
Above Treeline Gear List - Technical

Check out our [Gear Guide](#) for specific recommendations

Clothing

Feet

- *Wool or synthetic hiking socks* - that come up to mid-calf or higher
- *Toe warmers* - optional if you run cold

Legs

- 1) *Thermal layer* - Synthetic or wool long underwear, your guide will let you know the day of your program if a thermal layer is necessary given the weather, conditions, and objective
- 2) *Moving layer* - Soft shell pants
- 3) *Shell* - Waterproof with with **full or ¾ length side-zips**
- 4) *Protection*: Gaiters to prevent snow from getting into your boots and to protect your pants from rips and tears

Torso

- 1) *Base layer* - long-sleeved wicking layer, lightweight wool or synthetic
- 2) *Lightweight insulation and wind protection* - many options work here such as a fleece or lightweight softshell, our preference is for the latter
- 3) *Mid-weight insulation* - down or synthetic insulated jacket (hood preferred)
- 4) *Waterproof shell* - single layer, no added insulation
- 5) *Belay Jacket* - Heavy duty down or synthetic parka, must be large enough to fit over all other pieces

Hands

- *Lightweight liner gloves*
- *Midweight gloves* - leather palm is preferred
- *Heavyweight mittens or gloves* - a two-part system with a shell and liner for waterproofing works best
- *Hand warmers* - optional if you run cold

Head

- *Warm (but thin) hat* - wool or synthetic
- *Buff or other thin neck gaiter*
- *Neoprene face mask or equivalent* - it's important to be able to cover your entire face while wearing goggles. Look for a good seal between goggles and face mask where air isn't forced into the goggles when breathing heavily.

Equipment

*All items in **BOLD** are provided by MSA if needed. Your guide will inspect your personal gear before the outing to ensure that it is appropriate for the day's objective.

Technical Gear

- *Mountaineering boots* - double boots are preferred but single wall boots may be acceptable depending on weather and conditions, must be full shank and have heel and toe welts to accept an automatic ice climbing crampon.
- **Ice Tools** - Ice tools are purpose built and designed for climbing, traditional straight shafted ice axes will not work.
- **Ice Climbing Crampons** - fully automatic with vertically oriented front points
- **Microspikes** - these are excellent lightweight traction devices and (condition depending) what we will be using the majority of the time when not in technical terrain.
- **Climbing Harness** - should be designed for rock and/or ice climbing - not a mountaineering specific harness like the Black Diamond Couloir.
- **Belay device and locking carabiner**
- **Locking carabiner**
- **Personal anchor system**
- **Climbing helmet** - Must be rated specifically for climbing, no skiing or bike helmets
- *Backpack* - 35-55 L capacity with adjustable hip belt. Simple tube style packs (fewer exterior pockets) with a removable brain and ice axe loops are preferred.

Vision Gear

- *Sunglasses* - with side shields
- *Goggles*
- *LED headlamp* - and spare batteries (lithium work best in the cold)

Food and Hydration

- *2 liters of water* - with insulation such as the Outdoor Research water bottle parka. **NO** camelbacks as the tubes will freeze even when in a neoprene liner
- *Small thermos* for hot drinks - optional but recommended
- *Food* - bring items that are quick and easy to eat on the go and have high calorific value. We will not stop for a formal lunch but rather be eating on the go throughout the day. Avoid fresh fruit and other items that have the potential to freeze. Plan for 1000 - 1500 calories for the day.

First Aid

- Your guide will have supplies for general emergencies but bring all your necessary medications for this type of activity as well as moleskin, band-aids, and other personal first-aid items.

Leave No Trace

- There are no established toilets in most locations above treeline. In order to preserve the delicate alpine environment, plan on bringing a pocket packet of tissues, a few



plastic bags, and a small bottle of hand sanitizer and plan on packing out all soiled wiping materials.

Optional

- *Camera and/or phone*
- *Sunscreen*
- *Lip Balm*