

# NZOIA Quarterly

Number 28

Newsletter of the New Zealand Outdoor Instructors' Association

March 2004

## Outdoors New Zealand launches OutdoorsMark

### A Quality Assurance scheme for Outdoors Recreation

An innovative scheme to assuage public fears about the safety of outdoor recreation organisations has been developed by Outdoors New Zealand (ONZ) with funding from SPARC (Sport and Recreation New Zealand).

Launched at Parliament on 1 March by Minister for Social Development and Employment Steve Maharey, OutdoorsMark is a quality assurance scheme providing an independent process for assessing the robustness of safety procedures within participating organisations.

The scheme has been designed for those New Zealand organisations that offer outdoor education and recreation programmes. It provides a process, specifically relevant to the outdoor recreation industry, to examine the quality of the policies, procedures and practices that exist for safety within an organisation. OutdoorsMark is a development of the UK's Adventure Activities Licensing Authority scheme.

#### Who would OutdoorsMark apply to?

Application for accreditation is open to any business or organisation within the outdoors education and recreation sector eg, outdoor activity providers, adventure tourism operators, secondary school outdoor education programmes etc, that can demonstrate the quality of the following policies or procedures and that they are part of their regular business practice:



- Strategic/business plan and financial plan
- Organisational structure
- Code of practice (or equivalent)
- Insurance cover
- Licensing/permits to access and use land and water areas
- Administration procedures
- Human resource and safety management
- Accreditation (where required)
- Environment and resource management
- Procedures relating to equipment, food handling, communicable diseases/ infections
- Hazards, incidents and emergency preparedness.

**NZOIA**  
New Zealand Outdoor Instructors Association  
TM

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

# From the Presidents Wine Glass



## Billboard in Australia shrieks

### WHERE THERE IS BLAME THERE IS A CLAIM

(advert paid for by  
the Insurance companies)

We seem to be moving into an age of 'pin the tail on the donkey' (Chris Burtenshaw), or constantly refer to the 'Lost Tribe of THEY' (Mark Jones). Oh dear me, what a sorry state of affairs it will be if our industry succumbs. There is a hint of terror in the air. We'll hardly leave the carpark at this rate, or even that may be too risky.

Some sensibility in the Dominion Post, 2 January, following the six fatalities in Mt Cook National Park, whose editorial had this to say:

"In a country which seems all too ready to pass a law against anything that might be deemed dangerous, it seems there is nothing anyone can do ....but accept that sometimes, as in surgery, even when trained experienced and well prepared, well-equipped people have done everything properly, things will go wrong."

And even more sensibility from Bryan Carter of Alpine Guides in the same paper who said "All too often there is a focus on the tragic side of climbing, not on the thousands of successful and uneventful ascents and descents."

Surely this is a more positive statement than blaming 'they' – its 'their' fault, which is what we all too often see in many different newspaper reports.

I was fortunate to find a book in the Christchurch Libraries book sale (\$1) by Jim Haberl called 'Risking Adventure', part of the Introduction reads:

"Adventure. Simply writing the word brings images of unique situations, exciting moments and unfamiliar places to mind. By committing to an adventure, stepping out of my comfort zone, I accept that unforeseeable things are bound to happen. For me, that unknown element is a large part of the attraction of any trip. While it is true that unknown circumstances may be arduous, stressful, or even dangerous, I can learn important things about myself by contending with and surviving those events.

Just as often, though less dramatic and more difficult to express, by exposing myself to such dynamic situations I experience beautiful, sometimes extraordinary, moments. Those moments could not have been part of my life if I hadn't accepted the risk of following the passion in my heart.

Risk is the process of engaging in an activity without the security of knowing the consequences of your decision. When I set out to climb a mountain, there is a powerful appeal based on the uncertainty of the outcome. If it were a sure thing, then the attraction would diminish. Periodically I take a calculated risk, relying on my seasoning as a mountaineer and my intuition – many treasured experiences are the result of such decisions. Yet learning to recognize when something is unsafe or beyond my control has been a critical lesson. To retreat in the face of danger, suppressing ambition, is not only wise, it is admirable."

Its always the way isn't it – people like Jim Haberl can express just what I believe, and I'm sure is also the belief of many NZOIA members. Why do we seek a career in the outdoor industry? Because we have that passion for adventure and the truly great rewards that can be gained.

As an organization, I believe we have to continually keep up the fight against joining the Lost Tribe of They and continue to provide quality outdoor experience for our clients, of course whilst ensuring that we have the skills, knowledge and experience to make sound judgements. Its been a worry to hear of the student days on assessments being 'boring' as candidates forget about the adventure experience and go overboard on cotton wool wrapping. I was heartened this last weekend to hear of the great instruction day demonstrated by candidates on a Rock 1, maybe adventure is still alive and kicking out there.

I was privileged last December to accompany my friend Katie (aged 88) from Christchurch on her quest to climb Mt Rolleston. Katie has climbed many major peaks in NZ, including Mt Cook at the age of 21, and is still extremely active in the outdoors.

She'd resorted to us young 50+ year olds because 'all my other climbing partners have died on me!' As is often the case in NZ, the environment had the final word. Avalanche conditions were increasing, and as we climbed up to the ridge above the Otira Slide, many point releases started to occur. It would have been easy to push the envelope and go on, but we made the decision to turn back and try another day. The mountain will still be there, and we had a great time getting to where we did. Still had an adventure, oh and I think used a bit of sound judgement as well.

Keep adventuring out there!

