

# Snowdonia

## Mountain Walks and Scrambles

Mark Reeves

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Edited by Alan James and Rebecca Ting  
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Cover photo: *Bristly Ridge* (1+) - p.159 Glyder Fawr.  
Photo: Eilir Davies-Hughes  
This page: *Cneifon Arete* (Diff) - p.174 - Cwm Cneifion.

This book belongs to:

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Skills  
Snowdon  
Glyders  
Carneddau  
Meelwyns  
West Snowdonia  
South Snowdonia  
Snowdonia Winter

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### Access and Personal Participation

The inclusion of a route in this guidebook does not mean you have a right of access or right to walk or climb the given route. Every effort has been made to provide you with up-to-date access information but this can be subject to change. The descriptions of the routes within this guide are here for historical record only and no reliance should be placed on the accuracy of those descriptions. Similarly the grades we have used in this guide are subjective and the difficulty of any given route can alter over both time and with climatic conditions. It is up to individual hill-goers to exercise their own judgement as to the appropriateness of any given route on any given day. The authors, publisher and distributors of this book do not recognise any liability for injury or damage caused to, or by, individuals, third parties or property arising from such persons seeking reliance on this guidebook as an assurance for their own safety.

Skills  
Snowdon  
Glyders  
Carneddau  
Moelwyns  
West Snowdonia  
South Snowdonia  
Snowdonia Winter

"Climb if you will, but remember that courage and strength are nought without prudence, and that a momentary negligence may destroy the happiness of a lifetime. Do nothing in haste; look well to each step; and from the beginning think what may be the end."  
 - Scrambles Amongst the High Alps by Edward Whymper - 1871

The Mountains of Snowdonia have long been a place I have cherished in my heart. From the first moment I visited as a teenage schoolboy, the area held a strange magnetism for me. Something to do with the heady mix of the adventure of exploration and the shock and awe of the rugged natural beauty. Little did I know then that over 30 years later I would be making a living from working and playing in these mountains. More than just a livelihood or pastime, these mountains are a therapy to me. It is why the bond I have with them is so strong; each and every time I step out onto these hills my soul feels cleansed.

I hope that this book shares the joy of these mountains with you. Whether it is your first mountain in Wales or your thousandth, the beauty of Snowdonia is found everywhere you look and at every level of scale and difficulty. In sharing them with you, it feels like I am offering you the key to the whole of the National Park and beyond.

To capture that zeitgeist, I have included the best hillwalking, mountain walking, scrambling and winter mountaineering Snowdonia has to offer, showing that there is something for everyone, any time of year and in any weather. Combining some very popular classic mountain days alongside some unique activities and walks, this guide will lead you to some of the beauty hidden amongst the crags, valleys and mountain peaks of North Wales.

The routes chosen are those I use at work or in my own time. They are all classic in one way or another and will help get you off the beaten track every now and again. Many of the routes (like Snowdonia itself) are extremely popular and, on any given day, may be crawling with crowds of people. Rest assured, there are some quieter backwaters that are worth seeking out if solitude is what you crave.

*Mark Reeves*  
 Author, Mountaineering Instructor  
 and Climbing Coach

A scrambler topping out on the amazing on *Cneifion Arete (Diff)* - p.174 - as the sun starts to set in Cwm Cneifion. Photo: Jethro Kiernan

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### Using this Guidebook

This guidebook covers the best hillwalking, mountain walking, scrambling and winter mountaineering across Snowdonia and North Wales. With all Rockfax guidebooks each chapter has lots of information and features to help you find and assess the right route for you. Our aim is to have all the information at your fingertips and you should not have to turn more than a few pages to get from an overview to a map and a topo with a description.

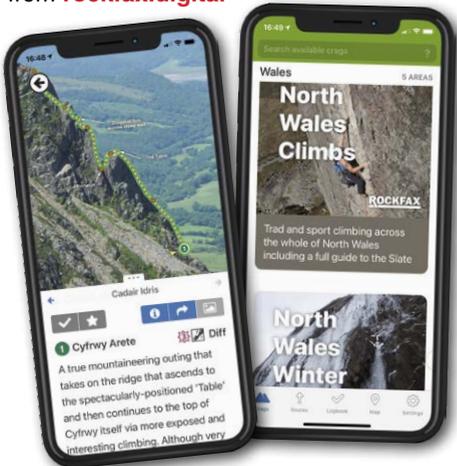
### Using a Smartphone with this Book

Each parking area has a GPS location and an associated QR code. Just point your smartphone camera at the code and it should open in your chosen navigation app to drive you straight to the parking spot.



### Rockfax Digital

All Rockfax rock climbing publications are also available in a digital format through our app. In this book many of the scrambles and all the rock climbs have been added to the digital guide for North Wales Climbs and some of the winter climbs to North Wales Winter. Rockfax Digital is available by subscription from [rockfax.digital](http://rockfax.digital)



### Grades

The routes covered in this book drop into three categories each with their own grading system and a corresponding colour code. If you are used to Rockfax colour codes in our rock climbing books, be warned that the equivalent difficulty levels don't translate to this book. What would normally be a green spot rock climbing in our other books is a red spot in this one.

#### Walking Grades - Green Spot

The walks have a description grade only.

**Easy** - A walk which has good paths, easy terrain, will not take all day and has less than 300m of ascent.

**Mod** - A moderate walk that either takes all day but has little ascent or one that is a shorter day out and has over 300m of ascent. Some of the terrain may be rocky underfoot.

**Hard** - A full day out with over 300m of ascent, usually up a mountain peak and with potentially rocky terrain underfoot. No scrambling except the odd small step.

#### Scrambling Grades - Orange Spot

For scrambling the difficulty is assessed using the widely accepted UK grading system that bands scrambles in three grades **1, 2** and **3** sometimes with a + suffix. These are covered in more detail on p.44.

#### Climbing Grades - Red Spot

This book includes a few easy rock climbs that are of a mountaineering nature. These are slightly harder than grade 3+ and we have used the traditional UK trad climbing grades of **Diff, VDdiff** and **Severe**. There are no climbs graded Moderate in this book since these are given a scrambling grade III.

#### Winter Grades - Orange Spot

The short Snowdonia Winter section uses the British Winter climbing grading system **I, II** and **III** with split grades like **II/III** used occasionally.

### Understanding the Route Description

Topo number	Route name	Stars	Symbols	Tick box	Grade
1	A Ridge .....	☆	👤 🏠 🏔	<input type="checkbox"/>	1
Distance	Ascent	Descent	Height Gain		
8km	3-4 hours	2 hours	550m		

**Distance** - This is the distance from the parking to the end of the route. Sometimes this will only be a rough guide as there are multiple options on the route or the descent.

**Ascent** - The time taken to get to the top of the route. Some routes are only described to their top and not the summit and linking to the summit, or to another route, is required. Ascent time is calculated based on 3-4 kilometres per hour plus 30 seconds per contour. With scrambles of grade 2 and above it is assumed that there is some use of ropes. If you are soloing without ropes the time will usually be shorter.

**Descent** - The time taken to descend from the top of the route or summit. Again, be cautious if the route does not top out on the mountain as heading to the summit may take longer. However, this is taken into account on routes where this is the only option.

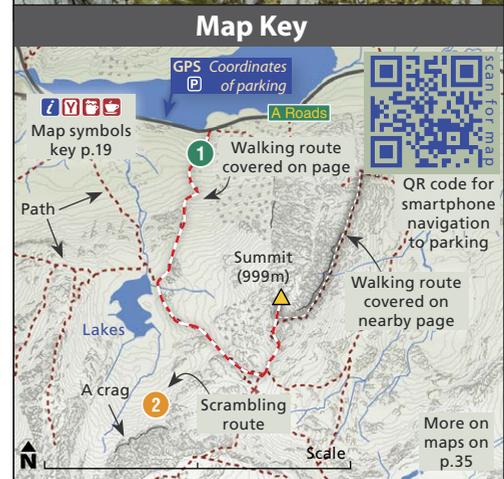
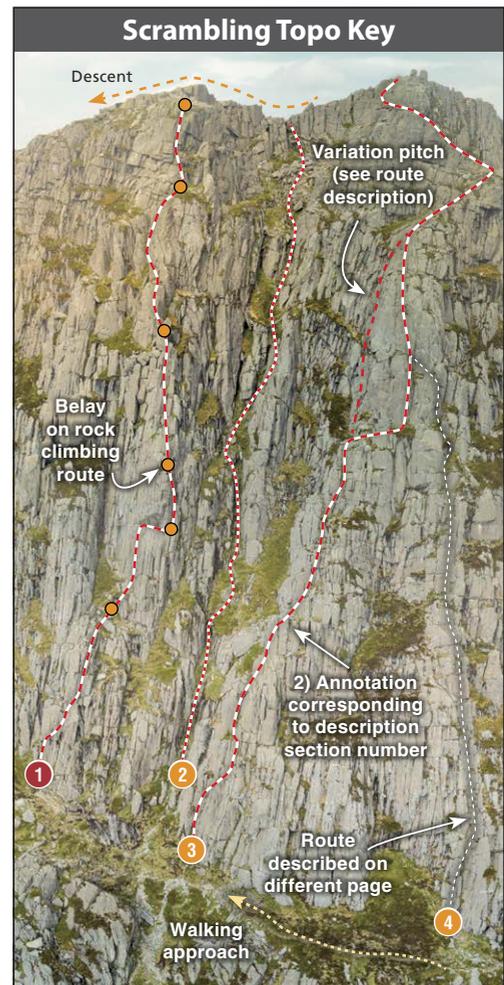
**Height Gain** - The amount of ascent in metres from the carpark to the highest point on the route.

