

American Alpine Institute^{Ltd.}

DENALI – WEST BUTTRESS EXPEDITION EQUIPMENT LIST

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Selecting and preparing the equipment you will bring to Denali are among the most important aspects of your expedition and will have a significant effect on your comfort, security, and chance of success. Items that are prone to failure or difficult to repair in the field should be left at home or replaced with more reliable gear. Any new gear you are considering should be very carefully evaluated *and tested* before bringing it on the mountain. You should be very familiar and comfortable with the fit and function of your equipment and your pre-trip training process is a perfect time to accomplish this. Once you are on Denali you will be glad you took the time to critically evaluate the appropriateness of every item you brought.

Your success and safety depend on you carefully choosing an array of clothing and gear that will protect you from the threats of temperature extremes, high wind, stormy weather, and solar radiation.

- The temperature fluctuations on the glaciers surrounding Denali can be extreme. 100 degree F temperature fluctuations are a reality on Denali's valley glaciers. It is normal to start a day at -20F (-29C) and peel layers in sweltering 80F (27C) heat just hours later. High on the mountain, temperatures can dip below -40F (-40C) without the added cooling effect of windchill.
- Windless days on Denali are uncommon. Even a slight breeze can make conditions feel far colder. The combination of extreme low temps and high winds on the upper mountain creates serious frostbite and hypothermia hazards.
- Almost every Denali climber will encounter severe stormy weather at least once during their expedition, whether it be wet rain and heavy snow low on the mountain, or blowing snow and intense wind high on the mountain.
- Strong solar radiation is compounded by the high reflectivity of snow, thus making sunburn likely in uncommon areas, such as the bottom of your nose, inside of your mouth, and behind your ears.

There is no one combination of clothing and equipment that is "the" right system and each guide will have personal preferences which may slightly affect the items and systems described below. Almost without exception there are a number of climbers on each expedition that need to make a trip to the gear store after their gear check as a result of substituting items and making adjustments to the list below. Please do your best to adhere strictly to this list and of course feel free to call on our staff at any point with questions or for advice.

Your best clothing and gear options should work in concert with each other. They must be versatile and compatible enough to protect you from the wide-ranging environmental factors listed above. You must balance lightweight with sufficient equipment. Excluding extra socks and underwear, you should be able to wear all of your clothing at once. Strive for minimal redundancy. If you have any doubt regarding extra clothing or gear, please bring it with you to

your rendezvous in Anchorage. Your guides will assist you in making the best choice of what to keep and what to leave behind.

Please take the time to prepare your equipment carefully. If you have any questions, feel free to call the AAI staff in the Equipment Shop at 360-671-1570. AAI carries all of the equipment on this list. Whether or not you rent or buy gear from the shop, we are here to advise you. Please use our knowledge and experience to help you prepare for this complex undertaking.

CLOTHING – Upper Body

Base Layer Top: This will be your base layer and should be lightweight or silkweight synthetic or wool. Cotton is **not acceptable**. **Bring a change of this layer (two total)**. One light and one dark is a good combination as lighter colors are much cooler on the lower glacier.

Examples include: Marmot Base Layer, Patagonia Capilene, REI MTS, and OR Dry Release products.

2nd Layer (Top): Expedition weight long underwear top, lightweight fleece, or windshirt. A chest pocket is a helpful feature of this multi-use layer.

Examples include: Patagonia R.5 or R1, Marmot Driclime Windshirt

Soft Shell Jacket: A thin, light, stretchy, breathable but wind and snow-resistant layer that is comfortable to wear is ideal. This will be your action layer and the outer layer that you spend the most time in. Schoeller or Polartec Powershield fabrics are preferred.

Examples include: Arc'teryx gamma MX, Patagonia Figure 4 and Ready Mix, and products by Moonstone, Marmot, and Mammut.

Light Insulating layer: Should be lightweight insulating layer, windproof is a bonus. This is an intermediate piece that can go between your 2nd layer and your softshell jacket, or between your soft shell jacket and your shell jacket and/or parka. The weight and design of this piece will vary based on the other items of climbing that you are bringing. The goal or purpose of this piece is to beef up and add warmth to your internal layering system should you be moving in very cold temperatures, but not in need of your heavy insulation (parka). All internal layers (under your shell and parka) should work in combination with each other. Be sure to size outer garments with the idea that you could be wearing all of the layers described above at the same time.

