
North Cascades - Technical Ice

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

Clothing

Feet

- *Wool or synthetic hiking socks* - that come up to mid-calf or higher **X2-4**

Legs

- 1) *Underwear* - Wool or synthetic **X2-4**
- 2) *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
- 3) *Moving layer* - Soft shell pants
- 4) *Shell* - Waterproof with with **full or ¾ length side-zips**
- 5) *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 X2
 - a) *Sun hoody* - lightweight, loose, breathable base layer with hood - **HIGHLY RECOMMENDED**
- 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

Head

- *Warm (but thin) hat* - wool or synthetic
- *Buff or other thin neck gaiter*
- *Sun hat* - baseball cap style

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* - must be full shank and have heel and toe welts for automatic crampons
- ***Alpine Ice Climbing Tools*** - moderate alpine ice tools recommended such as the Petzl Quark
- ***Ice Tool Tethers*** - Tethers that clip into the pommel of the tool, not wrist leashes
- ***Crampons*** - 10 -12 point mountaineering or ice climbing crampons acceptable - ensure the attachment system fits your boots
- ***Climbing Harness*** - rock and/or ice climbing harness preferred, mountaineering acceptable
- ***Belay device and locking carabiner***
- ***Locking carabiner***
- ***Personal anchor system***
- ***Triple Action Locking Carabiner***
- ***Climbing helmet*** - must be rated specifically for climbing, no skiing or bike helmets
- *Adjustable trekking poles*

Overnight Gear

- *Backpack* - 55 - 75L capacity with adjustable hip belt. Simple tube style packs (fewer exterior pockets) with a removable brain, ice axe loops, and crampon pouch are preferred.
- *Large durable trash bag* - used as a waterproof backpack liner
- *Sleeping Bag* - rated from 0°F - 20°F down and lightweight preferred
- *Sleeping Pad* - lightweight inflatable preferred, if the pad has a low R value an additional compact foam pad is recommended.
- ***Four season tent*** - you are welcome to bring your own otherwise one will be provided by your guide.

Vision Gear

- *Sunglasses* - with side shields
- *Goggles* - low light lenses and anti-fog treatment recommended
- *LED headlamp* - and spare batteries (lithium work best in the cold)

Food and Hydration

- *2-3 liters of water* per day - **NO** camelbacks as the tubes will freeze even when in a neoprene liner - one liter nalgene style bottles or soft dromedary style flasks are recommended
- *Lightweight bowl, spoon, and mug*



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- *Breakfasts* - simple and high in calories that can be cooked with the addition of boiling water only (e.g. instant oatmeal with nuts and dried fruit or prepared freeze dried meals).
 - *Lunch* - bring items that are quick and easy to eat on the go and have high calorific value. We will not stop for formal lunch but will rather be eating on the go at breaks throughout the day. Plan on enough food for 1500 - 2000 calories between breakfast and dinner each day.
 - *Dinners* - can be cooked with the addition of boiling water - lightweight freeze dried backpacking meals are ideal.
 - *Hot drinks* - optional but feel free to bring instant coffee, hot chocolate, tea or whatever else you need to kick start your day and/or relax in the evening.

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, we are required to carry out human waste by our partners in the USFS and NPS. We will provide human waste disposal kits. Plan on bringing your own wiping materials and a small bottle of hand sanitizer and plan on packing out all soiled wiping materials.

Toiletries

- *Sunscreen* - must be SPF 50 or more
- *Lip balm* with SPF 20+
- *Personal hygiene* kit (avoid bringing items such as deodorant or other fragrant extras - they are unnecessary weight and can attract rodents and other (potentially larger) animals to our camp.

Optional

- *Camera and/or phone*