> FURTHER INFO



WATCH:

Winter Climbing: Conditions Apply A free to watch short film on BMCTV showing how to identify good winter climbing conditions.



http://tv.thebmc.co.uk/video/winter-climbing-conditions-apply



READ:

North Wales White Guide

Reconciling conservation and recreation — winter climbing in Snowdonia. Download a free copy at:



www.thebmc.co.uk/northwaleswhiteguide



READ:

Be Avalanche Aware

90% of victims trigger their own avalanche. Don't become a statistic yourself. Find out more and download a free copy at:



http://beaware.sais.gov.uk



READ:

Winter Skills

Packed with essential information and techniques for climbers & walkers, this is Mountain Training's official handbook for all winter qualifications.



www.bmcshop.co.uk/product info.php?products id=5464



WATCH:

Winter Essentials DVD

Practical advice on skills and techniques for climbing, walking and mountaineering in the winter mountains.



http://www.bmcshop.co.uk/product_info.php?products_id=7045id=7045

PRODUCED IN PARTNERSHIP WITH











> LAKES WINTER ETHICS



READ:

Lake District Winter Climbing

– the avoidance of damage

Further information on winter climbing ethics in the Lake District.

www.thebmc.co.uk/lakeswinterethics



> WEATHER FORECASTS



Lake District Weatherline

Reports from fell top assessors who walk up Helvellyn every day during winter to assess real conditions on the ground.

www.lakedistrictweatherline.co.uk



Mountain Weather Information Service (MWIS)

Mountain specific weather forecast with a summary for all British Mountains and detailed forecast information for the Lake District.

www.mwis.org.uk/english-welsh-forecast/LD/



>>> Advice for winter climbers





INTRODUCTION

Winter climbing in the Lake District is fantastic, and despite all too often presenting a fleeting opportunity given the fickle nature of UK weather, can provide some of the biggest adventures and most magical experiences available in this small but perfectly formed corner of England.

One of the most important skills in winter climbing is identifying where might be 'in condition' given recent weather and once you arrive at your chosen crag, picking a route in suitably wintery condition. This is important both from a climbing ethics perspective, but crucially also to ensure that we prevent damage to the rare arctic alpine plants that can live on the crags we climb on.

Well-formed water ice on Waterfall Gully, Pillar Rock. Photo: Adam Marcinowicz.

FRONT COVER: Rape and Pillage, Helvellyn. Photo: Steve Ashworth.



Conflict between winter climbing and conservation is a real possibility. If a route is climbed when its turf is out of condition, the areas inhabited by arctic alpines are sometimes so small that an entire population could be destroyed in one ascent.

The traditional conservation view might have been to ban climbing on any cliffs holding these rare plant species, but the modern approach recognises that this conflict can be easily avoided by following a few simple guidelines.

The Lake District provides an important habitat for a number of rare arctic alpine plants. These have been drastically reduced in numbers over the years through intensive collection in the Victorian era and heavy upland grazing. This means that plant populations are small and the last bastions for these species are on the crags we visit as climbers, where sheep have been unable to graze. Nowhere is this truer than on winter routes, which tend to follow natural drainage lines and turf which provides the ideal habitat for these plants.



They might not save the world, but they could help protect some of the rarest plants found in UK mountains...



DO

- Keep an eve on weather patterns and forecasts in the run-up to a winter trip
- Make sure turf is frozen solid before you climb on it
- Take care when making tool placements in cracks - some very rare alpine species grow there rather than on ledges, and can be easily damaged or dislodged by the tearing action of tools in marginal conditions
- Check the topos in this guide for more information on the location of rare plants
- Remember that thin ice streaks and smears can hide arctic alpine plants. Make sure ice is thick enough to properly take a tool before starting up these types of route

- Try to be as precise as possible with placements. Make sure your tools are sharp, where possible hook rather than hack with your axes and try to avoid pedalling your feet
- Be flexible so you don't have a wasted day in marginal conditions. Banked-out snow gullies, pure ice or non-turfy mixed routes might be possible as an alternative. If conditions are really poor, why not spend a mountaineering day getting some mileage in your legs and bagging a few summits instead?

DON'T

- Climb a turfy route if your axes rip through turf or come out coated with mud
- Clear out turf-filled cracks: they can provide a haven for arctic alpine plants

LAKES WHITE



LAKES WHITE GUIDE

First winter ascent of Grand Finale, Great End. Photo: Steve Ashworth.

SENSITIVE LAKE DISTRICT CRAGS

The crag topos on the following pages give details of where we know there are populations of particularly rare species of arctic alpine plants. Please avoid these areas in anything other than hard frozen conditions in order to protect the plants living there - if you're not sure if the turf is frozen, play it safe and pick a route elsewhere.