**First Paragraph** - An overview of the route and a brief introduction to its character and any salient points. It usually also includes the starting point.

**Route Description** - A step by step account of the route. For walks, this starts the moment you leave the starting point. For scrambles and climbs the approach to the base of the route is covered first. The walk and scramble descriptions are broken down into small sections which are cross-referenced on the photo-topo with an annotation with the same number.

Rock climbs are broken down into pitch-by-pitch descriptions usually with lengths and belays marked on the topo. **Descent** - Descents may be covered with the route or elsewhere on the page if there is a group of routes with the same descent. Often there is more than one descent option. Link-ups with other routes are also described.

Route Symbols	
☆	Good route which is well worth doing.
☆☆	Good route which is well worth doing.
☆☆☆	Brilliant route, one of the best in Snowdonia.
👤	Some loose rock may be found - take care.
🏠	Fluttery climbing, exposed and scary moves.
🏔	Wide cracks or uncomfortable, awkward moves.
🏔	Winter route on which two ice axes are advised.
🏔	Winter route on which one ice axe is advised.
🌲	A very quiet location, likely to be deserted.
🌲	Quiet location, a few other people at most.
👤	Busy with other walkers or scramblers.
👤	A very busy location with lots of people.



### Other Publications

This is one of the first and biggest books to cover both mountain walking and scrambles (over 200 walks and scrambles covered) but several other books cover the mountains of Snowdonia.

### Skills Books

There are some excellent technical books which go into much more detail than the skills pages in this book.

**TradClimbing+** (Rockfax) 2017

**WinterClimbing+** (Rockfax) 2009

**Hillwalking** (Mountain Training) 2014

**Rock Climbing** (Mountain Training) 2011

**Winter Skills** (Mountain Training) 2007

**Navigation in the Mountains**

(Mountain Training) 2012

### Natural History

**Nature of Snowdonia**

(Pesda Press) 2015

**Rock Trails Snowdonia**

(Pesda Press) 2013

### Walking Guides

**Mountain Walking Snowdonia**

(Cicerone) 2016

**Day Walks in Snowdonia**

(Vertebrate) 2012

**Ridges of Snowdonia**

(Cicerone) 2005

### Scrambling Guides

**Scrambles in Snowdonia**

(Cicerone) 2017

**North Wales Scrambles**

(Northern Edge Books) 2018

**Scrambles and Easy Climbs  
in Snowdonia**

(Grey Stone Books) 2005

### Web Sites

Some great web resources that are worth looking at.

[UKHillwalking.com](http://UKHillwalking.com)

[UKClimbing.com](http://UKClimbing.com)

[UKScrambles.com](http://UKScrambles.com)

[Rockfax.digital](http://Rockfax.digital)



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Rockfax publish predominantly rock climbing information to areas all over Europe in digital and print. The company was started in 1990 and since then we have published 63 guidebooks and 4 performance books, redefining the style of guidebooks in the modern era.

### Guidebooks

Our printed guidebooks use modern publishing techniques to create visually-stunning books. We use inspiring action photos, huge photo-topos, detailed text descriptions and clear maps to create the most user-friendly climbing and scrambling guidebooks available.

[rockfax.com](http://rockfax.com)

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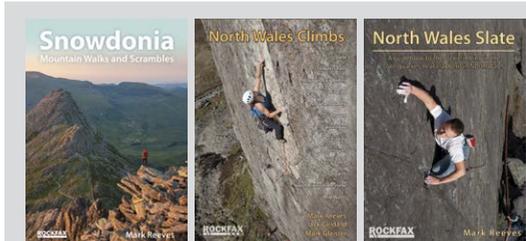
### UKHillwalking/UKClimbing

#### Logbook Route Database

If you like to log your days in the hills either for personal or professional reasons, the UKClimbing/UKHillwalking Logbook system has a comprehensive list of mountain summits and most of the scrambles, easy rock climbs and winter routes across the UK. This includes all the summits, scrambles and winter routes in this book. As such keeping an up-to-date logbook for yourself or for professional reasons is quick and simple. UKHillwalking also has many of the routes in this book covered by route cards with some online maps.

[UKClimbing.com](http://UKClimbing.com)

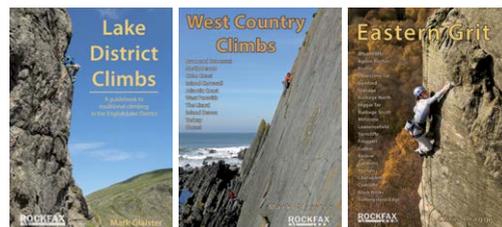
[UKHillwalking.com](http://UKHillwalking.com)



### Rockfax North Wales Guidebooks

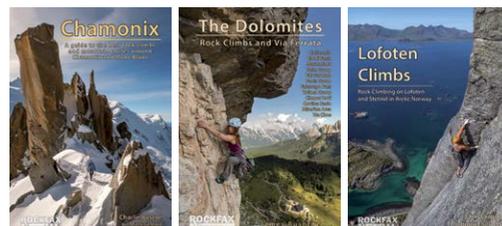
We have three guides to North Wales all written by Mark Reeves of Snowdonia Mountain Guides

- see opposite



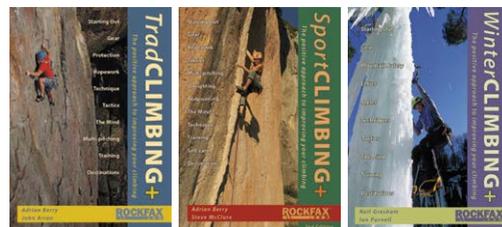
### UK Rock Climbing

Books to all the major rock climbing areas in England and Wales -18 guidebooks.



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Books to mountaineering, sport climbing and via ferrata in Spain, France, Greece, Italy and Norway - 11 guidebooks.



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Snowdonia Mountain Guides is run by Mark Reeves, author of this book and two other Rockfax guidebooks to climbing in Snowdonia

## About the Author

Mark Reeves is a mountaineering and climbing instructor based in North Wales.

Mark has climbed, scrambled and walked extensively in Snowdonia and written and photographed the area since 1995. He is the main author of two climbing guidebooks also published by Rockfax - *North Wales Climbs* and *North Wales Slate*.

This, his third book, uses his experience to capture the spirit of the mountains of Snowdonia and show their true beauty. It is as much a celebration of the mountains it covers as it is a tool to help you enjoy them.

## Contributors

Many people have contributed to this guide. Some simply came out on various adventures with the author to help check a few of the more obscure routes. Others have offered advice on route descriptions or images of many of the routes. However small their contribution, they have help turn this book into one of the most complete and visually compelling books to the mountain walks and scrambles in Snowdonia. The list of such people is long and includes too many of my clients to mention, although many feature in the action shots as well as several friends like Duncan Spencer, Natasha Lucas and Simon Lake.

Special thanks to Elfyn Jones, for his help with the Mountain Rescue and Mountaineering Welsh section.

Thanks also to Liz Jenkins for her tech support with QGIS mapping software. Liz runs [snowdoniaclassiccampers.co.uk](http://snowdoniaclassiccampers.co.uk).

I was also lucky enough to have a team of local instructors help check many of the descriptions as we were forced into lockdown during the COVID-19 outbreak. This included Rachel Crewsmith, Alex Kay, Simon Verspeak, Johnny Schofield, Stuart Lade and Ian Martin. Assembling the finished book is a huge task. I would like to thank Rebecca Ting and Dan Bailey for their proof reading.

For a final oversight we have been helped by a long time friend and colleague Dave Evans whose knowledge is equal to or greater than the author. Dave is ball of energy and works at Plas y Brenin but we have been truly lucky to manage to get him on his days off to give the final checks to this book.

## Photographers

The book is visually stunning thanks in no small part to the amazing contributions from a whole host of different photographers. Many of them are also guides or instructors in the region as well.