Examples include: Patagonia Puff Jacket or Micro Puff pullover, Patagonia R3 or R4, Wild Things Primalight and EP jackets, or any light and compressible down vest.

Parka: A baffled down or synthetic parka with hood is required. Parkas come in many shapes, sizes and temperature ratings. If you tend to get cold easily, opt for a slightly warmer and more substantial parka.

Examples include: Patagonia Down parka and DAS parka, Feathered Friends Frontpoint Parka and Rock and Ice Parka's, Marmot Plasma and 8000 Meter parkas.

Shell Jacket: Gore-Tex or other waterproof breathable material required. Your shell layer should be sized to comfortably fit over your other clothes (minus your parka). Choose lightweight and comfortable over heavy and durable. Avoid hip pockets. Alternatively, you can bring a one-piece Gore-tex suit if it fits over your layers and is comfortable and light. If bringing a goretex suit, you must have previous multi-day experience with this piece before using it on Denali.

Examples include: Arc'teryx Alpha and Gamma, Patagonia Jetstream or Stretch Latitude, and Marmot Precip.

CLOTHING – Lower Body

Base Layer Bottom: You will live in this layer for almost all of the trip. Most folks wear undergarments underneath their base layer. Synthetic materials only for underwear if you choose to wear them. Your base layer and should be lightweight or silkweight synthetic or wool. Cotton is **not acceptable**. Your base layer should be **light in color** to be cooler on hot days. One pair of bottoms is sufficient.

2nd Layer (Bottom): Expedition weight fleece like material such as Powerstretch or similar fabric. One-piece suits (Farmer-John/Union Suit) are popular but require more planning and effort when answering the call of nature and work best with other layers designed for using the bathroom without removing layers.

Examples include: Mountain Hardwear Farmer John, OR suit, 100-200 weight fleece or Powerstretch, or Patagonia R1 pants. Windproof/Windstopper pants are not intended for this layer.

Soft Shell Pants: A thin, light, stretchy, breathable but wind and snow-resistant layer that is comfortable to wear is ideal. Materials such as Schoeller or Polartec Powershield are preferred. This will be your action layer for your legs and the layer that you will spend the most time in. Consider a darker color for trips in early May and lighter color for trips after mid-May.

Examples include: Patagonia Guide pants, Black Diamond Alpine Pants, Arc'teryx Gamma LT Pants.

Insulated Pants: Down or synthetic insulation (i.e. Primaloft or Polarguard 3D). For May programs, heavier insulation and warmer pants are recommended. Full length sidezips are a critical feature. Thick, windproof/Windstopper fleece works but it not ideal. Down pants are acceptable and lighter weight, but are higher maintenance and require more care to not get them wet and/or frozen.

Examples include: Mountain Hardwear Chugach pants, Feathered Friends Volant Pants, Patagonia Puffball pants.

Shell Pants: Gore-Tex or other waterproof breathable material required. Full or hip side zips required for easy on and off over boots and crampons. Choose lightweight and packable over heavy and durable.

Examples include: Arc'teryx Theta LT or Gamma AR Pants, Patagonia Grade VI, or Marmot Precip.

CLOTHING – Head, Hands, and Feet

Hand System:

Fleece Gloves/Glove Liners: You wear these A LOT of the time on the mountain. They need to be dexterous and comfortable, made of powerstretch, fleece, or similar synthetic materials. They do not need to be very insulating. Bring two pair of fleece/liner gloves, one light and one heavier.

Examples include: Mountain Hardwear/Black Diamond Powerstretch Gloves, OR Gripper Gloves, Manzella Fleece gloves, Black Diamond Drytool gloves.

Modular Gloves: Composed of heavy-duty waterproof shells with *extremely* warm liners. These gloves will be worn during any cold/stormy weather and need to be dexterous enough to manipulate carabiners, harnesses, and tie knots. Some gloves can be used in combination with your thinnest liners gloves but this is not required.

Examples include: Black Diamond Guide Gloves, OR Super Couloir, and Marmot Ultimate Ski Gloves.

Summit day mittens: These are **expedition weight** modular mittens, down or synthetic, with a storm-proof shell. You want your mitts to be extremely warm and thick. This is more important than dexterity. We often wear our mitts all day on summit day. These need to be large enough to allow for liner gloves to be worn underneath. Please attach keeper loops to them.

