

ISSUE 23 - AUTUMN 2001

£2.50

# SUMMIT

[www.thebmc.co.uk](http://www.thebmc.co.uk)

## Help!

Mountain First Aid

## Grigri

Dispelling The Myths

## Risk, Freedom & The Law

Who's To Blame?

## Comfort Zone

Mountain Fabrics

**UK MOUNTAIN TOURISM**

**AFRICAN ADVENTURES**

**ANCIENT SECRETS**

 **access 2002  
calendar**  
rock climbing in england & wales

**BRYCS FINAL • ACCESS CALENDAR • MOUNTAIN EXHIBITION • LEADERSHIP CHANGES**



# FOREWORD... SUMMIT VIGIL

When living in Edinburgh, in what is an almost forgotten past, I did a lot of mountaineering with Barry Smith who was a lecturer at what was then called the Dunfermline College of Physical Education. Like many academics Barry seemed to have a quotation to fit most situations. Wise words would be quoted from some philosopher on the influence of landscape, or a paradoxical line or two from Bob Dylan on human relationships, and if a quote could not be found to fit a particular climbing situation a few were created. One of my favorite lines was: never mind what the books say about essential equipment, for winter and alpine climbing always make sure to pack your sense of urgency (which I have found to be wise words indeed). I can't remember who said the price of freedom is eternal vigilance, but that is another quote that has always stuck with me.

Veteran mountaineer Alan Blackshaw seems to have been the president or chair of just about every important organisation or committee in the world of outdoor pursuits. Alan has spent a life-time being vigilant when it comes to protecting the freedoms and interests of climbers and hill walkers. Alan recently pointed out the seriousness of the gathering perception that open country will only become legally accessible as an outcome of the Countryside and Rights of Way Act; and he quoted the example of the June issue of *Camping and Caravanning* which suggests that access land will need to be mapped before it can be used, which is not the case. Though possibly well-intended, inaccurate statements about access rights will reinforce the very dangerous and false impression that walkers and climbers are trespassers rather than responsible lawful visitors to the countryside.

In Scotland by re-examining existing rights the draft bill for Land Reform creates the same threat of misinterpretation. Thankfully the access teams of the mountaineering councils are working to protect your freedoms and watchfully guard against unhelpful or threatening 'language creep'. However, we will all need to be vigilant as the mapping exercise for England and Wales gathers momentum, and the next steps are taken with access legislation in Scotland.

As everyone knows access and conservation is the most important programme for the mountaineering councils when it comes to protecting the freedom to enjoy climbing, hill walking and mountaineering. Also, as the impacts of foot and mouth disease outbreak showed, access to open countryside is vital for the tourism and rural economy. We all seem to agree on the rhetoric, and many hard working volunteers put very considerable amounts of time and expertise to support this vital work. But how big is the commitment to support this work with cash investment? In 2000 the total cost of all the BMC's access and conservation work was just over £180,000 and could have been much greater if the resources were available to fund more work. Just over half these costs were met by sponsorship, donations, service contracts and carried forward funds. Which means that less than half the cost was met from funds generated by the surplus from trading activities and from the modest surplus available after deducting all the costs from members' subscriptions.

To increase the efficiency of the funding mechanisms for specialist programmes is why the mountaineering councils and training boards have worked together to establish Mountain Services Ltd and the Access and Conservation Trust. Both these new initiatives will be launched this autumn and will increase our collective ability to raise funds through improved commercial activities and by attracting charitable donations and sponsorship. Creating the framework for these joint operations has also resulted in other opportunities to modernise structures and operations. Three key benefits have been the recognition to re-structure the representation of members in Wales, even closer liaison between councils on the operation of UK-wide specialist



Roger taking a rare moment to relax in Pakistan

programmes, and outline agreement for a new information and communication system that will benefit all the councils, training boards and provide much better services to members and greater support to volunteers.

The full implementation of the IT project (which should be complete by mid 2002) will enable members to obtain improved services more quickly, improve administration including better support for volunteers and staff, will create greater efficiency and cost reduction in the region of £52k per year, and will allow members to share information that will greatly encourage volunteering amongst the 55% of members who indicated a willingness to undertake voluntary work in the membership survey last year.

I hope all members will welcome the above as a firm commitment to improve efficiency to achieve the BMC's mission to promote your interests and deliver the agreed objectives and targets in the 2002 - 2005 Development Plan. Some may be surprised that at a time of such change and progress that I have taken the decision to stand down as General Secretary. However, a vital part of the re-structuring is reviewing the role of senior staff with the support of the other councils and training boards. Given the nature of my post and the role of the BMC, it would be inappropriate for me to be in a position of influence and remain a candidate during a process of review and re-appointment. Hence, I hope all will agree that after 12 years service to the BMC the end of the year it is a good time for me to seek new challenges and for new senior staff to be appointed to manage Mountain Services Ltd and lead the BMC team.

*Roger Payne*

General Secretary

Welcome to issue 23 of

# Summit

Summit is the membership magazine of the British Mountaineering Council. The BMC promotes the interests of climbers, hill walkers and mountaineers and the freedom to enjoy their activities. The primary work of the BMC is to:

**Negotiate** access improvements and promote cliff and mountain conservation.

**Promote** and advise on good practice, facilities, training and equipment.

**Support** events and specialist programmes including youth and excellence.

**Provide** services and information for members.

BMC, 177 - 179 Burton Road,  
Manchester M20 2BB

Tel: 0161 445 4747

Fax: 0161 445 4500

e-mail: members@thebmc.co.uk

www.thebmc.co.uk

## EDITORIAL

Contributions for Summit should be sent to Alex Messenger at the above address or summit@thebmc.co.uk. Every care is taken of materials sent for publication, however these are submitted at the sender's risk.

## PUBLISHING

Gill Wootton

Display Advertising

Lisa Undery

Classified

Paula Taylor & Lindsay Wilson

Tel: 01536 382500

Fax: 01536 382501

## PUBLISHED & PRINTED BY

GreenShires Publishing  
Telford Way, Kettering  
Northants, NN16 8UN  
Tel: 01536 382500

Neither the BMC nor GreenShires Publishing accept responsibility for information supplied in adverts. Readers are advised to take reasonable care when responding to adverts.

## RISK & RESPONSIBILITY

Readers of Summit are reminded that climbing, hill walking and mountaineering are activities with a danger of personal injury or death. Participants in these activities should be aware of and accept these risks and be responsible for their own actions and involvement. The BMC publishes a wide range of safety and good practice advice and provides training opportunities for members.

# CONTENTS

FEATURES REGULARS

## 4 News

Blair opens exhibition, FMD enquiries, Change of leadership, Festival of Climbing.

## 8 Access News

CRoW consultation, Lakes News, Crag updates.

## 34 Briefing

Latest events.



4 News

## 10 Welcome Home

Kim Howell discusses mountain tourism in the UK following FMD.

## 14 Risk, Freedom..

..and the law. How liable are you?

## 18 Comfort Zone

The state of the art in mountain clothing.

## 22 BRYCS 2001

Strong juniors at the final.

## 24 Ancient Secrets

How our playground was formed.



14 Risk, freedom & the law



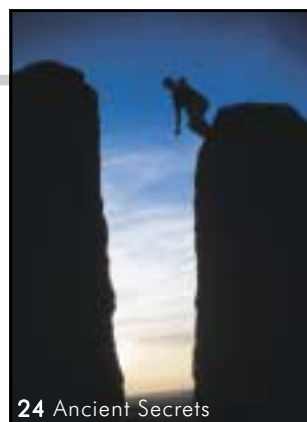
40 Forum

## 40 Forum

License to Climb - are you competent enough to climb indoors?

## 42 Arena

Club Awards, Area meetings.



24 Ancient Secrets

## 26 GriGri

Dispelling the myths.

## 30 Help

Mountain First Aid.

## 33 Rheged Update

And special book offer.

## 37 Travel Special

Africa, travel and adventure.

## 52 Last Thoughts

A day to remember.

2002 access 2002  
calendar  
rock climbing in england & wales

Cover: Leo Houlding on the Whipping Post, E7 7a, Reecastle, Lakes. Just one of the great images from the new Access Calendar. Credit: John Houlihan / Witness Photography.



## BMC FOOD CHAIN

We went to Annapurna in April, and enjoyed some excellent food all over Nepal, especially Momos. So we were very surprised to notice that you sell your own special brand, just off Durbar Square in Kathmandu. Are these available in the UK?, please let me know!

**Clive Graham**

## EXPEDITION SUCCESS

I have been instructed by Mr Nicholas Bullock to congratulate your organisation on your perceptive comments regarding the icefall below the appealing South face of Quitaraju, Peru. This fine mountaineering obstacle took a respectable seven and a half hours to negotiate leaving our party in a fine state to begin a swift dash to the summit. The face above in contrast took a mere two days without food, sleeping bags or water. I can report the climbing to be of the highest quality, entirely on ice and without respite, protection or belays that any Englishman would understand. The party amassed a fine total of 28 frostnipped digits and returned to BC to discover a traditional Peruvian cultural exchange had taken place in our absence. I'm sure second hand SLR, minidisc technology and trekking shoes are due to be a big growth sector to the local economy as long as such exchanges continue. Shall communicate further as soon as I have located alternative footwear.

**Alun Powell**

## CHINA SANCTION?

I read with surprise and regret the news in the last issue of the first UK/China climbing exchange. Given China's appalling human rights abuses in general and the atrocities visited on Tibet in particular it seems strange to sanction an official visit. I appreciate that the

general population are not to blame and may be missing out on the spirit of exchange prevalent amongst climbers but the Chinese government will see this visit as further acceptance of their regime by the West. Given that climbing writers (Heinrich Harrer, Audrey Salkeld, Joe Simpson) have done much to publicise the genocide in Tibet I had hoped that climbers would show better judgement than our businessmen who have embraced China with such gusto. On this evidence it seems not.

**Richard Blowes**

*We are very sensitive to the issue of Tibet and did take considerable advice before arranging the exchange. We found widespread support amongst the key organisations and indeed Free Tibet asked the group leader Lindsay Griffin to make representations to the CMA on their behalf, opposing suggestions that permission might be granted for an attempt on Kailash. Exchanges like this which include major public speaking engagements are a rare chance to forge a link. If the people of China don't realise how their occupation of Tibet is viewed by the world what internal pressure will there ever be for change?*

## UNHAPPY ABOUT FMD

BMC does stand for British Mountaineering Council doesn't it? If it wasn't for the fact that the middle letter is an M, I would have thought that I was a member of the British Farming Council. Throughout all this Foot and Mouth Business all I seem to have heard from the BMC is about how considerate we all must be towards farmers; how it is their livelihood which we mustn't threaten with our selfish pursuit of pleasure. How this is a golden opportunity for us all to show how responsible we are (in the main, haven't we already demonstrated that?) – that the Brownie points we gain will help us in future access negotiations. How we must all be patient etc. Now don't get me wrong. I do have some sympathy with some farmers but my point is that surely the BMC is there to represent and lobby for the interests of the outdoor community. Farmers have the NFU to fight their corner.

There has been a great deal of hardship amongst people whose work is associated with the outdoors, moreover there has almost certainly been hardship among some people who have been denied access to the countryside. 'Only' leisure perhaps, but leisure is arguably as important to our emotional and physical health as our income. So why hasn't the BMC been speaking out for the interests of the people it is supposed to represent? There continues to be the most ludicrous situations which go virtually unchallenged, e.g. the closure of Shipley Glen to climbers when sheep are walking all over the road which we also may freely walk on. The apparently absurd decision of the National Trust to close access to Brimham Rocks (this is land which is supposed to be held for the enjoyment of the public member, not the grazing of animals) when there is no case of the disease remotely near. The complete closure of entire counties to walkers and climbers where there hasn't been a single case of F&M. The list goes on and on. The way F&M has been dealt with is presented as necessary and sensible. Yet there is much about it that is certainly debatable if not deeply dubious and disturbing. I see no evidence that the BMC has attempted to support the interests of its members by entering this debate and challenging the decisions which have been made. The policy appears to have been one of appeasement in the hope of finding future favour in negotiations for access which should in any case be a right, not a privilege.

**Alan Brown**

## WRITE A LETTER AND WIN THIS BERGHAUS EXTREM SAC!

Come on, write in to Summit, with any news, views, or comments on the issue, and you could win this great Berghaus Extrem Climb 32l sac. This issue, the prize goes to Clive Graham, the Momo spotter, because Alan Brown sounded just a bit too angry. Next issue...it could be you.



## BMC Membership



Join the BMC today for a full range of benefits including: insurance, news, training events, Summit Magazine and, for under 18's, *gripped?* magazine. Just fill out this section & return it **FREE** to BMC, Member Services, FREEPOST MR9759, Manchester M20 7AD

**Membership Rates** (Tick your preferred option)

<input type="checkbox"/> Individual Member	£18.00	£9.00
<input type="checkbox"/> Individual Member with High/OTE magazine (delete as applicable)	£43.00	£34.00
<input type="checkbox"/> Individual Member with High and OTE magazine	£65.00	£56.00
<input type="checkbox"/> Family Membership*	£30.00	–
<input type="checkbox"/> Family Membership with High/OTE magazine (delete as applicable)	£55.00	–
<input type="checkbox"/> Family Membership with High and OTE magazine	£77.00	–

\* Family membership includes up to 2 adults and 3 children (under 18) living at the same address. Please supply all family names and dates of birth. Reduced membership fees for under 18s, full time students and the unemployed (please send proof of status) are listed above in red type. If living outside the UK please add £10 for each magazine subscription offer to cover the additional cost of postage.

Name: .....

Address: .....

.....Postcode .....

Date of Birth: ..... / ..... / .....

Card Number

.....

Card Type

VISA  SWITCH Expires ...../...../.....

AMERICAN EXPRESS Switch Issue no .....

Please make cheques payable to BMC



Tony Blair and George Band start their exhibition tour. Credit: Charlie Hedley

## Almost Royal

The Helly Hansen National Mountaineering Exhibition opens



The Queen was busy in Berwick on the day the Helly Hansen National Mountaineering Exhibition had its official opening so Tony Blair stepped up to do the honours instead. Arriving by helicopter with Cumbria Tourist Board Chief Executive Chris Collier he spent just under an hour touring the Exhibition (guided by George Band – the youngest member of the successful 1953 Everest exhibition) and unveiled a 4m x 5m painting

of Scafell by Julian Cooper. The Prime Minister declared the Exhibition to be 'fantastic' and '...not just an interesting exhibition of mountaineering [but] a slice of our own history as well.' The Helly Hansen National Mountaineering Exhibition is based at Rheged, Penrith, North Lakes. 01768 868000. [www.mountaineering.co.uk](http://www.mountaineering.co.uk).

### A Brief History...



A great new book illustrating the history of British mountaineering has now hit the shops. 'A Brief History of Mountaineering' by Colin Wells, is a brilliantly illustrated 128-page A4 book giving a lively overview of British Climbing and Mountaineering. See page 33 for more details and a special readers offer.

## FMD Recovery - Call for Climbers & Walkers to Support Rural Businesses

With the majority of the countryside and footpaths now re-opened and many rural businesses still reporting ongoing losses due to FMD - now is the time for climbers and walkers to get back to the hills and help rural areas to recover. The BMC calls on climbers, hill walkers and mountaineers to support local businesses as much as possible when vis-

iting the Lakes, Snowdonia, Yorkshire, Devon and other badly affected areas over the autumn and winter months. Every extra penny spent in areas affected by FMD will help local people to get over the crisis.

Here are a few ideas to be going on with:

**Support outdoor shops** in badly effected areas (the Outdoor Industries Associa-

tion reports £60m lost sales in the UK due to FMD!).

**When planning trips** away or staying in huts - do your food shopping at your destination rather than in your nearest supermarket.

**Consider using** local accommodation (campsites, B&Bs, bunkhouses etc) rather than making day trips to the hills.

**Support pubs** and petrol stations in rural areas.

## Foot and Mouth Latest Enquiries don't go far enough!

The Government has announced three independent inquiries into Foot and Mouth Disease (FMD) - but alas - no public inquiry. The three inquiries are a Policy Commission on Farming and Food which will investigate how a more sustainable and competitive farming industry can be created in England and reporting at the end of this year; a Royal Society Inquiry (reporting in Summer 2002) which will review scientific issues relating to the transmission, prevention and control (including vaccination) of FMD in Great Britain, and; a 'Lessons Learnt' Inquiry which will advise Government how to handle future outbreaks

of FMD. This final inquiry will get under way once FMD is under control and will report six months from then. The BMC does not feel that the planned inquiries go far enough and has written to the Dept of Environment, Food and Rural Affairs (DEFRA) calling for the inquiry to be made public and for an investigation of the scientific and legal justification for the blanket closure of Public Rights of Way and Access Land.

**Information on the remaining FMD access restrictions are still being updated on:**

[www.thebmc.co.uk/outdoor/access/fmd.asp](http://www.thebmc.co.uk/outdoor/access/fmd.asp)

## Kendal Film Festival '01

16-18th November

This year's line up is looking as good as ever. Thomas Huber is being flown over especially to give a lecture that will include the fascinating story of the long awaited second ascent of the Ogre. He joins an already strong lecture program of Doug Scott, Mick Fowler, Bu Bu, Jim Curran, Airlie Anderson, Johnny Dawes, Niall Grimes, Steve Razzetti, Bill O'Connor, Rab Anderson, plus BMC, MEF and Nick Estcourt Award expedition lectures. An IMAX film on the incredible journey of Shackleton, over two years in the making and including Reinhold Messner, Steven Venables and Conrad Anker will also be shown. The Festival also welcomes entries for this year's prestigious mountain photographic

competition. There are two categories: compete for the Eagle Creek LANDSCAPE prize and the Therm-a-Rest ACTION prize. Entry details can be found on the web site [mountainfilm.co.uk](http://mountainfilm.co.uk).