### Jethro Kiernan

Jethro has been an active outdoor photographer for years capturing many amazing images of climbers in action in Snowdonia and beyond. We are really privileged to have some of his amazing images in this book. Find out more about Jethro's photography and guiding at [jethrokiernan.com](http://jethrokiernan.com)

### Eilir Davies-Hughes

I was reintroduced to Eilir as part of a photoshoot to capture the Snowdon Horseshoe for an outdoor clothing company. As a young, up-and-coming photographer this chance meeting was serendipitous since Eilir's images are truly stunning, and the effort he has put into his photography is amazing. Check out his work at [eiliradventurephotography.co.uk](http://eiliradventurephotography.co.uk)

## Rob Johnson

Rob Johnson is a local guide who is a specialist in photography and videography from drones and otherwise. There are a few of his photos in this book that really capture the atmosphere of some of the routes. Find out more through [expeditionguide.com](http://expeditionguide.com) and [filmuphigh.com](http://filmuphigh.com)

## Karl Midlane

Karl is another instructor who has spent a lot of time exploring the area. In recent years he has added a camera and I hope you agree he has mastered that as well!

[karlmidlane.co.uk](http://karlmidlane.co.uk)

## Mike Hutton

Mike's work in adventure photography is renowned. He is a major contributor to Rockfax guidebooks and for good reason.

[mikehuttonimages.com](http://mikehuttonimages.com)

## Tom Hecht

I first met Tom when he was starting out as an instructor, it has been great to see him develop into not only in instruction but in writing and photography.

There were also many other photographers who have help fill the gaps in imagery. Thanks to Cordelia Malloy, Rusty Bale, Oly Sanders, Bryn Williams, Jez Brown, Jon Sparks, Oliver Cain, Luca Celano, Guy Steven, Myfyr Tomos, John Worral, Alex Riley, Jack Thompsett, James Kelly and Jim Jones.

If I have missed anyone out from these acknowledgements then I can only apologise. With a book of such magnitude, despite having the author's name on the front hinting otherwise, this truly has been a team effort spread over many years.

Mark Reeves, October 2020

## Advertiser Directory

Rockfax is extremely grateful to the following companies that have supported this guidebook.

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[awesomewalls.co.uk](http://awesomewalls.co.uk)

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[climbers-shop.com](http://climbers-shop.com)

**Trekitt** - *Inside front cover*  
[trekitt.co.uk](http://trekitt.co.uk)

**V12** - *p.2*

[V12outdoor.com](http://V12outdoor.com)

**Orange Mountaineering** - *p.21*  
[orange-mountaineering.com](http://orange-mountaineering.com)

**Head On Out** - *p.9*  
[headonout.co.uk](http://headonout.co.uk)

**DMM** - *p.29*  
[dmmclimbing.com](http://dmmclimbing.com)

# Snowdonia Logistics

Skills

Skills

Snowdon

Snowdon

Glyders

Glyders

Carneddau

Carneddau

Moelwyns

Moelwyns

West Snowdonia

West Snowdonia

South Snowdonia

South Snowdonia

Snowdonia Winter

Snowdonia Winter

It may look busy (estimate 76 people) but this is a standard spring weekend on *The PYG Track* (Hard) - p.88 - as the path starts climbing to Bwlch Moch.



The coastguard winching a casualty off Crib Goch. Photo: Oliver Cain

## Mountain Rescue

In the event of a mountain incident requiring the assistance of Mountain Rescue Dial 112 or 999 and ask for 'POLICE' and then 'MOUNTAIN RESCUE'.  
If the incident is on the coast dial 999 and ask for 'THE COASTGUARD'.

### Reporting an Incident

When you ring in an incident requiring mountain rescue the operator, and then the Mountain Rescue Coordinator, will need various pieces of information from you.

- 1) What has happened? Give an overview of the incident.
- 2) If there is a casualty with injuries, what are these injuries?
- 3) What is the name of the casualty or missing person?
- 4) Where are you and/or the casualty?

A map grid reference, a location from your phone or a route name and rough position on the route like pitch number are all worth knowing.

- 5) How many people are in the group? Are you wearing any identifying bright coloured garments?

### First Aid

It can be at least an hour before the rescue team arrives so you may well need to administer some first aid while you wait. A basic first aid course will help with this but a simple acronym is *DR ABC*.

**'D' Danger** - Is it safe for you to get to the casualty?

**'R' Responsive** - Are they responsive/conscious?

**'A' Airway** - Is their airway open and unobstructed?

**'B' Breathing** - Are they breathing?

**'C' Circulation** - Is their heart rate normal and is there a major bleed?

Beyond this we can look for other injuries and keep the casualty warm and comfortable, but without breathing or a pulse the casualty will die quickly.

### Helicopter Procedure

If a helicopter has been tasked then there are a few things you can do to aid their arrival. Get any spare bags, equipment, people and clothing gathered together well away from the casualty site and get someone if possible to sit on them as the downdraft can easily blow people off their feet. If you are climbing/scrambling nearby, make sure you are secured to the cliff as well.

If you need to attract the helicopter, stand up and make a 'Y' shape with your arms in the air and if possible with your back to the wind. Don't wave (everybody waves at helicopters), remain still and the helicopter should come in to hover in front of you if the wind is against you back. At this point you can probably back away from the aircraft and do not approach it unless you are beckoned over by the aircrew as those spinning blades are extremely dangerous.

### Smartphone Apps

Smartphones have apps that can help you be found quickly. **Echo122** has an SOS button that will call the correct emergency service whatever country you are in. In **Google Maps** you can tap on your blue dot location and 'Share' this easily via a text message or similar. The rescue team may send you a **SARLOC** message - just click the link they send you and it updates their map with your current location.

### North Wales Mountain Rescue

This is the umbrella organisation of the search and rescue organisations who deploy to mountain rescues across North Wales. The main teams in North Wales are Llanberis MRT, Ogwen MRT, South Snowdonia MRT, Aberdyfi SRT, Aberglaslyn MRT and North East Wales MRT, all supported by the Search Dog at SARDA. Find out more at [nwmra.org](http://nwmra.org)

### Accommodation

Often the most popular accommodation for hillwalkers and mountaineers is camping and there are loads of campsites all over the national park. These can vary from a farmer's field with a basic toilet and a tap, all the way through to large campsites with outstanding facilities. In general, most campsites are happy for you to turn up on spec on anything other than a bank holiday.

[ukclimbing.com/listings/accommodation/](http://ukclimbing.com/listings/accommodation/)

### Snowdon Area Camping

**Nant Peris Campsites** (p.110) - Two campsites opposite the Vaynol Arms.

**Llanberis Camping** (p.110) - Well placed for Llanberis paths - [campinginllanberis.com](http://campinginllanberis.com)

**Llyn Gwynant Campsite** (p.87) - Near the start of the Watkin Path - [gwynant.com](http://gwynant.com)

**Snowdonia Parc Campsite** - Waunfawr next to Snowdonia Parc pub - [snowdonia-park.co.uk](http://snowdonia-park.co.uk)

### Ogwen Area Camping

**Gwern Gof Uchaf** (p.134) - Below Tryfan.

**Gwern Gof Isaf** (p.211) - Close to Tryfan.

**Capel Curig** (p.214) - Two sites near A5.

### Southern Snowdonia Camping

**Cwm Bychan** (p.253) - The farm allows overnight parking and may allow camping.

**Cadair Idris** (p.259) - Two sites near the parking to the south of Cadair Idris.

### Hostels and Bunk Houses

There are many hostels and bunkhouses in Snowdonia.

[yha.org.uk](http://yha.org.uk)  
[independenthostels.co.uk](http://independenthostels.co.uk)

**Ben's Bunk House, Llanberis** (p.110)

- [bensbunkhouse.co.uk](http://bensbunkhouse.co.uk)

**Crashpad Lodges, Llanberis** (p.110)

- [crashpadlodges.com](http://crashpadlodges.com)

**Pete's Eats Bunkhouse, Llanberis**

- [petes-eats.co.uk](http://petes-eats.co.uk)

**Jesse James Bunkhouse, Penisarwaun**

- [jessejamesbunkhouse.co.uk](http://jessejamesbunkhouse.co.uk)

**Lodge Dinorwig** (p.114)

- [lodge-dinorwig.co.uk](http://lodge-dinorwig.co.uk)

**Ogwen Bunkhouse, Ogwen** (p.187)

- [ogwenvalleybunkhouse.co.uk](http://ogwenvalleybunkhouse.co.uk)

### Holiday Rentals

There are many rental properties in Snowdonia which work out at a reasonable cost if bringing your whole family or a group of friends. Search 'Holiday Rentals Snowdonia'.

### Pubs

There are many pubs across Snowdonia. Some favourites are listed below but there are others. **Snowdonia Parc, Waunfawr** - A nice pub with its own micro-brewery and good pub grub.

**Gallt y Glyn, Llanberis** - West of Llanberis.

Home to the famous Pizza and Pint.

**The Heights, Llanberis** - Not the climbing centre it used to be but still a good pub.

**The Gwynedd, Llanberis** - A nice quiet pub with a pool table.

**Padarn Lake, Llanberis** - Restaurant and sports bar.

**Vaynol Arm, Nant Peris** - Good beer, pub grub and a pool table. Can get busy.

**Pen y Gwryd, Llanberis Pass** - A bar steeped in mountaineering history.

**Saracen Head, Beddgelert** - Modernised bar in the village.

**Cwellyn Arms, Rhyd Ddu** - A good selection of beers and nice food.

**Plas y Brenin, Capel Curig** - Open to the public. Can get busy.

**Tyn y Coed, Capel Curig** - On the A5 between Capel and Betws-y-Coed.

**The Stables, Betws-y-Coed** - Busy in the summer.

### Cafes

There are hundreds of cafes in Snowdonia and you are never very far from coffee and cake at the start or end of your walk.