Examples include: BD mercury mitts, OR Alti mitts, Marmot Expedition Mitts, etc

Head System: Your cold weather head/face system should not leave any skin exposed at all. When wearing your warm hat, face mask, and goggles, there should not be any gaps in your clothing where wind and snow might penetrate close to the skin level. On the outside edge of your goggles is a common place for climbers to overlook and as a result, get frostbite. Have a friend double check your system to make sure you have complete coverage.

Warm Hat: Big, puffy and warm. Windstopper fabric can be a good idea but makes hearing difficult. This hat will primarily be used while sitting around camp or in very cold and windy conditions.

Beanie Hat/Toque: A thinner synthetic/fleece hat that will fit under your climbing helmet and over your balaclava.

Balaclava or Buff: Thin polypropylene or fleece recommended. Buffs are multifunctional and convenient for a number of uses but they are not overly insulating from the wind and cold.

Face Mask: Thick fleece, windstopper, or neoprene.

Sun Hat: A baseball cap or Kavu type visor works well.

Nose Protection: This is for sun protection; fits onto your glacier glasses. Beko's brand works well.

Bandana: Serves several purposes while on the mountain. Bring 2.

Foot System:

Socks: Wool or synthetic (**no cotton**). Bring two to four complete changes – depending on how much you sweat. Climbers frequently wear a thin liner sock, and one pair of thick socks depending on boot fit. Consider bringing thin socks for warmer temperatures and thicker socks for the cold higher on the mountain.

Vapor Barrier Liner Socks: Optional. Ideally the vapor barrier will keep inner boots dry at lower elevations where your feet will get wet from sweating in mild temperatures. You must experiment with this system before the trip because it does not work well for all people (those who sweat a lot get wet feet and blisters).

Foot Powder/Anti-Perspirant: A very small (sample size) bottle of Gold Bond or Dr. Scholl's will allow you to treat your feet daily, keep them dry, extend the life of your

socks, and help you avoid blisters/rashes and non-freezing cold injuries from chronic wet feet.

Camp Booties: Optional. Down preferred. Must be very lightweight and packable. Many climbers put climbing boot liners in overboots instead of bringing booties.

Climbing Boots: To prevent frostbite your boots must be very warm. They should be designed for extended use in temperatures at least as cold as minus 30F. Thermo-mold liners are warmer and lighter than standard boots liners and they can increase the comfort and warmth of your boot significantly. If you have thermo-mold liners in your boots already and you have worn them for several trips, you may want to have them re-fit to ensure that the foam has not compressed and the temperature rating has been retained. Intuition manufactures a very good thermo-mold liner, which can be purchased through AAI's equipment shop.

Examples include: Koflach Arctis Expedition, Scarpa Inverno/Vega, Lowa Civetta Extreme.

Modern Single/Integrated Boots such as the La Sportiva Olympus Mons, Scarpa Phantom 8000, Millet Everest, and highly recommended Kayland 8001 are suitable for this climb. There are some advantages and disadvantages to these boots including the cost. We would be happy to talk with you about the specifics if you are interested in purchasing a pair of these boots for your climb.

Overboots: Required for climbers using plastic double boots. Mountain Hardwear Absolute Zero Overboots and OR Brooks Range overboots have not performed well on past expeditions and should not be used. Most crampons do not fit well with overboots. Please take extreme care to make sure your crampons and overboots are highly compatible before heading to Alaska.

Examples include: Forty Below K2 Superlight, Everest, and Purple Haze overboots.

Gaiters: These can be regular gaiters or a supergaiter. If using supergaiters they should be glued on in advance. Getting them on your boots is a rather involved process and if they come off while on the mountain it will be extremely difficult to get them back on.

Examples include: OR Crocodile, Mountain Hardwear Venti-Gaiter, La Sportiva Eiger Instulated, Wild Line supergaiters, Climb High Buzzard supergaiter.

CLIMBING GEAR

Snowshoes: They should be equipped with an integral crampon (most snowshoes will already have an integral crampon). Snowshoes can be sized smaller than is typically recommended by manufacturers since deep snow is not common on the climbing route.

Examples include: MSR Denali, Denali Ascent,, and Denali Evo are highly recommended. Atlas Model 1022, Model 1025 are acceptable though not as highly recommended. If you have another model that you would like to use, please call our shop for prior approval.

Trekking poles: These poles should be the adjustable type either two or three section; three is recommended. Make sure they are in good working order and that the sliders are properly cleaned and lubed prior to your trip. Cold temperatures often negatively affect the performance of the adjusting mechanisms. Snow baskets for your trekking poles are highly recommended.

