

American Alpine Institute^{Ltd.}

HUASCARAN, ALPAMAYO, AND ANCOHUMA EXPEDITIONS EQUIPMENT LIST

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During your expedition in Peru or Bolivia you will encounter a very wide range of temperatures and weather conditions, and therefore the equipment you bring must function well in a wide variety of conditions. Your clothing should be warm, lightweight, dry quickly, and allow good freedom of movement. The layering principle, based on several thin layers of insulation (rather than one thick one), covered with an outer weather-proof shell, meets these needs well.

On the Huascaran and Ancohuma expeditions the nighttime temperatures at high camp (19,600' and 19,000' respectively) typically range from 0 - 10° F, often accompanied by a strong wind, especially on Huascaran. Daytime highs on summit day usually are in the teens or 20's, although if the wind is not blowing (rare) the intense sun can make it seem much warmer. The lowest temperatures on the Alpamayo expedition are usually about 5 - 10° warmer than those encountered on Huascaran, and for this reason there are a couple of items required or recommended for Huascaran which are not needed for Alpamayo. These differences are noted in the list below.

Our base of operations for the Huascaran expedition, the town of Huaraz at about 9,500', enjoys pleasant temperatures with lows in the 50's and highs in the 70's. For Ancohuma, with an approach that begins above the level of the Bolivian Altiplano at over 14,000', temperatures are cooler with night time lows near freezing and highs in the 50's. Rain or snow is not uncommon during the approaches or climbs and you should be well prepared for it.

Please take the time to choose your clothing and equipment carefully; it may make the difference between a comfortable and successful trip and one which could have been more enjoyable. If you have any questions don't hesitate to call the Institute's equipment shop (360-671-1570).

CLOTHING

Boots - Plastic climbing boots are required, mostly for their warmth and drying speed. Models such as the Koflach Arctis Expe, Degre, Lowa Civetta, and Scarpa Inverno perform well. Huascaran and Ancohuma expedition members should be sure their boots can comfortably handle sustained temperatures as low as 0F. Climbers will do a great deal of frontpointing on the Alpamayo expedition boots should be rigid and fit well.

Gaiters - Knee high. If you buy gaiters ahead of time make sure they are large enough to fit over plastic climbing boots. Required for everyone who is not bringing supergaiters.

Supergaiters - As an alternative to regular gaiters. For Huascaran or Ancohuma we especially recommend using supergaiters. In the past some expedition members have been forced to turn back short of the summit because of cold feet. 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.

Light weight hiking shoes - for approaches and wear around base camp.

Socks - Wool or synthetic, (no cotton). Bring three complete changes. It is recommended one wear a thin liner sock, and one or two pair of thick socks depending on boot fit. You may want a couple of pair of lighter synthetic socks for the trek.

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 DriClima) 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 Mammut 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.

Liner Gloves - Polypropylene / polyester.

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 allows 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. Expedition mittens or an extra pair of very warm gloves are required for higher altitudes and colder temperatures. Black Diamond Mercury Mitts and Marmot Expedition Mitts are recommended models.

Shorts - Lightweight running shorts are best. Often worn over your lightweight long underwear.

T-shirt

Warm Hat - Synthetic is less itchy than wool and dries faster.

Lightweight Balaclava - A balaclava is a hat that can be pulled all the way down over the head to the shoulders. It completely covers the head except for an opening for the face. It provides excellent wind protection for the chin, ears and neck. Thin polypropylene or similar synthetic is recommended.

Sun Hat - A baseball cap serves well.

Travel and Town Clothes - We occasionally like to go out to good restaurants while in Peru/Bolivia. You may want something other than your climbing clothes to wear.

- light cotton or other pants, jeans are fine if they are nice.
- light cotton or other shirt, sweaters are nice.
- footwear other than sneakers or hiking boots

CLIMBING GEAR

Ice Axe -55 cm to 70 cm length with standard pick and wrist loop. If your axe doesn't have a wrist loop pre-sewn ones are commercially available or you can bring 6 feet of 9/16 inch tubular webbing and we'll tie it on the course.

