## MOUNTAIN INDEPENDENCE



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### Kit List - Rjukan Ice Climbing Week

We're keen to make our courses accessible, but there's no getting away from the fact winter climbing kit is expensive. We do have a small selection of kit we can lend but please do give us advance notice so we can organise this. Most likely to be considering this trip you'll likely have a fair bit of personal climbing equipment already.

\* Can be Provided † Optional

Personal Kit - the stuff you would typically pack for any day out in the mountains.

Mobile Phone - for emergencies and obligatory selfies. Consider a waterproof case - pockets rarely are! Consider a lightweight portable battery charger with a super short charging cable as a backup.

Headtorch - key safety kit. Our preferred brand is Petzl, aim for around 500 lumens/100g in weight.

Spare Headtorch / Batteries † - a headtorch is crucial. Personally, I always carry a spare headtorch as opposed to spare batteries as it's barely any extra weight; something like a Petzl eLite easily packs into a small personal first aid kit.

Personal First Aid Kit - light basic, DIY is best, waterproof! Your instructor will carry a comprehensive group kit. We recommend a whistle, any meds & painkillers, blister plaster, zinc-oxide tape, Dioralyte, Energy Gel, sanitary items.

Sun Stuff - depending on conditions we may climb in the sun. Sun glasses, sun cream etc.

**Goggles** - low light ski goggles can be vital for windy spindrift days.

Water Bottle and/or Flask - we're big fans of Nalgenes (BPA free), Platypus bottles, and Klean Kanteen flasks. Hydration bladders often freeze in winter and are not recommended.

Day Pack - around 30-40 litres for all your personal kit, typically you'll be given ropes to carry by your instructor so a way of affixing a rope to the pack and consider how you'll carry ice axes & crampons.

Personal Clothing -similar to Scottish Winter, but typically drier and potentially much colder, as low as -20°C.

Boots - crucial kit to invest in. Stiff B3 boots with heel & toe welts compatible with C3 crampons for pure ice climbing. Warmth is very personal, but typically Scottish Winter boots are warm enough if you don't run too cold. Our top pick, are the La Sportiva G-Summit; very warm for their weight. La Sportiva Nepals or Scarpa Phantom Tech range also work well. Fit is crucial, try on in person in a shop. They need to be sized with space for "toe bang" as when the ice is hard it can be like kicking concrete! Consider thicker socks for cold conditions also.

Walking Socks - synthetic or merino style, with a bit of padding for comfort, and paired to fit with your boots.

Base Layers - underwear and base layers to stay comfortable. Synthetic or merino style materials rather than cotton. A couple different thickness baselayer leggings that can be combined to work for a range of temperatures.

Waterproofs - a good set of top and bottoms, 3-layer membrane such as Goretex, eVent or Paramo style. We'll hopefully climb predominantly in softshells but if the weather is warm, hard shells are crucial for drippy icefalls. Look for crampon reinforcement patches on the insteps of trousers. Tie loops & integrated gaiters can be useful features.

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**Softshells** † - not essential, but one of the joys of ice climbing in Norway is the typically drier & colder weather allowing for softshells to be worn in lieu of of hardshells. These should be winter weight; look for trousers with crampon reinforcement patches on the insteps, tie loops & integrated gaiters can be useful features.

Mid Layers - ice climbing alternates between cold periods of inactivity on belays & warm tiring work climbing! Warm yet breathable mid layers are where it's at. Hybrid layers with synthetic or down in the body but breathable panels work well for the cold temps. Integrated hoods that can be worn under a helmet work well and can replace a hat.

Belay Jacket - a big jacket that can be thrown over everything else at belays. Typically for Scotland this would be a heavyweight synthetic jacket. For Norway it's typically cold enough that a down jacket can be carried due to it being drier. If you feel the cold we recommend getting a big down jacket. Bring both if you have the option!

Hat - warm hat that can be worn under a helmet i.e no bobbles!

**Gloves** - a selection! Despite being colder, typically lighter gloves can be worn than in Scotland due to the drier conditions. A few pairs of light/medium weight gloves to wear whilst climbing that you can tie knots & handle climbing gear with. A pair or 2 of warmer gloves for belay duty - mitts being warmest for those who suffer the cold, these can be worn over gloves if sized large. Some folk like a very thin pair worn under thicker gloves for fiddly tasks like kitting up.

Gaiters † - not essential, but they can add a little warmth to lighter boots and help keep baggy trousers out of the way of sharp crampons if your waterproofs/softshells don't have integrated gaiters/kickstrips.

Buff / Neck Gaiter † - not essential, but for those who feel the cold these can be a useful lightweight addition.

Personal Climbing Kit - we can help out with much of this, just let us know in advance.