### Don't Miss Out

Kendal is the first film festival in the world to include IMAX and in partnership with the National Mountaineering Exhibition there are a limited number of special tickets available to include the IMAX Shackleton and Everest films, a meal and a tour of the Rheged Centre, Penrith at 6 pm on the Friday, Saturday or Sunday evening of the Festival for £12.50

Details and tickets from [www.mountainfilm.co.uk](http://www.mountainfilm.co.uk) or 01539 725760 / 725133

## New leadership and structures for 2002

Over the past two years important work has been carried out between the mountaineering councils and training boards on joint projects that create a unique opportunity to bring the mountaineering bodies even closer together. One of these opportunities is to review the role of senior staff in the light of new UK co-ordination of specialist programmes, the new representative structure for Wales, and the creation of joint bodies such as Mountain Services Ltd, and the Access and Conservation Trust. So that the review of the BMC General Secretary post can be carried out in a meaningful and open way, Roger Payne has decided to stand down and seek new challenges next year. By the end of the year Roger will have served the BMC for 12 years (six and a half of which as General Secretary). At this stage Roger is only just starting to consider options for the future but said:

"It has been a tremendous period of growth since joining the BMC in December 1989 and becoming General Secretary in July 1995; and an incredible privilege to build and lead the BMC staff team and to work with so many expert and loyal volunteers. I am enormously grateful for all the support I have enjoyed as General Secretary and congratulate all those I have worked with to make this growth possible. I would like to thank all the area and spe-

cialist committees, Management Committee, elected officers, colleagues in the office, and all those organisations and individuals who have helped or supported the BMC and my work as General Secretary. There is still a lot of work ahead to finalise the new structures and launch them at the Entre-Prises & BMC Festival of Climbing in December, and to the Outdoor Industries trade show in September. However, these events - plus the recent opening of the National Mountaineering Exhibition - create a fitting climax to current work, and the perfect launch pad for the new joint initiatives and the 2002 to 2005 development plan."

Also, in the autumn, there will be the appointment of the senior member of staff to manage the new Mountain Services operation. The appointment of new senior staff for 2002 will also coincide with the election next April of a new BMC President and at least two new Vice Presidents when Derek Walker, Crag Jones and Cathy Woodhead all complete their terms in office. The new BMC executive team and chief officer will have the responsibility to oversee the delivery of the 2002 to 2005 Development Plan and in 2003 start the vital review process for the development plan that follows.

## BMC Technical Conference 2001

This is an essential event for anyone involved in outdoor retail, trade or training as well as those who actively participate in outdoor sports. Specialist seminars, practical workshops and Q&A sessions will revolve around a variety of subjects including: **The grigri:** a study of some recent failures and advice on safe use. **Helmets:** explanation and results of recent testing programmes. **Care & Maintenance:** A general session covering all mountaineering and climbing gear

**Via Ferrata:** Advice on equipment and techniques for this increasingly popular activity. **Indoor / Outdoor:** Advice on making the transition and technical aspects of leader placed protection.

The conference will be held on the 3<sup>rd</sup> and 4<sup>th</sup> of November at Plas-y-Brenin, North Wales. Further information and registration forms can be obtained from the BMC Office or [www.thebmc.co.uk/safety.htm](http://www.thebmc.co.uk/safety.htm)

## The Entre-Prises and BMC Festival of Climbing

The Entre-Prises and BMC Festival of Climbing is taking place on 7-9th December 2001, at the NIA in Birmingham. This promises to be the biggest event in the UK for climbers, hill walkers, and mountaineers. As well as world-class competition action, and the usual array of pre-Christmas bargains, an entertaining and informative series of lectures and seminars is in the pipeline.

One special feature this year is the Voluntary Leader Conference, taking place on Friday 7<sup>th</sup> December. This is a welcome opportunity to look at the mechanisms for supporting both the young people and the voluntary leaders within youth organisations, particularly those interested in climbing, hill walking and mountaineering. The support given by climbing clubs, walls and youth organisations will be highlighted, as well as ways to enable them to work more closely together. This conference will be followed by a series of workshops sup-



Fun for all at Climb '99

ported by the BMC, UKMTB and other Training Boards.

If you or your organisation is involved with youth work in the outdoors, this is a great opportunity to discuss a range of important matters with the opinion leaders. Tickets for the Volunteer Leaders Conference will be on sale soon - check adverts in the outdoor press and at [www.thebmc.co.uk](http://www.thebmc.co.uk) for news of all Festival of Climbing events.

Tickets are now on sale for the Festival just call the hotline on **0870 909 4144**.

## New Access Calendar '02



As featured on the front cover of this issue, the BMC and Vertebrate Graphics have teamed up to present a stunning new calendar for 2002. The Access Calendar features 12 sensational images of rock climbing,

from mountain crags to hardcore bouldering, all taken by leading photographer John Houlihan. Proceeds from the sale go to the Access & Conservation Trust, whose work helps to ensure the continued freedom to visit crags, sea cliffs and mountain areas on public and private land throughout the UK. To order an advance copy at the special price of just £14.95, send a cheque payable to The BMC, 177 - 179 Burton Road, Manchester M20 2BB.

## New Future for Mountaineering in Wales? - Open Meeting Invitation

An open meeting is being held in South Wales on Sat 29 Sept to discuss the role of the new 'Mountaineering Council of Wales' which is being set up in 2002. The new Council will offer exciting opportunities to boost

the profile of climbing, hill walking and mountaineering in Wales - anyone with an interest is welcome to come along and have their say. Venue to be confirmed on [www.thebmc.co.uk](http://www.thebmc.co.uk)

## Dewhurst Resigns

After many years of supporting the British Competition Climbing Team Paul Dewhurst resigned as Team Manager in mid July. Paul has been an extremely hard working contributor to the competitions programme which, through the efforts of all concerned, has moved forward significantly during the past few years. The BMC would like to thank Paul for all of his hard work and commitment.

As part of the BMC's ongoing commitment to the Competition programme there will be a review of the organisational structure of the competitions programme and how the roles and responsibilities of the Competitions Committee, High Performance Steering Group, and Youth Advisory Panel integrate and complement each other. A meeting will be held at the BMC office on Thursday 27th September to discuss the programme, anyone interested in attending should contact Graeme at the BMC.

## Route Setting Course

The BMC are running another Competition Route Setting Course in early/mid October. Venue and date are to be confirmed but anyone interested should contact Graeme at the BMC. The course is open to those with route setting experience and the ability to climb and/or route-set to a minimum of F7b.

## Huts News

The BMC Huts List has been rejigged and it is now possible to do rolling updates. Any hut owning clubs can send updated details to the BMC office.

## Ski Mountaineering World Champs

The first ever Ski Mountaineering World Championship will be held on Jan 24th-27th, Serre Chevalier, France. This is an exciting new event, and if you think you could compete against the world's best ski-mountaineers, then do get in touch with the BMC office.

## Troll recalls helmets from the last three years

In response to some investigation by the BMC Equipment Investigation Panel, and in response to advice from the Technical Committee, Troll have initiated a recall of all fibreglass helmets produced from October 1997 to January 2001. A helmet of this type was found to offer a significantly lower level of protection than claimed (or required by the EN Standard for mountaineering helmets) for vertical energy absorption (i.e. an

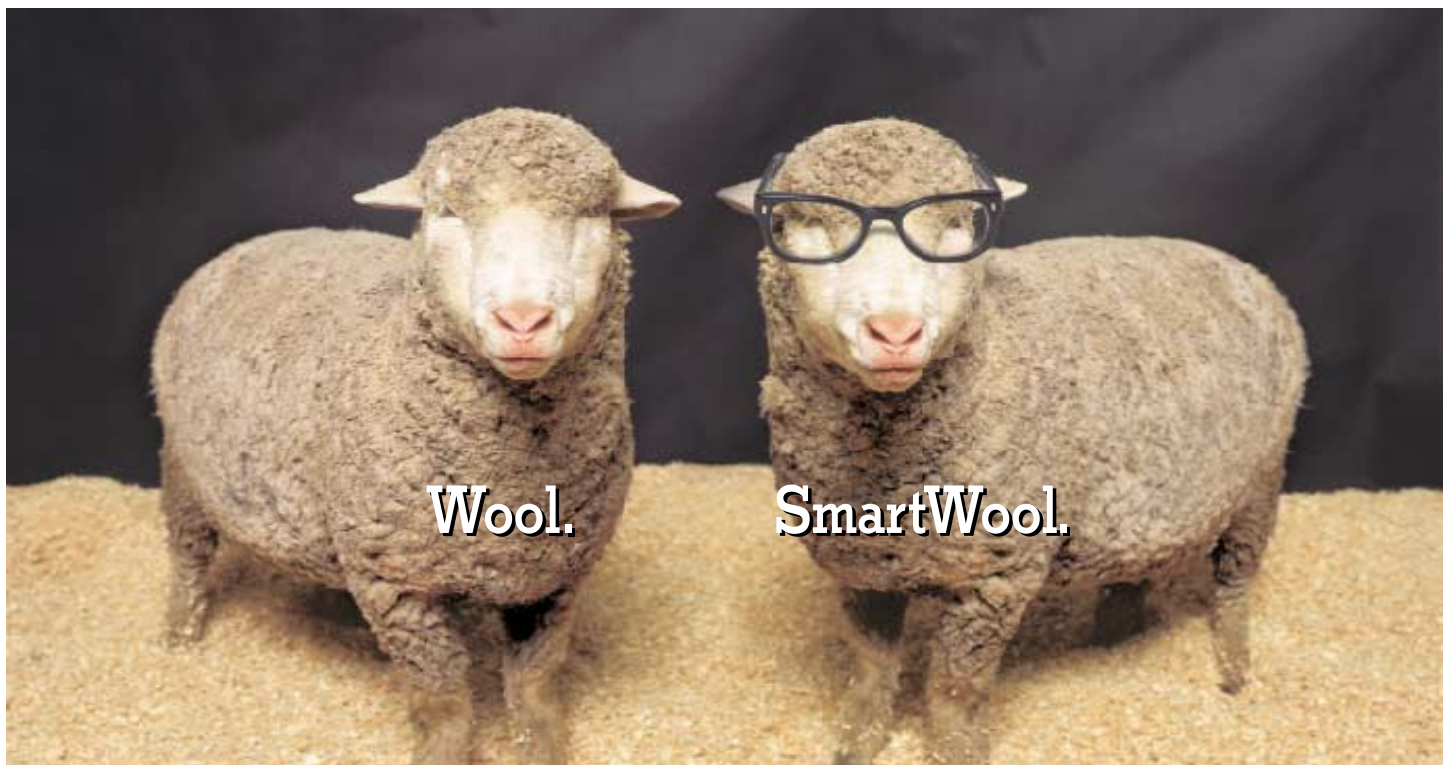
impact to the top of the helmet). The reason for this was some inconsistency in the distance between the helmet shell and the webbing cradle attaching it to the climbers head – in some cases the separation of the shell and cradle was insufficient to provide the level of protection required by the standard. Anyone owning one of these helmets should contact Troll directly on 01457 878822 or sales@troll-climbing.com for further advice.

## Legal Case

An interesting case was recently concluded at Blackpool County Court that has potentially important ramifications for defending some cases brought against climbing walls. The Judge upheld the value of the BMC Participation Statement and made some other important conclusions relating to the provision of matting. Further details are available from the BMC Climbing Walls Officer Graeme Alderson (graeme@thebmc.co.uk) or from the website.

## WMW Update

As featured in Summit 21, Women Mountains Words is a new forum for women who want to write about climbing. WMW have just published a booklet and are organising another workshop in Leeds, 13-14th October. For further details of this workshop, or the compilation, contact Judith Brown at judithbrown@compuserve.com.



JUST BECAUSE THEY CALL IT MERINO WOOL DOESN'T MEAN IT'S SMARTWOOL. SmartWool starts with the finest grade of 100% Merino, then adds "Smart Technology." That's what allows us to guarantee our products will not itch or shrink (or your money back), while giving you superior insulation, moisture control, and the best overall comfort. Don't let them pull the wool over your eyes. Make the smart choice – SmartWool.

For a dealer nearest you, call 0131 221 2200 or visit us at [www.smartwool.com](http://www.smartwool.com)

SMARTWOOL IS DISTRIBUTED IN THE UK & IRELAND EXCLUSIVELY BY FOOT LOGIC™



"About as close to sock perfection as you'll get"  
Backpacker Magazine, USA, Editor's Choice Awards







Stanage - Cut the crap!

## Stanage Plantation – cut the crap

Worries about sanitation at the Plantation have been reported. The water supply for the campsite is a spring which sources in the Plantation area so if you get caught short please bear this in mind. There are public toilets near the Plantation car park.

## CRoW Act: Consultation on Draft Maps

The mapping of open country and registered common land is now underway in England with the first Draft Maps due for publication in mid-November. The critical period for climbers and walkers is the three month consultation period following the publication of each Draft Map. Once complete, Draft Maps can be viewed in local Council Offices, the BMC office or on the website; [www.countryside.gov.uk/access/mapping/](http://www.countryside.gov.uk/access/mapping/). Consultation periods are shown below but please note there is a lot of overlap between areas, and parts of Yorkshire fall into Areas 2,4,5 & 8!

## Lakes News

The High Fells in the Lake District were opened by BMC patron Sir Chris Bonington, on a rather wet weekend in June. The opening was the culmination

of weeks of work by a team of people working against the odds to secure access. The re-gaining of access was preceded by a series of meetings with farmers in each of the areas to be opened. Representatives from MAFF, Cumbria County Council, the National Trust, the National Park Authority and the NFU, as well as many smaller bodies and individuals, worked tirelessly to consult and reassure farmers and landowners, gaining confidence within the local farming community to ensure unhindered re-opening. Further opening took place at the beginning of August and more is scheduled for mid-late August. The consultation and restrictions review process is continuing in the Lake District, with the Restrictions Review Team meeting on a regular basis to review the situation under DEFRA guidance.

The Lake District Mountain Liaison Group met, rather timely, two days prior to the opening of the Lakeland High Fells. The meeting, originally scheduled for May, had been postponed due to the severity of the Foot and Mouth Crisis in the Lake District. Peter Davies of the National Park Authority started the meeting by expressing the National Park Authority's and the National Trust's thanks to climbers and hill walkers for their responsible attitude during the Foot and Mouth crisis. So thanks to you all, your respect and responsible behaviour has not gone unnoticed. The BMC reciprocated the thanks acknowledging the hard work by the National Park and the National Trust, amongst others, to achieve the re-opening of the high fells.

## Windgather: belay erosion

The issue of erosion of belay placements at the top of Windgather will be discussed at the next Peak District area meeting on the 27th September. Placements can still be made for belays at the top of the crag. But what should be done to minimise the wear and tear on the rock to help preserve it for future enjoyment and use?

Please take care when making placements not to damage the rock. Hopefully with care the placements will last a lot longer than they otherwise may have done.

## Chee Dale: clean-up

Prior to the re-opening of Chee Dale for climbing after Foot and Mouth the tat and unnecessary iron mongery from Two Tier Buttress were cleared. Thanks to Ian and Claudie Dunn and Chris Addy who completed the work. The clean-up was done in consultation with Derbyshire Wildlife Trust who own and manage the dale. Please avoid leaving unnecessary colourful tat or iron mongery on routes.

## Stanage Forum

The final Forum meeting, which is open to all, was due to take place on Saturday 29 September. This meeting has been postponed and no new date has yet been set. If you would like more details, or have something you want to say about how you think the North Lees Estate should be managed for the next five or ten years – what you think about the parking, or how best to protect the wildlife – phone Matthew Croney and tell him. Matthew is the National Park Authority's Land Agent. His direct line is 01629 816351 or you can email him [mc@peakdistrict-npa.gov.uk](mailto:mc@peakdistrict-npa.gov.uk) or send a fax 01629 816310. This will be your last chance to have your own input to the new Management Plan.

## Peak Rock Fall

As well as the top pitch of Chicken Run parting company at Chee Dale over the winter, there have been several recent rock falls. These include two recent falls at Horse Shoe Quarry. In particular there has been a rock fall to the right of *Galening Crack* and there is a lot of loose rock on the right wing of the lower tier. At Millstone a large block has purposefully been tipped over the edge after it was reported as moving away from the surrounding soil - thanks to those who called in to warn of this. Apparently it required minimum effort to dislodge it completely!

## Brimham Rocks

During the Foot and Mouth Crisis the wardens took the opportunity to do some needed tree clearance work. 'Disinfected' local climbers spent a Sunday morning helping to clear brash from the site. The result has been a vast improvement for climbers in the Black Chipper and White Rose Flake areas giving the crag some much needed air and sunshine and the opportunity to dry out and become a bit less green. Thanks to all those who helped.

## CRoW: Draft Map Consultation Schedule

Mapping Area	Mapping Begins	Draft Map Published
1 South East	April 2001	Nov 2001
2 Peak, Lancs, Staffs	April 2001	Nov 2001
3 South (inc Dorset & Avon)	Nov 2001	June 2002
4 Cumbria/Pennines	Feb 2002	Sept 2002
5 North East	May 2002	Dec 2002
6 SW (Devon, Cornwall)	Aug 2002	Mar 2003
7 Midlands	Nov 2002	June 2003
8 East	Jan 2003	Aug 2003

Publication of Draft Maps is followed by three months public consultation

**For the latest access info on more than 600 crags in England and Wales - check out the Regional Access Database (RAD) on [www.thebmc.co.uk](http://www.thebmc.co.uk)**



# Welcome Home

## Supporting Mountain Tourism in the UK

By Dr Kim Howells, Parliamentary Under Secretary of State for Tourism, Broadcasting, Film and the Creative Industries.



Kim Howells, (2nd from left) on the Old Man of Coniston

**I**t was late June and a drenched interviewer held an umbrella over his cameraman as the rain fell like stair rods upon Coniston. Sir Christian Bonington, Roger Payne and I stood, the remains of our hair plastered to our heads, smiling like a trio of drowned rats, trying to convince the evening news audience that climbing the Old Man of Coniston was heavenly, even in a deluge.

