American Alpine Institute^{Ltd.}

Peru Artesonraju Expeditions Equipment Checklist

During your expedition in Peru, you will encounter a very wide range of temperatures and weather conditions. As such, the equipment you bring must function well in a wide variety of environments. Your clothing should be warm, lightweight, dry quickly, and allow good freedom of movement. The layering principle, based on several thin layers of insulation (rather than one thick one), meets these requirements well. Please take time to choose your clothing and equipment carefully; it may make the difference between a comfortable and successful trip and one that could have been more enjoyable.

On the Artesonraju expedition, the nighttime temperatures at high camp typically range from 0 - 10° F, often accompanied by a strong wind. Daytime highs on summit day usually are in the teens or 20's, although if the wind is not blowing (rare) the intense sun can make it seem much warmer. Our base of operations, the town of Huaraz at about 9,500', enjoys pleasant temperatures with lows in the 50's and highs in the 70's. Rain or snow is not uncommon on approaches or on climbs and you should be well prepared for it.

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 the Peru, 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. Please pack your boots and shell jacket/pants into your carry-on luggage. Delayed luggage is not uncommon.

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.

Equipment items that are available for rental are designated with an (R). Please contact the Equipment Shop at 360-671-1570 for assistance in selecting

equipment for your course. Any rentals must be rented and shipped to your home address before you leave for your trip so you can take the items with you.

<u>Clothing & Footwear</u>

Base Layer Top: This will be your base layer and should be "lightweight" or "silk weight" synthetic or wool. Bring two. No cotton.

- Weight: 5 8 oz / 140 225 grams
- Materials: Synthetic, wool.
- Example: Patagonia Capilene 2

Base Layer Bottom: Look for the same features as your Base Layer Top. Bring two.

- Weight: 5 8 oz / 140 225 grams
- Materials: Synthetic, wool.

Undergarments: Most climbers wear them underneath their base layer. Up to 5 pairs depending on personal preference for changing.

• Materials: Synthetic, wool

2nd Layer Top: A lightweight fleece or wind shirt. A chest pocket is a helpful feature of this multi-use layer.

- Weight: 13 16oz / 368-454 grams
- Materials: Nylon, micro weave fabrics, fleece, wind stopper
- Examples: Patagonia Houdini, Golite Wisp, Outdoor Research Marvel

Expedition-Weight Bottoms: Useful for those who get cold easily. A thicker pair of bottoms that will serve as an additional insulating layer. One-piece suits (Farmer-John/Union Suit) are popular but require more planning and effort when answering the call of nature, and they work best with other layers designed for using the bathroom without removing layers. Windproof/Windstopper pants are not acceptable for this layer.

- Weight: 5 8 oz / 140 225 grams
- Materials: Powerstretch 100, wool, fleece

Soft Shell Jacket: A thin, light, stretchy, breathable but wind and snow-resistant layer that is comfortable to wear is ideal. This will be your 'action layer' and the outer layer that you spend the most time in. Hoods are optional but highly recommended. Size your jacket to be trim fitting, but large enough to fit over your base and second layers. Light to moderate insulation/thickness is recommended. This layer will go over your base and insulation layers, but under your shell and parka.

- Weight: 18 26 oz / 510 737 grams
- Materials: Schoeller, Powerstretch, Powerdry, or similar
- Examples: Arc'teryx Gamma MX, Patagonia Figure 4 and Ready Mix, Patagonia Core Skin, OR Mithral

Soft Shell Pants: 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.

- Weight: 16 30oz / 450 850 grams
- Materials: Schoeller, Powershield, Powerdry, or similar
- Examples: Patagonia Guide pants, Black Diamond Alpine Pants, Arc'teryx Gamma LT Pants, Mammut Champ

Light Insulating Layer, Top: The goal for this piece is to add warmth to your layering system. Depending on your clothing system, you may fit this layer underneath your shell gear (e.g. fleece sweaters) or over your shell gear (lightweight insulated jackets). If choosing fleece, pick modern garments with waffle-grid patterns and avoid "windproof fleece" – it is not breathable enough. The weight and design of this piece will vary based on the other items of climbing that you are bringing.

- Weight: 10 20oz / 283 566 grams
- Materials: Primaloft, down, fleece
- Examples: Patagonia Puff Jacket or Micro Puff pullover, Patagonia R3 or R4, Montbell Thermawrap, Wild Things Primalight and EP jackets.

Shell Jacket: Choose the lightest, most packable, waterproof shell that will still get the job done. Avoid extra pockets (one or two chest pockets is perfect), 3-layer Gore-Tex, and hanging linings. Your hood should fit over your climbing helmet. Your shell should fit comfortably over your other base and mid-layers (minus your insulating layer).