Crampons \* - these should be C3 style technical crampons & checked for fit with your B3 boots. For pure ice our recommendation is the Petzl Dart, the Blue Ice Harfang Techs look interesting but we haven't tested them yet. If you already own crampons with replaceable points, I'd highly recommend buying a replacement set of front points so you have razor sharp points for Norway. Your old points are worth keeping as a Scottish Winter set. Older crampons are fine but worth sharpening beforehand, we can help advise in Norway.

Crampon Bag † - personally I often don't bother, but can be useful to protect other delicate items in your rucksack. The Petzl Ultralight Pouch is a nice lightweight option.

Technical Climbing Axes \* - for pure ice climbing we recommend a modern, handled tool, such as the Petzl Nomic, Black Diamond Hydra, Grivel Tech/Dark Machines or the new DMM Cortex's look good but we haven't yet tested them. A more all-around ice tool such as the Petzl Quarks, Black Diamond Vipers are often a sensible choice as a do-everything tool that will serve well for Scottish winter and easier mountaineering routes. As above, we highly recommend purchasing a replacement set of ice picks for existing tools so you have razor sharp points for the hard ice we'll encounter. Pick weights and any accessories are worth bringing along so we can fine tune your ice axes.

Ice Axe Tethers \* - our preferred option is for individual leashes such as the DMM Freedom Single Leash for less clutter on approaches. Many folk prefer double leashes with integrated spinners.

Harness \* - we like the Arcteryx harness range. Best to buy in a shop. Look for padding and a comfortable fit, sized for wearing over winter layers. Ideally a harness with ice clipper slots and plenty of gear loops for racking equipment.

Ice Clippers \* - we can provide, but if purchasing we like DMM Vault Wire Gate for leading as they're solidly built, the Petzl Caritools are lightweight, and the Caritool Evo can be fitted to harnesses without ice clipper slots.

Helmet \* - we rate the Petzl Sirocco helmets for lightness, comfort and safety if it's a good fit.









## ΜΟυΝΤΑΙΝ INDEPENDENCE

Belay Plate \* - our favorite kit is made here in Llanberis by DMM. We like the DMM Pivot for winter climbing.

Belay Screwgate \* - a HMS style carabiner generally works best for belaying. We like the DMM Phantom HMS.

Screwgates \* - we recommend 1 big HMS (DMM Shadow HMS / Boa) & 3 D shapes (DMM Shadows). Consider matching coloured anodizing for easy identification of your kit. Check you can operate them with gloves on easily.

120cm Sling x 1 \* - for a lightweight makeshift lanyard for abseiling. Dyneema is popular and light; we like Edelrid Tech Web Slings as they're typically easier to unknot. If you have a deciated lanyard you can bring it if you wish.

Prussiks x 2 \* - key kit. We recommend pre-sewn dedicated prusiks like the Beal Jammy, Edelrid HMPE Cord Sling 6mm or Simond Autoblock Knot Loop 60cm from Decathlon. DIY 5 or 6mm cord prusiks are a cheaper option.

Long Ice Screw † - optional, instructors will provide but if you're planning more ice climbing & mountaineering consider investing in your own. Useful for glacier travel & building abalakovs. Look for around 21cm length; it's worth paying for a lightweight aluminium style screw. Our preferred screw is the Blue Ice Aero Lite 22cm for this.

Abalakov / V-Threader † - optional, instructors will provide. Can be DIY'd, but our favorite is the Petzl Multihook.

Abseil Tat † - optional, instructors will provide. Around 3/4 metres of abseil tat. Our preferred thicnkess is 7/8mm for standard strength cord, old cut up half ropes work well, or 6mm can be used for more exotic high strength cords such as HMPE core cord to reduce bulk and weight.

**Climbing Rack**- your intructor will provide all of this & we recommend trialling our kit before purchasing your own.

Ice Screws † - optional, instructors will provide but if you're developing toward leading you might want to invest in a set. Blue Ice are our preferred screws; the steel screws weigh as much as rival manufacturer's lightweight screws, and their aluminium screws are exceptionally light. Aluminium is lightest but can be sticky to place in warm, chewy ice whilst on lead. My preferred rack for fat Norwegian multipitch ice routes consists of 8 x 13cm and 2 x 16cm steel screws for leading with 2 x 16cm and 2 x 22cm aluminium screws for belays.

Ice Screw Carrier † - a worthwhile investment to protect expensive ice screws! We really like the Blue Ice Screw Keeper for general use and the Blue Ice Roll-ups for multipitch routes to minimise weight.

Quickdraws † - I like to use a slightly larger snapgate for winter with gloved hands - the DMM spectre is a good size. I personally carry 3 x screamer quickdraws, around 5 x short 10cm quickdraws and 4 x 60cm alpine quickdraws depending on length of route and total number of screws carried. Many climbers don't bother with screamers though.

