

The Professional **Mountaineer**

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Association of
Mountaineering
Instructors

British Mountain
Guides

British Association
of International
Mountain Leaders

Mountain Training
Association



**FIRST
MUNROS**
in winter

**NAVIGATING
around
CORNICES**

**THE GREENING
of the Alps**

**The therapeutic
BENEFITS OF CLIMBING
for refugees in Iraq**



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The Professional Mountaineer

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NEXT ISSUE

Spring 2023 Mount Olympus, Hiking to Health and The Benefits of the Coaching Qualification

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Our front cover

Classic winter day in Glencoe, descending from Bidean nam Bian with Stob Ghabhar prominent in the background. © Chris Marden

Woodland Carbon scheme



CO₂ emissions from the production of the paper used in this magazine has been offset by planting native woodland in the UK, through the Woodland Trust and the Woodland Carbon scheme.

EDITORIAL

The post-pandemic new “normal” is a very different world compared to the era of the “Oven-ready Brexit” that preceded it. As the world slowly re-opened to international travel, mountaineers have been amongst the first to experience the exponential recession of snowlines worldwide, and to travel through so-called “green” industries that have replaced ancient forests with monocultures. We are acutely aware that our travel is a significant part of the problem, yet for many mountainous countries international travel is not only a major income economic driver for the protection of wild places and their inhabitants. Meanwhile, within Europe many of our association members have found professional work opportunities to be severely limited by the loss of our freedom of movement.

We also need to consider the impact of climbing and mountaineering activities on local communities and landowners: low impact travel is easily outgunned by luxury tourism, so we need to bring something else to the table. The annual Union Internationale des Associations d'Alpinisme (UIAA) for mountain protection was presented recently to a project in Pitumarca, Peru that has created self-managed climbing parks. In contrast with the rather hedonistic exploration that can be seen on YouTube, this project fully involved the indigenous inhabitants of this wild place, from negotiating access, developing accommodation through to cultural activities and youth training. This is



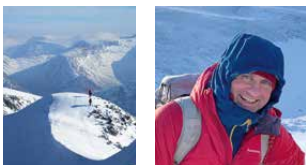
ABOVE The editor awarding appreciation certificates to Hong Kong federation for contribution to skills training.
© Ami Lui (UIAA)

a lesson that has been learned too late in much of the world, where major climbing grounds have subsequently been lost, due to the (justified) assertion of first nation rights. We need to embrace locals as friends and colleagues, otherwise the initial lustre of tourist gold is soon dismissed as cultural imperialism.

Some of these complexities, and ways to mitigate our impact, are explored in the current edition of this magazine, alongside practical suggestions for the healing and development of the growth mindset required to increase the diversity of participation in mountain activities. Safety remains paramount, so we have also revisited some important aspects of ropework and navigation for safe travel in winter. Another “bumper” edition, thanks to our volunteer contributors!

Steve Long
Technical editor

OUR COVER



Chris Marden

Chris is a member of **MTA** and an active mountaineer since the 1980's, but is relatively new to formal qualifications, having gained his Mountain Leader (ML) in May 2021, and Winter ML in March 2022. After 27 years in the energy industry, he established a fledgling outdoor enterprise, *mountainology.pro*

OUR WINTER ISSUE CONTRIBUTORS INCLUDE



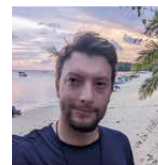
Tom Litchfield

Tom is a member of **BAIML** and **MTA** and works as a freelance instructor. He is a keen climber, skier, mountaineer and walker and is interested in how we can approach mountain activities more sustainably.



Liz Heyworth-Thomas

Liz is a member of **MTA**. She is a Principal Lecture at Liverpool Business School and founder of The Rambling Business Academic Ltd and Berwyn Nordic Walking & Guided Walks.



Daniel Grace

Daniel is a member of **MTA**. He is based in the Brecon Beacons and works as a portfolio GP. Daniel has recently returned from Fiji where he was working to support a major US TV show.



Alex Reid

Alex is a member of **AMI**. He is a Highland-based Winter Mountaineering and Climbing Instructor, Ski Mountain Leader and Anaesthetics trainee delivering mountaineering, climbing, ski touring and wilderness medicine courses.

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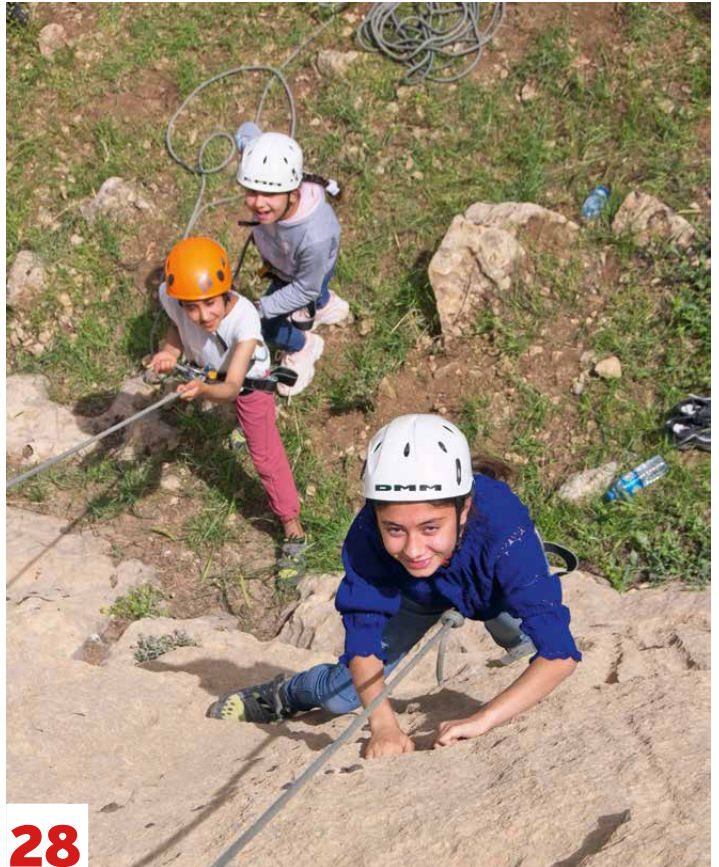
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Feeling inspired? If you would like to contribute to the next issue, please contact **Belinda Buckingham** at belinda@mountain-training.org

Fancy advertising? If you would like to advertise in the next issue, please contact **Caroline Davenport** at caroline@media-solution.co.uk

NEWS



ASSOCIATION OF MOUNTAINEERING INSTRUCTORS (AMI)

It's pleasing to report that membership numbers are up to around 870 after the implementation of the 1st July mandatory CPD requirement. This is a clear reflection of AMI members' commitment to professional development, thank you.

A reminder that members who were unable to comply with the CPD requirement can re-join as a Non-Active Member, and then upgrade to Full Membership when they have acquired 3 CPD points.

Our Regional Reps are busy arranging workshops, and there is a Glenmore Lodge CPD weekend on 7th to 8th January – see CMS for details. By the time you read this, the November Plas y Brenin CPD Weekend will have run. Thanks to Peter Stollery, Events Rep, for organising these. Also, AMI have funded 2 Chris Walker Memorial Trust avalanche awareness workshops for Trainee and Full Winter Mountaineering and Climbing Instructors.

27 AMI Members passed Mountaineering and Climbing Instructor (MCI) Assessment this year, congratulations. There have been 53 candidates who have completed MCI Training and offered complimentary membership, and 19 MCI Trainee workshops have run thanks to the efforts of Craig Offless, Operations Rep.

Finally, keep an eye out soon for resources that you will be able to use in our new AMI Social Media Marketing Campaign – thanks to Tim Francis, Marketing Rep.

Have a safe autumn.

Rob Pugh (Chairman)



The AMI is the representative body for professionally qualified Mountaineering and Climbing Instructors in the UK and Ireland and is committed to promoting good practice in all mountaineering instruction. Full members hold the Mountaineering and Climbing Instructor's qualification or the higher qualification Winter Mountaineering and Climbing Instructor.

T 01690 720123
www.ami.org.uk



BRITISH MOUNTAIN GUIDES (BMG)

This is the time when folk seem to be either on holiday in Greece or climbing somewhere remote in the Himalaya. It's also the time for CPD, with workshops ranging from: techniques for improving client performance; to hardware testing; technical clothing; updates on rope and ropework developments; as well as looking at the latest in ski mountaineering equipment.

We can congratulate Tom Coney this summer on completion of the training scheme and so becoming a full Guide. Eight new trainees begin the scheme in 2023.

The stand-out issue this summer has been the accelerating nature of climate change. Whether we are working in the Alps or the high latitudes the effect of record high temperatures over longer periods following a lower snowfall winter, has increased the challenges of safe glacier travel. Retreat of permafrost on high rock peaks has also resulted in a well-publicised, increased risk of sudden rock collapse. Guides have responded, adjusting itineraries and altitudes where they operate, and increasingly engaging in the education of client groups on the risk considerations we make in the high mountains. It has nevertheless been a successful busy summer with guests returning to summer trips after two quiet years.

Martin Doyle (President)



The BMG is a member of the International Federation of Mountain Guides (IFMGA), currently comprising 24 nations worldwide, with growing membership, it is the professional organisation that trains and assesses Mountain Guides in all disciplines. A British Mountain Guide operates to the highest recognised level throughout the world, in all terrain and in diverse roles.

T 01690 720386
www.bmg.org.uk



BRITISH ASSOCIATION OF INTERNATIONAL MOUNTAIN LEADERS (BAIML)

By the time you're reading this the 2022 BAIML annual conference will have taken place in Buxton.

It's my last one as President and several board positions have also been up for election – but I'm really pleased that as I write this at the start of November, I know we've had some great nominations, and by now we'll have some great new team members helping push our association forward.

The last seven years have been eventful – I don't think any of us could have foreseen how devastating Brexit would be, or that a global pandemic would occur. However, we've also seen our membership continue to grow and diversify, our engagement with the wider UK and overseas mountaineering community is now much stronger and our association offers a lot more than it ever has before. There continue to be many serious challenges ahead for our profession – and finding answers to them will require us all to be involved, all of us to contribute positively and productively. When I first stood to be a director all those years ago, I said that I believed an association of excellent individuals should mean an excellent association – and that continues to be true.

On a personal note, it's been wonderful to meet, work and share experiences with so many of you and I hope to see you out in the hills somewhere.

Stay safe, stay happy,

Kelvyn James [President]



The BAIML is the professional association for International Mountain Leaders (IMLs) in the UK. It represents the UK at UIMLA, the Union of International Mountain Leader Associations, which is the international governing body for IMLs. Full members hold the IML award and are committed to a dedicated CPD programme.

T **01690 720272**
www.baiml.org



MOUNTAIN TRAINING ASSOCIATION (MTA)

Our autumn biennial conference held at the FSC Blencathra was a great success and we look forward to our **All things winter** CPD weekend taking place at Glenmore Lodge on Saturday the 21st and Sunday the 22nd January. The weekend offers 3 packages; new to winter, preparing for your Winter Mountain leader and teaching winter skills.

Our regional volunteers continue to do a resounding job organising and facilitating peer led events around the UK. We'd like to welcome our new regional coordinators Steve Cook, looking after the England, South Central region and Sam Ferguson for England, South West (Somerset and Dorset).

The regions are a much-valued benefit of membership: They help build local communities, create valuable opportunities to practice night navigation, enjoy a social climb or a variety of online or in person skills and local knowledge-based events and activities. Contact your Regional Coordinator or Support Volunteers to find out what's going on in your region, or even to offer your expertise, experience and knowledge to local members. We are also looking to support and expand our network of regional groups and are therefore looking for a new Regional Coordinator for the England, South East region and for Support Volunteers for England, East Midlands and East Anglia as well as a Regional Coordinator and Support Volunteers for the Republic of Ireland. If you would like to find out more get in touch via: info@mountain-training.org.

We'd like to thank you all for your continued support as members and wish you all a safe winter and season's greetings for the holidays.

Belinda Buckingham [Development Officer]



The MTA is a membership organisation providing support and development opportunities for all candidates of Mountain Training. Promoting good practice and continuing personal development opportunities for walking, climbing and mountaineering leaders and coaches. Full members hold one or more of the Mountain Training qualifications.

T **01690 720272**
www.mountain-training.org/mta

It's a crystal-clear morning, the cold adds a refreshing bite to the air and about an hour and a half after leaving the foggy glen, we can now turn off our headtorches and soak up the fascinating frozen scenery of Glen Garry.

WORDS AND PHOTOS BY EDITH KREUTNER



FIRST MUNROS *in* WINTER

The sun will take another 30 minutes or so to make it over the hills in the east, but the dawn light already illuminates the slopes around us. The cold air is so clear that even far-away summits such as the mighty Ben Nevis are not just assumed presences. It is easy to make out deer grazing away on some frozen leaves, unperturbed by two women making their way up the good stalkers' path to the summit of Gleouraich, 1035m.

Winter is special, it brings delights that summer does not hold but it also requires those who venture out into it to come prepared and choose their paths (or, as so often the case in winter, the lack thereof) wisely. Having just completed my round of Munros, I have my own rucksack of winter Munro-bagging stories and have listened to many a tale in bothies, youth hostels, around campfires and over a hot toddy. However, some of my summer mountain buddies are reluctant to venture onto the big hills in winter conditions and when asked why, there is a palpable hesitancy based simply on the belief that the first step is the hardest. As with most elements of mountaineering and hill-walking, experience and good gear are king.

For those first outings in winter, I pick a mountain with clear paths for at least some of the way, where the topography makes navigation a joy rather than a tough chore (fences or other boundary markers come in quite handy in winter conditions!). Also, the hills should not be too remote or hard to get to as daylight hours are limited and one does not want to find out that in the cold, the new headtorch batteries turn out not to have been that new after all.

Here are some of my suggestions for good entry-level Munros for first ventures into the winter wonderland:

1 Gleouraich (1035m) and Spidean Mialach (996m) [12km, 1129m of ascent, 6-7.5hrs]

These two Munros feel like real mountains with their rocky tops and amazing views, but excellent stalkers paths help with the ascent and descent. I love the cornices on the northern side but be careful and marvel at them from a distance!

2 Beinn Fhada (1032m) [18km, 1020m of ascent, 6-7.5hrs]

A glorious mountain and with its relatively easy ascent even in winter conditions despite views of amazing rock corries, it makes for a great day out. Walk there and back on the excellent path up a glen from Morvich.

3 Ben Lomond (974m) [12km, 960m of ascent, 4.5-6hrs]

The most southerly Munro is less busy in winter, but one is barely ever alone, so if you feel like walking in somebody's footsteps is just what you need for your first winter Munro, this summit comes highly recommended. With good paths that will be visible even with some snow on the ground and great views over Loch Lomond, this mountain has a lot to offer for a relatively easy winter walk. The often-recommended Ptarmigan Route is not as easy to find in winter but makes this walk a lovely circular route when conditions are excellent.

