting difficult so we will probe to find a suitable quarry site.

Camp Hazards: This is the windiest and coldest camp on entire trip. It demands that we recall those days of neighborhood snow fights and build a mighty fortress to protect our camp from the elements. Building this camp will be exhausting and building it well will be crucial to our emerging from this area unscathed. Living at this altitude is itself a challenge. Between the lack of oxygen, incredibly cold and dry air and ferocious winds, it is a trying camp. We will stave off lethargy, frustration and boredom by remaining active on our rest days or any days when we are waiting to get to the summit.

Human Waste: This place sounds pretty friggin' gross due to climbers forgoing their LNT ethics in the face of a long storm. We will not repeat this pattern and will use the NPS surface latrine. If we come upon a full latrine, we will do our part by hauling the bow out of the latrine and guiding it on a sled to a crevasse 1/8 of a mile northeast of camp. We will use the pee holes near the latrine in order to protect this area from unsightly yellow dots.

Day 16: Rest day.

Day 17: Pick up cache at 16,200.

Travel: We will use the same route that we followed to get up this point to descend back down and collect our 16, 200 cache.

Day 18-21: Summit days.

High Camp to the Summit and Back

Travel: 17,200 to 20,320 feet

Distance: 2.5 miles (one way) (3,100 feet gained)

Travel: This ascent comes in three sections. The first of which is the most difficult: Denali Pass. We will reach this section via a long traverse to the southwest. NPS has snow pickets in place here marked by large orange wands to facilitate running belays.

This traverse is in the shade until mid morning and is very chilly. After the pass, we will go south to the first group of large rocks to the east. We will stay slightly to the left or east side of the ridge, heading south until we reach the same elevation as the Archdeacons Tower. There will then be a short drop, which will put us in the football field (a .25 mile plateau). Once across this field, we will ascend directly to the Kahiltna Horn, which is also the top of the Cassin Ridge. The .25 mile Summit Ridge is the last obstacle before the South summit. Woot woot.

Hazards: The first section of this days' climb may not appear too steep but it has claimed lives and limbs and as such should be approached with great caution. The summit day is the longest and most exhausting climb so we will be prepared for that physical and mental challenge. Most of the accidents occur on the way back to camp and are made possible by climber's utter exhaustion and the false sense of security one gains after the peak as well at the altitude and cold. Specifically, climbers may veer off route, get pinned by weather, or fall while descending Denali Pass. We will prevent long falls by using running protection, using our ice axes (guides tend to place pickets and mark them with wands for the descent. The weather will be constantly monitored and respected. When it deteriorates, we will be prepared for a swift retreat as visibility may decrease to zero (heavily wandering the trail, then, will be important). A good weather predictor is the formation of a lenticular cloud on the top of Mount Foraker. We will travel on this day with enough gear to survive a night should we get caught in weather. This will include two sleeping bags for the three of us, all of our clothing layers, a stove, pot and soup, a shovel and saws. We will stuff food in our pockets for easy access (Libby is already in this habit) and will keep our water bottles under our layers to keep them from freezing. We will also bring a thermos of hot water. We will have foot warmers and hand warmers.

Day 22: Return to 14,200 feet. *

Day 23: Return to 11,000 feet

Day 24: Return to Kahiltna Base; check in with base camp manager for flight return.

Day 25: Fly to Talkeetna; visit climber's memorial, check out with NPS and drop off CMC.

*We recognize that it is on the descent, both from the peak and further down the mountain that we are most likely to run into danger. Climbers tend to loose focus because of they are exhausted and relieved to have reached the summit. We will descend in the same manner we climbed in. We will be focused, intentional, diligent and conservative.

Maps

We have ordered the Talkeetna and Mt. McKinley 1:63,000 USGS maps. They were due to arrive long before the submission of this proposal but they have not yet shown up. We also have examined the pictorial route laid out in Colby Coombs' guidebook.

Risk Management

Risks on Denali include high altitudes and related health risks, weather hazards, glacial travel across crevasse-laden areas, avalanches, rock and/or icefalls and other people. Managing these risks is the most important concern when climbing and camping on the mountain. Many specific risk-management concerns have been imbedded in the route section of the proposal. The following is an overview of the major concerns.

