



American
Alpine Institute

The Spirit of Alpinism

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**American Alpine Institute
– Ecuador Expedition –
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 alpine environment more comparable to Alaska than to the tropics.

The range of temperatures that you will encounter on your trip is very large, so layering and versatility in your clothing choices will be very important. At lower elevations, temperatures can get up to 80°F (27°C), though this is not common. During acclimatization hikes and approaches to the mountains temperatures may range from 40°F (4°C) to 75°F (24°C), but they are most commonly between 50°F (10°C) and 65°F (18°C). Summit temperatures on Cayambe, Cotopaxi, and Chimborazo usually range from 25°F to 45°F (-4°C to 7°C) but they can be as cold as 10°F (-12°C) and be accompanied by a strong wind. It is also important to note that while it is most likely that we will enjoy clear skies and lots of sun, we may also experience brief periods of significant rain or snow. With the climate changes that have occurred, this has become more common, especially in the last five years.

So you can see why the key goals are layering and versatility. The layering achieved with a number of thinner garments will be far preferable to being limited to one or two warmer, thicker 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 on your choices, please don't hesitate to call the Equipment Shop at AAI (360) 671-1570.

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

CLOTHING

Boots – AAI recommends current or recent models of insulated, full-shank mountaineering boots of double-boot construction. A variety of materials can work for the outer boot, including synthetic leather (e.g. the Sportiva Spantik), molded hard plastic (e.g. the Koflach Degre), and polymer coated nylon or Kevlar fabric (e.g. the Sportiva Baruntse). A single-wall mountaineering boot with insulated lining, such as the Sportiva Nepal Evo, may be adequate for some climbers in very mild weather, but must be accompanied by an insulated supergaiter or overboot in case conditions require it.

Gaiters – Expedition weight, knee high that snugly fit over the type of boot you will be using on this climb. You do not need gaiters if you have trim and clean soft shell pant legs that will not be snagged by your crampons. You also do not need gaiters if you are using a high altitude, double-boot with built-in gaiters.

Regular Shoes – Running shoes or lightweight hiking shoes, for use around town, day hikes, and huts.

Socks – Wool or synthetic, (no cotton). Bring two to three complete changes. It is recommended that some climbers wear a thin liner sock and one or two pair of thick socks, depending on boot fit and personal history with blisters.

1st Layer (Long Underwear Top & Bottom) – Close to skin garment. This will be your base layer and should be lightweight polyester, polypropylene, wool or similar synthetic.

2nd Layer (Top & Bottom Light Insulation) – Expedition weight, 100 weight powerstretch, or very light weight Pile / fleece, Schoeller, or a lightweight windshirt are good examples of this multi-use layer. Seek out quick-drying and wind/water resistant material.

3rd Layer (Top & Bottom Soft Shell) – 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. Many companies make soft shell jackets and pants that work well for this layer.

Insulated Jacket (Puffy Jacket) – Lofty lightweight down or synthetic to use when cold or around camp. 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.

Rain Shell Layer (Upper) – This will be your outermost layer and it needs to be waterproof, breathable, and durable. Two or three-ply eVent, 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 and climbing helmet. Lightweight and compressible layers are ideal but don't sacrifice too much weight for durability.

Rain Shell Layer (Lower) – This will be your outermost layer and it needs to be waterproof, breathable, and durable. 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 eVent, Gore–tex or other similar waterproof and breathable fabrics. Pants without full side zips must have zipping vents for ventilation.

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 polypro gloves or heavier gloves.

There are many modular systems for gloves out there that allow liners to be interchangeable.

- **Liner Gloves** – Polypropylene / polyester. 2 pairs: one lightweight thin base layer, and one PL100 weight.
- **Work Gloves** - 5-finger glove with leather palm & dexterous. Preferred for working with and getting wet while practicing or climbing.
- **Expedition Mittens/Gloves** – or an extra pair of very warm gloves; required for higher altitudes and colder temperatures.

Shorts – Lightweight running or hiking shorts are best. Often worn over your lightweight long underwear.

Warm Hat – Synthetic is less itchy than wool and dries faster, must be able to be worn under a climbing helmet.

Balaclava or Buff – 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.

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
- Light cotton or other shirt
- Sandals or footwear other than sneakers or hiking boots.
- Swim Suit/Board Shorts: to help enjoy the pool at our hotels in Quito and Banos.

CLIMBING GEAR

Ice Axe – Depending on body height, a length between 50 to 70 cm (55 cm to 65 cm preferred for people up to 5'10") with standard positive pick and optional wrist loop. If your axe doesn't have a wrist loop, pre–sewn ones are available commercially or we can show you how to build one out of a single length sling if your guide deems it necessary on the trip.

Prusiks – Prusiks are specially tied, 3 different color loops of 6 mm 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 Pole – 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 for step-in systems.

Climbing Harness – Should fit over bulky clothing. Adjustable leg loops help in this regard. Consider purchasing a lighter weight harness but one with belay and gear loops.

Carabiners – Bring seven total, three of which should be large, locking, pear shaped (or Mütter) carabiners. Four should be Wiregate carabiners.

Climbing Helmet – Rafting/kayak, bicycle, or construction helmets are NOT acceptable.

Personal Medical Kit –

- Personal medications
- 20 tablets of Tylenol or aspirin
- 12 assorted Band-aids (6 normal and 6 Band-Aid Advanced Healing Blister Cushions)
- One 1 1/2 inch roll of athletic adhesive tape
- Minimum 1/2 square foot Moleskine
- 4 safety pins
- One medium-size Ace bandage
- 20 cough drops/cold remedies

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

- Loperamide (Imodium) – For diarrhea.
- Acetazolamide (Diamox) or Dexamethasone (Dexa) – For prevention or treatment of Acute Mountain Sickness, depending on your doctor's prescription.

