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 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 40F (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 (-2°C to 7°C) but they can be as cold as 10°F (-23°C) and be accompanied by a strong wind. It is also important to note that while we are climbing in one of the two dry seasons that the country experiences, and 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 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.

** If you are considering the use of leather boots, any you choose must be designed for heavy-duty mountaineering, be broken in, be thoroughly waterproofed,
have at least a 1/2 length steel shank, and be used in conjunction with a supergaitor.

Gaiters - Knee high. If you buy gaiters ahead of time make sure they are large enough to fit over plastic climbing boots.

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 exam- ples 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 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.

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 Bandaids
- 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.
- Acetazolomide (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.)

MISCELLANEOUS

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

Sleeping Pad – Please see our notes in the final trip letter (sent via email about two weeks before your trip) or ask the program coordinator about sleeping pads. A 3/4 or full length closed cell or Thermarest is best. 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 sipper sliders of the duffel to secure its contents.

Favorite Snack Foods - 1 to 1.5 pounds of your favorite snack food and drink mixes. We will provide snack food on the climbs, but the quality and variety available in Ecuador are not great. Please bring a selection of your favorite candy bars, granola bars/power bars, dried fruit, jerky, Guu packets – basically whatever helps you get up trails and mountains!

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.

Bandanna – For additional sun protection.

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 too.

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.

The Equipment Shop at the American Alpine Institute

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 hear to help you prepare.

Call: (360) 671-1570
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