4 Ben Chonzie (931m) [12.4km, 712m of ascent, 5hrs]

With a wide track taking the hiker high up into the moorland above Invergeldie, and then some old fence posts for handrailing along in even not so brilliant visibility, Ben Chonzie is a good winter Munro for those who want to gain confidence.

5 Lochnager (1155m) [20km, 773m of ascent, 6.5-8hrs]

An early start is recommended for this rather long but absolutely magnificent hike up one of Scotland iconic mountains. Although there is a circular route, a there-and-back approach is easier navigation-wise as time on the bare (and potentially tricky) last stretch on the vast, gently sloping expanse leading to the summit is kept to a minimum, and one also avoids longer stretches along the -granted- amazing northern corrie with its cornices.



1



2

MAIN PHOTO On Beinn Fhada with glorious views over snow-capped mountains all the way to the Cuillins. 1. About to reach the frozen summit of Lochnagar. What a day! 2. Remembrance poppy placed at Port d'Arinsol. 3. A four-legged walking companion, good gear, a clear day and snow on the hills, what's not to like? 4. Between heaven and earth winter walking in the Torridon range on the 1st of January – Better than curing a hangover!



3



4

Advice on gear and prep

What might be teaching some to suck eggs is an eye-opener to others: A decent amount of time should be dedicated to the study of weather forecasts. You don't want to trash your newfound sense for winter fun with a whiteout that you just about manage to get out of. Fill your piggy bank of winter walking courage instead with many a day in good weather, with great visibility, low wind, and preferably frozen ground. Nothing beats the feeling of seemingly floating over a frozen bog!

I also usually have a look at the weather conditions of the previous two weeks or so. Huge amounts of snow are rare in the Scottish Highlands, but even 20cms require considerably more effort to walk in. Don't forget to also include time for snowball fights and making angels in new snow ☺. Checking webcams are also a good way of finding out about conditions on the hills, as is reading recent walk reports. The risk of avalanche is also an important planning requirement, and the Scottish Avalanche Information Service (SAIS) is a great place to start, but detailed advice on avalanches is beyond the scope of this article.

It should go without saying that winter trips into the hills require the right gear. Bring extra layers to change into once you reach the top as nothing sucks away heat more easily than a soaking wet base layer. Waterproof gloves, mittens, a buff, a beanie, a duvet jacket as well as over-trousers belong to your hill kit as well as warm, waterproof boots and crampons that fit those boots. With an ice axe as part of your essentials, your pack needs to be big enough to swallow all of your gear easily. Some extra room in your backpack does not weigh anything but comes in very handy. You might also want to attach some string to zip-ends as opening them with gloves on is notoriously hard otherwise and not having to take gloves off is priceless on an icy-cold day. Skiing goggles are especially good should the weather turn unexpectedly bad: Ice or sleet crystals crashing

into your eyes at 50mph or more makes navigation near impossible. Gaiters should certainly also be part of your winter equipment on the hill, they give you an extra second or two before water engulfs your boot when breaking through the snow and ice into a hidden watercourse. They obviously also stop the snow from getting into your boots.

It goes without saying that map and compass are absolutely essential but with our ever-increasing reliance on technical gadgets, special care should be dedicated to our phones in winter: with amazing scenery all around us, we tend to snap away with the phone in our gloved-up hands, use the mapping software, send pictures to those still on the sofa at home and it then often comes as a very unwelcome surprise that our phones' batteries last only a fraction of what they usually do – some phones fail completely in freezing conditions. I set mine on airplane mode, keep it in a warm pocket and only take it out when really necessary. You might want to bring a powerbank nonetheless. Hand warmers and an emergency blanket should be added to the usual first aid kit of the hill walker as should be emergency rations. Hypothermia is a killer, and we all know that we get cold much more easily when hungry.

And don't forget to stop and marvel at the landscape, so utterly changed through winter's dip in temperature, the mountain world in its crystal, snowy coat. What's not to love? ■



Edith Kreutner is a member of MTA. She is university lecturer with a passion for the outdoors. After exploring the UK from her base in Bristol for almost a decade, she now lives in Austria and has recently completed her round of the Munros. Edith is a qualified Mountain Leader, writes hiking guidebooks and exploring the mountainous regions of your wonderful planet is her passion.

Don't discount TRAIN TRAVEL this winter!

WORDS BY TOM LITCHFIELD

Taking the train to the mountains of Europe and the UK



Considering how to reduce our environmental impact is more important than ever. According to the European Environment Agency, rail travel is almost always environmentally preferable to driving or flying; with the joint lowest emissions per kilometre travelled and person transported.

The benefits are not only environmental, but train travel can also be more relaxing, comfortable and better for your mental health too. Train travel eliminates issues such as budget flights' infamous tight legroom, keeps your luggage within eyeshot, and saves it from the inevitable bruising by airport baggage handlers. Large windows, stops in lesser-known backwaters and the opportunity to leave the station during changeovers/delays present an opportunity to engage in "slow travel", a more mindful way to get to your end destination, focusing on connections to local people, landscapes, culture and cuisine. Comfortable seats and tables, charging ports and (somewhat) reliable carriage Wi-Fi create an ideal time to catch up on emails and binge box sets.

Train travel embraces the journey, not just the destination!

Tactics

Travel by public transport naturally requires a bit more planning and forethought, but this is something that can make trips more satisfying. Getting yourself to a nearby 'hub' (a decent sized town) to then change to local transport is sensible: Think about getting to Sheffield before switching to local buses out into the Peak District. Minimise stress by giving yourself ample time for changes and connections, while luggage lockers give you the chance to shed heavy bags and explore, when killing time between trains. Google Maps, Trainline, Rome2Rio and Seat61, in addition to national rail companies, are superb planning resources.

Scotland

There are extensive options for Irn-Bru powered walking, skiing and climbing feasible by public transport. Multiple Munros are easily accessible by rail, particularly from the outstandingly picturesque Glasgow-Oban, Glasgow-Fort William and Perth-Inverness lines. The best way to reach the Ossian hills (Beinn na Lap, Carn Dearg and Sgorr Gailbhre) is from Corroir station; the Ben Cruachan hills (four Munros, accessed from the Falls of Cruachan request stop) make for a superb bigger day or multi-day outing, while some twenty-two Munros (including Ben Lui) are straightforward from Crianlarich, Tyndrum and Bridge of Orchy. If timetables can be made to work with a sufficiently early start and ephemeral conditions, Creag Coire an Dothaidh and Ben Cruachan offer winter climbing direct from the station.

The Caledonian 'Sleeper' runs from London to useful hubs, including Glasgow, Fort William, Aviemore and Inverness. Onward travel to starting points is trickier: A combination of local bus services, taxis and hitchhiking should, albeit imperfectly, cover all bases, the best of which is the semi-regular bus service from Aviemore to the Cairngorm ski centre. Given that the first bus arrives at 09h46 and the last bus down departs at 17h02, consider hitchhiking up the ski road for ambitious single day objectives. An article about rail travel, Scotland and mountains would be incomplete without a nod to the Cairngorm funicular, which is planned to re-launch in early 2023 although sceptics may believe it when they see it.

In the face of rail strikes and the high consequence of missing the last train/bus home (the Midi* toilets are comparatively plush compared to a Scottish railway shelter), careful and realistic planning is required.

Continental Europe

Transporting passengers some 416 billion miles in 2019, the European rail network is comprehensive, efficient and well-developed. We are blessed to have access to a huge variety of adventurous options on our continental doorstep that are conveniently accessible by rail. On the rare occasions when rail services won't cut the mustard, BlaBlaCar (carpool or bus) provides a less nerve-wracking and more reliable alternative to hitchhiking.

Interrail

Post-Brexit, an Interrail Global Pass remains one of the most cost-effective ways to travel across 33 participating European countries, not just a clichéd student holiday.

Careful planning using the Interrail Planner, months in advance of travel, is critical as reservations (some with additional cost) are required for certain trains. While reservation fees can be avoided by taking slower or inconveniently timed trains, securing a Eurostar booking is imperative: The limited tickets available to Interrail passengers disappear quickly for peak weeks, potentially leaving travellers stranded in the UK with a useless Interrail pass. Travel to and from the Alps from the UK is possible in a single day, leaving a couple of days spare with the 4 days in 1 month pass.

Once across the channel, it is a question of settling in for the slog to your ultimate destination.

Switzerland

The famously reliable and interconnected public transport system makes Switzerland a prime candidate for rail adventures. As with many things in Switzerland though, this comes at a premium price.

Buying Supersaver tickets in advance helps soften the blow, but depending on how much travel is planned during your stay (and subsequent visits over the year), consider buying a Swiss Pass/Interrail 1 country pass (unlimited travel for 3/4/8/15 days), 1-month GA Travelcard (unlimited travel for 1 month) or a half-fare card (what it says on the tin): These have the added bonus of a slightly random selection of extra discounts (e.g., exhibitions and other transport, including some cable cars).

The ultimate lifehack is to consider where your train originates from: If it starts from outside Switzerland, buy your ticket from the last stop before the border through that nation's rail service. For example, if traveling from Basel to Interlaken, it can be significantly cheaper to buy a German rail ticket from Freiburg to Interlaken, boarding the train in Basel: Pay less to (technically) travel further...

From Rhône valley hubs, on the Geneva-Brig InterRegio (IR)90 express line, (Martigny (direct line to Chamonix-Mont Blanc from here), Sion, Sierre, Visp and Brig), the southern Bernese Oberland and Valais honeypots (Verbier, Crans-Montana, Evolène/Arolla, Val d'Anniviers, Zermatt and Saas Fee) are easily reached by local rail and Post Bus services. Equally accessible and less busy, the Lötschental, Moosalp, Belalp and Bettmeralp are interesting options for skiing and snowshoeing.

Interlaken opens the northern Oberland with rail transfers to Grindelwald and Lauterbrunnen. For Kandersteg (more than just ice and mixed climbing test pieces) and Adelboden, change at Spiez onto the Bern-Domodossola Lötschberger RegioExpress.

Most options in East Switzerland (e.g., Davos, St. Moritz, the Glarner Alps, Ticino) are uncomplicated from Chur and Disentis/Mustér, while Engelberg is best from Luzern. To get to the Brunnital (some of the best ice climbing in the Alps), change to a local service to Unterschächen at Flüelen.

France

While the French rail system doesn't compare to Switzerland for comprehensive coverage, high octane 199mph TGV trains give rapid access to plenty of options. Book tickets through the SNCF or RailEurope/ TheTrainline/ Omio (booking fees apply). A Carte Avantage offers some discounts useful to regular travellers, while for a budget-airline-on-rails experience, consider Ouigo for intercity travel. SNCF Connect is useful for journey planning.

Regular trains run from Paris (Gare-de-Lyon) to Fontainebleau-Avon and Bois-le-Roi and to Fontainebleau-Forêt at weekends and holidays. Once in Font, the best way to access boulders is by bike, but don't discount hitchhiking (although both can be tricky with pads).

Ski trains run from St Pancras to Bourg-Saint-Maurice and Moûtiers. These hubs, noteworthy destinations themselves and plausible from locations throughout the French rail network, offer simple connections to the behemoth Savoie ski resorts, such as Paradiski and Les 3 Vallées.

The picturesque Mont Blanc Express runs from St Gervais/Le Fayet to Martigny, with stops in the Chamonix valley. Perhaps,

DESTINATIONS



2. Train in the snow arosa Switzerland © Phil Wild, Pixabay.com.

though, Chamonix is better accessed by bus, painless from Geneva or Sallanches.

Biarritz, Toulouse, Carcassonne and Perpignan are good staging posts for services into the French Pyrenees, while Languedoc-Roussillon can be reached on lines from Alès and Beziers (TGV connections to Montpellier, Nîmes and Avignon – the best hub for Haute Provence). For the Côte d'Azur, TGV trains operate to Marseille, Aix en Provence and Nice. Remember, travel from hubs to crags and starting points can be tricky and requires substantial planning.

Spain

The choice winter sun destination for Brits, with top-quality climbing to boast! The rail transport isn't too shabby either: After speeding across France (allow two days for this), a high-speed network links all major cities, with local trains and buses allowing access to less frequented locations. Buy advance tickets from Renfe or through RailEurope/ TheTrainline/ Omio. For long-distance trains, connections to and from suburban stations at each end of your journey are included free in some cities (more than counteracting annoying X-Ray bag checks). Reservation fees on most services make Interrail's one country pass less useful, although Renfe's Spain Pass gives 4/6/8/10 train journeys in a month period on long- and medium-distance trains (changes count as two journeys).

With many crags within walking distance, El Chorro is the natural car-less choice. Trains from Málaga to Álora are semi-regular, followed by a hitchhike, bus or taxi to El Chorro.

With more rock-climbing in Salamanca, the Costa Blanca and Catalunya, hill walking/snowshoeing/skiing in the Pyrenees, Picos de Europa, Sierra Nevada, Montserrat and Sierra Blanca, Spain has plenty to offer train travellers.

Clearly, rail travel is well worth considering for your adventures this winter. Certainly not a catch-all-solution, but travelling by train, where it is practical to do so, is much less of a nightmare than its unfair reputation might suggest. Train travel presents opportunities for new adventures, is better for the environment, and avoids unpleasant airport experiences. Give it a try this winter! ■

* The toilets in the top lift station of the Aiguille du Midi



Tom Litchfield is a member of **BAIML** and **MTA**. He is a keen climber, skier, mountaineer and walker who has an interest in how we can approach mountain activities in a more sustainable manner. He has just finished studying Geography and now works as a freelance instructor.



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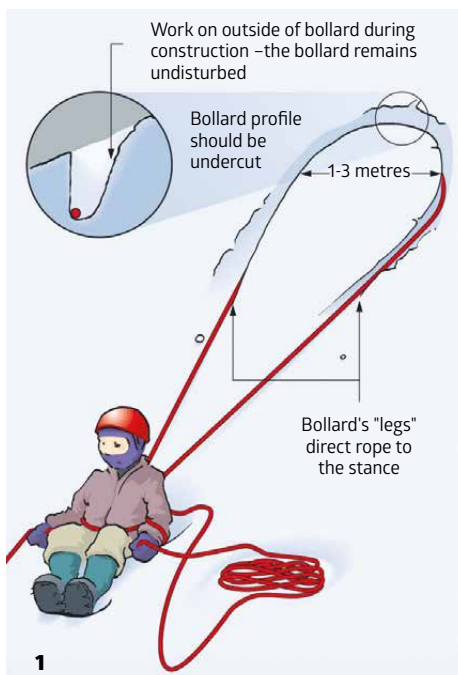
Moving on from my ropework article last edition, *The Professional Mountaineer – Autumn 2022*, where I looked at simple ways to progress from Mountain Leader ropework which make our systems slicker and more appropriate for the alpine environment, this feature looks at how we can winterise those same base level skills.