**Pete's Eats, Llanberis** - Well known outdoor cafe. Old school 'greasy spoon' food.

**Mafon, Llanberis** - A lovely small cafe with a modern healthy menu and excellent cake.

**Georgio's Ice Cream, Llanberis** - A proper ice cream parlour.

**The Pantry, Llanberis** - Small cafe attached to an outdoor shop.

**Lodge, Dinorwig** - A great cafe close to the Dinorwig Slate Quarries.

**Cafe Siabod, Capel Curig** - An amazing cafe with good food and cake. Massive scones.

**Alpine Cafe, Betws y Coed** - Monkey-themed cafe with a mind-blowing selection of cakes.

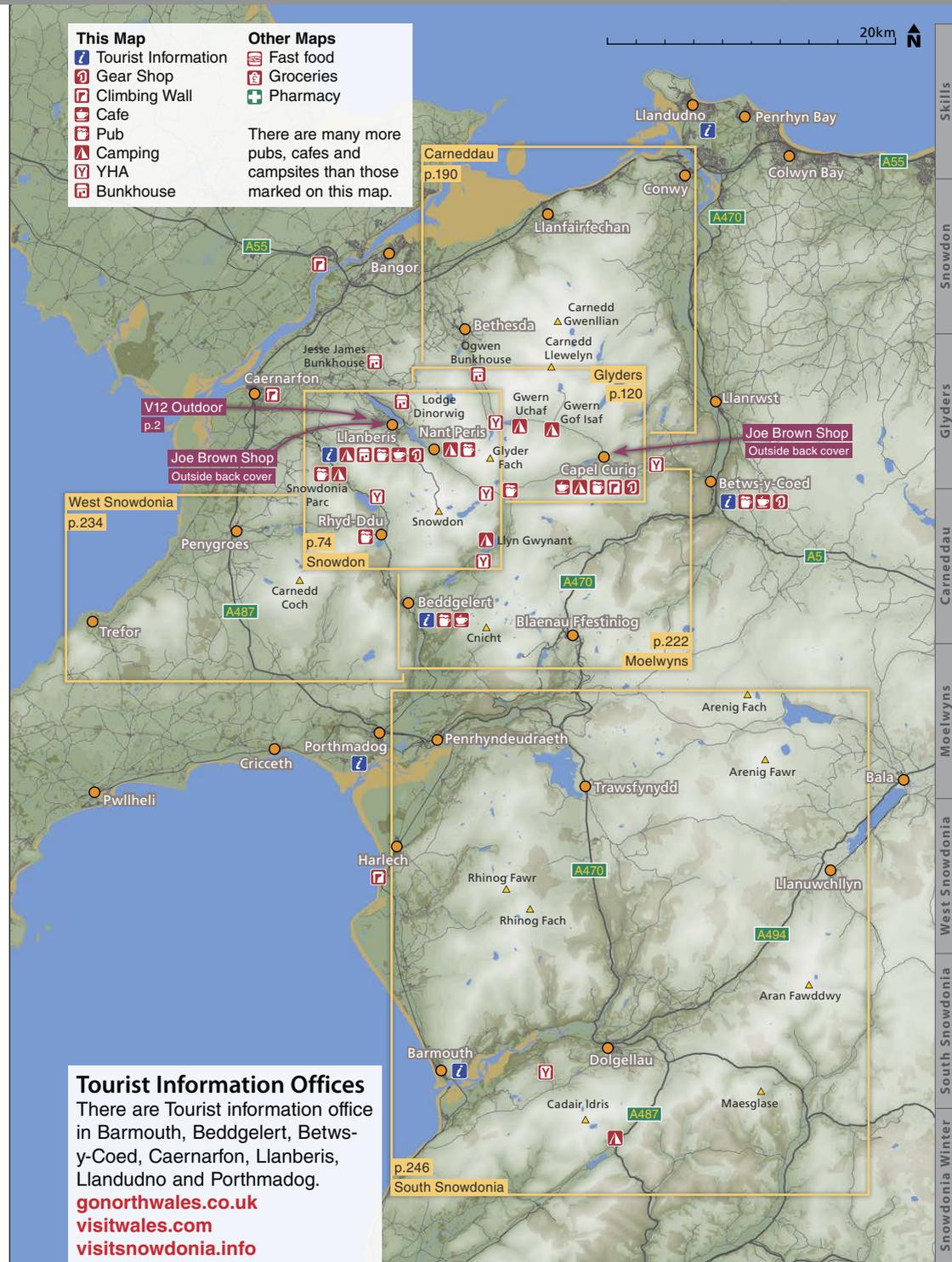
#### This Map

- Tourist Information
- Gear Shop
- Climbing Wall
- Cafe
- Pub
- Camping
- YHA
- Bunkhouse

#### Other Maps

- Fast food
- Groceries
- Pharmacy

There are many more pubs, cafes and campsites than those marked on this map.



#### Tourist Information Offices

There are Tourist information office in Barmouth, Beddgelert, Betws-y-Coed, Caernarfon, Llanberis, Llandudno and Porthmadog.

[gonorthwales.co.uk](http://gonorthwales.co.uk)  
[visitwales.com](http://visitwales.com)  
[visitsnowdonia.info](http://visitsnowdonia.info)

**Outdoor Shops** 

There are many outdoor shops in the Snowdonia Area. If you are looking for specialist equipment then we recommend one of the following:

**Joe Brown Shop**

Menai Hall, High St, Llanberis.  
Tel: 01286 870327

**climbers-shop.com**

Specialist outdoor shop with large range of clothing, walking and climbing gear.  
*See outside back cover*

**V12 Outdoor**

The Old Baptist Chapel, High St, Llanberis.  
Tel: 01286 871534

**V12outdoor.com**

Specialist outdoor shop with large range of clothing, walking and climbing gear.  
*See page 2*

**Joe Brown Shop**

Capel Curig, Betws-y-Coed.  
Tel: 01690 720205

**climbers-shop.com**

Specialist outdoor shop with large range of clothing, walking and climbing gear.  
*See outside back cover*

**Trekitt**

51 Eign Gate, Hereford.  
Tel: 01432 263335

**trekitt.co.uk**

Outside Snowdonia but a great web shop.  
*See inside front cover*

More shops listed at -  
**[ukclimbing.com/listings/outdoor\\_shops/](http://ukclimbing.com/listings/outdoor_shops/)**

**Climbing Walls** 

A great place to get started with climbing technique is a climbing wall and there are a number of good options in the Snowdonia area.

**Beacon Climbing Wall, Caernarfon**

Large dedicated climbing centre.

**[beaconclimbing.com](http://beaconclimbing.com)**

**The Indy Climbing Wall, Llanfairpwllgwyngyll**

Specialist bouldering wall.

**[indyclimbingwall.co.uk](http://indyclimbingwall.co.uk)**

**Plas y Brenin, Capel Curig**

National Mountain Centre with extensive walls.

**[pyb.co.uk](http://pyb.co.uk)**

**Guides and Instructors**

If you are looking for guiding or instruction to introduce you safely to scrambling at any level, you are advised to consider employing a member of the Association of Mountaineering Instructors - **[ami.org.uk](http://ami.org.uk)**. The AMI manages the ongoing competency and continuing professional development of MCI (Mountaineering and Climbing Instructor) and WMCI (WinterMCI) trained and assessed instructors. You will find members across all the mountainous regions of the UK. Hiring a local guide means you will get someone with local knowledge of the routes and conditions. Expect to pay upwards of £200 for a day's guiding.

**Mark Reeves**

**Snowdonia Mountain Guides**

Tel: 07872 565225

**[snowdoniamountainguides.com](http://snowdoniamountainguides.com)**

*See page 11*

**Orange Mountaineering**

Tel: 07980 747804

**[orange-mountaineering.com](http://orange-mountaineering.com)**

*See opposite*

**Head On Out**

Tel: 07952 176029

**[headonout.co.uk](http://headonout.co.uk)**

*See page 9*

**Rob Johnson - [expeditionguide.com](http://expeditionguide.com)**

**Rich Bale - [snowdoniawalkingandclimbing.co.uk](http://snowdoniawalkingandclimbing.co.uk)**

**Olly Sanders - [rockandseadventures.co.uk](http://rockandseadventures.co.uk)**

**Bryn Williams - [bwmountaineering.com](http://bwmountaineering.com)**

**Jez Brown - [JBmountainskills.co.uk](http://JBmountainskills.co.uk)**

**Luca Celano - [LucaCelano.com](http://LucaCelano.com)**

**Guy Steven - [moelwynmountaineering.com](http://moelwynmountaineering.com)**

**Alex Riley - [moelwynmountaineering.com](http://moelwynmountaineering.com)**

**Jack Thompson - [Inspiredguides.co.uk](http://Inspiredguides.co.uk)**

**Stuart Lade - [mountainindependence.co.uk](http://mountainindependence.co.uk)**

**Alex Kay - [alexanderkay.co.uk](http://alexanderkay.co.uk)**

**Rachel Crewesmith - [rachcrewe.com](http://rachcrewe.com)**

**Tom Ripley - [tomripleyguiding.com](http://tomripleyguiding.com)**

We have recommended a few local guides. Check **[UKHillwalking.com/listings/instructors+guides/](http://UKHillwalking.com/listings/instructors+guides/)** which lists 60 living within 20km of Llanberis.