Altitude: Health risks such as High Altitude Cerebral Edema (HACE), High Altitude Pulmonary Edema (HAPE), and acute mountain sickness (AMS) will be prevented by proper acclimatization. Several days throughout our itinerary are scheduled for acclimatization and rest to ensure that the potential for AMS, HACE and HAPE are reduced. We will not fall into the young mountaineer trap of speeding up the mountain simply because we can. We will demand an honest assessment of our altitude reactions from ourselves and from each other. We will constantly check-in and look for any signs of the damage that high altitude can inflict and chill out to acclimatize or descend whenever we need to. Water will be an intimate companion in this fight against the altitude. Hydrate hydrate and hydrate will be the tune to which we climb.

Weather: This mountain is known for being a most inhospitable host. Weather hazards include high winds, incredibly cold temperatures, white-out conditions and mountain storms. We will monitor the weather on Denali for at least four months prior to our expedition, as well as closely monitor the weather predictions and make our own assessments everyday we're on the mountain. We will also keep a weather journal in which we will record temperatures and pressures each day. Weather reports from the base camp manager will also be a crucial part of our weather assessment. We will set turn-around times and stick to them, climb conservatively and respect the power of winds and weather when we build our sites (especially those at 14,000 and 17,200 feet.) We will take extra precautions with triple-thick snow walls and camp conduct (everything bomb-proofed all the time) to protect our tent and ourselves from high winds and blizzard conditions. We have planned enough time, food, fuel, book and card games into our expedition to allow for this conservative approach.

If we find ourselves traveling in a white-out situation (a condition we will avoid like the plague but will be prepared to handle), the person traveling in the back of the group will use her fantastic map and compass skills to guide the group to safety. We will wand each length of rope for just such an occasion.

Avalanches: When crossing avalanche terrain, we will exercise avalanche precaution. We will pay attention to the weather and snow pack. We will be especially careful and cautious after large snowfalls. We will dig pits and note the conditions in our quarries. We will take our angles, wear our beacons and follow all the wisdom we have gleaned from our backcountry skiing adventures and our AVY courses.

Crevasse: Most of the route that we have chosen to travel in is crevassed. The snow bridges will be especially weak in the warm month of June so we will closely manage this risk. We will travel when the air is cold and the snow is hard and strong. We will probe and route-find to minimize our risk. We will constantly monitor our rope to ensure that the length of any fall is minimized. Our glacier rigs will always be set up correctly so that we can ascend out of crevasses, build anchors and arrest falls no matter where we each fall in that situation. Our hats and gloves will be ready and our layers accessible for that moment when a 60 degree day on the surface becomes a 30 degree hour in a crevasse. When we arrive at camp, we will be probing camp-sites for these suckers, wand perimeters and belay each other in and out of these areas.

Exposure: This mountain is one hellofa cold one. Concerns associated with this include frostbite and hypothermia. We will, once again, hydrate hydrate, drink some water, hydrate, have some soup, and hydrate some more. We will protect our sticky-outy parts from the cold and wind with gloves, masks and chemical hand warmers. We know that warmth comes from within so we will be eating our sticks of butter and drinking our

hot chocolate, we promise! Sun is also a huge factor in the climb and happens to be Sheldon's nemesis. She is vowing to apply SPF 800 every two minutes to avoid the incapacitating sunburns she is prone to incurring. We may settle for SPF 45 every hour or so. We will also wear our glacier goggles (complete with leopard-print beaks!) at all times to avoid sunblindness.

The Human Factor: There is also a great human factor that could put us in danger or keep us from harm's way. Our own knowledge and experience will make or break this trip so we will eat sleep and breath this mountain to be physically and mentally prepared for the challenges that will arise. On the hill, however, we will not be the only human factor we must pay attention to. People may climb above us, fall, and take out our team. They may have a crevasse incident and we may find ourselves in a rescue situation we did not anticipate. The gregarious, casual scene at some of the camps may lend itself to inspiring a false sense of security in a place where crevasses still exist. We will remain aware of this human factor throughout our trip and manage that risk accordingly.

Emergencies

Evacuation: Our party will be carrying a radio for emergency situations that we ourselves can not take care of. If need arises and one of us is too injured or sick for us to deal with, we will contact the NPS climbing rangers and plan an evacuation. We recognize that rescue situations put people at risk and self-rescue via our WFR and climbing skill and descents down the West Butt Route will be our best option. If a casualty should befall us at or near 17,200ft, we will also contemplate the use of the Rescue Gulley as opposed to following our own route back.