- Weight: 8 20oz / 227 566 grams
- Materials: eVent, Gore-tex, h2No, or similar
- Examples: Rab Latok Alpine, Patagonia Jetstream, Westcomb Mirage

Shell Pants: Made of a waterproof/breathable material, your lightweight shell bottoms should have full or hip-length side zips. This garment should be extremely lightweight and packable. A zipper fly is a nice optional luxury.

- Weight: 8 16oz / 227 453 grams
- Materials: eVent, Gore-tex, h2No, or similar

Puffy/Belay Jacket: Sometimes called a "belay jacket", these consist of a baffled parka and optional hood; these come in many shapes, sizes and temperature ratings. If you tend to get cold easily, opt for a slightly warmer and more substantial parka. Weight: 35 - 55oz / 992 – 1560 grams

- Fill Materials: 700+ fill down
- Shell Materials: nylon, epic, eVent
- Examples: Feathered Friends Frontpoint Parka, Patagonia Down Parka and DAS parka, and Marmot Plasma.

Fleece Gloves/Glove Liners: You wear these for much of your time on the mountain. They need to be dexterous and comfortable, but not necessarily very insulating.

• Materials: fleece, Powerstretch, or similar

Mid-weight Fleece/Schoeller/Leather Gloves: 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. Choose a mid-weight model. Bring 2 pairs for when one gets wet.

- Weight: 4 8 oz / 110 200 grams
- Materials: softshell, windstopper fleece, leather or similar

Expedition Gloves: 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. Gauntlets should extend to mid-forearm. These gloves should have "idiot loops," or keeper strings, so they're not dropped. No mittens allowed.

- Weight: 9 14 oz / 255 400 grams
- Shell Materials: Gore-tex, Schoeller 3x, or similar

Summit Day Mittens: Make no compromise with these as they are the first and often last defense against frostbite. These are expedition-weight modular mittens, down or synthetic, with a storm-proof shell. You want your mitts to be extremely warm and thick. This is more important than dexterity. Gauntlets should extend to mid-forearm. These need to be large enough to allow for liner gloves to be worn underneath. Please attach keeper loops to them.

- Weight: 12 16 oz / 340 453 grams
- Fill Materials: Down, Primaloft, Polarguard 3D
- Shell Materials: Gore-tex or similar

Sun hat: A baseball cap or visor serves well. Models with a "tail" are recommended for increased sun protection.

Beanie Hat/Toque: A thinner warm hat that will fit under your climbing helmet and over your balaclava.

- Weight: 2 4oz / 56 112 grams
- Materials: fleece, wool, windstopper, windpro

Lightweight Balaclava: A balaclava is a warm hat that can be pulled over the head to the shoulders. It completely covers the head except for an opening for the face. It should provide excellent wind protection for the chin, ears and neck. A Buff (described below) can substitute for this

• Materials: Powerstretch, fleece, polypro, windpro

Socks: Bring three to six complete changes. Many climbers prefer to wear a very thin liner sock underneath a thicker hiking/mountaineering sock. Adjust your sock system ahead of time to perfect your boot fit. Bring three additional changes of socks for your approach shoes. No cotton.

• Materials: wool, synthetic

Gaiters: (R) These can be regular gaiters or supergaiters. They should be knee-high in length. Supergaiters should be glued to the boot in advance. Getting supergaiters on boots is an involved process and if they come off in the mountains it is be extremely difficult to get them back on.

- Weight: 4 12 oz / 110 340 grams
- Materials: Schoeller, nylon, Cordura

Cold Weather Mountaineering Boots: (R) Double boots are required. These should be designed for extended use in temperatures as cold as 0F. Modern synthetic double boots can be more comfortable, but are more expensive. In plastic boots, thermo-mold liners are warmer, lighter, and more comfortable than standard liners.

- Shell Materials: Synthetic, plastic
- Liner: Thermo-moldable (Intuition)

NOTE: There are many of 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.

Tennis / running shoes: For use around town. These can be the same shoes for the acclimatization hikes.

Trekking/Hiking Boots: A lightweight pair of boots or a heavier pair of approach shoes may be used for the acclimatization hikes and approach trek. These may be the same as your "around town" shoes. Please break these in thoroughly before your expedition.

Travel and Town Clothes: We occasionally like to go out to good restaurants while in town. You may want something other than your climbing clothes to wear.

- 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 Equipment

Trekking Poles: (R) Two telescopic trekking poles are required for balance for approach hikes over varied alpine terrain.

Carabiners: Bring four total. Two must be large, pear shaped (or Münter) locking carabiners. Wiregate non-locking carabiners work well for the remaining two.

