

American Alpine Institute^{Ltd.}

SAINT ELIAS RANGE ALPINE MOUNTAINEERING EQUIPMENT LIST

© Copyright 2004 American Alpine Institute

The Saint Elias Range is a land of extremes. Intense maritime storms, which may drop several feet of snow, can be quickly followed by a week of clear, sunny, and remarkably warm weather. The daily temperature fluctuations on the glaciers can be astonishingly large. With the ice filled valleys acting as giant reflector ovens, a clear cold night of 0F can become a sweltering 80F day only 8 hours later. The clothing you bring, therefore, should be selected with an eye towards versatility. In this regard, the layering effect achieved by a number of thinner garments will be preferable to one or two extremely thick items. Clothing should allow good freedom of movement and be light in weight.

In May, at our base camp, lows at night normally range from 10F to 20F while the day-time highs climb up to comfortable above freezing temperatures. Average temperatures in June normally are about 5F to 10F warmer than those in May. Mid-day in June, the lower glaciers of the Saint Elias can be uncomfortably hot, even wearing shorts and a T-shirt, while night time lows dip to near the freezing point. Snow, sometimes lots of it, can fall during either month. Rain is not uncommon, especially at the lower elevations.

In this program group climbing equipment and group camping gear (tents, stoves and cooking equipment) are supplied by AAI. Food is also provided though you may wish to bring along a small amount of your favorite snack food.

We will be visiting two areas within the Saint Elias. The first is a convenient teaching area on the lower reaches of a large glacier about two hours walk from our course vehicle. We will establish a base camp here for two or three days in which time we will cover ice, snow and glacier climbing skills. On the fifth day of the program, after returning to McCarthy on the previous evening, we will fly further into the heart of the range where a second base camp will be located. Here, we will make a series of climbs on the nearby peaks, some of which may require placing a high camp.

Take time to begin your preparations well in advance of your trip. The more familiar you become with your clothing and equipment before the beginning of your program, especially boots and related gear, the more comfortable and confident you'll be when we finally step out of the plane into the heart of the Saint Elias Range.

CLOTHING

Long Underwear Bottoms and Tops - This will be your base layer and should be lightweight polyester, polypropylene or similar synthetic.

2nd Layer (Top) - Expedition weight long underwear top, 100 weight powerstretch, very light weight fleece, Schoeller, or a lightweight windshirt (i.e. Marmot DriClime) are good examples of this multi-use layer.

2nd Layer (Bottom): Schoeller or nylon fabrics preferred. This will be your action layer for your legs and the layer that you will spend the most time in. This layer should be light, comfortable, durable, quick drying, and provide some protection from wind and water. Black Diamond Alpine Pants, Arcteryx Gamma pants, and Marmot Champ pants are good examples of this layer.

3rd Layer (Top): This will be your action layer and the layer that you spend the most time in. Schoeller or nylon fabrics preferred. Seek out soft jackets that are light, comfortable, durable, quick drying, and provide some protection from wind and water. Lightly insulated is ok but not required. Arcteryx, Moonstone, Marmot, Mammut, and many other companies make soft shell jackets that work well for this layer.

Insulated Jacket - Lightweight down or synthetic in addition to the warm jacket described above. Some good examples of insulating materials are Primaloft, Polarguard 3D or any down jacket/parka. This is different than your outer most waterproof shell jacket.

Shell Layer (Upper): This will be your outermost layer and it needs to be waterproof, breathable, and durable. Two or three-ply Gore-tex or other waterproof breathable materials are required. Your parka needs to have a hood and should be sized to fit over your clothes. Lightweight and compressible layers are ideal but don't sacrifice too much weight for durability. Models like the Arcteryx Beta and Gamma jackets, Marmot Alpinist and Precip, and Patagonia Stretch Armstrong are top of the line.

Shell Layer (Lower): Full side zips recommended for easy on and off over boots and crampons, Make sure they fit over all of your layers when fully dressed. Pants or bibs are acceptable and each have their advantages and disadvantages. Materials should be Gore-tex or other similar water-proof and breathable fabrics. Examples include Marmot Cirrus and Minima pants, Arcteryx Alpha SV bibs and Beta AR Pants, Patagonia Stretch Element and Microburst pants work well.

Polypro Gloves - Bring two pair of polypropylene gloves, one light and one heavy.

Gloves: Gloves for mountaineering should be waterproof, dexterous, durable, and appropriately insulated for the temperatures expected while in the mountains. Leather palms are preferred and increase the durability of the glove. Most of your climbing time will be spent in either your poly-pro gloves or these, heavier gloves. There are many modular systems for gloves out there that allow liners to be inter-changed. Models like the Black Diamond Ice and Verglas glove, Patagonia Stretch-Element and Work gloves, and models by Outdoor Research are recommended.

Warm Hat - Outdoor Research hats with Gore Wind Stopper offer excellent protection.

Lightweight Balaclava - Also required. Thin polypropylene recommended.

Sun Hat - A base ball cap serves well.