KEY:

Highly sensitive areas for rare plants





of damage to plants climbable. With please avoid in thin underneath, but there will be no risk ice steps forming and rely on water come into condition temperatures to require a prolonged vegetation. They stands of tall herb E Gully support rich ice conditions properly formed ice in order to be period of sub-zero between B Gully and The gully lines

of any winter routes starting from the screes and should be avoided unless banked out and hard frozen. Contrary to the winter guide advice, A Gully is not a suitable descent route – it is unstable and full of rare plants.

NORTH WASDALE SCREES

A Gully and Seven Pitch Gully contain the most sensitive plant communities



4

m

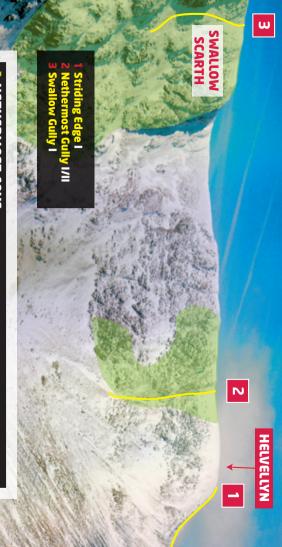
ဖ



7





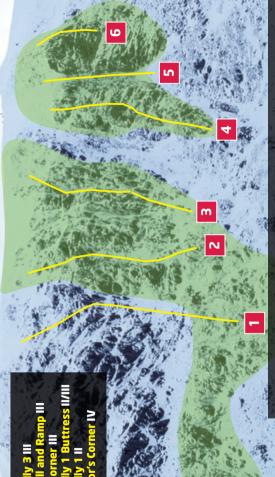


> NETHERMOST COVE

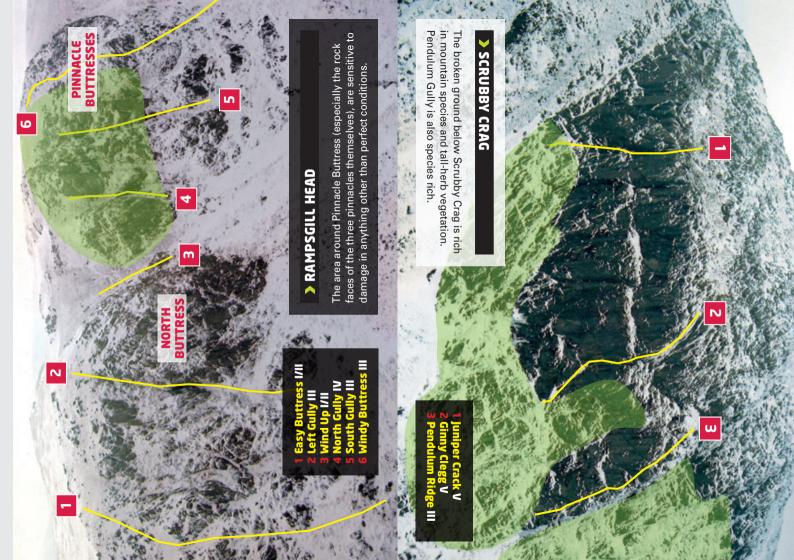
purple saxifrage and moss campion – all vulnerable to damage in poor conditions the crags provide habitat for downy willow, black alpine sedge and colourful sheets of Gully should be avoided unless hard frozen and/or banked out. South of Swallow Scarth Both Nethermost Cove North and South support important mountain plants. Nethermost

climbed on when not solidly frozen. Please avoid these cliffs in marginal conditions. The cliffs of this tarn hold a wide range of the rarer arctic alpine plants found in These plants are found on some of the best areas for climbing and are at risk if England, including the best populations of downy willow and alpine saxifrage.

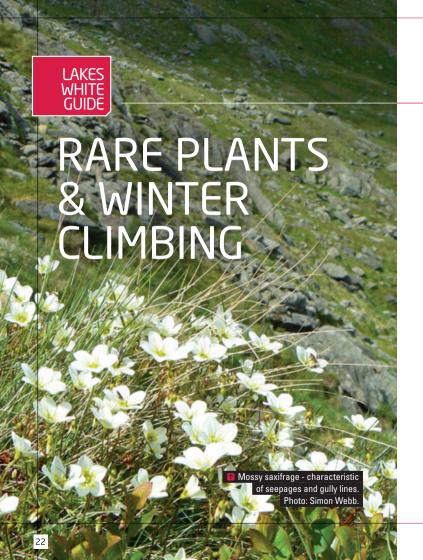
> RED TARN CRAG











> WHAT GROWS HERE?