Emergency numbers are as follows:

Anchorage Hospital
(907)-562-2211
Talkeetna Air Service
(907) 733-2649
Talkeetna Ranger Station
(907) 733-1465

Minimum Impact Practices and Concerns/ Environmental Considerations:

Since hundreds of people climb Denali every year, environmental impact is a very important issue. Shared camps exacerbate the effect and concentration of human impact, especially from human waste. Designated pee holes and the use of CMC's (Clean Mountain Cans) will be imperative and vital to the preservation of the mountains' and the individual camps' beauty and hygiene. Camp crowding also means respect for other climbers is essential, as is proper behavior and waiting for a turn on the fixed-rope section (the area most likely to bottleneck with climbers), and any other impasse that slows travel.

Snow and glacial travel is low impact, and will be the majority of our means of transportation and camping sites. During climbing, training and other pre-trip excursions we will use the well-known *Leave No Trace* principles that we have practiced and respected on many past adventures.

Leave No Trace Principles Applied:

Plan Ahead and Prepare

We will be de-packaging and repackaging food to keep waste on the mountain down and will be prepared to pack out what we bring in. We will also be prepared with adequate hard skills and decision making skills to keep out of hairy situations and save our own butts when we do find ourselves in them. Self-sufficiency is key. We will prepare and climb as if we were the only expedition on the mountain.

Travel and Camp on Durable Surfaces

This will not be too great a challenge as we will be traveling on snow and ice, which are very durable surfaces. We will camp in frequently used areas and move into already established sites whenever possible, provided that these sites are not straddling crevasses or on or under avalanche-potent areas.

Dispose of Waste Properly

Human solid waste will be deposited into crevasses and CMC's at the respective appropriate altitudes. We will use established pee holes within camps and when on the move, we will concentrate our yellow snow whenever possible. We will pack out pads and tampons.

Leave What We Find

As snow balls do not tend to keep and ravens are bad company, we will not be taking anything off this mountain.

Minimize Campfire Impact

We will be using fuel-powered stoves on stove boards so this will not be an issue.

Respect Wildlife

The only wildlife we will encounter besides rowdy Euros and Nancy's head lice is the dreaded raven. This bird preys on poorly-buried and abandoned food caches, un-bomb-proofed camp sites and small children. We will leave the kids at home, bury our caches deep with nice solar-melt-out-preventative piles of snow on top, take the food down the hill when we leave and keep a tidy, bird-proof site.

Be Considerate of Other Visitors

This mountain will be crawling with climbers especially at the time of year that we are headed to it and the route we have chosen to take. We will respect other climbers' privacy and space. We will only move into camps when others have clearly moved from them. When it makes sense to share a site, a wall...etc, we will ask permission to move in before cozying up. We will also be considerate of future climbers, by putting waste in its appropriate place, whether in a crevasse or on our backs (or in Libby's mug).

Gear

Individual Equipment:

Clothing:

Head:

Warm hat (heavy fleece or wool w/ ear flaps)
Balaclava or equivalent polypro hood for additional warmth/protection
Neck gaiter/face mask (windproof and warm)
Sunglasses (glacier gogs) with full side coverage
Nose protector duckbill-looking-thing
Storm goggles
Bandanna for when it's hot

Upper body:

Sports Bra (1) fleece (yes!)
Polypros (2) One with hood as substitute balaclava, one=expedition weight, both=stinky
Fleece jacket (1) Windproof and warm
Down Jacket (1) 800-fill or so with baffled hood.
Synthetic fill jacket (1) insulating overlayer to go over down jacket for extreme cold
Wind/waterproof shell (1) fits over all other layers. Has a hood.

Hands:

Fleece liner gloves (2) really nice ones to go under gloves
Thin fleece liner mitten (1) to go over liner gloves, under overmitts (I hate cold hands)
Insulated Overmitts (2) water/windproof/breathable/super warm (2nd = just in case)
Other gloves (1) warm with removable liners, for dexterity/warmth

Lower body:

Underwear (4) capilene/fleece (4 pairs is gross)
Polypros (2) one is light, one is thick (fleecy). Both are really fashionable.
Puffy pants! (1) Full side-zip, wind/waterproof, synthetic fill, so nice.
Gortex shell (1) Full side zip, wind/waterproof

Feets!

Socks (6) heavy wool=all but one liner pair. Two pairs saved for summit day. So fresh!
VBL's (maybe) = plastic bags
Plastic boots (1) fit in ski bindings and crampons, have Denali Therma-mold liners.
Gaiters (1) usually exist on the bottoms of shell pants.
Overboots (1) so warm!
Puffy booties! (1) The good kind. Really puffy, big insulated soles. For camp-wear.

Technical gear:

Skis and bindings (1) teles for Libby, AT setups for Sheldon, Nancy
Poles (1)
Skins (1) woot, woot uphill.