**Climbing | Hillwalking | Mountaineering**

Snowdonia based, courses & experiences, summer & winter

[www.orange-mountaineering.com](http://www.orange-mountaineering.com)



# Snowdonia Gear



A lone scrambler enjoys the exposed arete on *y Gribin* (1) - [p.169](#) - on Glyder Fawr. Photo: Karl Midlane

## Clothing

There is no such thing as inappropriate weather, just inappropriate clothing! Being properly prepared for the hill first means having the right clothing. There are seasonal variations but some items are essential in any conditions.

Check the big database of reviews at

[UKClimbing.com/gear/](http://UKClimbing.com/gear/)

## Layered Clothing

Layered clothing means that you have a thin layer close to your body that wicks away sweat, followed by some warmer, often fleece layers before you work up to a hard shell (waterproof jacket) or a soft shell (windproof jacket).

## Base Layers

Base layers come in polyester-type man-made fabrics that are warm or natural fibres like Merino wool. The latter is often more expensive but less likely to become smelly. Man-made fabrics do a decent job, but they are made from plastic and do contribute to micro-plastic pollution.

Base layers can be long or short sleeved, with the latter probably better for scrambling and the former for walking. Leggings come in the same choice of fabrics. They are less essential except in winter as much of the rest of the time you will find them too warm when walking or scrambling.



There are base/mid-layer options these days like this fleece.

## Mid-Layer (Fleece)

A fleece top is the standard mid-layer. The top brand versions can cost £100 or more. Cheaper options can be picked up from many different shops and will do a decent job. Unfortunately most fleece tops also contribute to micro-plastic pollution which is becoming an important consideration.



A solid hard shell is an essential addition to any kit list.

## Waterproof Jacket (Hard Shell)

A good waterproof jacket is essential not just for keeping you dry, but also as a windproof. If the weather turns rough then you can't afford to be without one.

There are many options ranging from very expensive top brand heavy mountain shell jackets, to lightweight cheap and cheerful options. Breathable fabrics are available but these also come at a price premium. In terms of features, deep map pockets are worth having, as are hand pockets. A helmet-compatible hood is important if scrambling but make sure it fits well without a helmet. With jackets you get what you pay for, although the price variation is huge. It is questionable whether a £500 jacket is in fact ten times better than a £50 jacket - it certainly won't last ten times longer. However, the top quality clothing is generally well made and has good features that often makes it worth the premium price if you can afford it.

## Windproof Jackets (Soft Shell)

These are great if the weather is windy and cold but not raining. They are much more breathable than a waterproof, allowing you to work at a higher rate of exertion without sweat building up. A lightweight waterproof also fits into this category, but be aware that the super light fabrics many top brands use are not very hard wearing, especially when scrambling.

## Trousers

For the legs a pair of lightweight trousers made from man-made fibres are advised - these will dry quickly after rain. Often these will have a tight weave and will be pretty resistant to the wind. Shorts are fine for the summer providing you have options should the weather turn. In winter, hard shell trousers are essential. As with jackets the price range is huge without necessarily the same range in quality.



Proper hard shell over-trousers with full length zips.

## Down or Synthetic Jacket

Warm jackets are not essential all year round but is a sensible addition to your rucksack away from the summer months. Although heavier overall for the same warmth, synthetic versions tend to be less expensive and still function when wet. Down feels great but budget options will have poor quality down and the fill pressure much less than the big brands (and unlikely to be ethically sourced). Most importantly down doesn't function well when wet.

## Hat

Whether it is summer or winter a good hat can help make your day more pleasurable. Take a warm hat for most of the year and a wide-brimmed summer hat for sun protection in the warmer months.



Gloves for cold weather but not full winter use.

## Gloves

Although you won't always wear gloves they are important at the colder times of the year and in case the weather turns. Fleece gloves are warm but they are not good in the wind or with ropes, so tougher windproof options are advised. For scrambling you need gloves with good leather palms and fingers to help with rope handling and climbing. As with other items, there is a large range in price. Cheaper options are worth considering since you are likely to wear them out more quickly when scrambling. Wherever you buy them, take the time to get the right size.

## Socks

That pair of 'outdoor' socks your mum brought you for Christmas really won't cut it in the long run and good quality socks are a relatively cheap investment that you won't regret. The best option is correctly-sized wool socks that are appropriate for the level of activity you are going to do. This is a case where it is worth going for the better brands since they simply last longer for the price.

## Footwear

Good footwear is of paramount importance when mountain walking or scrambling. You need something solid that gives you the support you need, keeps you dry but also gives you grip and flexibility on different terrains. The best option for scrambling is not always the best option for walking; sometimes a compromise needs to be made since you will seldom take two pairs of footwear unless actually rock climbing.



A quality B1 walking boot.

### Walking Boots (B0-B1)

For the mountain walks described in this book, walking boots are the best option. These days they are usually lightweight with leather or synthetic uppers and can come with a waterproof lining, although this makes them unpleasantly sweaty for some people. A high ankle gives more support for walking, or a three-quarter ankle gives flexibility on rough terrain and easy scrambling. The price can vary dramatically but the most important factor is fit so you must try on different pairs from different brands. Are they comfortable straight away? How do your toes feel on downward slopes? Is there pressure on the heel at any point? One brand will often be a better fit than another and this should dictate what boot is best for you.

### Approach Shoes

Approach shoes are made like walking boots but low cut like trainers. Some people like them since they offer flexibility and lightness. The trade off is that they lack support and the ability to stand on small edges, which can be crucial on harder climbing sections. As with walking boots, fit is key.

### Mountaineering Boots (B2-B3)

A mountaineering boot has a rigid insole so there is minimal flex in the sole of the boot. This can help you stand on small edges, but they are less comfortable for walking long distances. Modern lightweight alpine boots are an excellent compromise between solid mountaineering footwear but without the clumpy feel of a full-on winter boot. Where heavier mountaineering boots come into their own is in winter when you want to use crampons or in-step crampons. In Wales you can often get away without full winter mountaineering boots for the easy gullies and buttresses.



More substantial mountaineering boots.

### Rock Shoes

Rock shoes are advised for the rock climbs in this book. In this case you do need to carry them as an extra pair since you certainly don't want to approach and descend in them if you can avoid it. A basic comfortable flat rock shoe is all that is required, preferably a stiffer model than some of the super-soft versions that are available these days.

Once you have your clothes there are some other bits of gear that are extremely useful. **Climbing gear such as ropes and protection, is covered from p.50**



A good 35-40 litre rucksack.

### Rucksacks

The first essential piece of equipment is an appropriately sized rucksack to carry everything. A small 15-20 litre rucksack may be all you need for a short walk up a minor hill but Snowdonia is a little more demanding. A 35-40 litre rucksack is usually essential, especially in colder times of year or for longer walks. A pack without side pockets allows you to strap poles and bottles to the side, but it is personal preference as to what works for you and not advisable for harder scrambles. Most important is that the back system and hip belt fit well and allow you to take most of the weight on your hips rather than your shoulders. Back length is also important - too short and you won't use the hip belt properly, too long and you won't use the shoulder straps to their best effect. This is particularly important on more demanding days when you will need to carry more kit.

### Walking Poles

Walking poles help spread the effort between all four limbs on hills and also reduce the impact on your knees and hips when heading downhill. Two-section poles are fine when walking, but for scrambling, three-section is preferred since you can get them properly in your rucksack when not using them. The cheaper ones are made of aluminium, but you can also get stronger and lighter titanium or carbon fibre poles at a heavier price tag. The collapsing systems vary but most work fine - avoid screw-lock poles if you plan on using them in winter.

### Head Torches

Much of the walking and scrambling in Wales is close to the road but there are still times when you risk getting caught out by failing light. Having a head torch means that darkness should not stop you. Some head torches, aimed at the professional market, are like turning on a second sun and cost a small fortune. A simple head torch with an LED light will be more than enough to get most people off a hill in the dark.

### Drinking Systems

The simplest solution is a bottle. This can be a bottle of spring water bought from the local shop or something more substantial like a commercial drink bottle or bladder hydration system. In cold weather a small half litre flask will deliver hot tea, bovril or blackcurrant all day. It is important to take enough water but it is heavy. When hot, or on long walks, you will need as much as 2 litres per person which is 2kg of weight! Hydrating before you set off and when you get back can keep the weight down.

