

The Professional **Mountaineer**

ISSUE 45 >> SPRING 2024 >> £4.75

Association of
Mountaineering
Instructors

British Association
of Mountain Guides

British Association
of International
Mountain Leaders

Mountain Training
Association

TREKKING **the Giants' Trail**

GREEN **SOCIAL** **Prescribing**

AFFINITY GROUPS **and Inclusivity**

PEAK BAGGING





SWIFT RL

The new SWIFT RL is the ultimate multi sport headlamp. With 1100 lumens at only 100g and easy USB-C recharging the SWIFT RL also offers updated REACTIVE LIGHTING® technology, analysing the ambient light and automatically adjusting brightness whatever your activity. petzl.com

 **Reactive**
LIGHTING



Access
the
inaccessible®

The Professional Mountaineer

ASSOCIATION CONTACTS

AMI Scott Kirkhope
development@ami.org.uk

BAIML Peter Chapman
info@baiml.org

MTA Belinda Buckingham
belinda@mountain-training.org

BMG Calum Muskett
secretary@bmg.org.uk

EDITORIAL

Editor Belinda Buckingham
belinda@mountain-training.org

Technical editor Polly Harmer
association@mountain-training.org

Sub editor Mike Riley
mike@mountain-training.org

Layout Jane Beagley, Vertebrate Publishing
www.adventurebooks.com

ADVERTISING

Advertising sales Caroline Davenport
T 07726 933 337
E caroline@media-solution.co.uk

Advertising artwork **must** be supplied ready prepared as high resolution [300dpi], font embedded pdf/jpeg. Please refer to our T&Cs for details and cancellation terms.

Print and distribution Printworks
www.printworkspint.co.uk

NEXT ISSUE

Summer 2024 Expedition leadership, Lowland series: Limestone grassland, Applying intrinsic motivations and extrinsic goals in climbing.

Copy deadline: Friday 19th April 2024.

The Professional Mountaineer is registered with the British Library.

ISSN 2052-3351

Our front cover

Mary Wilson seconding Commando Ridge at Bosigran. © Stuart Burns

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



ABOVE Polly and Anna Wells climbing on the Grand Jorasse Traverse. © Ben Tibbets

Hello, and thanks for having me! I'm here as guest technical editor to support our long-standing editor Steve Long during a busy time for him and a quiet time for myself. We work in a wonderful yet quite vulnerable industry. Many of our jobs as instructors and guides entail an element of risk and often fragile employment arrangements.

Lots of us work in seasonal jobs and freelance positions, often without income insurance and in roles which demand a high level of physical and mental health. I have always felt that many of us have been drawn into this line of work because we enjoy less bureaucratic environments and the autonomy afforded working in the 'freedom of the hills'. Yet we all need support and stability in our work to ensure it is sustainable.

We have experienced a wide range of conditions across Scotland and the Alps this winter; with lots of early snow and huge fluctuations in temperature. If we cast an eye east to mountain professionals working in India's premier ski resort (Gulmarg) we see a reminder of our industry's climatic fragility, and the threat of things to come. Normally a thriving ski resort, the mountains of Gulmarg have had only one day of snow so far this entire winter season.

Safety, self-awareness and adaptability are key to surviving and thriving in our profession into the future. Our associations, and the creative individuals who drive them, continue to bring us together in more professional and resilient ways of working. The contributors in this issue consider approaches we could take to be stronger and more stable as a profession; by offering more to society through green social prescribing schemes, and 'affinity groups', along with tips for improving the fundamental skills in our work. I was knocked out of my physical work in August by a snapping hold and a badly broken ankle. From staying loosely involved in work, and observing from the sidelines, I see a strong, supportive and open community amongst professional mountaineers today, and this issue reflects that.

Polly Harmer
Technical editor

OUR COVER



Stuart Burns

Stuart is a member of **AMI** and **MTA** and is a multi-activity instructor working as Senior Instructor at Gower Activity Centres. He is one of the organisers of the BMC Gower Climbing Festival and BMC Access Rep for Gower.

OUR SPRING ISSUE CONTRIBUTORS INCLUDE



Tom Carrick

Tom is a member of **AMI**, **BAIML** and **MTA**. He is the Access and Conservation officer for the BMC and lives in North Wales. Tom is looking at how we educate more people to help protect our wildlife while we enjoy the outdoors.



Esther Foster

Esther is a member of **AMI** and **MTA**, and a Mountaineering and Climbing Instructor and Development Coach based in the Lake District. She focuses most of her work on coaching and developing climbers of all levels and disciplines.



David Monteith (Monty)

David is a member of **AMI**, a retired MIC and teacher who served as secretary of **AMI** and as a Director of Mountaineering Scotland. He is now a Trustee of the Mountain Heritage Trust.



Christopher Sweetman

Christopher is a Mountain Leader and member of **MTA**, he is a qualified teacher and has an MSc in Recreation Management and has taught navigation and expedition skills for over 25 years.

IN THIS ISSUE



8



11



14



17



19

DESTINATIONS

- 8** Trekking the Giants' Trail
Andy Hodges

- 24** The Mountain Heritage Trust: an introduction
David Monteith (Monty)

TECHNICAL SKILLS

- 11** The altitude accuracy of OS Locate
John Syme

BUSINESS SENSE

- 26** Green social prescribing: a business opportunity
Richard Chapman

OUR PLANET

- 14** A lowland series: Woodlands
Jim Langley
- 17** Wild camping
Tom Carrick

GUIDANCE

- 29** Affinity groups and inclusivity
Esther Foster
- 32** 10 Tips for climbing a Yosemite big wall
Alex Riley
- 36** Peak bagging in Eryri
Charles Smith
- 38** Navigating the Ds
Christopher Sweetman

WELLBEING

- 19** Ankle injuries amongst hill walkers
Daniel Grace
- 22** Climbing makes us feel good!
Stuart Burns

BOOK REVIEWS

- 40** *Mountain Walks Kinder Scout*
by Sarah Lister



22



24



26



29



32



36

NAVIGATING the Ds

38

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]

We had a very successful AGM weekend at Glenmore Lodge in early January with over 100 Members on workshops in good conditions.

After AGM voting, we welcome the following new Committee Members:

Andy Barker – Chair Elect; Karl Smith – Treasurer; Connor Holdsworth – Events Representative; Keith Ball – Chair of Professional Standards. A huge thanks to the outgoing Committee Members who have given years of service to AMI: Tarquin Shipley, Peter Stollery and Steve Howe.

The 2024-2025 Delivery Plan is now written and is on the Members' web site. Driven mainly by the Tri-Annual survey results, this documents the focus for the Committee's work over the next year.

The Winter Mountaineering and Climbing Instructor Mentoring Guidelines have been updated and we ran an associated update workshop in December. We also held a very well attended Safety Seminar in Fort William in November, and AMI had a presence at the December Adventure for all Conference. We will also have a stand at the Fort William Mountain Festival in February, so come and say hello if you're in the area.

Our winter social media campaign has been a great success, and our reach continues to grow.

I'd like to remind Members of the Professional Standards Policy requirement to report incidents within 48 hours of them occurring. We can then offer appropriate support via our updated Instructor Trauma Support process.

Be safe out there!

Rob Pugh (Chairman)



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 ASSOCIATION OF MOUNTAIN GUIDES [BMG]

The BMG is in a healthy state with several Guides presented their Diplomas at our recent AGM and annual dinner at Plas Y Brenin. We had quite a few valuable training opportunities at the weekend, including a Media Training Day with Alistair McDonald and a Social Media Training morning with Mark Bullock. The Sunday was an excellent CPD day run by leading psychologist and BMG member Professor Lew Hardy alongside Professor Tim Woodman and Dr Matt Barlow. We looked at personality types and risk as well as lots of other fascinating content, relevant to us all.

The work situation is favourable at present with no immediate crises to deal with (thanks Martin for sailing the ship the last three years, through a lot of troubled water). Moving forward we hope to negotiate a more favourable insurance situation, having had an existential problem a while ago. Most of our members are currently insured via the Tiroler section of the Austrian Guides Association, but we will hopefully, in the not-too-distant future, be able to have a UK based insurer.

It is great to have real winter upon us, both in Scotland and the Alps. But I am mindful of the fragile reality of our profession in the midst of climate change. We will need to adapt and accept new norms for our work and our work environment. Swiss glaciers have lost 10% of their volume in the last 2 years alone, so our experience and examples to clients is very important.

John Morgan (President)



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)

The Spring season is often a busy one for those International Mountain Leaders who work the snowy months on snowshoes, particularly in destinations such as the Alps, Carpathians, and Scandinavia. Choosing locations where the winter conditions are stable and predictable is becoming more challenging due to unpredictable swings in the weather. Having greater flexibility in destinations in your trip planning is something I am including to avoid the risk of no snow. Useful tactics include picking lesser-known destinations thus staying away from honeypots and using national hut-networks rather than hotels.

This also relates to wider sustainability efforts, which are a focus for us as an Association. We have shared a draft policy with the membership for consultation which we will finalise in March. In parallel, we are working with key member experts to develop CPD modules – both webinars and face-to-face workshops. These will be rolled out later in the year. This ties in with sustainability becoming an important subject area for the IML – both in their training and in their working life. Through mountain tourism, we can educate clients and help to motivate better decisions in resource-use, holiday choices and adventure travel in general.

Further on becoming more sustainable, we are working to issue digital membership cards for 2025. Due to full members having an international need for proof of UIMLA IML status, particularly in countries where the profession is regulated, we are collaborating with UIMLA to secure a suitable design of the digital ID card and a way to replace the numbered holographic sticker on the physical cards.

Peter Chapman (President)



BAIML is the professional membership organisation in the UK and Ireland for holders of the International Mountain Leader (IML) qualification from MTUKI, and also for people from other nations who hold a UIMLA IML diploma and become resident in the UK or Ireland.

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



MOUNTAIN TRAINING ASSOCIATION (MTA)

Our Winter weekend held at Glenmore Lodge was a sellout. As well as our usual winter workshops we had a few new offerings: An introduction to winter climbing and Discovering winter mountaineering. A big thank you to the staff at Glenmore Lodge for providing quality learning and experiences in very challenging conditions.

We are delighted to be continuing our collaboration with the Met Office this year and our programme of Mountain Weather workshops with dates and venues are up on the Candidate Management System (CMS).

We are very happy to announce the winners of our Volunteer Awards for 2023, celebrating the great effort and achievement of volunteers within the sector and all they do for the Association and further afield. Winners are all listed on the Mountain Training website, www.mountain-training.org/latest-news.

Our Mentoring Programme is due to get underway in May and applications are now open for members who are interested in being mentored as well as those interested in becoming a mentor, details can be found on the MTA website.

Our biennial Autumn Conference will take place at Plas y Bennin on the weekend of Saturday 12th and Sunday 13th of October, we are busy shaping the programme and bookings will be open as soon as the details are finalised.

Have a great spring and stay safe.

Belinda Buckingham (Development Officer)



MTA is the membership side of Mountain Training. Our mission is to build a community of confident and expert coaches, instructors and leaders by promoting good practice and continuing personal development opportunities in hill walking, climbing and mountaineering. Qualified members hold one or more of the Mountain Training qualifications.

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



TREKKING THE GIANTS' TRAIL

MAIN PHOTO Easy trekking above Val de Lys.

The northern Aosta Valley is a crinkle cut crisp type of place. Tributary valleys sweep from glaciers rooted in the highest mountains in the Alps to join the mighty Aosta Valley.

WORDS AND PHOTOS BY ANDY HODGES

The ridges and valleys form the basis of the Giants' Trail, named after the giant mountains beneath which the route wends its way.

Whilst working towards my final International Mountain Leader (IML) assessment I was also researching and writing a guidebook for Cicerone Press on this trail and found it to be an ideal spot for IMLs working towards their summer assessment. International Quality Mountain Days (IQMDs) are highly sought after and can be the source of angst-ridden deliberations. Where do you go? How will you ensure you get enough different experiences in the day? How will route finding go? Can you drop a bit of steep ground or snow into a summer day? Will you be able to include some history, archaeology and the natural world?

Welcome to the Giants' Trail.

The full route of the trail takes around two weeks and will see an intrepid trekker climb and descend 14,000m in 180km. With almost no uplift (ski lift, cable car, etc.) or vehicle options, it is one for fit, experienced walkers and would build on nicely from an easier trek such as the Tour du Mont Blanc. The valley enjoys good transport links either from Turin or Geneva via the Mont Blanc tunnel. Various transfer companies can assist with group transfer to the Aosta Valley from Geneva. The full route takes around two weeks and will see an intrepid trekker climb and descend 14,000m in 180km. With almost no uplift (ski lift, cable car, etc.) or vehicle options, it is one for fit, experienced walkers and would build on nicely from an easier trek such as the Tour du Mont Blanc. The valley enjoys good transport links either from Turin or Geneva via the Mont Blanc tunnel. Various transfer companies can assist with group transfer to the Aosta Valley from Geneva.



1. Rifugio Rivetti perched high above the rising cloud. 2. Final descent to Courmayeur. 3. Ibex above the monastery. 4. The students encountering the Grand St Bernard Monastery for the first time. 5. Climbing from Valtournenche. 6. The team descending from Col Malatra toward Mont Blanc.

Working with a range of unfamiliar maps is a key skill of an IML and the variety of maps available for the route allow you to choose different cartographic suppliers and scales, although my favourite are the Escursionista Editore 1:25,000 maps (www.escursionistaeditore.com).

Starting in the east at Donnas where the Alta Via 2 ends, the trail climbs over a couple of days into the reasonably unfrequented Mont Mars area. The climb out of the valley, through deciduous nut orchards to the higher environments above the treeline certainly help a budding IML understand the climatic zones we often learned about at school!

This nature reserve celebrates a wealth of biodiversity and over the next few days hardly any other people will be seen but there will be plenty of awe-inspiring views in the mornings, and in the afternoons the mist climbs from the plains to swallow the summits – another good IQMD opportunity!

Incredible overnight stops set the bar very high, the Etoile du Berger offers a stunning first night's viewpoint and a very warm welcome whilst the Rifugio Barma offers some of the best mountain hut services I've encountered in the Alps. Throughout the route it is important to book well in advance, some huts have as few as 20 bed spaces and it is critical to be able to book every hut on the route as there are scant alternatives, the latter

part of the walk shares space with the Tour du Mont Blanc, probably the busiest walk in the world – booking ahead is key!

The route allows for variations almost from the off: one passes the old gold mine where those wishing to follow the 'Two Monts' option will enjoy some slightly airy walking with fixed gear; whilst others may choose a faster and shorter option via the Col Portola and the ancient, inscribed stones of Pian Sorciere.