Two weeks later, I stood with Wales's greatest mountaineer, Eric Jones, on the summit of Snowdon. It hadn't rained during our stroll up the Pyg Track but a dense mist had rolled in from the Irish Sea and obliterated sight of everything beyond the throng of amazed Snowdon Railway passengers and the long queue of climbers and walkers attracted to the newly re-opened paths to the summit.

Chris, Roger and Eric, between them, have wrestled with a fair percentage of the world's hardest mountain challenges. So, what makes them smile with undisguised delight on these relative pimples, straightforward one-thousand metre strolls, their summits crowded as often as not with mountain tourists? I know this much: theirs is not some kind of new affliction. At the very beginning of the nineteenth century, Lord Byron wrote, "I live not in myself, but I become / Portion of that around me; and to me / High mountains are a feeling, but the hum / Of human cities torture."

This longing to be in high, sometimes dangerous places is a primal urge in many of us. It helps fuel a huge outdoor equipment industry and contributes significantly to the 25,000 accommodation establishments of one sort or another throughout our countryside.

According to a 1995 Highlands and Islands Enterprise report, 500,000 mountaineers visited the Scottish hills every year, spending £34 million and sustaining 4000 local jobs. The numbers have almost certainly increased substantially since then. One estimate puts the number of jobs at over 6000 and a total spend approaching £180 million.

The British Tourist Authority (BTA) runs a successful, web-based, Walking Britain campaign. The site receives around 11000 visits per month and the BTA currently is putting together a walking map of Britain, highlighting 40 routes across all regions to be printed this coming October. Climbers as well as walkers will benefit because the map will signpost the website addresses for the British and Scottish Mountaineering Councils.

Despite these important advances, however, we still have a long way to go, as the Foot and Mouth crisis showed us only too clearly. We found ourselves without the means of accessing accurate information about which paths and

routes were open and which were not. Some of our communication chains remain primitive like, for example, those Tourist Information Offices that have no computer-based links with each other, let alone on-line access with the rest of the world via the web! As a consequence, many thousands of potential mountain tourists simply gave up the ghost and waited for an official confirmation that the crisis was over before they ventured back into our high places.

Compared to the concerns expressed on behalf of the farming lobby, the voices speaking up for mountain tourism were muted, despite the fact that climbers, walkers and visitors to the hills generate far more local employment and income than does farming.

Mountain tourism must find a voice. It can begin by reiterating a simple truth: there is not a single recorded instance of a walker or climber being responsible for spreading Foot and Mouth Disease (FMD). Walkers and climbers are likely to be well-informed; they read specialist publications, show a good understanding of environmental issues and high levels of personal responsibility for the continued well-being of the countryside in which they enjoy themselves and spend their hard-earned cash.

FMD has placed a spotlight on the mountain tourism industry. It has tested it as never before and highlighted tourism's great economic importance. When I had the temerity to urge the tourism industry, in the shadow of FMD, to build on its many strengths, improve staff training, communications, marketing and the quality of its product, I was howled at by the usual apologists for third-rate hotels, dismal caterers and service levels which make Fawley Towers look like a documentary.

The truth, of course, is that we have some superb accommodation in the mountains, ranging from Youth Hostels, through B&Bs to marvellous hotels, large and small. But we also have a long tail of under-performers in all of those categories. That is one reason why the Government encourages visitors to stay in establishments that are members of national quality assurance schemes – so minimising any chance of unpleasant surprises.

Hopefully, FMD has taught us that, in the 21<sup>st</sup> Century, tourists have the world at their feet. They will visit the mountains of Britain only for as long as they find them convenient, pleasurable and special. The lure of the Alps, Himalaya and Rockies has always been great. The difference now is that these formerly exotic locations are becoming increasingly accessible.

**That competition, looming beyond the runways at Heathrow, Gatwick and Manchester, must be the great driver that propels British mountain tourism into the new millennium.**







# RISK, FREEDOM

WHO'S TO BLAME?



Society has become increasingly risk averse and your freedom is under attack. For example, risk and perceived risk has been virtually removed from children's play areas to the point where they have become regulated padded gardens in which young people can no longer learn about risk taking and the consequence of making a mistake.

**F**ears about liability are thus preventing young people from learning about risk and the real law of gravity. Whatever your age, there is no getting away from the simple fact that climbing, hill walking and mountaineering are dangerous activities with a risk of personal injury or death. The freedom to face, assess and manage this risk, is one of the factors that attracts people to the sport.

As participants we assess and mitigate the risks, for example, by carrying adequate clothing and proper navigation equipment to avoid getting lost and hypothermic, or by using ropes or bouldering mats to reduce the consequences of a fall. We recognise and accept these risks every time we go to the hills or climb. Essentially we are performing a risk assessment before and during all our activities. In performing such an assessment we are analysing the risks and we take action according to the outcome of the assessment – in other words, we take the responsibility for our own actions based on an assessment of the likely dangers and outcomes of our activity. Sounds good, but what about the law and how does it affect our recreation?

### Our sport is not above the law

First, we have to remember that sport is not above the law and therefore neither are climbers or walkers. Secondly, the law is not static but changes to reflect society. For example, at one time it was not illegal to drive under the influence of alcohol, you did not need to wear a seat belt, and motorcyclists did not have to wear helmets; but society changed its view and so did the law. Hence, as society re-evaluates acceptable risk it seems we increasingly assume that somebody is to blame when an accident occurs. We are even encouraged by claims management organisations in their adverts telling us that “where there's blame there's a claim”. Obviously individuals need to be protected against the negligent acts of others, and when injury results, should be in some cases compensated. However, the culture of ‘an accident equals blame then claim’ is completely contrary to the ethos of personal responsibility and self reliance that would seem to be normal characteristics of a healthy society.

### Whose fault is it?

Another point to remember about the law is that it is about fault, about the consequences of actions (this is called the chain of causation) and if your actions have led to actual

(LEFT) Breaking the rules on the Isle of Wight, Credit: Ian Butler. (RIGHT) Warning sign, Skaha, Canada. Do we need signs like this all over our countryside?



damage to another it is possible that you are at fault and then you may be liable. Luckily it is not as simple as that and there are all sorts of questions to be satisfied before you start to panic. For a successful claim to be made for negligence the claimant has to demonstrate firstly that a duty of care was owed, that the duty of care has been breached, and that actual damage or loss have been sustained as a result of that breach of duty of care. One of the first defences is the BMC Participation Statement; an experienced climber would find it hard to show that he/she is unaware of the normal risks associated with outdoor recreation.

### The standard of care

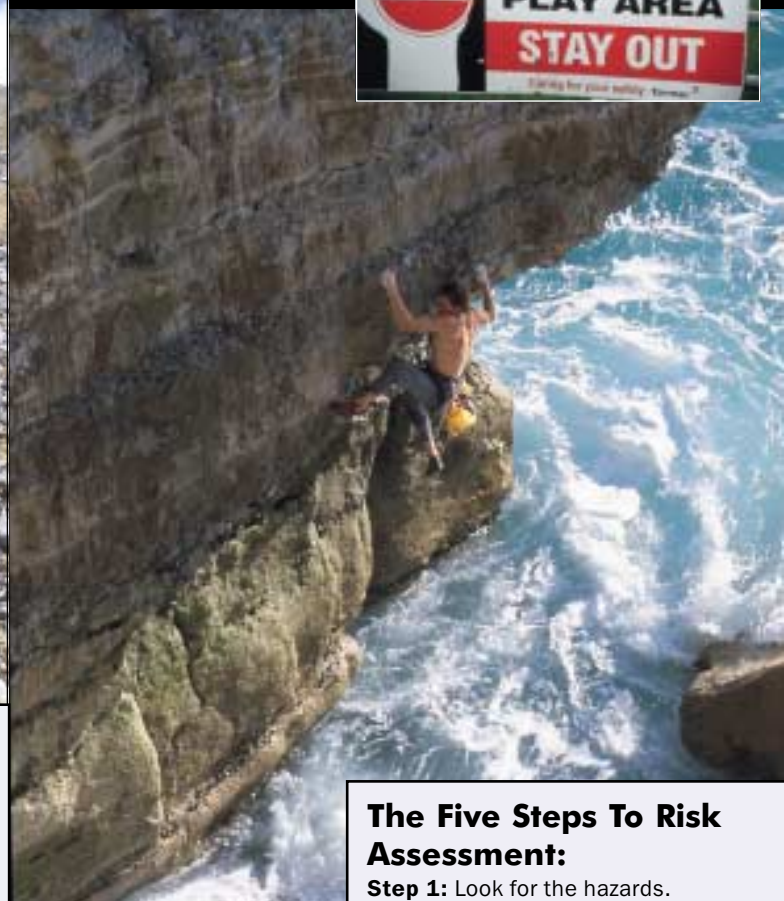
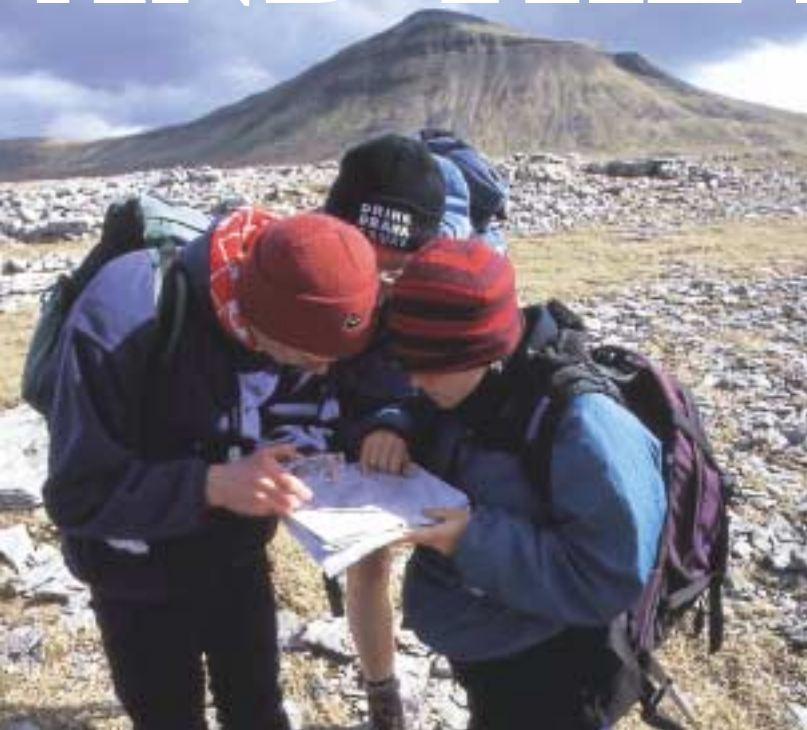
The standard of care owed to a novice is obviously higher than to an experienced participant. Hence, it is wise to ensure that a novice has been made fully aware of the relevant risks involved. Climbing walls, outdoor centres and ski slopes might achieve this by an introductory session outlining

### The Duty of Care

For a person to be liable, they've got to breach a duty of care that they owe to the injured person, and the damage must result from that breach of duty of care. As a climber you owe a duty of care to others who are so closely and directly affected by your actions, that you ought reasonably to have them in mind as being affected by those actions. So when belaying your partner, you owe a duty of care to he or she because they are closely and directly affected by your actions to such an extent that it is quite reasonable to have them in mind when you are belaying. This means as a belayer you must be taking reasonable care, but it does not mean there has been negligence or you are liable if a mistake and accident occurs.



# AND THE LAW



## The Standard of Care

The crucial part of all this is what that standard of care will be. In the context of a group (two or more climbers), the standard of care owed to other(s) will be higher for the more experienced member. The practical result of this is fairly obvious, whereas you would not routinely check your experienced partner's harness buckle and knot, you would be expected to do so for a novice who has only recently learned 'the ropes'. There are a number of other factors that must be taken into account before deciding what the standard of care should be, including the dangers of the particular activity (climbing, etc. are dangerous activities and a responsible adult would be expected to be aware of the potential for injury), the foreseeability of the accident (e.g. getting caught out by the weather in Britain).

the specific risks involved. In America it is becoming the norm that documentation is kept that shows that participants are aware of the normal risks of participation and are willing participants (in fact it is being found that activities where risk recognition is being verified are becoming more popular).

## A willing person cannot be injured

Another defence that is linked to the BMC Participation Statement is the principle of 'volenti non fit injuria' literally a willing man cannot be injured – this is a very old common law principle. It was 'passed' as a defence by the Occupiers Liability Act (1957) which does not impose any obligation on a landowner or occupier to a visitor who willingly accepts risks (see [www.thebmc.co.uk/outdoor/access/ol.htm](http://www.thebmc.co.uk/outdoor/access/ol.htm) for further details). The Occupiers Liability Act was amended by the Countryside and Rights of Way Act (2000) to remove occupiers' and owners' liability for anyone injured as a consequence of the natural features of the landscape such as falling down a cliff, pot hole or water fall. For further details on the CRow Act see [www.countryside.gov.uk/access](http://www.countryside.gov.uk/access) or for Wales [www.ccw.gov.uk](http://www.ccw.gov.uk). The situation in Scotland is currently being reviewed by the Scottish Parliament with proposed new legislation.

## The chain of causation

The chain of causation means that the loss or injury has been caused by the act or omission in question, rather than by something else. In a negligence case, the negligent act must have caused the injury. If there is some other factor,

such as the action of another person (or the person who was injured), which caused the injury then the chain of causation between the alleged negligent act and the injury is broken and the person who committed the alleged negligent act will not be responsible for the injury.

For example: A is belaying T who is leading a bolt protected climb. T falls off a few feet above a bolt but A is not holding the rope but talking to G and allows a further 40 feet of rope to run out before the rope becomes tangled around a rock and arrests the fall. It means that T falls 50 feet instead of 10 feet. T has not tied his harness properly and when his fall is stopped it comes undone and he falls out of it, a further 20 feet onto the ground and breaks his leg and G's arm. Expert evidence shows that the harness would have come undone from the force of a 10 feet fall and that T would have fallen 10 feet in any event if A had been acting as a reasonable belayer. A is not liable for T and G's injuries as the chain of causation (between the negligent belaying and the injuries) has been broken by T's failure to do up his harness properly. But remember, each case depends on its particular facts.

## The Five Steps To Risk Assessment:

- Step 1:** Look for the hazards.
- Step 2:** Decide who might be harmed and how.
- Step 3:** Evaluate the risks and decide whether the existing precautions are adequate or whether more should be done.
- Step 4:** Record your findings.
- Step 5:** Review your assessment and revise if necessary.

Hazard means anything that can cause harm (e.g. rockfall or bad weather) Risk is the chance that somebody will be harmed by the hazard (e.g. that the rockfall will hit you or that the bad weather will cause hypothermia).

The process is quite simple and can be applied to anything from the simple day out on the hills to running an outdoor centre, although for a day out on the hills a mental assessment would suffice whereas for running an Outdoor Centre a formal written assessment would be required.

*From '5 Steps to Risk Assessment' HSE.*

Who's taking more risk here? (LEFT) The hill-walking leader, Credit: Alex Ekins, or (RIGHT) Martin Crocker making the first ascent of an E7 6c shallow water solo, Credit: Carl Ryan.



**Contributory negligence**

Contributory negligence is another factor that can reduce the liability. This concept is fairly simple, an example of which might be a member of a novice walking group forgetting to pack essential supplies despite being informed that they were required. Any negligence by the group leader may then be reduced depending upon the circumstances. Another example might be of a climber who negligently dislodges rock or drops equipment onto the belayer who, although aware of the possibility of rockfall is not wearing the helmet that is in his/her rucksack. If the evidence was that if the belayer had worn the helmet then no injury would have been sustained then the belayer and the climber are each responsible and there would be 25-50% contributory negligence upon the belayer.

One of the difficulties in either bringing or defending a case for negligence is that climbing, hill walking and mountaineering do not have a body of rules that can easily be referred to. This is where expert witnesses come into the equation. In litigation it is up to each side to find an experienced, and respected person to provide expert advice. The legal system in the UK is still adversarial but recent changes have been made to reduce the use of court time and therefore the cost of bringing or defending cases. Increasingly there is a body of written rules and experts are requested by the court to verify and interpret those rules and apply them to the particular circumstances of the case in question. The experts will agree upon a list of points and then argue over the remaining issues. It might be that one expert can prove outright that their case is the strongest, or it might be that it transpires that there is more than one way to view the situation in which case the negligence claim may fail.

**The Mountain Guide**

There have been a number of interesting cases that have highlighted liability issues in the world of climbing and mountaineering and they each demonstrate different aspects of the complicated issue of liability. One of the most famous cases in recent years was the one brought against the mountain guide 'Smiler' Cuthbertson. The details of the case were very complicated with expert witnesses being employed by both sides. Smiler had, in the interests of expediency, taken the decision to only use one ice screw as a belay. When Smiler was 20-30m up the next pitch the ice gave way and the resulting fall ripped the belay and killed the client.

The fact that Smiler was with a client substantially increased the duty and standard of care that was expected. Similar circumstances involving partners of equal experience might have resulted in a different verdict due to the lower standard of care expected. However the judgement appears to hang upon a statement made by Smiler's expert witness under cross examination. In answer to a question about whether or not the belay would have failed if two ice-screws had been used he indicated that it would not have failed. It is difficult to understand how a definitive answer could have been given to that question, but it was and the judge relied upon it.

(LEFT) A young Richie Patterson attempting Cooks Leap, from the Valkyrie Pinnacle to the main cliff, Froggatt. Credit: Alderson. (RIGHT) The media always like an incident.

**The Hill walker**

Another case has some similarities. A few years ago a party of 8 hill walkers climbed up into Parsley Fern gully at the back of Cwm Glas in winter conditions. They had little winter equipment between them

and 2 of the women in the party fell, one of whom, aged 28 was killed. The nominal leader of the party was a male student. The level of responsibility and duty of care was investigated and there was no prosecution. A verdict of accidental death was given because the leader of the group was acting reasonably in accordance with his level of experience and the rest of the group made their own judgement to follow the nominal leader. If the leader had been qualified or more experienced and the group were all clearly novices, a different outcome may have been reached.

