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WELCOME TO ISSUE 34

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: 0870 010 4878 Fax: 0161 445 4500 members@thebmc.co.uk www.thebmc.co.uk

President: Mark Vallance Chief Executive: Dave Turnbull Summit Editor: Alex Messenger

EDITORIAL

Contributions for Summit should be sent to the Editor Alex Messenger at the above address or alex@thebmc.co.uk. Every care is taken of materials sent for publication, however these are submitted at the sender's risk. The views expressed within are of the contributors, and not necessarily the BMC.

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Gill Wootton
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Jane Harris
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Paula Taylor

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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.



foreword



A High Church

Welcome to the summer edition of Summit. The cold days of winter seem to be behind us, and I'm sure you're looking forward to some great days out. The hot weather seemed to affect the Annual Gathering weekend too. Gone were the frosty debates, to be replaced with a surprisingly uncontroversial AGM.

But there are still some clouds on the horizon, and these were highlighted in a Management Committee meeting prior to the AGM. The Future Policy Steering Group has been busy identifying problem areas and suggesting possible changes over the winter, but the interim report presented to ManCom seemed to ignite controversy rather than agreement.

Past policy making committees, made up of the "great and the good", have carried out their work behind closed doors, but in this new century the process has been dragged out of the smoky rooms and onto these pages, the web, and open meetings, allowing many "ordinary" members to air their views. Which creates a problem.

It's a simple fact that you just can't please everyone all of the time. The traditional games of rock climbing, hill walking and mountaineering now jostle for position with bouldering, indoor climbing and competitions, to give a very broad church. Satisfying the needs of such a diverse membership will always be a balancing act.

And one of the key problems still to be faced is the relationship between Individual and Club Members. There seems to be general agreement that the membership structure and management structure of the BMC need to be adjusted to accommodate the expansion in Individual membership, but the mechanism still remains to be decided. This particular cloud needs to be tackled, otherwise the next AGM might not be so sunny.

Individual members contribute an ever-increasing proportion of BMC funds. They want, and are willing to pay for, the various services that have been introduced such as Summit and liability insurance, but they feel disenfranchised and resent club members getting a cheap deal.

The requirements of Club affiliated members - huts, meets, dinners and lectures, are met to a large extent by their clubs. They rely much less on the BMC for services and activities though, ironically, they provide the BMC with most of it's volunteers and elected officials. Why should they pay more for bells and whistles they don't want?

There is a way to square this circle. Individual members should get access to a full range of services, evolving to suit their needs as climbing develops, while the Club affiliated members should only get, and pay for those core services that they founded the BMC to provide. If they want the bells and whistles they can pay for upgrading to full membership.

Well I'm off to the Dolomites this summer, followed by a week in Cornwall. but I'd like to get feedback, on a postcard. So whether you're heading to the Alps, learning to lead, or on an overseas trek, enjoy your summer'!

Mark Vallance

Mark Vallance

BMC President

(TOP): Mark Vallance lays down the facts at the BMC AGM.

ON THE COVER: Jon Cooke enjoying summer on the Left Unconquerable, E1 5b, Stanage. **Credit:** Alex Messenger



BMC support of competition climbing has always been controversial to some. But years of effort have paid off and the British team is now looking stronger then ever. With increasing numbers competing, is it time to leave any prejudices behind?

The recent Ordnance Survey Outdoors Show was the biggest yet, filling five halls at the NEC in Birmingham. Over 48,000 visitors piled in over the three days to sample the various exhibitions; Canoe '04, Adventure Travel '04, and of course Climb '04, with it's centrepiece being the North Face UIAA-ICC Bouldering World Cup.

Nationally and internationally the competition scene is now vibrant. The Sprayway BICC (British Indoor Climbing Championships) and A5 BBC (British Bouldering Championships) are going from strength to strength, and the international calendar now has 20 World Cups. Climbing is in the World Games and World Student Games in 2005, and even the World Firefighter Games this September (incidentaly any climbing firefighters do get in touch!)

The British Team are going particularly well too, achieving their most consistent results ever. After a number of third places over the last few years in the European Youth Cups, we've had our first ever victory from Tom Bolger in Switzerland. Tom went on to finish 2nd overall, with teammate Jamie Cassidy finishing 4th. Then there was Lucy Creamer reaching her first ever Difficulty final at Ratho in November, up against some pretty fierce opposition, with Steve McClure

also getting his best ever World Cup result with a $15^{\rm th}$ on the same weekend.

But it's the Bouldering team that's making everyone sit up and take notice. Malcolm Smith got our first top podium spot back in 2002 and finished second overall, but others in the team are now starting to perform. Various final placings last year (Mark Croxall 6th in France, Andy Earl 10th in the World Championships in Chamonix) culminated with four finalists at Ratho in December.

In the NEC they took the place by storm in front of an enthusiastic home crowd, and the result was the best overall set of results for the British team ever. A podium place for Gareth Parry, 4th for Mark Croxall and 6th for Andy Earl. No momentum was lost when they headed on to Erlangen in Germany either, just two weeks later Andy Earl had bagged a 4th place and Mark Croxall a 9th.

Part of the reason for this upturn is the improvements in team structure and resources, and now volunteers across the country are helping out on a regular basis. This has led to some interesting quirks for a start. 30% of BMC affiliated clubs (including student clubs) now have some kind of involvement with competitions, and the biggest gathering of BMC members is no longer the

AGM, but is at the BRYCS (British Regional Youth Climbing Series) final, when hundreds of parents and competitors converge to cheer on the climbers. But ironically this increase in grassroots support comes at a time when UKSport have cut the BMC competitions grant - who knows what could be achieved with more funding?

Of course, there will always be those unsure what to make of competitions, often claiming that competitors are just "plastic pullers", but the names speak for themselves; Lucy Creamer, Malcolm Smith, Steve McClure, Andy Earl, Gareth Parry. These aren't a separate breed, but some of the best climbers we have - indoors or out. Even Leo Houlding, posterboy for adventure climbing gained prominence from competing. It would seem that competition climbing is now very much part of the fabric of our sport.

NEXT YEAR

The OS Outdoors Show is on the 18-20th March next year and it'll be even better, featuring overnight camping, bands and barbeques for a full weekend festival experience.

TOP) Killian Fischhuber (Austria) gets in a tangle at Climb '04, before finishing 2nd. Credit: Alex Messenger.

latest news



Cheddar Summer?

Work continues on the Cheddar Gorge superb taster on the Sunday of the BMC AGM weekend proved very appetising. with Cheddar Caves and Gorge to some of the proposed cliffs, including Horseshoe Bend Buttress and High Rock. Lots of climbers made full use of the glorious sunshine and continental atmosroutes, and it was good to see Sir Chris mertime venue Cheddar could be.

But Remember...

The BMC South West Area Committee would like to remind climbers that the recent re-gearing work in the Cheddar Gorge (required due to prevailing conchange in the Avon Gorge fixed gear policy, or in the BMC fixed equipment policy. The Avon Gorge policy remains For belays reliant on fixed protection, it is acceptable to replace current gear with bolts if the fixed protection is rot-

For fixed gear runner placements with no natural protection available, it is acceptable to replace the fixed gear on a like-for-like basis only.

CROW Act Latest

The new statutory access rights under the CRoW Act will be implemented in England in a rolling programme, starting with the south east and lower north Wales follows and by the end of 2005 this process should be complete. The on what this will mean to you as a climber, hillwalker or mountaineer and what changes you can expect to see in the countryside.

Student Stand at AGM

Bristol student James Jackson tackles BMC and wins subscription freeze at the coolest AGM for many years.

This years AGM and annual gathering came and went in Bristol in April in a flurry of meetings, alcohol, and sunshine. According to some observers it was the least contentious and friendliest event for years. The highpoint was when the floor agreed to an amendment proposed by James Jackson from Bristol University, that student membership fee increases be freezed for a year.

Standing up to the old quard, and tackling BMC Treasurer Gordon Adshead by the horns, Jackson presented a compelling case for his side. He argued that the problem was not so much a case of "poor students", but more pressure from the Student Unions. In many cases club affiliation fees are handled directly by the Union, and if a Representative Body's fees are thought to be too expensive, they will simply drop out. With Universities increasingly discriminating against adventurous sports clubs, it would be a bad day for student climbing clubs if this happened, possibly leaving them high and dry without liability insurance, and entangled in a red tape nightmare of safety regulations.

Facing initial resistance, Jackson pressed on, and soon had most of the floor reminiscing about their days at University, and stating that the BMC needed to send out a firm message of support. This was democ-

racy in action, and everyone was so pleased by the result that the AGM even finished half an hour early.

Later in the evening Sir Chris Bonington did the business as guest speaker at the dinner with some tales about his early Cheddar exploration days including the first ascent of Coronation Street. The weekend was rounded off by up to a hundred climbers descending on Cheddar Gorge, although an attempt to get the elite team of Bonington and Derek Walker back on Coronation Street was foiled due to in-situ parties. The Gorge had been opened for climbing for the day thanks to the efforts of Martin Crocker and a keen band of Bristol climbers.

It was a sunny weekend in more ways than one, and with such good vibes, could it be that the BMC is finally back on track after a turbulent few years? Jackson making his stand.

CCBSS &

Latest ACTs

Recent Access and Conservation Trust (ACT) news.

In Summit 33 we reported on the work promoting rural development. These projects are now at the end of their implementation stages and already climbers and hillwalkers are benefiting from the improved relationships between visitors and local residents. The CHIPs (Climbing Huts Information Project) folders are now in club huts in Snowdonia, at Plas y Brenin, Pete's Eats, National Trust offices and bunkhouses and in some privately run accommodation. To see the kind of information on offer see www.thebmc.co.uk/outdoor/chips/ index.html. The Lake District Visitor Payback Initiative is also complete and info folders are in club huts in Langdale. The local children have enjoyed lots of outdoor activities, and interest is high for more projects to happen.

The success of the projects is being monitored, but the initial signs are very good. A key success has been how a relatively small amount of funding from ACT has pulled in much more from sources such as the National Trust, Lake District National Park, Adfywio, Cumbria County Council and Cumbria Youth Alliance.

ACT has also partnered the Peak District National Park in restoring a car parking area below Stanage Edge. This has been finished already, and the parking at Cabin track should blend in sensitively to the landscape and be a real boon to visitors. A number of other projects have been completed already this season, including the work needed to fix Rivelin after tree damage (see Access

act

Future likely projects include resin repair work on Southern Sandstone, path work in the Lakes, updating 'Heading for the Scottish Hills', and a BUFT project to review path work funded in previous years. This is only possible due to the support of individual donors and some very major supporters. In 2004 we've secured support from the Castle Climbing Centre, the Climbers' Club, Mountain Leader Training England and the Yorkshire Mountaineering Club, and Climb Rochdale. Other key supporters include BMC Guidebooks, RockFax, Association of British Climbing Walls, Lowe Alpine and Cleveland Mountaineering Club. As ever a big thank to you to you all, and do please keep supporting our efforts.





Lucky Horseshoe

The BMC finally goes ahead with the acquisition of Horseshoe Quarry from its current owners, Tarmac.

This decision follows nearly seven years of discussions between the BMC and the quarrying company over access, liability and ownership, and is a significant step forward. The BMC owns several other sites for climbers; Stone Farm Rocks, Aldery Cliff (Earl Sterndale) a small limestone crag near Buxton, and Craig Bwlch y Moch at Tremadog. We are also involved with the management of many others such as Harrisons Rocks, Wintours Leap, Cheddar Gorge, and Upper Pen Trwyn to name but some.

Assuming the purchase of Horseshoe Quarry goes through, the BMC Peak area will be establishing a sub-committee to manage the crag. Ownership by the BMC should ensure access for climbers to this ever popular Peak District sports climbing yenue.

The timing couldn't be better either, since fresh from the Staffordshire Grit triumph, the team are hard at work on a new masterpiece. This summer will see the release of a new guidebook covering mid-range sports climbs in the Peak District.

From Horseshoe to Harpur Hill is aimed at the growing numbers of sports climbers who operate in the mid grades i.e. F5 to F7s, and seeks to show the wealth of routes in this range in the area. Most of the crags covered are ones that have been developed in the last few years, mainly in abandoned quarries in the region.

Crags covered are Horseshoe Quarry, Hall Dale Quarry, Cawdor Quarry, Slaley Brook, Lorry Park Quarry, Intake Quarry, Deepdale, Cowdale, Blackwell Holt, Blatant Buttress and Smalldale. It contains almost 600 routes, mainly in the F6 range.

It is richly illustrated by colour crag photographs many fine action pictures, and detailed maps, and based on the same format as the recent BMC Staffordshire guidebook. It is hoped that this guide will appear on the shelves sometime in July or August, and will fill a much needed niche in the coverage of Peak District climbing.

(TOP) Horseshoe Quarry. Credit: Niall Grimes

Welsh Adventure worth £140 million

A new piece of research into the importance of the outdoor adventure industry in North West Wales, has just been launched. "The Active Economy" was commissioned by Snowdonia-Active, the outdoor sector support organisation for the Gwynedd, Anglesey and Conwy areas. The study found that the adventure tourism industry contributes over £140 million per annum to the North West Wales economy, £60 million of which is contributed to the economy within the Snowdonia National Park area.

The industry creates (directly and indirectly) over 8,400 jobs across the area, almost 5,500 of which are created within the Snowdonia National Park. This equates to almost 6% of all employment across North West Wales. The work was supported by the Welsh Development Agency, Gwynedd Council, Skills Active Wales and the Welsh Canoeing Association and carried out by Cardiff based consultancy firm Newidiem. To view a copy of the research, see www.snowdonia-active.com.

Black Nick Nabbed

The BMC is pleased to announce the appointment of Nick Colton as Deputy CEO. "Black" Nick is most famous for his ascent of the Colton/MacIntyre route on the Grandes Jorasses, still regarded as one of the hardest ice routes in the Alps. In recent years Nick has focused on rock climbing and can be found crimping down at Broughton Wall most evenings. He joins the BMC from teaching and will take a lead on youth activities within the BMC.

Sprayway BICC

The Sprayway BICC (British Indoor Climbing Championships) went well again this season, with a great depth of younger talent. This can only bode well for international success in the future, so look out for great things to come.

2004 SERIES CHAMPIONS:

Senior Male: Steve McClure
Senior Female: Rosie Shaw
Junior Male: Tom Bolger
Junior Female: Katie Hill

Thanks to the venues and all who made the events possible by belaying, judging, and marshalling. Thanks also to Sprayway, Entre-Prises, OTE, High, Awesome Walls, Edelweiss, Red Chilli, and Bentleys Accountants for support.

FUNdamentals

The BMC HPSG (High Performance Steering Group) will be organising a number of these workshops again this year. Aimed at those who teach climbing, the workshops proved very successful in 2003. Email graeme@thebmc.co.uk for details. Also many thanks to those that took part in the HPSG Adolescent Injury Survey. The winners of the prize draw were Ryan Frost, Ewan Russell, Eleanor Kitchen, Michael Clayton, Lianne Smith, and Deb Banerji.

Lakes Access Meet

There was a productive day at the Old Dungeon Ghyll Hotel in late March, venue for a day of access and conservation related discussion. The morning session introduced access reps to their new information pack, followed by a workshop on the CRoW Act. Then it was on to the Lakes Area Meeting, looking at how climbing and new routeing can co-exist with conservation interests, especially in the light of new wildlife protection law. Various speakers gave food for thought, and it highlighted the great success of the BMC voluntary gested that more work needs to be done in the same vein to protect flora. Thanks to all who helped organise the day es-Earnshaw, David Staton and Bunny

news

New Sponsor for BRYCS

We're pleased to announce that Perkins Slade have taken title sponsorship for the British Regional Youth Competition Series (BRYCS) for a one-year period. Perkins Slade are the brokers for the BMC's Travel and Activity Insurance and also insure many climbing walls. The previous sponsors urban Rock, had a change of ownership and were unable to commit to the continuation of the arrangements. The BMC would like to thank urban Rock for their support over the last few years, and Perkins Slade for stepping in at the last minute. The Regional rounds start in early May, see BMC website for details and application forms.

Return to Ben Nevis

Richard Lamb aims to re-climb Tower Ridge on Ben Nevis on 11-13th June, to raise funds for the Limbless Association (LA) and English Federation for Disability Sport (EFDS). In February 2001 he had to have his lower-right leg amputated following an accident on the route, and also lost all the fingers and most of thumb on his right hand, and half his fingers on his left from frostbite.

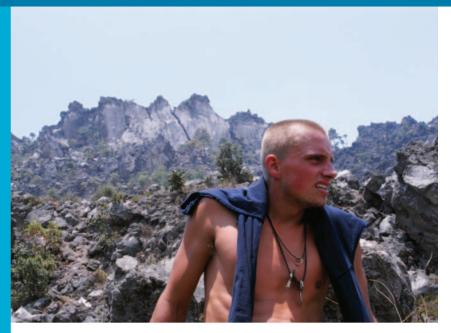
After discharge from hospital and subsequent recovery, he is now set to return to Ben Nevis, to complete Tower Ridge and raise funds for charity. Lochaber Mountain Rescue Team is supporting the climb, and he's supported with gear from Cotswold Outdoor and OSC Ltd. If you'd like to help support his challenge, find out more at www.dickymintos.plus.com.

Shieldaig Rejected

Scottish Government Ministers have rejected a proposed hydroelectric scheme in the heart of the Torridon Mountains within the Western Ross National Scenic Area. The Mountaineering Council of Scotland campaigned for eight years to stop the scheme, and is grateful to the BMC for support and also to the many individual mountaineers who wrote letters, spoke to politicians and encouraged their friends to do the same. Supporters of the proposed scheme tried to discredit the arguments, but the voices of those who value the area were heard and their passion made all the difference.

Competition Winners

Well done to all the winners from issue 33, and thanks for entering. Paul Hornbrook and Claire Kestell will be smiling at their new Synchronic Sensor Masters. The following will have a new DMM quickdraw; Iain Johnson, Lizzy Hawker, Jenny Measures, Andrew Lawfield, Ben Vickers, Helen Crisp, Lee Lewis, S. Hunter, Jane Kitching, and Alistair Robinson. And Glenn King, Moira Herring, John Brain, Iain Stackhouse, Gerald Moss, Alex Newman, S. Thirsk, A. Simpson, David Dornan, Kurt Diminieux are now proud owners of the Walkers Companion.



Save an arm and a leg..