Options abound, but whichever way you go, after about four days you'll likely arrive at Gressoney St Jean, home to a large summer running festival, and a chance to restock. Two or three more days sees you arrive at Valtournenche with the mighty Matterhorn a few miles up the valley. This can be the end of a great week away, with good transport options back to the main valley.

Or it can be the starting point of a second eight days or so of adventures.

A short first day here will allow a group to settle into the trekking pace which is such an important part of good leadership; a group will begin to feel the effects of altitude and get to grips with walking uphill for hours at a time. The second day can be a tough one, nine hours of trekking over three cols and includes a snowfield with fixed ropes towards the end of the day. Perfect for IMLs, given a chance to use those skills with ropes, fixed gear and snow. The small hut is basic, with

few facilities (only one dormitory and no showers) and at around 2,600m it is one of the highest trekking huts in the Alps. The high altitude may also serve to refresh your memory on the treatment of minor altitude related conditions.

Temperatures can reach 30°C plus in the valleys whilst remaining little over single digits on the high passes. Yet more skills for a leader to demonstrate.

With the option of a night in a staging post on the Via Francigena (owned for a thousand years by the monastery at Grand St Bernard Pass) and a short day following one of the oldest roads in Europe which leads to the monastery and a new country, there's plenty of opportunities to share the historical aspects of the mountains with a group. Leaving time to explore the kennels, meet the most famous mountain dogs in the world and visit the museum to learn more about alpine history and Napoleon's famous crossing of the Alps, here is a day well spent, and an opportunity to practice your French as this is French speaking Switzerland. All this adds to the IML experience; the qualification encompasses

much more than navigation and safety. History, culture, flora and fauna are all essential aspects of the IML journey and will be considered during assessment.

A tough day follows a night at the monastery with an 'Alpine start' (early!) to enable the crossing of multiple cols culminating in a final, and highest, col at almost 3,000m and the use of some fixed ropes, an interesting aspect and a key IML skill for summer assessment. (It is also important to ensure group members have insurance for this altitude, some cheaper options don't!) Mont Blanc is almost within touching distance from here! As you climb higher and higher, Alpine toadflax and other rare flowers grow amongst the bare rock.

A last night stay in Rifugio Bonatti; although now back on the Tour du Mont Blanc things are different here. With over 100 trekkers in the hut it can be pretty full on and good group management skills

will be required to ensure your group depart with all their belongings!

The final morning's walk enters Courmayeur. Although it is feasible to travel on to Geneva within the day, to miss an afternoon and evening in Courmayeur with its Italian charm would be a shame.

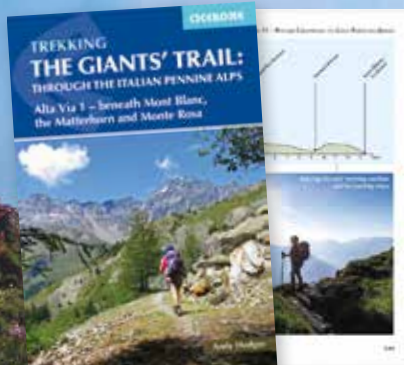
Reflecting in Courmayeur with a gelato in the main square, you will have experienced eight days of walking covering 96km and 6000m ascent. You'll have experienced virtually every climatic zone in the Alps from lush deciduous valleys to barren rock and snow-covered terrain. You will have walked in the footsteps of Napoleon and countless Rome-bound pilgrims, even staying in the same hostels as these ancient travellers. Maybe met an iconic St Bernard dog in the monastery, seen countless wildflowers and wildlife, spoken two languages and had an absolute blast! ■



Andy Hodges is a member of **BAIML** and **MTA**. He has worked as a teacher for 31 years before moving into the outdoor world professionally. Based in the South West, he leads the Army's Environmental Compliance Team for the Ten Tors Challenge and has been in Dartmoor Search and Rescue Team since 1994. He qualified as an IML in 2018 and has written three guidebooks for Cicerone Press.

Find your next adventure

For over 50 years, Cicerone has been your go-to guide for exploring the great outdoors. We are proud to be the leading publisher of guidebooks, covering destinations all over the world. With nearly 400 guidebooks to choose from, each pocket-sized and complete with crystal-clear maps and expert advice, we have everything you need to plan your next adventure.



Explore the full range at www.cicerone.co.uk

CICERONE

ROCK & SUN

CREATING BETTER SAFER CLIMBERS FOR OVER 20 YEARS

Coaching
Instruction
Fear Management

Costa Blanca
Kalymnos
Thailand
Albarracin and more..

Every Trip Guaranteed to go ahead
Buy your Flight - We'll take care of everything else
Photo: Trevor Masson on Moraine, Spanish Wall, Seng Phai, Thailand

ROCKANDSUN.COM



MAIN PHOTO Buttermere.

The altitude accuracy of OS Locate

WORDS AND PHOTOS BY JOHN SYME

OS (Ordnance Survey) Locate is a popular application [app] enabling phone users to acquire OS grid references and height data. The availability of data or WiFi is not required for the app to run if the phone's Global Positioning System (GPS) is enabled.

The Frequently Asked Questions (FAQs) on the OS website (<https://shop.ordnancesurvey.co.uk/os-locate-faq/>) answer many questions about the app, one of which relates to the accuracy of the Grid References it generates and states that GPS location is normally around $\pm 15\text{m}$ accuracy in good conditions.

However, one of the sections on the website answers a question by asking another more intriguing one:

How accurate is the height information?

"Height taken from the GPS signal is less accurate than location, so is normally $\pm 50\text{m}$. If you have a data connection, we will look up the height from your current location, giving a height accurate to 5m for most of Great Britain."

So why, and how, does data connection improve the accuracy of the height information?

I used my Android phone to get a location and height

above mean sea level (MSL) of about 175m at Hassness, near Buttermere in the Lake District. A colleague, with his iPhone, got an elevation of about 125m in the same location. Both of us had WiFi but no phone signal. The OS map had us between the 120m and 130m contours. It appeared that the iPhone was collecting data to arrive at a $\pm 5\text{m}$ result while my Android phone was getting $\pm 50\text{m}$ accuracy.

Moreover, using my phone elsewhere in the country gives me height data consistently around 50m above MSL height, rather than \pm the correct figure.

I canvassed others who use OS Locate and those with Android phones reported the same issue whereas those with iPhones consistently got height data within about $\pm 5\text{m}$ of the contour value.

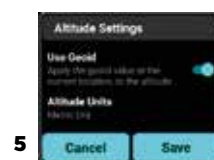
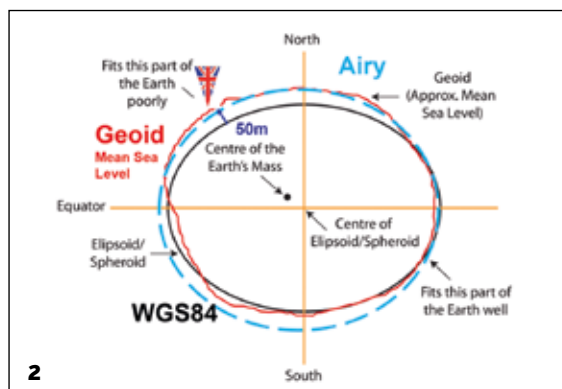
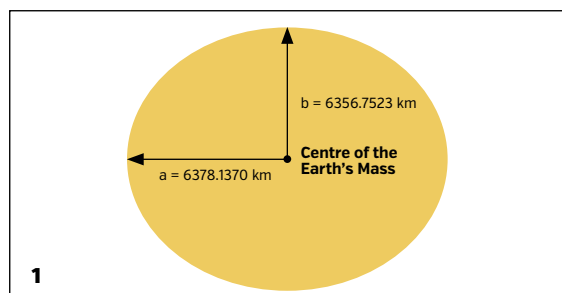


FIGURE 1 WGS84 Ellipsoid. FIGURE 2 Geoid, Airy and WGS84. FIGURE 3 GPS Test shows the location screen [handy large fonts available]. FIGURE 4 GPS Test shows altitude 76m in a location between the OS 25m and 30m contours [so clearly an ellipsoidal height]. FIGURE 5 GPS Test shows the option to use the Geoid to calculate and display altitude. FIGURE 6 GPS Test shows the displayed adjusted altitude using the Geoid. 7. GPS Test app icon. FIGURES 3-7 © Chartcross Ltd

I raised a query with OS as I suspected that my phone (or perhaps the Android version of the app) was not connecting to the OS website to improve the height accuracy.

The OS Technical Team replied:

"With regard to the altitudes on Android devices we can confirm this is expected behaviour on these devices and not a bug. We are looking into a way this can be corrected and give the same accuracy as Apple devices. However, there is no confirmation at this time that this will be possible."

So, what is the problem here?

Eastings and northings

Global Navigation Satellite Systems or GNSS (usually called GPS) work by analysing signals from at least four satellites. Phone GNSS chips generate coordinates based on the World Geodetic System 1984 model (WGS84), giving a latitude and longitude and a height above (or below) the reference ellipsoid, which is a geometric shape chosen because it gives a best fit with MSL worldwide, in so far as a simple ellipsoidal shape can – see Figure 1.

OS Locate and other GPS apps use transformation formulae to convert GNSS derived latitude and longitude coordinates to OS eastings and northings. In general, if the accuracy requirements are, say 5 to 10 metres, then transforming such coordinates from one system to another is straightforward.

However, converting a height above or below the reference ellipsoid to a height above MSL is not so simple.

The Geoid and the geoid

To measure height we need an imaginary surface of 'zero height' somewhere underneath us. However, the direction of gravity, although generally towards the centre of the Earth, varies, so a 'level' reference surface is not a simple geometric figure like the ellipsoid, but is bumpy and complex. For practical reasons our chosen height reference is the average surface of all the world's oceans – an irregular three-dimensional shape called the Geoid (with a capital G).

The Geoid is very nearly an ellipsoidal shape. We can define a best-fitting ellipsoid, such as in the WGS84 system, which

matches the Geoid to better than 200m everywhere on its surface. Usually, however, we want to know our height much more accurately than that. The Geoid has exactly the same height throughout the world, and it is never more than a couple of metres from local MSL. This makes it the ideal reference surface on which to base a global coordinate system for vertical positioning.

Height measurements on national mapping services are usually stated as height above local MSL. The oceanic currents, effects of tides and winds, variations in water temperature and purity, etc., all cause 'MSL' to deviate slightly from the truly level Geoid surface: the MSL surface contains very shallow hills and valleys. The seas around Britain form a 'valley' in the sea surface, so our MSL is about 1m below the Geoid. Reference surfaces such as this are called 'geoids' – the capital G being omitted.

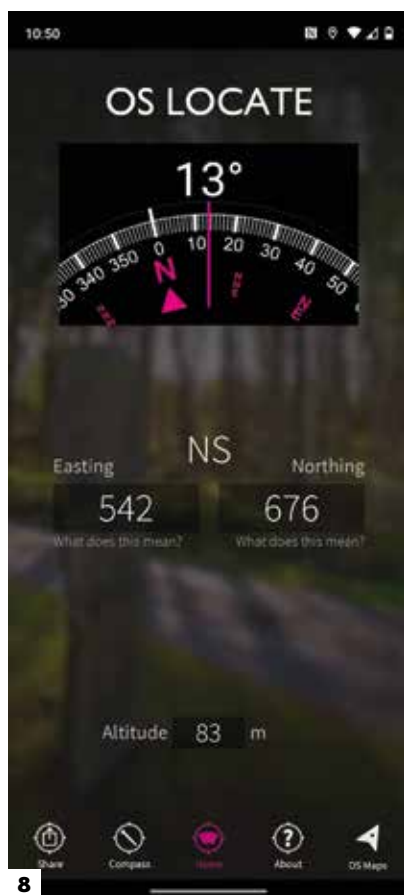
The Geoid is located above or below the reference ellipsoid in a complex way depending on latitude and longitude. A lookup table for any particular area is called a Geoid model: you need one to convert ellipsoid height to Geoid height and vice-versa. It is not possible to apply a simple formula to make the conversion.

OS heightings

The WGS84 reference ellipsoid used by GNSS is not a very good fit to MSL in Great Britain. The OS Airy1830 ellipsoid was calculated as a best fit here in the 19th century and no over-powering reason has been found to discard it.

The Airy ellipsoid is always within about 6 metres of the Geoid, which itself is within 2 metres of the MSL geoid throughout the British mainland and these differences are not overly significant to the navigator. However, the WGS84 ellipsoid lies 45 to 55 metres below Airy1830. As described above a complex lookup table is needed to convert accurately from ellipsoid height to OS MSL height.

Figure 2 shows the WGS84 in black, Airy1830 in blue and the Geoid in red. WGS84 coincides with the Geoid well in some places. However Great Britain is located with Airy coinciding well with the Geoid but with WGS84 about 50 metres below it. Therefore, the ellipsoidal height of a British location is about 50 metres higher than the Airy/Geoid/OS MSL figure.



8

8. OS Locate App. © Ordnance Survey 9. Buttermere.



9

Conclusion

It appears that the OS Locate app (iPhone version) can access the lookup table to improve accuracy to ± 5 m if data connections are available. Without data, or with the Android version, height accuracy is lowered as the app displays the ellipsoid height, 45m–55m higher than OS height above MSL. The OS website describes this accuracy as ± 50 m. However, if the user is aware of the factors described here then certain assumptions can be made. For example, with my Android phone I deduct 50m as a matter of course from any OS Locate height readings I obtain.

Of course, OS Locate coordinates can be used to establish height by reading a map. However, some users may employ height data directly from the app, for example to quickly determine

position on a well-defined hill track or to walk on a contour.

Footnote

In November 2023 OS announced that the OS Locate app is being integrated into OS Maps in early 2024. From November, Android users would be unable to download OS Locate. However existing Android OS Locate users will continue to be able to use it. iPhone users are not affected.

GPS Test

I have found one solution in the Android app GPS Test. It allows the user to choose whether to use ellipsoid height or Geoid height – see Figures 3-6 for how GPS Test shows height data. ■



John Syme is a member of Mountaineering Scotland and MTA. He is a Mountain Leader, Explorer Scout Leader, NNAS Navigation Awards Tutor and tour leader for Ramble Worldwide. He is fascinated by all aspects of mapping and holds a degree in Topographic Science from the University of Glasgow in the 1970's.

First Aid Training

Our Courses
16 Hour Outdoor First Aid Course.
Five day FREC 3, for remote environments.
Our training is Ofqual regulated, recognised by the NGB's & designed to be practical and fun.

Guarantee
We guarantee our face to face first aid training. If we do not meet our promise, we will refund the cost of the course, you can keep the certificate & receive £50 off your next booking.

