



American  
Alpine Institute

*The Spirit of Alpinism*

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## Ecuador Expeditions

Cayambe-Cotopaxi Skills Expedition

Chimborazo Ascent

### EQUIPMENT CHECKLIST

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. However, the ascent of any of Ecuador's highest summits involves climbing into an alpine environment more comparable to Alaska than to the tropics. Please take time to choose your clothing and equipment carefully.

**CLIMATE:** At lower elevations, temperatures can get up to 80°F (27°C), though this is uncommon. During acclimatization hikes and approaches to the mountains, temperatures may range from 40°F to 75°F (4°C to 24°C), but they are most commonly between 50°F (10°C) and 65°F (18°C). Summit temperatures on Cayambe, Antisana, 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. We may enjoy clear skies and lots of sun, or we may experience periods of rain or snow.

Given the variability in weather, layering and versatility are key. The layering achieved with a number of thinner garments will be far more preferable than being limited to one or two warmer, thicker items. Clothing should allow good freedom of movement and be lightweight.

**GEAR PREPARATION:** Please take the time to properly label and identify all items of personal gear. Be sure to mark your name on a clothing or item tag.

When preparing your equipment for travel to Ecuador, protect your equipment by covering any sharp objects with cardboard or other protection to prevent puncturing or tearing. Please pack your boots and shell jacket/pants into your carry-on luggage just in case your checked baggage is delayed.

**ASSISTANCE:** All of our rentals are done in Ecuador at a local gear shop. You will fill out a [Rental Request Form](#) before your expedition to inform us of any rentals you may need. Please feel free to contact the AAI Equipment Shop if you have any questions about gear for your expedition. The shop can be reached at [shop@alpineinstitute.com](mailto:shop@alpineinstitute.com) or 360-671-1570.

Clothing	Packing Checklist
<b>Beanie/Toque</b> Wool or synthetic, must fit under a helmet.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Sun Hat</b> A baseball cap or visor works well.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Lightweight Balaclava / Buff</b> Look for one that is UPF rated. Brighter colors work better for warmer conditions and darker colors for colder conditions.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Glacier Glasses</b> These are mandatory. Look for a pair that fits well and has side shields. The lenses should be dark enough to not let more than 10% of visible light through. Photochromic (variable tint) lenses are more expensive but are usable in a wider range of activities.  <i>★ 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. If you only use prescription glasses, we recommend "OTG" (over the glass) or "Frame-over" style sunglasses.</i>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Goggles</b> <i>Optional.</i> These are used in high winds or heavy rain, and can serve as a backup to your glacier glasses. Look for UVA/UVB protection and a lighter lens is recommended for better visibility in flat light.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Headlamp</b> Bring extra batteries, or if it has a rechargeable battery, make sure to bring a charger. 200-350 Lumens is an ideal range.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Liner Glove</b> Thin, lightweight, wool or synthetic gloves. Size to fit snug but not too tight. You will wear these for much of your time on the mountain. UPF rated liner gloves are ideal for sun protection. 1 pair is required; 2 pairs are suggested.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Work Glove</b> The most desirable glove is one that is comfortable and dexterous, so that it can be worn all day. It should be durable enough (leather palms) to handle ropes, ice axes, and a bit of rock scrambling. These come in different weights, so choose the thickness that works with your glove system. Bring one pair.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Expedition / Hard Shell Glove</b> Composed of heavy-duty waterproof shells with extremely warm liners, these modular gloves MUST have removable liners. These gloves must be dexterous enough to handle ropes, carabiners, and jumars.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Undergarments</b> Wool or synthetic.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Base Layer Top</b> This will be your base layer and should be "lightweight or silk weight" synthetic or wool. Long sleeves are preferred. No cotton.	<input type="checkbox"/> Own <input type="checkbox"/> Buy