Choose one of the four antibiotics, below, depending on personal allergies and on what your doctor prescribes:

- Trimethoprim-Sulfamethoxazole (Bactrim or Septra)
- Ciprofloxacin (Cipro)
- Levofloxacin (Levo)
- Azithromycin (if Cipro and/or Levo don't work)

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

PERSONAL GEAR

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

Sleeping Pad – Bring an inflatable full length sleeping pad and patch kit. You can also bring a Closed Cell Foam pad alone or in tandem to the inflatable pad.

Small Travel Pillow – Bring a small travel pillow or make a pillow out of some of your extra clothes inside your fleece jacket.

Hydration 3 liters of water capacity are the minimum.

- 2-3 water bottles, usually one–quart Nalgene type, are required. Other plastic bottles such as gatorade bottles work as well.
- Hydration packs or bladders like the Camelbak or Platypus. *Special care will have to be taken at higher altitudes and colder temperatures to avoid freezing the hose if using the bladder and tube system. There are several types of insulators are available and having one of these is strongly recommended.

Mid-Size Backpack – A mid-size internal frame pack, 65 liters +/-10 liters (3965 cubic inches +/- 610 cubic inches). External frame packs make movements necessary for climbing difficult and are not acceptable.

Day Pack – A 28-32 liter (1700-2000 cubic inch) pack. Useful for sightseeing in Quito and day hikes. Can also be used on summit days.

Headlamp – Bring spare batteries. Flashlights are not acceptable. 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 the communal eating area.

Pocket Knife – Multi tools like a Leatherman or Swiss army knife work well also.

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 backpack as a piece of baggage as it isn't possible to secure all of the outside pockets and entrances.

Personal Small Repair Kit - For When in Town Only (optional)

- Needle and thread
- Small amount of duct tape
- Inflatable pad patching kit
- 30 feet of 3mm perlon cord (great to replace broken boot laces, to build tethers, etc.)

Small Padlock – To fit through the zipper sliders of the duffel to secure its contents. TSA approved best.

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 may 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 (and Pee Funnel for Females) – Optional for men at camps. Recommended for women especially while climbing. Great for anyone on stormy nights. 48 oz in capacity, ideally collapsible. Mark it well.

- Men: Huts have toilet facilities and there is a toilet tent at the base camps of Antisana and Chimborazo. On the mountain you can pee on the ground after stepping away from the route during the ascent. At the base camps, you can pee on the ground by stepping away from camp.
- Women: Huts have toilet facilities and there is a toilet tent at the base camps of Antisana and Chimborazo. On the mountain and at the base camps – because it can be cold and the air can be very moist even in good weather (forming rime ice) – it's best to not need to take down your pants. A pee funnel and pee bottle can allow you to go while only unzipping. The funnel is not hard to master, but you need to learn how to stand and pee; it's different. Practice at home and in the shower before your trip. Firm plastic models such as the Freshette, Pstyle seems to work better and are recommended over silicone models like GoGirl and others.

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

Ski Goggles - For use in high winds and heavy snow. These should be lightly tinted but not so dark that they will reduce visibility in low light conditions. They should block 100% of UVA/UVB light. If you wear prescription glasses, these must fit comfortably over your glasses.

Water Purification - Bring tablets for personal use when not using our boiled water at camp to treat approx. 10 gallons - 45 liters. These are lightest and most efficient. Preferably chlorine dioxide over Iodine.

Sunscreen – With a protection factor of at least SPF of 25; you are on the Equator after all.

Lip Protection – With SPF 20+ is needed.

Bandana/Buff – For additional sun protection.

Toiletries – keep it small/travel sized.

- Bring half a roll to a roll of toilet paper in it's own ziploc bag. Several small packets of travel tissues or wet wipes can also be used.
- Hand sanitizer
- Personal toiletries
- 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.

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.

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

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

Camera – Extra batteries, and memory card (or large memory card) are a must. Tripod is optional.

Ear plugs – For use in huts/tents when necessary.

Entertainment for Huts – Cards, book, journal/notebook, ipod, etc.

AAI's Equipment Shop and Gear Specialists

The Equipment Shop at the American Alpine Institute provides clothing and equipment for purchase, rental gear, and advice. Shop staff members are great climbers themselves and deeply involved in evaluating and testing gear. They are considered by many outdoor gear manufacturers to be the most expert in the country. They thoroughly understand the needs of climbers who will be rock climbing, ice climbing, mountaineering, or exploring the world on international expeditions.

Please consider our staff members a part of your resource team in preparing for your trip. AAI Equipment Specialists are on hand to consult with you on specific gear needs, to answer questions on the latest equipment and innovations, and to make recommendations on best choices of clothing and equipment. They can assure that you are equipped with the best possible gear for your climbs. And if you have any difficulty determining if some particular items of clothing or equipment you already own will serve you well on a particular trip, they can help you answer that question.

Guides Choice International Field Testing

The Equipment Shop at the American Alpine Institute also administers AAI's prestigious Guide's Choice Award. Equipment and clothing that have been awarded the Guides Choice designation have proven to be the top item in their product category. The awards are made on the basis of excellence in design, performance, and durability demonstrated in rigorous international field tests carried out by the professional guides of the Institute. All of the products at the Equipment Shop and on its website, guideschoice.com have been field-tested or have been vetted and are in the process of being field-tested.

Call or E-mail the Equipment Shop for Advice or Gear

Please feel free to contact us and to let us help you get ready for your climbing trip. Our staff members are experts in the field, and the items of gear that we rent and sell are the best made in terms of design, performance, and durability. Your comfort and safety depend on being well equipped. Whether you get your gear from us or just get advice, we're here to help you prepare.

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