Plus
Free anaphylaxis training.
Free Stop the Bleed certification.
Discounted online CPD courses.
MTA member discount and access to **Free** Workshops.

Follow in the footsteps of our ancestors on The Ridgeway National Trail. Training is held in the Chilterns, an area of AONB. Easy Access from the M40 Junction 6. Instructors are outdoor instructors & health-care professionals working pre hospital.

Please contact us for more information:
www.inveniotraining.co.uk
info@inveniotraining.co.uk
0800 9991064

BACKCOUNTRY ACCESS

AVAILABLE EXCLUSIVELY FROM

mountainsports.co.uk

30% DISCOUNT*

ON SELECTED ITEMS USING CODE:

BCA-ML

*Conditions Apply

A LOWLAND SERIES

Woodlands

This series, exploring lowland habitats, continues with a look at the shady world of woodlands. Britain was once covered by vast swathes of forest that developed following the retreat of the glaciers at the end of the last Ice Age. Around 8,000 years ago Britain had near-continuous forest cover from Lands End to almost the tip of Scotland.

WORDS AND PHOTOS BY JIM LANGLEY, ADDITIONAL PHOTOS GRATEFULLY SUPPLIED BY ANDY TEASDALE WWW.ORIELYCASTELL.CO.UK

In these early days, when Mesolithic hunter-gatherers foraged along forest edges, the forests were little affected by human activity and are considered as wildwood. Since settlements began in Neolithic times, around 5,000 years ago, Britain has experienced woodland management in one form or another. These first settlers showed evidence of woodland clearances as grazing animals became domesticated and the roots of agriculture were established.

By the Bronze Age, Britain was down to 50% forest cover and by the Middle Ages it was down to around 7% as cultivation expanded to feed the growing population. Woodlands continue to provide successive generations with an incredible resource in terms of food, grazing, timber production and firewood, to name but a few.

Woodland pastures developed and represent the original form of managed and grazed woodlands. These habitats lack shade-tolerant plants due to grazing pressure and are also known as tree'd grasslands. The medieval period saw the introduction of

fallow deer, rabbits and pheasants by the Normans which had a profound impact on the woodland structure.

Some woodland pastures began as hunting forests or wooded commons, whilst others are the designed landscapes from large estates. Trees were often cut at around eight feet high, above the browsing height of the stock below. This technique, known as pollarding, allowed the land to be used for both grazing and to provide useful material from the forest.

Another traditional woodland management system is coppicing. This is similar to pollarding but the trees are cut close to ground level. A regular crop of wood and wood products is obtained as this sustainable technique allows the trees to regrow. The rootstock is left untouched and a continual, semi-natural, woodland cover is achieved. The canopy is open and coppiced plants are those which benefit from extra sunlight.

You may also come across the term 'ancient woodland'. This reflects an area which has been continually wooded for many centuries. A threshold date of 1600AD is used to show these



MAIN PHOTO Woodland. 1. Bluebells. 2. Lesser celandine. 3. Wood anemone. 4. Wild garlic. 5. Wood Sorrel. 6. Primrose. 7. Cow-wheat. 8. Jay. © Andy Teasdale

woodlands from a time when reliable 'tithe maps' became widely produced.

Bluebell (*Hyacinthoides non-scripta*)

This classic woodland plant gives a spectacular deep violet-blue glow in springtime as their flowers carpet the woodland floor. The sweet-smelling flowers droop to one side of the flowering stem. The flowers are a vital source of nectar for many insects such as bees, butterflies and hoverflies which help carry pollen to other flowers for pollination.

Lesser celandine (*Ficaria verna*)

The bright yellow, star-shaped flowers of lesser celandine brighten up the woodland in early spring. Their leaves are heart-shaped and glossy green. The best place to find them is in damp woodlands and along stream banks. The queen bumblebee favours their nectar because they open in early spring as the bees emerge from hibernation.

Wood anemone (*Anemone nemorosa*)

This is one of the first flowers to bloom in early spring. Their large white flowers track the sun as it passes through the sky in the leafless canopy of broadleaf woodland. They are found in damp, mature woodlands and grow very slowly

through underground stems (rhizomes). They take about 100 years to grow a clump 1.8 metres across!

Wild garlic (*Allium ursinum*)

Also known as ramsons this plant is common across the UK in damp, shady woods. They often appear in large quantities coating the woodland floor. Their flowers have six white petals and form a rounded cluster of around 25 flowers at the tip of long stems. The leaves have a delicate garlic scent when crushed. It's a popular foraged plant, however, by law they can't be uprooted.

Wood sorrel (*Oxalis acetosella*)

A distinctive small plant with three heart-shaped leaves and white flowers. The plants form clumps in damp, shady woodlands often growing amongst moss on fallen branches. At night the leaves fold back and open out during the day. The leaves have a sharp, bitter taste and make for good foraging.

Primrose (*Primula vulgaris*)

These are one of the first, or 'prime' springtime flowers. The flowers are pale yellow with bright yellow centres and each petal has a deep notch. Their leaves are wrinkly and form a rosette close

to the ground. They provide a valuable source of nectar to pollinating butterflies.

Cow-wheat (*Melampyrum pratense*)

A delicate plant that brightens up the woodland edge with its deep golden flowers. It is a hemiparasitic plant, meaning that it relies on obtaining some of its nutrients from the roots of nearby plants. Its nectar is reached by insects with a long proboscis, especially bees. Cow-wheat has a mutually beneficial relationship with the wood ant. The flowers produce a sugary liquid from tiny glands that the ants feed on. The seeds of the plant resemble the cocoons of the ant and get transported to the nest where they will germinate into a new plant.

Jay (*Garrulus glandarius*)

A highly intelligent bird known for its love of acorns and its ability to 'cache' them for winter. It's a large woodland bird with pale brown plumage, a black tail and its black and white wings have a distinctive panel of electric-blue feathers. Their diet comprises acorns, insects and sometimes eggs and young birds from nests. They pair for life and lay between four and five eggs per year which take 16 days to incubate.



9. Robin. © Andy Teasdale 10. Blue tit fledgling. © Andy Teasdale 11. Nuthatch. © Andy Teasdale 12. Greater spotted woodpecker. © Andy Teasdale 13. Badger. © Pablo Valero 14. Red Squirrel. © Andy Teasdale

Robin (*Erithacus rubecula*)

A feisty, iconic bird with its signature orange-red breast, the robin is immediately recognisable. It's also the Christmas card favourite and commonly seen in gardens in search of worms, fruits, seeds and insects. They breed from March building a mossy nest and have between four and six eggs per clutch. The chicks hatch after 13 days and fledge just two weeks later.

Blue tit (*Cyanistes caeruleus*)

A delicate little bird with bright plumage. It has a bright blue cap, white face with black stripes across its eyes and chin and a bright yellow breast. Its wings are blue, green and white. Their diet consists mainly of caterpillars, but they also eat seeds, nuts and spiders. They lay between seven and 14 eggs which hatch after 15 days. The female sits on the eggs being fed by the male.

Nuthatch (*Sitta europaea*)

A specialist tree climber often seen scuttling up and down tree trunks searching for food. They have a distinctive orange breast, blue-grey back and head with a black stripe across the eyes. They feed mainly on insects but in winter feed on seeds and nuts which they stash in gaps in the tree bark a practice which may have earned them their name. They nest

in tree cavities and lay between six and eight eggs which hatch after two weeks.

Greater spotted woodpecker (*Dendrocopos major*)

Known for their distinctive hammering sound which can be heard from a long way away. They have black and white markings with a bright red rump and red mark on the back of the head. They feed mainly on insects extracting beetles from beneath the bark with their tongue after hammering holes to get to them. They also feed on caterpillars and spiders. They use their beaks to excavate a nest cavity within a tree and lay between four and six eggs which hatch after two weeks.

Badger (*Meles meles*)

The largest land predator in the UK, the badger is famed for its black and white striped head and grey body. They use their strong front paws to dig for food and to excavate their large underground

burrow known as a 'sett'. They feed on small mammals, bird eggs, worms, fruit and plants. Cubs are born in January or February emerging in spring when the weather is warmer. They are protected under conservation legislation in the UK.

Red squirrel (*Sciurus vulgaris*)

Recognisable by their red fur, ear tufts and long fluffy tails the red squirrel is the UK's only native squirrel. Their diet is mainly hazelnuts, acorns and seeds. They don't hibernate and store fungi in trees to feed on over winter. The female produces two to three young, called kittens, in February to April, around 45 days after mating. Kittens are weaned after 10 weeks by which time they have developed a set of teeth. Since grey squirrels were introduced their population experienced a huge decline but conservation measures have seen their number and range increase across the UK. ■



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*. Jim runs CPD courses for mountain leaders, mountaineering instructors and hill & moorland leaders in Snowdonia but also for IML's 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

Andy Teasdale is a member of **BMG** and has a photographic gallery in Caernarfon, www.orielycastell.co.uk



WILD CAMPING

ABOVE Wild camping. © Shutterstock

The British Mountaineering Council (BMC) supports people's right to wild camp (or backpack camp) responsibly. Over the past 18 months wild camping has been a hot topic of conversation – this article aims to clarify what we mean by wild camping and will look into some of the recent events and developments.

WORDS AND PHOTOS BY TOM CARRICK

In an increasingly fast and busy world, wild camping can offer a unique experience – a connection to nature, a moment to reflect, and the potential for solitude. Since Covid-19, this has been increasingly important as more of us strive to connect with nature. The experience of camping in the wild brings with it physical and health benefits and gives us a greater appreciation and understanding of the natural world. For most of us who have experienced it, we can remember our first-time wild camping – a memory that endures.

Currently it's hard to find places in England and Wales where you can truly move across the landscape as part of a journey or adventure, or get lost in the wilderness and know it's acceptable to set up a temporary 'wild' camp.

In Scotland this is permitted under the Land Reform Act (2003) and behaviour is governed by the Scottish Outdoor Access Code – some byelaws and restrictions (e.g. around Loch Lomond) may apply in busier areas. The Republic of Ireland doesn't

have any legislation to support access into the uplands, and in Northern Ireland the access legislation doesn't address camping. Mountaineering Ireland recommends people seek landowner permission where possible, and that camping in the uplands should follow a minimal-impact approach. In England and Wales however, it is not considered legal unless the permission of the landowner is obtained. In fact, under the Countryside Rights of Way Act (CROW 2000) camping (trespassing) is listed as a restricted activity and is a civil offence. In a civil case there is no guilty or not guilty charge, but it decides as to whether an individual is liable or not and seeks to remedy an issue brought forward by the "in this case landowner", this could be monetary but not always. It's difficult to see how this would play out as there hasn't as yet been a case brought against an individual.

However, there are some parts of England where wild camping is either legal (e.g. Dartmoor) or generally accepted (the Lake District), and many people wild camp discreetly in our hills and mountains, following a strict 'leave no trace' ethic. This appears to function well in practice.

Complexities arise if you are asked to leave by the landowner as this could turn into aggravated trespass if you refuse to do so.

Wild camping has received more attention over the past 18 months as the court case between a private landowner and the Dartmoor National Park received a lot of publicity and sparked a public debate on the security of our access rights more widely. The initial High Court Trial in January 2023 saw the judge rule in favour of the landowner and the decades long assumption that wild camping was allowed ended abruptly. Fortunately, after returning to the Court of Appeal, this ruling was overturned as three judges unanimously concluded that wild camping



ABOVE Wild camping. © Emma Travers

was a form of 'open-air recreation' and should be allowed to continue. However, all this took huge amounts of energy and campaigning, the joint support of a number of organisations and individuals and fundraising to raise the money needed for the appeal, all this to gain access to the 1,620 hectares of one landowner.

Since then, there has been a renewed interest in wild camping and campaigning has begun in both England and Wales to consider extending these rights. The BMC, in particular, want to see more areas open to respectful, responsible, wild camping where visitors feel comfortable in the activity but are very much aware of their surroundings and respect nature; and where landowners and managers are tolerant of visitors who are acting as custodians of our natural environment.

Clearly there is a difference between fly camping (or dirty camping) and wild camping, and more is needed to educate the wider public on these differences.

The BMC believes that wild camping should encompass the freedom to choose where to camp, without any regulations, to be self-sufficient and to do so in a discreet and responsible manner, in wild places away from civilisation using strict 'Leave no trace' practices. This is very different from fly camping, which is often close to roads, can involve lots of people, noise disturbance, littering and fires



Tom Carrick is a member of **AMI, BAIML** and **MTA**. He is the Access and Conservation officer for the BMC and lives in North Wales. Tom is looking at how we educate more people to help protect our wildlife while we enjoy the outdoors.

with little respect for the surrounding environment.

As professional mountaineers, wild camping may be done as part of an adventurous experience, or as part of an assessment or training course. When you arrive, it should be nearing dusk, and when you leave it should be around dawn, and there will be no evidence that you were ever there. Participants might have questions around this, and it is important to explain the truth around the legalities of wild camping but to also outline the benefits of why it's an important skill, and how if it's done responsibly it should have minimal impact on the environment we all care for.

Given the increased interest in wild camping and in access rights more generally, the BMC believe now is the time to campaign for a right to roam approach across England and Wales. This should also commit to extending rights to wild camp responsibly. In particular, the BMC is calling for:

- More opportunities for more people to experience wild camping.
- A trial period of a rights-based approach to wild camping on some open access land in National Parks (England and Wales).
- The introduction of a responsible wild camping code of conduct with clearly defined wild camping principles, examples of what this might look like, and the need for exclusions.
- Effective enforcement or exclusion of some areas to help protect nature or limit numbers in honey pot areas.
- Following the trial period, amendments to the Countryside and Rights of Way Act 2000 to include wild camping as a permissible outdoor recreation activity on open access land.
- Appropriate funding and resources for National Parks, Areas of Outstanding Natural Beauty (AONBs) and land-owners to manage and monitor

responsible wild camping rights, e.g. by expanding the Ranger Service, and to help educate those fly camping. The BMC is also encouraging other organisations to adopt and recognise the difference between wild and fly camping, and for individuals to follow the BMC advice on how to wild camp with minimal impact, outlined below.

Be inconspicuous. Choose your location wisely: only use remote locations, well above the highest wall line and out of sight of civilisation. Stay for one night only. Pitch camp late and leave early, and don't leave tents up during the day.

Don't use camp fires or BBQs. They are highly destructive in sensitive mountain landscapes. Use a camping stove instead. During high fire risk periods, don't use any open flame.

Need the toilet? Removing all human waste using a packable toilet kit is the best solution. Away from popular spots, as a last resort, bury solid waste 15cm deep, replacing the earth afterwards. Pack out (take with you in your backpack) used toilet paper and sanitary products in a zip-lock bag. Wash up and toilet a minimum of 50m from any water sources.