### Other Gear

It is always worth carrying a simple first aid kit including Compeed patches to catch blisters before they form. A whistle is also a good idea since it can be a great help to a rescue team in the last 100m in limited visibility.

## Maps

This book has very detailed maps for each walk which also cover the approaches and descents from the various scrambles and easy rock climbs. In good conditions these maps may be all you need, especially if the walk is popular, with well-marked paths. The vast majority of the time though it is strongly advised that you have access to more detailed mapping.

## Smartphone or Paper

Smartphone mapping provided through apps like Viewranger or the Ordnance Survey has some obvious advantages. You are almost certainly carrying and using your smartphone anyway, and the apps also give a precise GPS location which is a huge help in navigation. The disadvantage is that a smartphone has a battery life and is not waterproof. It also doesn't develop your navigation skills (p.32) which are essential for any serious hillwalker.

Paper maps don't run out of batteries and work when wet, but they are bulky and don't show you where you are with a little blue dot. We advise using a combination of both and strongly recommend that you carry a 1:25000 scale walking map with you on the majority of walks and scrambles in this book. Always buy waterproof maps since they only cost a little more and it is well worth the extra protection they offer.

**OS App** - This excellent app is relatively cheap and gives you annual access to mapping at 1:25000 level for the whole country. The only thing you have to be careful about is making sure you download the mapping tiles before you set off, otherwise it will not show you anything useful when out of 4G signal.

**OS 1:25000 Paper Maps** - These are the most detailed maps available. The maps in this book are based on the OS 1:25000 free mapping layer, but the OS versions have more details like walls and extra paths.

**Harvey's 1:25000 Paper Maps** - These have almost as much detail as OS maps.

## Compass

In order to properly navigate with your paper map you also need a dedicated compass - don't rely on the one on your smartphone. The Silva Type 4 has a long plate on the front for taking bearings and using as a magnifying glass. Of course a compass is only useful if you know how to use it so read our navigation section first - p.32.

## GPS Unit

A dedicated GPS unit is more reliable than your smartphone and the modern ones come with mapping software built in. The batteries tend to last longer and they are more robust but it is still recommended that you have a paper map as a back up.



## Map and Device Protection

You can get waterproof bags to protect maps and smartphones - these are a great idea. Most have loop neck cords which make quick viewing easier. Portable battery chargers are also a good idea since these don't take up much space, but can bring an empty battery back to life.

## Rescue Apps

There are a few apps like **Echo112** that can be a help if you need a rescue. In **Google Maps** you can tap on your blue dot location and 'Share' this easily via a text message or similar. These days the rescue teams have **SARLOC**, whereby they send you a text message and you click on the link and send your position back to them. However this still requires a working smartphone!

dmmclimbing.com

climb now  
work later

# without a shadow of a doubt



The Wall, #5  
East face Tryfan, North Wales  
© Jethro Kierman



## Shadow HMS

A large, yet lightweight, HMS carabiner with a short gate to maximise gate opening. Perfect for belaying. The deep and wide top basket can take three clove hitches.

# Snowdonia Hill Skills



A trainee mountain leader putting her navigation skills into practice Photo: Jez Brown

The weather in Snowdonia is highly changeable and, even in good visibility, you usually need good navigation skills to walk from the bottom of a mountain to the top without losing your way. In bad visibility, good navigation skills are essential. It is surprising how frequently an accident in the hills is caused by simple navigational errors that send a group or individual down a wrong turn. Good navigation skills keep us on the right track and help avoid incidents.

### What is Navigation?

Navigation is about using simple strategies to avoid getting lost by following your position on the ground with the map.

### Maps and Orientation

A map is a two-dimensional graphical representation of the 3D world, which can be confusing until you orientate it correctly. This can be done in two ways. The first is to orientate it to things you can see - is there a feature like a road, path, ridge, peak, lake or river you can orientate the map to? The second method is to use a compass. Orientating the map should be the first thing you do when you are navigating.



### The Five D's of Navigation

When planning navigation you should split your walk into short sections and plan these separately using the Five D's of navigation. The sections can be anything from a few hundred metres to around 1km. Any longer than that and it becomes increasingly difficult to remember.

#### 1) Description

Describe clearly where you want to get to and make sure you recognise it on the map. This helps identify it when you get there. This could be a clear feature like a lake, or a more vague feature like a rise in a ridge, or where a path crosses a stream. Make sure everyone in the team agrees.

#### 2) Direction

If your map is correctly orientated, and visibility is good, then you can simply point yourself in the direction indicated by the map. For more complex navigation take a compass bearing of where you are heading and follow your compass, checking it from time to time. This is especially important in terrain where the path is vague or nonexistent.

#### 3) Distance

A 1:25000 map has a 1km grid square on it. Distance can be approximated using this or measured more accurately using the roamer scale on the side of your compass. Also count the number of contour lines you cross to get there. These two figures help you reach a duration. If using a digital map you can easily measure distance using the route creation functions of the app. Once walking you need to keep a rough idea of the distance you have covered. In poor visibility it is worth counting your paces. You only count one foot (either your left or your right) so '1 step' = 2 actual paces. The average for 100m is around 64 steps, but it can range from low 50s to high 70s depending on your height and stride length.

#### 4) Duration

To walk on the flat takes time and to gain height takes additional time. Knowing how long it should take is a great help in working out when you get to your chosen navigation point. Naismith's Rule takes into account both horizontal distance and vertical height. There are many variations but the easiest is to work out your horizontal distance, then add 30 seconds for every 10m contour crossed, or 5 minutes for 100m height gain if calculating longer distances. There is a limit to how well this works and, on very steep terrain, the timings break down especially if you start scrambling which is generally a much slower procedure.



The tables below can be used to work out the duration of each section of your walk.

Horizontal distance	Walking speed			
	5 kph	4 kph	3 kph	2 kph
1km	12 min	15 min	20 min	30 min
500m	6 min	7.5 min	10 min	21 min
400m	5 min	6 min	8 min	12 min
300m	3 min	4.5 min	6 min	9 min
200m	2 min	3 min	4 min	6 min
100m	1 min	1.5 min	2 min	3 min

Time to cover distance

Add 30 seconds per 10m contour crossed

Add 5 min for 100m ascent

Add 5 min for 100m of very steep descent

-1 kph for heavy rucksack

Approximate walking speed for terrain	
5 kph	Very fit - good paths
4 kph	Reasonably fit - rough terrain
3 kph	Fit - rough terrain - light snow
1-2 kph	Unfit - very rough terrain - deep snow

#### Worked example

400m distance on rough terrain (3 kph) = 8 min  
 50m height gain = 2.5 min  
 Time to cover this distance = 10.5 min

#### 5) 'Da' Journey

The description of the journey is key in helping you get to your chosen destination along your chosen route. It is like a series of step-by-step instructions which you can tick off on the way as you pass them. It is a way of simplifying the route and helping you to both memorise and recall where you are heading. At each point you can reassess your description, direction and duration to find the next point you are heading for.

The next pages cover some of the strategies you can use to improve your navigation.

## Navigational Strategies

There are many navigation strategies and using the 5 D's could be considered one of them. However, there are a few more tricks and skills that will help you avoid getting lost.

## Tick-off Features

These are features you can identify on the map that you can tick off when you pass them. Features can be anything from a bend in the path, a wall, a stream, a bluff or a footbridge. If you can identify it on the map, you should be able to recognise it as you pass. Even contours can be used, like a steepening of the path or where the path goes diagonally across a hillside rather than straight up it. The scrambles and walks in this book are marked with some tick-off points corresponding to the descriptions.

## Thumbing/Marking The Map

It can be a good idea to mark off the features on the map as you pass them. This can be with a fingernail crease or a pencil marker.

## Handrails

Handrails are linear features which lead in the direction you are aiming. A good path is the most obvious handrail feature but rivers, valleys, gullies and ridges also work well.

## Catchment/Overshoot Features

A catchment feature is something that will stop you overshooting the point you are aiming for. This could be a steep drop or a rocky bluff. An overshoot feature is something that indicates you have passed a key point. These features can be a wall, a prominent junction, a lake, a summit or a simple change in angle. What it will do is stop you walking any further.

## Attack Points

An attack point is an easy, obvious and definitive point that you can aim for. Once there you can 'attack' a more complicated or vague position that is nearby. An example might be heading to below a huge cliff in order to find the narrow gully to the side of it.

### Tick-off Features

- 1 Go up grassy slope to bluff - *tick*
- 2 Follow broad grassy ridge - *handrail*
- 3 Reach steepening and pass on the right - *tick*
- 4 Go up ridge aiming for gully - *handrail*
- 5 Climb gully - *tick*
- 6 Follow easy-angled ridge - *handrail*
- 7 Reach summit - *tick*



## Contour Features

Understanding contours can help you easily identify the shape of the terrain around you. This is the absolute essence of safe decision making in mountainous terrain without obvious paths.