120cm Sling x 3 \* - for threading ice pillars. These are light to carry and provide extra potential protection opportunities, as well as potential use in belay building. We like Dyneema for it's lightness and skinniness for threading punched ice screw holes through curtains.

240cm Sling x 2 \* - for building belays on multipitch routes. Dyneema is best to reduce bulk.

Rope x 2 <sup>†</sup> - optional, instructors will provide. A pair of 60m ropes are the norm for big abseils and long pitches, triple-rated ropes provide reassurance. We like the Beal Joker with Unicore technology and Golden Dry Cover, but any triple rope with decent dry treatment will do. (look for the UIAA Water Repellent Dry Test as an objective measure).

Lightweight Leader Pack † - it's nice to have a small, lightweight bag when leading, to hold essentials such as belay jacket, tat, food and drink. Particularly climbing at venues with an abseil approach or retreat where the main pack can be stashed until after the climb. This could also be a small rolltop drybag that can be clipped to the back of a harness.

Other Kit - some other potentially useful items.

**Trekking Poles** † - trekking poles provide stability indeep snow (fit snowbaskets). Our preference is for the z-folding style poles which are more packable for placing inside rucksacks when climbing when required.

**Snowshoes** \*† - we have a few sets of basic snow shoes in case and trail breaking through deep snow is necessary. If you have your own you may wish to bring them out.

**Snow Shovel** \*† - not so much for heading out climbing, but useful stashed in thehire car for digging out!

Repair Patches / Kit \*† - for fixing crampon punctures to clothes! McNett's Tenacious Tape is great and waterproof but a little cheap duct tape is always useful as is a needle and thread.

Small file \*<sup>†</sup> - for sharpening and refining crampon points or ice picks.

Travel Items - useful bits.

Lunch & Snacks - we'll shop for lunch stuff in Norway but it's worth bringing personal snacks such as cereal bars from the UK that you know you enjoy. Sweet snacks are expensive in Norway!

Lunch Container † - we're keen to minimise unneccesary waste. Consider bringing a sandwich bag/box with you.

Evening Meals † - typically we cook as a group taking turns to cook evenings meals in teams. A little bit of planning goes a long way here, so if you have a particular dish you'd like to cook, prepping spices and harder to source ingredients to travel out with can be helpful, to save cost and waste.

Alcohol † - whilst we wouldn't encourage copious drinking, if you do enjoy a tipple, alcohol is very expensive in Norway. Packing a bottle of whiskey, or swinging by the duty free in the airport isworth considering.

Earplugs / Eyemask † - accommodation will be a shared room basis unless you're particularly keen to upgrade to individual rooms. Earplugs can be a sleep saver!

European Plug Adapter - Norway uses European style plugs.

Phone Charger - consider an extra cable for car music connectivity.

Washkit - don't forget your toothbrush!

Towels / Linen - depending on the accommodation option we may need to bring our own towels, and potentially bed linen.

Games † - a bit of evening entertainment if you want to introduce the team to a (fun!) game.

#### **Documents** -

Passport - definitely bring your passport, and also check it satisfies the validity requirements for entry here.

Insurance - we can't provide specific advice on insurance, but the British Mountaineering Council, Snowcard and Dogtag all have policies aimed at climbers and mountaineers. Ideally bring a printed copy of your insurance, or at the least a digital copy and relevant reference numbers in case you're incapacitated.









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Flight Check-In Paperwork - so much of it is digital but it's prudent to have a paper copy just in case!

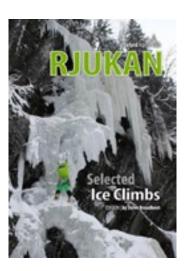
**Driving License** - instructors will be the lead driver on hire car bookings, but it's worth bringing your driving license just in case. It's typically possible to add named drivers to hire cars which may help share some of the driving load if needed.

**Payment** - Norway is predominantly cashless, so bankcards should be all that are needed. We'll need money for fuel when refilling hire cars, and food. Typically we'll use an app such as Splitwise to track group payments for items like food.

#### **Reading -**

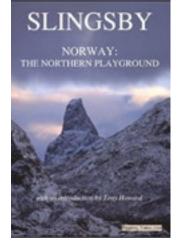
#### Guidebook

Rjukan Selected Ice Climbs pulished by the Oxford Alpine Club is the most up to date guidebook for the area.



#### **Recommended Read**

Norway: The Northern Playground by Cecil Slingsby is a book on early mountaineering in Norway. Slingsby is often described as the father of Norwegian mountaineering.



You can usually get discounts on kit as a BMC members, mountaineering club member, student etc but also if you're buying a good amount at once.

We highly recommend **V12 Outdoor** in Llanberis for climbing gear- an amazing range, super friendly, knowledgeable staff and they're local – 100m from our door! We've set up a 15% discount for Mountain Independence clients with them.