Choose durable ground. Pitch your tent on well drained ground that won't be easily damaged or leave evidence of your visit.

Leave no trace. If you take it in, take it out. Try to remove any litter you find too. Pack out all food waste – it takes much longer than you think to decompose. Replace any rocks you've moved.

Use lights on their lowest setting around camp. Light and noise is very noticeable at night and can disturb wildlife and other people.

Keep group sizes small. Large groups can have a significant impact.

Use campsites in the valleys. If you want to camp in the valley floor, always use a formal campsite with facilities to minimise your impact and help the local economy. ■



1. Supporting the casualty to walk out. 2. Two person chair technique to carry casualty. 3. Reproduced and modified from The Body Almanac. © American Academy of Orthopaedic Surgeons, 2003

Ankle injuries amongst hill walkers

Ankle injuries are common amongst hillwalkers and, depending on their severity, can end a day out on the hill and result in a Mountain Rescue callout. Studies reviewing attendance records from eight emergency departments in the UK estimate an incidence rate of 52.7 ankle sprains per 10,000 people, however the true incidence is probably higher as many people will see their GP instead or self-manage their symptoms at home.

As always prevention is the best strategy. Pre-trip it is sensible to advise clients on choosing suitable footwear with appropriate ankle support. Similarly, when meeting at the start of the trek it is important to check that the group's footwear is suitable for the terrain and forecasted weather conditions. Dynamically assessing the proposed route and looking at path choice, the conditions underfoot and whether the client skill-mix is adequate is vital, and making early interventions to address these potential risk factors can be the difference between an injury and a successful trip.

Simple tips such as advising clients about foot placement, using hiking poles to enhance stability, and running a quick set of warm-up exercises, can all help reduce the likelihood of injury.

Types of ankle injury

Unfortunately, despite these measures, inevitably some people will sustain ankle injuries.

The majority of these involve the soft tissues around the ankle, however, sometimes there may be an associated fracture or dislocation.

Key terms:

- **Sprain:** a stretch or tear of a ligament. Ligaments are strong bands of tissue that connect one bone to another.
- **Strain:** a stretch or tear of muscle fibres or tendons. Tendons are cords of tissue that attach muscles to bone.
- **Fracture:** a partial or complete break in a bone.
- **Dislocation:** the displacement of one or more bones at a joint.

How do I assess a painful ankle?

Asking the participant about the circumstances surrounding their injury is a good starting point, and establishing whether they inverted or everted the ankle, whether they slipped,

WORDS AND PHOTOS BY DANIEL GRACE



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.



4. Mould the flexible SAM splint around the ankle and lower leg (N.B. you can use the non-injured ankle as a template to mould the splint around, as this will be less painful for the casualty). 5. Secure the splint in place using a bandage or some tape. 6. Secure the end of the bandage in place using tape or a safety pin. 7. Ankle swelling. © John Carr

tripped or fell over will give you a better idea of what happened. It is also important to check for any associated injuries and ask about past medical history, allergies, and current medications at this point.

Assuming that we are dealing with an isolated ankle injury, it is important to check whether the participant can put weight on the affected limb. The inability to weight-bear immediately after an injury may indicate either a fracture or a sprain, and on the hill, differentiating between these will not usually impact on your initial management, however it may mean that you need to assist the person off the hill yourself or call for help from Mountain Rescue.

Clients with ankle injuries will usually complain of pain regardless of the underlying cause and therefore this is not a particularly good discriminating factor. It is important to try and address pain early with simple analgesia (pain relief medication) such as paracetamol, ideally from the participants own personal first-aid kit.

If possible, it is helpful to remove the participant's boot and sock so you can have a look at the ankle and foot. Obviously if there is a gross deformity and the foot is pointing in the wrong direction, this is most likely to be broken or dislocated, and it may be too painful to remove the boot. In more subtle cases, you may be able to see some bruising or overlying redness of the skin, and the ankle will usually look swollen. Feeling around the ankle can help determine where is most painful. It is also beneficial to assess the range of movement in the ankle joint.

Various rules are used by healthcare professionals to determine whether an ankle is more likely to be sprained or broken and therefore whether an X-ray is required. The specifics of these rules are beyond the scope of this article, however if you are interested in finding out more you might want to consider getting a copy of the Oxford Handbook of Expedition and Wilderness Medicine or attending an outdoor first aid course.

In severe cases when someone injures their ankle there can be associated damage to the nerves and blood vessels that supply the foot. It is therefore important to check that the foot is warm, is a normal colour and has normal sensation when compared to the other foot. If there is a significant difference, this could suggest damage to these nerves and blood vessels which

requires urgent medical attention. In such severe cases, and when rescue is far away, it may be worth straightening the limb back into its normal form to allow more blood flow.

What should I do?

As with all injuries that occur in a wilderness setting it is important to do the basics well. As mentioned, appropriate early analgesia is valuable, and reassuring the casualty will also make a significant difference. It is also vital to consider the environmental conditions and ensure that the casualty and wider group are not getting too cold as you may be stopped for a prolonged amount of time.

If you have attended a course or have the appropriate prior knowledge and training, you may wish to tape or strap the ankle to provide support.

How do I get the casualty off the hill?

Following a period of rest and some decent analgesia, the participant may feel able to continue, or at least walk off the hill relatively independently using a trekking pole or with help from some of the other participants. Several techniques can be used here, including simply supporting the casualty as they walk, a two person seat carry, or even a simple 'piggy-back.' Whether you are going to try one of these or call Mountain Rescue for more formal assistance will largely depend upon the distance you have to travel, the fitness of the rest of the group and the severity of the injury.

Overall, regardless of how the casualty gets off the hill, if they are in significant pain or unable to weight bear, they will need to be seen at the local A&E or minor injury unit for review.

Take home messages:

- 1 Don't worry too much about whether it is a sprain vs break as the initial management is the same.
- 2 Manage pain early on and provide ample reassurance.
- 3 Think about potential evacuation strategies if the ankle cannot weight-bear.
- 4 Don't let the casualty or group get cold.
- 5 Signpost to A&E if persistent pain and the ankle is unable to weight-bear. ■

Disclaimer

This article does not constitute medical advice and should not be treated as such. You must not rely on the information published here as an alternative to medical advice from your doctor or other professional healthcare provider. You should never delay seeking medical advice, disregard medical advice or discontinue medical treatment because of information published in this article. If in doubt, please advise all participants to see their doctor for a comprehensive assessment and management plan.



PLAS Y BRENNIN

NATIONAL OUTDOOR CENTRE

Peak Pioneers

Empowering Women to Rise Above Limits in the World of Mountaineering

Choose Your Course For 2024:

MARCH

Scottish Winter Skills for Women (3 days)

MAY

Introduction to Rock Climbing for Women (2 days)
Hill Skills for Women (2 days)

AUGUST

Introduction to Rock Climbing for Women (2 days)

Visit our official website or contact us directly to get the most accurate and current information regarding course availability, dates, and specific offerings for women in 2024.

We also offer private 1:1s and group bookings, please send your enquiry to info@pyb.co.uk.



12 - 14 April. Save the Date!

Enjoy a weekend of outdoor adventure for everyone, with climbing activities, expert instructors, and opportunities to connect with fellow climbers. Meet Mountain Equipment athletes, hear inspiring speakers, and experience the warmth of PyB hospitality firsthand.

LEARN MORE



#ADVENTURESMAST



CLIMBING MAKES US FEEL GOOD!

How climbing
can improve
mental health
and wellbeing

WORDS AND PHOTOS BY STUART BURNS

The mental health benefits of climbing and mountaineering have been recognised for many years. Early explorers and mountaineers like John Muir and Sir Edmund Hillary noted the profound psychological impact of their adventures, describing feelings of tranquillity, clarity, and a stronger connection with nature. More recently, Shauna Coxey, GB Olympic climber, has talked about how climbing requires complete concentration and how this has helped her manage stress and anxiety. Tommy Caldwell, American record setting rock climber, has opened up about how climbing helped him overcome traumatic experiences in Kyrgyzstan and find a sense of purpose, healing and resilience. Over the years, these anecdotal observations have been backed up by scientific research, proving the link between climbing and mental wellbeing.

In mainland Europe, climbing is gaining ground as an alternative form of therapy for both physical and psychological injuries and illnesses. There are educational courses, books and even climbing walls within hospitals. The evidence from scientific research into the positive effect of climbing in the areas of physio-

therapy and psychotherapy is growing¹. These health benefits are often discussed within the climbing community². However, compared to our continental neighbours, climbing therapy within clinical practice is in its infancy in the UK.

A recent study: 'Your Movement Matters', conducted by Leeds Beckett University in 2021³, was partially funded by the British Mountaineering Council, Mountain Training and Plas y Brenin National Outdoor Centre. Out of over 1000 respondents, 19% of indoor climbers and 16% of outdoor climbers identified as having a mental health condition or illness. It is likely that we have all had some experience with this ourselves or know someone who has. The research reported that 71% of indoor climbers and 66% of outdoor climbers, said that one of their motivations for climbing was for their mental health⁴.

In 2017, the Association of British Climbing Walls reported that over 100,000 people climb at least twice per month. Climbing participation is growing by 15-20% each year⁵. As the number of climbers grows, there will be an increasing number of people coming

to climbing for its mental health benefits. It is important for instructors to be aware of this and understand how and why climbing can have this effect.

Firstly, climbing causes the release of endorphins such as dopamine and serotonin: neurotransmitters that play a crucial role in regulating mood and reducing stress. The physical exertion and concentration required during climbing helps to create a sense of accomplishment and self-efficacy, fostering a positive self-image and boosting self-confidence.

Secondly, climbing outdoors can expose us to negative ions, which are molecules that have gained extra electrons, resulting in a net negative charge. They are found abundantly in natural environments, such as the mountains. Certain geological formations, such as limestone and granite, are rich in minerals that release negative ions when exposed to the elements. When the wind blows, it can pick up these ions from the rock and soil and they become part of the air. They are also present in forests, rivers, oceans, and even rain showers. Have you ever felt the charge in the air at a sea



MAIN PHOTO Tom Savory on Nemo at Boiler Slab. 1. View from Tryfan. 2. Teaching Sam and Andy at Griben Facet. 3. Jake above Wen Zawn.

cliff with waves crashing below? Or the exhilaration of scrambling in pouring rain? When we breathe in negative ions or they come into contact with the skin, they interact with the body in several ways:

- Improving mood, by increasing serotonin levels, which can lead to reduced feelings of depression and anxiety.
- Lowering cortisol levels, the hormone associated with stress.
- Improving sleep quality, cognitive performance, concentration, and mental clarity.

TRANSFERABLE SKILLS FROM CLIMBING

Overcoming challenges

The simple act of getting to the top of a climb carries significant implications for mental health. Overcoming obstacles fosters a sense of accomplishment and resilience, providing tangible evidence of one's ability. This success can serve as a powerful reinforcement, empowering individuals to tackle life's challenges with newfound confidence and determination.

Trust

We build strong bonds when we climb with people, as our life is sometimes literally in their hands. Learning to trust someone in this way is a powerful tool in developing faith in others and building strong friendships, which can be essential for good mental health.

Risk management

Climbing presents continuous challenges in potentially dangerous situations. When teaching someone to climb we help them to develop their ability to make good decisions, improve their judgement and build risk management skills.

Problem solving

One essential skill you develop when climbing is the ability to adapt to changing situations. On each route we are constantly making choices, climb a little left?

Or right? Should I smear* or try a high foot? The beauty of rock climbing is that every route is different and over time, we develop the ability to make split second decisions in order to stay on the wall. It helps build resilience and perseverance, enabling you to face challenges head-on with confidence and find innovative solutions when met with adversity.

STRUCTURING A SESSION TO MAXIMISE EFFECTS

Instructors play a pivotal role in ensuring participants reap the mental health benefits of climbing. Structuring sessions to incorporate overcoming challenges, trust, risk management or problem solving will aid the personal growth of clients. Goal-setting, positive reinforcement, and fostering a supportive and encouraging environment can enhance feelings of competence. Varied climbing experiences, both indoors and outdoors, can provide diverse mental stimuli and further promote psychological growth. These outcomes can be enhanced by having small ratios and good relationships with clients.

Instructors need to be equipped with the knowledge and skills to leverage the mental health benefits of climbing effectively. A comprehensive instructor training programme would ideally cover psychology basics, communication techniques, group dynamics, and crisis management. Empathy and active listening are vital tools for instructors to create a safe space for participants to discuss their concerns, feelings and challenges. It is important to emphasise the value of the process, not only the outcome. Focusing on the effort and

perseverance required to complete a climb can promote a growth mindset and resilience. Encouraging reflection and setting personal goals can promote self-awareness and confidence.

When taking clients climbing outdoors, the environment and weather conditions should be leading players in the experience: the views, the exposure, the texture and structure of the rock, the wind on your face, the shared camaraderie. Encouraging clients to appreciate the moment and situation can be really rewarding.

As we continue to explore the relationship between nature, physical activity, and mental well-being, climbing stands out as a remarkable activity. However, we have to recognise that climbing is unfortunately not a magic pill, so understanding our role and how to support people to seek professional help is paramount. For more information and advice, I recommend attending a Mental Health First Aid course, and these websites:

www.mind.org.uk

www.samaritans.org ■

FOOTNOTES

1. Stelzer E-M, Book S, Graessel E, Hofner B, Kornhuber J, Luttenberger K. Bouldering psychotherapy reduces depressive symptoms even when general physical activity is controlled for: A randomized controlled trial. *Heliyon* 4 (2018) e00580.
2. Lambert K. *The mental health benefits of climbing*. (2021). <https://www.climbing.com/news/mental-health-benefits-of-climbing/>
3. Kay C, Ankers E, Bond S. *Your Movement Matters: Mountain Activities*, Tier 1 Report, Carnegie School of Sport, Leeds Beckett University (2021).
4. Kay C, Ankers E, Bond S. *Your Movement Matters: Climbing Activities*, Tier 2 Report, Carnegie School of Sport, Leeds Beckett University (2021).
5. Daoust P. Climbing has gone from niche sport to worldwide sensation. What is its dizzying appeal? *The Guardian* (2018).

*smear – utilising the ball of the foot or under toe area on a flat or indistinct surface and using pressure and friction to move.



Stuart Burns is a member of **AMI** and **MTA** and is a multi-activity instructor working as Senior Instructor at Gower Activity Centres. He is one of the organisers of the BMC Gower Climbing Festival @gowerclimbingfestival and BMC Access Rep for Gower. He recently completed his MCI training at Plas y Brenin.



1. 1960-70s Climbing kit. 2. Boots. 3. Books and helmet on shelf. 4. New trustees at Threlkeld June 2023.