Bandana

Socks - Wool or synthetic (no cotton). Bring two complete changes. Climbers frequently wear a thin liner sock, and one or two pair of thick socks depending on boot fit

Hiking Shoes - Lightweight hiking boots or approach shoes. Those using a leather/nylon combination are recommended. These are used for the first three days only.

Climbing Boots - Plastic double boots are required. Good models include Koflach Arctis Expedition, Scarpa Inverno, or Lowa Civetta Extreme. To prevent frostbite your boots must be very warm.

Supergaiters - Supergaiters should be fit, attached, and tested well in advance of your trip. 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. Look for models that have some insulation, particularly on the lower boot rather than just heavy fabric. Models like the Wildline, La Sportiva Eiger insulated, and Climb High Buzzard work well.

CLIMBING GEAR

Ice Axe - 60 to 70 cm length with standard pick and wrist loop.

Crampons: Flexible or semi-flexible. Step in crampons are easier to put on with cold fingers but they are not compatible with all boots. Only modern strap on, step-in, or pneumatic crampons are acceptable. Older Scottish style strap-on crampons are not adequate. The Black Diamond Sabretooth and Contact, Grivel 2F, and Charlet Moser Black Ice are examples of acceptable crampons. Anti-balling plates are highly recommended.

Climbing Harness - Should fit over bulky clothing. Adjustable leg loops help in this regard.

Climbing Helmet - Bicycle, construction, or any other non-climbing helmet is not adequate.

Carabiners - Bring two large, pear shaped (or Mütter) locking biners and three regular carabiners.

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.)

CAMPING GEAR

Sleeping Bag - Down or synthetic. Rated to 0F. If you know you sleep cold take this into consideration when purchasing your bag.

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. Old Thermarests with metal valves are not acceptable, the valves freeze.

Eating Utensils - Spoon, thermal mug approx. 20 oz., and bowl (1 pint to 1 quart size).

Hydration: 3 liters of water capacity are the minimum. Hydration packs or bladders like the Camelback or Platypus with appropriate accessories are recommended. Two water bottles, usually one-quart Nalgene type, are required. Other plastic bottles, similar in nature can work as well.

Special care will have to be taken at higher altitudes and colder temperatures, if using the bladder and tube system, to avoid freezing your drink. There are several types of insulators available and having one of these is a good idea.

Water Bottle Parkas - Two, required. These are insulating jackets for your water bottles. OR manufactures them.

Pee Bottle - (essential) 1 quart size. Label it well.

Pee Funnel – For women. Most REI stores carry them, the Freshette is a good model.

Multitool - Any multitool similar to a leatherman is great. Swiss army knives will work as well.

MISCELLANEOUS

Large Pack: Large internal frame pack, minimum 5000 cubic inches required. External frame packs make movements necessary for climbing difficult and are not acceptable. Models such as the Dana Designs Terraplane, Arcteryx Bora 80-90, and Gregory Robson work well.

Summit Pack - A small pack 1500 - 2000 cu in. is great for use on summit days. Lowe ALpine Summit Attack is a great example.

Snowshoes - The smaller aluminum frame models such as the Atlas Model 1022 or MSR Denali Ascent are recommended (do not bring an extremely large pair). They should be equipped with an integral crampon. Most snowshoes will already have an integral crampon.

Trekking Poles: At least one required and two are recommended. Even if you don't normally use trekking poles, at least one is necessary to help with balance while carrying heavy packs on mountainous terrain and crossing streams.

Duffel Bag - 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 5000 cu in. capacity. Brands such as the Wild Things Burro Bag, or Gregory, Dana Designs, and North Face duffels.

Stuff Bags - Bring a few of varying sizes and colors to help keep your gear organized.

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.

Sunscreen - With a protection factor of at least 20. 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.

Lip Protection - Highest SPF available. Zinc oxide also works well (available in pharmacies).

Camera - We recommend small range finder camera 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. Bring lots of film and an extra battery. All battery powered auto-focus cameras do not perform well in the cold.

Personal Toiletries - We supply the TP.

Personal Medical Kit

- personal medications
- 20 tablets of Tylenol or aspirin
- 10 to 20 assorted Bandaid
- one 1 1/2 inch roll of cloth athletic adhesive tape
- minimum 1/2 square foot moleskin
- 4 safety pins
- 3 inch wide Ace bandage
- Pepto - bismol Tablets
- Cough drops such as Halls

Hand/Foot Warmers: Recommended for cold weather courses and for people that are susceptible to cold hands and toes. These should be small, disposable type products like the ones made by Grabber Mycoal.

Foot Powder: Foot powder is very useful especially on longer trips or for people with sweaty feet. Foot powder can help dry your feet, and promote warmth on cold weather trips. Be mindful of the storage container and make sure it will stand up to the abuse it will be subjected too.

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.

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.

Garbage Bags - Bring two or three large ones. They serve a large variety of uses.

Snack Food - If you have favorite snack foods for during the day you can bring approx. a pound of goodies.

Compass - Liquid filled.

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 light-weight.

Crazy Creek Chair – Optional or a lightweight Thermarest chair set up.