WORDS BY SIMON VERSPEAK

An introduction to SNOW ANCHORS¹

MAIN PHOTO Practising snow anchors on Buachaille Etive Mor © Simon Verspeak 1. The profile of a snow bollard © 2020 Mountain Training UK. 2. Snow bollard © Karl Midlane. 3. Elements of a snow belay © 2020 Mountain Training UK.



There are four types of anchors in the winter environment: ice, rock, turf and snow. Most of these are not easy to use without specialist equipment, such as ice screws. However, we can create some simple anchors and systems using just snow and the rope, which are often surprisingly strong. In this article we will look at the simplest systems and introduce a few rules which can mean the difference between success or failure of an anchor or system.

Bucket seats

Bucket seats are rarely used on their own, but in conjunction with an anchor, like the bollard described below, they can be very effective. If we are using them to bring people up over or down through a steepening we need to carefully consider the order of construction and where we are going to situate our system i.e. a bucket seat will need to be closer to the edge and below a bollard but both will need to be in line with the direction of pull and aim to keep a straight line between our **A** (anchor), **B** (belayer) and **C** (climber).

The first thing to do is make sure we have an area of undisturbed snow. Importantly in this case, it is *in front* of where we want the seat to go, so ideally, we dig from the side. The front face is key, so we can draw a line at right angles to the direction of pull and then a half circle above it. This gives the outline of the seat to quarry. We want the seat to be large enough that the backs of our legs to the inside of our knees is submerged.

The front face should be flat and angled at 90 degrees to the slope angle. We can cut out an enlarged slot at the back for our rucksack if needed.

Once the seat is excavated, we need to climb into it without disturbing the snow in front or the front face. There is a school of thought that we should kick our heels in once sat down but I'm not a believer of that as it can disturb that crucial snow. If the hole is deep enough, this shouldn't matter as we are firmly in it!

If we are just using the rope, we will be body belaying. In summer I would recommend long sleeves, gloves and wearing a rucksack; we're likely to be

doing this in winter already! Belaying in a bucket seat can be awkward so it is worth practising and you may need to make an adjustment to the seat to allow space for our elbows.

Advanced tip: we can site our anchor slightly offset to make attaching to it easier. Think about where the rope is going to be flaked into as we belay and dig a hole ready for it.

Bollards

Arguably, the simplest type of snow anchor is the bollard, requiring nothing more than an implement for digging, usually your ice axe. These are horseshoe-shaped areas of snow rimmed by a slot, which provide good anchors in a variety of conditions. We can abseil off them and use them as an anchor within a bigger system by sitting in a bucket seat. We generally don't belay direct off snow anchors, as shock loading even in good snow can cause them to shear.

In order to make our anchor we firstly identify an area of undisturbed snow. We need to draw on the surface the size and shape of the bollard, orienting the anchor to the direction of pull. We can use our ice axe pick to mark this out: essentially the softer the snow, the bigger the bollard. For hard snow, an ice axe pivoted around its spike beside the centre of the bollard for iron hard neve, around our elbow holding the axe out for firm snow or arm extended, holding the axe and pivoted around our shoulder for soft snow. After we have a half circle, we can draw the horseshoe tip. We then need to dig out the slot for the rope, keeping the middle undisturbed; the slot needs to be as deep as the hardest layer. We need to slightly undercut the slot towards the middle so the rope cannot roll out. The slot should be even in depth and shape all the way round. Using a gloved hand is often the best way to achieve this. Once we have completed this we can thread our rope around the bollard. For belaying we would tie it in as per a thread anchor, or for a retrievable abseil we can use the middle of the rope. It is essential we keep



the pull low: for abseiling over a corniced edge this may mean kneeling or belly flopping over the edge!

Advanced tip: in soft fluffy snow we can shovel up and then compact by compression i.e. stomping up and down to create a more bonded snow pack to dig into. In medium snow we can reinforce the side of the bollard just below the apex of the semi-circle where it starts to straighten out using poles or ice axes vertically placed to prevent the rope cheese-wiring.

Summary

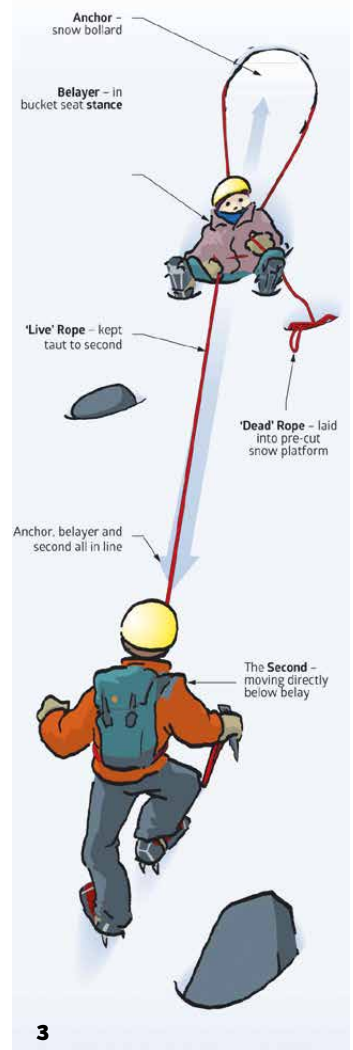
Snow anchors are only as strong their base constituent however we can greatly improve our chances if we carefully construct them; a bucket seat is not just a hole! In the next instalment we will look at the options for burying anchor objects in the snow. ■



Simon Verspeak is a member of **AMI, BAIML** and **MTA**. He is an experienced WMCI and IML having spent nearly ten years teaching mountaineering during the winter seasons in Glencoe. Normally based

in Snowdonia, he loves the challenge of moving North and working Scottish winters.

- 1 A snow anchor here we define as an anchor using just a rope and snow, no ice axe, ice screws, nuts, etc.



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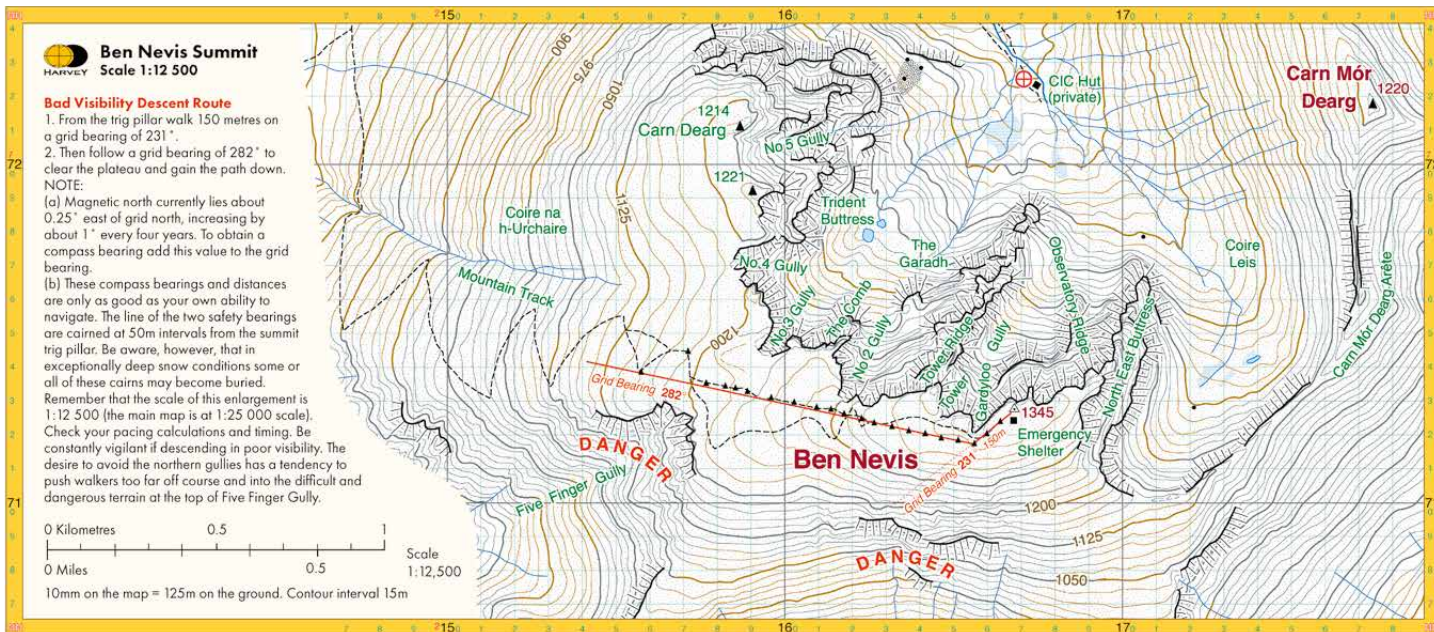


FIGURE 2 Map extract © HARVEY 2022

NAVIGATING *around* CORNICES

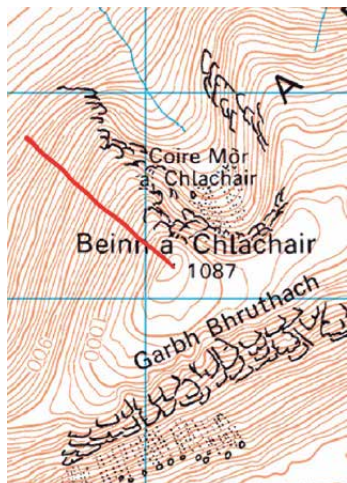


FIGURE 1 © Crown copyright 2022
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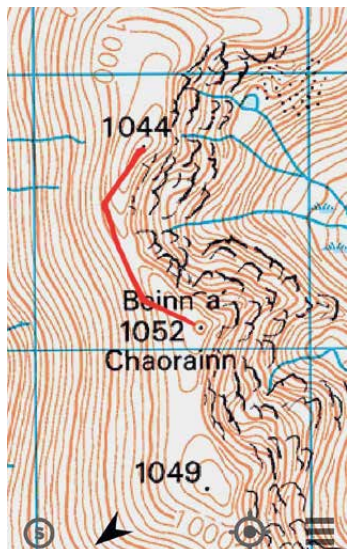


FIGURE 3 © Crown copyright 2022
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WORDS BY ALISTAIR OTHEN

WOAHHHHH! came the cry from my right as howling wind blew snow into our blinking eyes, as we fought across the Cairngorm Plateau.

Phil had strayed off his bearing and been spooked by the sudden appearance of a bright white horizon line 5m to his side – he was stood on a cornice and quite simply, got away with it. He quickly scuttled back to the safety of the scoured ground that our crampons were keeping us stuck to in our wide braced stances. He regathered his wits, we rechecked our position and took a new bearing to take us to the safety of the scoured slope and visibility beyond the corrie rim. With the benefit of hindsight, I find myself sucking my teeth when I look back on the close shaves from my youth! The availability and diversity of information and guidance (such as this magazine) is much better these days, so such near-misses should be more easily avoided.

What is a cornice? In simple terms it is a lip of blown, compacted snow that builds out from the steep edges of a ridgeline or, more commonly, a corrie rim: they can start off as convex roundings in early season through to full on wave-type formations. In either case

they can be a source of great danger should we wander onto one. This is not always the case, but that is for another article to examine.

How do we avoid them? Let us look at the simplest method to start off, knowing where the prevailing wind has come from and where it will be during your planned day. Armed with this information you can predict where the snow has been transported over steep corrie rims, which will form cornices and indeed avalanche prone slopes. With this knowledge you can plan a route that avoids these edges and slopes – simple. Well, it is – if your intended route is a straight up and down to a summit with no deviation; Cairngorm from the Ptarmigan being a good example. Sources for this information include various wind and weather apps along with the Scottish Avalanche Information Service forecast. If outside the Highlands, there are daily Fell Top Assessor reports for the Lake District and on Tuesdays and Fridays for Snowdonia.

So, what if your route wanders a bit or takes

you to a summit that is flanked by two corrie rims? In clear sunny weather, this is again fairly straightforward. Cornices are pure snow and as a result if you stay on the terrain where rocks can be seen poking through or where it is scoured with visible grass tufts etc., you are on solid ground; this is particularly relevant when following a ridge. You may find that you travel just off the edge of a ridge due to a cornice build up from the top of the ridge to the other side of your line of travel. So again, if you stay on the terrain where rocks etc., are visible, you will be on safe ground.

The above assumes good visibility, but what if you end up in the “white room”? A white out is where it is difficult to discern the ground from the sky with visibility varying from virtually nothing to a few metres. This is where your map and compass, and also nowadays a GPS, can help you out.

Bearings are the name of the game here, with the first strategy being a simple bearing to a safe slope: coming off the summit of Beinn a Chlachair in Ardverrick Forest is a good example of this. As can be seen in *Figure 1* a bearing is being taken to the ‘safe’ ground and away from the potentially corniced rims of Coire Mor Chlachair. All you need to do is follow your bearing down the slope until you hit the obvious track, although it is likely you will break into good visibility before then.

The second strategy is navigating around a dogleg onto safe ground, with Ben Nevis in Lochaber being the most well-known example of this. An initial bearing is taken to (if possible) another identifiable point, once this point is reached a new bearing is taken to reach the open slopes away from the corniced terrain. Pacing is the main strategy I use for this: along a bearing, know how many paces it takes you to cover 100m, which you can then use to measure the distance in blocks of 100m, avoid totaling the distance, as you are certain to lose count. *Figure 2* shows the Harvey’s map inset on their 1:40,000 with the bearings and distances off the summit toward the zig zags and Pony Track.

The final strategy is using all your navigation ninja skills; this would see you navigating around a corrie rim from one summit to another, a traverse of the two summits of Beinn a Chaorainn being a good example of this. This method is called boxing and involves walking the 3 sides of a square/rectangle to reach your destination. As with the previous strategy, as well as bearings this employs pacing, and possibly timing, and would more than likely be used to get round the corrie rim. *Figure 3*.

Throughout all of these strategies, the use of a GPS – either a specific device or a phone with appropriate mapping software is really useful, combined with a map and compass. I still do not fully trust the capabilities of using a GPS alone (I know folk who do) as more than once I have found the unit has lagged in position or been slightly out, and if used alone could have created an issue. Besides that, I still find the skill of using a map, compass, timing and pacing immensely satisfying: I treat the GPS as a backup, rather than vice versa. ■



Alistair Othen is a member of **AMI** and **MTA**. He is a trainee Winter Mountaineering and Climbing Instructor and has been involved with a paddle, boot or rope since the age of 15. Since then, Ali has sea kayaked, canoed, white water kayaked, climbed and hiked in the many stunning places we have in the UK as well as alpine

mountaineering in the Alps, climbing in Yosemite, sea kayaking in Lofoten, white water kayaking in Slovenia, ice climbing in Norway and canoeing in Canada. He now runs his own business Ali Othen Mountains and Paddles from his home in Shropshire. When not in the outdoors, Ali is with his partner Rachel and his daughters, as well as being a keen supporter of the Exeter Chiefs.