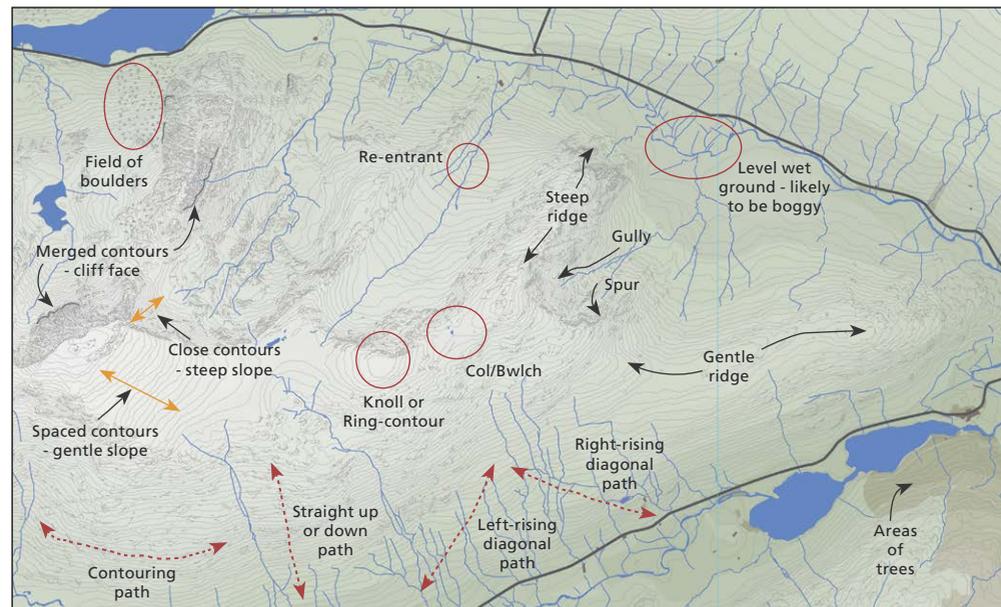
### Direction across a slope

The simplest way to use contour lines is to see what direction the path is taking across the hillside.

*Contouring paths* are parallel to the contour lines.

*Straight up or down paths* are perpendicular to the contour lines.

*Rising diagonal paths* cut through contours at a diagonal angle.



## Angle of Slope

Being able to identify subtle changes in angle is a useful skill since this can be used as an additional tick-off feature to help you identify your position on the map. Where contours are close together this means that the ground is steep. Where they are far apart it means that the ground is more level or gently sloping. Occasionally the terrain becomes so steep that the contours merge into one another. This indicates very steep terrain, or cliff faces, and the terrain may be scrambling or rock climbing.

## Ridge

A ridge is a long narrow feature where the contours form a V or U shape. They can be steep or flat, which you can also see from the contours. A spur is a smaller version that appears only on a few contours.

## Gully

A gully appears as an inverted ridge. It will have V or U shaped contours but the point will be uphill rather than downhill. Often gullies form the boundary of another feature. Spurs are often defined by having a gully on one or both sides. Usually gullies have streams running down them.

## Re-Entrant

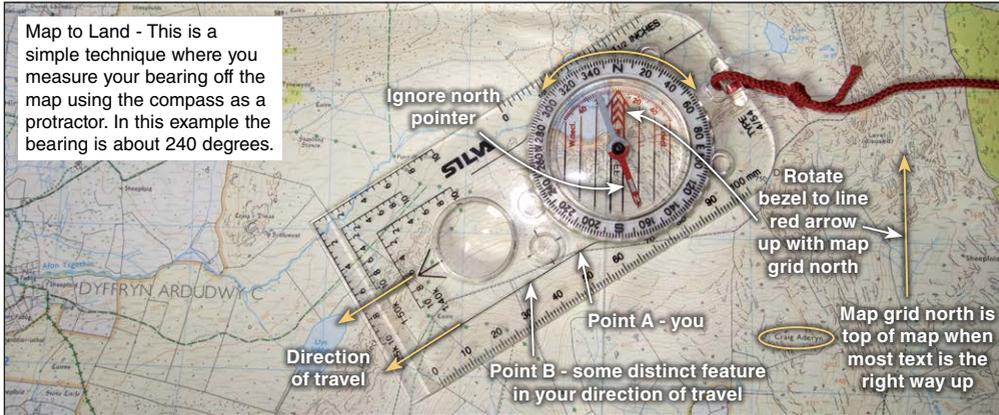
A re-entrant is a specific type of gully which is most commonly found on what would otherwise be an open hillside. A watercourse that has run down the hillside for thousands of years has slowly eroded a surprisingly deep trench that will probably still have a stream in it. These can be surprisingly difficult to cross.

## Knoll or Ring-contour

These are small circular rings in the contours, sometimes they are so small all you get is a single dot or spot height. They signify a little knoll or hillock.

## Col/Bwlch

Cols (or bwlchs in Snowdonia) are very important features for mountain walking. They are dips between peaks or ridges and can also be described as 'saddles' - like a horse's saddle. They often provide level ground where ridges and slopes meet and as such are frequently found on walks with path junctions, at the base of ridges or distinct points between two summits.



### Compass and Bearings

Taking a bearing is rarely needed in good visibility when the navigation techniques previously described are adequate. However, it is useful when visibility is poor or you need to double check your direction of travel with more accuracy on uniform terrain.

### Map to Land

Taking a bearing from the map to the land is a simple technique and you can forget about the bit of the compass that points north. The idea is that you measure the bearing off the map using the compass as a protractor. For this you need a Type 4 compass with a long base plate.

**Step 1** - Drop down on one knee and use your other knee as a makeshift table.

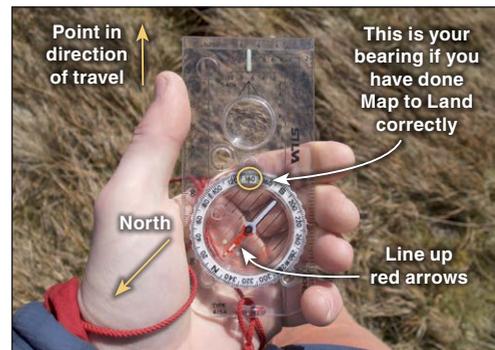
**Step 2** - Use the thin black line on the base plate of the compass to connect Point A, where you are and Point B, where you want to go on the map.

**Step 3** - Turn the bezel so that the red north arrow lines up with the north grid on the map. Make sure you line it up with the correct grid since it is easy to get this wrong. North is at the top when the text is mostly the right way up.

**Step 4** - Re-check that you are still lined up with point A and B and the black line as in step 2. If not repeat steps 2 and 3 until everything is in alignment.

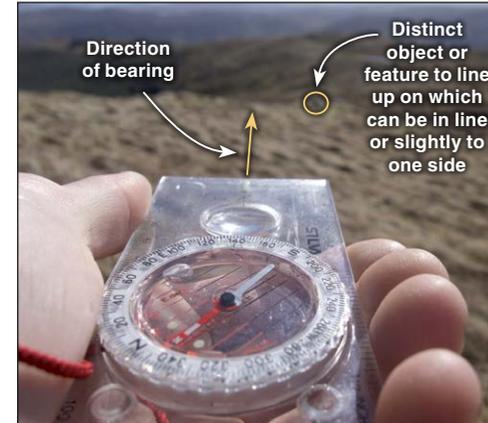
**Step 5** - Now read the bearing off the bezel lined up with your direction of travel.

**Step 6** - Check the bearing against what you observe and, if it lines up with Point B, you are ready to walk on the bearing.



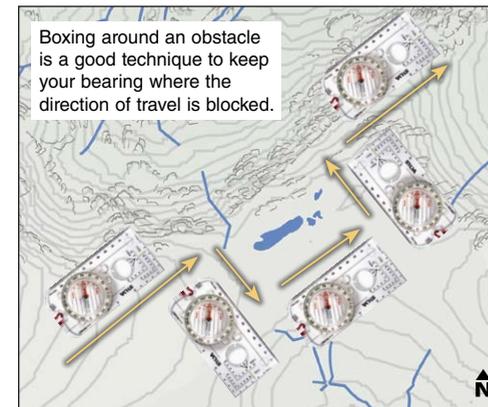
### Walking on a Bearing

Line the north pointer arrow up with the red north on the bezel and, keeping the compass flat, you should be looking down the direction of travel arrow. Choose a distinct object 20m to 50m away. This could be a rock, a tuft of grass, or anything you can identify on the bearing. Once you have walked to it, stand close and repeat until you get to the destination. It is tempting to choose something further away but this technique is far more accurate if done in short steps, especially over rough and uniform terrain where there isn't a path.



### Boxing Obstacles

When following a bearing you can come across an obstacle that blocks the direction you are heading in. If the obstacle is not very big you can take a few side-steps, perpendicular to the direction you are travelling, and continue along the bearing. If this is under 10 steps then it is often not necessary to side step back in the opposite direction once you have passed the obstacle.



If the obstacle is too large to side step then you need to box around it. To do this, take a bearing at right angles to your direction of travel. Before you worry about working out the maths of plus or minus 90 degrees, just line the compass pointer up with east or west rather than north and south.