<b>Base Layer Bottom</b> Look for the same features of your Base Layer Top. They should fit comfortably under your trekking pants. These are used mainly in the evening or on colder days while trekking. This will be your primary layer on those days.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Active Insulation Layer</b> Lightweight “gridded fleece” or lightweight down or synthetic insulated jacket. Hood preferred.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Soft Shell Jacket or Windshirt</b> A soft shell is a weather resistant, breathable, and stretchy freedom of movement piece. This piece is versatile in the sense of movement. It is often called an “action layer.” It is weather resistant, meaning it can put up with light showers and wind. Also if it gets wet it dries fairly quickly. This enables you to not have to stop and put on another piece when the wind picks up or a light shower happens. Because it is water resistant, and not waterproof, it also breathes fairly well. This enables you to move without overheating, so you don’t have to constantly stop to change out layers to regulate body temperature. They are also made of a stretchy material so there are no restrictions to your movement during activity. Put all those together and you have a pretty versatile layer, the Soft Shell. Hood preferred.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Insulation Jacket</b> A.K.A. the “puffy.” Down or Synthetic. This piece is worn in cold conditions or when not moving. Hood preferred. If choosing Down, water-resistant Down treatment is preferred to help prevent matting and loss of insulating ability if the jacket gets wet.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Hard Shell Jacket</b> Non-insulated jacket with a waterproof and breathable membrane. Three layer construction is recommended. It must have a hood, ideally a helmet compatible hood. When sizing make sure it can fit over other layers.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Hiking Pant</b> These should be light to mid-weight comfortable synthetic pants that don’t restrict movement. These will be worn in-town and on acclimatization hikes.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Soft Shell Pant</b> Look for the same features as your soft shell jacket. This will be your outermost layer most of the time for your legs. A thigh pocket is a useful feature for storing small items. Your base layers need to fit under these pants comfortably.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Hard Shell Pant</b> Non-insulated, waterproof and breathable membrane. Full side zips are recommended. When sizing make sure it is able to fit over a base layer and soft shell pants.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Socks</b> Wool or synthetic socks that are over the ankle height. Focus on getting insulation from the boot and using a lighter weight sock, instead of using a heavy weight sock for warmth. Wearing a “silk-weight” liner sock beneath your hiking sock can reduce friction on the skin directly and mitigate blister development. Bringing 2-3 pairs is recommended for this Expedition. Two pairs mainly used while climbing that can be switched out if one gets wet. As well as having a 3rd pair to sleep in and as a backup.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Comfortable Approach Shoes</b> For use around Quito. These can be the same shoes for the day hikes and approach hikes.	<input type="checkbox"/> Own <input type="checkbox"/> Buy

### Mountaineering 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 upper gaiter or overboot in case conditions require it.

★ NOTE: There are many makes and models out there and not all are created equal. Please consult with our Equipment Shop if you are uncertain about the acceptability of your chosen model.

- ☐ Own
- ☐ Buy
- ☐ Rent\*

### Gaiters

Knee height. These keep snow and ice out of your boots and socks and will also protect your pants from the sharp points on your crampons. Check the fit of the gaiter to your boot in advance to make sure the coverage is adequate. Can omit if your pants have a built gaiter and scuff guard.

- ☐ Own
- ☐ Buy

## Climbing

### Packing Checklist

### Ice Axe

A straight shaft ice axe like the Petzl Glacier or Black Diamond Raven Pro is recommended. Adze is required. Please contact our Equipment Shop if you have any questions.

Use the following table as a rough guide on length. Ice axe leashes are not required and not recommended.

Straight Shaft Axe	
Personal Height	Recommended Length of Axe
5'8" or shorter	50-55cm
5'9"- 6'	55-60cm
6'1"-6'3"	60-65 cm
6'4" and up	65-68cm

- ☐ Own
- ☐ Buy
- ☐ Rent\*

### Harness

Make sure the harness has a belay loop and gear loops. When sizing make sure it can fit over your clothing layers when you have multiple layers on.

- ☐ Own
- ☐ Buy
- ☐ Rent\*

### Helmet

Must be UIAA rated for climbing.

- ☐ Own
- ☐ Buy
- ☐ Rent\*

### Crampons

Must be steel crampons with front points and compatible with your mountaineering boots. Only modern strapon, step-in, or 'newmatic' crampons are acceptable.

- ☐ Own
- ☐ Buy
- ☐ Rent\*

### Carabiners

Must be UIAA rated for climbing.

- ☐ Three large pear shaped munter-style locking carabiners.
- ☐ Four non-locking wire gate carabiners.

- ☐ Own
- ☐ Buy

<b>Trekking Poles</b> One is required, but two are highly recommended. These increase balance while wearing a heavy pack and making stream crossings, while also decreasing pressure on the knees during steep descents. Adjustable poles only.	<input type="checkbox"/> Own <input type="checkbox"/> Buy <input type="checkbox"/> Rent*
<b>Prusiks</b> These are specially tied loops of 6mm cord used for crevasse rescue. Bring three lengths; 13 ft, 6 ft, 5 ft. We recommend getting three different colors for easy identification.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Internal Frame Pack</b> We recommend a pack size around 50L for this Expedition. Choose the pack that fits your body best. It is very important that your pack is in good working condition and not prone to failures of any sort. Our packs are a hugely important item and a climber may not be able to continue due to a pack failure. An external frame is not adequate.  Most climbers on this Expedition will use the same pack for hut approaches (approx. 35 lbs for up to 1 hour) as well as for their trekking/summit pack (approx. 20-25 lbs for up to 8 hours). For this purpose, it is nice to have a backpack that has adjustable compression straps. Removable hipbelt, suspension parts, and lid are ideal options.	<input type="checkbox"/> Own <input type="checkbox"/> Buy <input type="checkbox"/> Rent*
<b>Day Pack</b> 25 L to 35 L is an ideal size, if you choose to bring a separate pack for day treks and summit approaches.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Duffle Bag</b> Bring one large, sturdy duffle bag. Durable coated nylon is best. This will be tied on the roof of our jeeps as we drive to base camp. Models with wheels are not allowed.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<div>Camping</div> <div>Packing Checklist</div>	
<b>Sleeping Bag</b> We recommend either a synthetic or down sleeping bag rated to around 15°F. If you bring a synthetic bag bring one on the lower end of the temperature range since synthetic bags tend not to be as warm as down. If choosing Down, water-resistant Down treatment is preferred to help prevent matting and loss of insulating ability if the sleeping bag gets wet.	<input type="checkbox"/> Own <input type="checkbox"/> Buy <input type="checkbox"/> Rent*
<b>Compression Stuff Sack</b> For your sleeping bag. If it is a down bag, a waterproof compression sack is recommended.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Sleeping Pad</b> <i>Only required for those pursuing the Chimborazo Ascent.</i> Bring one full-length inflatable pad. Your inflatable pad should be lightweight and packable with an RValue of at least 4. Please bring a patch kit for inflatable pads.  A closed cell foam pad will be provided to each climber at no extra cost.	<input type="checkbox"/> Own <input type="checkbox"/> Buy <input type="checkbox"/> Rent*