Dave Lucas (above) has just returned from an exploratory rock trip to the Sinai, where a total of 35 new routes were put up on a Hot Rock venture. The Hot Rock trips have sprung out of the World Global Challenge trips, featuring a bundle of climbers in a truck touring the world in search of new rock. Dave's part on the World Global Challenge was cut drastically short after rock fall in Guatemala on the cliff shown above. The fall may have earnt him a recent spot on the National Geographic channel, but it nearly cost him his leg. With local emergency care lacking, and infection setting

in, Dave was pretty glad he had BMC Travel and Activity Insurance. Within days he was in a UK hospital, and has now become a great ambassador for the scheme saying, "The BMC Insurance essentially saved my leg". Now fully healed and the Sinai trip completed, the next Hot Rock venture is to South America this summer. See www.planetfear.com or email davelucas@postmaster.co.uk for details. And if you're heading off the beaten track, well come to us first, with our new range of policies you could save in more ways than one.

ManCom Summary

The last BMC Management Commitee (ManCom) Meeting was held on 23rd April.

This shortened (two hour) meeting took place in Bristol as part of the BMC AGM weekend, attended by 28 people. The main issues of debate were Horseshoe Quarry and the Interim Report from the Future Policy Review (FPR) Steering Group. After lengthy discussion it was agreed that the BMC would proceed with the acquisition of Horseshoe Quarry from the current owner, Tarmac.

Elsewhere around the country the resurgence of the SW Committee and work on the Cheddar Gorge Access Project was wel-

comed by ManCom. Potential access problems at Pant y Ifan, Tremadog were discussed and it was reported that the Staffordshire Guidebook had been published.

An interim report was received from FPR Steering Group Chair, Bob Moulton. It was agreed that this would be discussed further at Area Meetings. With regard to youth activities, ManCom also endorsed a decision that, for the time being, BMC volunteers and staff cannot run outdoor youth activities and events under the name of the BMC without authorisation from competent parties within the BMC.

| 2004 | LAKE DISTRICT | NORTH WEST | LONDON & SE | MIDLANDS | NORTH EAST | PEAK DISTRICT | SW & SOUTHERN | WALES | YORKSHIRE |
|------|---|---|--|--|-------------------------------------|--|--|---------------------------------------|--|
| Jun | Friday 4th The Golden Rule Ambleside 7.30pm | Monday 14th BMC Office Manchester 7.30pm | Tuesday 8th Francis House Francis St. London 7pm | Thursday 10th Railway, Hinkley 7.30pm | Monday 7th Whickham Thoms 8pm | Thurs 17th June The Grouse, Froggatt from 19.15 | | Saturday 13th Plas y Brenin 7pm | Friday 11th June Brimham Rocks National Trust Centre |
| Sep | Friday 24th The Golden Rule Ambleside 7:30pm | Monday 20th BMC Office Manchester 7.30pm | Tuesday 28th Francis House Francis St. London 7om | Thursday 23rd Rockface, Birmingham 7.30pm | Monday 13th Venue & time tho | Thurs 30° Sept The Grouse,Froggatt from19.15 | Sunday 19th Sept Undercover Rock Bristol 6pm | Saturday 18th Venue & time tbc | Monday 27th Leeds Wall Gelderd Rd 7pm |

access news



Rivelin Revolt

Recent tree damage by climbers threatens access.

In recent weeks, blatant damage to trees near Rivelin edge and concern over erosion to paths has led the landowner to protest strongly to the BMC. The Peak access reps have done a huge amount of work to smooth things over with him, and it has been agreed that:

Informal access to the crag for small parties can be maintained (NO groups).

ACT will meet the cost of making good the damage that has been done to trees. Limited clearance of additional trees, with the exception of oaks, has also been agreed with the landowner where these shade the craq.

The work will be carried out by the owner and volunteer help will be sought to remove and stack the felled wood.

Access to the crag is via the footpath that starts opposite the dam road and emerges left of the pinnacle. Do not wander through the woodlands below the crag.

This footpath will be sympathetically developed to preserve surrounding woodlands and ensure that it is easily visible.

Climbers and boulderers must avoid the edge right of the Altar Crack area and respect its integrity as a nature reserve. Failure to do so will jeopardise all access to the rest of the craq.

The landowner is a tree surgeon with a strong vision of how this woodland should be managed, and any further damage to the trees will result in the immediate loss of all access for climbing.

(LEFT) Thea Williams on White Out (E2 5c) in the summer heat of Rivelin. Credit: Nick Smith.

LAKE DISTRICT

Falcon Crag

The bird nesting restriction at Falcon Crag in Borrowdale has moved, as the bird has decided to nest on the lower crag. The restriction now covers the ascent/descent gully, and the route Spinup on Lower Falcon Crag. Upper Falcon Crag is open, but please abseil off and avoid the gully.

Humphrey Head

There is a peregrine nesting on Humphrey Head, see the signs there for more details of where the voluntary restriction lies.

Whelter Crag

The female of the last pair of Golden Eagles in England is presumed to have died, and the male is busy trying to attract a new mate. The continued viability of the territory is on a knife edge, and at the recent Mountain Liaison Group the BMC agreed to advise climbers not to climb on Whelter Crag within the core territory due to the impact this may have on a potential new mate. This will remain under regular review.

NORTH WEST

Hoghton Quarry

A similar agreement to last year has been signed with the de Hoghton estate. This gives access during 1-31st July, 8.30am and 5.30pm, hopefully with one day a week where climbing can extend to 9.00pm. Climbers should be BMC members, and there are other conditions which can be found on the news section of the BMC website.

SOUTH WEST

Goblin Combe

The 'No Climbing' sign as you approach the entrance to Goblin Combe continues to cause confusion. North Somerset Council, with BMC support, have acquired the Combe and are very positive on access. However, the sign is not on their land and so it is not a simple matter of them removing it, and they are working on it. The BMC are working with them on a climbing agreement, but in the meantime you are welcome, though groups are asked to contact the Environment Centre (the old School - 01934 833723) to let them know you are visiting.

WALES

Range West, Pembroke

After much work and pressure over the years by BMC and climbers, this year will see site specific bird nesting restrictions on climbing rather than the previous blanket ban on access during the nesting months. As usual you should attend a briefing for the year (though a briefed climber may take in one unbriefed climber). Remaining briefing dates for this year are 29th May (7pm, Castlemartin) and 31st July (Castlemartin, time tbc). A survey of where the birds are nesting will be undertaken, and publicised on the BMC site in advance of the season opening on 29th May.

Tremadog

At Craig y Castell there were worries that the construction of the new hospital below Tremadog could prevent access to the crag. The BMC are in negotiation with the coun-

cil, planners and architects, and an alternative access route will be incorporated into the new site. There will be a temporary route during building which may be a little circuitous to ensure that no public members venture onto the site. Please respect this route, and report any problems to the BMC.

Not so positive on Pant Ifan where Countryside Council for Wales (CCW) may be forced to enforce the long-term access ban here following legal advice on safety matters. The BMC has pointed out that climbers will always make their own assessments where potential for rockfall exists and is negotiating to prevent any further bar on access.

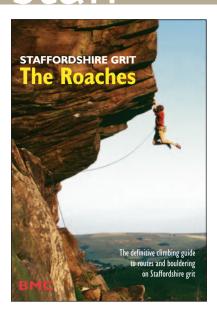
OTHER

Regional Access Database

RAD remains a vital source of up to date info on access to hundreds of crags in England and Wales. We quickly update any changes we get to know about but for many sites the info has started to look a bit dated. To counter this the local access representatives are doing a superb job of updating their areas. In addition, the CRoW mapping process generated a host of new crag data in some regions. So in the near future you'll find that RAD has more up to date, more extensive coverage. Any info you send us helps keep it that way!

REGIONAL ACCESS DATABASE

For the latest access info on more than 600 crags in England and Wales, on www.thebmc.co.uk



Staffordshire Grit

The long awaited BMC Staffordshire Grit guide is now well and truly out. The team have pulled out all the stops on this one to make it one of the most impressive guides for years. We would say that of course, but don't just take our word for it, check it out in a climbing shop near you, phone the BMC office, or see www.thebmc.co.uk to grab your copy today.

BMC Insurance

If you're heading off for the summer, don't forget to pack your BMC insurance. This is especially important if planning a trip to the Alps, where rescue, unlike the UK, is not free. The policies represent excellent value for money, and can provide cover for all kinds of sports. BMC Insurance is availinstantly online from www.thebmc.co.uk or just call the office on 0870 010 4878 for help.

WIN THE COMPLETE POCKET MOUNTAINS

Pocket Mountains

£5.99

Pocket Mountains have been very busy, scurrying around north of the border, and have now released three new titles to complete their Highlands and Islands series. Written and researched by Nick Williams, the new titles - Central Highlands, West Highlands and The Islands - follow on from the success of The Cairngorms, Southern Highlands and Northern Highlands. Each pocketsized book features 40 walks which cover all of the Munros in the region as well as many other great hills. Available from all good outdoors retailers. For information check out www.pocketmountains.com.



WIN THE SET

To win a complete set of six pocket mountains books in an attractive wooden display stand, just answer the following question:

Q. How many Paps are there on Jura?

Answers on a postcard to the BMC Office or email summit@thebmc.co.uk. Winners will be published in Summit 35. Closing date is 01/08/04. Six runners up will receive the book of their choice - please specify on your entry.

Owl & The Cragrat

f5 95

Inspired by a thread on ukclimbing.com, this is a great little book featuring all sorts of poems and songs adapted for climbers. "If Ishould die think only this of me; that there is some corner of some...gritstone edge", you

get the idea. Anyway, it works - very well. See www.stonegold.co.uk for more details.

WIN ONE OF 10 COPIES

To be entertained for hours just find out:

Q. How many owls does one of the authors, Marc Chrysanthou have ?

Email answers to summit@thebmc.co.uk. Closing date is 01/08/04.

Sigg Boxes

From £15.95 Sigg is famous for producing high liahtquality, weight aluminium drinks bottles, but



these Swiss perfectionists have turned their attention to something different for 2004. To cure the perenial problem of squashed sarnies and crushed bananas, they've designed two new aluminium lunchboxes, These shiny items come in two sizes, Maxi and Midi depending on how greedy you are. For local stockists call Burton McCall on 0116 234 4646, or see www.sigg.ch for more information.

WIN ONE OF 10 LUNCHBOXES

So if you fancy somewhere safe to stash your flapjack, just answer the rather tricky question below:

Q. In which country are Sigg products made?

Answers on a postcard to the BMC Office or email summit@thebmc.co.uk. Winners will be published in Summit 35. Closing date is 01/08/04.

Expedition handbook

The Royal Geographical Society have fully revised and updated their Expedition Handbook, a tried and trusted companion for many adventurers. Embarking upon scientific or adventurous travel, whether it's to the Antarctic or the Alps, requires planning and research. How much food should you take? Who will give you funding? What illnesses might you catch? The RGS-IBG Expedition Handbook is a compendium of everything anyone needs for safe and successful expeditions anywhere remote. ISBN 1861970447. See www.rgs.org for details.

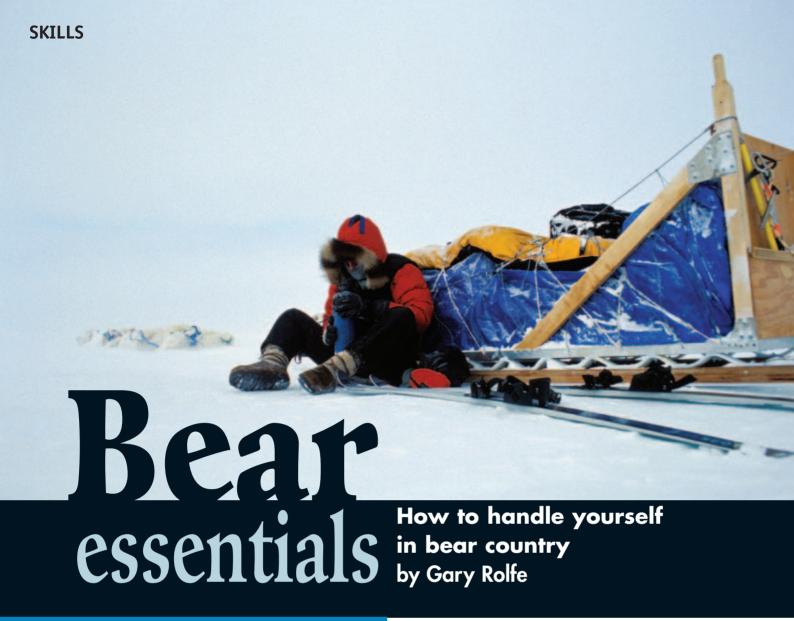
WIN A NEW RAB ALPINE JACKET

Rab Latok Alpine Jacket

If you're heading to the alps this summer, you could do worse than packing the new Latok Alpine Jacket. Made from eVENT fabric, the Latok Alpine is a stripped down, lightweight version of the established Latok jacket and offers great levels of breathability and comfort in a fully waterproof shell. With a total weight of just 440g Paul Deegan would no doubt approve (see page 20), and it's just the job for some speedy alpine ascents. For more information and stockists visit www.rab.uk.com or phone 0114 2757544.

WIN THIS JACKET





ne of the first people to teach me anything worth knowing about bears was Trapper Mack. We met in the Yukon. Isolated, he'd been on his own a very, very long time. I listened to him intently as he stared at me. I didn't want to upset this man. His thick black hair was wild but I sensed he wanted to tell me something important.

In the early 1980's the Canadian government hired him for his tracking skills to help look into the disappearance of several hikers in his trapping area. He worked alone for weeks then hit the headlines when he returned with human heads, hands and other body part remains from bear attacks.

It's tragic that every year 'nuisance bears' become a threat to humans and are destroyed. And whilst some situations can't be avoided most can. There are roughly 6,500 grizzlies (brown bears) ranging the Yukon to the Arctic coast. 10,000 black bears span the British Columbia border to the same coast and 15,000 polar bears roam the Arctic Ocean within Canada. These polar bears constitute just over half of the world's total population. To journey safely I've learnt to respect bear behaviour and their habitat.





Black bears spend their entire existence in forests, grizzlies prefer open country and polar bears follow open water on the Arctic Ocean in order to hunt. With varying dispositions all bears are unpredictable and when we humans enter the same habitat, encounters are inevitable. From my experience there are absolutely no hard and fast rules for getting out of a collision course with a bear. The best strategy by far is to try and avoid them. Most will attempt to remain elusive but if they're surprised, defending cubs or guarding food an encounter can become life threatening.

Grizzlies and black bears

In the Yukon and Northwest Territories grizzlies and black bears are generally dormant throughout the winter months from October to April. Once out of their dens a tremendous sense of smell and hearing enables them to feed a legendary constant drive for food. In the spring they love chomping on fresh deciduous aspen and poplar shoots. Trapper Mack still fears the grizzly. He taught me to be cautious in areas like berry patches where their favourite food grows. Between July and August when the blueberries and tundra cranberries begin to ripen, grizzlies go into a state of frenzied rampage to consume a colossal amount of food. They need 40,000 calories daily to lay down enough fat to survive their seven months in hibernation.

Grizzlies thrive in the open tundra and bolting moose or caribou can indicate hunting bears. I watch for high circling ravens or eagles indicating a bear kill. You'll rarely ever see black bears in barren expanses. Soccer pitch size open sunny glades are their favoured territory since denser forest has little vegetation to feed on. But even if all appears clear I keep a wary eye for sleeping bears. They sometimes nod off after feeding.

Both bear types hunt on the alluvial flood plains for fish and scavenge for carrion. If I see salmon in a stream I think bear. Spawning periods on rivers will attract them during July to October, and fast torrents of river water or windy conditions will drown out noise increasing the risk of surprising them.

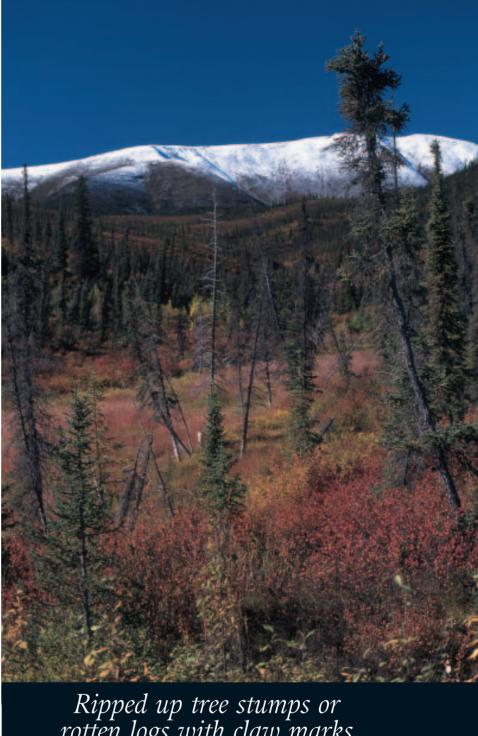
Bright red clusters of soapberries ripen in late July in the Yukon and for bears they're recognised as the top seed along shores and streams. On approach walks to mountain ranges during July or August the Arctic tundra is ablaze with a surprising number of

(MAIN) Gary with his dogs share the Canadian Arctic Ocean with 15,000 hunting polar bears. All credit: Gary

(FAR LEFT) Shot by a Gwitch'in Indian friend of Gary's this black bear tried to rip off the roof of his log cabin while he was inside.

(LEFT) With paws the size of a man's chest polar bears are capable of taking off a human head with a single blow

(ABOVE RIGHT) Bear country



Ripped up tree stumps or rotten logs with claw marks are ominous bear signs

stunning looking plants. Flowers such as tiny Arctic lupins, arnicas, forget-me-nots and vetches mingle with bear favourites like yellow cloudberries and scarlet cranberries.

Travelling in bear country

I'm constantly aware of the environment. If vegetation is closing in, the chance of surprising a bear rises. Sometimes you can hear a distant clatter through vegetation and birds lift as a bear stumbles through. At other times there will be no such warning. I'm rarely without dogs and talk loudly to them or clap hands in areas of limited visibility.

Depending on their fare, fresh bear turd can vary from resembling human faeces with

fur and twigs to looking like messy tar. Ripped up tree stumps or rotten logs with claw marks are ominous bear signs too. I don't approach fresh piles of soil or branches either, since bears protect fresh kills. It's also a bad idea to investigate bad smells since they cache and protect surplus food in shallow graves.