Examples include: Black Diamond Flick-lock, Leki poles, and REI/Komperdell brands.

Ice Axe: 60cm to 70cm length (depending on height of climber) with standard pick and wrist loop or "bunjy waist loop".

Many climbers insulate the head of their ice axe with a small piece of foam or similar material. In colder temperatures, heat can be lost conductively through your glove when gripping the cold axe. This insulation should be small enough to not affect the performance of the ice axe or your ability to grip it and/or self arrest.

Examples include: The Grivel Airtech and Black Diamond Raven Pro.

Crampons: Semi-rigid if you have a “step-in” model. Step-in crampons are easier to put on with cold fingers, but make sure they will work well with your overboots. Strap-on crampons provide more reliable attachment to boots with overboots. Be sure your crampon, overboot, and boot combination work well together. Modern “New-matic” crampons are the best of both worlds. You must also bring crampon adjustment tools if your crampons require them. Aluminum crampons are not acceptable for Denali.

Examples include: Black Diamond Sabertooth*, Contact clip, Grivel Airtech and G12.

*Can be difficult to fit with overboots.

Climbing Harness: Should fit over bulky clothing. Adjustable leg loops help in this regard and are key for changing pants. Alpine Bod style preferred. Make sure that your harness fits comfortable in combination with your fully loaded backpack. Some models have features that cause wear and tear on your waist when used with a heavy pack.

Examples include: Black Diamond Alpine Bod, Black Diamond Bod

Carabiners: Bring two (2) large, pear shaped (or MÜNTER) locking ‘biners and four (4) non-locking carabiners. Wire gate carabiners such as the Black Diamond Hotwire are preferred. Mark these in some way (tape works well) so as to avoid confusing them with others. Carabiners are considering group gear and they will wind up changing hands a lot while on the expedition. Clearly labeling them will help you get yours back at the end of the trip.

Prusiks: Prusiks are specially tied loops of 6mm cord used for crevasse rescue. If you don’t have a set of prusiks from a previous AAI course then bring three lengths of 6 mm perlon: 13 feet, 6 feet, and 5 feet. (Precut lengths are available for sale at AAI.) Cord thicker than 6mm will not work.

Personal Anchor Tie-in: A length of webbing, a sling, or a daisy chain will be needed to attach your ascender to your harness and for other uses throughout the trip. Please note that these slings must be sewn and not tied. Shoulder length slings are the most versatile choice for this as they can be used for multiple purposes throughout the trip. Daisy chains will work but are not recommended due to their specific and limited function. We supply the ascender.

Climbing Helmet: This is an equipment update and change. In past years we have not required that climbers use helmets on the West Buttress route, but due to changes in conditions along certain parts of the route, we now require that you to include a helmet as part of your equipment for this expedition. We won’t wear helmets for most of the route, but there are a few sections of the climb where they are warranted, including when we move around Windy Corner just below the 14,000-foot camp and from the base of the fixed lines at 15,200’ to High Camp at 17,200’. Because the helmets are only used in a few spots but need to be carried all of the way up the mountain, lightweight models are highly recommended.

Examples include: Petzl Meteor and Ecrin Roc, Black Diamond Half Dome.

CAMPING GEAR

Sleeping Bag: Down only. Synthetic bags are not acceptable. Rated to -35F (-37C) for the early and mid-May expeditions, to -30F (-34C) for expeditions in June. If you know you sleep cold take this into consideration when purchasing/selecting your bag.

Examples include: The Marmot Cwm, and Feathered Friends Snowgoose and Ptarmigan.

Compression Stuff Sack: Important to maintain the upper hand in packing your sleeping bag.

Examples include: Granite Gear ultralight and Sea-to-Summit compression sacks.

Sleeping Pads: Two are required. One full-length 1/2" thick closed cell foam pad. The second pad can be either a closed cell pad or a Thermarest pad. It can be either 3/4 length or full length. Narrow Pro-series Thermarests are recommended (Thermarest Prolite 4 is a favorite). Wide or extra-thick Thermarests are not ideal as they take up too much room in the tent and on your pack. For inflatable pads be sure to bring a repair kit.