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The GREENING of the ALPS

WORDS AND PHOTOS BY JIM LANGLEY

With another summer of record temperatures and heat waves across Europe the signs of a warming planet are all too evident. The effects of climate change have significant consequences for plants and animals, their habitats and their ultimate survival. This article takes a look at the changing climate in the European Alps where it is having a pronounced and visible impact on both the physical environment and the living world.

This year has been exceptional in many ways in terms of climate. It is following a trend in which sixteen of the past seventeen years have been the warmest on record. Last winter saw little snow fall in the Alps and very mild conditions too. A hot, dry summer followed across Europe and the Alps experienced rapidly deteriorating conditions. These conditions have been widely reported with major alpine events including the tragic news of a serac collapse on the Marmolada glacier in the Dolomites killing 10 mountaineers in its worst recorded incident. Rock collapse, widening crevasses and generally poor glacier conditions have also led to the closure of some normal routes up major alpine peaks including the Matterhorn, Mont Blanc and Jungfrau.

Impact of climate change

At the scale of the European Alps, over the course of the 20th century, temperatures have risen by 2°C which is double the average increase recorded in the northern hemisphere. This rate of warming, observed since the industrial revolution, has accelerated in the past 40 years (see *figure 1*). Data recorded by MeteoSwiss in 2022 reported a record-high freezing point of 5,184 metres – an altitude higher than Mont Blanc – compared with the normal summer level of 3,000-3,500 metres. This temperature change impacts all living things at that altitude and represents an upward movement of about 100 metres. Therefore in order for species to be able to stay in the same temperature conditions they will need to move



1



2

MAIN PHOTO Glacier crowfoot a high alpine specialist. 1. The alpine landscape of Mont Blanc photographed by researchers from Dundee University in 2019. 2. The alpine landscape of Mont Blanc photographed by Walter Mittelholzer in 1919.

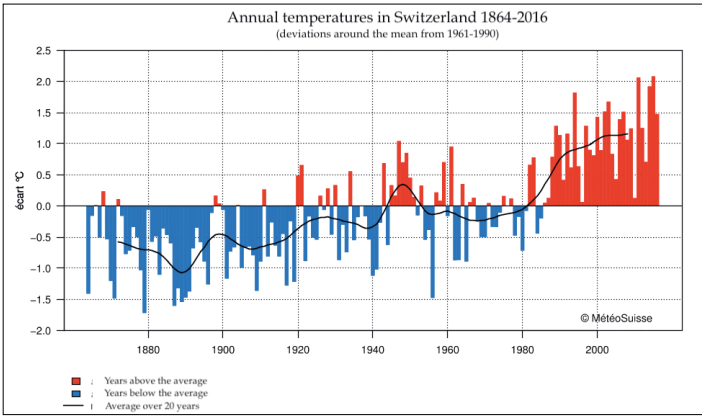


FIGURE 1 Annual temperatures in Switzerland based on the 1961-1990 average.



3. Ibex. 4. Coltsfoot flowering in spring following snow melt. 5. Aletsch glacier. The longest glacier in the European Alps with depths up to 800 metres thick. 6. Alpine snowbells appear in early spring through melting snow.



100 metres upslope. This forms a major challenge for biodiversity, as species try to keep pace with these rapid changes.

Snow cover

The rate of warming is amplified in the mountain environment as many different habitats occur over a small area: Snowbeds are reduced in size and length of time, ice melts from screes and rocky ridges earlier, and meadows are exposed for longer periods. These habitats are all experiencing a reduced snow and ice cover, which has several issues. Snow and ice reflect the sun’s rays keeping the ground cold but when they melt they are replaced by rock and vegetation. These both absorb the sun’s heat increasing ground temperature and thus contribute to more melting. These effects have been recorded on the Mont Blanc massif which has lost one month of snow cover, at mid-elevation, in the past 40 years. This trend is predicted to continue and an equivalent reduction is likely by 2050.

Drought

Europe has just had its hottest summer, and hottest August on record. Associated with these heat waves is drought due to a lack of rain, warmer soils and enhanced evaporation due to the high temperatures. Yet as southern and central Europe baked, Scandinavia soaked this summer. According to scientists global rainfall patterns have changed little over the past century, however, regional and seasonal changes have been observed and we are witness to this in Europe. A noticeable consequence I observed this summer was with Switzerland’s drinking water fountains: These are normally a constant flow of fresh spring water but many were turned off this summer to conserve

water supplies. Incidentally due to the risk of wildfires, no fires were permitted including during the Swiss day celebrations when fireworks displays are traditionally seen across the evening sky on 1st August.

Glacial volume

Global heating is supercharging extreme weather at an astonishing speed. High temperatures have a dramatic effect on glacial ice volume, causing glacial retreat to occur at an alarming rate. Since 1850 glaciers in the Alps have lost between 30% and 40% of their surface area and half of their volume. The speed of loss has accelerated, and since the turn of the millennium the Alps have lost about 17% of their ice volume. Iconic glaciers such as the Mer de Glace in the Mont Blanc Massif and the Aletsch glacier in the Swiss Valais have experienced huge reductions in ice volume. The Mer de Glace experienced a 7-metre loss of thickness this summer alone and the Aletsch glacier, the largest in the Alps, is contracting by 5 metres or more each year.

In 1919, the Swiss pilot and photographer Walter Mittelholzer flew over Mont Blanc in a biplane to photograph the alpine landscape. Exactly 100 years later, researchers from the University of Dundee in Scotland recreated his photographs to show the impact that the changing climate has had on the mountain’s glaciers (see photos 1 and 2).

Permafrost

Permafrost is the permanently frozen ground and consists of soil, rocks and sediments usually bound by ice. Permafrost generally occurs in the Alps from around 2,300 metres altitude. Investigations into the link between permafrost thawing and

rock collapses were started around the time a large part of the Bonatti pillar on the Aiguille du Drus collapsed in 2005 but have been speculated about since the 1970's. Long-term monitoring has revealed progressive warming and degradation of permafrost, which has a profound influence on the evolution of the mountain landscape and the stability of the mountains. The potential for natural hazards such as rock falls, landslides and debris flows, will become more frequent and will impact not just mountaineers but settlements, infrastructure and all living things in the Alps.

Impacts on the natural world

Such rapid changes in the physical environment have significant effects on all living things. The effects of climate change on alpine flora and fauna are noticeable and are already contributing to changes in species distribution and abundance. They need to keep pace with evolution in order to survive, but the gradual greening of the Alps illustrates the changing distribution of species.

Growing season

Alpine plants are specialists at survival. They are at home in the harsh alpine environment with its extreme climate and short growing season. As snow cover melts earlier the growing season lengthens and this will begin to favour the less well adapted and more competitive species usually confined to lower elevations. Gradually, the high-altitude alpine specialists will become restricted to newly exposed areas, uninhabitable to the invading plants. The rise in spring temperatures, combined with earlier melting of the snow cover allows the majority of species to develop earlier in the season and to produce more biomass over the course of the growing season. This is generally a positive effect but some species are sensitive to frost, especially in early season, so this can increase the risk of damage to species such as bilberry.

Vertical migration

Over the past decades, with the warming climate, a rise in elevation of both plant and animal species has been observed. Plants are rising vertically at a rate of about 30 metres per decade with animals rising about 100 metres per decade. Forest tree have migrated around 30 metres over the 20th century. This vertical migration increases the competition for space and resources and combined studies across the Alps have indicated an increase in plant species found on summits over the past few decades.

Phenology

This is the timing of events in nature. It is when plants come into flower, when eggs are laid and when you see the first swallow of summer. It also focuses on how plants and animals respond to the climate. In order to survive changes in climate species can either migrate to preferable conditions or they can adapt to the new environmental conditions. Examples of this are; the arrival of migrating birds advancing by about 15 days over the past 30 years, common toad eggs are laid about a month earlier than 25 years ago and plants are flowering between 2 & 5 days earlier per decade.

Grazing animal

The changing in the times of spring is also having a great effect on grazing animals such as ibex and chamois. They are becoming desynchronised with peak vegetation production in the spring with dire consequences for their young. Their mating season is in the autumn and young are born in the springtime. During relatively warm winters peak plant production is out of synch with weaning their young. As a result higher mortality of young ibex and chamois has been observed due to a lack of suitable food.

Summary

It is without doubt that the Alps are entering a period of unprecedented change. Climate change continues to alter the alpine ecosystem and there will be winners and losers. While alpine species will lose significant areas of habitat, colonising plants and forest trees will expand their territories.

As individuals, we have our role to play in mitigating climate change. The decisions we make regarding how we travel, what we eat and what we buy all have an important impact. ■



Jim Langley is a member of **BAIML** and **MTA**. He is an International Mountain Leader (IML) and co-author of *The Alps – a natural companion*. He runs CPD courses for mountain leaders and instructors in Snowdonia but also in the Alps. To find a course or to learn more about his educational business – Nature's Work – check out his website www.natureswork.co.uk



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HAUNTED HILLS AND SKY DANCING BIRDS: *Part 2*

WORDS BY IAN TONGE
PHOTOS FROM THE RSPB



1

In part one of this article, I shared with you some of the joys and challenges of working in the hills and high moorland with vulnerable birds of prey. In part two I will share some of the knowledge I have gained about the fascinating wildlife I encounter.



2

Over the five years that I've been volunteering for the RSPB, I've become familiar with the behaviour of some of the UK's most endangered raptors and have developed knowledge of their intriguing life cycles. Sitting quietly tucked away in the landscape I am also privileged to observe other wildlife closeup: lizards, adders, deer, hare, stoats, and many species of bird.

Watching wildlife at close quarters has also given me a real understanding of the delicate balance and interconnectedness of the ecosystems which sustain it. The meadow pipit, that small brown bird so commonly seen in the hills might appear to be insignificant, however it is a crucial part of the food chain, the breeding success of which impacts on raptors such as the merlin and hen harrier. The voles that scurry for cover as you trudge through heather and bilberry are a key prey species for owls. In a "good vole year" Bowland can sustain a healthy population of short-eared owls. If the vole population crashes, I might see no

short-eared owls for the whole year.

Merlin, Britain's smallest falcon, are fantastic birds to watch. Fiercely territorial, I think of them as miniature jet fighters. I've watched them defending their patch against much larger raptors such as buzzards and harriers, bursting skywards from cover in the heather, until they have gained sufficient height, then swooping down at their targets in amazing aerobatic displays, not relenting until their adversaries have been driven off.

The peregrine is Britain's largest falcon. Like their smaller cousins, they too are aggressively territorial and amazingly aerobatic. They typically spot their prey from high above and stoop down at high speed onto their target, often killing it instantly on impact. Their stoops have been recorded at speeds of over 200mph.

I find the hen harrier a particularly intriguing bird. Like many birds of prey, they are sexually dimorphic, mature males and females differing enormously; the male is a stunning silver-grey bird with white rump and black wing tips,



3

MAIN PHOTO Peregrine falcon. 1. Short eared owl.

2. Male hen harrier. 3. Female hen harrier in flight

© Lee O'Dwyer.



4. Hen harrier chicks. 5. Barn owl in flight. 6. Male hen harrier in flight © Lee O'Dwyer.

the female is brown with a streaked breast, white rump and distinctive barred tail giving it the nickname “ringtail”. The female is also significantly larger than the male.

The UK’s hen harrier population suffered a significant decline this century and the species was on the brink of extinction in England, falling to just four pairs in 2016. Happily, thanks to the efforts of the RSPB and other conservation organisations, numbers have increased over the past few years. This year we have recorded thirteen nests in Bowland, however while this result gives us reason for optimism, it is far too early for celebration, as the population remains critically low.

Individual hen harriers can differ hugely in character and habits. One satellite-tagged male from a nest in Bowland, overwintered in Northern Spain for two years running in 2019 and 2020, returning to Bowland in spring to breed. One year, he flew across the Bay of Biscay from Brittany to Northern Spain in an epic two-day, non-stop journey of over 400 miles. His brother from the same nest, lived a completely contrasting life, remaining in northern England throughout the whole year.

Hen harriers have earned the nickname “sky dancer” due to their spectacular aerial displays at the start of the breeding season, during which the male will repeatedly soar to a great height then tumble earthwards in a bid to attract a mate. Once breeding is underway, aerial food passes from male to female and from parents to fledged chicks are almost as spectacular as their sky dancing.

Having watched hen harriers from up to a mile away through binoculars or scope, it is a great experience to get up close when assisting in ringing and tagging of chicks at the nest, which is made in deep heather. These procedures, carried out under a Schedule 1 licence and the respective British Trust for Ornithology (BTO) permits, are completed quickly and professionally to minimise disturbance. Information gained from rings and satellite tags is crucial to the huge effort being made to conserve and protect these vulnerable birds, shedding light on their habits, movements, and life cycle. Adult hen harriers

are aggressively defensive of their brood and typically, from arriving at the nest to leaving, we are repeatedly divebombed, frequently having to duck to avoid being hit by their sharp talons.

Sometimes a day in the hills can bring unexpected surprises. In spring of 2022, a golden eagle wandered into Bowland, staying for three weeks. I was lucky enough to see it twice while watching hen harrier nest sites.

In addition to the work being done directly with birds, it is also encouraging to see significant conservation efforts being made on a landscape scale. Restoration work is underway in Bowland and the Peak District to regenerate and improve important blanket bog and peatland habitat. Peatlands are important water catchments, they are also the world’s most efficient carbon sinks, covering only 3% of the world’s land area and yet holding an estimated 30% of the world’s carbon. Peatland preservation and improvement brings benefits both to local wildlife and to the wider environment.

Working with endangered birds of prey does have its downsides: Watching these amazing birds so closely, one cannot help but become personally involved and any losses and nest failures are heartfelt. These setbacks however are outweighed by the successes I have been privileged to witness. Seeing chicks fledge and take their first flights is a hugely rewarding experience. ■



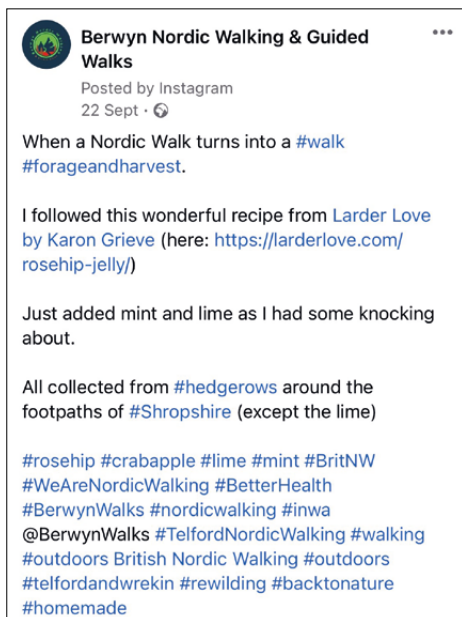
Ian Tonge is a qualified Mountain Leader and a member of **MTA**. He has enjoyed outdoor activities for over 30 years, including canoeing, rock climbing, winter climbing and mountain hiking. Ian coordinates a hillwalking group and regularly organises and leads hikes in the UK’s hills and mountains. He works for the RSPB as a volunteer and seasonal employee monitoring and protecting endangered upland raptors. Ian runs an accredited CPD course: Wildlife and Habitats of the UK’s Mountains and Uplands, which can be found on the MTA website.