The Mountain Heritage Trust: an introduction

Nestled under the southern flanks of Blencathra in the English Lake District lies an Aladdin's cave of artefacts, books, photographic slides, and written records that detail the history of British mountaineering.

WORDS AND PHOTOS BY
DAVID MONTEITH



David Monteith (Monty) is a member of **AMI**, a retired Mountaineering and Climbing Instructor and Teacher, and in 2023 was appointed a Trustee of Mountain Heritage Trust. Monty served as a secretary of AMI and as a director of Mountain Safety and Training for Mountaineering Scotland and was a freelance Instructor at Glenmore Lodge. He has climbed skied and walked all over the world.

The Mountain Heritage Trust (MHT) can be found in the Blencathra Field Studies Centre at Threlkeld, run by a mountain-loving community passionate about celebrating mountaineering heritage. The aim is to collect, preserve and exhibit mountaineering material to educate and make people aware of the rich heritage of British mountaineering. MHT is a charity funded by the British Mountaineering Council (BMC), grants, gifts, and fundraising activities.

MHT was founded in 2000 with the aim of recording and collecting material from the fields of climbing, mountaineering, and mountain culture. Britain has a proud legacy in the Alps, the Himalaya, and the other great mountain ranges as well as closer to home on British mountains and crags. Pioneers in techniques from the earliest days, Britain's climbers and mountaineers have also led the way in the preservation and conservation of traditions, culture, and mountaineering history.

The MHT collection includes a wide range of artefacts, stories, images, films, traditions, and records connected to the mountains. Many of these were exhibited in the Rheged centre, Penrith, between 2001-2007. The National Mountaineering Exhibition was the Mountain Heritage Trust's first major project. It was visited by around 250,000 people. Since then a number of events and exhibitions have been

held and in 2024 MHT is supporting a number of events relating to the 100th anniversary of the tragic disappearance of Mallory and Irving on Everest.

Chris Bonington, the first chair of the MHT, said in 2001:

The key role of the Mountain Heritage Trust is to ensure that mountaineering's fascinating heritage, artefacts, history and traditions are conserved, documented, made accessible and perhaps most importantly, communicated to as wide an audience as possible.

Ultimately, the Trust, through its own collection and database of other existing archives and artefacts, provides opportunities for outreach activity and visitor attraction. Our hope for the future is to have a dedicated centre for study, storage, and exhibition, possibly in conjunction with a partner organisation. The Trust also wants to offer opportunities to use items of equipment from the 'handling collection' through partnership working with educators.

Items of particular interest include equipment used on notable mountaineering expeditions, for example the down suit worn by both Pete Boardman on Kangchenjunga



in 1979 and by Joe Brown on Everest in 1986, candle lanterns used by Sir John Hunt, leader of the 1953 Everest Expedition, the tent used by Smijth-Windham on the 1936 Everest expedition, and replicas of the clothing worn by George Mallory when he disappeared on Everest in 1924. The collection also includes many examples of protection and climbing equipment that started to evolve in the 1960s and 1970s. A surprising part of the archive are models made for first Don Robinson climbing walls.

Patrons, trustees and staff are committed to safeguarding the stories, traditions, and legacies woven from the rugged mountain landscape of Britain, the Alps and the Greater Ranges. From the first rock climbs in the Lake District, to daring first ascents around the world, the archive echoes with some of Britain's most iconic achievements and its boldest personalities.

To further work started in 2000, MHT has a new group of trustees, who are committed to educating people about the history of British mountaineering. They are currently working on a strategy to move the Trust forward, particularly with partner organisations such as Mountain Training and the Associations.



AMI member David Monteith (Monty) is one of the new trustees and is looking for opportunities to develop partnership working with mountaineering leaders and instructors through their partner associations. He introduced the concept at the last AMI AGM held at Glenmore Lodge on January and has been invited to attend the Autumn 2024 MTA conference. If anyone is keen to become involved with such partnership working contact Monty using the email address in the contact information. To find out more about the trust and its collection visit the MHT website.

To learn more about MHT and the opportunity to use their resources in Mountain Training contact David Monteith at:

E monty@mountain-heritage.org, general contact details are:



Blencathra Field Studies Centre,
Threlkeld, Keswick, Cumbria, CA12 4SG

T +44 (0)1768 779911

E enquiries@mountain-heritage.org

www.mountain-heritage.org



BioLite

HeadLamp 425



No-Bounce, Ultra-Thin,
Rechargeable Head Light

uk.bioliteenergy.com



Distributed in the UK by Burton McCall Ltd
sales@burton-mccall.com



GREEN SOCIAL PRESCRIBING

A business opportunity

Due to the nature of a profession based in the outdoors, most of us are likely entirely comfortable with the idea of discomfort. Indeed, we actively seek it out, embracing the physical and mental challenge that adventurous activities bring.

WORDS, DIAGRAM AND PHOTOS BY RICHARD CHAPMAN

Professionally, we go further, creating opportunities for others to experience these sensations, expanding their comfort zone and enjoying the gains that such experiences entail.

The benefit of spending time 'stretching' yourself in the outdoors is multi-dimensional, and the growing mountain of peer-reviewed evidence is testament to the research this area has received in recent years. It goes beyond the physical benefits of exercise or the serotonin boosts from being outside to encompass the psychological models of self-determination, togetherness and transcendence, and demonstrable neurological impacts on brain function (see for example <https://osf.io/preprints/psyarxiv/f735b> – 'The Associations between Climbing and Mental Health and Wellbeing: A Mixed-Methods Scoping Review', Hall *et al*, 2023).

Despite the evidence, it is currently on the fringe of mainstream healthcare. However, things are starting to change,

driven by several key trends in the health system and championed in places by committed, creative and vociferous individuals and groups. The increasing appearance of the term 'social prescribing' in articles espousing the benefits of non-medical, more personalised approaches to healthcare gives rise to the hope that this could be the formal, structured recognition to what we have known for many years – the health benefits of the outdoors – but which mainstream healthcare has thus far failed to fully grasp.

In 2023 I used this focus to receive an NHS grant to develop a five-week program of indoor climbing for people living with severe mental illness, called Climbing Matters. It was the result of three elements coming together: my lived experience; some fortunate timing; and some key strategic drivers in the NHS. These drivers are highlighted in the **NHS Long Term Plan**, published in 2019 (<https://www.longtermplan.nhs.uk/>).



MAIN PHOTO The author exploring the east ridge of Bla Bheinn, Skye. © Louis Chapman 1. One of Nottingham Climbing Centre's instructors supports a participant as she leaves the ground, and some of her worries, behind. 2. One of Turning Point's service users enjoying the freedom that climbing encourages, at Nottingham Climbing Centre. 3. The author gazing at the open groove at the start of the main challenge of Dolmen Ridge, Glyder Fach. © Louis Chapman

The plan has five key thrusts, the most relevant to us being the third; 'People will get more control over their own health and more personalised care when they need it'. **Personalised care** means people having choice over the way their care is planned and delivered. The NHS recognises that providing choice improves care outcomes and that investing in things better suited to an individual reduces the cost of their care in the long term. It means shifting thinking from 'what is the matter **with** someone' to 'what matters **to** them'.

Personalised care covers many things and has been crystallised into the 'Comprehensive Model of Personalised Care', see *Figure 1*. Its implementation includes recruiting and training 500 **Peer Leaders**, people with lived experience of accessing care who are trained by the NHS to understand a bit about how it works, so they can help shape what it offers and how it offers it. It is called **co-production**.

To become a Peer Leader requires the completion of the **Peer Leadership Development Program (PLDP)**, a free, six month, NHS online training course – I completed it between 2020 and 2021. A key element of this program is the power of your 'lived experience' story – but my lived experience was not something I was used to talking about. I had lost my first child to a rare brain tumour in 1998 and have lived with the effects that such a traumatic event causes since. However, I had always felt that my love of the outdoors had been a powerful source of healing. Through the PLDP, I found the system had a term for this sort of non-medical approach to healthcare – **social prescribing**. When I spoke of trauma recovery and the role I think climbing

played for me in terms of social prescribing, I found it resonated with system leaders. I also found that the government had just started a multi-million, multi-site, national trial on '**Green Social Prescribing**'.

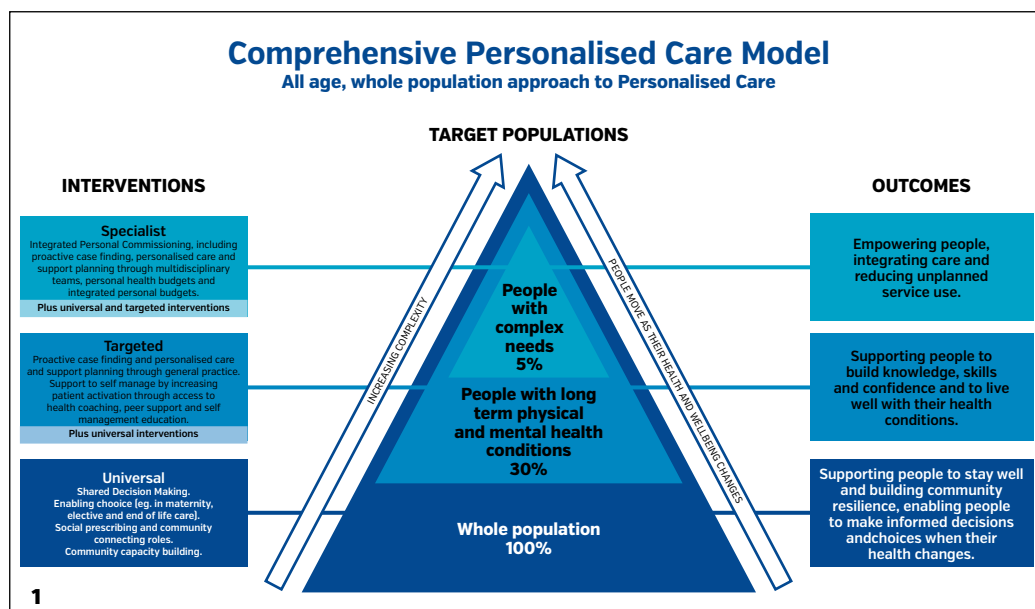
This £5.7m trial ran from April 2021 to March 2023. During this time, dozens of 'green service providers' – charities, voluntary organisations and private bodies who all use the outdoors to deliver health benefits – engaged with thousands of people with a variety of mental health challenges and the program monitored the impact of these interventions. The NHS has published much of the evidence to support Green Social Prescribing and the benefits are clear. My home city of Nottingham received £500k and, in partnership with the nationwide social enterprise Turning Point, I received a small grant, £600, to run Climbing Matters. This pilot 'proved the case' and we subsequently applied for and received a Sport England grant of almost £8k to expand the program in 2024. This led to funding from Nottingham City Council's Autism and Learning Disability Keyworking Service to deliver the program for the young people they support.

I am starting to embed Climbing Matters as 'business as usual' for the NHS in Nottingham. It took time, but here are five key success factors for anyone looking to do something similar;

1 Co-production; involve the people who want it – end users, the personalised care team in the Integrated Care System (ICS), lived experience partners, voluntary and community organisations – anyone who has the same improved care outcomes in mind. It is by bringing different groups together

Comprehensive Personalised Care Model

All age, whole population approach to Personalised Care



4. Selection of logos. FIGURE 1 Comprehensive Personalised Care Model.

in the process, not just the outcome, that we open people's eyes to the possibilities, crafting and shaping the demand and the benefits.

2 Personalised; if good health was easy, everyone would do it, but for many it is not. The system is realising that what works for one individual won't necessarily work for another, so focus on finding ways that work for individuals: health inequalities mean some people are harder to reach, but some people are harder to reach not because of a barrier they have, but because the system is trying to reach them with the wrong thing.

3 Proactive; there is an appetite for working in new ways and trying different things, but because this is so new, there is no single voice of authority of what works, no single process to follow to make it happen. Everyone is still learning. So, articulate the value you think you can bring, tell a story that others can get excited by, raise people's understanding from the way they think things are, to the way you think they can be – no-one knows the value of what you can offer better than you.

4 Trusted; if you are to be part of the system, the system needs clarity on what you can do. The National Academy for Social Prescribing website (<https://socialprescribingacademy.org.uk/what-is-social-prescribing/natural-environment-and-social-prescribing/green-toolkit/>) has lots of toolkits and advisory documents; use them so you are clear on what you offer, who you can offer it to, that you have the right policies in place, and start talking to the social prescribing and personalised care teams in your area.

5 Evidence; the Green Social Prescribing final report details the physical, mental and financial benefits of appropriate outdoor activities on health and wellbeing and is hard to argue with when making a case for funding, either from central government bodies, national governing bodies, charitable bodies or philanthropic trusts. Think broadly about how what you do aligns with these findings, what benefits you can deliver, what cost savings you can generate; good health is always cheaper than ill health.

With up to one in five GP appointments being for, traditionally speaking, non-medical issues such as loneliness, low mood or anxiety, the opportunity exists for our love of the outdoors, and the power it can have in personal transformation, to bring about significant changes in people's wellbeing and unlock substantial

cost savings for the NHS by doing so.

To watch my talk on NHS funding at Adventure Mind 2023 conference visit: <https://www.youtube.com/watch?v=sXSU-P64yzU>

Climbing Matters is a collaboration between three groups; a social prescribing fund, from the Nottingham and Nottinghamshire Integrated Care Board; Turning Point, a nationwide social enterprise who provide residential and community care for people who live with a number of challenging life circumstances; and the Nottingham Climbing Centre. The program is five weeks long, two-hours per week for eight to ten participants who all live with SMI and represent a range of ages, genders and ethnic backgrounds. Each session uses 'lived experience coaching', structured conversations that helped the attendees make connections between the physical act of climbing, how it made them feel, and what they can do about those feelings as a result.

Personalised Care is applicable to the whole population whether you are: healthy and want to stay that way, through shared decision making, enabling choice and community based social prescribing (the biggest, darkest blue triangle – *Figure 1 Comprehensive Model*); live with a long-term health condition, where you may need peer support and coaching to self-manage – Climbing Matters is an example of this (the medium-sized triangle); or have complex needs, where people have the right to a personal health budget (the smallest triangle). This is money that the NHS would have spent on their care, but instead gives it to the individual for them to spend in whatever way they feel supports their health and wellbeing.