If I see a feeding bear I try detouring down wind undetected. I realise this isn't always possible so I let the bear know I'm there by moving upwind. They then usually stand on their hind legs and sway nosing the air. I've inadvertently walked into a situation and had bears stand up only feet away. It can be unnerving. It's a good idea to speak slowly enabling the bear to identify you as a human. At this they usually clear off, sometimes not.

Aggressive bears chomp their jaws and turn sideways to display their size. The best thing then is to talk in a calm non-aggressive manner, avoid eye contact and back away,

very slowly. If this happens to you don't run. Trust me, you'll never make it. Black bears, all cubs and some grizzlies are excellent tree

Responses vary. A bear may move downwind, walk slowly to you or charge. Most grizzly and black bear charges are bluff. They simply veer off at the last second. If you're without bear deterrents and being mauled, curl into a foetal ball face down to protect your guts and clasp your hands behind your head. Practise with your backpack as this will help protect your back too. It's then vital to

remain motionless. Most people survive.

Cubs complicate things. If I see them I back away slowly and make a huge detour. I never ever come between a sow and cubs. If you do, the sow will head straight for you and boy she'll be mad. As she gets closer avoid eye contact and start talking calmly. At the same time back up, ever so slowly. If she charges assume the mentioned curled up position and remain totally motionless.

Man killers

Old, wounded or yearling males unable to lay down enough fat for winter display no fear and will follow you. Early bears out of hibernation are bad news too. They may stalk a human being as potential prey. It's best to stand still. If it carefully circles, be prepared, since from a fast walk they will attack. If you're armed be prepared to shoot, if not you could be very unlucky.

Other considerations

Think before making camp and avoid settingup near fresh signs of bears. Place tents in a line rather than a semicircle to give any bear an open escape. It's vital to organise a clean camp by keeping gear and tents free from food odours. Do this by cooking at least 200 metres away and downwind from where you intend sleeping a safe night. A designated toilet should be 200 metres away from sleeping areas too. It's debatable if menstruating women actually attract bears, but all the women I've travelled with in bear country take the Pill continually to stop their periods or use tampons rather than external protection. All sanitary materials should be burnt.

It's a good idea to cook in a set of clothes separate from those you sleep in. Make sure all food and toothpaste is sealed into airtight containers. Freeze dried or dehydrated food is best as it's fairly odourless. Leave the garlic sausage at home. Like all true omnivores bears are infamous for eating petrol cans, so avoid wearing unnecessary artificial smells like deodorants. In Yosemite National Park



law requires proper storage of "food". By this they mean anything that smells like food to a bear, irrespective of packaging. Items like

soap, your lipstick and if you're driving, engine oil are all on the menu for bears.

A few designated wilderness campsite hotspots like those found in the Little Yosemite Valley and popular trailheads provide static food lockers, but check first, don't assume their availability. It's no good storing food in vehicles either. Windscreens don't deter bears. With power tools for paws, bears fist windscreens as if they were made of cling film. In Yosemite you'll also be breaking the law by storing food in a vehicle. You're best using your own 'kegs'. And if this all seems too much hassle, motivate yourself by imagining your bear shredded tent with you quaking inside.

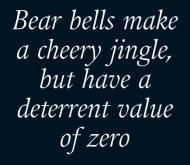
Never store food in your tent, that's simply asking for trouble. Burying food is futile. The counter-balance method, bagged food hung from a tree, is permitted in some National Parks. To do it, find a tree with a branch four metres long and five metres off the ground. Ideally the branch must be able to support the weight of your food but not that of a cub. Split food equally in two and throw a rope over the tree branch. Then tie one end of the rope to one of your food and hoist it up to the branch. On tiptoe tie with a loop the other end of the rope to the other half. Make this as high as you can. With a trekking pole push the second stuff sack until both halves

are roughly the same height off the ground. Both must be high enough off the ground where at least you can't reach them. This is one place where Velcro attached bear bells to your rope could warn you of trouble. In some areas of the Sierras' you'll be breaking the law by doing this, so check out legalities otherwise this could mean a double blow.

Minimising odours attractive to bears is a sure way to reduce unnecessary confrontation. You can lock six days food into a single hardshell Model 812 Backpackers' Cache without fuss. These neat 'kegs' can be fastened to a backpack, pack animal or hand carried. Another storage option is the blue rigid plastic barrel with watertight lid secured with a metal band clamp often used by paddlers. They come in two sizes. The 30-litre size will secure food for small groups for 4 days. Stuffed with grub the 60-litre is a decent weight to burden anyone with, though you can get padded harness carry systems. These barrels are good for storing cooking clothes and kitchen paraphernalia too. The only draw back with them is that metal band clamp. Bears tend to use this to grip and separate.

Polar bears

The entire Arctic coast is a hunting ground for lone males at any time of the year. Of all bears, it eats meat exclusively. Males will try eating their offspring by separating cubs from their mother. They're top of the food





(ABOVE) Pingo models the latest fashion in bear bells.

(BELOW) Boiling water instantly freezes then falls as ice in the great white north.



chain and fear nothing. Females emerge from their dens by May with usually two cubs and are extremely dangerous.

During the summer what they don't kill, they supplement with carrion. Beached whales are vulnerable and as expert long distance swimmers these bears will kill beluga by launching themselves from ice floes as these whales emerge to breathe. Polar bears protect critical space around themselves. This space varies in size from animal to animal, but whatever invades that area they seek to eliminate.

I look out for their kills and determine male footprints from protective females with cubs. I also watch for stalking bears attacking from downwind. In poor light they appear yellow. In bright light they blend in perfectly to their white surroundings. On a bearing I've headed for prominent far off snow cov-

ered sea ice only to look away and see it move, on all fours. In chronic visibility the only warning signs are from my dogs.

Most polar bears remain with a kill until it's totally eaten. When food is plentiful they'll feed off grim stuff like seal fat and move on leaving behind an almighty bloody mess. They don't cache food like grizzlies or black bears. Scavengers such as Arctic foxes then busy themselves like beggars with minimal effort. Polar bears don't do anything unless they really want to, and one charging at full tilt on all fours is rarely a bluff.

Now the only solution is shoot to kill. By law killing a polar bear in Canada must be reported to the Department of Renewable Resources. They'll then fly in to the incident. A life threatening explanation is required for your actions.

Deterrents

There's absolutely no point being armed to the teeth. Firearms demand respect and carrying one is a decision not to be taken lightly. Leave well alone unless you're planning to be alone hundreds of miles from civilisation in known bear country during their active months. If you will be carrying a firearm, and would like to learn more about how to defend yourself from a bear attack, then see the Summit section on the BMC website for an addition to this article. Take the trouble to find out the legalities in National Parks too. They all vary. Here are other options.

Bear sprays

The most important effect a commercial bear pepper spray has is temporary asphyxiation. These sprays are measured in Scoville Units, a heat measurement indicating the irritant's intense heat capacity on exposed skin. If aimed into the eyes, nose and mouth a spray will stop a charging grizzly or black bear although it's a matter of luck as to whether the bear is inhaling or has its mouth open when the spray hits. The ones with an oil rather than water based propellant linger in the air and a fog spray is more effective than a straight stream. I've seen them available with an added red dye to improve accuracy. If you're in a group I'd suggest everyone carry a can. They can be carried in a holster on the hip. I favour a military style chest rig. Don't stuff sprays deep inside a backpack. No licence is necessary for possession but you'll have to sign a notice to prove you've made the purchase and how many.

Bear sprays are limited because of their short effective range of eight metres so it's important to practice by firing three short bursts while stepping away from an imaginary bear. Consider wind direction before firing and if you get a dose yourself don't go hysterical, stay calm, move to fresh air, don't rub your eyes and if you wear contact lenses remove them. Flush your eyes with water and symptoms will disappear within an hour. It's worth noting that commercial bear sprays are intended for grizzlies and black bears and not polar bears.

Useful websites

Gary's website: www.garyrolfe.com

Bear proof barrels: www.backpackerscache.com

Barrel harness systems: www.rutabaga.com

Bear sprays: www.guardalaska.com

Dog panniers: www.canine-spirit.com

Chest rigs: www.arktisltd.co.uk

Bangers and bells

A pencil-sized launcher with rim fire screw-in flares will fire 50 metres into the sky and burns red, green or white for 5 seconds. Bear bangers can be fired from one of these too. But be warned, they're not accurate and are more likely to provoke an already miffed bear. Throw bear bangers, also known as thunderflashes, in front of a bear. A salvo detonating behind will either be ignored or bring a bear closer. I don't bother with these as deterrents.

Bear bells come in various sizes. Attached to a dog's collar, a set of panniers or your backpack they make a cheery jingle but have a deterrent value of zero. Clapping, talking loudly or rattling stones in a can are as good as anything to avoid surprising a bear in restricted visibility areas. Some canoeists use air-horns.

Dangerous goods

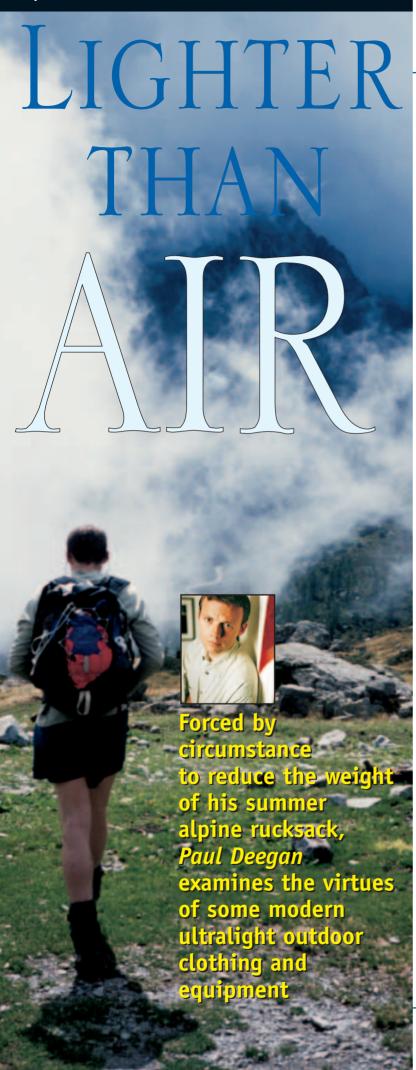
In Canada and the US bear sprays and thunder-flashes require no documentation for possession. You won't need a license to purchase them either but they're considered potentially dangerous goods under all airline luggage jurisdiction. They cannot legally be packed on board any regular international and internal commercial flights. It's best to purchase explosive and potentially dangerous necessaries within the host country ahead of time. It's also best to seek specific assurance that these critical items can be purchased within the Province or State you wish to journey. Once in, chartered flights and bush pilots to obscure destinations expect to see bear sprays secure. Then when you're dropped off, the rest is up to you. II



Gary Rolfe is one of the few people consistently and successfully to make solo expeditions on the Arctic Ocean with huskies. You can read more about how he survives in extreme cold in Issue 33

Look out for the next issue when Gary covers the use of technology in demanding environments, including sections on IT, photography, rescue beacons and radios.

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n my early expeditions, I prided myself on the amount of gear that I could carry. 30kg rucksacks at 6000m in Nepal? No problem. A double load in order to help a tired trekker whilst leading groups in Europe? No sweat. Volunteering to carry the spare maps and satellite telephone? Naturally. Packing extra clothing, food and fuel just in case? Of course.

This sort of masochistic behaviour continued until the late 1990s when the pain in my back, neck and shoulders (caused in no small part by the ridiculous weights I had struggled with for over a decade) began to prevent me from undertaking certain trips.

To start with I simply avoided tackling any treks or climbs that required me to shoulder a heavy load. But after a while I missed the attraction of long expeditions. The start of a cure came with a combination of intense physiotherapy, osteopathy, sports massage and Pilates. But I soon came to realise that making significant inroads into reducing the weight of my gear was also going to be a key ingredient of a long-term successful remedy.

I began by deciding what was essential to success on any given trek or climb, and what wasn't. For example, I earn part of my living from taking photographs on trips, so I was reluctant to shelve the bullet-proof SLR that I usually carry. Lightweight SLRs abound but the lack of a metal chassis make them vulnerable to abuse. However, carrying one general-purpose lens rather than two specialist lenses was an obvious way to save weight. On other occasions, just taking a high-quality 35mm compact camera has proved to be a viable alternative.

Likewise, trekking poles. There are plenty of ultralight poles on the market, but I found that the lightest models tend to bend under pressure. And I remain suspicious of models with internal telescopic adjusters after an experience with a pair in the Andes.

These two examples got me thinking that lightweight gear choices would have to be balanced by reliability considerations. If a piece of equipment is worth taking then it must be capable of doing the job required of it.

Ultimately, gluing myself to only packing essential items seemed the way to go. Whilst this sort of philosophy usually figures somewhere in most mountain travellers' minds, how often do we bend the rule in order to take a piece of kit simply because it's an old favourite or in order to cover a scenario that is unlikely to arise in the first place? With a trip to the Alps in the summer of 2003 in the offing, I decided to put my new-found hardcore attitude to the test. (It should be noted that the unusually high temperatures I encountered prevented full-blown tests on all of the gear described below.)

Looking into the individual weights of products, two things quickly became apparent. Firstly, that many more outdoor companies have in the past five years embraced the superlight approach to outdoor gear, and secondly that lightweight materials are very much stronger, warmer and more durable than they were even two or three years ago. Of course, no-one is pretending that ultralight fabrics are going to be as durable as their heavyweight brethren, which conspiracy theorists would argue plays into the hands of the manufacturers who produce the gear! So at some point everyone has to decide what price they are prepared to pay for a lighter rucksack and contents. If your philosophy or budget dictates that more than occasional replacement of key items is not an option, you might decide to read what follows with caution.

(LEFT) Paul Deegan descending from the Chalet de Loriaz. Credit: Andy Miles

SHAVE & SAVE

TO HUT OR NOT TO HUT?

Sleeping in an alpine hut prior to tackling the route of your choice will inevitably blow a sizeable hole in your budget. However, the advantages are multitudinous, not least the elimination of any need to carry sleeping or cooking equipment beyond that which you decide is essential from a safety point-of-view on the route itself. Even if you purchase the lightest sleeping bag and stove on the market, the weight saving is still going to be considerable.

Potential weight saving: 1.5 to 3kg + fuel
If you decide that huts are not for you (or
there are simply no huts on the route that
you are attempting) then there are plenty of
ultralight sleeping and cooking products to
choose from.

SLEEPING BAGS

Gram for gram, down remains the warmest insulation, although in the sometimes damp environment of the Alps, synthetic can win out in terms of performance in wet conditions.

Ones to look out for:
Mountain Hardwear Phantom 32
(down, 600g) rated to 0°C
The North Face Propel (synthetic, 481g)
rated to +4°C

On test: Marmot Hydrogen (595g)

An outrageously light bag designed to keep the user warm to freezing point or thereabouts (depending on your constitution), the **Hydrogen** uses down taken from mature East European geese to deliver an incredibly high warmth-to-weight ratio. Toastier than the overall weight would suggest, I found that sub-zero nights out in the **Hydrogen** (with a foam mat and inside an **Outdoor Designs Alpine Bivi**, below) were not just bearable but comfortable.

BIVI BAGS

In dry, cold conditions I no longer bother with a bivi bag as the weatherproof fibres used on sleeping bags outers are so efficient. However, in the Alps I still feel that some kind of waterproof-breathable shell is pretty much de-rigeur. There are plenty of different materials on the market which all claim to be highly breathable and also waterproof. My preference is for a simple design with the minimum number of entry/exit zips.

One to look out for:
Mountain Hardwear Conduit SL Bivy (510q)

On test: Outdoor Designs Alpine Bivi (630g)
Outdoor Designs was the first company to make use of W. L. Gore's latest Gore-Tex® fabric, which is air permeable. This allows the whole bag to be zipped shut without any risk to the user. If you can handle the potential for claustrophobia, then being able to completely seal up the shelter will raise the internal temperature, maximising the performance of your sleeping bag. Not necessarily the easiest bag to get in and out of, but of course a longer zip (available in their Assault model, 780g) means more weight...

STOVE AND COOK SET

Pressurised gas stoves continue to shrink in size and improve in performance. However, the lightest type (which screw onto the top of the cylinder) are not as stable as designs that have their own legs. So when using this type of stove more care is required, especially if you are using a large pot. When it comes to pans, stainless steel is a definite no-go from a weight point-of-view, which leaves aluminium (light, cheap and cheerful) or titanium (even lighter but also expensive). Potential weight saving on a pot and stove: up to 400g

Ones to look out for: Outdoor Designs Camp 3 Titanium stove (92g)

MSR PocketRocket stove (86g)

On test: MSR Titan 2 litre pot (185q)

Bringing reality to the oftused phrase "light as a feather" comes this offering from Mountain Safety Research. Having accidentally thrown the pan down 20 feet of sharp rocks

during testing I can attest to its durability; it dented but did not puncture.

RUCKSACK

The weight of some so-called alpine rucksacks made by established manufacturers can be disgracefully high. One well-known 45 litre rucksack that I came across during the course of my research weighed an astounding 2.2kg. To put this into perspective, that's the equivalent of one litre of performanceenhancing water tied up in unnecessary nylon and stitching. My ideal is a rucksack that weighs no more than 10% of the total weight I plan to carry. To achieve this, avoid all bells, whistles and thick fabrics. Removable aluminium staves or foam back systems can reduce the weight of the rucksack even further, though at some cost to comfort and support for the spine.

Potential weight saving: up to 1.5kg on a 50 litre rucksack.

Ones to look out for:

Berghaus Crag, 45+10 litres (920g stripped) GoLite Gust Pack, 59 + 17 litres (570g) Lowe Alpine Lepton, 45 litres (1.06kg)

On test: Osprey Aether 45 (850g)



ing in mind the 10% rule described above that discovery was hardly surprising.

CLOTHING

A whole article in itself, the potential savings from clothing are almost limitless. You now need very little in the way of bulky clothing to provide adequate or even superlative protection from rain, wind, sun and snow. Here we touch on a few key areas.

WATERPROOF-BREATHABLE IACKETS

Ones to look out for: Berghaus PacLite Smock (275g) Sprayway Women's Viper Jacket (360g) The North Face Men's Prophecy PacLite Jacket (412g)

On test: Mountain Equipment Firefly (390g)

ness of this jacket, it is important to bear in mind that there are still garments out there that offer similar performance but weigh three times as much. That equates to more than half a kilo of fabric deadwood. That said, the ultrathin fabric used in the Firefly took some get-

In order to appreciate the light-

ting used to. The waterresistant zips are easy to operate whilst wearing gloves; the hood accommodates a helmet.