Eating Utensils: Spoon and fork. Knives and other misc. cooking utensils will be provided by AAI. A mug is optional. Most climbers can use one of their nalgene bottles for hot drinks and soup although these can be more difficult to clean than a mug. A guide favorite for mugs is a 16oz Nalgene. It can be placed inside the pocket of your parka to keep it warm, it warms your fingers, and it can be carried full of water all day to supplement your drinking water supply. Wide mouth bottles are required and narrow mouth bottles are not acceptable. Label and personalize your bottles clearly.

Bowl: There are a number of bowl combinations that work well. Basically you need something to eat breakfast and dinner meals out of. Metal bowls tend to conduct heat too quickly and lead to burned hands and cold food. Nalgene makes a handled bowl with a lid that works well. Just about any plastic camping bowl with decent capacity and fairly durable construction will work.

Nalgene Bottles/Hydration: 2.5-3 liters of water capacity is the minimum. Hydration packs are not recommended. You should have extensive experience with a hydration system in extreme cold if you choose to bring one on Denali. Once they freeze they stay frozen for the duration of the trip. Two or three water bottles, usually one-liter Nalgene type, are required. Other plastic bottles, similar in nature can work as well.

Water Bottle Parkas: These are insulating jackets for your water bottles, one for each bottle. Make sure and label these parkas with your name as it is fairly easy to lose track of yours in a pile of 25 of them.

Examples include: OR Bottle Parka

Pee Bottle: 1 quart size minimum. Soft 2L Nalgene recommended. Plastic bottles from the store such as Gatorade bottles can work well but the lids are less secure than a Nalgene. If you choose to bring one of these, use it carefully and make sure the capacity is adequate. Label your pee bottle well.

Pee Funnel: For women.

Examples include: Freshette. Make sure and practice using this device before your trip.

MISCELLANEOUS

Large Pack: Large internal frame pack, minimum 5500 cubic inches. Wild Things Andinista Packs are not acceptable for this expedition. It is very important that your pack be in good working order and not prone to failures of any sort. Our packs are a hugely important item and a climber may not be able to continue due to a pack failure.

Examples include: Dana Designs Terraplane, Osprey Aether 90, Gregory Robson and Denali Pro, Arc'teryx Bora 85-90.

Duffel Bag (2): For hauling gear on sleds. Your large duffel should have a full-length zipper and be constructed of heavy pack cloth, cordura, or ballistic cloth and be at least 6000 cu in. capacity. A second duffel or travel bag will be needed to store your town clothes and personal items while on the mountain. This bag will be left in a secure storage area at the glacier flight service base.

Examples include: Patagonia coated duffel bags, Wild Things Burro Bag, Gregory, Dana Designs. North Face duffels are very heavy and not recommended.

Stuff Bags: Bring a few of varying sizes and colors to help keep your gear organized. Heavy/waterproof stuff sacks and dry bags are not necessary or functional.

Glacier Glasses: 100%UVA/UVB with side shields. If you have an extra pair, bring them too. Note: Those using contact lenses should also bring a pair of prescription glasses in the event that your contacts or solutions are lost or damaged by freezing. You should bring a pair of high quality (that block 100% of U.V. light) dark ski goggles which can be worn over your prescription glasses.

Ski Goggles: For use in high winds and heavy snow. These should block some light, but not be overly dark. Typically the goggles are used during storm or heavy snow where there isn't nearly as much sun to shade. An alternative is to bring clear lenses and wear them over your glacier glasses. Not all goggles work for this.

Sunscreen: With a protection factor of at least 30. For the fair, the higher the SPF the better. Stick types allow you to apply without exposing fingers. Dermatone produces an effective 1" diameter stick as well as a translucent zinc oxide lotion. A couple of 1 oz. tubes are usually adequate. Only your face and, at times, your hands will be exposed. Several small containers are better than one large one.

Lip Protection: 2 containers/applicators. Highest SPF available. Zinc oxide also works well (available in pharmacies). Dermatone and other companies make lips and face sunscreen that works well.

Camera: We recommend small point and shoot cameras that can easily be carried in an outside pocket or small case outside your pack. If you can't comfortably and safely carry your camera outside your pack, even in bad weather, you'll miss the best photo opportunities. Though some climbers bring them, SLR cameras are not recommended because of weight and bulk.

No battery powered, auto-focus cameras perform well in the cold. Digital cameras can work well but require extra care to protect them from the cold and elements. If bringing a digital camera, consider your battery needs. Bring an extra battery if your camera uses a proprietary lithium ion type. If your camera uses AA or AAA batteries, use lithium batteries and bring one or two sets of extra batteries, more if you take a lot of photos.