Crampons (1) Adjustable
Harness (1) fits over all layers
Chest Harness (1)
Gear Sling with Glacier Rig: 4 locking carabiners, 9 non-lockers, prussic, additional webbing/prussic cord for anchors, pulley
Sled Haul/Pack Leash
Foot prussic
Ascender
Snow Picket (2)
Ice Axe (1) with bungied tether
Shovel (1)
Helmet (1)
Beacon (1)
Internal frame pack (1) approx. 6000 cu. in. With straps on the outside for more stuff
Sled Duffel (1) Large duffel with full zipper
Sled (1) with brake, gear tie-down loops, and rope attachment prussic
Compass (1)

Camp/Sleeping:

Sleeping Bag (1) -40 down. So much warmth.
Sleeping pad (2) one full-length thermarest, one full-length foamy
Stuff Sack (1) compression sack
Pad stuff sack (1)
Trash bags (3) for lining sleeping bag sack, backpack and sled duffel
Cup/bowl/spoon (1) lid for bowl and cup
Water bottle (2) wide-mouth nalgene
Water bottle insulators (2)
Thermos
Lip chappy (2) with sunblock protection
Watch
Hand/foot warmers (lots and lots) I like warmth.
Ear plugs
Pee funnel
Camera
Book
Toilet Paper (2 rolls)
Hand Sanitizer (1 little bottle)
Pee bottle
Toiletries (toothbrush, toothpaste, etc.)
Extra batteries
CMC (1)
Extra poop bags

Group Gear:

4-Season Mountaineering Tent (with parachutes for tying down)

Altimeter
Kitchen Mega-mid (for 14-camp and below)
Probe (2)
Snow Saw
Ice Screws (2)
Spade
Stuff sacks for caches, etc (6)
Rope (60 m, super-dry, semi-static)
Med Kit (see attached inventory)
Food (see attached budget)
White gas (5 gal. is enough for 25 days, allowing for donations from/to other climbers)
CB radio and extra batteries
Satellite phone
Wands (50)
Stove (2)
Stove pad (2)
Fuel bottle (2)
Lighter (3)
Extra fuel (see food inventory for amount)
Pots/Pans/Kitchen Utensils
Sunblock (approx. 6 oz)
Maps/guidebook

Repair Kit:

Duct Tape
Extra cordolette/webbing
Lash straps
Super glue
Wire
Lighter
Stove repair kit (including lube and wrench and other items)
Thermarest repair kit
Leatherman Pocket knife
P-cord
Sewing kit
Seam-seal/nylon repair material
Jerry-rigged ski binding material (hose clamps, wire, etc.)
Extra tent pole

First Aid Kit Contents

Medications:

Acetazolamide (Diamox): prevention of mountain sickness, such as HACE, HAPE and AMS

Dexamethasone (Decadron): For High Altitude Cerebral Edema (HACE)

Benadryl: antihistamine

Cephalexin (Keflex); For infections of the ear, chest, skin, bones or bladder.

Colace: relief from constipation

Difflican: treatment of yeast infections

Epi-Pen: allergic reactions, always a good precaution for anaphylaxis, even if it is unexpected to occur on the mountain

Ibuprofen: pain reliever and anti-inflammatory

Imodium: relief from High Altitude Flatulence Emission (HAFE)

Nifedipine(e.g. *Procardia*): high blood pressure and angina

Pepto-Bismol (chewables): common stomach maladies and distresses

Sudaphedren: Decongestant

Tylenol: painkiller

Vicodin: super-doooper pain killer

Prescriptions to be provided by:

Carol Osborn M.D.

Evolutionary Health Care

461 East 200 South Suite 100

Salt Lake City, UT 84111

(801) 971-4562

Supplies

3 rolls sterile gauze

2 rolls athletic tape

Lots of Duck Tape (quack)

Assorted Band-Aids

Tincture of benzoin compound

Wound closure strips

Microthin film dressings (e.g. Opsite)

Moleskin gel wound coverings (e.g. 2nd Skin)

Moleskin (lots)

Soap impregnated sponges (e.g. Green Soap Sponges)

Antimicrobial wipes

Rubber gloves

Trauma shears (all purpose and useful)

Irrigation syringe

Jerry-rigged Splint (ski poles, sleds, backpack frames can be used in a pinch)

Thermometer

Tweezers

Safety Pins

Patient Assessment Forms

High resistance sunscreen and lipscreen

Gold Bond (mmmmm)

FOOD!

