



The mountains of Snowdonia are not high by international standards, and severe snow and ice conditions are rare, but nevertheless they should not be underestimated as they can be unforgiving for even the most experienced and well-prepared walkers. Severe weather conditions can set in in minutes (particularly given the proximity of the area to the coast) and navigation can be difficult at the best of times due to a scarcity of obvious paths and tracks.

Do not venture into the mountains unless you are fully equipped and prepared!

## Navigation



The ability to navigate accurately and efficiently in all conditions - particularly low visibility - and on all types of terrain is the single most important skill a hillwalker or mountaineer can possess. There is no mystique about good navigation (although it does take a little practice), and there are currently many recognised high quality Mountain Skills courses which teach navigation in an easy to understand way using qualified and experienced instructors. Despite this, many hillwalkers still take to the hills with inadequate map and compass skills, and navigational error remains the single greatest contributory factor to incidents resulting in Mountain Rescue callouts.



We do not encourage people to construct or add to cairns (piles of rocks which serve as rudimentary route markers). Not only do they look unsightly but they can encourage the ill-prepared and inexperienced to venture further into the mountains than may be wise, with a false sense of security. Instead, inexperienced walkers are encouraged to either learn to navigate on one of the recognised Mountain Skills courses mentioned above, or join one of the many excellent clubs in Ireland, which organise regular walks led by experienced walkers and mountaineers. Most clubs organise walks to suit all ability levels, and many also organise their own navigation training sessions.



For information on hillwalking clubs in Wales, and approved training courses, visit the BMC (British Mountaineering Council) website at <http://www.thebmc.co.uk>

Walkers should exercise extreme caution when navigating from the summit, particularly when visibility is poor. All parties should carry a **map** and **compass** and should include at least one competent navigator (ie. capable of consistent accurate navigation in darkness or white-out conditions) as part of the group.



## Route Planning

To get the most from your day in the mountains you will probably wish to spend some time in advance deciding on the most suitable route. Factors to be considered include:

- Distance and height gain of route, and time required for completion.
- Amount of daylight available and estimated time of return.
- Size, fitness and experience of group.
- Nature of the terrain, and possible conditions underfoot (eg. ice).
- Possible escape routes.
- Weather forecast, and poor weather alternatives.



You may or may not wish to prepare a detailed route card, but at the very least you should let someone know your intended route and your estimated time of return. Do not forget to notify this person of your safe return! If you leave word of your intended route, it also goes without saying that you should stick to your plan, unless, of course, you feel that this will place you or your party at risk.



When selecting the best route line during your walk there are many obvious dangers to be avoided,



such as clifftops in windy weather and icy slopes, however you should also be conscious of less obvious hazards. This includes such things as grassy slopes and lichen covered rock slabs, which may look innocent, but which can be every bit as dangerous as the more obvious hazards, particularly in wet weather. It is a good idea to get into the habit of asking yourself how great are the chances of a slip, and what the likely consequences of that slip might be. Remember that a simple slip is the cause of a large proportion of serious mountain accidents.



If you are on a slope where rocks could potentially be dislodged, keep your group bunched tightly together so that any dislodged rocks do not have the opportunity to build momentum, but can be stopped immediately by the person behind. Be particularly aware of the danger you may pose to other groups below you, and of the danger you may be facing from careless groups above you. If a rock is accidentally dislodged, the standard procedure is to shout "Below!" as a warning to all others.

## Equipment

As a general rule of thumb you should always pack with the assumption that you may end up having to stay out after dark, even if it is through no fault of your own (for example you may be required to help another walker in distress). Try to be an asset and not a burden to any group that you are a part of. A minimum list of equipment to carry on a day's hillwalk includes the following:



- Waterproof jacket and leggings
- Quality walking boots
- Plenty of warm clothing (nylon or fleece, but not cotton)
- Hat and gloves
- Map and compass (and the ability to use them!)
- Food and fluids (and spare food!)
- Survival bag
- First aid kit (including pencil and waterproof paper if possible)
- Torch (+ spare battery and bulb)
- Whistle
- Rucksack



Other items to consider include sleeping bag, emergency shelter, walking rope, ice axe and crampons, walking pole, rucksack liner, gaiters, watch, sun cream and hat (we all live in hope!), binoculars, camera, penknife etc..



Mobile phones can be useful to carry, and there is no doubt that in some emergency situations they can save hours in calling for help, and can be extremely useful for enabling Mountain Rescue Teams to communicate directly with a party on the hill.



Be aware, however, that coverage in many mountainous areas is still poor and a signal may not always be possible. A sensible approach is to carry a phone but not to depend on it (ie. carry it with the assumption that it will not work, and view it as a bonus if it does). It should certainly not be viewed as a substitute for knowledge, experience and essential equipment. Remember the mountaineering ethic of self-reliance, and please don't call out a Mountain Rescue team prematurely.

## Walking Alone

Many experienced walkers enjoy heading alone into the mountains, and the extra challenge and rewards that this activity can bring.

Intending solo walkers should be fully aware of the unforgiving nature of what they are undertaking





however, and the full implications of the activity they have decided to embark upon.

As a solo walker your risk level is dramatically elevated and your margin for error decreases accordingly. Your full range of mountain skills must be first rate to allow for this and to minimise the chance of an unintended ending to your day. Even the most skilled and experienced walkers can have a simple accident (eg. broken ankle) and the seriousness of your situation increases considerably if you are on your own at the time of any mishap.