The opportunities are there to support Green Social Prescribing initiatives check out the National Academy for Social Prescribing for more details. ■



Richard Chapman is a member of **MTA**. He has been climbing for over 40 years and is a trainee Mountain Leader, an NHS Peer Leader, a member of NHS England's national Strategic Co-production Group for Personalised Care and a Lived Experience Coach for National Voices. He is the founder of Climbing Matters and spoke at Adventure Mind 2023 on climbing, trauma care and funding. He lives in Nottingham. Richard.chapman@myself.com, [@climbingmatters](https://www.instagram.com/climbingmatters)



MAIN PHOTO Hiking during a weekend in the Lake District with Wanderlust Women, a group for Muslim women. © Lauren Barbour

Affinity groups and inclusivity

WORDS BY ESTHER FOSTER

In recent years, awareness around diversity and inclusion in the outdoors has significantly increased. Many outdoor organisations and grassroots initiatives have tried to better represent, and provide for, our diverse society.

The power of representation and the barriers that people face in accessing and flourishing in outdoor spaces has been more widely shared and discussed, contributing to an increase in groups, events and opportunities designed for specific demographics and needs (e.g., race, gender, size, age, sexuality, etc.). In this article we will refer to these groups as 'affinity groups'¹. Sometimes affinity groups are informal, starting with a few friends and a WhatsApp group or Instagram page, whereas others are on a more formal basis with charities or organisations running courses, events and initiatives.

Although the success and popularity of these groups and events is clear, there can also be questions and challenges to consider. This article offers thoughts both for those less familiar with affinity groups, and for leaders and instructors that are already involved with them.

The main emphasis is understanding the importance of affinity groups, looking at the bigger picture, and considering questions people may have.

Do affinity groups improve inclusivity and diversity in the outdoors, or do they increase separation and inhibit integrated participation?

THE BENEFITS

Affinity groups and events are hugely valuable. The energy and sense of inspiration at some of these events is amazing. Having a space to share similar lived experiences with others in the outdoors can leave participants feeling empowered, more confident, and inspired to do more. For many, it's also about feeling safe to be themselves, having not necessarily experienced that sense of security in wider society.

Affinity groups often enable more

practical needs to be met, helping people to fully participate and feel a strong sense of belonging within the activity and group. This could involve providing specific equipment, adjusting teaching methods, tailoring support beforehand, or planning for prayer times and dietary requirements.

Affinity groups and events provide crucial spaces for those that have been historically marginalised, and having role models people can identify with is invaluable. For those of us that have often been in the majority in outdoor spaces, unless we ask those that have been marginalised it can be hard to understand their need, and how powerful and uplifting these experiences can be.

These groups don't take away from integrated environments, they provide experiences which can't be replicated in a wider setting, and positively impact people integrating back into more mixed groups. Rather than creating a culture of separation and exclusion, these platforms create a springboard that enables people to feel more welcome and empowered when they participate in both affinity based and broader environments.

1. An affinity group is a group formed around a shared interest or common goal, to which individuals formally or informally belong. Affinity groups are generally precluded from being under the aegis of any governmental agency, and their purposes must be primarily non-commercial... Affinity groups can be based on a common social identity or ideology (e.g., anarchism, conservatism), a shared concern for a given issue (e.g., anti-nuclear, anti-abortion), a common activity, role, interest or skill (e.g., legal support, medical aid, software engineering), or shared personal identity (e.g. race/ethnicity, gender, disability, cultural interests). [source: Wikipedia]



1



2

1. Rock climbing during a weekend in the Lake District with Wanderlust Women. © Lauren Barbour 2. Climbers at Women's Trad Festival. © Bryn Williams 3. Women in Mountain Training conference. © Huw Jordan Tatlock

Do you work with, or support, affinity groups in the outdoors, but aren't from that community or demographic? Here's some advice that I have found helpful:

- Do your research. Read, listen and expand your knowledge on the groups you are working with. Understand practical needs, look at language and terminology, and consider how society, upbringing and individual circumstances affect your group's experience outdoors.
- Ask questions but do so considerately and question your assumptions first. Whilst it is important to ask questions and most people will appreciate you asking, remember that many people who look, or are perceived differently get asked the same questions repeatedly, and are constantly managing people's assumptions of them.
- Remember that everyone is different, even within the same affinity group. Don't assume everyone in that community is the same, and whilst it's important to consider differences, people also want to be treated primarily as a rounded person being rather than constantly singled out as different.
- Aim to empower rather than make people more like you. The differences between a leadership style that communicates 'you need to look, act, and speak like me' and 'I want you to be fully yourself, enjoy this activity and develop your skills', is immensely powerful. Focus on building relationships – the hard skills will be easier to teach and participants will leave wanting to come back.
- Consider role models. It is far more powerful to have an affinity group or session run by someone from that

community. Whilst that's not always possible, there're times where you might be able to use your expertise to support someone else to take the lead.

- Be self-reflective. Ensure you get feedback from others and be keen to find out how you can improve. Groups appreciate your openness and honesty; be humble and don't be afraid to get things wrong occasionally.

Everyone has questions and no one is an expert on everything.

It's ok to ask questions or be unsure of things, however, ensure you are genuine, kind and thoughtful, and be keen to listen. Here're my answers to some statements or questions I've heard over the years from both participants and leaders.

"There should be more groups for men or inclusive of men."

The expansion of groups and initiatives in recent years for under-represented groups in the outdoors is because, historically, most opportunities in outdoor activities have been designed by men, for men; people from under-represented demographics have started initiatives precisely because they have seen a need.

Importantly though, this does not mean that men don't face any barriers, struggles, or have a need for community, skills and support. If you see a need for a group in your area for men or anyone else, then ask for it, or set it up yourself, seek support, and go for it! The purpose of inclusion and diversity work is not to disempower or exclude those in the majority, but to recognise that the world is not a level playing field, to provide support that meets people's needs, and to increase understanding of other people's experiences.

"I am not from that community, but I'd really like to attend and learn from the experiences of that group".

There are some affinity groups that welcome anyone to attend as a participant or activity leader. There are also an increasing number of books, online resources, and workshops designed to help us learn from others and increase our understanding of key issues; as outdoor leaders we all have a responsibility in this area. Remember that those heavily involved with affinity groups often deal with an overwhelming number of requests and questions, and it may not be a key part of their role to educate those outside of their group.

Organisers do regularly take a step back and assess who they are working with and why, how the language and criteria they use affects who can participate, and if there are times to open up to wider participation. Whilst communicating with the wider population and considering mixed participation is important, affinity groups can also legitimately exist with the sole intention of benefitting the demographic they work with.

"The outdoors doesn't discriminate and my courses are open to anyone."

Nature may not discriminate, but society has, does and will likely continue to do so.

Even if you run accessible, open courses, there are still criteria for attending, some obvious and some subtle or perceived. As well as the kit, the need for prior experience, or the use of a car, there are often unwritten codes about how you should look, dress and talk. Society influences both the practical and perceived opportunities for people, and all the imagery and language around your course, the demographic make-up of your leaders and the other participants may



suggest that your courses are for a small selection of people of a certain size, build, skin colour, background, clothing style, age or ability. In short, open or mixed groups essentially aren't as 'open' or 'mixed' as we might think they are.

"I am all for greater diversity in the outdoors, but as a white, middle-class man I feel labelled as the problem and not able to do much".

Feeling like you can't contribute, ask questions, or play a part doesn't help anyone. Ask questions considerably, be keen to listen, and facilitate your own learning. Affinity groups need allies; your support and understanding is valuable, and learning from others is hopefully inspiring for you too.

Pretty much everything in the 'Western' world has used white, straight, average height, able-bodied, upper or middle-class men as the default. That includes clothing designs, sports science, research, climbing grades, nutritional advice, healthcare, media images, education and sporting success.

That's not the fault of individuals, and there is a great opportunity to be part of positive change. Be reassured that when affinity groups gather together, they'll often discuss societal structures and experiences, but don't spend their time blaming and criticising individuals.

IN SUMMARY

Hopefully these thoughts will prompt some learning and reflection, whether we are directly involved with affinity groups or not. As leaders it's important to step back and question our actions, even if we think we have the best intentions. Actively seeking out different opinions or gaining constructive, wider perspectives can provide valuable insights into our businesses and organisations, and lead to real growth.

Affinity groups are incredibly powerful and positive; they provide a springboard for so many, create community and shared experiences, and are a crucial part of making the outdoors more inclusive. They are also not the only answer to inclusivity, and there are many ways in which we can make outdoor spaces more diverse and accessible. As outdoor leaders, we have a responsibility to educate ourselves, learn from the experiences of others, and use our unique skillset and platform to benefit others. ■



Esther Foster is a member of **AMI** and **MTA**, and a Mountaineering and Climbing Instructor and Development Coach based in the Lake District. She focuses most of her work on coaching and developing climbers of all levels and disciplines, and runs Rock Climbing Instructor and Rock Climbing Development Instructor courses. Esther is a director of the Women's Climbing Symposium and is involved in supporting many groups and initiatives in the outdoors for under-represented demographics.

Technical Outdoor Solutions



www.technicaloutdoorsolutions.co.uk



Training Courses

We deliver an independent training and assessment programme for you and your staff on how to both manage and instruct on all types of ropes courses.

We deliver up to date industry leading courses for instructors, rescuers, and facilities managers. For convenience, we can provide staff training at your own site as well as from our Penrith based training centre.

- Traditional Ropes Course Instructor
- Low Ropes Course Instructor
- Adventure Park Instructor
- Temporary Low Ropes Constructor & Instructor
- Generic Rescue
- Bespoke Site-Specific Training
- Super Zip Wire Training
- RoSPA Operational Inspection and Maintenance
- RoSPA PPE Inspector
- RoSPA Wire Rope Inspector
- RoSPA Wood Pole Inspector



Tel: 01768 840 300

E: info@technicaloutdoorsolutions.co.uk
www.technicaloutdoorsolutions.co.uk



10 TIPS FOR CLIMBING A YOSEMITE BIG WALL

Last autumn, after years preparing and planning, I managed to make a lifelong dream happen: a climbing trip to the mythical Yosemite Valley.

WORDS AND PHOTOS BY ALEX RILEY



Alex Riley is a member of **AMI** and a Mountaineering and Climbing Instructor based in North Wales, where he runs Moelwyn Mountaineering. He's passionate about rock climbing and loves helping people to gain the skills to confidently tackle adventurous climbing independently. More information about Alex can be found at www.moelwynmountaineering.com

As you drive into the "Valley", El Capitan looms, a gigantic monolith blocking most of the car windscreen. You lean forward to get a better view, your heart races with fear, anticipation, but most of all awe at the hugeness of it all.

On our trip we managed to make two big wall ascents within a week, had an attempt on a third wall and climbed lots of rock. These are ten of the biggest lessons we learnt along the way.

1 COMMUNICATION

Big walling is a huge team effort and it's very important to have a strong climbing partner with whom you have good communication. A strong unified team makes it much easier to have fun and enjoy the challenge. There is the classic expedition saying about firstly aiming to come back alive and if you can come back still friends, even better. Having open discussions about aims and objectives before leaving for the trip helps to iron out any differences

and will help you understand whether the partnership will work well.

2 DON'T GIVE UP TOO EASILY

It seems like an obvious thing to say, but the temptation to bail can be hard to resist. On the aptly named Ledge of Despair on Lurking Fear we had a long discussion about our options upon realising we possibly didn't have enough food and water to get to the top if we kept at the current climbing speed. The options we had were to bail there and then, or press on and speed up, with the backup of bailing later if we needed to. This discussion helped us reassess and kick into gear and we ended up climbing the rest of the route much quicker than expected. That said, good reasons to actually bail include – being caught in a storm, injury/accidents, illness (diarrhoea, vomiting, heatstroke, etc.), running out of water (you might get away with it right at the top, but dehydration can quickly lead to complications like heatstroke), running out of food (less of a problem than water, unless you run out very early on you can probably carry on, no one said big walling is easy!). Don't just bail, unless you are forced to.



MAIN PHOTO Ben above the Kor roof on The South Face of Washington Column. 1. Getting ready to lower out on a traverse. 2. Big walling means big bags. Ben slogging to the summit of El Cap. 3. Joe Brindley regretting his food choices in camp four.

3 PREPARE WELL

Practising and becoming proficient at unfamiliar skills removes stress and faff when they need to be used for real. Climbing a Yosemite big wall is quite different to cragging¹ in the UK and Ireland. For the routes we climbed, we felt that the practise we did at home was very relevant and helped keep us moving efficiently as a team. Things we practised included: clean aid climbing (cams or nuts in crack systems); jumaring² different angled terrain; building big wall belays; setting up the portaledge³; and setting up different hauling systems. It might be tempting to try and fit all of this in a day or even try and learn whilst in Yosemite, but we found that having practised over a number of days we felt really slick and well prepared for when we were in the Valley. For each technique, it can be a good idea to have an alternative method up your sleeve in case you find a situation where your first choice doesn't work.

4 HYDRATE

Yosemite can be very (very!) hot, and it is easy to quickly become dehydrated. We found that about one American gallon of water (3.8L) per day per person was necessary to have enough to drink and prepare food. This is quite a lot of water to drink, and we supplemented the water with soluble hydration tablets – this

helps maintain mineral and electrolyte levels and can make the water taste a bit better (I'd avoid cherry and orange flavour, that one is a bit rank!). Communicating about hydration levels (wee colour and frequency) helps keep the team healthy by way of a bit of accountability. Keeping a lightweight water bottle on your harness works well for easy access, and it can be topped up from a big bottle in the haul bag at belay swaps.

5 GOOD FOOD

Everyone has different food preferences and on a big wall isn't the best place to find out what works for the whole team. Take what YOU want to eat and if there is overlap between you and the rest of the team then great, if not don't stress too much. Things I would recommend taking; bottles of pop, juicy sweets, tinned fruit, fresh fruit if you can store it – we took apples, easy to eat bars (I like Clif bars, which are pretty cheap if you buy the big boxes), instant oats with raisins for breakfast (watch out for flavoured ones, they are very sweet). Main meals are a bit trickier, next time I would take dehydrated expedition packs for dinner. Our best find was some really gooey brownie/cookie cake in the village store which was about 170 calories for a tiny square and sweated very well in a sandwich bag.

6 SPACE HAUL

Learn how to space haul. For me I found it nearly impossible to body haul, but space hauling was dreamy. The set up for this is very simple, when you fix your lead line, you pull up as much

1. Rock climbing.

2. Ascending the rope using a technique named after the ascender device manufacturer, Jümar Pangit.

3. A deployable hanging tent/shelter system suspended from a sheer rock face.



4. Ben Williams preparing gear for El Cap. 5. Ben Williams preparing gear for El Capitan. 6. Ben aid climbing at night on El Cap.

slack as you are comfortable with as a long back up, once this is fixed clip the wall hauler (protraxion, microtraxion etc.) to the belay and clip your jumars with ladders to the rope coming through the hauler (opposite side to the haul bag) and lean back, walking down the wall. Once you get to the end of the backup, you then jumar back up the rope and start again. Be careful once the bag starts getting lighter, because it will reach a point where it starts hauling very quickly. You can control speed by putting a hand on the "live" rope going to the bag or by switching to regular hauling.