Technical Ice Tool - For Alpamayo and Huascarán participants only. A 45 - 50 cm hammer. Models such as the Black Diamond Black Prophet or Cobra, Charlet Moser Pulsar or Axar, Grivel Rambo and Machine, work well. Straight or curved shafts can be used, and they must have a pre-sewn or tied leash.

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. Consider purchasing a lighter weight harness but one with gear loops.

Carabiners - Bring four, two of which should be large, locking, pear shaped (or Mütter) biners.

Climbing Helmet - Kayak, bicycle or construction helmets are NOT acceptable.

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.)

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.

MISCELLANEOUS

Passport

Passport/Money Pouch

Duffel Bag - Two large and sturdy. Durable coated nylon is best. This duffel will be tied to the back of a llama/burrow multiple times during the program. It is recommended that you have a duffel for gear transport, it is difficult to use a large back pack for this purpose without bending the internal frame. Also make sure you have a second duffel to leave belongings in when out on the trip. We will leave the extra baggage in storage at the hotel.

Small Padlock - To fit through the zip sliders of the duffel to secure belongings.

Sleeping Bag - Down or synthetic, rated to about 0 F. To help keep your sleeping bag dry, down bag users should bring an extra large garbage bag with which you can line your sleeping bag stuff sack and use for storage in the tent.

Sleeping Pad - Full length closed cell or Thermarest. If you already own a 3/4 it will be adequate but your feet will not be insulated from the ground and may be uncomfortably cold while sleeping.

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 is a good idea.

Water Bottle Parkas (Optional)- made by Outdoor Research. These are jackets that insulate the bottle from the cold. They can be very nice for cold climbing days.

Water Purification - Bring tablets such as Potable Aqua. These are lightest and most efficient. If you want to use a filter pump bring tablets for back up.

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 - 1500 to 2000 cu in. Useful on summits, day hikes and all around town. This is option but nice for climbing with rather than the larger heavier pack.

Headlamp - Bring an extra bulb and batteries. Flashlights are not acceptable.

Pocket Knife - Multipurpose tools like the Leatherman Tool are great, Swiss army knives work well also.

Repair Kit - Needle and thread, a small amount of adhesive tape, Thermarest repair kit, 20 to 40 feet of light cord, crampon adjustment tools if your crampons need them.

Personal Medical Kit -

- personal medications
- 10 to 20 assorted Band-aids
- one 1 1/2 inch roll of cloth athletic adhesive tape
- minimum 1/2 square foot moleskin, or bring Spenco Second Skin
- 4 safety pins
- 3 inch Ace bandage
- medicated cough drops such as Halls

The following drugs require a physician's prescription (except Immodium). Be sure to discuss the use and precautions for each drug with your doctor.

Loperamide (Immodium)- For diarrhea.

Acetazolamide (Diamox) - For prevention or treatment of Acute Mountain Sickness.

Choose one of the two antibiotics below depending on personal allergies.

Trimethoprim-Sulfamethoxazole (Bactrim or Septra)

Ciprofloxacin (Cipro)

(We strongly recommend against the use of codeine or the use of sleeping pills at altitude.)

Insect Repellent: If bringing bug repellent 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.

Glacier Glasses - With side shields make sure they are 100% UVA/UVB to protect from snow blindness.

Sunscreen - With a protection factor of at least 16. For the fair an SPF of 20 is better.

Lip Protection - With a protection factor of at least 16. For the fair an SPF of 20 is better.

Personal Toiletries - Bring half a roll of toilet paper or less. We provide TP in the mountains. However, TP is a precious commodity in third world countries. You'll find that having a small personal supply for use while in and around La Paz will be nice, the Hotel will have toilet paper.

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 to.

Thermal Mug - Approx 20oz.

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

Stuff Bags - Bring three or four of varying sizes and colors to help keep your gear or food organized.

Camera - With lots of film and an extra battery.

Favorite Snack Foods - We can get a lot of candy bars, granola bars, dried fruit for hiking and climbing days; however, you may have personal favorites or things that work well for you such as Power Bars, beef jerky, or Guu packets. You will not be able to purchase these specialty items in South America, so please feel free to bring some with you. Around one pound.

Optional Entertainment - Cards, books, Walkman, etc.

Foam Ear Plugs