Favorite Snack Foods: Don't bring more than a pound or so unless you have some special dietary needs, in which case, please consult with us.

Personal Toiletries: We supply the TP. Each climber gets one roll for the trip which should be more than enough. If you know you will require more than this, please bring the additional amount that you will need and try to be reasonable. Wet wipes are very handy for later in the trip when we all start to get a bit smelly.

Contact Lens Care and Precautions: In our experience, contact lenses are perfectly acceptable for climbing trips at altitude and in very cold conditions. If you plan on wearing contact lenses on Denali, you should be familiar with the intricacies of long term maintenance and care in these conditions. You should plan on bringing at least two spare pairs of lenses and a few small bottles of whatever solutions you will require. Bringing a pair of glasses as a backup or to give your eyes a rest is a good idea as well.

Hand/Foot Warmers: Recommended for people that are susceptible to cold hands and toes. These should be small, disposable type products like the ones made by Grabber Mycoal. The handwarmer models are much more functional than the toe style warmers.

Personal Medical Kit

- personal medications
- 20 tablets of Tylenol, aspirin and/or Ibuprofen
- one 1 1/2 inch roll of cloth athletic adhesive tape
- minimum 1/2 square foot moleskin
- Tincture of benzoine
- Second skin or similar blister treatments
- Hand lotion (for dry and cracked skin from prolonged glove use)

(Please note: you cannot use codeine or sleeping pills at altitude.)

Acetazolomide (Diamox): *Diamox requires a physician's prescription. Be sure to discuss the use and precautions of this drug with your doctor.* For prevention and treatment of mild Acute Mountain Sickness. Diamox can be used prophylactically or to treat symptoms of altitude illness as they occur. Use of Diamox varies greatly amongst guides and climbers and you should come prepared for and educated about your intended use of the drug. Increased urination and eventually dehydration are very common and potentially serious side effects of using Diamox.

Repair Kit: Thermarest repair kit (for Thermarest pad users), crampon wrench and extra screws, 10 to 20 feet of lightweight nylon cord, small sewing kit, duct tape (can be wrapped on water bottles or trekking poles).

Multitool: Any multitool similar to a Leatherman is great. Swiss army knives will work as well. One can be shared amongst tent-mates. Smaller is better and large ultra-comprehensive tools are not necessary.

Entertainment: Books, games, cards, for stormy days in the tent. Music players like walkmans, mini-disc and MP3 players are popular because the device and media are small and relatively lightweight. There is great radio reception from 14,000' on up. AAI provides a solar panel that can be used to charge electronic devices. Bring the car charger for your device along for recharging on the mountain. Ipods with a hard drive and air bearing (vs. flash memory) do not work above 14k.

Journal and Writing Device: Some climbers like to keep a journal or log for writing on the trip. Ball point pens work well in the cold and at altitude but other ink well type pens do not. Rite in the Rain notebooks are more durable and more functional for the mountain environment than regular notebook paper.

Ear Plugs: Defense against snoring in the area.

Crazy Creek Chair: Optional. A lightweight Thermarest chair set-up also works. Only lightweight models will be worth bringing. These can also double as an additional sleeping pad.

**You may have noticed that headlamps are not included on this gear list. By mid-May there is very little darkness in the Alaska Range and headlamps are not needed. Climbers on early May trips may choose to bring a small headlamp for the few hours in the late night or early morning that it is close to dark, but most people will not need one. If you do bring one it should be very small and very light like the Petzl Tikka or Black Diamond Ion.

Insect Repellent: If bringing bug repellent (recommended for Cascade courses, for use in town on Alaskan courses) look for more concentrated repellent in smaller containers. Make sure the

container is backpack worthy. If you use a repellent containing Deet be sure to store it away from any climbing gear and clothing. Deet destroys products made of nylon and will break down webbing, cordage, and rope.

NOTES ON GEAR PREPARATION AND MAINTENANCE

Please take the time to properly label and identify all items of personal gear. With up to twelve climbers all sharing a single camp site and cook tent, it can be very easy to forget which water bottle or set of gloves belongs to you. Many of items of gear that climbers bring are almost identical. A name on a tag or a piece of colored tape on carabiners and misc. items are easy ways to label your gear. If using tape or colored markers, make sure your labeling method is durable and water resistant.