MID-LAYERS AND WINDPROOF SHELLS

Ones to look out for: Lowe Alpine Women's DryPhase Pull-On (270g)

Patagonia Dragonfly Pullover (85g)

On test: Marmot DriClime Windshirt (283g)

Marmot shift this product
by the lorry load, and a
mate of mine absolutely swears by his.
There's no doubt
that it delivers a
high level of wind
resistance and not a
little warmth for a
tiny weight and price
penalty. However, on
reflection, I often found

myself getting so hot that on balance I now prefer to keep my windproof layer and lightweight insulating layer separate for maximum versatility. There is a weight penalty to be paid for adopting my approach and so it is very much a case of "You pays your money and takes your choice." As with the **Firefly** jacket, I was impressed by the apparently flimsy fabric's durability when it came into contact with rough surfaces.

LEGWEAR

Combined with a pair of shorts for a cool option on hot walk-ins, a single pair of stretch pants is likely to suffice for most alpine situations. If you hit rain then yes,

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(ABOVE) Everything weighs something. Leave the newspapers and iPod in the valley! Credit: Paul Deegan

waterproofs are still needed. But even these can be featherweight affairs rather than heavy reinforced models, providing you don't mind patching the odd crampon hole.

Ones to look out for:

Mountain Equipment G2 Pants (480g) Patagonia Women's Stretch Element Pants (610g) Berghaus PacLite Pants (185g)

On test: Mammut Champ Pants (590q - medium)

This was the first time I had worn this type of stretch pant. Comfortable, sufficiently wind and shower resistant, and with useful knee articulation for climbing and scrambling situations. The thigh pocket was pretty useful too.

DUVET JACKETS

Arguably redundant in the Alps in the summer, the weight of some duvets have shrunk so much that they are now a much warmer alternative to a second mid-layer for unseasonally low temperatures or whilst stopping for a brew whilst climbing at night.

Ones to look out for: Mountain Equipment Dewline, 567g Patagonia Women's Down Vest, 326g

On test: Mountain Hardwear
Phantom Jacket (400q)

This is the business. The fabric is so light that you can almost see the high-grade down. But don't be deceived; the fabric is tear resistant and the cut of the jacket delivers instant warmth around the kidneys and yer hack

BOOTS

A walking trip can succeed or fail on the quality of your footwear, so boot and crampon choice will be one of the most important purchases you'll make before an alpine trip.

Massive advances in boot technology, together with an apparent change in the alpine climate we've come to expect in summer, has made plastic boots all but redundant. Modern lightweight alpine boots are stiff enough to take crampons, although their synthetic fabric uppers do make them look like they've walked off the set of Blake's Seven. Nevertheless, if a pound on your foot is worth five in your pack, then you can more than quadruple the statistical weight savings indicated here.

Potential weight saving: over a kilo.

Ones to look out for: Scarpa Freney XT (1.85kg)

On test: La Sportiva Trango S (1.20kg)

Increasingly popular with instructors, the Trango S is ideal for the generally dry conditions found in the Alps in summer (Scottish winter bog trotting would be another

matter entirely). The synthetic fabrics seemed to make my feet feel hotter and more sweaty than all-leather versions, but these boots were precise and extremely versatile. The lightweight construction speaks for itself, although I did notice a fair amount of wear and tear to the Trango (especially the important heel area where the crampon binding clips to the boot) after just a few weeks. Take care when fitting crampons; in an ideal world, one would buy the crampons at the same time as the boots to ensure a perfect match.

EQUIPMENT

ROPES

Another potentially big saving is possible if you plump for a slimmer rope. There are obvious considerations here in terms of abrasion resistance. But again, if you are willing to replace your rope on a regular basis (which is no bad thing in any case) then your spine will thank you.



Potential weight saving:

Over 400g on a 60m double rope



On test:

Beal Ice Line (42g per metre) Quite possibly the lightest double rope on the market. The Double Dry finish shook off glacial puddles like water off a duck's

back.

NON-TECHNICAL AXES

For some reason (probably cost), relatively heavy walking axes continue to be manufactured. But surely not for much longer. Affordable lightweight metals are quickly overtaking traditional tools.

Potential weight saving: up to 300q

On test:

DMM Vapour (440g)

No widgets, no gadgets, nothing to go wrong. A joy to hold and yes the curved shaft really does work. Just like your Dad's trusted axe of the 1960s. Only a lot, lot lighter.

On test: Grivel Air Tech
Evolution (485g)

I've been using the original Air Tech axe for years; the Evolution now puts a deft bend in the UIAA-approved lightweight shaft and this did seem to further improve the axe's versatility. It retains the reassurance of a forged steel head for maximum strength.

Note: Unless you are attempting technical routes which require a second full-size tool, then Grivel also make a short hammer (the Black Three Degree, 480g) that doubles up very nicely as an emergency tool or as a second axe for short pitches of steep ice.

NON-TECHNICAL CRAMPONS

As it is for axes, so it is for crampons. Do you really need 12 points of contact? On straightforward ground, 10 points might well prove to be sufficient, especially if you have smaller feet. Then there is the choice of metal. Many alpinists steer clear of lightweight aluminium and titanium because of concerns over strength and durability on rock and in critical situations. But people who want a pair of crampons for occasional use on snow (for example glacier walking) might want to consider them.

Potential weight saving: up to 300g Ones to look out for: Grivel G10 Light (670g) Salewa Titan Ultra Walk (600g)

On test: Grivel G10 New Matic (820q)

On easy ground, I frankly didn't miss the extra points. The steel **G10** is available with four different types of binding, and for 2004 comes supplied with flex bars for a better fit on crampon-compatible boots that retain some flex in their soles.

HELMETS

A flick through almost any outdoor magazine will show editorial and advertising photographs that reinforce the image that wearing a helmet isn't cool. But then, neither is months spent in a hospital after a rock punctures your skull. The latest designs of climbing helmet which deliver sufficient protection from alpine stonefall really do weigh next to nothing and don't look bad either. 'Nough

Potential weight saving: up to 300g

On test: Petzl Elios (330q) Surprisingly light for the protection it affords. Whilst the Elios might not have quite as many venting holes as other models (although venting was still found to be adequate), the comfortable cradle made fitting a cinch.

HEADTORCH

Improvements in LED technology continue to reduce the size and weight of torches. The latest generation of LED bulbs which are just starting to emerge on the market are said to rival the brightness of some halogen bulbs.

Ones to look out for: Black Diamond Zenix (90g)

On test: Petzl Tikka Plus (42q)



Uprated version of the highly successful Tikka, the Tikka Plus possesses a fourth bulb for extra light,

beam to be tilted up and down. Just a smidgen heavier than the original Tikka (34g).

WATER

& FOOD

WATER

Of course, water weighs the same whichever way you mix it. Adding a sports drink powder to it will improve gastric emptying or carbohydrate intake (depending on the amounts added) but that won't do anything to lessen the amount of water that needs to be carried. And inevitably you always need more liquid than you can shoulder. However, a little bit of research on the route will let you know where it is possible to re-fill your bottles, which might help to reduce the number of litres you need to set off from the valley floor or cable car with. And of course if you have made weight savings elsewhere, then you might be able to justify that extra litre of water which will improve your mental and physical performance, helping you to finish the route in better condition than would otherwise be possible.

Weight saving: 1kg per litre that can be collected en route.

If you are staying in a hut and buying into a meal programme, then you will save a significant amount of weight for every day spent on the hill. You'll probably eat better in a hut too as there always seems to be second helpings knocking around.

Weight saving: 750q+ every day

THER.

WEIGHT

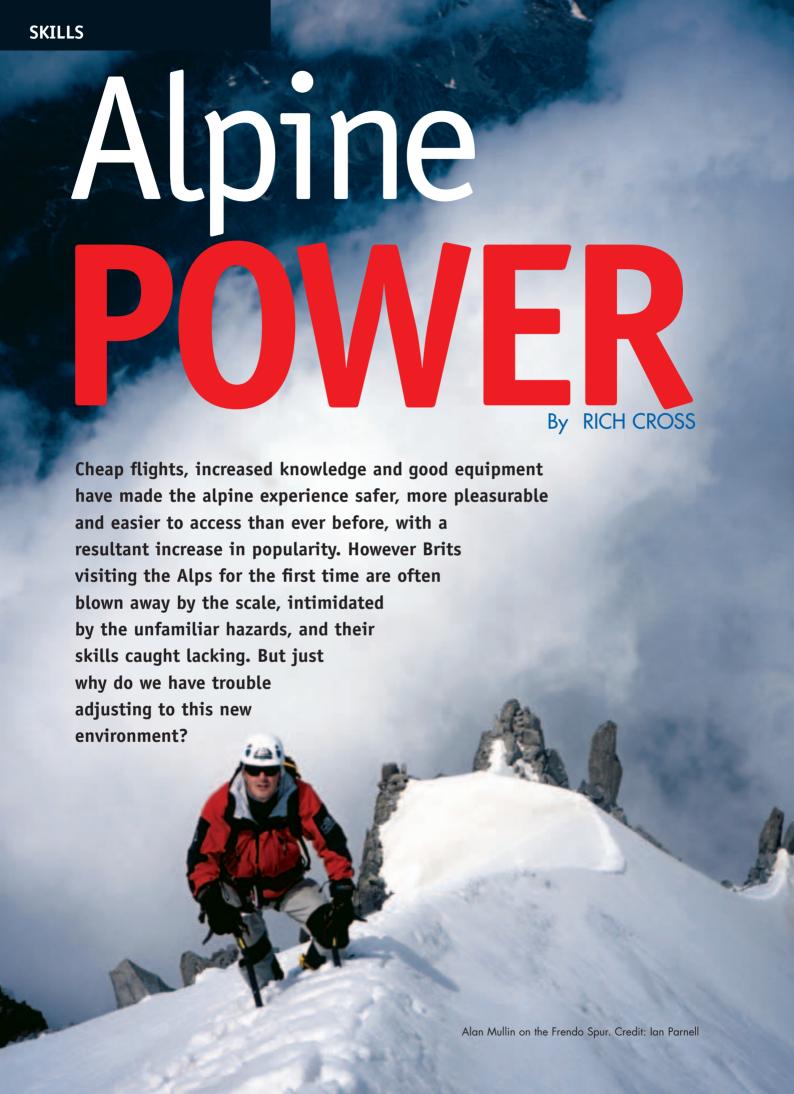
From karabiners to harnesses, there are substantial weight savings to be made across the board. Making a game of it with your climbing partner helps. So does thinking laterally. Looking at how experts in other outdoor disciplines tackle weight reduction can also give clues. As a writer, I thought carrying a Space Pen was always the way forward: it is compact and able to write upside down as well as on a variety of surfaces. However, whilst looking over the gear being taken to the South Pole by explorer Pen Hadow I found that he had shed the fashionable (but relatively heavy) metal casing of the Space Pen and only taken the guts of the device in the form of a refill cartridge. Obvious to some maybe, but completely overlooked by me. I wish you luck in your search for further weight savings.

By employing the lightweight options outlined here, and using my loaf to prune items that weren't absolutely essential, I personally saved nearly four kilos when compared to my regular alpine kit (including shared bivi items). In effect, this allowed me to carry all my food and fuel for a two-day route - as well as a full two litre hydration bladder - for free. Some saving. In addition, I reduced the weight of my boots and crampons by another kilo.

With thanks to Andy Miles for his assistance in the Alps and comments on the Petzl Elios, and Sheridan at Snow & Rock for help on the La Sportiva Trango S boots

(BELOW LEFT) Lightweight and free! Credit: Paul Deegan (BELOW) A lightweight ascent doesn't always mean a light weight! Credit: Paul Deegan





THE DIFFERENCE

Compared to our 3/400m long mountaineering routes the Alps can seem enormous on first acquaintance, with some routes exceeding 1500m or even 2000m. This coupled with altitude, glaciers, stone fall and violent electrical storms, presents an unfamiliar environment with hazards lurking around every corner. Understanding these hazards and minimising risk as you journey through this testing environment is the art of safe alpine climbing.

PREPARATION

There are many skills you can practice in the UK to help you prepare for that first alpine season. Rock climbing skills, as well as snow and ice skills are directly transferable from

the craqs and mountains of the UK. Scotland is a great learning and testing ground where you can learn to crampon (remember your first line of defence against simple accidents is good footwork), and to use an axe for self-arrest, climbing and belaying. More specific skills such as using a prussic knot, which is the basic building block for escaping a crevasse fall or hoisting someone else out, can easily be practised on small crags.

PLANNING

Successful climbing in the Alps requires you to work to a timetable and use every part of the day productively. Using maps and quidebooks to create a realistic plan for the day will hopefully prevent a bone-chilling bivouac, and see you back in the valley for tea and medals. Seeking up to date information about your route is also crucial as the Alps are in a constant state of flux, with glacial recession and rock fall causing

drastic change even over the course of one season. The local guides bureau is an excellent places to gain information, as are your fellow climbers.

ALPINE HAZARDS

The altitude is a real threat to any climber arriving fresh from the UK. The affects can be felt usually from 2000/2500m upwards and by 3500m it can be totally debilitating. Common effects are a lack of appetite, headache, nausea, lethargy and generally feeling on "death's door". It's crucial to acclimatise gradually at the start of any trip by sleeping and climbing at progressively greater heights, for example a trip to climb Mont Blanc should include at least a four day

build-up before you go to 4800m. More information on altitude and mountain medicine can be found on the BMC website.

The alpine environment is often extreme, with temperatures that can vary between -10°C at night and +30°C during the afternoon on open glaciers. This heat can cause wet snow avalanches on any steep slope that catches the mid morning or afternoon sun, and the same process can loosen the cementing effect of the snow on loose rock debris, creating large stone falls. The sun can be equally damaging to the skin, the importance of good sun block and eye protection is all too often underestimated, just recently I heard a scary statistic stating that 80% of German Mountain Guides had some instance of facial skin cancer.

(ABOVE) Alan Mullin on the Frendo Spur. Credit: Ian Parnell

Falling into crevasses is another new problem to consider as many alpine excursions involve glacier travel at some point, and seracs (large ice cliffs that form when a glacier plunges over a rock face) can fall down at any time of the day or night, their stability being largely down to gravity. Lastly but by no means least, the weather can be especially savage, with afternoon lightning storms costing many lives. The traditional Scottish ethos of climbing in the harshest weather is one technique to avoid transferring out here.

APPROACHES, HUTS & BIVOUACS

For the climber the great thing about most alpine bases (apart from the bars and fast food) is their ski infrastructure. This means cable cars can often be taken to within minutes of your alpine hut, cutting out hours of painful slog on humid alpine hillsides. Most huts require some walking however as they are often tucked high amongst the cliffs, but paths are usually well maintained and may even involve exposed ladders or cableways bolted onto steep cliff faces.

Huts are a fantastic resource, managed by their nation's alpine club, and allow you to get an early start on your chosen route without carrying heavy bivvy gear and lots of food. They can vary from small bivvy sheds with no facilities all the way up to large mountain hotels complete with showers and single rooms. The average hut will have simple dormitory beds, and a guardian who provides a simple three course evening meal and

breakfast, alternatively you can often bring and cook your own food. Half board in a hut costs around £25 per night.

Camping is an option for those on a budget but you need to be sensitive and pitch up at least a few hundred metres from the nearest but. Also be aware that camping is actually forbidden between sunrise and sunset so make sure you decamp and hide your gear during the day. Bivouacs are the answer for those seeking the ultimate alpine experience and can often be the highlight of the trip on a crisp starry night. Many bivvy sites can be found in natural caves or under boulders but commonly you will find yourself lying on a patch of gravel on a glacial moraine. Keep gear as light as possible, most people make do with a Gore-Tex bivvy bag and a two season sleeping bag or down jacket - take a look at Paul Deegan's article on page 20 for some tips on

how to save weight.

GLACIER TRAVEL

Crossing glaciers safely requires the party to be roped together, and the more people in the party the safer you will be. As a party of two you need a minimum of 12-15m of rope between you, the excess being carried in coils around the shoulders and tied off at your harness. Whilst travelling the rope should be snug between each person to prevent any fall building up momentum, and crevasses should be crossed at right angles rather than obliquely, for similar reasons. The most experienced route finder will usually go first to pick a safe line (prevention is better than cure), but if they accidentally 'find a

summit 34 27

slot' the fall should be held by dropping to the ground and getting some purchase with the axe. Next there are three options:

If there are other people around just shout for help and with some extra manpower you can often pull someone out of a hole without any fuss.

If the victim isn't hurt then they can often climb/prussic out of the slot by using the person on top as a dead weight anchor.

If the person below is hurt then you need to perform a rescue. Firstly by creating a belay using your axe or ice screws, and securing the rope to it. Next you need to create a mechanical advantage by engineering a hoist system, this is done using the spare rope around your shoulders and a special arrangement of prussic knots.

Crevasse rescue is a complicated business and easy to get wrong, especially under the pressure of a real situation. It is important to read around the subject, practice lots and preferably seek some professional training. Summit 22 has a detailed article on this (also available online as a pdf).

GOING UP

In the UK most climbers either solo or use the traditional system of climbing in pairs doing alternate leads every pitch. However in the Alps there's a lot of exposed but straightforward ground on many routes that's not safe to solo yet not practical to pitch because it would take too long. This is where the technique of "moving together" becomes essential to ensure safe but speedy movement, and avoid that miserable unplanned bivvy. In a similar way to crevasse travel, the spare rope is taken as coils around the shoulders and tied off to the harness. Both climbers move together with the rope snug between them, the leader placing protection and the second removing it, and obviously its crucial to always have at least one good runner on the rope. On rocky ridges with plenty of spikes and opportunities to place runners you can move with only 10 or so metres between climbers, but on smoother terrain more rope will be needed to reach between runner placements. Having this length correct is crucial, as is being able to adjust it quickly, as too much rope can mean poor communication, rope drag and may cause the rope to dislodge loose rocks, whilst too little can often compromise safety. Moving together safely and efficiently is a completely essential alpine skill and can be practised on the great ridges of the British Isles; good examples of things to try are Cneifion Arête in Cwm Idwal (North Wales) and Tower Ridge on Ben Nevis.