**The Climbing Wall**

In another example an accident occurred at a climbing wall involving an experienced climber falling onto matting. The climber had visited the centre many times before and had signed the appropriate forms. The thrust of the case was that the matting was unsuitable and therefore the owner of the wall was negligent. The Court decided that there was no evidence to indicate that one particular type of matting was more suitable than other types. This is an example of how there might be two different schools of thought, both respectable and it is not for the Judge to decide between them. The Court further went on to note that the claimant had accepted a voluntarily assumed risk and was fully aware of the dangers involved in his chosen activity and the case was dismissed.

Also, the principle of unforeseen circumstances is demonstrated in a case brought against the University of California in 1996. The claimant alleged negligence when a top rope anchor comprising several placements in the same crack failed. The Defendant proved that the rock had been fundamentally but invisibly damaged by a recent seismic tremor. The gist of the case was that a top rope anchor had failed due to seismic activity, clearly something that the instructor could not have predicted, and the claim failed.

**What now?**

The UIAA Legal Expert's Working Group is working on a number of case studies that will give guidance to both recreational and professional users of the mountains and crags. Each case study will look into a number of possible scenarios and will try and evaluate where liability exists. Specifically concerning liability and volunteer leaders, the BMC is hosting a conference at the Festival of Climbing on 7 December. This will have key-note speeches, expert presentations on risk, liability and insurance and discussion forums (registration details from the BMC office or web site).

Do we want to live in a society free from risk and adventure, where young people are not allowed to get a grazed knee in a children's playground? To protect the freedom to enjoy climbing and hill walking we must understand the law of negligence and liability; we must also constantly remind all participants about the hazards and risks, and actively promote the culture of personal responsibility and self-reliance. And we must also be ready for the odd 'grazed knee'.

*With thanks to the BMC Honorary Legal Advisors: Martin Wragg, Paul Debney, Stephen Porteus, Anthony Rich and Harry Sales, Ian Alderson of Bremner, Sons & Corlett, plus Adrian Berry of planetfear.com.*







(LEFT) Performance sports demand performance clothing. Credit: Mountain Equipment/ John Norris. (RIGHT) Clothing must be able to keep you warm, whatever. Credit: Arrans. (SMALL) Winter hill walking places great demands on your clothing system.

# COMFORT ZONE

Chris Smith from Mountain Equipment takes a look at the layering concept. How it began, how it's changing, and what we can look forward to in the future.

**The majority of outdoor clothing systems worn by today's climbers, mountaineers, and fell walkers, are loosely based upon the well-established principle of layering. The fundamentals of this idea have been well documented over the years, and you can be certain that when reading any kind of mountaineering literature, there'll be a reference to the type of clothing systems that existed at that time.**

The principles of layering will probably never change, as they are fundamentally based on scientific laws. However, the items of clothing that constitute a layering system have changed dramatically over the years, in terms of their technical function, comfort, and features - and are still radically changing today. Within the last 25 years, a myriad of new clothing systems and garment technologies have been launched, some of which have challenged the traditional concepts of layering and have stood the test of time, whilst others have burnt out. However, the most recent, more radical developments in outdoor clothing technology may permanently change the way we 'get layered'.

## First Principles...

The purpose of any outdoor clothing system is to keep you and your body comfortable whilst you are outside. The layering system consists of several different layers of clothing, each layer fulfilling a different role. A correct combination of layers ensures that your body temperature remains constant and safe in all weather conditions. The system re-

mains flexible, as it allows the wearer to take off, or put on layers, depending on the weather conditions and the level of activity. The system is versatile, as many different types, makes and models of outdoor clothing can be combined to create an effective system. Any layer used as part of an outdoor clothing system will typically fall into one of three categories; a Base Layer; a Mid Layer and an Outer Layer (or Shell).

## The Base Layer

This is the layer of clothing that is worn closest to the skin. Modern base layers are usually made of 100% polyester or polypropylene, usually incorporate some form of stretch, and come in different weights. Lighter weight garments suit high-energy activities in warmer conditions. Mid-weight garments are slightly warmer, suiting cooler conditions. Finally, heavier weight base layers possess more thermal qualities, will usually have a half zip and/or roll-neck and are designed for use in very cold conditions.

The fibres that make up the fabric of a base layer are inherently hydrophobic (water-hating). A combination of your body's natural energy forces and these treated fibres creates a push/pull situation, whereby moisture is pushed out of the body's pores onto the inner surface of the base layer. The fibres of the base layer then rapidly transport (pull) the moisture from the inner to the outer surface (a process known as 'wicking') where the moisture will naturally disperse and evaporate. The moisture vapour is now ready to be transported through the next layer within the system.





Harsh Scottish conditions. Credit: Mountain Equipment / Parnell

### Micro-climates

The complex activity that exists on the surface of the skin, and also between each layer within a clothing system, is sometimes referred to as a 'micro-climate', where varying amounts of perspiration (moisture and moisture vapour), accumulate and diffuse, depending upon levels of activity and the 'temperature differential' (delta T or  $\Delta T$ ) between the layers. The primary aim of any layering system is to manage these individual micro-climates, and to quickly move or transfer perspiration through the system.

### The Mid Layer

Mid layer garments are worn to provide thermal insulation by trapping warm air around the body and are designed to allow moisture to pass quickly and efficiently from the base layer to the outer layer. Fabrics with a non-absorbent open weave are best suited to this – the best example of this is fleece. A standard fleece jacket, however, will not prevent wind from penetrating the system. Therefore, if worn on a windy day without an outer layer, the warm air trapped within the system, insulating the body, will be replaced with cold air and the wearer will immediately begin to feel cold. Typical examples of mid-layers would include all types of fleece and fibre-pile, down, and synthetic hollow-fibre clothing.

### Outer Layer

The main purpose of the outer layer is to protect the mid and base layers from wind, rain and snow, thus allowing them to function efficiently. Outer layer garments will typically fall into one of four categories:

1. Windproof (breathable)
2. Breathable and Water-Resistant
3. Waterproof
4. Breathable and Waterproof

Windproof (breathable) garments are usually made from tightly woven, lightweight nylon with a high fibre density (such as Pertex). This outer layer will protect the insulating mid-layer from wind-chill and because fabrics of this type have inherently low RET values (Resistance to Evaporative Transfer), the system will retain high levels of breathability, ensuring the wearer remains comfortable.

Breathable and Water-Resistant outer layers are usually treated with a DWR (Durable Water Repellency) coating to give extra protection in light rain or snow. Garments of this type offer an excellent compromise between protection, weight and performance. However, in more severe weather a fully waterproof, breathable outer layer would be required.

Waterproof garments that are not breathable will offer excellent protection from the wind, rain and snow in static conditions. However, due to the high RET values, even during low energy activities, the moisture vapour will be unable to escape from the system and will condense on the inside of the garment. Moisture ingress to the base and mid layers would ensue, compromising the whole system. For the majority of serious mountain users, a non-breathable waterproof garment is simply no longer an option worth considering since the development of waterproof, breathable fabrics.

This type of outer layer garments offer the best protection against wind, rain and snow. They also enable the base and mid layers to function efficiently. The majority of garments that combine waterproof and breathable qualities fall into two categories:

1. Waterproof Breathable Membranes (e.g. Gore-Tex, Drilite Extreme)
2. Waterproof Breathable Coatings (e.g. Triple Point, Ceramic, Drilite Plus)

### Membranes

A typical waterproof and breathable membrane consists of a wafer thin, man-made membrane containing millions of microscopic pores, each large enough to enable moisture vapour (sweat) to pass through, but small enough to prevent the passage of water droplets (rain). Temperature and pressure differentials over the membrane (i.e. it is warm and dry inside the system, cold and/or wet outside) drive moisture vapour outwards, providing the breathability.

### Coatings

A breathable coating is created by spreading a thin layer of resin directly onto the face of a given fabric. Two different types of coating exist; microporous and hydrophilic. A micro-porous coating works on the same principle as a microporous membrane.

A hydrophilic (water-liking) coating is reliant on the chemical and molecular properties of water molecules. When the body generates heat inside the garment, this forces moisture vapour down polymer chains found within the coating to the external face of the garment. The moisture vapour moves through the system from molecule to molecule, rather than freely through a physical microscopic pore. As the body produces more moisture and the fabric gets wetter, the polymer chains naturally increase in size allowing more moisture vapour to be transferred through the system.

### Old vs New

When George Mallory's body was found on Mount Everest in May 1999, the remains of his layering system, (which in 1924 was state of the art), consisted of a couple of tattered woollen sweaters and the frayed threads of a cotton wind-jacket. By today's standards, a climber wearing Mallory's clothing system, even on a 3000ft mountain in the UK, would be ridiculed, never mind on the highest mountain in the world.

When Don Whillans and Dougal Haston conquered the South Face of Annapurna in May 1970, their layering system consisted of poly-cotton base layers, over which two mid-layers were worn - a 'Borg' fur jacket and trousers, and a Mountain Equipment down-filled jacket and breeches. The base and mid layers were then protected by an outer shell of Ventile Cotton, which was at the time, a relatively light, windproof and exceptionally breathable fabric when dry. Although Ventile was 'state of the art' and was suited to extremely cold, dry climates, when it got wet, it stayed wet, became very heavy and lost nearly all its breathability. Ventile Cotton is still favoured today over modern outer shell fabrics such as Gore-Tex for expeditions to arid regions such as the Arctic.

A modern winter clothing system would probably still incorporate several layers, and most definitely would include fleece, and down-filled garments for climbs in cold extreme conditions. Today however, an increasing number of modern garments exist that essentially 'break the mould' of the conventional layering system, whereby a combination of high wicking, thermal/insulating, wind-proof, water-resistant and

breathable layers are consolidated in a single garment. Furthermore, many of these modern systems are light, quick drying and have a small pack size when carried, and greatly reduce the need to take off or put on more layers.

## Alternatives:

### Pile/Pertex

In 1986, the first single layer clothing system was born, comprising a polyester fibre-pile that was bonded to a shell of Pertex. Pile/Pertex (Double P or P2 for short) clothing was designed to be worn next to the skin without the need for numerous additional layers. The system relied on body heat to drive moisture vapour from the skin through the fibre pile to the outer pertex shell, where moisture then spread out across the surface of the fabric and evaporated. Although such garments were not waterproof, any rain that did penetrate the system would be warmed by the body and driven rapidly back out through the fibre-pile and Pertex.

Pertex/pile garments have many advantages; quick drying, very warm during high activity making them useful for winter climbers, relatively low price (also making them useful for winter climbers!!), easy to repair and low in weight and bulk. However, when used during relatively low activity or static conditions, moisture can be retained within the system and the wearer may start to feel damp, cold and clammy.

### Wind Resistant and Windproof Fleece

The introduction of fleece clothing with wind protection caused a revolution within the outdoor clothing market as it enabled the most popular form of insulating layer to double-up and be used as an outer layer in blustery conditions. Early innovations of wind-resistant fleece consisted of very tightly woven close-knit fibres that resisted wind, repelled light rain and trapped warm air generated by the body. For climbers and mountaineers this meant that an outer shell layer would only be required in the worst conditions and sometimes not at all.

The development of the fleece continued and it soon became the most versatile piece of outdoor clothing available. Advances in technology meant that manufacturers could develop totally windproof fleece garments that consisted of a windproof and breathable membrane that was sandwiched between two layers of micro-fleece. Gore-Windstopper and Malden Mills' 'Windbloc' technology was now being used in the large majority of branded wind-proof fleece.

Early wind-proof garments were, however, quite heavy, bulky and not very breathable, due to laminating techniques and the limited amount of face and liner fabrics available. However, they did offer excellent protection against the elements because they utilised a membrane, and so remained highly water-resistant and could almost be deemed as waterproof. Today, more modern wind-proof fleeces incorporate much lighter face and liner fabrics, and improvements in membrane and laminating technology have increased levels of breathability, suppleness, and lightness. The new buzz-word describing this type of garment is 'Soft-Shell'.

### Soft-Shell Clothing

The modern concept of soft-shell clothing is being taken to new levels and will, arguably, replace the good old-fashioned fleece. More products are being developed that incorporate ultra-lightweight, open-woven, micro-fibre linings that are then bonded (laminated) or stitched to a soft lightweight wind-proof and water-repellent outer. These garments have a tiny pack size (a third of the size of a standard fleece), and can be worn as a shell in milder conditions, or under a more durable outer shell in extreme, colder or wetter conditions.



1922 - Geoffrey Bruce being helped down by Sherpas. Credit: Fell & Rock / Audrey Salkeld collections. Mountain clothing has evolved incredibly since these early days - what's in store for the future? Visit the new Helly Hansen National Mountaineering Exhibition to experience what is was really like in the early days.

### Layering in the 21<sup>st</sup> Century

The second generation of outdoor clothing systems is now being introduced to the outdoor clothing market. These new, radical garments aim to further shift the parameters of traditional layering concepts by offering higher levels of performance and comfort in a single layer, thus enabling the user to wear less, pack less and simplify their existing clothing systems.

The inside of the garment draws moisture away from the skin and allows it to evaporate. Moisture vapour is pushed very quickly through a unidirectional membrane (windproof and highly water-resistant), which prevents it from returning. After being transported to the outer layer, the moisture can then evaporate.

Because there is only one layer, these new products have a much lower RET than a traditional base layer plus wind-protection, so they retain exceptional levels of breathability. Additionally, because the membrane of the garment is situated much closer to the skin, moisture vapour is naturally forced through the system at a faster rate due to a higher  $\Delta T$ . This ensures that a dry and warm micro-climate exists between garment and skin, and the potential build-up of moisture that would occur in a traditional system is for the most part negated.

### The Future...

More and more products of this type will be introduced to the outdoor clothing market, and, although the technology used in these garments is radical, the perfect balance of fabrics, treatments and features that will eventually create the ultimate outdoor clothing system - has not been found...yet!

# UrbanRock BRYCS 2001

**156 of the UK's best young climbers head to the Foundry for the final of the Urban Rock BRYCS 2001**

Over 480 young hopefuls have been competing in 10 different regions around the UK to have the privilege of being here today – the biggest ever field from which our young finalists have emerged. It's not even 8am (where's my coffee?) and already they are arriving in droves at the Foundry Climbing Centre with everyone keen to get it on and show us why they got here. The back stage crew of judges, chaperones and belayers are being briefed and will soon be ready to meet the stars of the future.

In the main hall, the ever-cheerful Jemma Powell and Rosie Shaw have been energising 156 excited children in a mass warm-up; ranks of jumping, laughing and stretching bodies prepare for the day's activities in waves except they are not quite as rhythmic! The noise level is high right now as belayers and judges fight through the swirling chaos, then Paul Dewhurst starts yelling over the din, and gradually a quiet descends – the competitors split into groups, don their climbing shoes and turn eager faces to their first challenge.

The climbers face a variety of routes and boulder problems to test their mettle, and the climbing begins. Small hands clasp their way along the Living stone wall, in the furnace Sadie Renwick dispatches the 13-15 age group 6b+ with consummate ease. The good thing about climbing compared with other sports (e.g. athletics) is the way in which it brings together young and old, star and unknown – remember the saying “strangers are simply friends that we have not yet met”?

Younger, less experienced climbers get to climb next to their heroes both on the crag and at times like this, in the competition arena. Could you ever imagine swapping techniques with Colin Jackson or Linford? Don't think so! Composure and confidence are everything, route reading and visualisation skills can be seen close at hand as well as excellent displays of footwork, clipping technique and of course, buckets of determination that can make up for all of these!

Down the front an announcement is made. The London & South East team has an early lead and with around 100 competitors in each of their qualifying rounds the talent base must be exploding there thanks largely to the climbing walls, Sandy Ogilvie from Urban Rock and some very supportive parents. But there is still everything to play for, and now is the time to make every hold count, because it's a team event as well as your own. Local favourite Leah Crane is climbing well as usual, but is thwarted by the very last move of the 10-12 Girls' most taxing top-rope by a determined and on form climber Hazel Findlay.

Both boys and girls in the youngest category are put on the same climbs. A few years ago we saw the girls outperforming the boys at this age, but since then it appears the boys have crept ahead. Deb Banerji of the newly formed Scotland South team is particularly outstanding, and gains a superb victory.

Paul Smitton (North West) and Ian Hollows (NE & Lakes) are neck and neck in the 13-15 Boys for most of the day before Paul's near top-out on their hardest route proves decisive. A few new faces are also hitting the podium showing a healthy development in most of the regions. In fact in coming years we may well need to reorganise to cope with the numbers interested in taking part in BRYCS or even build a large new facility to house our talented youngsters!

BRYCS offers the ideal opportunity for those who aspire to enter the BICCs to practice leading in a relaxed fun atmosphere – this is the place to get noticed on the British competition circuit. Look out for more information on the National competition series and of course the upcoming events at the The Entreprises & BMC Festival of Climbing, which is taking place at the NIA in Birmingham on 7-9 December. Some of the older climbers you seen



Credit: John Arran

in this year's Urban Rock BRYCS will be competing for Britain in the European Youth Cup, so why not go along to support them!

At the end of the day, over two hundred people gather for the prize giving in the Foundry. Staff from Urban Rock, the BMC, the Foundry and the British Competition Team have to yell over the appreciative racket again as the prizes are given and closing speeches delivered. Many thanks to all the volunteers who helped out not just at the final, but throughout the whole series, the hardworking team at the Foundry (especially the café staff – you guys rock!) and of course to the competitors for giving their all. A big thanks also to title sponsors Urban Rock for generous support, Greenshires for their publicity and Graham Tiso for providing the raffle prizes.