7 STAY COOL

It might seem counterintuitive, but long clothing does a lot to help keep you cool when you are in direct sunlight. Trousers also help to protect against scrapes, especially on knees, which get a bit of a battering. Leave those British black trousers at home! Light coloured clothing works best, and some colours also work better than others, sun shirts like the Rab Force Hoody work amazingly well for

keeping the sun off the neck and usually have a Sun Protection Factor (SPF) rating too to protect against Ultraviolet (UV) light.

8 KEEP IT SIMPLE

As with the preparation section, having everything ready and simple makes life easier. Once you have decided on the system you use, don't change it (unless it isn't working). For us this manifested as building the belays exactly the same the whole way up, docking the bag, flaking the ropes, passing the gear all the same way. Another example is that we had the hauling system set up at the start of El Capitan and didn't need to adjust or change it other than to reset until we topped out. This saves lots of time overall and limits faff/stress/potential for arguments.

9 TAKE A CHAIR

I did have a point about practising using skyhooks and camhooks, but really, they are quite straightforward to use. Instead, if you are climbing a route with long complicated pitches which require lengthy

belay sessions, I'd strongly recommend taking a bosun's chair. These can be bought for about £50 or homemade from scrap wood and old rope. Your legs will thank me.

10 REST DAYS

Take rest days seriously, big wall climbing is hard work and can take a lot out of you physically but also emotionally, so make sure you take a proper break. After climbing two walls in quick succession, we took four rest days in a row. A few recommendations:

- Swimming in the river, there is a really nice spot opposite Pat and Jack Pinnacle on the road to El Portal.
- Happy Diner in Mariposa (A/C, wifi, good food, ice cold beers and you might see a cowboy).
- Mariposa grove of Giant Sequoia, a bit of a drive but it can be combined with a trip to Oakhurst for groceries.
- Hetch Hetchy – We didn't visit here but I'm told it's pretty cool.
- Tuolumne Meadows – a trip highlight for us. You are on a climbing trip after all! ■

Mountain Experience
EXPLORING • CHALLENGING • LEARNING

**Outdoor First Aid
in Eryri (Snowdonia)**

- Two day (16 hour) approved training
- Delivered by outdoor professionals
- Courses throughout the year
- Best value guaranteed!

BOOK NOW at www.mountainexperience.uk

TEKO®

ECO-PERFORMANCE

Your Pro-Deal:
30% Discount*
tekoforlife.co.uk

Use code: **TEKO-ML**

*Conditions Apply



PLAS Y BRENIN



MOUNTAIN
EQUIPMENT

20 YEARS OF PARTNERSHIP



Coire na Ciste
Ben Nevis
Scotland

PEAK BAGGING AND AN ERYRI SUMMIT PROJECT

Peak bagging or hill bagging is an activity in which hikers, climbers and mountaineers attempt to reach a collection of summits, usually published in the form of a list. As mountain professionals we are often called upon to help others complete lifelong ambitions like summiting all the Munros in Scotland or the Wainwrights in the Lake District.

WORDS, PHOTOS AND DIAGRAM BY
CHARLES SMITH

But what makes up a list of peaks, who makes them, and a potentially more interesting question, is it a good collection of peaks?

What is a summit list?

A list of summits is produced by a formula, a set of criteria which can be applied to a variety of peaks to form a final list. The point of the formula is to try and encapsulate the author's vision for a set of summits, whether it is to be exhaustive and a sense that they have left no stone unturned or a narrower criteria covering the hardest or tallest.



Charles Smith is a member of **MTA** and a passionate backcountry skier, trail- and ultra-runner recently qualifying as a Mountain Leader based in North Wales. Alongside his outdoor passions he is an experienced product designer and entrepreneur running several technology companies.

Parts of the formula

The most used elements of summit list formulas are:

- **Elevation** – the absolute height of the summit above sea level.
- **Prominence** – topographical prominence is the height from the lowest contour line encircling the peak to the summit.
- **Isolation** – topographical isolation is the distance of the summit from the next point of equal height.
- **Area** – a boundary to produce a more defined list, e.g. by country, national park, mountain range, etc.

Some of the most popular lists and the formulas they use:

Wainwrights (214 peaks)

- Elevation, peak above 304.8m (1,000ft), except one, Castle Crag.
- Area, Lake District national park.

Munros (282 peaks)

- Elevation, peak above 914.4m (3,000ft).
- Any prominence.
- Area, Scotland.

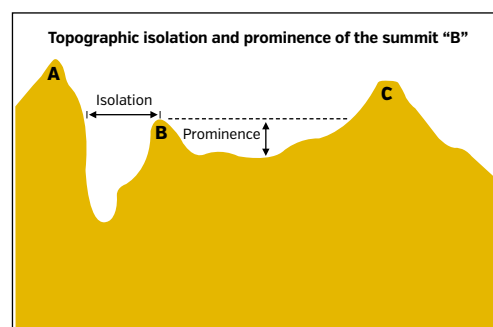
Nuttalls (257 peaks in England and 189 in Wales)

- Elevation, peak above 609.6m (2,000ft).
- Prominence, above 15m (49ft 3in).
- Area, England and Wales.

Marilyns (2010 peaks)

- Any Elevation.
- Prominence, above 150m (492ft).
- Area, United Kingdom, Republic of Ireland and surrounding sea stacks.

Across the United Kingdom and Ireland there are many more major lists of peaks including: HuMPs, TuMPs, Simms, Dodds, Munros and Tops, Corbetts and Tops, Grahams and Tops, Donalds and Tops, Furths, Hewitts, Buxton & Lewis, Bridges, Yeamans, Clems, Murdos, Deweys, Donald Deweys, Highland Fives, Birketts, Synges, Fellrangers, Ethels, County tops, SIBs (Significant Islands of Britain), Dillons, Arderins, Vandeleur-Lynams, Carns and Binnions. Adding all these together comes to 20,742 peaks, and have been available since 2001 as the *Database of British and Irish Hills (DoBIH)*.



MAIN PHOTO Foel Caerberllan. 1. Manod Mawr. 2. Moel Meirch. 3. Llyn Cau. 4. Dduallt. DIAGRAM Topographic isolation and prominence of the summit "B".

Why do people peak bag?

The answer to this will be as numerous as the people you ask, but there are some common themes:

- **Ticking lists:** For many, not all, lists are a vital part of life to help give them structure and organisation. They also help to give people a way to define success.
- **They are grand:** Unless you are top fell runner doing a list like the Wainwrights isn't a weeklong event it is multiple year or even a whole lifetime challenge. There are few things in life so big that you need to keep coming back year after year.
- **Constantly new:** A less appreciated part of this peak bagging trend is the constant desire to go to new places. Rather than going to the same peaks again and again every time you set out you are on a new adventure by the very nature that you have never been there before.
- **Rarity:** Both the rarity of completing a big list but also going up peaks that are less visited.

The positives and negatives of peak bagging

Within the adventuring and outdoor community, the term peak bagging may illicit as many opinions as there are people, both good and bad. Many argue the mindless pursuit of an arbitrary point on a map diminishes the experience of getting there, for example, taking the Llanberis path to the top of Yr Wyddfa (Snowdon) isn't the same as taking Crib Goch to the summit, but both ultimately end up at the same point. Others might argue that having the challenge of wanting to get to the top of a peak or a list of peaks helps drive people to go further and do more.

Whatever your personal feeling on the subject the important thing is the enjoyment and achievement of the client. Looking at some of the reasons above on why people peak bag can help you to enhance their experience by adding elements like teaching new

skills, alternative approaches to the peaks they want to bag or doing their challenges in a more environmentally sensitive way.

Eryri Copaon – Snowdonia summits project

I started getting interested in this when I moved to North Wales and was training to complete the Paddy Buckley Round, a circular route covering 47 peaks of Eryri (Snowdonia) inspired by the Bob Graham Round of the Lake District. One of the criticisms of the Paddy Buckley is the choice of which peaks are on the route and more importantly are they "really" peaks, as 11 of the 47 don't appear on any summit lists.

With major areas like the Lake District and the Highlands of Scotland having well-known lists of peaks doing a comprehensive job of covering an area is easier, but Wales, and in particular Eryri, doesn't have a list like this. To try and discover as wide a range as I could I combined 7 different summit lists for the Eryri and connected ranges. The project took me to 174 summits which I completed over 55 runs, 1,000km and 56,000m of ascent. An interactive map of all the summits, details of each one and links to every route I took to get to them can be found here: www.justfingrun.com/eryricopaon

Completing the project did help to get me more in the mindset of the peak bagger, one of which was definitely motivation. There were certainly times when the only reason I was going somewhere was to get up to some obscure point on a map, but I never would have gone there if I didn't have a driver like this to do it. Additionally, as a Mountain Leader it kept my map and navigation skills in constant focus because a significant part of the exercise involved charting the most efficient route to places which were often untracked. The positives of the project dramatically outweighed the negatives and I hope others take this as a call to improve, add, or challenge a comprehensive summit list of my favourite area, Eryri (Snowdonia). ■

Navigating the Ds

WORDS AND DIAGRAMMS BY CHRISTOPHER SWEETMAN

In recent issues of *The Professional Mountaineer* the Ds of Navigation have either had a mention, as by Nigel Williams¹ or as an article, as by Deyna Hirst². Nigel outlines that the Ds, in a variety of numbers from five to seven, appear at present to be popular in the UK and Ireland for teaching navigation.

Doing a spot of research, the Ds are also known across the pond in the USA³. So, where do the Ds in navigation come from and where did it all start? Was it mountaineering, hillwalking, rambling, orienteering, or perhaps the armed forces? The answer is orienteering and, perhaps unsurprising, how we navigate is largely down to this sport.

The first five Ds

Way back in 1955, Björn Kjellström wrote a book⁴, *Be Expert with Map and Compass*, which may be the most popular map and compass guidebook ever written with a print run of over 500,000. The book was originally aimed at promoting orienteering in the USA and the author was one of the founders of the Silva company (the compass manufacturer). Within the multitude of pages covering every aspect of map reading and navigation, aided by using a Silva compass of course, can be found 'The Five Ds of Map Reading.' These are: Description; Details; Directions; Distances and Designations. Then we had to wait almost six decades before the next set of Ds 'The Five Ds of Navigation': Distance; Direction; Description; Duration and Danger written by Carlo Forte and published in *Navigation in the Mountains* (2012), the official navigation book for Mountain Training walking schemes⁵.

The four Ds of navigation – a concept-based approach

The author of this article being previously unaware of either Kjellström's 'The Five

Ds of Map Reading' or Forte's 'The Five Ds of Navigation' used a four Ds concept based model derived from the key themes of navigation proposed by Professor Kate Jeffrey (2014)⁶:

- **Where are you starting from?**
Concept – **detection**
- **Where are you heading to?**
Concept – **destination**
- **Which way are you going?**
Concept – **direction**
- **How far are you going to travel?**
Concept – **distance**

This four D concept-based approach was used to provide the framework to the author's article: 'The Long Journey Home' in *Navigation News* (2014)⁷. The article discussed Amundsen's navigation techniques during the successful expedition reaching the South Pole and getting back home. Then it was further developed as a teaching method after the author conducted research involving a group of their students and published under the title: 'Land Navigation – Coaching Concepts' (2016)⁸.

Overview

Diagram 1 provides an overview of map reading and navigation Ds devised since their inception in 1955 from eight different sources. From 2016 there is a rapid expansion of Ds of Navigation models advocated by a wide range of organisations containing varying amounts of Ds! The most recent being the Ramblers' in their updated walk leader training scheme released in 2023⁹ which utilises the same model as published by BMC/Montane in 2022¹⁰.

Diagram 2 details the occurrence of the various Ds in the eight models/approaches included in this investigation. If one was to put forward a universal five Ds of Navigation approach based on the number of occurrences, then it would be: Direction, Distance, Description, Duration and Destination. However, none of these include a starting point which is the concept behind Detection. On a personal level even though I devised the Four Ds model I can forget the sequence I placed them in! Bring in 'The Rule of Three'.

The Rule of Three

From a pedagogical perspective (the methodology behind how teachers teach, in theory and in practice) having four or more words in a procedure can produce cognitive overload. This places demands on working memory which can exceed its capacity and cause a state of mental exhaustion. Working memory is the part of the brain that holds and manipulates information temporarily while performing cognitive tasks and can be easily stressed. Understanding this provides a rationale for why road safety procedures are limited to three words to aid memory, e.g., Stop, Look and Listen, for crossing a road, and why traffic lights are only three colours: Red, Amber and Green. Using three words that work together to convey a single concept is called a hendiadris and is especially useful for what we need to remember in a sequence. Now what three Ds of navigation will you select?

For my 'Rule of Three in Navigation' I wouldn't bother with any Ds, instead

Originator	Björn Kjellström [1]	Carlo Forte	IOI Chris Sweetman [2]	Mountain Bike Rider	DofE Award	BMC/ Montane^	MTA training workshop	MTA Deyna Hirst MTA [3]
Origin	Book	Book	Magazine	Website	YouTube	Website	Website	Magazine
Published	1955	2012	2016	2018	2019	2022	2023	2023
	Description	Distance	Detection	Direction	Destination	Distance	Destination	Departure
	Details	Direction	Destination	Distance	Distance	Duration	Direction	Direction
	Directions	Description	Direction	Description	Duration	Direction	Distance	Distance*
4 Ds	Distances	Duration	Distance	Duration	Description	Description	Duration	Duration*
5 Ds	Designations	Danger			Direction	Destination	Description	Description
6 Ds					Danger		Danger	Destination
7? Ds								Danger

Notes:

[1] Map reading approach

[2] Concept based navigation model

[3] Hike to Health approach

All the rest are navigation approaches

^ Also adopted by the Ramblers' 2023 YouTube

* Both grouped together under one D! - Hike to Health approach also puts forward a few more Ds: Delights, Deviations and Daftness!