Summer on the Lake District cliffs can be a spectacular show of flowering mountain plants; a burst of pink campion, a purple patch of saxifrage, a yellow splash of globeflower or a shady corner of ferns. The Lake District is the English stronghold for these arctic alpine plants which thrive in the cold and harsh conditions of the high fells, the damp gullies and north-east facing coves.

The saxifrages, alpine catchfly, moss campion and alpine cinquefoil cling to the cliffs, rooting in small cracks and pockets. Many of these plants have tiny populations, a result of Victorian collecting followed by more recent heavy sheep grazing. The alpine saxifrage for example is only found in two locations and there are only 10 plants in England.

Cracks and crevices are also home to mountain ferns. Holly fern (with tiny prickles) and oblong woodsia are the rarer types, but the shady cliffs and gullies are ideal habitat for ferns and many different types thrive here.

Where the soils are deeper on large ledges or at the foot of cliffs, taller herbs crowd together in colourful stands. These look like Pennine hay meadows and have a similar species mix with geranium, globeflower, lady's mantle and wild angelica. These are very attractive to sheep and are best seen on ground too steep to graze.



Steep ground is often covered with heathers and bilberry. These grow here as they are heavily grazed (especially in winter) on the more accessible slopes. Much of the heathland vegetation on crags is a colourful mixture of bell heather, ling, bilberry, crowberry and cowberry.

There are also more trees on the cliffs than on the open fell. Twisted junipers and stunted mountain ash are the most widespread. Mountain willows are rare with the Helvellyn coves supporting the only English location for downy willow a small bush with downy white undersides to its leaves.

Climate change will be a future threat to these plants, as well as to winter climbing. Mountain plants do have the capacity to thrive in north and east facing cliffs, but their small populations are vulnerable and need our respect.



RARE PLANTS & WINTER CLIMBING

> HOW CAN I LIMIT MY IMPACT?

When it comes to the ecological effect of winter climbing, the good news is that if we're careful and climb only in well-frozen conditions, we can have virtually no impact on vegetation. The topos featured in this guide highlight areas of Lakeland crags which are particularly ecologically sensitive. The highlighted areas should be avoided in all but rock-solid frozen conditions. Turf is a precious resource on any crag in the Lakes, whether it contains rare species of arctic alpine plant or not.

From a climber's perspective, it is important to conserve turf as it often makes a route possible at a given grade; if removed it may never form properly again. Climbing on turf that is frozen solid will make your climbing experience far more pleasant, reducing those heart-in-mouth, will it/won't it rip moments, and preventing damage to turf or the plants that live in it. Conversely, making placements in unfrozen or semi-frozen turf is likely to lead to picks and crampons ripping through, damaging the plants that hold it together or possibly tearing it off completely.

Climbing ice routes that are in good, fat condition, or banked out with neve will have no impact on vegetation as the ice will cover any plants that may live in the drainage line. Care should be taken if these sorts of routes are particularly thin however, or where mixed routes cross thin ice smears.





> WHAT DOES 'IN CONDITION' REALLY MEAN?

Just because a craq is white with rime ice and looks wintery doesn't always mean the turf will be fully frozen. Rime can form relatively quickly given the right weather conditions, whereas turf will often take several days to properly freeze.

Snow can sometimes act as a blanket and insulate the underlying turf, preventing it from freezing if there hasn't been a cold spell before it snowed. This isn't a problem in bankedout gullies, where the snow itself is climbed and its thickness provides protection to anything underneath. On face routes though, where snow collects on vegetated ledges (which often provide crucial turf placements), it's important to check before setting off on your big lead.

A good assessment of whether turf is frozen or not can often be made as you approach the crag by testing both exposed and snow covered ground at the base of the crag with an ice tool. When swinging an axe into well frozen turf, you're looking for a good solid stick similar to swinging into plastic ice. When you remove the pick it should come out clean and free of any soil. If this doesn't happen or you are in any doubt about the conditions, choose a different objective.

WHEN AND WHERE TO FIND GOOD CONDITIONS?

The lower hills and proximity to the coast mean winter conditions in the Lake District are more fickle than in Scotland. The climbing season can lie anywhere between October to April; usually the coldest point of the winter occurring in late January. In fact, good conditions are unlikely before New Year. Until then rarely will there have been enough cold days to freeze the ground thoroughly and any snow which does fall soon melts.

While the presence of snow is a must for winter climbing, its presence alone is not enough. A dump of fresh snow on unfrozen ground merely insulates the soil below and slows down the freezing process. Several days of cold temperatures prior to snowfall are the best indicator that conditions may be suitable on the fells. The hills may often be covered with a coating of fresh snow and take a few days to consolidate through a freeze-thaw cycle to become suitable for climbing. It takes a prolonged period of snowy wintery weather to fill gullies with the snow necessary to build up really good conditions. During this period crags exposed to the wind are likely to be better frozen.