### Land to Map

Occasionally we need to take a bearing from the land to the map. This may be to check the path you are walking is heading in the right direction in poor visibility, or taking a quick bearing on a destination as visibility is falling. To do this, take a bearing by lining up the north arrow on the bezel with the arrow that points north, whilst pointing the compass the direction of travel. It is then possible to line that bearing up on the map using the grid lines. You can then identify which direction you are heading on the map to check it.

### Relocation

The ability to relocate yourself on the map is one of the fundamental skills of navigation. This is one of the obvious advantages of digital mapping which uses GPS to display your location as a blue dot on the device screen.

Without using GPS, your first resort is to work out roughly where you think you are. This is easy if you have been thumbing the map, ticking off features or heading in a consistent direction at a consistent pace. If still unsure, identify features you can see and find them on the map in relation to yourself - a wall, a stream, a lake or small hillock. If these are widely spread then you may need to use simple triangulation. Take a bearing on the distinct features and line them up on the map. The point where these bearings intersect should be roughly close to your location.

In poor visibility, or blank terrain, you can use a technique called 'mapping the land'. Look N, S, E and W from your current location. What should the contours be doing 10m, 20m and 50m in each direction? Once you have 'mapped the land', compare it to the map around your approximate location. Does the land do what you predict? If it doesn't then can you see likely spots nearby. More often than not, this best guess cannot be confirmed until you move on to either a more defined location or, in the worst case scenario, you may need to backtrack to your last known point.

Skills  
Snowdon  
Glyders  
Carneddau  
Moelwyns  
West Snowdonia  
South Snowdonia  
Snowdonia Winter

Skills  
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Snowdonia Winter

Wild Camping means exactly that - camping in the wild. Placing a tent the other side of a wall by the road is not 'wild'. Technically any form of wild camping in Snowdonia is illegal, but if you set up a camp in a remote spot in the early evening, and leave early the following morning leaving no traces, then this is tolerated.

### Wild Camping Etiquette

Wild camping is an incredibly rewarding experience. Getting to watch the sunset or sunrise from a high mountain camp is a true delight. There are no hard and fast rules for wild camping except the general one of being considerate to other hill goers.

**1) Arrive Late and Leave Early** - Avoid leaving your tent up even if you want to spend two nights in the same spot.

**2) No Open Fires** - This can be dangerous and breaks the next rule anyway.

**3) Leave No Trace** - The only sign you have been there should be a slightly flattened patch of grass. Check [Int.org](http://Int.org)

**4) High and Remote** - Choose high and remote camping spots. If you want to camp in a valley then go to a campsite.

### Sanitation

Be mindful of your impact on the hills.

**Number Ones** - Ensure you are 50m away from water sources. Avoid focal points like behind walls or boulders that may offer cover but often become open cesspits.

**Number Twos** - Wherever you are in the mountains, ensure you are 50m away from any water source. Dig a hole at least 6 inches deep (a trowel is a useful piece of kit). If it is not tinder dry then you can burn your paper before burying everything. Put a small rock on top of the site. If it is too dry then pack out your toilet paper in a ziplock bag.

Having a basic understanding of mountain weather will allow you to plan your trip and stay safe when on the hill.

### Mountain Weather Forecast

The first port of call is checking the mountain weather forecast. The two most specific for Snowdonia are the Met Office Snowdonia Weather forecast and the MWIS Snowdonia forecast.

[metoffice.gov.uk](http://metoffice.gov.uk) - search 'Snowdonia'  
[mwis.org.uk](http://mwis.org.uk) - 'Snowdonia National Park'  
These are updated daily so check before and on the day. They give the weather expected at different altitudes on the mountain including visibility, wind and precipitation. They are very reliable but they do cover the whole area and are sometimes thrown by micro-climates.

### General Weather Forecasts

There are many useful weather apps, although these tend to only give the weather in the valleys. Using some simple techniques you can extrapolate the weather to where you are.

- 1) Double the wind speed for exposed tops and ridges.
- 2) Reduce the temperature by 0.5 to 1 degree for every 100m of ascent.
- 3) You can also assume that it will be wetter higher up than for a valley forecast. So if the forecast has Llanberis at 15 degrees, a 20 mph wind and light rain, assume that it will be nearer 5 degrees with winds approaching 40 mph and more persistent rain on the summit.

[bbc.co.uk/weather](http://bbc.co.uk/weather) - search for the nearest town  
[xcweather.co.uk](http://xcweather.co.uk) - good app version  
[yr.no](http://yr.no) - good app version

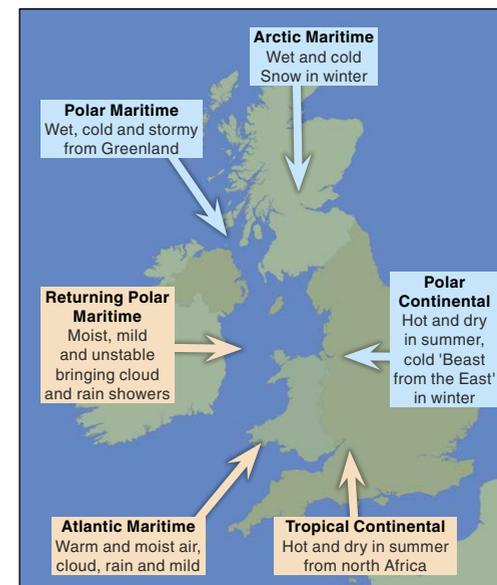
### Rain Radars

The arrival of rain can be predicted by using the rainfall radar on an app. This shows where rain is falling at any moment and you can get it to animate past and future to see how quickly a rain front is approaching.

In general you may need to use all of these services to get the best weather forecast, along with looking out of the window to see if what is actually happening matches up.

### Wind Direction

In general the wind direction is a reasonably reliable indicator of what kind of weather you can expect. From the ocean (the west) is wet, from the land (the east) is dry, from the north is cold, and from the south is warm.



### Local Micro-Climates

Anyone who spends a lot of time in Snowdonia knows that there can often be far better weather just outside the main mountain area. The mountains themselves create a rain shadow usually to the east or northeast of the wet weather coming in from the ocean. As the rain often drains from the clouds as it passes over the higher ground, as it descends to the warm air on the coast it simply runs out of moisture. Sometimes weather systems can pass over either the north or the south of the mountains and, with good planning, you can usually find somewhere that is at least sheltered from the worst of the wind or rain.

Wild camping high on Y Garn to capture the amazing sunset west over the edge of Snowdonia. Photo: Mike Hutton

**Keeping a Weather Eye**

A good rule once you are out is to keep an eye in the direction of the prevailing wind since this is where the weather will be coming to you from.

General weather forecasts may miss local variations. Spotting an isolated rain shower can give you time to find a bit of shelter or just get your waterproofs on before a deluge arrives. High cloud rolling in is almost always followed by lower cloud and that reaches the higher ground first. By spotting this early you can drop down or speed up your trip to avoid getting stuck in bad visibility.

**Weather Hazards**

The weather can bring many hazards and these can have serious consequences. Getting a forecast and interpreting it for your walk is about avoiding these hazards.

**Wind**

Wind is very significant in the hills. An exposed ridge like Crib Goch can be dangerous enough in the still conditions but strong winds make it a foolhardy route to attempt. When wet, windchill makes hypothermia a real issue.

**Fog and Cloud**

Hill fog and low cloud are very common, especially on the summits. In these conditions visibility can be down to 50m or less. Unless you are a very good navigator, it is easy to get disorientated. The walk or scramble you are on becomes important since you may still be able to follow a distinct path, or a gully scramble, but open areas with poor or nonexistent paths, or scrambles that follow less distinct features, are a different matter. Then you need to use your compass and map navigation skills. If you are in good visibility and see cloud or fog approaching, take immediate action to locate yourself on the map before you lose the bigger picture.

**Winter White Out**

Winter cloud and hill fog can create total white out conditions. These are the hardest to navigate in as you can lose perspective of up and down and you may walk over cliff edges or cornices. Blizzard conditions exacerbate a white out and make progress slow and even more dangerous. In general it is best avoiding this kind of weather if you can until you have plenty of experience.

**Lightning**

Lightning is an obvious hazard although with modern forecasting you should be alerted and alter your trip accordingly. Also, the mountains of Snowdonia are not as prone to thunder storms as alpine areas in the rest of Europe. An early start is usually the best way to avoid getting caught in a thunderstorm since they are usually late in the afternoons. If you are up high and see a flash of lightning, for every three seconds between the flash and the boom of thunder indicates the storm is one kilometre away. A bit of calculation can then indicate how long you have to find shelter.

**Heat Stroke**

Though heat waves are uncommon in Snowdonia, this can still be an issue and can be as serious as hypothermia when combined with dehydration. Plan ahead - early starts to miss the heat of the day in ascent, wear a hat and rest in shade if you can. Carry an extra litre of water or isotonic drink to replace your salts.

Photo: Jez Brown