GOING DOWN

The descent is often the most trying part of any alpine day and tired bodies and brains can easily cause accidents. Many descents will involve down climbing intricate ground that can be intimidating and hard to read from above, and will certainly require you to keep the rope on. Moving together can be applied in the same way as in ascent, with

the front person placing gear to protect the party. This can feel a little weird at first as the 'second' feels very exposed, and should therefore be the stronger climber of the pair. At some point on descent it may get too steep to down climb safely and then is the time to go into full-blown abseiling mode. On standard descents from classic routes there will usually be an in-situ abseil anchor when it becomes necessary to do so, and this will

usually be a collection of bolts/pegs or a rock spike threaded with an array of tape or cord. Its always worth checking the condition of all components of an in-situ anchor, and if in doubt back the system up with a good nut and replace the cord with some of your own 7mm thick accessory rope. Its crucial to have a clean, efficient and speedy system in place in the UK before you head to the Alps as sometimes a descent may involve many abseils. Using a prussic to back up your abseil device and having a clear communication system are all part of the deal, and will ultimately save your life one day.

GOOD LUCK OUT THERE!

This has been a whistle stop tour through the many areas of knowledge you should be seeking to develop as an alpinist. It can't be exhaustive in a single article but it has hopefully highlighted some important points and survival skills. If on your next Alpine trip things don't go your way and despondency sets in, remember that there is no such thing as wasted time in the mountains, the learning process is constant and experience is often hard won. Also remember that curious alpine reward, that of retrospective pleasure. As an alpinist you will undoubtedly suffer, but when back down in the valley, face burnt and legs weak, it will all have been worth it, and more.



(ABOVE) Sarah Adcock encountering some typically alpine rocky terrain. Credit: Ian Parnell



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Meindl are very aware that your boots must fit your feet exactly, which is why they produce such a wide range of models, all in half sizes.











"Do you want to go climbing, I think we have time before it gets dark?" asked Rolo, "we can just go and climb the First Flatiron, it's a freaking classic. It will be fun."

Now when someone like the great Rolando Garibotti asks you if you fancy doing an easy ultra classic US multi pitch 5.6, it's like Steve McClure asking if you fancy popping out to do a Diff on the Idwal slabs. And the word 'fun' tagged on to the end should be translated as "it's ludicrously easy for me because I'm superhuman so let's do it in a style that makes it seem much, much harder." And for Rolo fun meant speed.

Anyone who reads High's Mountain Info will know that Rolo is the darkest horse on the planet, a climber who's made an art out of trumping the big stars of climbing and anti spraying, i.e. not telling a soul what he's been up.

His few ascents that have leaked out into the public domain include a one-day ascent of the Infinite Spur on Foraker in Alaska (an 9000 foot Alaskan grade 6, knocking ten days of the first ascenionists time), ultra fast ascents in Canada and Patagonia, a Grand traverse of the Tetons, and speed records on El Cap.

So essentially the man's a superhuman speed demon, and when someone like that asks a fat bloke from Hull if they fancy nipping up a classic six pitch route, it's like Michel Schumacher asking if you fancy a spin out to the shops for some milk – you know you're going to crap yourself and feel totally humiliated - I jumped at the chance.

"Do you want to come Ian?" asked Rolo to Parnell, who was sat typing out an article on how to climb trees or something for OTE. Ian's no fool, he passed saying he needed to do finish his work. "You won't need a harness," said Rolo as I packed my harness, "or boots, or chalk bag."

"I'd better just in case," I replied, thinking 'just in case I'm as crap and unfit as I think I am'. "Maybe I should take a rope?" he said. "Yes, I think maybe that would be nice" I replied, imagining Schumacher saying to his terrified passenger "Oh yes I took the seat belts out last week."

We duly arrived in the car park and Rolo donned his harness and grabbed a rope from the back of his truck. Now when I say rope, what I mean is lace, as it looked like he'd brought along a length of red shoe lace the type of stuff you buy off a roll in a climbing shop. His skimpy rack consisted of three ascenders and that was it. 'We'll put our stuff on here," he explained, "then we can just take it easy and jog up to the route," and proceeded to sprint up the steep approach trail as if chased by a bear.

A minute later we were below the route, a huge six-pitch slab very similar to Etive. Snow clung to big sections of it, and damp streaks testified to an unsettling lack of friction. Rolo grabbed the rope, tied on and simply muttered, "I'll climb the first three pitches in one, so don't bother belaying, just pay out the rope', and with that he literally ran up the cliff. In his trainers.

Now you'd think that I had it easy, just stand there until the rope went tight then climb. Unfortunately I'd underestimated Rolo's speed and with only one boot on I was shocked to see just how fast the man could move, staring dumfounded as the rope ran out. Within 30 seconds all the rope was gone and I was away, both shoelaces still untied.

Climbing slabs like this is easy when you're a friction fan and know all the holds and

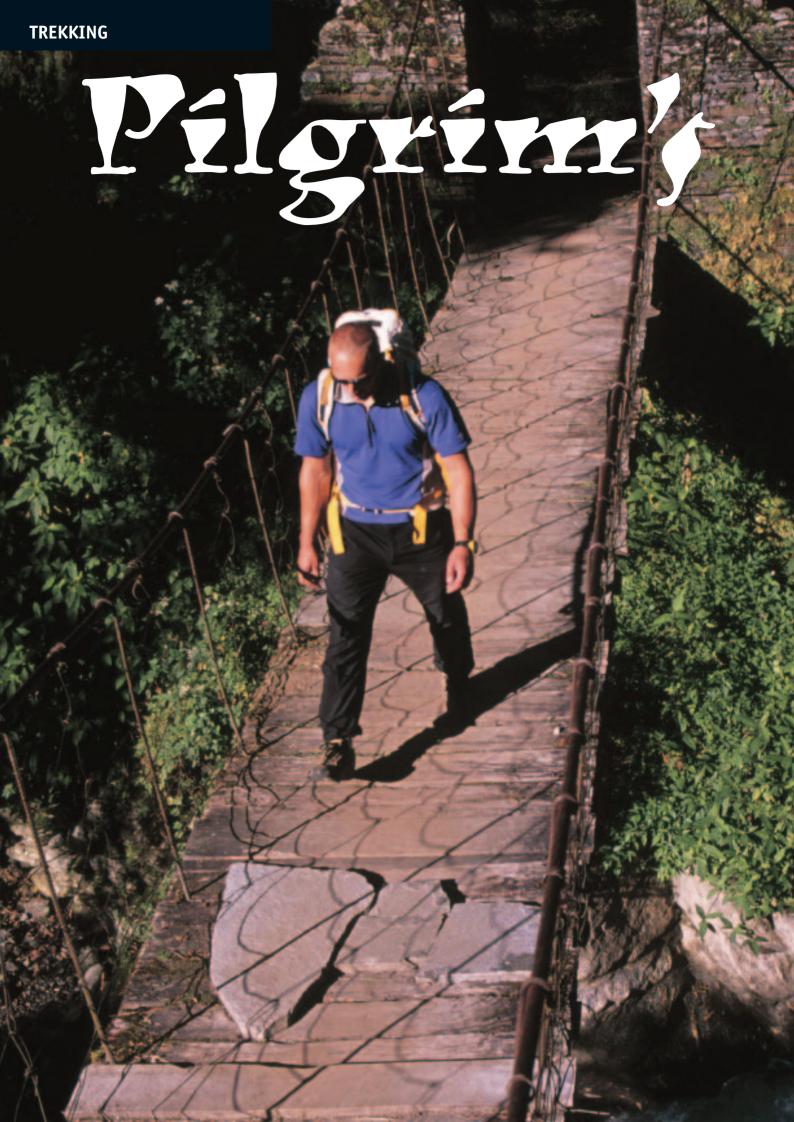
nubbins, but if not, you need a minute or two to work out each piece of the jigsaw. But aware that we were moving together, and that Rolo had no gear, all I could do is just peddle my way up – literally some times. Within two feet I'd slipped, only stopping by jumping up.

It was like a joke, moving so fast I couldn't even see the rock, my hands and feet shooting out faster then I could think. I got to the first belay and found a Tibloc providing some small level of protection on the shoe lace, but before I had chance to even unclip it, the rope was pulling again and I had a split second to snatch it off the belay and carry on.

Seven minutes later I was 500 feet off the deck at the third belay trying my hardest not to puke up as I tried to unclip the jumars. Rolo was sat gazing out over Boulder, "It's a great view from here isn't it Andy?" he sighed, looking as if he'd just awoken from a little nap. "Y-y-yess," I stuttered, pretending to admire the view, blinded by my crossed eyed, heart pounding pain. With only 30 seconds rest Rolo stood up. "Enough rest, I go" and he was off.

Only fifteen minutes had passed and we were at the top, a 1000-foot, six pitch 5.6 below us. I swore I could see steam rising from Rolo's Nikes. "I love it up here, it's just so peaceful" he said, blue eyes shining, the breeze blowing through his raven black hair, the sun reflecting off his tanned chiselled good looks. For a second I swore he was going to start singing, and I bet he's a great singer. But all I could hear was my heart thumping. I needed sugar. And a toilet. "It's a few more pitches along the ridge then and an abseil and then we can jog back to the car —won't take long". Eyes coming back into focus, I didn't doubt it.

Less then an hour since we'd left the house we were back. Ian sat at the computer only a chapter into his article. "No luck?" he grinned, "maybe we can all go and do it tomorrow." |



Lale

Up and down on a 1000Km unsupported trek across the Nepal Himalaya. By Lin and Rick Singh.

t all began when we saw a documentary about a man who crossed Tibet in two years on a pilgrimage, praying full length on the ground all the way to Lhasa. And whilst prostrating didn't appeal, the thought of crossing a country on foot did.

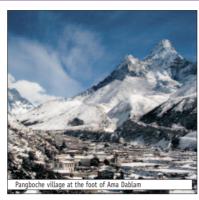
We decided to walk across the Nepal Himalaya, unsupported by porters, to experience the cultural differences between the tribes of Nepal and to witness just how the present political climate in the country is affecting its people. Crossing the more popular tourist trekking routes, we would also be venturing into those areas rarely, if ever, receiving foreign visitors.

I first met Rick in 1999, when trekking in the Annapurna region, and his many years of



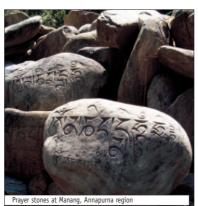
experience as a guide in the Himalayas later led us to form a UK based company leading Himalayan charity treks. Through this we have raised a considerable sum for both British and Himalayan charities, including the International Porter Protection Group. IPPG were able to utilise these funds to launch their health post at Macchermo in the Everest region last year and we were keen to visit the area during our trek.

Nepal has two trekking seasons when the weather is mainly dry and clear. These are October and November once the monsoon has passed, and March and April before it begins again. We decided to begin in late October, after leading a fund raising group to Annapurna Base Camp. Having planned our route, it became clear that it would be necessary to cross from west to east, beginning at Dhaulagiri and finishing in the Arun Valley to ensure that as far as possible, we would be able to cross the high passes before the weather turned against us. As we were carrying all our own gear, we took only the essentials, which in spite of our ruthless packing, weighed 34 kilos in total. Luckily, we had been able to borrow a good deal of equipment and the most essential item, our Lightwave G1 expedition tent which served



us faithfully throughout the trek, had been kindly donated to us by Crux in the UK.

So, having camped the previous night in a friend's garden in Pokhara, we caught the local bus to Beni on 20th October 2003 to begin our trek. Since 1996, Maoists in Nepal have been waging war against the state. Although thousands have lost their lives on both sides, tourists have never been subject to attack. The Maoists have however, seen fit to extract a 'donation' to their cause of various amounts of money, depending upon the nationality of the donor. As a result of the insurgency, bus travel throughout Nepal is disrupted by strikes and by police and army patrols who check for arms and explosives. As usual, our bus stopped every few kilometres, at which point all the passengers collected their bags, goats, children, chickens and other possessions, disembarked, walked through the check post and boarded the bus again. As the majority of the luggage is transported on the roof of the bus, which never received even the most cursory glance, I remain somewhat unconvinced as to the effectiveness of this procedure. That night, spent camping beside the river, was the first of many on which we lay on our backs with our heads out the tent, looking up to see stars of startling brilliance, undimmed by the light of human



The initial section of our journey took us around the Annapurna Circuit near the border of Tibet, with a side trip to climb up to the Dhaulagiri Icefall, our official starting point. Most trekkers walk the Circuit in an anticlockwise direction, to allow effective acclimatisation before crossing Thorung La at 5416 metres. Our west to east route necessitated a crossing from the Hindu shrine at Muktinath, where an ascent of 1300 metres must be made in one day, owing to the lack of a water supply on that side of the pass. The Kali Ghandaki valley, between Dhaulagiri and Annapurna One, is the world's deepest gorge and, is subject to extreme winds. With our faces covered by scarves like two bandits, we spent several days passing mani walls piled with carved



prayer stones, each one a work of art. Porters and mule trains carried goods down the valley and trekkers all headed in the opposite direction to us. Each day we would stop by the river to cook noodles for lunch on our stove and snack on apples and boiled eggs bought along the way. In the evening we would find a lodge run by the local Thakali people, often inexplicably with a picture of Tower Bridge on the wall, and eat the Nepali staple meal of *dal bhat* (lentils and rice) with vegetables.

The scenery along the border with the kingdom of Mustang is breathtaking. It is wild country, reminiscent of the towering, stark rocks and desert scenery of the western USA. In fact Manang is so much like a town in a Hollywood western, complete with horses galloping up the main street, that you wouldn't be surprised to see Clint Eastwood striding along in a poncho. Once across Thorung La, we followed the Marsyangdi Valley through forests and Gurung settlements to the greenery of lower altitudes. Main bridges washed away by the monsoon floods had been replaced by hair-raising makeshift ones and it was also necessary to follow many narrow trails across steep landslides. I have a less than



perfect sense of balance and find negotiating the landslides to be particularly taxing. Rick strides across confidently, whilst I edge along behind like Bambi on ice.

In Besisahar, our much awaited telephone calls home were abandoned because the Maoists had blown up the communications tower. Instead, we headed for Langtang via Gorkha, site of the ancient palace of Nepali kings. It was harvest time and we experienced rural Nepal in all its glory as families worked in the fields and teams of buffalos ploughed the soil, their owners singing the same haunting melody repeated from village to village. Away from tourist facilities and overlooked by the mighty Ganesh Himal, we ate our daily dal bhat in the kitchens of local families who befriended us in the open welcoming way of Nepalis and questioned us with obvious curiosity as to our venture. We often slept in the loft or on the floor of local homes and schoolhouses, besieged by goats and chickens. This was particularly true of remote Tamang villages where like Pied Pipers, we attracted a following of children and our presence warranted inspection by the entire population. Our digital camera was a huge hit every time and curiosity would always overcome natural shyness of strangers.

In these rural areas we were able to see the reality behind the 'Peoples War' waged by the Maoists. Lodge and shop owners are weary of Maoists eating food and taking supplies without paying and families are frightened because their sons are forcibly recruited to the cause. The Annapurna Conservation Area Project, an organisation which is dedicated to promoting eco friendly tourism and the financing of self help projects for locals in the region has been forced to close it's rural outposts because of Maoists attacks. As always however, there are two sides to a story. In one village, where buildings were



scrawled with anti-royal slogans and graffiti proclaiming 'Death to Americans', we stopped to eat with a family whose son had been a Maoist killed by the army. They told us that the strong Maoist presence in their area had driven out the government officials who had previously demanded illegal payments from all the locals. Most Nepalis in rural areas live hand to mouth and deprivation, along with a lack of government stability has led to increased support for the Maoist cause. This village, flying the communist flag, turned out to be one of the friendliest places in which we stayed.

In the context of the above, I was particularly quick to correct local people who pointed at me and loudly pronounced me to be American. One old man, having learned that I was from England and not sent by the evil Mr Bush, told those around him that it would explain why my hair wasn't blonde!

Before reaching the Langtang Valley, we spent the night in one village which although absolutely filthy - remember that there are no Dhaulagiri. At Christmas we took a break to make use of much needed hot showers and laundry facilities in Kathmandu, but in the first week of January we were back on the trail to Everest via the Sherpa villages of Solu Khumbu. The majority of visitors to Everest are on a tight time schedule and therefore fly directly to Lukla, but the trail from Jiri to Namche Bazaar is beautiful and in January necessitates the crossing of a couple of snow covered passes. The famous Thyangboche Monastery in the snow is a truly memorable sight. From Namche, it was thick snow all the way to Kala Pathar for excellent views of Everest, Nuptse, the Khumbu Glacier and Khumbu Icefall. The region has very few visitors in mid winter because of the extreme cold, but we had no hesitation in also visiting the lakes at Gokyo, making use of ice axe and crampons along the way.

The final section of our trek took us over three passes to the Arun Valley, covering ground that was first seen by Nepal's original western trekker, the legendary Bill Tilman. We



toilets in most rural settlements and often no running water - was full of beautifully carved and decorated houses. One woman, wearing the large traditional Tamang earrings, told us that she had been married at the age of ten and had her first child at twelve. She was concerned for her own daughter, who now at age ten herself, was under pressure from the community to marry.

A few days previously, we had spent time unraveling the complex relationships in one family of a husband, three wives and several children. All seemed to live together harmoniously, although the husband had married the second wife when the first had failed to bear a child. When the second wife also did not produce offspring, he married her sister, at which time all three wives became pregnant! There would seem to be a moral here on the virtue of patience.

From Langtang we headed through pine forests to the sacred lakes at Gosainkund and over Laurabina La to the Sherpa villages of Helambu. We were back on the beaten track here and saw our first tourists for several weeks. The panoramic view of the Himalayas from below Gosainkund allowed us to see nearly all the way to our starting point at

encountered several groups of armed Maoists along this trail who, a week later attempted to take over the town of Bhojpur and destroyed all communications to the town. The Arun Valley is one of the most scenic areas of the country. Populated by Sherpa and Rai communities, it receives a fraction of the visitors who flock to the neighbouring Khumbu and the local people were among the most welcoming of the entire trek.

We completed our journey on 21st February 2004 at Legua Ghat, the beginning of the rough road to Hille that leads onward to Kathmandu. After such a large amount of preparation and anticipation, followed by the most amazing trekking experience of a lifetime, we were somewhat disoriented. What did we do before we had to get up in the morning, load our rucksacks and walk the whole day? We racked our brains to remember.

Aha! That was the answer, time for a beer.

For further details on arranging a Himalayan trek in Nepal, Darjeeling or Sikkim with Lin and Rick, please email bluesagetrekking@yahoo.co.uk



COLLIE'S CANADA

By Ian Mitchell

The careers of Norman Collie, the great Anglo-Scottish mountaineer, and of myself share something. We both started on small hills in rural Aberdeenshire, he on the Hill o'Fare and myself on nearby Bennachie. Thereafter, though I have done some of Collie's climbs on Skye, our trajectories – sadly diverge somewhat. He went on to excel at everything he touched; science, exploration, climbing, writing, photography, and art, including the first ascents of many Canadian Peaks.