Breakfast

- *Oatmeal 5lbs \$4.45
- Cream of Wheat 2lbs \$4.00
- *Granola 4lbs \$13.96
- *Pancake Mix 3lbs \$3.49
- *Cereal 3lbs \$6.00
- *Cous Cous 2lbs \$3.38
- *Hash Browns 6lbs \$12.00
- Grape Nuts 1lb \$3.49
- Raisons and Cranberries 1lb \$4.59

Total: 27lbs \$55.36

Dinner

- Pitas and Tortillas 3lbs \$5.37
- *Dehydrated Black Beans 2lbs \$9.38
- *Dehydrated Refried Beans 1lb \$4.59
- *Fallafel Mix 2lbs \$6.78
- Dehydrated Sloppy Joe Mix 1lb \$2.19
- Dehydrated Taco Filling 1lb \$1.99
- *Dehydrated Veggie Chile 3lbs \$12.77
- *Dried Tomatoes 1/4lb \$2.50
- *Dried Veggies 1/4lb \$2.75
- *Spaghetti 3lbs \$6.57
- *Quinoa 3lbs \$7.47
- Mac & Cheese 4lbs \$12.00
- *Potato Pearls 2lbs \$3.98
- *Pine Nuts 1/2lb \$4.80
- *Sunflower Seeds 1lb \$2.69

Total 27lbs \$85.83

Cheese

- Cheddar Cheese 8lb \$50.00
- Cream Cheese 2lb \$8.00
- Peanut Butter 3lbs \$6.62
- String Cheese 6lbs \$20.00
- *Dehydrated Hummus 1lb \$4.99
- Dehydrated Spinach/parm/hummus 1lb \$2.29
- *Tahini 2lbs \$10.00

Total 20lbs 91.28

Trail Foods

- *Candy Bars 7.5lbs \$36
- *Banana Chips 1lb \$2.69
- *Dried Mango 1/2lb \$5.26
- *Dried Pineapple 1/2lb 5.29
- *Brazil Nuts 1lb \$10.99
- *Almonds 1lb \$9.99
- *Cashews 2lb \$20.00

*Peanuts 2lb \$6.58
*Soynuts 1lb \$2.59
*Glad Corn 1lb \$5.29
*Sesame Stix 2lb \$4.58
*Yogurt Pretzles 4lbs \$15.98
Crackers 4lbs \$4.98
Cheeze Its 3lbs \$6.58

Total 33.5lb \$136.8

Sugar/Fruit Drinks

Tang
Gatorade
Lemonade

Total 10lbs \$40.00

Soups, Bases, Desert

*Dehydrated Curry Lentil Soup 1lb 5.59
*Dehydrated Corn Chowder 1lb 6.99
*Dehydrated Split Pea Soup 1lb 5.59
Ramen 2lb \$6.00
*Chocolate Chips 1lb \$9.59
Alfredo Packets 1lb \$5.00
+Pasta Sauce Leathers 2 lb \$8.00
Fig Bars 2lb 10.00

Total 11lbs \$56.76

Milk, Eggs, Margarine, Cocoa

*Powdered Eggs 2lbs \$3.00
*Hot Chocolate 3lbs \$10.00
*Powdered Milk 1lb \$1.05
Butter 6lbs \$18.00
*Olive Oil 1 liter (4lbs) \$20.00
*Powdered Vanilla Soy Milk 1lb \$6.00

Total 12.25lbs \$55.05

Meat/Protein Substitutes

+Beef Jerky 3lb \$30
Salami 5lb \$21.00
Sardines 2lb \$6.30
+Tuna 2lb \$15.04
Bacon 1lb \$3.00

Total 15lbs \$45.34

Total 155.75lb \$566.38

+Items to be prepared (cooked, dried) ourselves to save dinero

*Items to be purchased in bulk to save cashola

Final Budget and Cost Saving Measures

Food: \$593.38

Fuel: \$30

Travel Expenses: \$2137

Permits: \$630 (\$210 each)

Miscellaneous extra costs (gas, food, sleds, etc.) : \$200

TOTAL COST: \$3596.38 (\$1198.79 per person)

Cost-saving measures detailed in the trip itinerary. Food was calculated based on expense and the need for a well-balanced and healthy diet in such adverse circumstances that the cold and altitude that Denali provides.