Credit: John Arran

## RESULTS

### 7-9 Girls

- 1 Rosea Day southwest
- 2 Alice Berry london/se
- 3 Polly Blinston peak

### 7-9 Boys

- 1 Deb Banerji scot-south
- 2 Rhys Edwards wales
- 3 Matt Beech scot-south

### 10-12 Girls

- 1 Hazel Findlay southwest
- 2 Leah Crane peak
- 3 Katie Hill southwest

### 10-12 Boys

- 1 Jacob Cook london/se
- 2 Martin Watson northwest
- 3 Tyler Landman london/se

### 13-15 Girls

- 1 Emma Twyford ne/lakes
- 2 Sadie Renwick scot-south
- 3 Rosemary Shaw northwest

### 13-15 Boys

- 1 Paul Smitton northwest
- 2 Ian Hollows ne/lakes
- 3 Chris Whiteman northwest

### Teams

- |                  |     |  |
|------------------|-----|--|
| 1 North West     | 677 | Full results on  |
| 2 London & SE    | 672 | <a href="http://www.thebmc.co.uk">www.thebmc.co.uk</a> |
| 3 Peak           | 595 |  |
| 4 Scotland South | 532 |  |
| 5 South West     | 500 |  |





# ANCIENT SECRETS

An aeon in the life of a rock

**From mountain peaks in sparkling sunshine, to rolling moors enveloped in a misty murk, Britain offers an unrivalled variety of landscapes and accompanying weather. This diverse scenery has been moulded over many millions of years by the various forces of nature and its creation is a compelling tale. In this feature, Kate Ravillous pokes around the nooks and crannies of the Yorkshire Dales and the Peak District to reveal an exotic and tumultuous history.**

**M**alham Cove, Gordale Scar, Kilnsey Crag and Gaping Gill, just a few of the many spectacular places to visit in the Yorkshire Dales. Some of the hardest climbs, best pot-holing and scenic walking to be found. One hundred metres of naked limestone rear up in front of you at Malham; climb it if you dare. While Gaping Gill is a monster hole that is capable of swallowing York Minster. It is all awe inspiring scenery that owes its existence to a varied past.

The tale begins many aeons ago (350 million years to be precise), long before the first dinosaur set foot on land. Visiting the southern Pennines would have been a bit of a diving expedition but sunshine was guaranteed. Brightly coloured fish darted about in the tropical waters, while shrimp like creatures bobbed up and down. Large woodlice like creatures, called trilobites, crawled along the bottom amongst the sea lilies. Coral reef islands were scattered around and it looked quite similar to the Caribbean today. This tropical paradise was the recipe for limestone.

When the plants and creatures died, their rotting remains collected on the sea floor and were buried in limey mud. Over millions of years layer upon layer of limey mud collected and squashed the layers below to make limestone. Today this limestone appears in different guises. The old coral reefs are very resistant and strong and now they stand proud and firm as rounded hills between Clitheroe and Malham. Impossible as it may seem Stebden Hill was once a coral reef island. Meanwhile the shallow water limey layers became pure light grey limestone like that at Gordale Scar. Features such as Ingleborough Cave started life as a tiny crack caused by the shrinking of the limey mud as the water was squeezed out of it. Over the years these cracks enlarged as water dribbled down and dissolved the sides. Today those cracks have become networks of disorientating caves.

If Yorkshire had kept its clear blue seas and idyllic islands it would appear in the Thomson sun brochure today. However Scotland had other plans and saved Yorkshire from becoming a package holiday destination. The trilobites had to pack their bags and the gritstone moved in.

Stanage, Froggatt, Gardom's Edge and Brimham Rocks. All tough sounding names for strong and sturdy rocks. Fantastic walks along the gritstone edges, strenuous climbs with abrasive, rounded handholds and little pebbles for feet to teeter on, or the remains of a giant's game of skittles over at Brimham Rocks. This typifies the harsh gritstone country that was responsible for snuffing out the limestone and dramatically altering the southern Pennine's appearance all those millions of years ago.

While Yorkshire was basking in its tropical limestone seas, Scotland was working hard building mountains. By around 300 million years ago Scotland had built the equivalent of the Himalayan mountain range and these majestic mountains towered over Yorkshire.

### Yorkshire...a murky lifeless sea

Each time a tropical storm hit the mountains lots of rubble was washed down into Yorkshire's limestone sea. The trilobites were squashed and the coral reefs smothered, turning Yorkshire into a murky lifeless sea. Nonetheless Yorkshire wasn't going to give up its tropical paradise without a fight. Each time Scotland ran out of ammunition from the mountains the limestone seas flooded back in. This battle created layers of rocks that look a bit like a many-tiered cake. Yorkshire contributed the hard limestones, while Scotland provided layers of sandstone and soft dark shales.

Today the remains of this battleground appear in the northern Dales. You can see it at places like Hardraw Force near Hawes. Yorkshire's tough limestone forms the top of the waterfall, Scotland's sandstone makes the cliff face and the soft shale at the bottom makes a plunge pool. Another place is the stepped sides of Pen-y-Ghent with alternating limestones, sandstones and shales from this time.

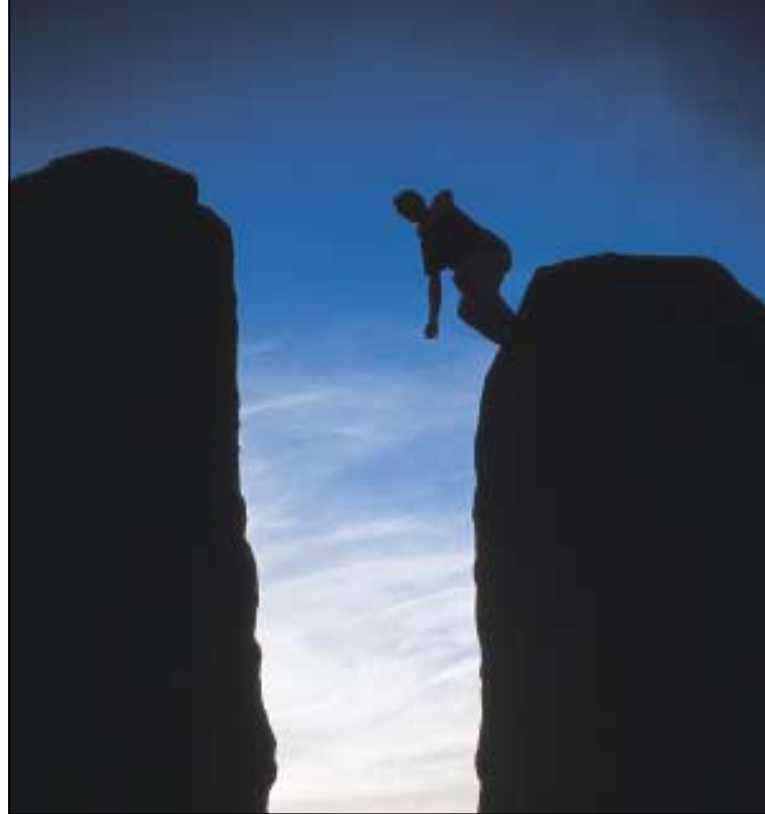
Eventually Yorkshire lost its battle with the Scottish mountains and the limestone seas died away. Yorkshire became Scotland's 'Bangladesh' and a huge delta with fingering streams and tugging tides was formed. Mud, sand and grit came tumbling down the rivers to the Yorkshire delta. The bigger pebbles would settle out first and then the smaller grains would float down slowly and sit on top. Some of the sand was laid down at an angle in underwater sand dunes. Each storm deposited a thick gritstone layer. Between storms softer muds settled.

Finally the Scottish mountains were diminished by the tropical storms and they began to run out of grit to throw at Yorkshire. Forests began to grow on the delta and the area became swampy.

The limestone and gritstone were buried and didn't re-surface again for many millions of years. While they hibernated, Yorkshire sailed northwards on its part of the Earth's jigsaw puzzle surface. About 30 million years ago Yorkshire turned the engines off and settled where it is today. The rocks below decided to push up and see the view. After a lot of erosion the gritstone and limestone got their first breath of fresh air and began to experience the Yorkshire weather. Wind and rain began to nibble at the fresh rocks. Pockmarks were created in the limestone, and caves enlarged. In the gritstone the weaker layers were picked at, rather like eating the filling of a sandwich but leaving the bread behind.

### Roll on the ice ages

Today the gritstone looks quite old and wizened. Softer bits have been etched out, leaving big blocky layers. The thicker the layer, the bigger the storm that created it. Some of the most difficult gritstone climbs that involve struggling across a featureless block can be blamed on the biggest storms all those years ago. The long gritstone edges like Stanage and Froggatt exist because they are sitting on soft shales. As the shale wears away the gritstone becomes overhanging and eventually big blocks break off and roll down the hill. However a little bit of Yorkshire wind and rain can't explain everything. Roll on the ice ages.



Thousands of years of weathering have created our magnificent playground.

Around two million years ago the Earth's climate suddenly flipped and big ice sheets started to grow at the poles. Why this happened is still debated, but changes in currents in the deep ocean probably had a part to play. To this day the ice sheets have waxed and waned as the Earth wobbles around the sun. If mankind hasn't meddled with the climate too much we will be entering another ice age in a few thousand years - good news for winter mountaineers.

Each time the ice spreads its fingers during an ice age it carves new valleys, scrapes off topsoil and plucks up boulders the size of houses. When the ice departs it leaves behind a wreckage of stranded boulders, heaps of clay and new valleys and drainage patterns. Evidence of the ice is scattered around the dales and peaks.

### Nose-diving over Malham Cove

Malham Cove once had a mighty waterfall plunging over its cliff. The cliff itself is the result of earth movements while Scotland was building its enormous mountain range. When the ice sheets from the last ice age began to melt, the meltwaters had to travel overland at first because the underground routes were all full of ice. The waters carved out a route down the Watlowes valley before nose-diving over Malham Cove. Nowadays the water takes the underground route and the Watlowes valley is dry. The limestone pavement at the top of Malham Cove was formed by ice sheets scouring the limestone and then rainwater dissolving the cracks.

The ice ages also left their mark at Brimham Rocks. When the last ice sheet departed, Yorkshire was a bit of a barren place, with no plants due to the lack of soil. Strong winds whistled in and bounced sand grains along the ground. The rocks at Brimham were sandblasted up to knee height, making the mushroom shaped blocks we see today.

Most recently the rocks have suffered miners and quarrymen hacking at their layers, while climbers and walkers swarm over their surfaces and pot holers explore their intestines. But what lies ahead for the gritstone and limestone? Another ice age? A greenhouse climate? Perhaps re-burial under the sea? Whatever it is the rocks will carry on watching the world go by for many years long after we have all gone.

**Kate Ravilious is a freelance science journalist and a keen walker and climber.**

# Grigri

Stuart Ingram and the BMC Technical Committee strip away the myths surrounding Grigris.

## Unmasking the myths

Over recent years, there has been much development within the field of belay devices, possibly the most important of which has been the advent of the grigri. This device manufactured by Petzl functions by running the rope around a pivoting cam that operates smoothly during normal use, but locks completely in the event of a sudden pull on the live rope (i.e. a fall). This provides several advantages over traditional belay devices:

The grigri will lock of its own accord in a fall providing a failsafe anchor.

It is perhaps a useful tool for the novice climber, as in the event of a leader fall the (novice) belayer does not need to actually do anything – the grigri will lock by itself even if the belayer lets go.

### STOP! REWIND <<

Failsafe? Hands free? How many times have you heard phrases like this used in connection with the grigri? Since its release the grigri has become massively popular with sport climbers and plastic pullers, as it is super convenient for redpointing and working routes. Once a fallen (or should that be resting!) leader is locked off, the belayer doesn't need to expend any energy at all keeping him or her stationary, as is the case with almost all other methods – in fact he doesn't even need to hold the rope. Add to this the ease with which slack can be rapidly paid out to a pumping climber for those crucial clips, and you have a sport climber's dream toy, right?

### WRONG.

(TOP) Steve Powell high on the Gift, Red Rocks. (LEFT) Matt Goode, Cave Rock, Tahoe. Just minutes after this was taken, an inexperienced belayer dropped her partner from the top of this cliff. He plummeted down until smashing his leg caused the grigri to lock - a very near miss. (RIGHT) Matt Goode, Keep your powder dry, Red Rocks. (BELOW) Look out for this safety leaflet, Credit: Petzl.



## Recently, at a climbing wall near you:

On nearing the top of a route around the limit of his ability, a climber throws a long dyno for the finishing jug. He gets agonisingly close to sticking it but he's tired (it's the end of his session), and slowly peels backwards expecting only a short fall as there's a bolt by his waist. After cratering onto the concrete floor 10m below, the climber and his belayer try to figure out what went wrong.

**Rope:** 10.5mm diameter, nearly new, good condition

**Belayer:** 10 years experience and uses a grigri regularly

**Protection:** bolt at the waist of the climber, almost no slack in the rope

**Fall:** very gradual and slow

The last two points are the important ones – there was no slack in the rope and the fall was very gradual, resulting in almost no shock loading to the system. Now, the grigri works by arresting a fall when its pivoting cam locks after a sudden load. If this sudden loading is absent, rope may run through the device without locking the cam to such an extent that an incident such as the above becomes possible – especially if the belayer is holding or pinching the device in any way. The fact that the rope in use was nearly new and probably quite “slick” may have also contributed.

## Near-miss of the year:

You're at the last couple of moves before the chain, but those forearms are totally maxed, fingers opening, feet skating – this is a route for another day. Luckily, you just clipped a bolt and can sit on it and rest rather than take the fall. The next instant, you're decking out on rope stretch 15 metres down – what's up with that? Thankfully uninjured but very psyched out, you begin the analysis:

**Belayer:** had been climbing indoors for 6 months and had recently started using a grigri

**Protection:** again, a bolt by the waist

**Fall:** not even a fall really, just slowly and gradually sitting on the rope

## Is there a pattern forming here?

In this incident, we have a very similar situation with the climber weighting the rope in such a way as to provide insufficient “shock” to allow the grigri to lock and arrest the fall. In this case

the grigri did eventually lock, most probably because the belayer suffered serious rope burns on her right hand, causing her to leave go of the dead rope and step backwards. Presumably, this changed the orientation of the device and allowed it to lock. These two (real) incidents present us with an uncomfortable fact:

**Myth:** The grigri will always lock of its own accord in the event of a fall, providing a failsafe anchor.

**Reality check:** If there is no initial shock loading or sudden pull on the rope, the device may not lock AT ALL!



Right now you're thinking “Wait a second, nobody told me about this when I bought the thing!” Read on...

## Lowering off....

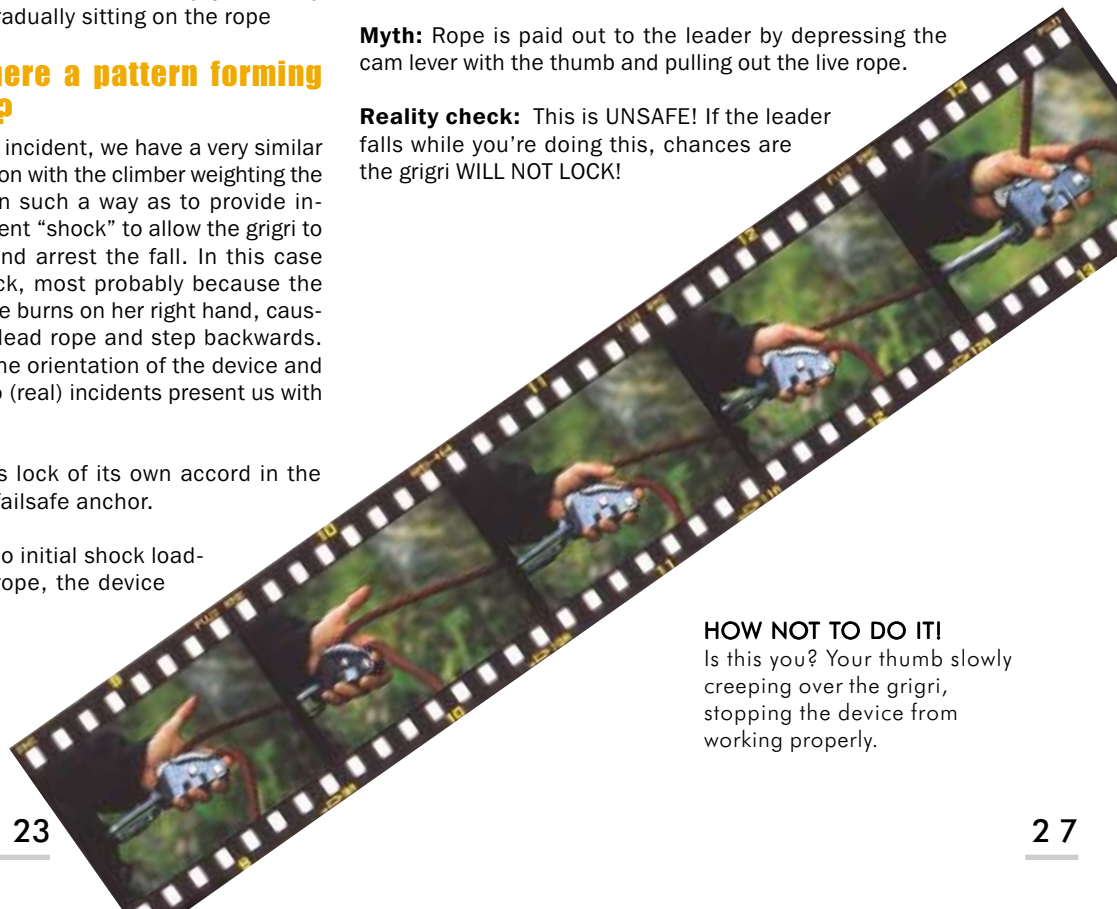
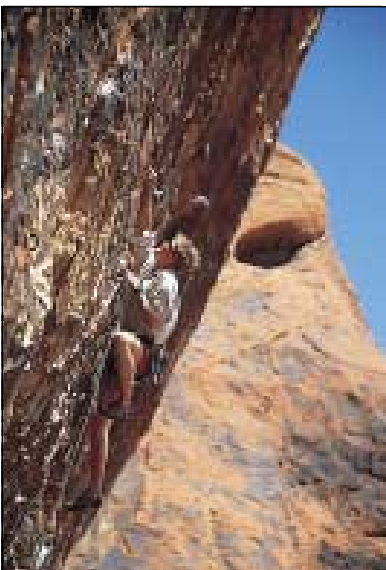
It's all over when you clip the chains, ain't it? Think again – several climbers have reported near-misses or ground falls whilst lowering off a route. These can be wholly put down to user error, since the grigri must already be operating correctly for a lower to commence unless the situation is similar to the above near miss, and the grigri doesn't lock in the first place. In theory, there are two ways to control a lower with a grigri – varying the position of the lowering handle and thus the cam trapping the rope (easier) or with the dead rope, holding the lowering handle open but not varying its position (safer, and the recommended method). In practice, the lower is controlled with a mixture of these two, and if the lower begins to get fast it's easy for an (inexperienced) user to confuse the two methods and adjust the wrong way, allowing free passage of the rope through the device – bad news.