<b>Hydration</b> 3L capacity is recommended, though some people need more and some people need less.  Some people bring a bladder and a hard sided bottle. The bottle is an important backup to the bladder if it gets punctured. A hard-sided bottle may also double as a mug for hot water, though not every bottle is designed to hold boiling water.  For Camelbak style hydration bladders, bring a drinking tube insulator, as the tube can freeze up. Drinking tubes must also have a lock on the bite valve. If you choose to use this system, be aware that they require constant vigilance in order to avoid freezing. Blow the water out of the tube after every use and place the bite valve in the neck of your shirt to keep from freezing.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Water Bottle Parkas</b> These are insulating jackets for your water bottles, one for each bottle. Must cover the entire bottle, including the lid.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Favorite Snack Foods</b> 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.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
Other Essentials	
<b>Passport</b> Required. This must be valid for six (6) months after your scheduled return date.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Wrist Watch</b> A model with an alarm that will wake you up is preferable. It doesn't need to be anything fancy.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Toothbrush and Toothpaste</b> Travel size recommended.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Hand Sanitizer and/or Wet Wipes</b> Required. Used after going to the bathroom and before eating. Wet wipes can be used for the "mountain shower."	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Sunscreen</b> SPF 30+, zinc based is preferred. Small travel size tubes are recommended so you can put them in a close by pocket for easy access.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Lip Balm</b> Make sure it is SPF rated.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Foot Powder</b> 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.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Toilet Paper</b> We recommend bringing half a roll to a roll of toilet paper in it's own ziploc bag.	<input type="checkbox"/> Own <input type="checkbox"/> Buy

<b>Hand/ Foot Warmers</b> Recommended for people that are susceptible to cold hands and toes. These should be small, disposable type products.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Personal First Aid Kit</b> <input type="checkbox"/> Band aids <input type="checkbox"/> Blister treatment <input type="checkbox"/> Prescription drugs <input type="checkbox"/> Ibuprofen etc. <input type="checkbox"/> If you wear contacts make sure and have spares if you can't see without them.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Repair Kit</b> <input type="checkbox"/> Inflatable sleeping pad patch kit <input type="checkbox"/> Duct tape (Can be wrapped around trekking poles or water bottles. Gorilla Tape tends to be the best brand for the mountains.) <input type="checkbox"/> Zip ties <input type="checkbox"/> 6-10 ft of 3mm accessory cord <input type="checkbox"/> 2 Trash bags that are big enough to line the inside of your pack with.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Garbage Bags</b> Bring one large bag to line your backpack and one to pack out garbage. If you are continuing onto the Chimborazo Ascent, bring a second set of garbage bags.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<div> <h2>Other Optional Items</h2> </div> <div> <p><i>The items below are not required, although many are nice "luxury" items that can make your expedition more enjoyable. Remember that a few ounces here and there add up to extra pounds on your back and knees during your expedition.</i></p> </div>	<div> <h3>Packing Checklist</h3> </div>
<b>Entertainment</b> Books, games, cards, music player, kindle, ect. For evenings or rainy days in the tent.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Portable Charging Device</b> Phone charger, battery pack, or solar panel.  <i>★ NOTE: Solar panels should only be used to charge battery packs. Battery packs should be used to charge devices. Inappropriate use of a solar panel could lead to the depletion of a device's power.</i>	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Ear Plugs</b> For defense against snoring and high winds.	<input type="checkbox"/> Own <input type="checkbox"/> Buy
<b>Camera</b> Phone cameras or small point-and-shoot cameras are preferred. SLR cameras are not recommended due to their size and bulk.	<input type="checkbox"/> Own <input type="checkbox"/> Buy