I meanwhile, was lagging behind this "epitome of a Victorian Gentleman", so decided to rectify the situation with a trip to the Rockies to experience some more of Collie's exploits. To help with the quest, I teamed up with Chic Scott, a local mountaineer and historical aficionado, whom I'd previously introduced to the delights of the Sligachan Hotel, and Collie's activities on Skye.

Our first port of call was Mount Athabasca. Collie had climbed on-sight to the summit in 1898, in an early display of "alpine style", and I'm told the route is still a testpiece for trainee mountain guides, and his descent now the standard ascent. But the variable hand of Rocky Mountain weather had other plans, and after several fruitless days we turned our attention elsewhere, to Abbots Pass. Heavy snowfall put paid to that, and I was beginning to fear our mission was over before it had begun.

Time was running out when Chic picked me up at the Chateau Lake Louise below Mount Victoria, there were just four days left before my plane home. But we were optimistic - the weather had turned in our favour. Like us, Collie had set out from the very same hotel here in 1897 after his first ascents of Victoria and neighbouring Lefroy, to head north to Bow Lake. However in his time the hotel was a four-room log cabin, now it's a 500-room 5 star luxury hotel. Another slight difference was that, in 1897,

though the Canadian Pacific Railway had been blasted westwards through the Rockies to Vancouver, there was no road north of Lake Louise. To reach Bow Lake, Collie and his party had to hack their way through virgin forest, swamps and rotting vegetation for three days. We simply had the Icefields Parkway, taking us the 40 or so kilometers in about as many minutes.

Collie took a horse-team of outfitters with him, carrying supplies and laying the camps along the way. This was led by the legendary Bill Peyto, a real Wild West character, and it was found that whenever Peyto got problematic, the answer was to feed him with whiskey. Chic seemed less problematic, but had a similar taste in whiskey, so I kept him fed.

His rusty beat-up Chevy, which caused many a raised eyebrow at the Lake Louise Chateau, was not comparable to the horses under Peyto's charge but his outfitting skills were easily up to scratch, and his knowledge of Canadian mountain history is second to none. In fact his book, Pushing the Limits, the Story of Canadian Mountaineering, is a classic, and should be read by anyone with the intention of visiting.

Collie's party camped at Bow Lake, below the Wapta Icefield, originally intending to climb the sharp peak visible from the lake -Mount St.Nicholas. There were no trails of course, so they sailed across the lake, and found their way through the alluvial outflow

to the Bow Glacier, and ascended this to gain the icefield. Once there, they noticed a higher peak, subsequently named Mount Gordon, further over the icefield, and changed their plans to make that their target.

This peak was our goal as well, though we had an easier day on the approach. A good track now follows the lakeside, through the glacial debris, avoiding the Bow glacier (which has massively retreated in 100 years) and makes its way up a narrow canyon which would have been almost impassable in Collie's day. After a freezing river crossing, the comforts of the Bow Hut were reached, another benefit of following over a hundred vears later.

Mount Gordon is a straightforward ascent, but Chic's concern was the icefield and its crevasses. Collie's party were heading back after their ascent when one of the party, Charles Thomson, fell head first, unroped, into a crevasse. "Someone must go down to him" was the conclusion. Collie as the lightest man, at the end of two full rope run outs, climbed down and managed to attach the rope round one of Thomson's arms, and the men emerged unscathed but almost hypothermic. Collie recalled, "We were both of us nearly frozen and wet to the skin, for icecold water was slowly dripping the whole time onto us, and I had gone into the crevasse very scantily clad."

These were some of Collie footsteps I wasn't so keen on following so we set out

from the hut wearing snowshoes, and roped together with jumars and etriers attached just in case. We were lucky in that the visibility was good, high winds had swept most of the new snow from the crevasses, leaving them clear. And these are big holes, the ice being upwards of 400 feet thick; global warming has some way to go here.

But as we summitted in a cold thick fog, it occurred to me that retracing our steps might not be as easy as it seemed. Chic came into his own, and with a set of back bearings and a knowledge of the mountain born of double figure ascents of it, led off, with the occasional mutter to me to keep a tight rope. We cautiously wound our way back, and after a while the mist tugged away and we caught a view of the entire icefield, over 500 square kilometers of it, with the peak we had climbed unseen now visible behind us, and away to the north, the larger bulk of Mount Collie itself.

From then on it was a scamper (if you can scamper in snowshoes) back to the Bow Hut and the celebratory consumption of the last of the whiskey. Raising a small glass to Collie, who'd have still had to fight his way back to Bow Lake right now. But that would have been the least of his worries I figured, since whilst I was wincing at an eight hour return flight, the man himself would have had a week on the Canadian Pacific across Canada, then a good few weeks on the ship home. Now that's dedication.



LEFT) Memory of Banff 1897: Peter Sarbach. George P. Baker and J. Norman Collie at Banff Springs Hotel. Credit: V701/LC-9 Wilson family fonds, Whyte Museum of the Canadian Rockies.

(TOP) Ian Mitchell with Mount Collie behind. Credit: Chic Scott.

Further Information

The ascent of Mt Gordon is described in Summits and Icefields by Chic Scott (Rocky Mountain Books) 2003 Vol 1: The Rockies.

WEEKENDS **Event Location & Dates**

Port Solent Superstore **Bristol Superstore Manchester Superstore Covent Garden Superstore Chertsey Superstore**

May 29th - 31st June 5th & 6th June 12th & 13th June 19th & 20th June 26th & 27th

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(CLOCKWISE FROM TOP LEFT) Amanda James on Sunset Crack, Froggatt. A popular first lead.

Andy Higginson slapping around at Burbage.

Not all sports routes are hard! Vicky Barrett tackles a lower grade testpiece at Smith Rocks, USA.

Learning to place gear is essential.

All credit: Alex Messenger



Bouldering

Bouldering is one of the easiest aspects of climbing to transfer to the outdoors. I mean, crank on sloper indoors, crank on sloper outdoors – how different can it be? Well, not very, but for the unwary beanie clad boulderer there are still a few potential pitfalls.

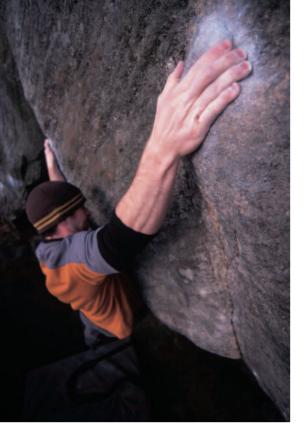
Real boulders present challenges and hazards that demand awareness and a different approach from their artificial counterparts. The ground surrounding and beneath boulders is generally uneven and much less forgiving than indoors, and there may well be protruding rocks that could easily cause injury in the event of a fall. Many boulderers now carry a padded mat to reduce these dangers, but don't over-estimate the effectiveness of this cushioning. It's still very easy to turn an ankle or wrist, especially on a carelessly positioned mat, or just plain miss the mat entirely! Mats should be placed under the point where a fall is most likely and/or would have serious consequences. An attentive spotter, ready to protect the climber's

back and head or to absorb some of the impact from an awkward landing is always highly recommended. And if you're sharing a mat, beware eagerly nabbing it whilst somebody is still climbing above.

But mats or no mats, treat the consequences of a slip or fall with respect and don't lose sight of this in your desire to get the tick. Some problems lure the unwary climber far from the ground or deliver a head-first ejection, and even experienced climbers can be surprised in this way.

On to the crag

If routes are more your thing then single pitch crags are a great way to learn the basics in a relatively controlled environment, and provide most people's first taste of life outside. "Single pitch" means that the climb is short enough to be completed in one rope length (pitch), so there's no need to set up a belay part way up the route. Choose a small outcrop, ideally less than half the length of a



peg isn't butted tightly up against the rock, treat it with a degree of suspicion relative to the amount of metal left protruding. Some fixed gear may have tape slings attached – check these for fraying or UV deterioration and replace if in doubt.

After clipping any piton or bolt I would recommend giving the quickdraw a sharp tug in the direction of anticipated loading and watching for any movement, rotation or other signs of frailty. But whenever testing a runner this way, be sure to keep a good grip on the rock in case it does fail!

Sport climbs rarely have a simple attachment karabiner at the top. Even those that do may present problems as the gates quickly seize shut through corrosion on our damp isle. So it's more usual to find a sealed ring or two, through which it is necessary to thread the rope before being lowered to the ground.

Whilst you could just simply clip in with a quickdraw, untie the rope, then tie back after threading, this is not ideal. For a short period you are at the mercy of a single point of contact at the belay, and are very stuck if you drop the rope! A safer method is to thread



typical climbing rope in height (i.e. less than 25 metres high). This makes communication straightforward, and means that the climber can be lowered back to the ground from any point on the route in case of difficulty. Climbs with a complex (e.g. tidal) approach or no easy descent from the top are unsuitable at this stage.

Sport climbs

On the continent, many climbs are protected with bolts, just like indoors, so at the start there are fewer new skills to learn. However Britain has a long tradition of preserving a natural protection ethic, so relatively few crags are equipped with bolts and lower-off points, and those that exist are usually featureless, steep and hard.

But for some climbers, sport climbs will provide a handy transition between indoors and natural routes, especially if you happen to live near one of the lower grade sport climb honeypots such as Portland.

Seeing a line of bolts, it's tempting just to jump on the route, after all, that's what you'd do indoors? But unlike inside, no one is ultimately responsible for the state of the bolts, and even on BMC managed crags such as Pen Trwyn near Llandudno, only the top lower offs are checked periodically. There is simply no guarantee that the bolt you're about to clip is still solid.

Treat all fixed gear, including bolts with a healthy degree of scepticism. Is it attached to solid rock or have cracks appeared? What does the bolt hanger look like – is it thin and rusty? On some routes you may also encounter pitons or "pegs". These are similar to bolts but hammered into natural cracks and holes, held in place by friction not glue. They can easily deteriorate over time, so your degree of trust should be relative to how secure the piton appears. Bad signs are copious amounts of rust, cracks in the metal (especially the "eye"), and if the head of a

LOWERING OFF:



The climber secures him or herself to the anchors with the belayer keeping them on belay throughout.



A bight of rope is threaded through the anchor.



A figure of eight knot is then put onto this bight and attached to the harness via a screwgate.



The slack is then taken in by the belayer and the original end of the rope untied from the climber's harness.

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(ABOVE) Unknown Climbers on Suspension Flake, Vs 4c, Hound Tor. Credit: Stuart Littlefair

the rope through the rings and tie back in, all before unfastening your original attachment.

Clip in to one or both anchors with quickdraws or a sling and feed a loop of rope through the lower off points. Tie a knot in the loop and clip this onto your harness attachment point with a screwgate karabiner. The original rope tied to your harness can now be unfastened, so that the rope now passes from the belayer, through the anchor and into the new knot. Pull the long end of spare rope through the anchors to allow a visual check of the attachment. The belayer can now take in any slack rope, until the leader unclips the extender(s) from the anchors and is lowered to the ground. Never allow yourself to be lowered on a rope threaded directly through a tape anchor. The tape would wear through virtually instantly, with obvious consequences.

Trad climbs

Most British crags are climbed using natural protection (gear). This means that the natural features of cracks, spikes or threads on the route are utilised to protect the climb. A hundred years ago this meant threading slings round pebbles, or hoping to encounter natural spikes, but these days climbers have a whole arsenal of weapons at their disposal. From wafer thin micro-wires to huge camming devices, if there's a natural feature to be exploited, there's usually something to fit.

But placing gear and understanding the advantages and limitations of each piece and it's placement is a dark art requiring practice and patience to master. In the early days you'll need to enlist the support of a more experienced mentor, and spend time experimenting with practice placements whilst safely on the ground. Your first encounter with gear placements will probably be removing them as you follow the climb after a more experienced leader, or perhaps when helping to set up a top rope.

Top roping

Top roping will be a familiar system for anybody who has already used ropes at the wall. Essentially the rope is threaded through a reliable anchor at the top of the pitch, so that two strands of rope hang down the approximate line of the climb. One end is attached to the climber while the belayer uses the other end.

It's easy to appreciate that the choice of top anchors is a vital one. Usually, two or more anchors are linked together to equalise the load and provide a backup in case of failure. The simplest anchors are trees, boulders, or a natural rock spike, but although they may look solid initially, never blindly trust them.

Start with a visual check. How big is the anchor? Thin trees and tiny boulders could well be unseated if subjected to loading. A detached boulder might be precariously balanced or perched on a slope. Sometimes even very large boulders can be moved suprisingly easily, and boulders that have been used for years become unseated after rain or frost. Watch out for rounded or "whaleback" boulders since slings just ride up and flip off under load. This sort of boulder can only be used if undercut at its base, and the sling should be carefully placed. To reduce leverage place it as close to ground level as practical, and test by running the sling back and forth in your hands in the anticipated direction of loading. If in doubt, look elsewhere.

Rock spikes should be tested for soundness; any cracks should be viewed with suspicion, and the edges should be checked for friability. Give a potential spike a tug in the intended direction of loading, and a hard knock with fist or foot, watching for any signs of movement. Again if in doubt, move on.

Sometimes you'll be able to find a natural thread, and pass a sling through a gap, or round a chockstone to find a quick and easy anchor capable of withstanding loading from many directions. But again check for stability, and make sure it really is a rock thread, and the sling is not just being held in place by some dried mud.

Placing Gear

But often there will be no convenient tree or spike, and you'll have use gear to create the anchors. Natural protection falls into two broad categories; static and camming. Static protection is simply wedged into a constriction, whilst camming devices actively convert their loading into sideways pressure to hold them into a crack, even a perfectly parallel one with smooth sides.

Static placements

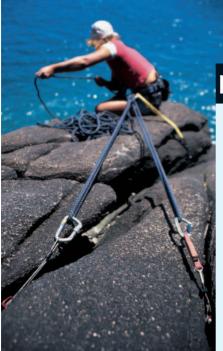
For small to medium cracks, wedge-shaped chocks (aka nuts, wires) such as Rocks, Wallnuts etc. can be used. These are usually attached to a swaged wire loop, although some larger sizes do come on cord. Prior to use the attachment loop should be checked for damage, and wires with broken or rusty strands should be binned. Some very tiny wires are available, such as "zero's" or RP's. On harder climbs these are used for protection, but they have a very low breaking strain and

I THINK IT'S VS 7b!

Climbers making a transition from sport and indoor climbs to traditional climbs

are often confused by the different grading system. Trad climbs use an adjectival description of the overall commitment and challenge, coupled with a technical grade of the most difficult move. This allows quite subtle information about the nature of the climbing to be conveyed. Sports grades usually use the French system, however, since sports grades do not allow the luxury of an adjective, the grade often attempts to cover factors such as effort as well as technicality. In the early days it's best to adopt a very conservative approach since the endless variety of holds and features outdoors can make everything feel much harder.

| UK Adjectival | UK Technical | French | UIAA (alpine) | USA | Australian |
|---------------------|----------------|------------------|-------------------|---------------------|----------------|
| Grade | Grade (approx) | Equivalent | Grade | Equivalent | Equivalent |
| Moderate | | 1 | I, II | 5.1, 5.2 | 4, 5 |
| Difficult | | 1, 2, 2+ | II, III | 5.2, 5.3 | 5, 6, 7 |
| Very Difficult | | 2, 2+, 3- | III, III+ | 5.2, 5.3, 5.4 | 6, 7, 8 |
| Hard Very Difficult | | 2+, 3-, 3, 3+ | III+, IV, IV+ | 5.4, 5.5, 5.6 | 8, 9, 10 |
| Mild Severe | | 3-, 3, 3+ | IV, IV+ | 5.5, 5.6 | 10, 11 |
| Severe | | 3, 3+, 4 | IV, IV+, V– | 5.5, 5.6, 5.7 | 10, 11, 12 |
| Hard Severe | | 3, 3+, 4, 4+ | IV+, V-, V | 5.6, 5.7 | 12, 13 |
| Mild Very Severe | 4a, 4b, 4c | 3+, 4, 4+ | IV+, V-, V | 5.6, 5.7 | 12, 13, 14 |
| Very Severe | 4a, 4b, 4c | 4, 4+, 5 | V-, V, V+ | 5.7, 5.8 | 13, 14, 15 |
| Hard Very Severe | 4c, 5a, 5b | 4+, 5, 5+, 6a | V+, VI-, VI | 5.8, 5.9 | 15, 16, 17, 18 |
| El | 5a, 5b, 5c | 5+, 6a, 6a+ | VI, VI+ | 5.9, 5.10a | 18, 19, 20 |
| E2 | 5b, 5c, 6a | 6a+, 6b, 6b+ | VI+, VII–, VII | 5.10b, 5.10c | 19, 20, 21 |
| E3 | 5c, 6a | 6b, 6b+, 6c | VII, VII+ | 5.10d, 5.11a, 5.11b | 20, 21, 22 |
| E4 | 6a, 6b | 6c, 6c+, 7a | VII+, VIII—, VIII | 5.11b, 5.11c, 5.11d | 22, 23 |
| E5 | 6a, 6b 6c | 7a, 7a+, 7b | VIII, VIII+, IX— | 5.11d, 5.12a, 5.12b | 23, 24, 25 |
| E6 | 6b, 6c | 7b, 7b+, 7c, 7c+ | IX—, IX, IX+ | 5.12b, 5.12c, | 25, 26, 27, 28 |
| | | | | 5.12d, 5.13a | |
| E7 | 6c, 7a | 7c+, 8a, 8a+ | IX+, X—, X | 5.13a, 5.13b, 5.13c | 28, 29, 30 |
| E8 | 6c, 7a | 8a+, 8b, 8b+ | X, X+ | 5.13c, 5.13d, 5.14a | 30, 31, 32 |



(ABOVE) A well equalised belay for Rachel South. Credit: Alex Messenger

are best left in the shop when starting out. For protecting larger cracks an assortment of hexagonal shaped tubes are available, with a cord or a tape loop. These "hexes" are often moulded into an offset shape, allowing the skilled user to introduce a degree of rotation when loaded, giving a camming effect.

For static placements, tapered or keyholeshaped cracks are usually required, allowing the metal to be inserted and slid down into the constriction. The best placements retain the wedge in place even if subjected to pulls from a range of directions. Removing such gear afterwards can be quite difficult, and judicious use of a metal "nut key" might be needed to prise a stubborn placement out.