Any items of clothing that are not new should be inspected to make sure that the seams, stitching, and waterproof properties of the garments are intact and adequate for the rigors of an expedition. Items of clothing such as shell jackets and softshell items should be cleaned and treated with a durable water repellent (DWR) such as Nikwax TX Direct, or Gore-Revivex. Gloves with leather or synthetic palms should be treated with a leather waterproofing agent such as the Nikwax product for leather and suede.

Make sure all of your packs and bags have buckles and straps that are in good working order. Bringing an extra buckle or two in case one should break in the cold weather is a very good idea. REI and most outdoor gear stores have a selection of Fastex buckles and straps.

American Alpine Institute^{Ltd.}

West Buttress Packing List

Clothing – Upper Body		Miscellaneous			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Base Layer Top (x2)	<input type="checkbox"/>	Large Pack
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2nd Layer Top:	<input type="checkbox"/>	Duffel Bag (2)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Softshell Jacket	<input type="checkbox"/>	Stuff Bags (x2)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Light Insulating Layer (top)	<input type="checkbox"/>	Glacier Glasses
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Parka	<input type="checkbox"/>	Spare Glacier Glasses?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Shell Jacket	<input type="checkbox"/>	Ski Goggles
Clothing - Lower Body		<input type="checkbox"/>	Sunscreen (SPF 30+)	<input type="checkbox"/>	Lip Protection
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Base Layer Bottom (1-2 pr)	<input type="checkbox"/>	Camera and Batteries
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2nd Layer Bottom:	<input type="checkbox"/>	Snack Food (<1lb)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Soft Shell Pants	<input type="checkbox"/>	Personal Toiletries
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Shell Pants	<input type="checkbox"/>	Hand/Foot Warmers (6)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Insulated Pants	<input type="checkbox"/>	Reading Materials
Head, Hands and Feet		<input type="checkbox"/>	Sun Hat/Visor	<input type="checkbox"/>	Cards/Games?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Nose Protector (Beko)	<input type="checkbox"/>	MP3 Player+Headphones?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bandanas (x2)	<input type="checkbox"/>	Ear Plugs
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Warm Hat	<input type="checkbox"/>	Camp Chair?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Beanie Hat/Toque	<input type="checkbox"/>	Thermarest Repair Kit
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Balaclava/Buff	<input type="checkbox"/>	Cord and sewing kit
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Face Mask	<input type="checkbox"/>	Multitool
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Liner/Fleece Gloves (light)	<input type="checkbox"/>	Journal and Writing device?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Liner/Fleece Gloves (heavy)	<input type="checkbox"/>	Bug repellent for town
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Modular Gloves	Personal Med Kit and Toiletries	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Summit Mittens	<input type="checkbox"/>	Personal Medications
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Socks (x3-4)	<input type="checkbox"/>	Tylenol/Aspirin/Ibuprofen (20)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VBL Socks?	<input type="checkbox"/>	Athletic tape 1/2" (1 roll)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Foot Powder/Antiperspirant?	<input type="checkbox"/>	Moleskin/Blister treatment
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Camp Booties?	<input type="checkbox"/>	Acetazolomide (Diamox)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Climbing Boots	<input type="checkbox"/>	Tincture of Benzoine
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Gaiters/Supergaiters	<input type="checkbox"/>	Hand/skin balm or lotion
Climbing Gear		<input type="checkbox"/>		<input type="checkbox"/>	Contacts, glasses, solutions
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Snowshoes	Camping Gear	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Trekking Poles	<input type="checkbox"/>	Sleeping Bag
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ice Axe	<input type="checkbox"/>	Compression sack
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Crampons and spare parts	<input type="checkbox"/>	Sleeping Pad - Foam
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Harness	<input type="checkbox"/>	Sleeping Pad - Inflatable
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Carabiners Locking (2)	<input type="checkbox"/>	Spoon/Fork/Spork
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Carabiners Non-locking (4)	<input type="checkbox"/>	Bowl, mug?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Prusiks	<input type="checkbox"/>	Nalgene Bottles (x2-3)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sling/anchor tie-in	<input type="checkbox"/>	Bottle Parkas (1 each)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Helmet	<input type="checkbox"/>	Pee Bottle
		<input type="checkbox"/>		<input type="checkbox"/>	Pee Funnel (women)

*Items with a question mark are optional or not applicable based on your gear.

**Two check boxes are provided so you can make your list, and check it twice!