WORDS BY DR LIZ HEYWORTH-THOMAS

Marketing:

MORE THAN JUST ADVERTISING

As a marketer, I am often asked how businesses can reach and engage with potential customers. The answer: marketing goes beyond simply advertising.



ABOVE An example post on social media showing how knowledge and interests outside of the core business activity can be used to create marketing content, show brand personality, and engage with customers.

As business owners, we need to be experts in what we offer and what our business does. We need to create advertising campaigns and marketing strategies that work together to publicise what our business offer is, with a focus on what makes our business different from every other business in the sector, with the key question being: why should your target consumer come to you over your competitors?

We might know our offer is better, or that our skills and experience make us the better choice, but in what way? And, do our customers see that from our marketing?

Do more than stand out, be remarkable

We can make our business stand out through creative advertising. But if the offer is not remarkable it is not likely to generate a return. Find your unique selling proposition (USP) by identifying why your business differs from others. In marketing we often refer to Seth Godin's Purple Cow theory which demonstrates that although a purple cow will stand out from the crowd, its function is the same as the others and so it is no more likely to sell. This theory reminds us that we need to think beyond advertising and explore the USP of the business, products, and services.

Building your brand personality

Your brand goes beyond the business name. It is the heart and personality of the business. It can show authenticity and 'sets the scene' of the business. Building a positive and personable brand personality can work towards building consumer trust and engagement. Think about the brands you are loyal to, and why. They may represent something meaningful such as sustainability, ethical business practice or wellbeing. Now consider your business. What values can you show through building your brand personality?

You can also make the brand about YOU. You can be your own USP. To give an example, when I started my Mountain Leader training I wanted to find an instructor who was experienced but was also approachable. I knew I was confident with navigation and expedition but wanted help with gaining confidence with ropework. For me, finding an instructor who was an experienced rock climber was ideal. Think about what is important to you and your business and reflect this in your branding.

Communicating and engaging with customers

Now is a particularly good time for outdoor businesses too, as the general population has really embraced 'getting back to nature' for a variety of reasons, be it fitness, health, wellbeing, or experience. We may see the frustrations of our beautiful landscapes being crowded, but in terms of business, this is a huge opportunity for our industry. We have a mass of potential new customers who can provide new market opportunities, growing a customer base of people who are reigniting their passions for the outdoors or perhaps discovering our more rural landscapes for the first time added to our already existing potential client base. The opportunity is there. We are here. We just need to bridge that gap and work out how we can engage with them.

Take a moment to think about your current and potential customers. Consider their demographics and their lifestyle. Social media is a valuable (and free) market research tool and avenue for customer engagement. For research, take some time to look across multiple social media platforms and see what your potential customers are posting (or telling us), where they are posting, and when they are posting. With time, we can learn more about our potential customers. Not only who they are, their lifestyle, their likes, and dislikes, but also how

and when we can effectively communicate with them, even down to the time of day to share our posts.

A good starting point is to look at the hashtags being used and which are being used simultaneously. This gives us an indication of consumer trends and connected trends. For example, #outdoors and #adventure are often used together. This tells us that people are looking for adventure in the outdoors. This is a very basic connection and may seem obvious, but if we look at the posts under those hashtags we can see how 'outdoors' and 'adventure' are portrayed and/or experienced. For product-centric business, we can see which product types are being used and sought after as part of the shared experience. For service-centric business, we can see the experiences being shared and sought after, as well as who those experiences are being shared with. Remember, social media is a platform for ideology, with imagery often presenting an idealist experience intended to create desire. Put simply, people share what they want the world to see, quite often the best parts of their lives or the life they want to portray. Businesses can explore avenues of 'fit' between their business offer and the ideals presented via social media platforms, and indeed join the conversation.

Interestingly, a quick search online using the hashtags of #outdoors and #adventure presented a narrative of wellbeing, uplifting feeling and #positivevibes. Yes, more hashtags to be utilised. By using hashtags we link our social content to that of others and show a sense of shared experience and can position ourselves to be visible in the online marketplace. This helps to raise awareness of our business to potential markets and is the first step to gaining interest. Awareness and interest are the two leading principles of the AIDA framework, developed by

American advertising advocate Elias St. Elmo Lewis. Once we have generated **AWARENESS** and gained **INTEREST**, we need to create **DESIRE**; a desire to engage with our brand. This is where brand personality and our USP is key. Finally, **ACTION**. There needs to be an action to take to encourage engagement. This stems from consumer psychology where if you have engaged with a social media post by clicking on a link for more information or viewing comments for more content, you are more likely to recall the post. Video content (vlogs) and blogs are great for this too! Plus, they are a great way to keep your website present and changeable; giving current and potential clients a reason to revisit your website, which in turn benefits your website hit rate. Businesses can also utilise page analytics to view how many people have engaged with posts and in what ways. This then helps us to identify which types of posts are most effective.

Content can take time to build. The best advice I can give any business is to take photographs of anything that sparks your interest and start building a narrative, whether it is through blogs or social media posts. Each post online is like a patch being added to a collage. It might seem inconsequential, but its placement contributes to a much bigger picture. ■



Dr Liz Heyworth-Thomas is a member of MTA. She is a Principal Lecture at Liverpool Business School, Co-chair of the Academy of Marketing's Entrepreneurial and Small Business Marketing Special Interest Group, and founder of The Rambling Business Academic Ltd and Berwyn Nordic Walking & Guided Walks. Liz has expertise in marketing, entrepreneurship, sociology, and social policy.

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Libby Peter
Mountain Guide
and mother of two

PREGNANCY, motherhood and outdoor careers

ABOVE Walking in the Peak District with a 6-month-old, wearing an oversized borrowed coat to protect Mum and Baby © Zlatko Vidrih.

Part 2: Physical and mental health

WORDS BY MIKAELA TOCZEK AND
SAMANTHA EVANS

The physical and psychological reality of pregnancy and motherhood is different for every individual. Often women in the outdoors feel they are balancing two identities when becoming a mother. However, if supported by employers, colleagues and course providers, we can empower visible role models for young people, redefining mothers in adventure sports and the outdoors.



Mikaela Toczec is a member of **BAIML** and **MTA**. She is an International Mountain Leader, Rock Climbing Instructor, Media-Maker and mother to a 2 year old girl, currently living and working in Slovenia.



Samantha Evans is a member of **BAIML**. She is an International Mountain Leader, BAIML French Representative and mother to her 9 month old baby boy. Sam works as a Ski Instructor, Mountain Bike Guide, Sailing Instructor and Outdoor Education/Sports/Geography Teacher, based in the French-Swiss Alps.

Pregnancy

The NHS advises that exercise continues to be beneficial for mother and baby throughout pregnancy, acknowledging different bodies, prior fitness levels and skill sets¹. There are an increasing number of acclaimed women mountaineers², guides³ and outdoor professionals who have continued working throughout pregnancy.

For Samantha there were added complications as she has Ehlers Danlos Syndrome (EDS), Hypermobility Type. There are many symptoms, but joint laxity and gastroenterology are her main issues. However, by staying active throughout her pregnancy Samantha was able to continue working in the outdoors until 7 months pregnant and training until the week of the birth of her son. This was achieved by working with a medical team, led by the physio, Neil Maclean-Martin at La Clinique du Sport, and with support from gynaecologists, doctors and EDS specialists. A similar level of consultation should be sought before embarking on training during pregnancy.

In general, training programmes during pregnancy should include pelvic floor and core

strength training, plus generic cardio fitness. Physio exercises to acquaint movements for rehab are essential to ensure expertise and muscle memory. To continue working and training on the mountain, risk needs to be considered, which may include adapting sports, grades or routes to prevent accidents and falls. For Samantha, having her International Mountain Leader (IML) winter assessment scheduled for 6 weeks after the birth of her son meant it was imperative she retained a good level of fitness throughout pregnancy and avoided skill fade by training on the mountain in winter conditions.

Recovery

Physical recovery will depend on individual scenarios during childbirth, including any complications or pre-existing medical conditions, stitches from episiotomies or surgical recovery from caesarean sections (C-Sections). The training programme below was devised by the above-mentioned professionals for Samantha's recovery from a planned C-Section, necessary due to her EDS, and the increased risk of herniation, prolapse of organs, haemorrhage and dislocations. This programme enabled Samantha to return to outdoor work within 6 weeks⁴:

- 1 Small walks in the hospital pushing the crib around the ward.
- 2 Gentle walks with baby in a pram on easy, flat paths, which increase in distance, speed and duration.
- 3 Reactivation – Introduce simple pelvic floor, core and abdominal exercises to retrain

deep stabilisers. These involve very small movements to re-educate but not to put load on the incision or muscles.

- 4 Re-establish normal muscle tone after all the stretching during pregnancy, followed by re-introducing movement habits to incorporate strength.
- 5 Start very gently spinning legs with no resistance on the turbo trainer.
- 6 Once sufficient stability and scar is bonded, loading is possible plus movement/exercises increase in difficulty and weight bearing.
- 7 Increase intensity and duration of walks carrying baby in a sling on rough and steeper terrain over time.
- 8 Incrementally return to normal training plans, reintroduction of various sports when recovery permits. Continue to perform ab and core exercises in training programmes.

Samantha built up her muscle tone and stability bit by bit and was medically cleared to return to the mountain for her IML Winter Assessment 6 weeks post caesarean. The quick return was achievable only due to her maintaining her fitness and strength during pregnancy, with her motivation and commitment to training, and correctly following the above programme.

Mental Health

Conditions such as Post-Natal Depression and Anxiety are common and require professional support, generally referred through your midwife or general practitioner (GP). To assist her through this stage Mikaela received postpartum support over the phone, and practised strategies to control her anxiety. Exercises such as rectangular breathing and visualisation helped with anxiety in early motherhood, alongside daily sling walks with her baby.

Maintaining engagement with the industry through employers, peers and training can help to restore confidence, address skill fade, develop new skills and maintain a sense of identity and connection with the outdoor community. Mental Health First Aid Courses could also be hugely beneficial in this context, and of course widely applied across the industry⁵.

Overseas Expeditions

Tropical diseases, access to medical care and remote locations could all influence individual choices regarding leading an overseas expedition while pregnant.

- Contact your travel nurse regarding diseases that pose a risk during pregnancy for your destination.
- Discuss options for medical support, e.g., Access to midwives.
- Consider your individual physical symptoms.
- Familiarise yourself with airline policies on flying. Most have some restrictions after 36 weeks and some require a letter from your midwife after 28 weeks.
- Have an open conversation with your employer, outlining the support you need or changes that could be made, e.g., Alternative destinations.

Nutrition

Adjusting your nutrition during pregnancy can have a positive impact on nausea and fatigue, try including more high protein options such as peanut butter and bland easy to digest carbohydrates. Have multiple options available on the hill in

case you suddenly develop an aversion to one type of food, which can happen from one bite to the next!

Breastfeeding uses an additional 300-400 calories per day, so calorie-rich foods will be needed for mountain days to maintain your own health and your milk supply⁶.

Breastfeeding

Returning to an outdoor career while breastfeeding can be rewarding if the right support is in place. Employers are legally obliged to provide a private, safe and healthy environment for breastfeeding mothers to nurse or express. However, due to the nature of many outdoor careers, this can be difficult. Planning breaks around breastfeeding, arranging a room at a centre or careful route-planning are all potential opportunities.

For Mikaela to be able to undertake her Winter IML assessment required planning around breastfeeding an older infant. Unable to leave for a week, she brought her mother to Switzerland to care for her toddler during the day, with her partner working in the apartment for back-up if needed. Having additional support enabled her to focus on the mountain, with the option of hand-expressing milk to relieve pressure if needed, nursing on her return to the apartment in the evenings.

For courses, work or assessments that require you to be away from an infant who nurses on demand, you will need to express milk gradually to build up a supply, alongside expressing periodically each day. For an older infant (only nursing occasionally), you may simply need to hand express to relieve pressure as needed.

As an IML a large amount of work consists of multi-day tours, and in this circumstance, Mikaela found herself regularly having to turn down work throughout the season. This is partly due to breastfeeding but also because of repeated illnesses brought home from the nursery. However, only accepting tours of 1-2 nights away has also created time to develop her own business. Furthermore, reaching out on social media to other mothers has created a network of support, collective experience, and shared work.

Building a network

If you are freelance, it can feel like there is very little flexibility to account for the physical demands of pregnancy and motherhood. Creating a group of local instructors who are parents, could help to create that flexibility, focusing on a family friendly approach to sharing work and support. Employers can also have a positive impact, reflecting on how their current approach impacts instructors with families, and reaching out to instructors for feedback in this area. ■

1 <https://www.nhs.uk/pregnancy/keeping-well/exercise/>

2 Alison Hargreaves climbed the North Face of the Eiger 6 months pregnant and Hilaree Nelson completed an expedition in Alaska 6 months pregnant.

3 Women Guides in Chamonix are known to have guided 4000m summits pregnant. The Gynaecologists and Physiotherapists here are experienced working with outdoor professionals to support their pregnancy.

4 Training programme devised by Neil McMcClean-Martin, La Clinique Du Sport, Chamonix.

5 For conditions such as Post Natal Depression and Anxiety seek out professional support with a referral from your Midwife or GP.

6 <https://www.cdc.gov/breastfeeding/breastfeeding-special-circumstances/diet-and-micronutrients>



Therapeutic benefits of **CLIMBING** *for refugees in Iraq*

WORDS BY MATTHEW LOW

After several years of working overseas, running an outdoor activity company in Morocco and later in France, in 2017, my wife and I were in that strange place of being ‘empty nesters’. The kids had gone, and we were free to make completely different life choices. We both felt we would like to do something with refugees, and to cut a long story very short, the same year we moved to the Kurdish Region of Iraq (KRI).

We worked with an International Non-Government Organisation (INGO) called STEP, which provides child protection services for displaced young people in the region. My wife had recently retrained as an Art Therapist in France, so had relevant skills in working with, often traumatised, young people. However, it was less clear what could be done with a Mountaineering and Climbing Instructor. Initially, they put me to work by teaching staff some of the many Development Training exercises I had used during my career. However, one day the manager of one of the child-focused centres asked me if I could teach some knots to young people. After a couple of days trying to track down somewhere that sold anything vaguely

resembling a kernmantle rope, we ended up buying some dreadful elastic rope from the Bazar. So began a remarkable journey into discovering the therapeutic benefits of outdoor activities for refugees and internally displaced young people (IDPs) in this region.