Climbing Harness: (R) For alpine climbing, choose a harness with adjustable leg loops and a belay loop. Make sure it fits your body when wearing bulky clothing. Gear loops are desirable.

- Weight: 6 16oz / 170 453 grams
- Examples: Black Diamond Blizzard, Arc'Teryx X350a

Climbing Helmet: (R) Lightweight, well ventilated, and comfortable. Models with a plastic shell are more durable, but are heavier than all-foam models. Must be UIAA approved for climbing.

• Examples: Petzl Elios or Altios, Black Diamond Half Dome

Ice Axe: (R) Bring the lightest steel-headed model you can find. Your axe should hang down to between your mid-calf and ankle (50-65cm).

Ice Tool: (R) Bring one that is 45-55 cm length. 50 cm is the preferred length for most climbing. Easy-to-use leashes are recommended.

• Examples: Black Diamond Viper, Petzl Quark, Grivel Matrix

Steel Crampons: (R) Flexible or semi-flexible. New-matic crampons are the easiest to put on with cold fingers. Only modern strap on, step-in, or 'new-matic' crampons are acceptable. Older Scottish style strap-on crampons are not adequate.

• Examples: Petzl Sarken, Grivel G12, Black Diamond Sabertooth

Prussiks: (R) These 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, bring three lengths of 6 mm perlon/nylon: 13 feet, 6 feet, and 5 feet.

Camping Equipment

Duffel Bags: (R) Bring two that are large and sturdy. Durable coated nylon is best. It must be large enough to fit your large backpack inside of the duffel. Models with wheels are not allowed. It is likely that at least one of these will be bent over a burro's back.

- Volume: 7000-9000 cubic inches
- Materials: Pack cloth, Cordura, ballistic cloth

Sleeping Bag: (R) Bring a bag that is rated to around 0°F.

- Weight: 2.25 4 lbs / 1 1.8 kg
- Materials: Down, Primaloft, Polarguard 3D

Compression Stuff Sack: Used to shrink your sleeping bag into the smallest size possible.

- Weight: 2-4 oz / 56 110 grams
- Materials: SilNylon, eVent, or similar

Sleeping Pad: (R) Bring one full-length pad. It can be closed cell foam or an inflatable model. Bring a patch kit for inflatable pads.

- Weight: 8 20 oz / 225 565 grams
- Example: Thermarest Prolite 4

Internal Frame Pack: (R) A pack around 55-65 liters in size is ideal. Make sure it will hold all of your personal equipment with room to spare for your share of the group equipment that will be divided during your expedition.

- Weight: 3.0 6.5lbs / 1.6 2.9 kg
- Volume: 55-80L / 4000-6000 cubic inches

Trekking Pack: (R) This is a 30-40 liter daypack used for climbing and trekking. It should have two ice axe loops.

• Examples: Grivel Air Tech 28, Cilogear 30I worksack, Black Diamond Speed

Eating Utensils:

- Spoon: Bigger is better. Lexan is lighter, but metals spoons are more durable.
- Thermal mug: 16-20oz with a lid. Optional.
- Bowl: A lightweight Tupperware-type bowl is recommended. The new, ultra-light folding plastic contraptions are excellent. Avoid metal bowls, they are expensive, and make your food get cold very fast (or burn your hands when you are eating soup).

Water Purification: Bring tablets or liquid purification. Bring at least 80 tablets or the equivalent. Filters are heavy and should not be used.

Hydration: 3 liters of water capacity minimum. Two solid 32oz water bottles, like a one-quart Nalgene, are required. Hydration bladders with appropriate accessories are recommended to Base Camp, but two bottles are required for use high on the mountain.

Personal Medical Kit: For sunburn, blisters, headaches, and minor cuts and scrapes.

Personal Medications: (notify AAI of all medications and prescriptions)

- 20 tablets of Tylenol, Ibuprofen, or Aspirin
- A few Benadryl
- If you are severely allergic to bees, or if you suffer from Asthma, please notify AAI and your guide regarding the location and presence of your epi-pen and/or albuterol inhaler.

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)

NOTE: you cannot use codeine or sleeping pills at altitude.

Cuts & Bruises kit:

- 10 assorted Bandaids
- One 1 1/2 inch roll of cloth athletic adhesive tape
- 3 inch Ace bandage

Blister Kit. Bring a comprehensive blister kit. This includes:

- Plenty of Compeed, Bandaid, or Dr. Scholls blister pads
- A packet of moleskin (note: some people are allergic to the glue on moleskin and other medical adhesives.)

Personal Toiletries: Bring a toothbrush, toothpaste, floss, a small towel, biodegradable soap, and a washcloth. Bring one roll of toilet paper. We supply the TP on the mountain.

Hand Sanitizer: Any alcohol based product for hand sanitizing work well. Bring a couple travel- sized bottles.

