

American Alpine Institute^{Ltd.}

ECUADOR HIGH ALTITUDE EQUIPMENT LIST

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Ecuador is named for its position on the Earth's equator, and certainly much of the country enjoys the tropical climate normally associated with that latitude. But the ascent of any of Ecuador's highest summits involves climbing into an arctic environment more comparable to Alaska than to the tropics.

The range of temperatures that you will encounter on your trip is very large. The summit temperatures on Chimborazo can be as cold as 10F and accompanied by a strong wind. You may also experience significant rain or snow during the program. At lower elevations, temperatures up to 80F are not uncommon.

The clothing you bring 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. Please take the time to choose your clothing 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 office.

This equipment list is the product of many years of safe and successful expeditions and instructional programs with A.A.I. The equipment listed below is required unless it is indicated as an optional item.

CLOTHING

Boots - Plastic climbing boots are highly recommended. Models such as the Koflach Degre, Lowa Civetta, and Scarpa Inverno perform well. Leather boots** are adequate when used with super gaiters.

**Should it be deemed that leather boots will be adequate, they must be designed for heavy duty mountaineering, they should be broken in, be thoroughly waterproofed, have at least a 1/2 length steel shank, and used in conjunction with a supergaiter.

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: 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.

Running shoes or light weight hiking shoes - For use around huts and town.

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

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, Pile or fleece preferred. Seek out quick-drying and wind/water resistant material. Black Diamond Alpine Pants and Arc'teryx Gamma LT Pants are good examples of these types of materials.

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 runners shorts are best. Often worn over your lightweight long underwear.

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

Balaclava - Lightweight, 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.

Sun Hat - A baseball cap serves well.

Swim Suit - To help enjoy the pool at our hotels in Quito and Banos.

Travel and Town Clothes - We occasionally like to go out to good restaurants and you may want something other than your woolies or jeans.

- Light cotton or other pants (either slacks or a skirt are fine for women.)
- Light cotton or other shirt.
- Footwear other than sneakers or hiking boots.

CLIMBING GEAR

Ice Axe - 50 to 70 cm (55 cm to 65 cm preferred) length with standard pick and wrist loop. If your axe doesn't have a wrist loop, pre-sewn ones are available commercially or you can bring about 6 feet of 9/16 inch tubular webbing and we'll tie it on 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.)

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.

Crampons - Flexible or semi-rigid, get good advice before purchasing crampons. Make sure crampons fit your boots well. Crampons with step-in bindings should be used only with plastic boots or leather boots with soles designed specifically to step-in systems. Black Diamond Sabertooth, Grivel 2F and Charlet Moser Black Ice are great examples.

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 MÜNTER) biners.

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

Personal Medical Kit -

- personal medications
- 20 tablets of Tylenol or aspirin
- 10 to 20 assorted Band-aids
- one 1 1/2 inch roll of athletic adhesive tape
- minimum 1/2 square foot moleskin
- 4 safety pins
- Ace bandage
- medicated cough drops such as Hall's

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.)

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MISCELLANEOUS

Sleeping Bag - Down or synthetic, rated to about 15 F.

Sleeping Pad - 3/4 or full length closed cell or Thermarest. If you use a Thermarest please bring a repair kit.

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 are available and having one of these is a good idea.

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 pack. Useful for day hikes and summit days.

Headlamp - Bring an extra bulb and two spare batteries. Flashlights are not acceptable. If you are using AA batteries for your headlamp bring three extra sets. Due to length of days in Ecuador our headlamps are used for 6 to 7 hours for each summit climb and for all evenings around the hut when outside communal eating area.

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 duct tape, Thermarest repair kit, 20 to 40 feet of light cord, crampon adjustment tools if your crampons need them.

Passport

Passport Pouch/ Money Pouch

Duffel Bag - Large and sturdy. Durable coated nylon is best. Used for storage and for luggage on airlines. When packing luggage for airline travel always put everything inside a lockable bag or duffel. Don't check your pack as a piece of baggage as it isn't possible to secure all of the outside pockets and entrances.

Small Padlock - To fit through the zipper sliders of the duffel to secure its contents.

Utensils - Large mug for warm drinks 20 oz. is nice, spoon, fork, and small plastic bowl.

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.

Pee Bottle (Pee funnel - women only) - One quart, mark it well. Pee funnel as well for female climbers.

Water Purification - Bring tablets such as Potable Aqua, at least 80 tablets. These are lightest and most efficient. You can also use a pump purifier but bring iodine as a back up for the pump.

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.

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.

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.

Foam Ear plugs - For use in huts when necessary.

Entertainment for Huts - Cards, Book, Walkman, etc.