Camming placements

Many cracks have parallel sides, and this is where camming devices come into play. Spring loaded camming devices were invented in the 70's and now are available in a bewildering range of sizes to suit all situations. However they are relatively pricey items and tricky to place securely, so don't rush out and buy a full set just yet.

The craft of placing reliable natural protection equipment requires considerable practice and experience, so novices should take great care, particularly when setting up belay anchors for top roping, where equipment failure could well be catastrophic. Initially, only very substantial boulders, trees and spikes should be used as testing them is relatively intuitive, and an experienced mentor should be on hand to check your work.

The Belay

For back up purposes it's normal to use two or more anchors for a belay, ideally using different blocks or crack systems. But these different anchors all need to be linked together, which can cause a headache. There are many ways to link anchors together; the simplest and most effective methods require a long sling or spare rope which is tied into all the

NATURAL DANGERS

Crags and boulders are subject to natural erosion and prone to loose holds and stonefall. The only person responsible for checking that a particular route or descent is safe is you. Holds may be wet or dirty, obscured by vegetation or even disintegrate. Detached rocks can also be dislodged by other climbers or perhaps wildlife, and can present a serious threat. Climbs with loose exits demand areat steadiness or are best avoided altogether, and you should remain alert at all times to the risk of rocks or even equipment being dropped from above. Wearing a climbing helmet is always a sensible precaution and with the development of effective lightweight helmets, this is no longer a chore.

anchors to create an attachment loop that pulls equally on each anchor when loaded. This means that the individual anchors share the load – the various loops should feed into the main knot within an angle of around 45–90° for optimum strength and stability.

Once the anchors have been equalised in this way, a screwgate karabiner or two can be clipped into the main attachment loop and the rope can be threaded through for top roping. If you intend to position the belayer at the foot of the climb like at the wall then take care to protect the top of the crag (and your rope) from erosion by friction. A simple way to achieve this is to make the main attachment loop long enough to extend beyond the crag top, or use a sling to extend the loop over the edge. This is particularly important for softer rocks such as sandstone,

EQUALISED BELAY:

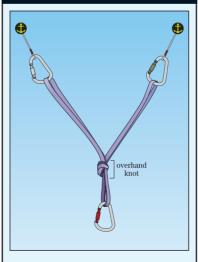


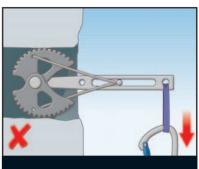
Diagram from the forthcoming MLTUK book **Rock Climbing**



and for crags such as Harrison's Rocks codes of practice have been drawn up to protect the crag environment.

Lead Climbing

Lead climbing on traditional climbs is for many people what it's really all about. And when you've got the right skills and confidence, it allows you to head up into some pretty special places. But getting to this stage takes time, so practice those gear placements at ground level and stay tuned for the next in the series – **Learning to Lead.**



CAM TIPS:

- Look for placements that don't widen in front or behind the cams, any movement or rotation may result in failure.
- Minimise rotation by positioning the cam unit's stem in line with the anticipated pull.
- Camming units tend to "walk" further into a crack when a cycle of rotation and release is caused by rope drag. In extreme cases you will lose your cam.
- 4 Spring-loaded cams used as running belays are usually best extended using a sling to reduce or eliminate the rotational effect of rope drag
- Cams are best avoided as anchors for toproping belay systems as the cycle of strain and release can also cause the unit to "walk" into a less secure part of the crack.
- Practice placing and removing cam units at ground level.
- For shallow horizontal placements, flexible shafts reduce leverage and are a much stronger solution.
- Optimum placement is within the central area of the cams' range of movements.

 If over or under cammed, the placement is mechanically weaker, but annoyingly can be much harder to remove by hand.
- Difficult placements often require judicious use of a nut key to extract them from the rock. Often this involves hooking the trigger bar on both sides of the stem and pulling while simultaneously pushing the stem head further in. This is as difficult as it sounds, so practice at ground level.

Steve Long works for Plas y Brenin, the National Mountain Centre. PyB runs a full programme of courses to suit all levels of ability, from indoor climbers progressing to climbing outside right through to big wall climbing. For more information see www.pyb.co.uk.

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SLOPE

JON MORGAN SUFFERS FOR HIS COUNTRY AT THE ISMC SKI MOUNTAINEERING WORLD CHAMPIONSHIPS.

I felt rather inadequately dressed in a borrowed snot-green catsuit at -19C on the morning of the first race.

Herd mentality and the perishing cold ensured that everyone legged it off at the start at an unsustainable pace. But within minutes even the continental uber-athletes were forced to a walk.

No matter, already a big gap had opened up. The top nations, France, Italy, Switzerland and Spain were rapidly disappearing out of sight. Not far behind were Slovakia, Slovenia, Austria, Czech Republic and USA. This was the second ever World Championships in Ski Mountaineering, held in Baquira-Beret in the Spanish Pyrenees, and there were 29 nations competing including unlikely oddities such as Mongolia, Eritrea, and the good old UK.

It felt like a physiology experiment designed to test who'd got the biggest lungs and highest tolerance to pain. And this first race was a mere warm up, just 950m of vertical gain, like skiing up a red run. It turned out to be enjoyably painful and addictive, yet by the time I crossed the line after 40 minutes of beasting, the winner was looking relaxed and fresh, having got there nearly ten minutes ago.

Ski mountaineering allows you to explore the winter hills in a highly efficient manner. To go up you just stick reusable skins on the base of your skis, they prevent you from sliding back on slopes



up to about 20 degrees. Steeper than that and you need to zig zag, doing uphill kick turns to change direction - an acquired skill. The skis don't need to be special but light ones make it easier. The bindings, however, need to articulate at the toe, to allow a natural walking action, and also have to clamp down at the heel for the descent. And occasionally on icy slopes harscheisen's (ski crampons) are put on to prevent sliding sideways.

Almost unknown in Britain, ski mountaineering racing is very popular in Europe, and several manufacturers produce gear specifically designed for racing. Scarpa produce the F1, a lime green boot worn by most competitors. It's unique in that it bends at the toe, like a telemark boot, allowing a natural walking action, but still clamps down at the heel for the descents. It also has a single clip that simultaneously tightens the boot and locks a spindle into the rear of the shell to put you into downhill mode. And they weigh less than 1.5kg each before you start cutting bits off.

Weight saving on any moving parts is of paramount importance and the Italians in particular seem adept at removing all but the barest components. They cut things off, pepper the boots with holes, shave the sole down, remove any clips and replace with gaffer tape. Most racers remove the tongues altogether and manage without. One guy actually managed to shave 400g off each bootvery impressive since they're the lightest on the market anyway.

The bindings, Dynafit Tourtech for all the serious competitors, are designed in conjunction with the boots, and superlight skis of less than a kilo are standard for this game. To complete the package oversized cross country ski poles provide an advantage since they allow some of the gruelling effort to be shared by your arms.

The second day of the racing was a team event, in pairs, and involved five ascents and five descents, each a total of 2100m. There were two sections of portage, carrying skis on your sack, the first up a steep slope, the second along an exposed ridge. But the bulk of time and effort in this game is always skinning uphill on prepared tracks, and there are often two tracks in parallel to allow overtaking. A lot of crucial time is gained or lost by the transitions. At the top of the climbs you have to rip the skins off with elastic cord whilst keeping skis on, stuff them down your suit, crank up boots, change binding mode to downhill and go. And at the bottom, reverse it. The top guys can do these transitions in as little as 25 seconds! The downhill sections are very variable; 40 degree couloirs, dense forest, icy traverses, flat skating sections. It's flagged and marshalled off piste, so no route finding problems, but often you're pressured by others, and from within, into straight line nailing it on slopes you'd feel a lot happier turning on.

We spent a rest day hacking off more bits off our boots, then it was the individual event. It followed a similar course to the team event, but only 1700m of ascent and descent. A few overeager continentals jumped the gun and led to a false start, but an irate skidoo-driving official herded them back. Then we were go, on a refrozen start that saw a Japanese, an Eritrean, then finally a Brit hurtle all the way back down one of the steeper sections.

Things were going OK for the first half. My benchmark was the top female competitors - I could just about hold my own going up, but they would nab 30 seconds off me at the top with their swift transitions. I'd chase them on the downhill and almost catch up until the next change-over. This was the pattern until disaster struck. At the bottom of the second descent, as a result of overenthusiastic trimming, I couldn't disengage my left boot from the downhill position. Several minutes were lost while I fought with the boot. I managed a temporary fix, but not before hordes of skiers came streaming past me.

The next climb and descent saw me frantically trying to overtake them, but on the final climb things looked bad. My skins wouldn't stick, nor my boot go into uphill mode again. Making the decision not to lose any more time, the ascent was skinned in a painfully forward downhill mode, and then, at last, the final descent of 950m, over in blurred orgy of excitement, adrenaline and ischaemic thigh pain.

We all came to the event to compete and to learn. And while we were no threat to the top dogs, it was a fantastic experience, and I'd like to think that more Brits could take it up. We have some great skiers and a host of whippet-lean fell runners, and a combination of the two is ideal. Plus the UIAA and the ISMC (International Ski Mountaineering Council) have put a formal bid to the IOC (International Olympic Committee) for ski mountaineering to become an Olympic sport. If ratified, to be decided in 2006, then it will become an Olympic sport in 2010. So if you fancy the chance to represent Britain, then get those skins on! II

The Author: After working as a doctor in Sheffield, John Morgan trained to be a mountain guide. He now lives in Chamonix with his wife Caroline and 2.5 kids. His developing taste in ski-mountaineering was helped by reading a "Wanted- competitors to represent Britain!" snippet in Summit, and off he headed accompanied by Nick Wallis, Roly Sinker, and Nigel Mockeridge. They bagged a respectable 17th place for Britain out of 29 countries.

(LEFT) Catsuited competitors on the start line. Credit: Nick Wallis. (LEFT BOTTOM) The work had only just begun! Credit: Jon Morgan.

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"Afterwards it seemed a surreal meld of dream and nightmare, a lost story perhaps, from Edgar Allen Poe. Had I nodded off by the fire and imagined the whole bizarre episode? But no, it happened all right, on a dark winter's night that would endure in memory."

By Mick Ward

You can take the man from the project but can you take the project from the man? Another Saturday, another trip to Rubicon. Surely Water Cum Jolly comes second only to Ashby de la Zouche in the gentrification stakes? By then, however, gentrification was far from my mind. A series of rapid successes had lured me into an attempt on the gold standard 8a grade. Yet this time, when it really mattered, success was taunting, elusive.

So it was with surprise, perhaps disquiet, that I was confronted by the familiar visage of The Sissy garlanded by quickdraws, an in-situ rope and an in-situ team. Michele and I tramped across the mud beneath Rubicon and introduced ourselves. Two Nicks – previously unknown to me. Big Nick and Little Nick, we christened them. Big Nick (Bond) was tallish, gaunt and intense. Little Nick was about my size, with a shock of black hair and an air of contemplation.

We swapped beta on the route. They were still exploring, whereas I was fully au fait

with The Sissy's discreet charms. Big Nick looked a tad dubious as I explained about the crimp, the rockover, the two finger pocket, the snatch, the flag, the finger shuffle. Perhaps a demonstration was in order. Dutifully I followed the sequence to the finger shuffle where mine, as ever, opened. A quick plop, then back on to pull through to the lower-off. "Bloody hell," said Big Nick, "you look close to getting it."

But, over the next few weekends, I came no closer to getting it. Big Nick improved. But Little Nick was a dark horse. Lack of reach, which had made an adjoining route problematic, didn't matter on The Sissy. Steel fingers did matter, as he pulled on tiny, sharp holds with a smoothness I couldn't muster. Incessant chatter filled the sanity breaks between redpoints. Little Nick's confession that he was trying to get back into climbing after a long layoff made a mockery of my panels and plyometrics.

Back on the route, things were going badly - for me anyway. "You were our hero



at first," Big Nick cheerfully confided, "but you've fallen from grace." My rueful reply...
"I was always rubbish; you just didn't see it."

As October drifted into wild November, it became a race to complete the route before the weather broke. Sometimes, with Michele, there were four of us, sometimes three, sometimes just Little Nick and me. We were equally driven. And we came close, tantalisingly close. Twice Nick pulled through the crux, only to be hampered by my tired, tardy belaying. Once I fought past the crux and, disbelievingly, blew the redpoint within spitting distance of easy ground.

A final dank, winter's afternoon, Water Cum Jolly shorn of its hordes of hikers, just Seb Grieve bouldering and laughing at us. Agonisingly cold. Gentle feathers of snow swirling all around. Reluctantly stripping off layer after layer of clothing for the redpoint. Sharp, greasy crimps biting into numb, swollen fingers. Inevitable out-

comes. The line blurring between determination and obsession.

A muttered farewell as Seb vanished into flurries of thick snowflakes. A final manic giggle, "Don't leave it too late!"

Over an hour later, having reluctantly accepted the impossibility of climbing at such a grade in such conditions, we arrived back at the cars, soaked through, only to discover that all ways out were uphill, covered in snow and equally impassable.

Snowed in – at Water Cum Jolly, of all places! Who could believe it? At first, we didn't as we shoved and revved and swore and the cars skidded and slipped back down again. Dejected, we trudged up the hill to the Monsal Head, a welcoming beacon in the darkness. Inside, the giddiness of pints hitting empty stomachs. Phone lines were down and mobiles were still playthings for Yuppies. We were expected in Manchester and Sheffield. Our grim obsession to get up the route transformed into an equally grim obsession to escape the trap.

Big Nick had suffered badly with cold, wet and wind. He was shivering uncontrollably, seeming dangerously close to hypothermia. Somewhere in the preceding hours, we'd crossed an invisible boundary, abandoning the whinges of sport climbing for a deeper mountaineering stoicism. Mountaineering in Water Cum Jolly? The stuff of farce! Yet if Big Nick had left the pub, he'd have been a corpse. Terrified, we made him stay.

Outside once again, mercifully the snow had stopped. How to escape? A decision was quickly reached: we would scoop parallel trenches for tyres in the snow, all the way we'd come, from Water Cum Jolly up the hill to the Monsal Head. Our tools a borrowed coal shovel and poker.

Over the next few hours, the night assumed a surreal, phantasmagoric quality, an orgy of shovelling and scraping. I did my share but Nick was like a man possessed. He seemed in his element, snow and hardship. Odd for a sport climber.

We paused, grunted. Light glinted off the shovel. Two near-perfectly parallel lines cut all the way up the hill. We grinned foolishly at our handiwork, relieved. Back in the pub, the tools of the job were returned to a bemused landlord, and a revived Big Nick collected. A final plod down a now very familiar hill was followed by skidding, spluttering ascents back up it. Parting at the main road, watching the dim red lights disappearing into the darkness, something was niggling at me. Little Nick. And his strange enthusiasm for shovelling snow. II

Mick ruefully reports that he never did tick it, but Nick Colton (aka Little Nick, aka Black Nick) made it to the chains of his first 8a, Unleashing the Wild Physique in the Spring. Apparently he's been around for a while and done a bit, but is now happiest shovelling his intray at the BMC, as the new Deputy CEO.

(LEFT) Winter Peak. Don't get stuck out there now. Credit: Messenger.





The BMC (through funding from UK Sport) and the Mount Everest Foundation continue to provide support to expeditions climbing new routes and visiting unexplored mountainous regions. So what's planned for 2004?



SOUTH AMERICA

Four Go Free on Fitzroy

Twid Turner and co. had hoped to make the first ascent of a 1300m free climb on the NE side of Fitzroy. As it turned out, due to the weather they spent four weeks perfecting the art of snowholing! The route was later climbed by an Argentinean-Italian team.

Torre Egger Freestyle

Ben Bransby teamed up with Swiss and American climbers to make the third overall and first complete free ascent of the Slovak route on Fitzroy, an impressive new line on Desmochada and a new route on the West Face of St Exupery. All in good style and during a unusually fine spell of weather in February. Good effort.

Return to Cerro Torre

The mystery of the Maestri Egger Route remains intact with Leo Houlding and Kevin Thaw defeated in their latest attempt at this historic line. Atrocious weather prevented them ever really attempting the

route but that is unlikely to prevent Leo from wanting to go back again next year!

Cerro Torre

Dave Hesleden and Simon Richardson hoped to link the Marsigny-Parkin route 'Los Tiempos Perdidos' to the Col of Hope with the Ferrari West Face to the summit. Hampered by appalling weather they only managed one day of climbing on the lower West Face (see pic) which they described as "the most exhilarating and awe inspiring day's climbing either of us had ever experienced". Quite something for a team with over 40 collective years of alpine experience.

Chacraraju Este En Los Andes

Nick Bullock and Al Powell plan to make the first ascent of the East Face of Chacraraju in the Cordillera Blanca. They plan to follow a shallow corner directly up the middle of the face starting from the same point as the Slovenian 1993 attempt.

Cordillera Blanca

Mike Pescod leads a four-man team to attempt unclimbed lines from both the popu-

lar Santa Cruz Valley and also the rarely visited Cancaraca Grande Valley. The peaks they have identified are between 5500 and 6200m.

Aguilera

David Hillebrandt leads a return trip by boat to Patagonia to attempt this well-known objective. Given their knowledge from last year, Cerro Aguilera at 2438m, should not present great technical difficulties but will the weather cooperate?

UCL Quimsa Cruz

Information about first ascents in the Bolivian Cordillerra Quimsa Cruz is fairly muddled with several first ascents possibly having been claimed for the same peak under different names. This six-person team from UCL led by Sarah Griffin hope to make more sense of what's been done in the area and add some first ascents of their own.

(ABOVE) Gunnbjornsfjeld, 3710m, Greenland - the highest peak in the Arctic. Credit: Graham Flson / Mountain Visions



Anglo-Scottish Vilcanota

The Vilcanota is one of the more remote areas of the Cordillera. David Wilkinson leads a four-man team hoping to make the first ascent of the West Face of Colque Cruz I (6100m) and also other peaks in the 5700-6000m range in the area. The climbing is likely to be typical Andean snow/ice/mixed.

Scottish Cordillera Huayhuash

Iain Rudkin leads a team of six, who hope to climb a new route on the West Face of Nevado Rondoy (5879m) to the right of the Czech direct route. They also hope to attempt other new routes in the area.

Artesonraju

Neal Crampton and Clare Fennel head to the Cordillera Blanca. Of particular interest are the NW Face of Artesonraju (6025m), the South Face of Pucajirca (5900m) and the SW Face on Santa Cruz (6259m).