Initially, it was total pandemonium. We had far too many young people trying to muscle their way into sessions, so it was often more crowd control than constructive teaching. We had a constant flow of young people, with sessions being constantly disturbed by kids banging on the door as even more were trying to get in. Overall, there was a generally manic atmosphere! Slowly, we simplified what we did and found better ways to manage our sessions, making them a lot more conducive to learning. At this point in the process, I had never even heard of adventure therapy, wilderness therapy, or any of the many terms describing the therapeutic benefits of outdoor activities, nor had we managed to do a single climbing day outside the centres. However, that was soon to change.

Kurdistan is a place of incredible beauty that, unfortunately, humanity has done its best to ruin! There are vast wilderness areas with mountains soaring to over 4000m and so many rock faces – almost all unclimbed. I drove a visiting climber friend along a 10km cliff face, and he was literally screaming in joy at the potential of new routing unfolding in front of him around every corner. Kurdistan is a stable part of Iraq but compared to many parts of the world, there are some unique challenges to navigate. Unfortunately, vast areas of the



MAIN PHOTO These days out are a rare moment of freedom for many © Shadyar Ali. 1. The mountains are a great place to help us loosen up © Shadyar Ali. 2. Girl power, over 50% of our participants are female © Matthew Low. 3. Working together is key to a successful day, and we make sure to introduce this concept right away © Hero Mohamed Salih. 4. Easy slab climbing in a dramatic environment – Kani Shok, Kurdistan © Shadyar Ali.

mountains are mined, especially on the Iranian border – so we have to keep clear of those. Then there are still conflict areas in some of the mountains where the PKK (Kurdistan Workers Party – officially a terrorist group fighting against Turkish forces) operate. So, drone strikes, the odd artillery barrage, and air strikes mean we have to keep clear of those areas too.

However, huge areas are safe enough to explore and develop into suitable areas to run activities. It sometimes feels a bit like the wild west, but the locals are always friendly and helpful – with often hilarious miming pantomimes as we try to communicate. Unfortunately, my Moroccan Arabic doesn't help much with Kurdish. Little by little, the adventure of hunting down cliff faces began to pay off as we discovered sites that we could develop into suitable beginner climbing locations. Then came the more challenging work of raising enough money to buy the equipment we needed.

As we continued to run training sessions at the centres and slowly introduced rock-climbing activities, we started to see the results of young people's involvement in the programme, with staff commenting that they were noticing a difference in some of those participating. Attention spans were getting longer, behaviours were improving, and some were taking responsibility for small things around the centre. Where we had seen hyper-vigilance and hyperactivity, with children running in and out of our teaching sessions, they became slowly calmer and more constructive. Yet, I still did not understand why this was the case, so it was time to do some research.

Most of the young people we work with have experienced horrific traumatic events as they fled ISIS. Post-Traumatic Stress Disorder (PTSD) is so common among refugees and IDPs, and my studies began to shed light on some of the behavioural issues we were seeing, showing how PTSD can shut down neural pathways as the brain tries to protect itself. Conversely, I learnt how engaging the mind in complex processes could help promote neural pathways, even making new ones¹ It seems that the brain is a dynamic organ that is shaped by experience², so getting these young people to learn knots and then later learn how to teach those knots to other young people has been like rebooting their brains; they have been learning how to learn again.

More research into the concept of adventure therapy, wilderness therapy and the general therapeutic benefit of the outdoors revealed a rich history of practice and theory – especially in the USA and increasingly western Europe. However, despite a lot of searching, I could find little material on using the outdoors therapeutically in a refugee context. In Lebanon, a Swiss-based charity has been running a climbing gym and mobile bouldering wall, and in Afghanistan, there has been enthusiastic participation by a small number of people in outdoor activities. However, probably the most impactful project has been run by Skateistan, which runs skateboarding schools initially in Afghanistan, and has since expanded to several other nations. A recent study in Germany is showing that bouldering with some therapeutic benefit is at least as beneficial as Cognitive Behavioural Therapy and significantly more effective

GUIDANCE

5. Much of the work is done before we even get to the rockface; classroom sessions build relationships and trust © Ahmed Akram. 6. Kurdistan is a new climbing location with huge potential for new climbs © Hedi Salah.



than simply following an exercise regime in helping alleviate depression³. While the projects in Lebanon and Afghanistan are very impressive, this German study points to the importance of having an intentionally therapeutic angle in a project, as it is likely to increase the benefit to young people.

As many of us know, there is often stigma attached to Mental Health provision and services. Unfortunately, people can be very insensitive in their use of language around this subject, sometimes making light of serious issues, mocking those in need or worse, causing those in genuine need to avoid seeking help for fear of what people may think about them. This is something that we have had to face in the refugee camp, where the stigma around mental health is far, far worse than in the western world. The situation is so serious in the camp that even people that were eventually driven to take their lives through suicide refused to seek any kind of professional help. With the very high percentage of traumatised people in most refugee camps, there is a huge need for services that can address mental health and well-being issues, yet without triggering a community-wide rejection of that very service. So, we seemed to be trapped in a less-than-ideal situation. Yes, we could run activities, but as soon as there is any whiff of Mental Health provision, we could lose any interest in participation. Fortunately, my wife had already found a way to run her Art Therapy sessions for young people in a way that flew way under the community's radar, so we had some encouragement that it was possible.

A relatively recently produced document by the Institute of Outdoor Learning titled 'Outdoor Mental Health Interventions & Outdoor Therapy'⁴ has proved very helpful in outlining a framework for us, and I would highly recommend anyone interested in the therapeutic nature of the outdoors to download and refer to this document. While it does not address the many unique cultural issues that we face in the Middle East, the principles it outlines are still very relevant to our situation. Part of the document looks at the levels of intentionality regarding an outdoor-orientated therapeutic programme. This helped us see that while we were seeing an impact on the lives of the young people enrolled in our programme, we were very much in Zone 1, where 'individual or group experiences are enriched by adding an outdoor or psychotherapeutic dimension to a session or service'. We were encouraged that we had at least made a start, and by adding more intentionality to our programme, we determined to move towards Zone 2, where 'complimentary outdoor activities and psycho-therapeutic practices are used to enhance the approach and benefits offered.' However, we recognised that we were a long way from Zone 3, which uses 'unique and dynamic integrated experiences draw(ing) on professional competence in both outdoor learning and psychological therapy.'

I have been very fortunate to be able to build this programme from scratch, to have trained so many Iraqi and Syrian staff to help run the activities, and mostly to have been able to

positively impact so many young people that have been forcibly displaced from their homelands. I watched as a cloud of brokenness and depression lifted from a young girl as she struggled to the top of a climb. I have seen a young man go from a place of disturbing agitation to focus and clarity. So many walking away with a sense of pride and achievement after successfully getting to the top of the climb, and the girl who, despite everything, managed to put a harness on, sit at the side of a climb and imagine herself climbing, there are too many stories to tell.

Displaced people are not the 'other', they are us, and we are them. A simple hello, a smile, a handshake, a shared coffee – normal gestures that the so-called barrier of language and culture seems to make us hesitate to cross. I have had the privilege of working with people from so many different cultures and seeing them in the midst of the same struggles, joys and challenges as my family. I have learnt that with some imagination and hard work, you can go beyond the boundaries of your perceived limits and discover a world of potential, waiting to be harnessed. The privilege of being able to share in some of these special people's joys and griefs, despair and hope has been an inspiration to my wife and I. Next time you go to the bouldering wall, invite that new person who's come from afar. Buy them a membership, but more importantly – take time to sit down and have a coffee with them at the café at the end of the session – talk with them and listen to who they are. ■



Matthew Low is a member of **AMI** and **MTA**. He has worked in the outdoors professionally since 1985. Matt spent 20 years building and running an outdoor adventure business in Morocco. Moving to France in 2010, he finally focused on getting his Mountaineering and Climbing Instructor and managed to get recognition as an outdoor instructor by the French state. He continued his international focus – running events and training people in France, Jordan, Egypt, Kazakhstan even the UK. Since 2017 he has been building an outdoor activity programme for refugees and IDPs in the Kurdish Region of Iraq.

- 1 Jeff Jernigan – PTSD and the Neurology of Learning, How Stress Robs Us of Understanding: <https://www.stress.org/ptsd-and-the-neurology-of-learning-how-stress-robs-us-of-understanding>
- 2 Bransford, Brown & Cocking – How People Learn: Brain, Mind, Experience, and School: Expanded Edition.
- 3 Dorscht, L., Karg, N., Book, S. *et al.* A German climbing study on depression: a bouldering psychotherapeutic group intervention in outpatients compared with state-of-the-art cognitive behavioural group therapy and physical activation – study protocol for a multicentre randomised controlled trial. *BMC Psychiatry* 19, 154 (2019). <https://doi.org/10.1186/s12888-019-2140-5>
- 4 <https://www.outdoor-learning.org/Good-Practice/Good-Practice/Outdoor-Mental-Health>.

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Tips for your WINTER MOUNTAIN LEADER QUALIFICATION

WORDS BY CHRIS MARDEN

Mountaineer and sailor H.W. Tilman used a brilliant expression – ‘the secret of roughing it, is smoothing it’. Even if you cruised through your Summer Mountain Leader qualification, there are many things that you can do to make your Winter Mountain Leader (WML) journey that little bit more comfortable. Here I will share some practices that worked for me, or that with hindsight and observation, I wished I had used.



ABOVE Preparing a snow bollard, Coire Cas © George MacHardy

First, it's important to understand what skills and attributes are required to qualify as a WML. Helpfully, these are set out in the WML Skills Checklist that enable you to benchmark your progress. In essence a WML should have all their personal skills completely dialled (efficient and effective) to give them capacity to lead the group. It's well worth self-assessing at regular intervals. Similarly, use Mountain Training's Winter skills handbook as a technical reference.

Personal organisation is important; there are enough pressures in the WML process without creating your own! At its very simplest, this means turning up at the right place, at the right time, ready to go. Allow suitable time to review and understand the weather and avalanche forecasts, including the written detail, not just the graphics. Make it easy to use your map and compass by preparing your 'office'. Don't have too many ready-to-tangle retainer cords attached to your jacket and do make them different colours. Keep your map area small, and ideally use an A5 map case or laminated map extract, rather than fighting with a full-size case.

Your kit doesn't need to be absolute top of the range, or brand new, but your clients (and therefore your assessors) expect you to appear professional, and decent kit will keep you warmer and drier and able to focus on the job. A good robust B2 boot is an ideal all-rounder for WML, providing enough support for Grade 1 ground, along with warmth and comfort. When the weather is full-on, goggles make all the difference, as does a big synthetic belay jacket. Size up on your rucksack, making it easier to pack, and avoiding the need to strap helmets and crampons to the outside. Pare down your kit, but don't skimp on gloves,

especially for the expedition. A shovel with an extendable handle makes for easier digging, and two decent headtorches are more resilient than a single torch with spare batteries. Adjust your crampons for a snug fit, and trim off excess strap tails – while leaving enough to handle with gloves. Get slick at putting on your crampons (less than 2-minute pitstop?) and keep your empty crampon bag somewhere handy.

Even if you are a climber, the WML ropework may be new to you, and in a strong wind, with big gloves it can be challenging. There's lots you can do to make life easier. First, keep your rope in an oversized stiff-necked drybag rather than uncoiling/coiling it and all the associated jeopardy. Other than when confidence roping, it is simplest to use a stoppered slipknot (Marshall knot) to tie in your client because unlike an overhand on a bight it's easy to put on over the head, it's easy to adjust, and easy to undo. You can pre-tie it on your rope ready for use but be comfortable doing it in the field too. For tying yourself on or confidence roping a client, a rethreaded overhand is better than an overhand on a bight because you don't have to step into it, and it is easy to adjust by rolling the first overhand along the rope before rethreading (try this at home). The knot tail will also be the correct length.

In training you will likely be shown how to scribe the shape of a bollard of different radii, to give you a template. It's also helpful to mark out the shape of a bucket seat with your personal dimensions before you start digging to reduce any trial and error – I am one axe wide; one axe back, plus a smooth off; and $\frac{3}{4}$ of an axe deep. That's for without a rucksack to reduce the amount of digging and to make it easier to flip the rope over my

back without snagging. Of course, make sure your sack is secure to avoid any embarrassment! Standardise how you do things – e.g., dig a rope bucket on your dead rope side *before* you set up your buried axe anchor. Above all practise, practise, practise the ropework – hopefully, you will make and learn from (safe!) mistakes *en route*, so that you are super slick at assessment.

If visibility is good in assessment, your assessors will find ways to make navigation more challenging by targeting more subtle features, setting higher standards of precision, and of course night navigation. Or you might just be lucky and have poor visibility. Be prepared for both! When you practise, seek out poor weather days, record a GPS track and review it at the end of the day. Do you drift? Did you misinterpret the ground? How accurate was pacing and timing? Did you hit the target bang on? Why? Keep the maths simple – know what 4kph, 3kph and 2kph feel like, and in what conditions you tend to walk at these speeds. Recalibrate your speed and pacing for different conditions and learn to do this on the fly as you move across different snow types, slope angles and windspeeds. Get in tune with slopes, feel in your legs the subtle unseen changes from up to flat to down. Test your processes to build confidence and stick to them.

A WML needs to be able to give novice walkers some basic tuition on snowcraft techniques and winter walking, and your ability to do this is assessed. Your own axe and crampon technique obviously need to be up to standard and you should feel entirely comfortable moving on steep ground. This may be a challenge for candidates with less extensive winter logbooks, so you need to take the time to practise whenever the opportunity arises. For coaching it is best to develop a simple model that emphasises a few key points. For example, for crampons emphasise the hazards and how to deal with them; ankle flex; and in balance progression through flat footing, to hybrid to front pointing as the slope steepens. For self-arrest, don't be afraid to demonstrate and practise techniques on the flat before using the runway. Lead coaching sessions before assessment and ask for feedback. Keep the talk bite-sized and focussed, instruct how and why, and put your group's backs to the wind.

A quick word on Logbooks! If you plan to apply for the WML scheme, then get your logbook populated. While there are defined requisites (at least 20 Quality Mountain Days (QMD) for training and at least 40 QMD for assessment, a longer apprenticeship is invaluable – mainly because you will have made plenty of mistakes and learned from them (lost, hot, cold, late, over equipped, under equipped, over optimistic, lost again....). Many people (myself included) fail to appreciate that unlike the Summer ML, the Digital Logbook (DLog) needs to be vetted before you can fully register on the WML scheme. Make allowance for this when booking training and give at least 10 days for your DLog to be checked, more if there may be some issue with the required minimum 20 QMDs. There is also good guidance on what constitutes a QMD, and where to log climbing, overseas, ski touring and other non-QMD but relevant experience. Do as instructed and make life easy for the good folk at Mountain Training Scotland.

If you are lucky enough to snowhole, then invest that extra 20% of time in construction – it will be 200% easier to live in if there is a space to stand in to dress, and to organise your kit. Moreover, you will emerge as fresh and organised as you can be to face the new day's challenges.