Water ice and turf can freeze to give good climbing after only a few days of hard frosts or a longer period of sub-zero temperatures. It is important that overnight temperatures have been regularly dropping below zero. A limited thawing during the day is desirable, as long as it freezes again the next night. This process builds up the ice thickness more quickly. Buttress and mixed routes usually come into condition more readily than snow gullies and the more reliable nature of this style of climbing has helped to increase its popularity.



When choosing a venue, altitude and aspect are crucial. North or east facing crags tend to receive limited sunshine allowing snow cover to build. Hence north-east facing Great End is one of the most reliable crags for collecting snow and tends to retain it for longer than most other areas in the Lakes. The Helvellyn coves, while slightly less reliable, can be better if the wind has recently been from the east. In winter, a prevailing easterly usually heralds cold air that helps to freeze turf and form water ice, but it often does not bring much chance of snow. Thus, areas such as Blea Water near Haweswater. which readily form water ice, can be a good choice if it has been cold and dry. In general, if the wind has been from the east then it is often better to choose a cliff on the east side of the district with an easterly aspect to it. Winds from the west or south-west are more likely to carry snow and bring buttresses and gullies into condition. Scafell is high enough for it to often rime up with a westerly wind even if snow has not fallen. Gable Craq is another reliable venue in such conditions. Areas close to the sea, such as Dow Crag, are greatly affected by milder coastal winds, and are seldom worth considering unless circumstances are exceptional.

Snow falling on unfrozen ground can insulate turf despite low temperatures. With deep snow cover, gully lines can be a good option as the depth of snow will protect any plants underneath and exposed turf is more likely to be frozen.

Finally, there are many waterfalls and gills that will freeze given a sufficiently prolonged cold period. Some high falls such as Newland's Hause and Low Water Beck come into condition relatively quickly. Even these take about a week of sub-zero night-time temperatures to form, others will take longer. Strangely enough, for the weepier sort of ice climbs, periods of intense cold aren't necessarily ideal as the water may freeze in the ground; better to have a slight thaw during the day and a refreeze at night allowing a build-up and thickening of the ice.



WINTER CLIMBING ETHICS:

WHERE NOT TO CLIMB

Despite a large number of excellent winter routes, the Lake District is predominantly a rock climbing area. This is evidenced by a far greater number of routes, participants and climbable days for rock climbing compared to the same for winter climbing. Of course, there are many excellent winter climbs which take the same line as high quality rock routes. Their first ascents form a valued part of the rich history of winter climbing in the Lake District. However, high quality rock climbs are a finite resource which once damaged cannot be replaced.

Inevitably climbing a quality rock pitch with ice axes and crampons will considerably

accelerate damage to the rock and a slight covering of snow or rime will not protect it. In the case of harder rock routes, even a small number of winter ascents could render them unclimbable in both summer and winter through damage to crucial holds or gear placements.

There are many crags and buttresses in Cumbria which give superb winter climbing. However those listed below have been agreed as rock climbing only venues by a meeting of both summer and winter Lakes activists and should not be climbed on with axes and crampons due to the high quality rock climbing found on them.

BORROWDALE

- Reecastle
- Shepherd's Crag
- Black Crag
- Quayfoot Buttress
- Woden's Face
- Bowderstone Crag
- Sergeant Crag Slabs

EASTERN CRAGS

- Castle Rock of Triermain
- Raven Crag, Thirlmere
- Raven Crag, Threshthwaite Cove
- Dove Crag: North Buttress

BUTTERMERE & ST BEES

Grev Craq

& SLATE

St Bees

EDEN VALLEY & SOUTH

LAKES LIMESTONE

• Everything except High Cup Nick & established waterfalls

DOW, COPPERMINES

 Dow Crag: A and B Buttresses (not including the gullies)

LANGDALE

- Raven Crag, Walthwaite
- Scout Crags: Lower, Middle and Upper
- Raven, East Raven & Far East Raven Crags
- Gimmer Crag: South-East Face to North-West Face (inclusive)
- Flat Crag: Conditionalist to BB Corner (excluding those routes)
- Black Craq
- Lightning Crag
- Long Crag

GABLE & PILLAR

- Kern Knotts: Cat Wall to the Cracks Area (inclusive)
- The Napes: Tophet Wall & all major buttresses except gullies
- Gable Crag: Engineer's Chimney to Engineer's Slabs (excluding those routes)

SCAFELL & WASDALE

- Scafell, East Buttress: all routes except obvious ice & turf lines
- Scafell: Moss Ghyll to Botterill's Slab (excluding those routes)

ESKDALE, DUDDON

- All the low lying crags in Duddon & Eskdale unless via obvious ice lines
- Esk Buttress: from Gargoyle Groove to Trespasser Groove (inclusive)