(ABOVE) Dave Hesleden on approach slopes to the bottom of the West Face of Cerro Torre. Credit: Simon Richardson.

Fin Del Mundo

The area around Ushuaia, Tierra del Fuego is well explored in summer, however winter climbing in the area is in its infancy. Colin Wells leads a team of four hoping to climb the South Face of Monte Vinciguerra (1450m) and other routes in the area. It is expected that weather and conditions will be very similar to Scotland in winter.

CANADA & ALASKA

Dusk Till Dawn

Stuart McAleese, Twid Turner and Dai Lampard attempt the SW ridge of Middle Triple Peak (2693m) in the remote Kichatna Spires. Unable to land beneath their proposed line on the Sunshine Glacier the team will have to cross a col from the Shadows Glacier, then traverse back over the mountain, making this a very committing line.

Mount Dickey

A previously attempted, and very ephemeral ice line to the right of Blood from a Stone on the 1600m East Face of Mount



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ing to make the first ascent of the Baron. It's going to be busy in there this summer!

CHINA

Qionglai

Tom Chamberlain and friends hope to complete a major new route up the North Face or West Ridge of Siguniang, situated in the Sichuan Province of China.

Gongga East

Angela Benham and friends intend to carry out exploration in West Sichuan and make the first ascent of Gongga East (6618m). If this proves impractical they have various back up options including Mount Zhushang at 6410m.

West Sichuan

Martin Scott leads a four-man team to attempt Haizi Shan (5844m), in West Sichuan. In addition they hope to carry out exploration of the other mountains in the area, all unclimbed and in territory not visited by Western Mountaineers.

Chomo Lhari

Julie-Ann Clyma and Roger Payne again hope to make the first ascent of the NW Ridge of Chomo Lhari (7314m) in Yadong County in the far South of Tibet. Permit difficulties prevented them reaching the mountain at all last year.

Nganglong Kangri

Continuing his exploration of remote areas of Tibet, John Town heads a three-man team to Rotuk County in the far West hoping to make the first ascent of Nganglong Kangri at 6596m.

Xiashe North Face

A five-person team led by Ed Douglas plans to visit Qionglai Shan in West Sichuan to explore and make the first ascent of the 1200m North Face of Xiashe (5833m).

Big Wall of China

John Arran leads a four-person team to Siguniang National Park in Sichuan Province with the aim of making first ascents of big walls and rock spires in the area.

Kajaquio

A beautiful unclimbed and unattempted peak in the Nyainqentanghla East Range. Mick Fowler leads what will be a very exploratory trip hoping to make an ascent of the NE face of Kajaquio (6447m).

OMAN

Western Hajar Traverse

Geoff Hornby and friends succeeded in their highly original plan of traversing the Western Hajar Mountains in Oman climbing five new routes along the way! One each on Jabal Kawr, Jabal Manzoob, Jabal Asait, Jabal Asala and Jabal Misfah, each 300-500m long. Jeep support was used between the mountains.

IRAN

Anglo-Iranian Big Wall

A lot of rock awaits exploration in Iran. Anne Arran leads a team of four who hope to explore some of these possibilities and produce some hard free big wall routes. They intend to team up with local climbers once out in Iran. II

CHANGES IN BMC / MEF EXPEDITION FUNDING

BMC grants are only made possible through funding from UK Sport. To meet the criteria for consideration for a BMC award teams must be attempting innovative ascents in remote mountain environments in 'good' style. Most expeditions will also be considered for the Mount Everest Foundation (MEF) award. The MEF's criteria is slightly different to that of the BMC's. Their main concern is the exploratory nature of the expedition rather than the technical difficulty.

HOW TO APPLY FOR BOTH BMC & MEF

Applications for BMC and MEF grants are made at the same time, and initial BMC screening takes place as part of the MEF process. To qualify for MEF consideration, application forms must be submitted before 31st August or 31st December in the year prior to the expedition.

HOW TO APPLY FOR BMC ONLY

The BMC understands that it is not always be possible to meet these deadlines and

will accept direct applications up till November 1st or March 1st. Expeditions applying directly to the BMC in this way will not be eligible for MEF funding and should be aware that they can only be assessed on the information they provide on paper.

LAST MINUTE BMC ONLY

In addition, a small amount of funding may be available for a few last-minute trips that meet BMC criteria but cannot comply with the schedules above.

If applying for BMC funding only, send your application forms direct to the BMC office.

FURTHER INFORMATION

For further information and application forms for BMC/MEF awards contact:

Bill Ruthven, Gowrie, Cardwell Close, Warton, Preston, PR4 1SH, or visit www.mef.org.

The application deadline for 2005 expeditions is 31st December 2004.



events

Perkins Slade BRYCS May - July

The Perkins Slade BRYCS (British Regional Youth Climbing Series) runs throughout the summer, split into ten geographical regions, with the final at Ratho on 25th Sept. For dates and application forms, see the BMC website, and for all the latest results see www.indoorsout.co.uk.

Nepal Himalayan Festival 5-6th June, Manchester

Doug Scott is guest speaker at the 3rd Nepal Himalayan Festival in Manchester. Organized by the Nepalese Association in the UK and hosted by Manchester City Council in the Town Hall, the festival will feature all sorts of Nepalese talks, arts and food. Looks like it could be a good way to start planning a trip. For more information see www.himalayanyeti.org.uk.

Rockhoppers Club 50th Anniversary

19th June, London Rowing Club

Rockhoppers Mountaineering Club are celebrating 50 years in existence with a reunion party at the London Rowing Club in Putney. This lively event is to be attended by 150 current and former members, includ-

ing some of the original members from 1954. If you were once a member and fancy coming along, see www.rockhoppers.org.uk or email warwick@kingmaker.demon.co.uk.

Diabetics Alpine Meet 15th - 19th Sept, Vallouise

Nikki Wallis and Jerry Gore are organising a "Mountains for Active Diabetics" alpine meet and seminar for those interested in diabetes and outdoor sports. Featuring guests such as Herbert Hausmann, the first person with diabetes to complete the Marathon des Sables, and Will Cross, leader of 2004 Everest diabetic expedition, this could be of interest to all active diabetics. For more information see www.mountain-mad.org.

BMC Huts Seminar 2nd October, Plas y Brenin

The fourth annual BMC Hut Seminar will be held at Plas y Brenin on Saturday 2 October at 3.30pm. The seminar will discuss building and planning regulations, energy efficiency, hut management and maintenance plans, changes in the law affecting hut operations and schemes for increasing visitor numbers to huts. Anyone involved with managing or planning a club hut is encouraged to attend. The seminar, which includes a hot supper at 7.30pm, is free. Details from office or website.

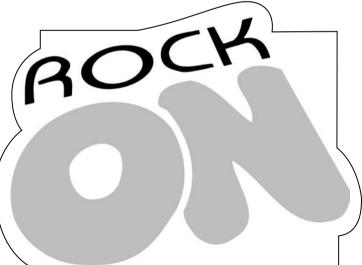
BMC Student Seminar 9-10th October, Plas y Brenin

Supported by the Mountain Training Trust
The 2004 Student Safety and Good Practice Seminar is designed for student-based walking and climbing clubs, and gives senior post holders the opportunity to improve their club practices. The focus is on developing skills needed to safely introduce novices to the sports of mountaineering and climbing, whilst also offering a chance to crank up personal climbing, walking or mountaineering skills. The programme is a lively mix of lectures, discussions, handson workshops and slide shows.

The practical workshops are run by Plas y Brenin instructors and a host of highly qualified volunteers. Activities range from indoor climbing, single pitch rock climbing and multi-pitch climbing, scrambling and hazard awareness to hill walking, navigation and fun bouldering and orienteering competitions. Places are limited and allocated on a first come first served basis (although priority will be given to clubs who have not previously attended). Further details and registration forms are available from the website or office, or email ana@thebmc.co.uk.

See www.thebmc.co.uk for more events.





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It's a fact of life that ice axes and crampons do occasionally break. The loads put on them during winter and alpine climbing, especially modern mixed climbing are considerable, and over time fatigue cracks can develop in the metal, possibly leading to sudden failure.

SUDDEN FAILURE?

Every year the BMC Technical Committee receives a number of axes with snapped picks and crampons with snapped points, almost always a result of fatigue failure. With modern quality control standards, people are very surprised when it happens, but it's all a question of loading.

If a load lower than the stipulated failure load is repeatedly applied to a piece of equipment, then it may eventually fail. Each load application is known as a cycle and the lower the load the more cycles are required to cause failure. Equipment design takes fatigue into account, and in most cases many thousands of cycles are required before fatigue failure, well beyond the expected lifetime of the product.

However with exceptionally heavy or abnormal use (for example strenuous torquing of ice axes in cracks or badly fitted crampons) too many cycles may have been accumulated and failure is near. Cracks in the highest stressed areas will then be forming and growing and a single further load cycle is sufficient to cause complete failure.

SPOT THE SIGNS

Examine your axes and crampons closely prior to use and search for fatigue cracks, a small magnifying lens will make this easier.

In crampons the highest stressed areas are likely to be at the base of the front points and where there is considerable angle change, such as where points meet the frame. In ice axes the most likely high stress location is at the base of the teeth on the pick a few cm from the end. Remember that most manufacturers consider torquing to be outside the design specification for an ice tool, and this will make failure more likely. To tackle this some now produce extra strong torquing picks, but their thickness will give reduced performance on ice.

(RIGHT) The front section of an axe pick that snapped en-route in Scotland. A fatigue crack can clearly be seen, easily picked up with a 10x magnifying glass. The axe was over ten years old and had seen considerable use. A quick visual inspection prior to use had not given the owner any cause for concern.







VOICES

Should women climb mountains without men? Is it right that women with children climb mountains? Can women both climb intensely and write actively? Are women climbing writers constrained to this day?

By Kaydee Summers.

These questions have been in existence since Maria Paradis first made it to the summit of Mont Blanc in 1808. Their context may have changed, but the core issues are still the same; climbing and climbing literature remain male dominated. Female mountaineering literature may have a rich history with many remarkable women giving a feminine voice to the genre, but this is a voice scarcely heard.

The pioneering female mountaineers felt that they were rendered invisible by the mental and physical constraints placed upon them, which is evident in the literature they left behind. Mountaineering women from the 1800s and mid 1900s existed in a liminal space where they were neither viewed as properly feminine, nor as proper mountaineers. Each woman chose to cope with that in her own way, but many turned to the secretive freedom of the act of writing. They understood the constraints of the literature and many found ways to circumvent the male editors. Mrs. Henry Freshfield, in 1861, chose to publish Alpine Byways with the author listed simply as "a lady." The actual woman is invisible in

Alpine Byways, only aspects of the climbing are visible allowing the physical woman to remain in the marginal state.

Are present day female mountaineers still struggling to move out of that liminality? In Summit issue 10, Penny Clay brings up the idea of the Invisible Women Syndrome. The Syndrome is explained by the simple equation: 1 woman + 1 woman = 1 man. Clay defined the Syndrome as, "a gender specific phenomenon, which operates within a patriarchal system to deny the existence of women and their achievements." Climbing in a mixed group, or manless, is an individual choice and one that becomes complicated in light of Clay's article where she describes the continual question from men and women, "Do you need someone to climb with?" even though she is standing right next to her female climbing partner.

Perhaps, "Do you need someone to climb with?" has replaced the Victorian query, "Should women climb mountains?" Are both questions still asked today? The notion then becomes, how do mountaineering women stop males from assuming that women need men in order to climb? These ideas also prompt the question of whether women should publish their climbing experiences. If the constraint that women can't climb has been destroyed, have new constraints been created in its place, such as, 'should mothers climb mountains'?

Members of the 1998 BMC International Women's Meet were aware of these questions and the existence of the Invisible Woman Syndrome and idealistically declared climbing to be a legitimate activity for women regardless of constraints, such as age, marital status, family or career responsibilities. They called for women to start writing and publishing their climbing experiences hoping that would help dissolve the male dominance. But despite these efforts, the Syndrome has prevailed and the climbing community still struggles with the above questions.

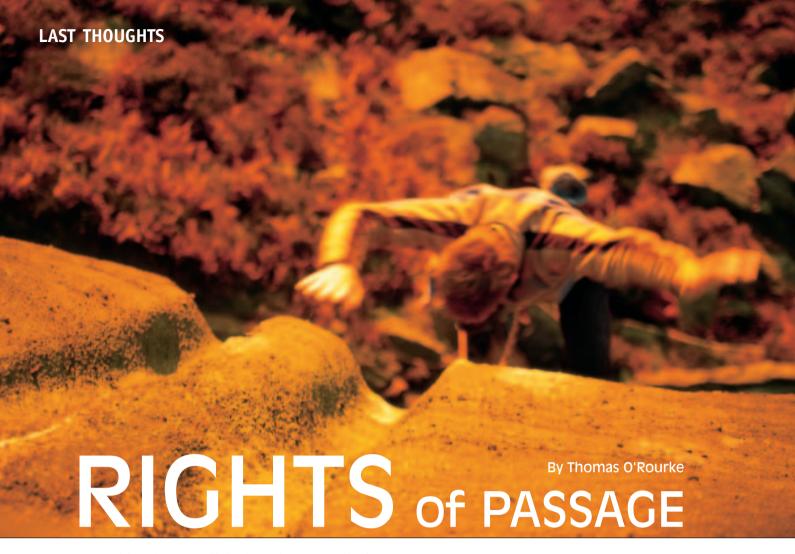
So how can women dispel the Invisible Woman Syndrome? Should they merely climb to disprove the myth? Or is it imperative that they record their experiences with written accounts? In her article Penny Clay states that she climbs with female friends to bring the Syndrome to an end and jokes about the effectiveness of writing, "And a it's far more enjoyable way of dispelling the Invisible Woman Syndrome than simply writing about it." If Clay truly believed this statement, then why did she write the article for BMC? The majority of women do choose to climb instead of write. The common comment being, "I would rather put my energy into climbing rather than taking the time to write about it." The problem is that if no women write about their experiences, men will always dominate the literature and the Syndrome will continue in the written record.

Presently there is only one emergent all female climbing magazine, *She Sends*, where the target audience is fellow women, although they are aware that their overall audience includes men. Lizzy Scully, *She Sends* editor, is overwhelmed with submissions for publication. Another alternative for publication are the club journals. Why is the female voice nearly nonexistent in the club journals and magazines? The majority of club members are male so the primary audience for the journals is male. Do women alter their experiences when publishing for male majority magazine readers? If so, does that alteration then reinforce the Invisible Woman Syndrome?

If women are allowed to climb to the best of their ability and are able to accurately publish their experience, are women now visible as women, not just as climbers? Is female mountaineering literature moving in a new direction fueled by the need to dismiss the Invisible Woman Syndrome? Surely women ought to become visible both on the crags and in the literature. Continued exploration of the questions brought up here could bring about the revolution the BMC Women's Meet so ardently called for in their 1998 summit meeting. II

Kaydee Summers is a PhD student in Mountaineering Literature at the University of Leeds. She is working on a thesis about women's climbing writing and would appreciate any thoughts on the subject. Contact her at: kaydees@davidbowie.com. For details of She Sends magazine see www.shesends.com.

(LEFT) Women climbing together, are they invisible? Well, these two don't look it. Credit: Alex Messenger.



Everything has a political angle, even climbing. And when we climb, even if ethics take the place of politics, we're still expressing our political views.

Following an 'incident' on Clapham Common, Ron Davies in his resignation speech talked of being the product of many factors. And in my case climbing has played a massive part in making me who I am and shaping my political views, which have, in turn resulted in the opinions I hold regarding climbing.

Of course during this formative process I have, in both life and in climbing, made mistakes. I've been rescued from Pebble Mill, retreated from the Cromlech in a blizzard, and made more serious errors of judgement. Yes, it's true. In addition to a teenage flirtation with the Labour Party I've top roped routes.

That was a long time ago and I've long since seen the error of my ways, the scars of these earlier misdemeanours are now vestigial. I knew at the time that it was wrong (the top roping not the flirtation with the Left), that I was propagating a shallow image and living a lie. I knew that it was sinful and it devalued what I held dear.

So why didn't I wait until I was good enough to do the routes onsight? To accept the challenge, take the risk and be prepared to pay "the price of admission" if all went wrong? It's hard to say now, but being brutally honest it was because I wanted something that that was out of reach, some forbidden fruit, to be not what I was but what I aspired to be.

As time passed I gradually accepted the challenge, took the risk and accepted a price may need to be paid. Top roping was left behind with other childish things and having picked up the gauntlet and committed to the task at hand I know that the taste of success will be even sweeter for doing so. When I do top out I drink deeply from the cup of success, drain it to the dregs and savour the intoxicating effects spreading through my body.

So, do you fancy a drink? Do you crave that nectar; whether it flows from snatching victory from the jaws of the Hallamshire Infirmary or enjoying an easy day out with your mates. Or are you content with something else? An ersatz brew, a substitute, a pale imitation, a drink as satisfying as a lukewarm shandy on a hot summer day?

If you want a shandy, go for a walk, a bike ride, play chess. If you do, you're not a lesser person. However, if you want a proper drink you'll have to be prepared to pay for it, to climb on sight and leave top roping behind. If you want to climb technically harder go bouldering. If you don't want bold routes climb well-protected ones. If you don't want to accept the risk, don't climb.

I can think of no grit crag, and lets face it it's grit that bears the scars of this scourge, that doesn't have routes of all grades that can be adequately protected with modern gear. So don't sell yourself short, accept your limitations, choose a route and go for the onsight. You are doing something special, something that very few people could or would do.

This isn't about elitism, climbing alone puts you in an elite. Joe Public wouldn't contemplate leading a V Diff let alone a HVS. Even amongst climbers it isn't about elitism, the same principles apply as much to an E6 as to a Mod. It's about something special. Climbing is special; the rewards from climbing are special, and I for one would like to see it remain special.

And when you top out, whether you've had a steady day on a long V Diff or had a moment of madness onsighting your first E5, drink deeply and savour the taste and then I'll buy you another.

Some things are worth fighting for, some traditions are worth protecting. Heritage once gone cannot be replaced, and unless halted and reversed, the pernicious scourge of top roping will mean that future generations will just not have the opportunities that we've had, or enjoy the experiences that have made us who we are. II

(TOP) Toby Benham fancying a proper drink, but paying the price on Avoiding the Traitors, E7 6c, Bamford. Credit: Alex Messenger.