Finally, if you can team up with another candidate for regular practice sessions, this is invaluable, providing motivation,

feedback, advice, ballast for ropework and someone to share the often Type 2 fun. ■



Chris Marden is a member of **MTA** and has been an active allround mountaineer since the 1980's, but is relatively new to formal qualifications, having gained his ML in May 2021, and Winter ML in March 2022. After 27 years in the energy industry, he established a fledgling outdoor enterprise, **mountainology.pro**, and enjoys the new perspective of leading groups, and in particular building the skills and confidence to enable clients to become more self-reliant in the hills.

- 1 There may be situations where it is more appropriate to keep your rucksack on, and dig a bigger seat.

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Kathy Grindrod, SAIS Forecaster
Coire an T-Sneachda
Cairngorms



FIGURE 1

Whether you are out walking in the Brecon Beacons or traversing the Cairngorm plateau this winter, it is important to have an awareness of how to keep warm and reduce the risk of hypothermia. This short article will cover some common pitfalls and explore how to manage a cold casualty out in the field.

MANAGING *hypothermia* OUT ON THE HILL

WORDS BY DANIEL GRACE

Over 13% of Mountain Rescue callouts occur due to cold and exhausted hill walkers. To explore why this is, we first need to understand how humans lose heat. As shown in *figure 1*, there are four main mechanisms by which this occurs: Radiation, Conduction, Convection and Evaporation.

The way in which we dress for cold conditions is designed to minimise the impact of these four mechanisms. For example, a suitable wicking base-layer will reduce the amount of heat lost through evaporation when individuals sweat. Mid-layers and insulating jackets aim to reduce convective heat loss by trapping warm air between multiple layers. Staying as dry as possible for as long as possible is vital, and a good pair of Gore-Tex trousers and a jacket are essential. Hard-shell layers also reduce the impact of wind chill, whilst gloves, hats, thick socks, and walking boots focus on minimising conductive heat loss. The potential impact of wind chill cannot be understated. As wind speed increases, the apparent temperature drops significantly, as shown in *figure 2*. It is also vital to remember that there is a temperature drop of approximately 1°C per 100 metres of elevation and appreciate that whilst it may be a relatively warm day in the valleys, it may be very different on the summits.

Proper planning, and understanding these principles, is fundamental to enjoying a safe day out on the hill, however despite our best efforts, individuals can get cold, whether this is due to injury, poor equipment, or underlying health

conditions. The human body is designed to operate at a fixed temperature range of 36.5 to 37.5°C. Once our core body temperature drops outside of this range, we will start to exhibit symptoms of hypothermia. Individuals frequently start to behave differently from usual, they may become quiet and withdrawn, have problems walking, become confused or have difficulty completing simple tasks such as zipping up their jacket. An easy way to remember these common symptoms to think of the “Umbles” as shown in *figure 3* (grumbles, mumbles, fumbles, and stumbles).

Several different methods exist to classify, or stage, hypothermia. However, a pragmatic way to approach a cold casualty is to use the Canadian Cold Card, which was developed by Professor Gordon Giesbrecht and is shown in *figure 4*. This handy aide-memoire can be used by both lay and medical professionals, and therefore certain details, such as giving intravenous fluids, are beyond the scope of practice for an outdoor instructor. Nevertheless, it provides a really useful overview of the key symptoms and subsequent management strategies, for a cold casualty in an austere setting.

Depending on an individual's condition, it may be necessary to call Mountain Rescue, however there are some simple measures that you can try in the interim whilst waiting for help to arrive. Providing an individual is conscious and able to swallow, giving them a hot drink and something to eat can help provide the calories and energy required for them to generate

		AIR TEMPERATURE (CELSIUS)																
		0	-1	-2	-3	-4	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60
WIND SPEED (KM/HR)	6	-2	-3	-4	-5	-7	-8	-14	-19	-25	-31	-37	-42	-48	-54	-60	-65	-71
	8	-3	-4	-5	-6	-7	-9	-14	-20	-26	-32	-38	-44	-50	-56	-61	-67	-73
	10	-3	-5	-6	-7	-8	-9	-15	-21	-27	-33	-39	-45	-51	-57	-63	-69	-75
	15	-4	-6	-7	-8	-9	-11	-17	-23	-29	-35	-41	-48	-54	-60	-66	-72	-78
	20	-5	-7	-8	-9	-10	-12	-18	-24	-30	-37	-43	-49	-56	-62	-68	-75	-81
	25	-6	-7	-8	-10	-11	-12	-19	-25	-32	-38	-44	-51	-57	-64	-70	-77	-83
	30	-6	-8	-9	-10	-12	-13	-20	-26	-33	-39	-46	-52	-59	-65	-72	-78	-85
	35	-7	-8	-10	-11	-12	-14	-20	-27	-33	-40	-47	-53	-60	-66	-73	-80	-86
	40	-7	-9	-10	-11	-13	-14	-21	-27	-34	-41	-48	-54	-61	-68	-74	-81	-88
	45	-8	-9	-10	-12	-13	-15	-21	-28	-35	-42	-48	-55	-62	-69	-75	-82	-89
	50	-8	-10	-11	-12	-14	-15	-22	-29	-35	-42	-49	-56	-63	-69	-76	-83	-90
	55	-8	-10	-11	-13	-14	-15	-22	-29	-36	-43	-50	-57	-63	-70	-77	-84	-91
	60	-9	-10	-12	-13	-14	-16	-23	-30	-36	-43	-50	-57	-64	-71	-78	-85	-92
	65	-9	-10	-12	-13	-15	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
	70	-9	-11	-12	-14	-15	-16	-23	-30	-37	-44	-51	-58	-65	-72	-80	-87	-94
	75	-10	-11	-12	-14	-15	-17	-24	-31	-38	-45	-52	-59	-66	-73	-80	-87	-94
80	-10	-11	-13	-14	-15	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95	
85	-10	-11	-13	-14	-16	-17	-24	-31	-39	-46	-53	-60	-67	-74	-81	-89	-96	
90	-10	-12	-13	-15	-16	-17	-25	-32	-39	-46	-53	-61	-68	-75	-82	-89	-96	
95	-10	-12	-13	-15	-16	-18	-25	-32	-39	-47	-54	-61	-68	-75	-83	-90	-97	
100	-11	-12	-14	-15	-16	-18	-25	-32	-40	-47	-54	-61	-69	-76	-83	-90	-98	
105	-11	-12	-14	-15	-17	-18	-25	-33	-40	-47	-55	-62	-69	-76	-84	-91	-98	
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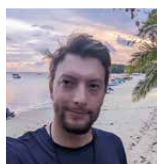
FIGURE 2

some endogenous heat. Putting up an emergency shelter and using a roll-mat to reduce heat loss into the ground, is an essential yet straightforward intervention. Removing wet clothing and replacing these with dry items is also valuable, if these are available. Placing warmed fluids in a Nalgene, or similar watertight container, and applying these to the armpits, groins and near the neck can help warm the circulating blood volume, as these areas are where large arterial vessels pass closest to the skin.

The detailed medical assessment of a patient with hypothermia is beyond the scope of this article, however when a patient stops shivering or is no longer alert, this is a medical emergency. In such scenarios, the casualty should be handled gently and be kept still due to the risk of irregular heart rhythms developing, which can lead to subsequent cardiac arrest. Early identification of mild to moderate hypothermia can prevent these complications, and, as mentioned on the Cold Card, creating a vapour barrier or "burrito," as shown in figure 5, is a simple, yet potentially life-saving intervention, that can be accomplished with the kit you are carrying.

As with all potential medical emergencies, prevention is better than cure. Checking the weather forecast, performing an appropriate risk assessment, and ensuring you and your group have good quality gear is vital. Hypothermia occurs frequently in the UK, particularly in wet conditions, and prompt identification and management can mean the difference between a safe trip and a Mountain Rescue call-out.

This article has provided a very brief overview of hypothermia for the outdoor professional, however if you are interested in finding out more, visit "Baby its cold outside" <https://www.bicosurvive.com/> which includes relevant case studies, resources and more. ■



Daniel Grace is a member of MTA. He is based in the Brecon Beacons where he works as a portfolio GP. Daniel has worked on multiple endurance events and treks, ranging from the tea plantations of Kenya to the deserts of Jordan to the wilderness of the Canadian Yukon. He has recently returned from Fiji where he has been working to support a major US TV show.



FIGURE 3

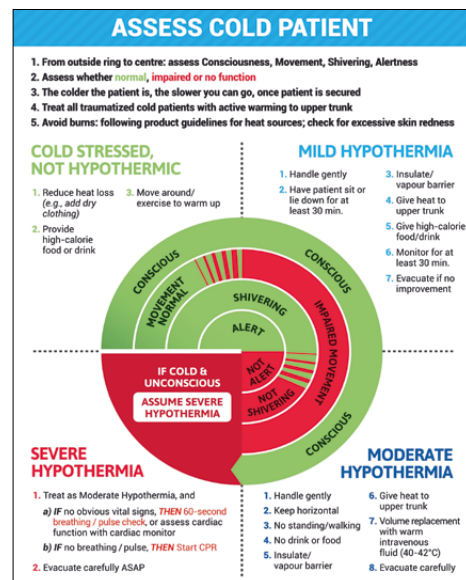


FIGURE 4

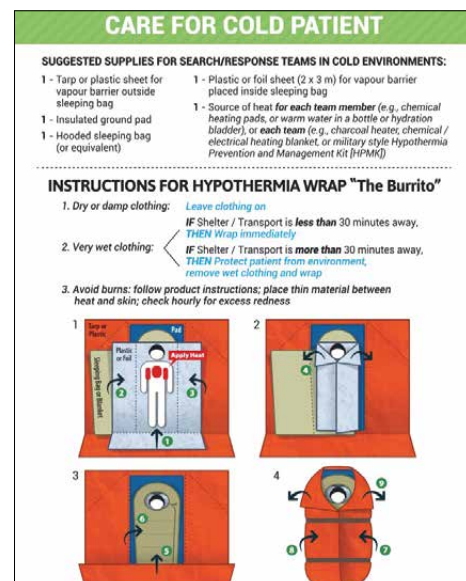


FIGURE 5

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By the time you start preparing for your Winter Mountaineering and Climbing Instructor (WMCI) assessment, you will have already built up a great deal of experience of assessments and know some of the strategies and tools that work for you. I passed my assessment in January 2022, 3 years after the training course. These are some of the things that prepared me for the assessment and made me feel confident to start working as a WMCI.



PREPARING FOR YOUR WINTER Mountaineering and Climbing Instructor assessment

WORDS AND PHOTO BY ALEX REID

Winter Prep

1 Find yourself a mentor

The Association of Mountaineering Instructors (AMI) have done an incredible job of creating and supporting a mentoring scheme. These mentors are very experienced WMCI's who will be there to support you through the process. This can be in a variety of ways from either a phone call at the end of the day where you chat through what you did and any issues encountered, through to observing you on the hill with clients. They can also offer work, which is incredibly useful, but their role is certainly not just to facilitate you working on the hill.

2 Team WMCI trainee

Get together a team of other WMCI trainees. This allows you to share ideas, discuss and practice on the hill. We met up on Zoom every couple of weeks in the months leading up to the winter and set the task of planning a day with clients using different weather and avalanche forecasts. This allowed us to share our knowledge of different routes for different conditions on the east and west coast. Practicing as a group and taking it in turns to be the leader can give great feedback from both ends of the rope. Forming a WhatsApp group is one easy way to keep in touch.

2 Efficient rope changeovers

From series to parallel to short roping is great to practice on the wet days in the valley (or even going up the stairs at home) but remember that practice conducted in context is always best. Being efficient here can save you lots of time, which you can use to focus on looking after and teaching your clients.

4 Plan your diary

When working towards the assessment it can be easy to book yourself up with winter skills work, which isn't as useful as going climbing and mountaineering. Secondly quite a proportion of the WMCI trainee work offered out is guided or intro winter climbing. It's therefore important to have days with 'mock clients' where you can practice what you

need to practice such as short roping, climbing in series or teaching leading. Work your weaknesses!

The Winter

5 Go winter climbing

This may sound stupid, but you need to spend the winters before the assessment living and breathing winter climbing. Read the avalanche forecast every day, and from your observations try to predict what the avalanche forecast will be and how the snow/weather will affect your day. Being able to cruise up grade IV (or above) will make everything easier and mean you can focus on the teaching and guiding.

6 Session plans – Figure 1

Especially at the start of the season. I used a session plan to get me dialled into the clients; their needs, weather and avalanche conditions. This gave me a framework to follow and guided my thought process to make the most out of the day, both for the clients and myself.

At the bottom of this I kept a section to reflect on the day, what went well and what I needed to change. For example, cutting a bigger belay ledge or remembering to get the client to eat a snack at the belay ledge. I could then act on these points, putting the change into practice on my next day out.

7 Time

As I practised, I soon learnt that with clients, time can simply disappear. As you gain experience you quickly find out what and how much you can teach to clients. It can feel more 'command' based than summer. There isn't the time on a winter climbing day to go into lots of depth with teaching navigation or avalanche knowledge on the way in; more signposting and demonstrating the 'mountaineering' skills that the client needs to learn. On the walk out, if you are ahead of time, these are of course excellent things to teach. For example, when teaching novice winter gear placements, 'clear that crack, then give an option of a cam or a nut', rather than the open question 'what do you think'.

MAIN PHOTO Clients on one rope for topping out on a windy day in Sneachda.

8 The rule of 3

Practice everything with 3 people for as much as possible: It's harder work, but it's how you will be assessed. Even if it's with another trainee to make up the numbers. Real clients are better as they do weird stuff and need to be told what to do. Climbing friends are ok but are often too helpful!

9 AMI workshops

These are delivered by super experienced WMCI's and offer really good value they can give some feedback on your performance and focus you on areas that you need to practice.

10 Avalanche Education

As a WMCI knowing about the snowpack and why/ how a forecast is written is important, to both keep you safe and to educate your clients. I attended the online Chris Walker trust evenings run by the SAIS. These were interactive and really helped me to understand how an avalanche forecast is written and how changes in the weather will affect the forecast. On top of this I also completed my American Avalanche Association L1 and L2 courses, these again give a different view on avalanche education.