A graphic indication of the serious nature of solo walking is that three out of every four fatal mountain accidents attended by LLMRT in recent years have befallen solo walkers or walkers who had inadvertently become separated from the rest of their party at the time of their accident.

## Mountain Weather

Snowdonia's proximity to the coast means that the mountains here can sometimes experience storms of a ferocity seldom seen in many larger mountain ranges elsewhere.



Wind speed increases with height and can be one of the greatest dangers to hillwalkers, at times being strong enough to literally knock people off their feet. In these conditions the best advice is not to venture into the hills at all, but if you are caught out, rope your party together if you are carrying a walking rope, and try to descend as soon as practicable, avoiding precarious ground and cols (saddles) if possible.



Temperature decreases with altitude, at a rate of approximately 2-3°C per 300 metres height gained (known as the lapse rate). In reality, what this means for the mountaineer is that the temperature on the mountain tops may be as much as 10°C lower than that at the valley floors, and when increased windchill is taken into consideration, winter temperatures may fall as low as -20°C. These are severe conditions indeed, and require the best of equipment just to survive.



Precipitation on the other hand increases with altitude, and may be up to 300% greater than in neighbouring lowlands. Mountain rivers can become raging torrents extremely quickly, and what was crossable in the morning may not necessarily be crossable on your return in the evening. Drowning may not appear on most hillwalkers' lists of potential dangers but several hillwalkers have been drowned in the past, and it should be regarded as a very real danger - if in doubt, do not attempt to cross! Mist and cloud present obvious complications for navigation, and can appear surprisingly quickly in the mountains.



Severe lightning is rare in the Welsh hills, but nevertheless can occasionally present a danger to walkers. If caught out, conventional wisdom is to try to avoid summits, ridges, spurs, cave entrances and obvious danger spots such as trees. Descend as soon as you can, or sit on your rucksack on an open slope, particularly on a boulder field where the current may pass safely beneath you.

Winter conditions obviously present a full set of dangers of their own. Always use an ice axe and crampons (after learning how to use them correctly!), and do not venture out unless you are fully familiar with the additional risks posed (eg. cornices, avalanche danger etc.) and the ways to minimise them



Cold, wind and rain, combined with exhaustion, are the principle causes of hypothermia, therefore it is hardly surprising that hillwalkers and mountaineers are potentially at risk, given that these are the 'normal' conditions we find ourselves exposed to. The good news is that a little knowledge can go a long way in preventing, recognising and treating hypothermia, and there is no reason why it should become a major problem, providing that you take sensible precautions (particularly in relation to



clothing, food, fitness level, choice of route and awareness of weather implications).

Do, however, be aware of the hidden danger of mild hypothermia - that you may become mentally as well as physically lethargic, impairing your judgement and causing you to make poor decisions (eg. navigation). This has the potential to result in your situation rapidly spiralling out of control.

### When Things go Wrong!



Despite all the best preparations, mountains are hazardous and unforgiving, and accidents can happen. It is also possible that you may find yourself first on the scene of an accident involving another party.

### When things do go wrong, above all else Stay Calm! Think Clearly! Think Logically!

The initial time you spend assessing the situation is critical. If early decisions are rushed, you may regret them later. By it's nature, Mountain Rescue is a slow business, so do not be afraid to take as long as necessary to think your situation through and decide on the best course of action. Making the right decisions at this stage may well save time in the long run - There's no point in running if you're on the wrong road!



If a Mountain Rescue Team is to be called out, either use a mobile phone or try to send at least two competent walkers (carrying a written note) to raise the alarm. Whether phoning or sending messengers, the following information should be to hand: the nature of the problem, the number of people involved, the exact location (both with a 6-figure grid reference and a written description), and your intended course of action. Consider carrying a pre-prepared incident report form and casualty card on waterproof paper in your first aid kit, which can be filled in when needed.



To call a Mountain Rescue Team, dial 999 or 112 and ask for Mountain Rescue. The messengers may be required to wait by the phone for further instructions, and may be used to guide the Team to the exact location of the incident, so they should be the fittest group members if possible.



Be prepared for a long wait - comprised of the time it takes for your messengers to reach a phone, the team callout and assembly time, and the time required for the team to walk to your location with heavy equipment. You may decide that if there is a danger of hypothermia it is best to evacuate most of the party and leave a small group remaining with the casualty. You may also decide that it is necessary to move the casualty to a more sheltered or safer location (if so, ensure that someone will be on hand to guide the Team to your new location).

Consider how your group members or passers by can best be deployed, and how the equipment carried by the group can best be redistributed and utilised. Consider 'alternative' uses for the equipment you are carrying, for example camera flashes can be used to attract attention in the dark, a rope laid out along the ground will maximise your chances of being located in poor visibility, and a survival bag can be used for attracting attention. The standard distress signal is six sharp whistle blasts (or torch flashes) followed by a one minute silence, repeated.



Don't lose touch with common sense when coming to any decisions!

Finally, don't be put off by these page - most people will spent a lifetime in the mountains and never be involved in an accident. Do try and take on some of the points contained above however. Knowledge might not fit into a rucksack but it is the most important thing carried by any of us in the mountains - and what's more it doesn't weigh a thing!

*Happy Hillwalking!*