## Beware “The Thumb”

Most grigri users will be aware of the trick of pushing on the barrel of the lowering handle with a thumb, thus depressing the cam and allowing slack to be yarded out very quickly to a quivering leader. Great – he makes the clip and avoids a fall. But think about what you just did. Whilst you were depressing the cam, you were deliberately preventing the device from locking (to pay out slack), so what if your leader fell whilst you were doing this and before he clipped? BANG – deck out; almost certainly the grigri would fail to lock.

**Myth:** Rope is paid out to the leader by depressing the cam lever with the thumb and pulling out the live rope.

**Reality check:** This is UNSAFE! If the leader falls while you're doing this, chances are the grigri WILL NOT LOCK!



## HOW NOT TO DO IT!

Is this you? Your thumb slowly creeping over the grigri, stopping the device from working properly.



**CORRECT** - A hand is always kept on the live rope, just like a traditional belay device.

## What now?

Before you drop your grigri in the trash and buy a Sticht plate, let's turn around and get some perspective here. There are only a very few incidents like these each year, and when you compare the huge number of user hours, it becomes obvious that the grigri is a very safe and effective device in the hands of an experienced user. It's very important to be clear about this next bit:

**Petzl have never marketed the device as a "hands-free" or "failsafe" belay device, and have always recommended that it is for expert use only.**

They even went to the extent of providing any interested parties (i.e. climbing walls, outdoor centres) with a free user advice poster and leaflet showing how to use one safely when these incidents began to come to light - respect due. The problem is the popular opinion that has evolved amongst climbers, that the grigri *cannot* fail in use ("It's an autolocking device, how can it fail?" says one climber to another...) - not true.

## Testing the theory

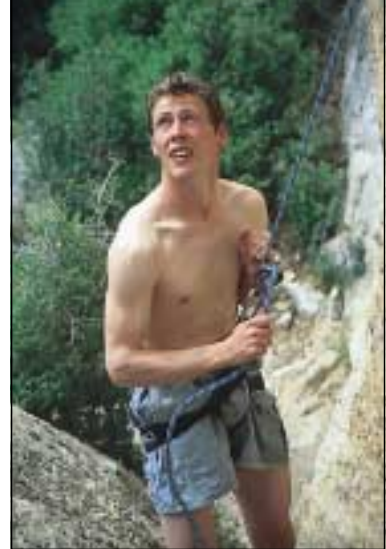
Staff at the National Mountain Centre, Plas-y-Brenin conducted some experiments based on the circumstances of the above incidents, in conjunction with the BMC Technical Committee. Various hand/device configurations were tested with a climber slumping from an overhanging wall onto a high runner or falling from above the runner. Findings supported similar Lyon Equipment tests with normal use of the device: all types of fall were held. However, when paying out rope for the lead climber to clip a runner it was a different story. If the plastic lever part of the device was held down the device failed to grip and would only hold a fall if the belayer had the

presence of mind to release the lever area or let go of the device altogether.

In other words, proof that use of "the thumb" is a dubious and dangerous game - as shown in the Petzl leaflet and poster.

## Use it right

At first reading it might seem as if this article sets out to demonise the grigri as a dangerous, unpredictable device that will drop your leader if you so much as look at it wrongly. Absolutely the opposite - the aim here is to illustrate some of the popular misconceptions that have grown regarding its use, and to dispel the notion that it is a foolproof device. As with any other piece of climbing gear it most definitely isn't, and it takes proper instruction and experience to use correctly. In the right hands the grigri is a safe and incredibly convenient tool for belaying (amongst other uses) and offers significant advantages over some other methods when sport or indoor climbing. **But only if you switch on and use it properly!**



**CORRECT** Keep that hand on whilst lowering

## SAFETY SUMMARY

- Recommended for use after expert instruction only!
- Don't use "the thumb" - always pay out slack to the leader as if using a traditional belay plate. This may earn you curses for a failed redpoint, but praise in the end for not allowing your leader to deck.
- Leaders: if you're going to sit on the rope without falling, tell your belayer you are about to do it, so they can make sure the grigri locks.
- Monitor the flow of the rope through the device at all times. Forget we put the words "failsafe" and "hands-free" at the start of this piece, and use the grigri with as much care and attention as any other piece of gear.
- Take extra care with skinny ropes as they offer less friction, and thus more potential for non-locking situations than fat ones. In their catalogue, Petzl recommend between "10-11mm single ropes only (9.7mm accepted)" - obviously, the beefier your rope, the greater your margin of safety all round.
- Finally, if you happen to be using a grigri and it fails to lock in a fall situation, try to do something to give the rope/device the initial "jerk" it needs to lock up. Step back, yank hard on the rope (dead or live), or *in extremis* move the device itself to a different orientation - though you risk depressing the cam and preventing locking if you do this. However, prevention is always better than cure and by following the guidance above and keeping with the program when belaying, you should never experience a failure in use.

## More information

More information on the grigri, its safe use and other applications can be found at [www.petzl.com](http://www.petzl.com), or via Lyon Equipment (01539 625493 - [www.lyon.co.uk](http://www.lyon.co.uk)). Thanks go to both these companies and Ben Lyon for their input into this article.



# HELP!



## FIRST AID IN THE MOUNTAINS



The most dangerous part of your day is probably over when you step out of the car, but it's a fact that most climbers, hill walkers, and mountaineers will at some point confront a serious accident in the hills.

Whether it's a member of your party tripping over, or an unknown climber hitting the deck and spoiling your lunch break, having a basic knowledge of first aid can help you deal with the incident more effectively. Rob Spencer, a Senior Instructor at Plas y Brenin, IFMGA Mountain Guide and First Aid Trainer takes a closer look at the things you know you should know, but always forget to learn.

But what happens before help arrives?  
Credit: Ollie Sanders - Plas y Brenin, the  
National Mountain Centre



## Prevention vs cure

Before digging out that mouldy first aid kit, remember the prevention is better (and usually less painful!) than the cure. The majority of mountain accidents occur when the party is least expecting trouble. When “your guard is down”, on the easy descent after a tough walk, relaxing after the rush for the summit, or the abseil after the tough route.

The dramatic incidents might be the ones that make the news, but the Mountain Rescue Council Handbook 2001 contains a couple of enlightening statistics:

**68% of call-outs in 2000 were for participants in the “summer hill walking” category**

**over 50% of accidents were caused by a “slip, trip or stumble” on easy terrain**

This rather destroys the notion that only rock climbers or mountaineers are putting themselves at risk in the mountains, and highlights the need for first aid training as a part of your range of skills for tackling the British mountains – whatever your participation level.

## The basics

If you are not already familiar with simple first aid then you should to be. The basic ideas are crucial, and in many ways more important than fancy medical procedures as they can be applied immediately, with minimal equipment and a little knowledge. Learn your ABC.

## In the mountains

As an outdoor activist, good judgement, prior planning and an appreciation of accident prevention and risk management should always be the priority and will dramatically decrease the odds of

an accident. However accidents do happen, and being in the mountain environment will complicate things. Often the injury itself is relatively minor but climatic conditions and the time needed for evacuation make things exponentially worse.

Ideally you should have a thorough knowledge of basic life-saving skills for use in any environment, combined with a good understanding of how remote first aid differs from the urban variety. First aid practices that make perfect sense in town could be deadly on a mountainside. In a wilderness situation the first aider must take an informed risk rather than simply state “my course tutor said nil by mouth” then watch their patient die.

A classic example of the difference in scenarios is that in urban situations it is common practice to cut away clothing and remove footwear to expose a possible fractured leg for assessment and splinting. But on a windy mountain in sub-zero temperatures this would be risking hypothermia and frostbite. Better to estimate the injury, immobilise the limb and to transport quickly to a warmer, more sheltered spot to allow better treatment.

Cold will always be an issue, much more so than in urban situations, and indeed may have been the cause of the problem – so do make sure you know how to treat hypothermia.

Basic mountain first aid is really all about treating symptoms and not worrying over diagnosis – all you are trying to do is stabilise the casualty and prevent further injuries until the professionals can take over. So, if you can safely immobilise a fracture of say, the elbow and monitor the effectiveness of your handiwork, and as long as the arm is secured in the most comfortable position, your job will be a good one. If however you attempt to diagnose the exact nature of the injury, decide wrongly, that you have a fracture of the radius and treat accordingly in a nice regulation broad arm

## The Alphabet

**A**ssess the situation. Is it safe to approach the casualty – are the casualty and the others in a safe position? Safety of the remaining members of the party is paramount; the first thing you can do to help the casualty is to ensure there are no more incidents. For example, a rockfall injures one of your party; check the stability of the slope and the likelihood of further rockfall before rushing in. Then Assess the consciousness level of the casualty. Do they respond to you?

**B**reathing – is the casualty breathing? You’ll need to check the airway and look, listen and feel for breathing. If not – do something now! Can you clear the airway of an obstruction? Do you know how to do rescue breathing?

**C**irculation – quickly look for signs of severe bleeding. If there is deal with it immediately by applying direct pressure (if practical) and elevating the affected area if possible, blood loss is life threatening! Check for signs of circulation, look for colour and check the pulse – do you know how to? Can you do CPR? (During 2000 there were 51 callouts due to heart attack, with more than one person CPR can keep a victim alive for hours)

It is absolutely crucial that you assess the above three criteria immediately – they are the top priorities in treating a casualty **in that order**, and may make the difference between life and death. Worrying about spinal injuries or other complications is pointless if the casualty isn’t breathing or has no heartbeat.

**D**eformity - check for deformity, swelling, bruising and additional bleeding etc, in a thorough body examination. This will enable you to locate the major sites of injury and assess their severity.

**E**nsure that the casualty is comfortable. Taking care of the emotional side makes a huge difference particularly if there is going to be a long wait for the emergency services. A bit of TLC goes a long way – talk encouragingly and confidently and keep talking! Hypothermia is always going to be a threat in the mountains, so prevent it from happening. Get the casualty as much clothing and shelter from the elements as possible and keep talking to them.

If the above is all gobbledegook to you then a practical first aid course is strongly recommended. You can enhance your knowledge through reading books, but you won’t increase your skills. You only get competent by practising.

## Traction - an example of urban vs remote care

Broken limbs are a common injury, and can be particularly daunting to deal with, especially if there is lots of bleeding and/or deformity. A fractured thighbone (femur) is rare, but a particular worry in a remote area as the pain and blood loss from this injury can kill.

During the early First World War the mortality rate for open fracture of the femur was 80%, but within a few years the figure had dropped to less than 10%, all because Hugh Owen Thomas invented the traction splint. Mountain Rescue Teams now carry these splints, or modern alternatives like the Kendricks.

Traction splints work by applying traction to the bone ends to control the muscle spasm, and reduce pressure to the bone ends. By stretching the muscles to their normal length, the blood vessels are also stretched minimising blood loss, pain is also reduced.

Traction is not advised in urban scenarios, but in the mountains where time is a factor it can be a big lifesaver. Consequently many mountaineering doctors have suggested using telescopic ski poles and/or Karrimats to improvise a traction splint (e.g. Dr Dave Hillebrandt’s article, issue 214 of High magazine).

sling you could easily cause more harm than good. Don't go looking for extra complications!

Advanced mountain first aid will involve learning how to improvise equipment from your outdoor gear, and understanding what you can and can't do with what is available. This does begin to cross over into the sphere of paramedic skills, but it is surprising what can be improvised by a knowledgeable first aider.

Remote first aid can present some difficult challenges and feel very different to urban first aid. Basics may be the same, but in the mountains it is much more important to understand the whys. This empowers you to react more intelligently, and have the confidence to improvise your way through the many problems that can arise.

## First aid kits

Knowledge may be key but a few necessities are needed to enable you to put your skills into practice. These can be obtained in a commercially packed kit, or by purchasing the basics yourself. Always keep these items together in a waterproof bag or box, which lives somewhere accessible in your pack.

There are many books giving advice on what a kit should contain and the important points are covered below. It's easy to get bogged down about

what to carry, and if you covered every eventuality, your first aid kit would never fit in your pack! Think about the injuries you might encounter and then consider how you would cope and what items you would need to hand.

A first aid kit should only include multi-purpose items that you know how to use. Rather than try and pack everything, face up to the fact that in a major incident you won't have enough wound dressings and strapping, but you probably will have spare clothes, rucksack padding etc. Think it through carefully, and you can end up with a small, lightweight yet effective kit that you'll be happy to take anywhere.

## High-altitude medicine

Expeditions to high altitude require more specialist medical knowledge and much more equipment. Longer term diagnosis, understanding drug administration, and even some basic surgical skills become important since expedition casualties may be totally reliant on their own doctor for days or even weeks. Again special training is available and should be considered vital for this scenario. If you are going to altitude and don't know the difference between HACE, HAPE, AMS and HAFE then find out! (three are serious, one is just antisocial!)

## Further reading

### Mountaineering First Aid

*The Mountaineers*

ISBN No 0-89886-092-X

### Wilderness First Aid, NOLS

ISBN No 0-8117-3084-0

### Medicine for Mountaineering

*The Mountaineers*

ISBN No 0-89886-331-7

### Expedition Medicine, The RGS

ISBN No 1-86197-040-4

### Altitude Illness, Bezruchka

ISBN No 9-781871-890570

### First Aid on Mountains, Bollen/BMC

ISBN No 0-903908-71-9

### Medical h'bk for walkers & climbers

ISBN No 0-0947-82105

## Contacts

Training can be provided by a number of establishments. Also check the BMC courses directory, and magazine adverts.

### Plas y Brenin, North Wales

01690 720214

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

### Glenmore Lodge, Aviemore

01479 861256

[www.glenmorelodge.org.uk](http://www.glenmorelodge.org.uk)

### St Johns Ambulance Service

020 7258 3456

[www.sja.org.uk](http://www.sja.org.uk)

### The High Altitude Medicine Guide

[www.high-altitude-medicine.com](http://www.high-altitude-medicine.com)

### UIAA Mountain Medicine Centre

[www.thebmc.co.uk](http://www.thebmc.co.uk)



## Winter Sports Instructor Programmes Canada & New Zealand 2002

- CSIA, CASI, NZSIA Ski & Snowboard instruction & examination
- CAA & NZMSC Avalanche Level 1 instruction & examination
- Backcountry snowcat & heli-touring
- 3 to 12 week programmes available

Sven Bruno at Kicking Horse Mountain Resort, B.C. by Henri Georgi



For more information please contact the  
International School of Sport:  
T: 01572 813 701 F: 01572 812 932  
E: [info@theISOS.com](mailto:info@theISOS.com) W: [www.theISOS.com](http://www.theISOS.com)

# Typical Incidents

## A backpacking trip

- A simple cut of the hand following a slip
- A sprained ankle or knee
- Blistered feet
- Asthma attack
- Headache due to dehydration
- Burnt hand due to stove problems

If you have the right skills; some plasters, a roller bandage, blister treatment, inhaler, some painkillers and a bottle of water, roll of tape, and a polythene bag would do the trick for all of these complaints.

## An Alpine Climb

- Arm broken by rock fall
- Extensive abrasions due to slip on a dry glacier
- Head injuries due to fall
- Major upper leg injuries, broken & bleeding
- Serious sunburn and snowblindness

The right improvising skills, together with the following would suffice;

A bottle of water, large wound covering (polythene bivi bag), a roll of tape, climbing slings, ski poles, sunblock, sunglasses, a teabag (cold wet tea bags are a great calming compress for irritated eyes!), and some strong oral painkillers. A bivi bag will help keep the casualty warm whilst waiting for the helicopter.



## Volunteer Leader Training

The BMC is offering key youth and competition volunteers the opportunity to apply for a training bursary to spend at Plas-y-Brenin on group leader, navigation and first aid skills until the end of 2001. Two subsidised route setting courses are to be held in September for Area Youth Co-ordinators and a bursary is available to attend a choice of NCF coaching modules to support regional coaching and development.

Volunteer courses at PyB are supported by the BMC and the Mountain Training Trust. If you are interested in supporting the BMC's youth, training, competition or equity development programmes in 2002 please look at the *gripped?* section on the BMC website and return a volunteer registration form (CPP-3a) to the BMC office.

## BMC Regional Training Co-ordinators supported by AMI

If you are an AMI member and interested in supporting the BMC development programmes and major events such as the Entreprises & BMC Festival of Climbing (7-9 December) as a volunteer for 5 days per year (expenses included) please contact [anne@thebmc.co.uk](mailto:anne@thebmc.co.uk) or Andy Brown

(AMI Liason Officer) for more details. Liason with youth and community organisations will form part of the role and Regional Training Co-ordinators will be advertised on the BMC and AMI websites, promoted through Summit magazine and in the BMC Training and Courses brochure. Closing date for application is 1st November 2001, however we would like to establish the positions ASAP! See BMC website for application form and further details.