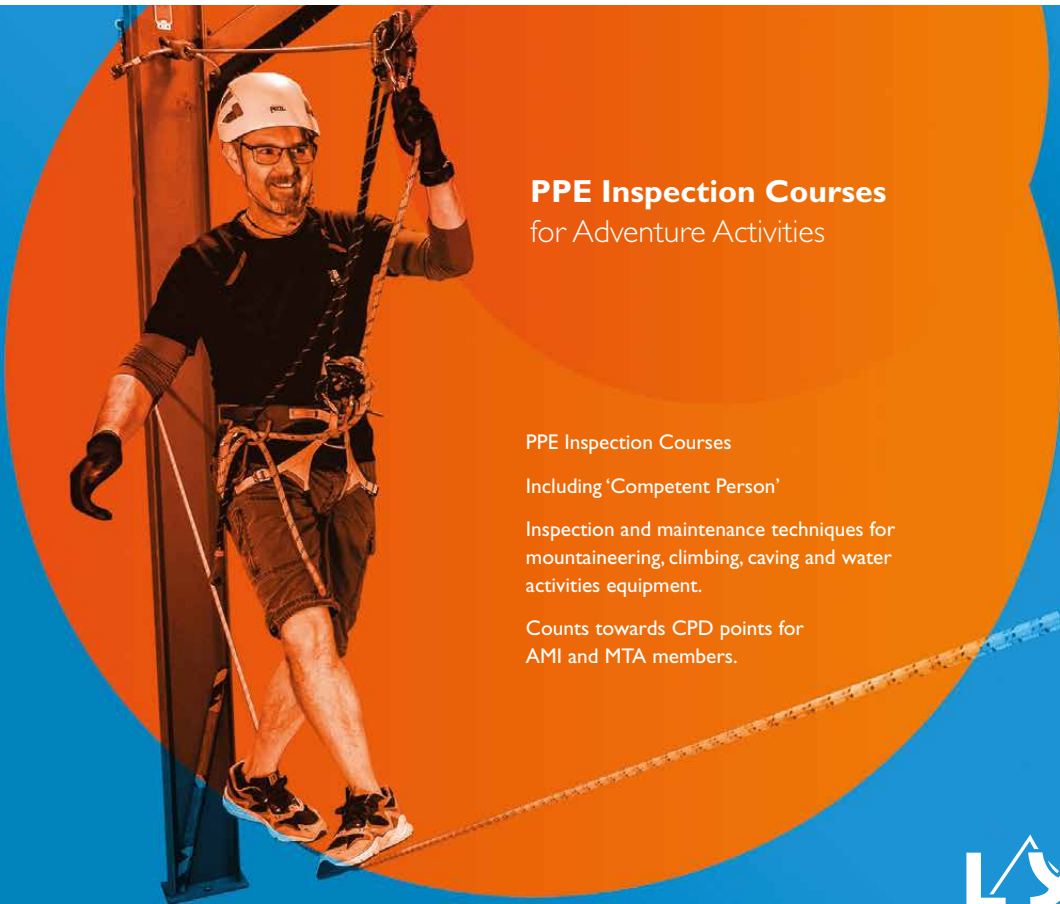
Best of luck to anyone preparing for their assessment this winter. It's hard work but well worth it at the end. ■



Alex Reid is a member of **AMI**. He is a Highland-based Winter Mountaineering and Climbing Instructor, Ski Mountain Leader and Anaesthetics trainee. Alex is a freelancer delivering mountaineering, climbing, ski touring and wilderness medicine courses.

FIGURE 1


Winter Mountaineering and Climbing Instructor			
Session plan			
Date	21/03/21	Location	Cairngorms
Weather	Avalanche Forecast		
Wind speed	15-20	Avalanche forecast	Low
Direction	West	What is the avalanche problem?	Cornice collapse/ glide cracks
Freezing level	600 rising 900	Where is the problem?	Sunny aspects
Visibility	Good	Snow?	Nil
Precipitation	Nil		
Client/s	Plan		
What have they done before?	Aims		
Client 1	AAA + BAA, Test belay building, seconding skills, multipitch Leading (if appropriate), Coaching movement		
Summer rock leading	Possible Routes- grade II gully, good belays		
Winter walking Skier	Red Gully, Goat Track Gully, Spiral Gully, Jacobs Left , Trump towers		
One winter ice route	Key places		
Client 2	Car park, Into Sneachta, Bottom of routes		
Grade 1's, wavelength	Teaching Ideas		
Led runnel	Walking in crampons, Walking deep snow, Snow anchors, Winter belaying		
What would they like to do?	Walk in discussion		
Grade III climbing	BAA/ winter planning, Observations, Timing (how long will it take)		
Leading	My Aims		
When did they last climb?	Good belays, Good demos, Paint a consistent picture- multipitch		
Client 1 – recent winter			
Client 2 – recent rock, some winter this season			
Evaluation			
Route			
What went well?			
Even better if?			
Feedback from clients/mentor:			
Points to focus on next time:			



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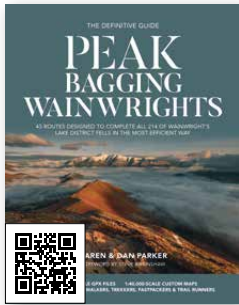
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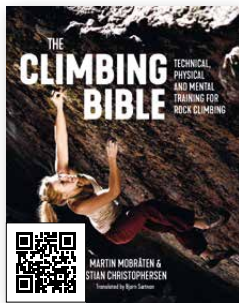
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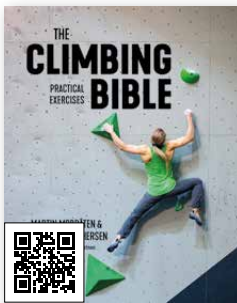
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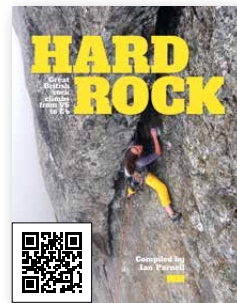
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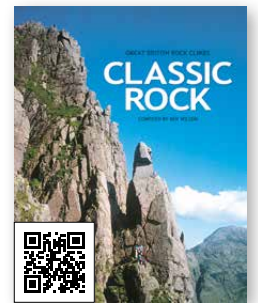
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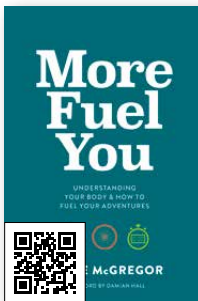
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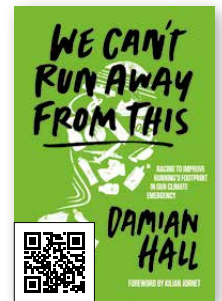
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BOOK REVIEW



MONT BLANC LINES

by Alex Buisse

Reviewed by Calum Muskett

The alpine coffee table genre of books is a busy one, so it takes something visually stunning and unique to stand out from the crowd. Alex Buisse's *Mont Blanc Lines* is both. Conceptually the idea is intriguing, combining Buisse's photographic talents with incredibly well researched and detailed topographical

(topo) images of the most famous and storied faces of the alps.

Alongside these topo's, are historical accounts of some of the early ascents, as well as contemporary accounts from top alpinists and guides of their experiences on the different mountains, all illustrated with stunning action and landscape images.

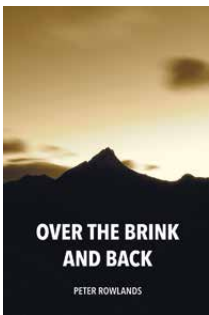
Originally published in French at the beginning of the year, this revised English edition has been translated by Natalie Berry and published by Vertebrate. Having previously had a read of the original French version, I can see that there have been several updated images in this new English language edition, whilst some topo lines have been corrected and a few extra routes included. The reproduction of images and overall quality of the printed book is, I think, the best Vertebrate have achieved thus far. Berry has maintained a faithful translation of the original, whilst also making the writing easily digestible.

The book primarily concentrates on the Mont Blanc Massif, with only the north faces of the Eiger and Matterhorn included outside of this area. The topographical images themselves

are photo stiches of many high-quality images, making them extremely high resolution to a point where these will be very practical topo's for alpinists. Buisse has decided to be as near comprehensive as practicable with his inclusion of marked routes, rather than sticking solely to the few frequented classics, and I think this really adds value to the book from the perspective of recording alpine history and also for the enthusiastic mountaineer looking to venture away from the popular classics. Whilst I've been praising the high-quality resolution of images, I fear I haven't given the chosen images the justice they deserve in terms of them being stunning landscape images in their own right. Alex has gone out of his way to find striking light conditions to take these pictures in, and I know that he has suffered some very cold nights as well as expensive helicopter rides to capture the very best angles to secure the shots.

Whilst this book isn't illustrated with as many "action" shots as some of the other well received alpine books of recent years (such as *Alpenglow* by Ben Tibbetts and *Alpine Exposures* by Jon Griffith), its smattering of well-chosen action and landscape images accompany the text appropriately. I can also vouch for Alex "suffering for his art" when he took the images in the final chapter on the Eiger, when he accompanied Dave Macleod and I for some mild peril on the Rote Flüh!

Whilst sitting somewhere in the ill-defined ground between a guidebook and a coffee table book, I believe that *Mont Blanc Lines* will long be regarded as one of the best books in the alpine genre for many years to come. It will be interesting to see if Buisse has more books in store for us with his current exploration of North America – I for one hope he does! ■



OVER THE BRINK AND BACK

by Peter Rowlands

Reviewed by Huw Jordan Tatlock

This is a story of two halves, divided neatly in two by the crack of an avalanche. Rowlands wastes no time in letting us know this, as he recounts (through the memories of his friends and colleagues) the momentous accident in the opening pages of his memoir without a trace of

bitterness, nor pride for having shouted a warning that saved the lives of his companions. This is the kind of man Rowlands is, and this book proves itself not just to be a moving story of love, loss, and recovery, but also a character study of a larger-than-life figure super-charged with more lust for life than any ten other people, and all told through his own words.

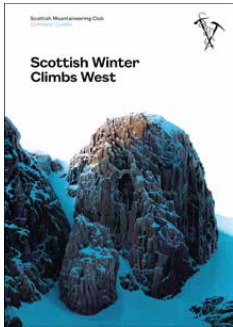
The first half of the book follows a typical format, recounting Rowlands' distinctly atypical life. If you fear you've heard mountaineers tell similar stories before, then rest assured that Rowlands' adventures will still leave you amazed. From his introduction to climbing as a child that sparked a life-long love of the outdoors, to escapades at Ambleside University, and through to his career as an educator and Mountain Guide, each of Rowlands' stories are told with glee and an immensely clear voice. It often feels more like you are sat in the pub or an alpine refuge listening to him tell these tales out loud, rather than reading them off a page. Rowlands is wonderfully honest and regularly funny (even if he does laugh at his own jokes). He is aware and proud of

the truly epic nature of some of his trips – throwing himself down "death weirs" with student kayakers, being first on the scene to a climber with a broken back and nearly severed spinal cord, and a truly legendary crack climb in Moab, to name just a few. He is also happy to admit times he has made mistakes, lied, or finagled his way to success. It is clear to see why Rowlands is so respected and has made so many friends along the way. Whilst endearing, this is also a sombre reminder that Rowlands' accident happened at the zenith of his professional life, and numerous readers of this book will have met or know "Big" Pete Rowlands personally. For some people, Rowlands' is a story still being told.

The second half of the memoir Rowlands recounts his long and arduous recovery from an accident that left him comatose and paralysed for a long, long time. Once again, Rowlands is brutally honest. He describes frankly the fear, the uncertainty, the sadness and the longing. But these emotions dwarf in comparison to his tremendous willpower and determination. You will marvel at his progress from a diagnosis of "he may be able to communicate by blinking" to cycling a distance equivalent to 2 circumnavigations of the globe. And this is not a miracle. This is due to Rowlands' absolute refusal to give up, to see himself as unlucky, or as a victim or a patient, as well as the help of family, friends and medical professionals. Rowlands' life post-accident is just as riveting and even more inspirational than his adventures.

In his last few pages, Rowlands' expresses remorse that since the accident he has yet to walk more than 12km. Sure, compared to his past, it isn't very far. But to all those who read this story, filled with passion and grief and humour, those 12km will seem the most amazing of all. ■

BOOK REVIEW



SCOTTISH WINTER CLIMBS WEST by Neil Adams and a host of contributors

Reviewed by Andy Moles

If you're not new to climbing in Scotland, the first thing you will notice about this guidebook is that it looks different. The cover, a detail of a painting by Christopher Smith-Duque depicting the morning sun catching the upper reaches

of a frosty Church Door Buttress, announces intent in more ways than one.

First and most obviously, it is a departure from more than twenty years of the Scotting Mountaineering Club's (SMC) white background image format, a style that was due an upgrade. On flicking through, the benefits of its broadened dimensions are obvious: there is more space for upright photo topographies (topos) and a more digestible two columns of text. That flick also reveals a refreshing change in font and a good deal more colour, adopting the now standard practice of coding routes by grade. But the differences between this and the old range of guidebooks go deeper than first appearances.

In the writing there is a subtle departure from the SMC's dry house style: author Neil Adams' character and passion for winter climbing has space to come across. His stated aim, to encourage people away from the honeypots by exposing the breadth of winter climbing in the west of Scotland, is well served by a section addressing the skills of interpreting conditions, a 'Chasing the Ephemeral' in miniature. It is also served by useful added features such as a selected crag table with grade spread, elevation, aspect, approach time and a summary of each crag's character. It is perhaps served best of all, however, by the fresh content of crags and routes.

This is the first to be published of three winter climbing guidebooks that will cover the whole of Scotland. The selection in this volume draws its northern boundary at Glen Shiel, leaving Skye and the rest of the west coast to the North book (while the East will cover essentially the Cairngorms and Creag Meagaidh). The range and diversity of this book is perhaps the greatest – from the mainstays of Ben Nevis and Glencoe and

the accessible crags around Bridge of Orchy and Arrochar to the wilds of Knoydart, and less known winter arenas such as the hills of Galloway and the islands of Arran, Mull and Rùm. While the classic venues are mostly supplemented by newer routes in the higher grades, the array of quality compiled here at less travelled crags provides a glut of intrigue and inspiration.

Compared to the previous range of SMC area-comprehensive guides, which included both summer and winter routes, and the slim winter select volume, this seems like a well-judged middle-ground. It is not fully comprehensive, and that is a good thing – there are some bad Scottish winter routes! – but it does include everything that all but the keenest local or wayward new-router will want. The exception to this is Ben Nevis, which in respect of its status as Our Best Mountain will be getting a new dedicated comprehensive guide. Still included here are all the popular classics, with some of the best modern mixed additions. I'm personally undecided whether the Ben (Ben Nevis) really needs its own volume, and that it wouldn't have been better to include a few extra pages' worth here, but I can also see the logic in publishing both.

There are other nice details to this book. The natural history section is made interesting and relevant with reference to the crags. There are translations and pronunciations – no excuses for butchering Gaelic crag names, no matter which side of the border you're from!

Clearly, given the season, I have not yet had the opportunity to test the book in action, but the main potential negative I can foresee is its bulk. Unlike the old SMC or Cicerone guides, which at a push could fit in a pocket, this will not, and neither is its cover so robust. Then again, aren't photos of descriptions and topos standard practice now, and the light option? On balance, the improved browsing experience probably outweighs the downside of the book's size. The topo coverage in particular appears to be outstanding and, even if a few are slightly distant getting them all in good light can be hailed as quite an achievement.

Do you need this guidebook, when you've still got all those classics to do? If you only make it out in winter once or twice a season, maybe you don't. But if you are 'into' Scottish winter, not just the swinging of tools but the unique history and culture and art of it, the answer is a definite yes. ■

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