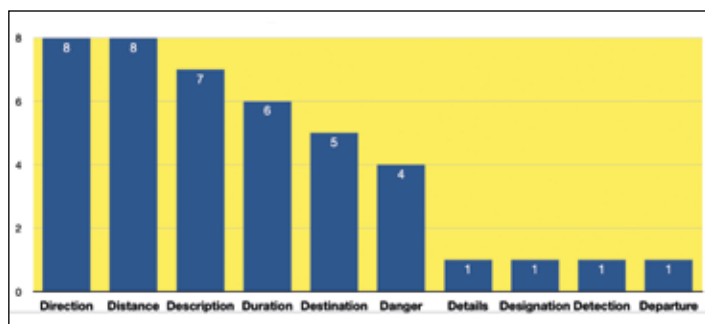
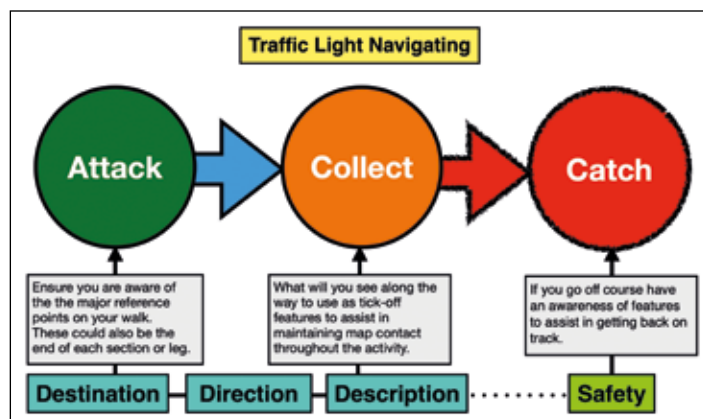


DIAGRAM 1 (TOP) Overview Navigating Ds.

DIAGRAM 2 (ABOVE) Occurrence of Ds in 8 approaches models.

DIAGRAM 3 (RIGHT) Rule of Three in Navigation.



I would utilise the essence of orienteering techniques: Attack, Collect and Catch. This would enable a level of familiarity to avoid cognitive overload when performing complex navigation tasks.

Diagram 3 shows traffic light colours attached to Attack – Collect – Catch. One can add Ds to each if preferable and if this is the case Attack looks at the Destination whether at the end of a leg or a prominent feature on a section of the walk. Collect links to Description as each tick-off feature needs to be, firstly, identified in the planning stage, and secondly, recognised when in the navigating stage. Both Attack and Collect embody Direction. Catch represents Safety and incorporates the orienteering technique of catching features if you wander off course. All areas can be under-pinned by Duration and Distance.

to put into use whilst navigating. Having four or more Ds could be confusing regarding sequencing especially when under pressure and has the potential to cause cognitive overload. Also, there is no universal Ds of Navigation approach/model adopted. From all of this, on a personal level I will use my 'The Rule of Three in Navigation', and keep the Ds to theory sessions. ■

Footnotes

1. Nigel Williams, Planning Backwards, *The Professional Mountaineer*, issue 43 Autumn 2023
2. Deyna Hirst, Hike to health – inner and outer landscape exploration, *The Professional Mountaineer*, issue 41 Spring 2023
3. US Today News - published online 27th September 2022: <https://ustoday.news/learn-the-four-ds-of-navigation-before-your-next-wild-escape/>
4. Björn Kjellström Be Expert with Map and Compass: The Complete Orienteering Handbook 1955 3rd edition 2010 with Carina Kjellström Elgin: Wiley
5. Carlo Forte, *Navigation in the Mountains: The Definitive Guide for Hill Walkers, Mountaineers*



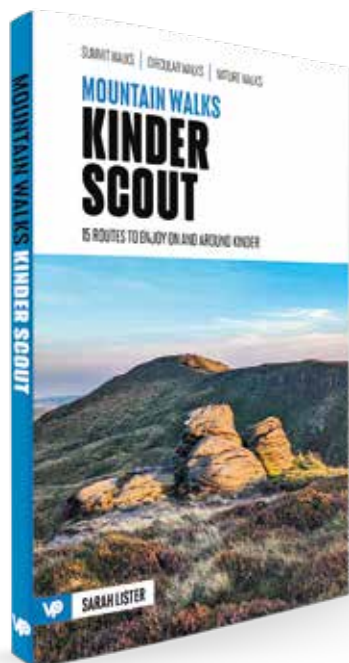
Christopher Sweetman is a Mountain Leader and member of **MTA**, he is a qualified teacher and has an MSc in Recreation Management and has taught navigation and expedition skills in the further education sector for over 25 years. Formally a British Orienteering Instructor and Club Coach, Chris currently leads walks for various NGBs. He is a fellow of the Royal Institute of Navigation (RIN) and a panel member of RIN's Outdoor Adventure Navigation Group.

- & Leaders – the official navigation book for all Mountain Leader Training Schemes; MLTUK 2012
6. Professor Kate Jeffrey, Navigation Networks in the Brain Royal Institute of Navigation – Navigation News, September/October 2014
 7. Chris Sweetman, The Long Journey Home Royal Institute of Navigation – Navigation News, November/December 2014
 8. Chris Sweetman Land Navigation – Coaching Concepts Institute of Outdoor Learning – Horizons, issue 73 Spring 2016
 9. Ramblers' - published online 2023: <https://www.ramblers.org.uk/go-walking-hub/our-simple-approach-navigating-your-walking-route>, accessed 16/12/23
 10. BMC/Montane Hiking Essentials Navigation 2022 – Resources available as a download, accessed 16/12/23
- Others not listed above but mentioned in Diagram 1:
- Mountain Bike Rider – published online 21st August 2019: <https://www.mbr.co.uk/how-to-2/four-ds-navigation-378610>, accessed 16/12/23
- Duke of Edinburgh's Award – published online 27th March 2019: Duke of Edinburgh: Navigation – YouTube, accessed 16/12/23
- Mountain Training Association website – three hour workshop: <https://mt.tahdah.me/event/detail/666340>, accessed 16/12/23

Summary

Whilst any Ds of Navigation model/approach is useful in teaching or training, particularly in a theory session or as an introduction to an activity, it has limitations when in the field and trying

BOOK REVIEW



MOUNTAIN WALKS KINDER SCOUT by Sarah Lister

Reviewed by Stephen Jones

has a different character, and some offer simple scrambling for those who wish. The peat bog which covers the summit is dissected through erosion into miniature valleys, or groughs. Once black-sided gouges scarring the face of the mountain, the groughs are now rapidly healing, following the wonderful work of environmental restoration which has rapidly changed the condition of the peat bog, raising the water table, stemming further erosion, bringing species diversity and (crucially) bringing back the sphagnum moss which is the building material for fresh peat.

So, for anyone to offer a new book which will introduce new walkers to this magical place is something which I warmly welcome. And (in my view) that is what this book does: it introduces the stranger to the Kinder plateau and its surrounds. There are fifteen walks, described in detail, with good Ordnance Survey (OS) map extracts, detailed instructions, and beautifully illustrated with striking photographs. The walks are arranged progressively, the first one being a gentle lowland amble, and the fifteenth a good hill day of 20km. Most of the walks are on or about Kinder, but some are in the neighbourhood of Edale village, or approached from the west beginning at Hayfield, or even on the chain of hills opposite Kinder across the Edale Valley, known rather grandly as The Great Ridge. So, the walks are not just about Kinder Scout and the

plateau. The principal must-see locations are fully represented: Kinder Downfall (the waterfall which flows UPHILL in a strong westerly wind), the extraordinary wind-sculpted gritstone pillars called The Woolpacks, the epic panoramas of the descent by Kinder Low End, the moody and atmospheric Gates of Kinder, a view of the site of the 1932 Mass Trespass; everyone has their own list of the great moments on Kinder, and using this book will provide a clear guide to finding them.

There is a wealth of supporting information. Each walk has an overview section, outlining the highlights of your walk, before the detailed instructions begin. And there is a lot of very useful advice on mountain craft in general, including safety and emergency procedures, which the novice hillwalker would be well advised to read carefully, and lay to heart.

Is this book for you? It may be that, as a reader of this magazine, you are a seasoned hillwalker well used to planning your own routes. But this is a well-researched and attractively presented book written by a local author, a Hill and Moorland Leader who knows Kinder and hillwalking well, and is a really useful introduction to a mountain which may be new to you. Or a great gift suggestion!

I will end as I began. Kinder is a place of wonder, and this book which leads people to explore it, is to be welcomed. It deserves to be well received by the hill-going public. ■

First of all, let me declare my partiality to any book whatever which has the peak 'Kinder' in its title! I am passionate about this extraordinary hill; indeed, mountain according to some definitions of the word, as it tops out above 600 metres. And despite this relatively modest elevation, some of the approaches to it have a grandeur worthy of a much bigger landmass.

Kinder, for those who don't know, is a triangular plateau of ancient blanket bog straddling the watershed of our island; the western face drains to the Irish Sea through the Mersey, the northern and southern faces to the North Sea through the Trent and the Humber. It is approached by a number of deep V-shaped valleys, or cloughs; each

TEKO®
ECO-PERFORMANCE SOCKS

ECO-FRIENDLY SOCKS

TEKO is the most award winning eco-friendly sock in the World

Our overriding goal is to be the best sock on the planet and the best sock for the planet. We also understand it is a never-ending journey of continual innovation and improvement.

Winner of the prestigious ISPO Innovation Award and Eco-Performance Awards and the Innovation Award at the international OutDoor Trade Show in Germany. TEKOs have also been selected as one of the top 100 most innovative companies in the UK.

It would be fair to say that we are as **PASSIONATE** about **COMFORT, FIT & PERFORMANCE** as we are about the **ENVIRONMENT** – to us you simply cannot truly enjoy the one without the other.

www.tekoforlife.co.uk



The MOUNTAIN BOOKSHOP

Britain's **best** outdoor books from **adventurebooks.com**



Hard Rock
Great British rock climbs from VS to E4



The Science of Climbing Training
An evidence-based guide to improving your climbing performance



The Climbing Bible
Technical, physical and mental training for rock climbing



The Climbing Bible: Practical Exercises
Technique and strength training for climbing



Beastmaking
A fingers-first approach to becoming a better climber



Other Ways to Win
A competitive cyclist's reflections on success



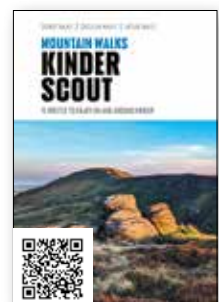
Cook Out
Fell Foodie's guide to over 80 gourmet recipes to cook in the great outdoors



Great Scottish Walks
The Walkhighlands guide to Scotland's best long-distance trails



Peak Bagging: Wainwrights
45 routes designed to complete all 214 of Wainwright's Lake District fells in the most efficient way



Mountain Walks Kinder Scout
15 routes to enjoy on and around Kinder



More Fuel You
Understanding your body & how to fuel your adventures



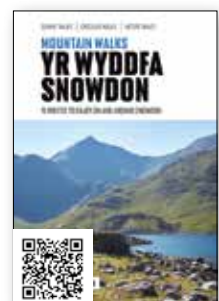
Bikepacking Wales
18 Multi-day off-road cycling adventures



Big Rides: Great Britain & Ireland
25 of the best long-distance road cycling, gravel and mountain biking routes



Big Trails: Great Britain & Ireland
The best long-distance trails



Mountain Walks Yr Wyddfa/Snowdon
15 routes to enjoy on and around Snowdon



vp inspiring adventure
www.adventurebooks.com

30% OFF!

For **30% OFF** just add code **MLT30** at checkout

Calluna Self Catering in Fort William



Need a base for your courses or personal activities, summer or winter? We have the place for you, whatever your activity!

- Legendary drying rooms
- Private parking
- Winter kit hire
- Free and fast fibre-WiFi
- Secure kit storage
- Owned by an AMI and BMG member

01397 700 451 or 07776 414 491
www.fortwilliamholiday.co.uk

STL: HI40242-F EPC: C-G

Calluna
SELF CATERING

CONNOCHIE ROAD, FORT
WILLIAM, PH33 6XK
Alan, Sue & Victoria Kimber
info@fortwilliamholiday.co.uk

Line-Lok® CL260

Guy line tensioner for all weathers from
arctic cold to
desert heat

Easy to adjust,
will not shake loose

cleats.co.uk



Credit: Richard Beech

CANINE FIRST AID

EMERGENCY CARE FOR YOUR DOG IN THE REMOTE LOCATION
www.activefirstaid.co.uk

Caban Cysgu Bunkhouse

The perfect choice for ML Training
and assessment courses

Sleeps 16 (8, 5, 2, 1)

Ample space in hall for course and theory
Wi Fi available

www.cabancysgu-gerlan.co.uk

01248605573 info@cabancysgu-gerlan.co.uk

KNEE & ELBOW Protection



- Comprehensive range to suit every application
- Ergonomic design
- Comfortable and secure fit
- Reliable protection
- Tough and hard wearing
- Manufactured to the highest standards from selected quality materials
- CE marking throughout
- NATO Stock No: 22c 8415-99-8873869

Gotec Trading Ltd

Boulton Road, Pin Green,
Stevenage, Herts SG1 4QL
Tel 01438 740400
Fax 01438 740005
enquiries@gotectrading.com
www.gotectrading.com



Official handbooks to support you through
Mountain Training's qualifications



Available in all good bookshops and online
www.mountain-training.org



BIOHITE HEADLAMP 425

BioLite's 2nd generation range of Headlamps redefines the rechargeable landscape.

The HeadLamp 425 combines an ultra-thin 9mm front with balanced weight and moisture-wicking fabrics to create a fit so comfortable, you'll forget you're wearing it. Go further and stay brighter with the benefit of multiple lighting modes and a rear red light for added visibility.

With a burn time of 60 hours on Low, and 3.5 hours on High, and a beam distance of 85 metres (Spotlight) and 15 metres (Flood light), the HeadLamp 425 is ready to illuminate your next adventure. Four different front

lighting options put you in control, while the USB charging delivers a reliable battery-free performance.

Experience top-tier performance with a fit unlike any headlamp you've experienced thanks to BioLite's award-winning 3D SlimFit Construction.

BioLite make the gear you need to power your outdoor trips – all built on renewable energy.

Available at Blacks Outdoor Retail www.blacks.co.uk
For product information visit www.bioliteenergy.com



ARE YOU LOOKING FOR A NEW CHALLENGE IN 2024?

We are recruiting Field Guides
to join our team in Antarctica

visit ***www.bas.ac.uk/vacancies***
to find out more

Application closing date 31st March 2024



**British
Antarctic Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL



COVER TO MATCH YOUR AMBITION



LIFE INSURANCE

INCOME PROTECTION



**MORTGAGE
PROTECTION**

**CRITICAL
ILLNESS COVER**



Call today
0345 565 0937

Click for a free quote **www.summit-fs.co.uk**

COVERING CLIMBERS, WALKERS AND MOUNTAINEERS FOR OVER 22 YEARS

Summit Financial Services is a trading style of Sports Financial Services Ltd which is an appointed representative of Suttons Independent Financial Advisers Ltd which is authorised and regulated by the Financial Conduct Authority. Registered in England and Wales. Registered No. 493197.