## MLTB Workshops

Details and booking forms can be obtained from the MLTB office (01690 720314) or by visiting [www.mltb.org](http://www.mltb.org).

### ML Holder Seminars (2 day)

Sat/Sun 13-14<sup>th</sup> October, PyB

Sat/Sun 24/25<sup>th</sup> November, PyB

### SPA Holder Seminars

Saturday 29<sup>th</sup> September, PyB

### Assessor Training Workshops

Sat/Sun 6/7<sup>th</sup> October, PyB

Sat/Sun 17/18<sup>th</sup> November, PyB

### Teaching & Coaching in the Mountains

Sat/Sun 3/4<sup>th</sup> November, PyB

### Disability Awareness Workshops

Monday 1<sup>st</sup> Oct, B'ham, The Rock Face

Of special note is the new 'Voluntary Leaders Conference' - 'Risk in the mountains when leading formal or informal groups'.

This innovative new conference is running on Friday 7<sup>th</sup> Dec, at the National Indoor Arena, Birmingham, as part of the Festival of Climbing.

## Winter Lectures 2001

Going out on the hills this winter? A series of six interactive lectures presented by Andy Perkins and Helen Caudry to prepare you for hazard awareness, essential winter safety skills as well as useful information on planning trips and top tips on enjoyable places to climb or walk. Lectures will start at 6.45pm and there will be a bar available at most venues. Tickets available from the BMC from early October and also on the door. Check the BMC website for further details.

**13 Nov** - University College London, Edward Lewis Theatre, Windeyer Building, 46 Cleveland Street, London

**14 Nov** - University of Bristol Union, Winston Theatre, Queen's Road, Clifton, Bristol

**15 Nov** - University of Nottingham, B62 Law & Social Sciences Building, University Park, Nottingham

**20 Nov** - University of Bangor, Main Arts Theatre, College Road, Bangor

**21 Nov** - Venue to be advised.

**22 Nov** - University of Leeds (tbc)

Tickets: £3 members, £5 non-members

**learn what you love...**

- ▼ HND Sports Science (Outdoor Activities or Marine Pursuits)
- ▼ BSc/HND Coastal Zone & Marine Environment Studies
- ▼ BSc Sail & Powerboat Studies
- ▼ HND Leisure Boat Design
- ▼ HND Marine Studies (Professional Skipper)

**... in Britain's only coastal national park**

Courses in conjunction with

Freephone **0800 716 236** for details  
[www.pembrokeshire.ac.uk](http://www.pembrokeshire.ac.uk)

Over 70 other courses available

**PEMBROKESHIRE COLLEGE**

**bringing learning to life!**

**We're going to extremes...**

**High Altitude Expedition**  
1st - 13th December 2001

**Summit majestic Cotopaxi and Chimborazo!**

Trekking in the breathtaking Avenue of the Volcanoes in Ecuador is your chance to do something memorable and unique. You can experience the point furthest from the centre of the Earth and stand, ultimately, on two of the most isolated summits in the world.

**...come with us**

For further information on this and other overseas fundraising expeditions:

- Visit our new website [challengeseries.co.uk](http://challengeseries.co.uk)
- Call us on 0118 953 3238
- Email: [info@cad.tele2.co.uk](mailto:info@cad.tele2.co.uk)

**Children's Aid Direct**  
Reg Charity No. 803236

**challengeseries.co.uk**







# AFRICA **travel and adventure**

**Stuart Ingram and the BMC Information Service check out the varied delights of the dark continent.**

Varied is dead right – almost unbelievably so, from the vibrant Arab culture of the North, through the indigenous tribal people of the central and Southern regions, to the old colonial outposts along Africa’s west coast – you couldn’t ask for a more exciting continent to visit. The only problem is deciding which bit to go to – there’s no way to cover it all in one visit, and certainly not in one article! The best we can do here is to provide some ideas for destinations together with the basic travel information you will need to visit, and links to other resources.

In addition to hiking or climbing, there is a full range of water and land based sports to sample on rest days – for example the surfing off the Cape is some of the wildest on Earth! Immerse yourself in the history of Africa, the roving Bedouin of the Northern Deserts, the Egyptian Pyramids, the mighty Zulus or the mystical tribes of the Ethiopian Highlands. Then there is scenery – the Great Rift Valley, the awesomely huge Sahara – and wildlife - the Serengeti and Masai Mara offer some of the most beautiful experiences anywhere. How are you going to fit in climbing or hiking with all of this going on??

Just kidding! Much of Africa is very amenable to outdoor activity, and many parts of the continent having a long history of (adventure) tourism. The climbing scene is espe-

cially well developed in South Africa - see past reports on the BMC exchange in Summit magazine - in particular; the Rocklands bouldering sector is currently a world forcing ground with problems as hard as any on the planet. Hiking and trekking is well catered for throughout with internationally recognised destinations like Kilimanjaro, The Atlas Mountains, The Drakensberg and the East African Rift Valley attracting millions of outdoor enthusiasts every year. However, there is plenty of adventure to be had for those who want to get off the beaten track – sometimes more than you can handle! The East and West coasts are relatively undeveloped, not to mention dangerous in varying degrees, and parts of the interior (eg. remoter parts of Congo) have never even seen a “Westerner” – be careful out there!

Overleaf is a selection of currently popular destinations; obviously there are many more and a little digging and exploring may allow you to discover the next “gem” of an African destination. Bear in mind that many of these areas will offer both hiking and climbing in addition to other outdoor pursuits.

(LEFT) Climbing on the recent BMC South Africa exchange. (RIGHT) Unexplored ground at Mirupi, Nampula province, Mozambique. Credit: Dave Turnbull



Friendly locals in Mozambique. Credit: Turnbull

## Climbing destinations

### Todra Gorge, Morocco

Morocco's premier destination. Magnificent limestone with many bolted routes up to 300m high, with easy access and a variety of short and steep test-pieces to long and spectacular routes up to the canyon rim (take a full rack for these!). There are about 100 routes up to 8a within walking distance of the four hotels in the gorge – the Hotel Etoile des Gorges is friendly and the owners have lots of local information on the climbing.

**Guidebook** - No official climbing guide; use local information and topos on arrival, or check Rock & Ice No 83

**Map** - Toubkal Regional 1:50000 series (locally available)

### Cape region, South Africa

The Cape area of South Africa combines wonderful trad and bolted routes with quality bouldering, spectacular views and positions and ease of access. Right on the doorstep of SA's most cosmopolitan city is Table Mountain, or for a little more adventure, head out to the Cederberg mountains for more of the same – here lies Rocklands, currently one of the forcing grounds for world bouldering standards. There is also the awesome sport climbing venue of Montagu, two hrs drive from Cape Town. A great local climbing scene exists around these venues, ensuring any visiting climber will have a memorable trip.

**Guidebook** - Cape Rocks (Fisher)(various local guides available in SA or through the MCSA)

**Map** -South Africa 1:2000000 (Freytag & Berndt)

### Red Sea Mountains, Egypt

Difficulty of access, supplies and occasional banditry prevent most visits here, but the situation is easing as the coastal strip is developed for tourism. Tony Howard's (of NOMADS) exploratory report in the 1997 Alpine Journal is an excellent survey of what's out there. The area contains Egypt's highest mountain – Jebel Shayib (2187m) – and consists of Chamonix-like granite peaks, some of which were climbed early in the 20<sup>th</sup> century by Alpine pioneers. Check with the Egyptian Consulate General for latest restrictions (Tel: 020 7235 9719).

**Guidebook** - Nope!

**Map** - Egypt 1:1000000 (Freytag & Berndt)

## Hiking destinations

### Atlas Mountains, Morocco

A dozen summits in the Atlas reach 4000m but there are no glaciers, and the snows of February quickly give way to desert heat in the summer. The highest peak is Toubkal (4167m) and ascents are possible in winter (full competence with ice axes and crampons, or in ski mountaineering) and summer (full competence at scree slogging) but at

any time remember the altitude and acclimatise properly. The views are stunning (and bizarre) 360° panoramas from the icy peaks to the warm, red deserts below! The lower peaks are often overlooked, but offer much untouched potential when compared with the more popular destinations.

**Guidebook** - Atlas Mountains (Cordee) Great Atlas Traverse (Peyron) – vols 1 & 2

**Map** - Toubkal Regional 1:50000 series (locally available in Imlil or Rabat)

### Simien Mountains, Ethiopia

A part of the Africa Rift Valley system, the Simiens are hard to beat for spectacular scenery. The park is most easily reached by flying from Addis to Gondar, then taking the bus to the town of Debarq. The views are just like the Grand Canyon without all the tourist clutter, the wildlife includes rare birds, game and of course the Simien foxes, and the hiking is fabulous. Untouched highland villages, spectacular gorges and pinnacles and Ethiopia's highest mountain (Ras Deshen 4620m) are all must visits. Try to squeeze in a trip to the Danakil Depression (one of the lowest points on the Earth's surface at 116m below sea level) for posterity.

Guides are **compulsory** in the park, you cannot trek there without one. The guides must pass a training course, and come complete with mules and an armed guard, currently for around £20 per day (for a group of up to 3). Contact the senior guide at Simien Mountain National Park Office in Debarq for more details (Tel: +251 8 110705).

**Guidebook** - No! An article on trekking in High No 165 (Aug 1996) may be found useful

**Map** - Simien Mountains – Trekking Map 1:100000

### Kilimanjaro & Mt Kenya, Kenya

Kili is probably the most popular climb in Africa, and it's easy to see why. Terrain on the ascent varies from dusty desert, through temperate meadows, lush forests, alpine tundra to glacial snow and ice at the top. All the while there are huge desert vistas and wonderful wildlife to admire, and the final sections around the crater rim (ideally done at dawn) are nothing short of spectacular. However, there are several routes up the mountain aside from the *voie normale*, and it's quite possible to enjoy a solitude experience on your ascent.

**Guidebook** - Kilimanjaro & Mt Kenya - A climbing & trekking guide (Burns) A guide to 30 routes including nearby peaks.

**Map** - 1:50,000 Map & Guide to Kilimanjaro (Savage)

## Just great destinations

A visit to Africa is not complete without checking out some of the (un)natural wonders on offer here:

### Masai Mara game reserve, Kenya

The world's most famous, and probably still the best game park. You've seen the TV shows, now go and experience it for yourself. Easily accessible by air from Nairobi.

### The Pyramids, Egypt

Amazing, just amazing. Think about the effort it must have taken to build these pyramids with only manpower and cunning. Gaze up at one and you'll see just how big they really are. There also is some great trekking in this region.

### Cape Town, S Africa

Cape Town, South Africa's oldest settlement, is dominated by the kilometre high flat-topped Table Mountain and superb mountain walks, vineyards and beaches are all within easy reach. The town is a fascinating mix of English and



African influences, has a vibrant nightlife and a great outdoor scene, with hiking, climbing, surfing diving etc. on the doorstep. It is also one of the safest African cities to visit.

## Marrakesh, Morocco

Formerly the Moroccan capital, the most famous feature of Marrakesh is the Old Square at Djeema-el-Fna – perhaps the most famous market in the world, where everything is for sale! The abundance of low budget hotels and souks make this a great town for a little cultural exploration – be careful of pickpockets and scammers though!

## Travel and Health Advice

As a general rule, most visits to Africa are completely trouble-free if you avoid the known trouble spots. All the same, take sensible precautions when in towns and cities – don't carry more money than you need, travel in groups, try to blend with the locals etc.

Make sure that you have adequate travel insurance for your holiday activities. Hospital treatment and/or rescue can be extremely expensive for the non-insured.

It is essential to be vaccinated against Yellow Fever, Polio, Hepatitis A and Meningitis if visiting Africa, with immunisations such as Malaria, Hepatitis B, Cholera and Typhoid also required for some areas. The usual precautions against mosquitoes (repellents and nets) will be needed, and carrying sterile needles and syringes in your medical kit is a good idea. This kit should also include antihistamines, painkillers, rehydration salts and multivitamins. Remember that Africa has a very high rate of HIV/AIDS (up to 45% in some areas), so behave out there!

## Current problem areas

Unfortunately, the continent sometimes seems to have more than its share of political, social and humanitarian issues - these once popular destinations should be considered closed to outdoor activities for the foreseeable future. Check with the Foreign Office ([www.fco.gov.uk/travel](http://www.fco.gov.uk/travel) or call 020 7008 0232) or [www.lonelyplanet.com](http://www.lonelyplanet.com) for updates and the latest situation.

**Tibesti Mountains, Chad** – uncleared minefields, armed criminal gangs and rebel activity in the border regions with Nigeria and Cameroon

**Hoggar Mountains, Algeria** – frequent outbreaks of street warfare between rival political factions and muslim extremists

**Eritrea / Ethiopia / Sudan border** – continuing disputes over this border region have turned increasingly violent over the last few years

## Tourist offices

**South Africa** Tel: 020 8971 9350

[satour@satbuk.demon.co.uk](mailto:satour@satbuk.demon.co.uk)

**Egypt** Tel: 020 7493 5283

[egypt@freenetname.co.uk](mailto:egypt@freenetname.co.uk)

**Ethiopia** No active tourist office in the UK

**Morocco** Tel: 020 7437 0073

[mnto@btconnect.com](mailto:mnto@btconnect.com)

**Kenya** Tel: 020 7355 3144/5/6

**Tanzania** Tel: 020 7407 0566

[director@tanzatrade.co.uk](mailto:director@tanzatrade.co.uk)

**Mozambique** No active tourist office in the UK

## Other useful contacts

**NOMADS - New Opportunities for Mountaineering, Adventure & Desert Sports**

Greenmans Farm, Greenfield, Oldham, OL3 7HA

Tel/Fax: 01457 873231

[www.n-o-m-a-d-s@demon.co.uk](http://www.n-o-m-a-d-s@demon.co.uk)

**Medical Advisory Services for Travellers Abroad (MASTA)**

Tel: 01276 685 040

[www.masta.org](http://www.masta.org)

**Foreign & Commonwealth Office**

King Charles Street, London, SW1A 2AH

Tel: 020 7270 1500

[www.fco.gov.uk](http://www.fco.gov.uk)

**The Mountain Club of South Africa (MCSA)**

97 Hatfield Street, Cape Town 8001, South Africa

Tel: +27 21.46.53.412, Fax: +27 214 618 456

**Independent Travellers World**

14 - 15 Child's Place, Earls Court, London, SW5 9RX

Tel: 020 7373 7788, Fax : 020 7341 6644

[www.itwnet.com](http://www.itwnet.com)

## Useful Publications

There are Lonely Planet and Rough Guides to most African countries. Specific guidebooks and maps are covered within the relevant text sections, but the following travel narratives may be of interest:

**In Ethiopia with a mule** (Murphy)

**Danakil Diary:** Journeys through Abyssinia (Thesiger)

**The Rainbird:** A Central African journey (Brokken)

## Internet

**[www.africa-inform.com/catalogue/tourism](http://www.africa-inform.com/catalogue/tourism)**

There is so much information here you won't know what to do with it!

**[www.budgettravel.com/africa](http://www.budgettravel.com/africa)**

A million and one further links

**[www.lonelyplanet.com](http://www.lonelyplanet.com)**

Highly recommended

**[www.goafrica.about.com/mbody](http://www.goafrica.about.com/mbody)**

Essential information and links

**[www.travelafricamag.com](http://www.travelafricamag.com)**

Online travel magazine and planning base

**[www.adventurepages.com](http://www.adventurepages.com)**

Suggested itineraries throughout the continent

**[www.africaguide.com/travelog](http://www.africaguide.com/travelog)**

A great section of this useful site giving personal accounts of African adventures

## Insurance and more information

Comprehensive BMC information sheets are available for all the above destinations and many more - free to members, £2.50 to non-members. Please contact the office on 0161 445 4747 or email [stuart@thebmc.co.uk](mailto:stuart@thebmc.co.uk) to order. Travel insurance for all activities is available from the BMC.

## Get THE Mountain Travel Book

Whether you're planning a trek in Morocco, or an ascent of Kilimanjaro - this is the book for you. The Mountain Travel Handbook, written by Paul Deegan, and published by the BMC is packed full of all the essential information you need. The Handbook includes advice on altitude illness, clothing and equipment, situations to avoid and what to expect on a typical day in the mountains. As well as a chapter on photographic and video techniques, the book has sections dedicated to communications, sponsorship and the best time of year to visit key mountain destinations. This full-colour book, which contains 75 photographs, is priced just £12.95. Available from the BMC and all good outdoor shops from November.



The Summit of Kilimanjaro - Highest point in Africa

# LICENCE TO CLIMB

## CLIMBING INDOORS: EXPERIENCE VS QUALIFICATIONS

**In some countries you need a test of competence before you're allowed to climb indoors. Should the UK follow?**

The article 'Climber or Leech' in Summit 22 was one that certainly produced a lot of feedback. Written by Ian Dunn of Entre-Prises Climbing Walls the article was based on the increasing number of claims that are being lodged against climbing walls for accidents that were, well, accidents, or were caused as a direct result of the climber's own actions e.g. failing to tie in-correctly. What Ian was not trying to do was defend climbing walls that are negligent (see Risk, Freedom and The Law page 14).