Sunscreen: With SPF 30 or higher. A couple of 1 oz. tubes are adequate. Several small containers are better than one large one.

Lip Protection: Bring 2 containers/applicators with the highest SPF available. Some models of chapstick have SPF15 or higher.

Hand/Foot Warmers: Bring at least two sets. Recommended for people that are susceptible to cold hands and toes. These should be small, disposable type products like the ones made by Grabber Mycoal.

Glacier Glasses: Choose a model with 100% UVA/UVB protection and side shields. If you have an extra pair, bring them too. Climbers using contact lenses should bring a pair of prescription glasses in the event that your contacts or solutions are lost or damaged.

Garbage Bags: Bring two or three large ones. They serve a variety of uses, especially while mules/horses are carrying your gear. Trash compactor bag, if available, are more durable.

Headlamp: Choose a small, high output LED model that runs on AAA batteries. Bring one set of extra batteries. Flashlights and older halogen headlamps are not acceptable.

• Examples: Petzl Tikka XP, Black Diamond Spot

Repair Kit: At a minimum this kit should include a stove repair kit for your stove, Thermarest repair kit (for Thermarest pad users), 10 to 20 feet of lightweight nylon cord, small sewing kit, duct tape (wrapped on water bottles or trekking poles), and a pack waist buckle.

Multitool: Any multitool similar to a Leatherman is great. These are used for emergencies, and for slicing cheese, salami, and opening packages.

Travel Items

Passport: Required. This must be valid for six (6) months after your scheduled return date. Make 1-2 photocopies of it to travel around Peru, while keeping the original in the hotel safe.

Passport/Money Pouch: Bring a low profile money pouch or belt to protect your essential documents, credit cards, and money.

Small Padlock: To fit through the zip sliders of the duffel to secure its contents. Buying a TSA-approved lock is highly recommended. Don't lock your bag when you check it through security at the airport.

Personal snack food: Bring no more than one pound of high energy and tasty snack food for high-energy expenditure days (like summit day) and for evening treats while in the hut. Gu, bars, and the like are difficult to obtain in South America.

Optional Equipment

The items below are not required, but many are nice "luxury" items that can make your trip more enjoyable. Remember that ounces add up to pounds on your back and knees during the expedition.

Handiwipes/Wet Wipes: The mountain shower. For personal hygiene and general use.

Pee Bottle: A nice luxury for those cold nights. 1-quart size minimum. A collapsible 2L Nalgene is recommended. If you choose to bring one of these, use it carefully and make sure the capacity is adequate. Label your pee bottle well. Women should also bring a pee funnel; Freshette makes a tried and true model.

Bandana: A cotton bandana has many uses on the mountain.

Entertainment: Books, games, journals, cards, etc. are great for rest days and stormy days in the tent. Music players like mini-disc and MP3 players are popular because the device and media are small and relatively lightweight. Models with a hard drive (e.g. Ipod) do not work at altitude. Bring a car adapter for any electronic devices to charge on our solar panel.

Ear Plugs: Defense against snoring and high winds in the area.

Camera: We recommend a small point-and-shoot cameras that can easily be carried in an outside pocket or small case outside your pack. If you can't comfortably and safely carry your camera outside your pack, even in bad weather, you'll miss the best photo opportunities. Though some climbers bring them, SLR cameras are not recommended because of weight and bulk. If bringing a digital camera, consider your battery needs.

Buff: "Buffs" are a multifunctional neck gaiter that can substitute for a lightweight balaclava. Buffs are worn on the head more than any other item. They make a good facemask, and can prevent sunburned lips and tongues.

Shorts: Lightweight shorts are nice for warm days.

- Weight: 4 8oz / 110 227 grams
- Materials: Nylon

T-shirt: Light colors are best. This shirt can be synthetic or cotton. If you plan to hike in it, synthetic is better. A cotton shirt can be a nice break from the synthetics in camp.

• Weight: 3 - 7 oz / 85 - 200 grams

• Materials: Synthetic, cotton, blends

Foot Powder: A very small bottle will allow you to treat your feet daily, keep them dryer, extend the life of your socks, and help you avoid blisters/rashes from chronic wet feet.

- Weight: 1 2oz / 28 56 grams
- Examples: Gold Bond, Dr. Scholls

Insect Repellent: Recommended. If bringing repellent look for more concentrated repellent in smaller containers. Pack it in a Ziploc bag to prevent contaminating other items in your pack.

Ski Goggles: These should be dark and block 100% of UV light. If you wear prescription glasses, these must fit comfortably over your glasses.

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 Email: <u>info@guideschoice.com</u> Equipment Shop Website: <u>www.guideschoice.com</u>