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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; it may make the difference between a comfortable, successful trip and one that could have been more enjoyable.

**CLIMATE:** 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 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. It is also important to note that while it is 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 weather has become more common, especially in the last five years.

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

**GEAR PREPARATION:** Please take the time to properly label and identify all items of personal gear. With many climbers all sharing a single campsite, it can be very easy to forget which water bottle or set of gloves belongs to you. Be sure to mark your name on a clothing tag. Colored tape or fingernail polish is excellent on other items. If using tape or colored markers, make sure your labeling method is durable and water resistant.

All items of clothing should be inspected to make sure that the seams, stitching, and waterproof properties of the garments are intact and adequate for the rigors of an expedition. Used articles of clothing including shell jackets and softshell items should be cleaned and treated with a durable water repellent (DWR) such as Nikwax TX Direct or Gore-Revivex. Gloves with leather or synthetic palms should be treated with a waterproofing agent such as Nikwax. Make sure all of your packs and bags have buckles and straps that are in good working order.

When preparing your equipment for travel to Ecuador, protect your equipment by covering your ice axe, crampons, and trekking poles with cardboard or other protection to prevent puncturing or tearing less durable equipment. Keep in mind that all liquids must either be in your checked luggage or in a clear

ziplock bag. Please pack your boots and shell jacket/pants into your carry-on luggage just in case your checked baggage is delayed.

**ASSISTANCE:** At AAI we take equipment and its selection seriously. Our Equipment Services department is expertly staffed by climbers, skiers and guides. Additionally, we only carry products in our store that have been thoroughly field tested and approved by our guides. This intensive process ensures that all equipment that you purchase from AAI is best suited to your course and future mountain adventures. Please contact us to select equipment for your course.

## Please contact the Equipment Shop at 360-671-1570 for assistance in selecting equipment for your course.

| Clothing   | Packing<br>Checklist |
|--|----------------------|
| Beanie/Toque Wool or synthetic, must fit under helmet.   | □ Own<br>□ Buy       |
| Sun Hat Preferred to fit under helmet. A baseball cap or visor works well.   | □ Own<br>□ Buy       |
| Lightweight Balaclava / Buff Look for one that is UPF rated. Brighter colors work better for warmer conditions and darker colors for colder conditions.  | □ Own<br>□ Buy       |
| Glacier Glasses 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.  **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. | □ Own<br>□ Buy       |
| Goggles Optional. 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.  | □ Own<br>□ Buy       |
| Headlamp Bring extra batteries, or if it has a rechargeable battery, make sure to bring a charger. 200-350 Lumens is an ideal range.   | □ Own<br>□ Buy       |
| Liner Glove 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.  | □ Own<br>□ Buy       |
| Work Glove 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.   | □ Own<br>□ Buy       |

| Expedition / Hard Shell Glove 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.   | □ Own<br>□ Buy |
|--|----------------|
| Undergarments Wool or synthetic.   | □ Own<br>□ Buy |
| Base Layer Top This will be your base layer and should be "lightweight or silk weight" synthetic or wool. Long sleeves preferred. No cotton.   | □ Own<br>□ Buy |
| Base Layer Bottom 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.  | □ Own<br>□ Buy |
| Active Insulation Layer Lightweight "gridded fleece" or lightweight down or synthetic insulated jacket. Hood preferred.  | □ Own<br>□ Buy |
| ★ Weight: 250g-350g ideal weight.  |                |
| Soft Shell Jacket or Windshirt 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.  ** Materials: Exolite, Matrix, Schoeller*  ** Windshirt: Patagonia Houdini or similar. | □ Own □ Buy    |
| Insulation Jacket 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.  ** Weight: 350g-450g ideal weight.  | □ Own<br>□ Buy |
| Hard Shell Jacket 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.  ** Materials: Gore-Tex, eVent, Drilite, H2NO, Pertex Shield   | □ Own<br>□ Buy |
| Hiking Pant 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.   | □ Own<br>□ Buy |