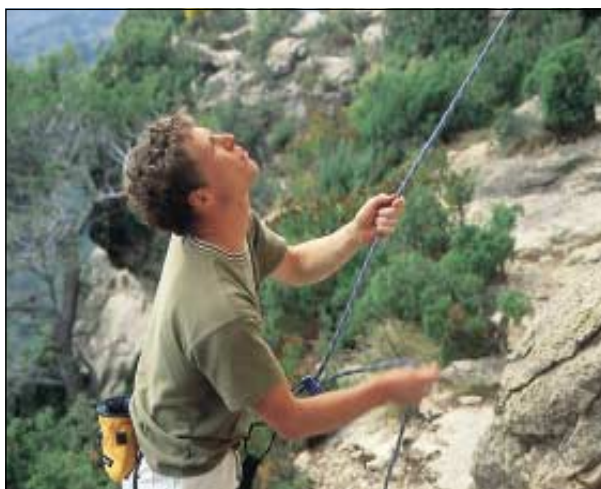
One issue that the article raised was whether it was acceptable for walls to let climbers in without any form of checking on their competence. The current situation in the UK is that there is no form of compulsory testing for climbers at walls – or at least not for climbers who declare themselves to be capable of tying on, belaying etc and are over 18. The situation for under eighteens is different. Under the law minors cannot fully accept responsibility for risks, as a young person approaches 18 the level of responsibility increases and is also dependant on the individual's experience. The recommended procedure was explained in the article 'Young Climbers at Walls, Summit 11 (also available at [www.thebmc.co.uk](http://www.thebmc.co.uk)). Beginners should be accompanied by a responsible experienced climber or should take one of the centre's induction courses. Some people see no other option but to introduce some testing of climbers to ensure that the equipment is being used correctly.

**Steve Christian, a Risk Management Manager and a climber, argues:**

*"Yes people should have a duty of care for their own safety and this is acknowledged in health and safety legislation. However it does not negate the need for providers of public facilities, including climbing walls, to carry out risk assessments of the activities of people using the facility, nor the need to provide them with safe and proper equipment for its use. Such safety equipment as ropes, lower offs and fixed protection, classed as personal protective equipment in industry, is covered by legislation and requires testing and certification to the required level of load for the application.*

*For climbing walls, even just providing such basic assurance of the safety equipment is insufficient to prevent accidents, as is now increasingly obvious with the frequency of occurrence of such. What therefore can be argued as also appropriate, to prevent personal injury, is a formal assessment of people's competence at using the climbing equipment, both supplied and which the user brings with them."*

Whilst Steve is totally correct that in industry there is a requirement for the employer to ensure that employees are correctly trained to use PPE marked equipment (Regulation 9 (1) of the "Personal protective equipment at work regulations 1992") this is not the case outside of industry.



Does an experienced belayer need certifying?

**Steve goes on to comment:**

*"I would suggest for climbing walls, that relying upon the honesty of the user in filling out a questionnaire on their level of competence, falls way short of the standard required in demonstrating a duty of care for the user."*

**Tony Webster from Canada also questioned whether self assessment was sufficient :**

*"I would suggest that with the growing popularity of indoor climbing (at least over here in Canada) if some form of required basic safety check is not implemented at gyms then trouble is on the way.....I have to confess that I do not really understand the idea of self certification of competence" - if you ask every belayer (for example) at a climbing establishment if they feel that they are competent I would be surprised if anyone would respond negatively. Everyone always THINKS they are competent, but maybe they have never really been taught the truly correct safety techniques!"*

Some climbing walls in America have adopted competence testing or "orientation" as they call it, but this has met with resistance.

**Chad Rhodes of San Diego disagrees:**

Chad climbs at the Aztec Recreation Centre and is considering cancelling his membership. *'I understand and appreciate the need for safety, but for people like myself, who have been climbing here for years, I think we should be offered an alternative to the orientation.'*

So would competency testing for climbing wall users actually reduce accidents? The BMC believes that experienced climbers do not need and should not be required to attend an induction course in order to use a climbing wall safely and responsibly. Any test or qualification can only give you a snapshot of a person's competence at one moment in time. If competency testing eliminates accidents then how come there are so many road traffic accidents, after all the vast majority of drivers have driving licences.

**Steve Richardson, MIA, manager of the Bristol Climbing Centre and Chair of the Association of British Climbing Walls thinks not:**

*'I read with interest Ian Dunn's article, 'Climber or Leech' in the last edition of Summit magazine. As a climbing wall manager I am constantly aware of the risk of litigation and as a result tend to share a lot of Ian's sentiments. Most climbing wall operators work hard to find a sensible balance between providing a safe, well run facility and ensuring life is neither too onerous or expensive for climbers. They should be thanked rather than sued. When things do go a bit pear shaped one question often asked is – why don't you assess people who wish to use the climbing wall? Well we don't and neither do we wish to in the future.*

*Quite simply there is no evidence to suggest that assessing users – and we are talking about competent climbers here, not novices – would reduce the likelihood of accidents. To do that we would need to reduce the stupidity factor, which no amount of assessment will circumvent. For most climbing walls, implementing user assessments would cause considerable practical problems which, when combined with concerns about increased liability and cost, make it a fairly unattractive proposition for everyone concerned, especially climbers. In our experience by far the most practical and successful approach is to regularly monitor all climbing activities using trained and vigilant staff. Doing this ensures that irresponsible climbers who may cause injury to themselves or others are dealt with sensibly and appropriately.*

*The alternative to this will be a lot of misguided rules and regulations, which would offer no discernable benefit and would be completely contra to the ethos of the sport. For all our sakes let's hope common sense will prevail.'*

The BMC are currently undertaking an exercise to establish patterns of accidents at climbing walls, and the initial impression, backed up by years of anecdotal evidence, is that an accident is just as likely to happen to an experienced climber as to a novice climber. Novice climbers have a tendency to treat climbing walls as a safe environment, an alternative to a leisure centre whereas the reality is that climbing walls have some, if not all, of the risks associated with outdoor climbing.

It is a reasonable assumption that the majority of experienced climbers who have been involved in accidents would have passed any basic competency test. It is therefore safe to conclude that it is not a lack of knowledge that causes accidents, more likely that it is lapses of concentration, complacency or other dynamics that are contributory factors. This assumption is backed up by the findings of research that has already looked into the relationship between experience and accidents at climbing walls. This research was produced by the BMC in 1997 and one of the most important findings was that climbing walls are incredibly safe places, far safer than squash courts or football pitches.

**The biggest causes of accidents were:**

- Climbers being lowered off too fast
- Incorrect rope attachment to harness
- Poor use of belay device
- Poor leading/clipping technique
- Other misuse such as three way loading of karabiners

Would a basic competency test significantly reduce these types of incident? For experienced climbers probably no, as

we are talking about simple basic errors that arise through casualness. What about inexperienced climbers who would be capable of self-certifying their own competence? Well they would more than likely pass a basic competence test but just as newly qualified drivers have at least an average chance of crashing, it is a safe assumption that they would have at least an average chance of being involved in a climbing wall incident.

A competence test for the climber who brought the case mentioned in the article 'Risk Freedom and the Law' (page 14) would presumably have passed a competency test but it would not have prevented his accident.

Other factors also affect the feasibility of competence testing. Imagine the scenario whereby on August Bank Holiday weekend the weather at Stanage turns foul. Half of the crag might decide to trot off down to the local climbing walls and because half of those climbers haven't visited that particular wall before they have to undergo a competency test. Where are the staff going to come from, how long are you going to have to wait until it's your turn to be tested. And when it's your turn to be tested are the staff going to insist that you belay with one specific type of belay device rather than the one that you have been using for years and are familiar with? Competency testing in this scenario would not be "reasonably practicable" and this is an important phrase in Health and Safety law. Reasonably practicable implies that a computation has been made in which the quantum of risk is placed on one scale and the sacrifice whether in money, time or trouble involved in the measures necessary to avert the risk is placed on the other.

The perception that competence testing would reduce the liability of climbing walls is in fact incorrect; the liability of the walls would increase, which would have the following effects:

1. A 'basic' competency test would turn into an exhaustive test as the walls try and protect themselves. How long would this take? Would an SPA qualified instructor be adequate, or would an MIA or MIC be required? And who would end up paying for all of these procedures? The wall users. And would the initial problem of accidents be solved? More than likely not.
2. In the event of accidents still occurring, as the BMC believes would be the case, the likelihood is of increased claims against the walls. Some of these claims will be successful, some will be settled out of court, some will be successfully defended and some will be withdrawn. The result will however be the same, the spiral of increased costs outlined by Ian Dunn in his original article.

What is needed to reduce accidents at climbing walls is not competency testing or strict regulation and management interference but increased advice on good practice and improved training opportunities. Novices need advice and education about the risks of climbing. Experienced climbers need to be vigilant to ensure that they are using their equipment correctly. And novice and experienced climbers alike need to develop a culture of collective responsibility whereby we don't just turn our backs when we see someone displaying bad practice.



Young climbers do need looking after.

**British Rock - All the Gear!**  
[www.needlesports.com](http://www.needlesports.com)

UK post free on all internet orders

56 Main Street Keswick  
Cumbria CA12 5JS 017687 72227

## Multiple Club Subscription Refunds

Thanks to all club members who did not claim multiple club subs back from the BMC last year. If you are currently affiliated to the BMC via more than one club, now is the time to reclaim your additional membership subs for 2001. Please notify the BMC's Membership Services Team in writing before the 1<sup>st</sup> Dec. 2001 stating which clubs you are presently affiliated to.

## Sports Club of the Year Awards 2001

The FSA in association with The CCPR is running this award scheme for the eighth year. The award is presented to a sports club that sets standards in excellence, encourages more participation, attracts grants & sponsorship and has a track record in community, schools or other outreach work. Three prizes (£10000, £4000 and £1000) are up for grabs by the top three sports clubs judged to exhibit "current best practice" within their activities. This is a great opportunity both to get your club noticed by two of the bigger bodies for sport in the UK, and to pick up some welcome financial assistance! The BMC is able to nominate up to three of its affiliated clubs for this award - the closing date for nominations to the BMC is 5th October ahead of the final date of 12th October. Nomination forms and criteria are available from the BMC Office.

## Management Committee

27 Jun'01. The Guidebook Programme WG provided a report and the Committee agreed with recommendations including the recruitment of a guidebook production co-ordinator and volunteers for specific posts. The Stange Guide-

book is near and C. Craggs has not responded to a 2nd letter re. copyright. FMD, CROW Act, Equal Opps and Dyslexia were discussed. The final version of the Strategic Plan for Mountaineering has been submitted to UK Sport and the home nation sports councils. A financial forecast was circulated for MSL. MSL will be launched in Dec. at the Festival of Climbing and will start trading in Jan.'02. The Committee empowered the Executive Committee to nominate a Director to MSL. The Access & Conservation Trust will be launched at the same time, the Committee approved Iain McMorris as an ACT Director. The draft Huts Policy was discussed. Executive Committee Areas of Responsibility were approved. Support was given to the UIAA Summit Charter. The '02 AGM will occur in the Lakes. Paul Dewhurst was thanked for his contribution as Chair of the Comps Committee. The Executive Committee reported about planning for a new President and new VPs. The Gen Sec had written to the Executive stating that the timing is right for the councils and training boards to move closer by jointly appointing a new BMC senior officer. He also indicated that in order for this to be carried out in a realistic and open way that he would stand down and seek new challenges next year

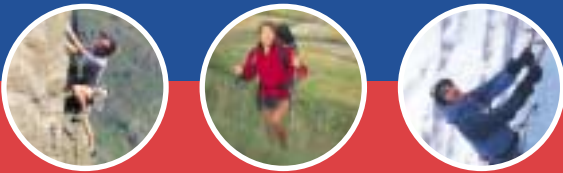
## Area Meetings Calendar

BMC Management & Area Meetings Calendar for 2001										
2001	MANAGERS	LAKE DISTRICT	NORTH WEST	LONDON & SE	WELSHS	NORTH EAST	PEAR DISTRICT	SW & SOUTHERN	WALES	YORKSHIRE & HUMBLES
Sep					Thursday 17 7.00pm Fauldgate Birmingham		Thursday 17 7.00pm The Rocks Tutwell Cornwall		Saturday 22 10.00am Wales International Climbing Ct	
Oct	Wednesday 10 BMC Office	Friday 12 8.00pm Golden Pulp Airedale	Monday 15 7.00pm RMC Office Manchester	Thursday 18 7.00pm Fleaze House Fleaze St. Ludlow		Monday 22 7.00pm Whitson Thorncliffe Durham			Saturday 27 10.00am Wales International Climbing Ct	Monday 15 1.00pm Leeds Hall Gardai Road
Nov		Friday 23 8.00pm Golden Pulp Airedale			Thursday 22 7.00pm Acacia Birmingham and area	Monday 26 8.00pm 1.00pm Dunville W. Durham	Thursday 22 7.00pm The Woods Tutwell Cornwall	To be confirmed	Saturday 24 8.00pm Fitz T. Bristol	Monday 12 1.00pm Leeds Hall Gardai Road

Dates and venues may be subject to change. Please check BMC website on a regular basis

# BMC

## THE ESSENTIAL INSURANCE GUIDE



**unbeatable value  
for cover you can trust**

### The BMC Travel & Activity Insurance Guide

- **Sun Leisure** Value for money travel insurance
- **Sun Trek** Low cost options for hill walking and trekking
- **Sun Rock** Popular climbing cover
- **Sun Ski & Climb** Comprehensive cover for mountaineering and winter sports
- **Sun Peak** Competitive premiums for ascents in the Greater Ranges

**INSTANT COVER**

**www.thebmc.co.uk**  
**0161 445 4747**

All surpluses from **BMC** services are invested in work that promotes your interests and protects your freedoms – **so the only one to profit is you.**



Please send me a **FREE** copy of the **BMC Insurance Guide**

Name: .....

Address: .....

Postcode: .....

Return to: **British Mountaineering Council,  
Member Services, FREEPOST MR9759, Manchester M20 7AD**

**Fax: 0161 445 4500 E-mail: insure@thebmc.co.uk**























# Unhappy Birthday

**Snap, buckle and pop. My knee was grinding itself out of business fast. My leg kept collapsing without warning, but it was sustainable, so far. As long as it didn't crumble as I crossed a crevasse I'd be fine...**

The fall should have controlled, but the momentum of my rucksack toppled me in. Now, wedged face up in a crevasse the depth of which I dared not guess, the only things between me and the blue abyss were the battered Karrimat and tent lashed to the sides of my pack. The sanctuary of the crevasse lip was only four feet above, but that was four feet too far. Alone in Pakistan, and miles from civilisation it could not have worked out worse...

Grind, step, grind, step. It was no good, my right knee was definitely failing, we stopped and pondered what to do. I was certainly going down but the real question was whether it was alone. We argued for a while neither side giving in, but as usual my sheer stubbornness won through: I would descend alone - a small victory I would later learn to regret.

I said goodbye, trying not to make anything of the moment as I turned to leave them, content in the thought that at least the entire expedition wasn't over. Jim's trekking poles helped to lessen the impact on my knee, although co-ordinating them was a challenge. A tear welled-up in my eyes as I began my descent, all that preparation and planning straight down the pan.

### "I managed to hold back breaking down"

I managed to hold back breaking down, consoling myself in the knowledge that it was simply my turn. Richard's Austrian heart-infection, Chris's Icelandic Hypothermia, Duncan's Nepalese Giardia, Dave's Swiss lead-fall, now just my Pakistan knee. As the minutes flowed into hours this thought managed to imprint itself into my head, leaving me free to concentrate on at least trying to look co-ordinated hobbling along on the poles.

I made good time on the flats thanks to Ibuprofen, mastering the cross between a hobble and a waddle. It was just the ups and downs that seemed to bother me, which was a slight drag, since the terminal moraine of the Biafo Glacier is the biggest crevasse pile-up I've ever seen. Skirting the edge of the glacier seemed to work, relatively flat underfoot despite its undulating and crevassed nature....

### "I started praying and praying hard"

....Wedged in the crevasse I started praying and praying hard. Then began to recall my Mother's words before I left: "You just make sure you come back in one piece!". Well, I had reassured her, with a 100% success rate so far, I have no intention of returning as air-freight. With this im-



## An unforgettable day by Nick Adlam

pressive success rate on the line, remorse turned to resource and I began to analyse an escape.

The trekking poles still dangled from my arms, despite my dislike for them I swallowed my pride as I silently thanked their maker, Mr. Leki. If you dismantle one section of a pole you are left with a very sharp threaded point, ideal for ice chiselling. I cut two handholds above myself and with a little huffing and puffing managed to orientate myself into a vertically wedged position.

### "leap of faith"

Emboldened by this unexpected result, a cunning plan swung into action. I squirmed round, and managed to chisel two small ledges in the crevasse walls - opposing each other at knee height. Concentrating fiercely, I reassembled the trusty Lekis, wedged them across the abyss in the ledges, and then in a leap of faith manoeuvre (I still haven't quite worked out how), stood on top of the poles de-wedging myself in the process.

Swinging my rucksack off, I removed the ice axe before pushing it out and over the lip of the crevasse, then tied off the trekking poles to my feet - I then prayed once more, this was it: the crux.

I reached up and embedded the ice axe hard. Pulling up with the remainder of my strength and simultaneously performing that mandatory waving of the legs that always occurs, I managed to claw my way to safety, and sunlight. After a brief word of thanks to upstairs I decided not to sit on the crevasse rim and contemplate what could have been, leave that for later - I still had to get out of here, ideally still in one piece.

Over the next eight hours I stopped only to pop Ibuprofen, saving the more powerful Temgesic's to help me sleep. Eventually the edge of the glacier loomed in front of me, I staggered on until I stumbled across a flat piece of ground outside a village. Collapsing in a heap, I weakly pitched the tent, before falling into a deep sleep.

### "screaming my head off, waving an ice axe"

Only to be rudely awoken by someone unzipping the tent. Tired, annoyed, and in no mood for a robbery, I erupted from the tent, screaming my head off, waving an ice axe, dressed in nothing but boxer shorts. Deciding not to bother this madman anymore, my nocturnal visitors slunk off, but I just sat there listening, waiting for daylight, I needed to get out of here. Good job I'd forgotten to pop the Temgesics, they could've danced on my knee, and I wouldn't have woken.

Later that day, I arrived in the relative sanctuary of Skardu by dusk, after a positively uneventful jeep ride from Askole, and headed straight for a hotel. Later that night I found two cards in my rucksack - and dimly remembered - today was my 21<sup>st</sup>.

Definitely one to remember.

(LEFT) Nick in happier times (RIGHT) The eternal terminal moraines of the Biafo glacier. Credits: Nick Adlam.