Appendix

(a) Money raised as of January 8th, 2006 for the American Breast Cancer Foundation by us, Breasts on the West Buttress is \$4338.61. Our goal is \$50,000 by June. This amount of money will raise significant funding for breast cancer treatment and prevention and will allow us to use less than 15% of the proceeds for our fundraiser. For more detailed information about the fundraiser itself, please visit www.botwb.org

(b) Training Schedule for 2006

In addition to semester-long dry-land training including: strength training, endurance, cardio-vascular, yoga, and lots of running the Incline!

Half Block Jan 9-19:

- WFR course- Libby
- Jan 19-22- Glacier Travel/Crevasse Rescue course- Nancy and Libby
- Sheldon beginning her field internship with the Alaska Mountain Guides in Alta, UT practicing her ice climbing, mountaineering and backcountry ski skills

5th Block Jan 23-Feb 15

- Jan 28-29 WFR re-cert- Nancy
- Either 2nd or 3rd weekend- Overnight and summit attempt of Mount Massive/Elbert, with ski descent of Mount Massive
 - Specific skills to **review** and focus on:
 - Self-arresting
 - Winter camping techniques- walls, bombproofing, snow kitchens, etc.
 - Beacon searches and avalanche rescue techniques
- Feb 15-19- Lead ORC backcountry hut trip- Libby
- Sheldon still in Utah getting fit fit fit and skilled skilled skilled

6th Block Feb 20-Mar 15

- Feb 22-25 complete day trips in Emigration Canyon in Northern Utah focusing on skiing roped up with sleds, climbing and foot placement technique and general fitness
- Feb 26-29 Complete Climb of Timpanogos in Utah focusing on building snow shelters, wandering, setting running protection, building anchors, arresting with skis, moving with heavy packs...etc.
- Mar 2-12 Embark on an extended ski touring route in the Wahsatch. Focus will be on pushing our fitness level, becoming a proficient rope team, and generally working our skills and systems into muscle memory. We should walk away from this trip ready for Denali action.
- Interim day trips will be spent hiking and skiing at altitude (10,000ft)

7th Block Mar 27-Apr 19

- 1st, 2nd or 3rd weekend- Overnight and summit attempt of Mount Lincoln/Democrat/Bross with ski descent of Mount Bross
 - Specific Skills to **review** and focus on:
 - Skiing roped with sleds

- Knots/anchors/pulley systems/snow pro
- Winter camping techniques
- 1st, 2nd or 3rd weekend- Overnight and summit attempt of Quandary Peak with ski descent

Specific skills to **review** and focus on:

- Ascending fixed lines
- Alternative snow shelters (snowpack permitting)
- Belaying techniques
- Skiing roped with sleds

8th Block Apr 24-May 17

- 1st, 2nd or 3rd weekend- Overnight and summit attempt of Colorado peak TBD with ski descent of course

Review of all relevant skills!

Interim

- Possible summit attempt of Sadie Peak in Kachemak Bay state park

Review of all relevant skills in Alaskan terrain!

June 1st

- Proposed climb date of DeGnarli(est) mountain ever!

Note: In addition to the skills mentioned specifically, each trip in the backcountry will necessarily include continual practice with: rope management, avalanche assessment, cold injuries assessment, altitude assessment, other risk/hazard assessment, minimum impact techniques, knots knots and knots, anchor building, protection setting, snow shelter building, trip rationing/packing, gear testing, and hanging out with each other for an extended period of time, which should ensure cohesive group dynamics during a 5-day storm at high camp.

(c) Bibliography

- Coombs, Colby. Denali's West Buttress. The Mountaineers: Seattle, 1997.
- Cox, Steven M. and Kris Fulsaa. Mountaineering; Freedom of the Hills. The Mountaineers: Seattle 2003.
- Dawson, Louis W. II. Dawson's Guide to Colorado's Fourteeners. Blue Clover Press: Colorado Springs, CO, 1999.
- Fleming, June. The Well Fed Backpacker. Victoria House: Portland, 1976.
- Houston, Mark and Kathy Cosley. Alpine Climbing; Techniques to Take You Higher. The Mountaineers: Seattle, 2004.
- Pearson, Claudia. Cookery. National Outdoor Leadership School: Pennsylvania, 1997.
- Secor, R.J. Denali Climbing Guide. Stockpile Books: Pennsylvania, 1998.
- Selters, Andy. Glacier Travel and Crevass Rescue. The Mountaineers: Seattle, 1999.
- Tilton, Buck, Burke, Tom. The Wilderness First Responder. The Globe Pequot Press: Connecticut, 1998.
- Waterman, Jonathan. Surviving Denali; A Study of Accidents on Mt. McKinley. ACC Press: Golden, 1991.