| Soft Shell Pant 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.  |                         |                                 |                         | □ Owr<br>□ Buy          | • |
|--|-------------------------|---------------------------------|-------------------------|-------------------------|---|
| Hard Shell Pant Non-insulated, waterproof and breathable membrane. Full side zips are recommended. When sizing make sure to it is able to fit over a base layer and soft shell pants.  |                         |                                 |                         | □ Owr<br>□ Buy          |   |
| ★ Materials: Gore-Text   | k, eVent, Drilite, H2NC | ), Pertex Shield                |                         |                         |   |
| Socks 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.   |                         |                                 |                         | □ Owr                   |   |
| Comfortable Appro  |                         | same shoes for the day hikes ar | nd approach hikes.      | □ Owr<br>□ 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. |                         |                                 |                         | □ Owr<br>□ Buy<br>□ Ren |   |
| Gaiters  Knee height. Keeps 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.   |                         |                                 | □ Owr<br>□ Buy          |                         |   |
| Climbing   |                         |                                 | Packir<br>Checkl        | _                       |   |
| 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.  |                         |                                 | □ Owr<br>□ Buy<br>□ Ren |                         |   |
| 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  |                                 |                      |                     |                     |
|   |  |  |                                 |                      |                     |                     |
|   | •  | op and gear loops. Whave multiple layers on.   | nen sizing ma                   | ike sure it can fit  | 0 0                 | Own<br>Buy<br>Rent* |
| Helmet Must be UIAA rated for climbing.   |  |  | 0                               | Own<br>Buy<br>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<br>Buy<br>Rent* |                     |
|   | •  | ter-style locking carabi<br>rabiners.  | ners.                           |                      | 0                   | Own<br>Buy          |
| -   | aking stream cro   | ecommended. These i<br>ssings, while also de<br>les only.  |                                 | <b>-</b> ;           | 0 0                 | Own<br>Buy<br>Rent* |
|   | =  | n cord used for crevass<br>ree different colors for  |                                 |                      | 0                   | Own<br>Buy          |
| body best. It is very failures of any sort.   | pack size around<br>important that your<br>Our packs are a | 50L for this Expeditio<br>our pack is in good wo<br>hugely important item<br>ernal frame is not adeo | orking conditi<br>and a climbe  | on and not prone to  |                     | Own<br>Buy<br>Rent* |
| for up to 1 hour) a hours). For this purp   | s well as for the<br>pose, it is nice to                   | use the same pack fo<br>ir trekking/summit pac<br>have a backpack that<br>, and lid are ideal optio  | ck (approx. 20<br>is adjustable | 0-25 lbs for up to 8 |                     |                     |
| Day Pack<br>25 L to 35 L is an ide<br>approaches.   | eal size, if you ch  | oose to bring a separa   | te pack for da                  | ay treks and summit  | 0                   | Own<br>Buy          |
|   | •  | rable coated nylon is b<br>b. Models with wheels   |                                 | :                    | 0                   | Own<br>Buy          |

| Camping   | Packing<br>Checklist      |
|---|---------------------------|
| Sleeping Bag 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.                | □ Own<br>□ Buy<br>□ Rent* |
| Compression Stuff Sack For your sleeping bag. If it is a down bag, a waterproof compression sack is recommended.  | □ Own<br>□ Buy            |
| Sleeping Pad  Only required for those pursuing the Chimborazo Ascent. 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.   | □ Own<br>□ Buy<br>□ Rent* |
| A closed cell foam pad will be provided to each climber at no extra cost.   |                           |
| Hydration 3L capacity is recommended, though some people need more and some people need less.   | □ Own<br>□ Buy            |
| 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. |                           |
| Water Bottle Parkas These are insulating jackets for your water bottles, one for each bottle. Must cover the entire bottle, including the lid.  | □ Own<br>□ Buy            |
| 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.                    | □ Own<br>□ Buy            |
| Other Essentials  | Packing<br>Checklist      |
| Passport Required. This must be valid for six (6) months after your scheduled return date.  | □ Own<br>□ Buy            |
| Wrist Watch A model with an alarm that will wake you up is preferable. It doesn't need to be anything fancy.  | □ Own<br>□ Buy            |
| Toothbrush and Toothpaste Travel size recommended.  | □ Own<br>□ Buy            |
| Hand Sanitizer and/or Wet Wipes   | □ Own                     |

| Required. Used after going to the bathroom and before eating. Wet wipes can be used for the "mountain shower."   | □ 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.   | □ Own<br>□ Buy       |
| <b>Lip Balm</b><br>Make sure it is SPF rated.  | □ Own<br>□ Buy       |
| 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.           | □ Own<br>□ Buy       |
| <b>Toilet Paper</b> We recommend bringing half a roll to a roll of toilet paper in it's own ziploc bag.  | □ Own<br>□ Buy       |
| Hand/ Foot Warmers Recommended for people that are susceptible to cold hands and toes. These should be small, disposable type products.  | □ Own<br>□ Buy       |
| Personal First Aid Kit  □ Band aids □ Blister treatment □ Prescription drugs □ Ibuprofen etc. □ If you wear contacts make sure and have spares if you can't see without them.  | □ Own<br>□ Buy       |
| Repair Kit  ☐ Inflatable sleeping pad patch kit ☐ Duct tape (Can be wrapped around trekking poles or water bottle. Gorilla Tape tends to be the best brand for the mountains.) ☐ Zip ties ☐ 6-10 ft of 3mm accessory cord ☐ 2 Trash bags that are big enough to line the inside of your pack with. | □ Own<br>□ Buy       |
| Garbage Bags 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.  | □ Own<br>□ Buy       |
| Other Optional Items  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.  | Packing<br>Checklist |
| Entertainment Books, games, cards, music player, kindle, ect. For evenings or rainy days in the tent.  | □ Own<br>□ Buy       |
| Portable Charging Device Phone charger, battery pack, or solar panel.  | □ Own<br>□ Buy       |
| ★ 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.  |                      |
| Ear Plugs  | □ Own                |

| For defense against snoring and high winds.  | □ Buy          |
|--|----------------|
| Camera Phone cameras or small point-and-shoot cameras are preferred. SLR cameras are not recommended due to their size and bulk. | □ Own<br>□ Buy |