*Jill Dalton*

## COMMITTEE NEWS

From the last Executive Meeting:

- Support for Outdoors NZ and the Outdoors Mark (see lead story).
- SKOANZ/NZOIA awards – only administrative details to be completed.
- Policy for website links developed, and use of NZOIA logo.
- Membership fees structure confirmed, including discounts and website access for members/ cutoff dates.
- NZOIA products – investigation into sunhats, thermal mugs and other items.
- Trademarking project completed.
- Plan for review of assessment course structure & documentation.
- Training courses – policy for provision and advertising.



OutdoorsMark is NOT a compulsory scheme. Therefore, owners/managers of businesses or organisations can choose whether they wish their business or organisation to become accredited. Although participation is voluntary, it is highly recommended not only by Outdoors New Zealand as the lead body for the outdoors recreation sector but also by officials and agencies such as Sport and Recreation New Zealand (SPARC).

Speaking at the launch, SPARC CEO Nick Hill said he encouraged all outdoor recreation organisations to undergo the accreditation process so that consistency of safety standards across the sector would be achieved. This has the added benefit of encouraging people to be more physically active in the outdoors, he said.

Outdoors New Zealand approved and trained safety auditors, will undertake a workplace safety focused quality audit to ensure the required accreditation standards are being met.

The OutdoorsMark Foundation Committee established the experience and qualification prerequisites for the safety auditors. Approved safety auditors will undergo training and moderation in the OutdoorsMark scheme and will comply with a Code of Conduct covering such areas as confidentiality, inducements, and conflicts of interest.

The initial safety auditor 'pool' was established through a moderation workshop where Outdoors New Zealand 'grand parented' selected experienced safety auditors. The auditors invited to attend the 'grandparent' moderation weekend were been identified through a national request for expressions of interest (EOI) via Outdoors New Zealand organisation members and all other known sources. The EOI responses were reviewed with regard to meeting the criteria set by the OutdoorsMark Foundation Committee as below:

### **Safety auditor requirements to be considered for 'grand parenting':**

- Must have at least 10 years proven experience working in the outdoor education and/or recreation sector
- Must have New Zealand recognised qualifications in the outdoors field
- Must have had Risk Management / Safety Management training.
- Must have experience/training/assessment in safety focused quality audit and quality systems and processes eg Quality Society of Australasia, Loss Control Management Systems, ISRS etc.

In addition, a safety auditor should have:

- Strong advocacy skills to maintain and build relationships with key stakeholders and applicant organisations
- A professional and systematic approach to safety focused quality audit processes
- Excellent written and oral communication skills
- A passion for continuous improvement in quality and safety management in the outdoors, including attendance at an annual 'safety auditor pool' moderation weekend and demonstrating ongoing professional development.
- A commitment to the aims of the OutdoorsMark quality assurance scheme.

Once the initial 'pool' of approved OutdoorsMark safety auditors is established other individuals with the necessary qualifications, skills and experience will be able to gain approval from Outdoors New Zealand as an OutdoorsMark safety auditor.

Businesses or organisations that meet the required standard of the OutdoorsMark safety focused quality audit will be accredited to use the OutdoorsMark Quality Assurance Scheme for a period of 3 years before they are required to undergo another full safety focused quality audit, provided there is no significant change in their manner or mode of operation. In the intervening period, an annual declaration is required from the organisation that they continue to adhere and operate to the required standards of OutdoorsMark. They will be able to use the OutdoorsMark branding in their own marketing as well as being promoted by ONZ.

There is an annual fee as holder of an OutdoorsMark accreditation. This fee (discounted for members of Outdoors New Zealand) recovers the cost of the safety focused quality audit (though not any appeal audit nor the safety auditors direct expenses such as airfares or accommodation), administration of the scheme, and the promotion of the scheme and the holders of the OutdoorsMark accreditation.

### **Advantages of organisational accreditation**

There are many advantages to being involved in and supporting OutdoorsMark:

- Promoting quality standards within the outdoors sector.
- It is an ongoing continuous improvement process, requiring organisations to constantly review and update, ensuring that they reflect accepted best practices and changing community needs and attitudes.

- It will provide users such as schools, parents, tourists, government departments and landowners and managers, with assurance or confidence that a measure of safety and professionalism has been met if they choose an OutdoorsMark accredited organisation.
- A database of high quality outdoor recreation organisations may be accessed to identify those that have met a minimum standard of skill and knowledge
- The collation of data that can be used by planners and policy makers to gain a more accurate picture of outdoor activities and the manner in which they are conducted.
- The development of a more professional image throughout the outdoor sector and across a variety of outdoor activities.
- It provides clients (eg schools) with confidence and assurance that they are using providers that meet national sector standards.
- Provision of accident and near accident data compulsory for building an Incident Database.
- Enables peer review to set and raise the standards 'bar'.

If an organisation has already participated in a safety focused quality accreditation program such as Qualmark™, NZQA/SFRITO or has a Department of Conservation concession, they will have already satisfied many of the assessment requirements making the accreditation process for attaining OutdoorsMark less demanding. Agreements with these and other organisations is being negotiated so that they will accept that OutdoorsMark accredited organisations also meet their requirements thus reducing the potential for a double up of costs

### The OutdoorsMark accreditation process

In brief:

- Fill in an application form available online from [www.outdoorsmark.org.nz](http://www.outdoorsmark.org.nz) (under construction) or by request from: [info@outdoorsmark.org.nz](mailto:info@outdoorsmark.org.nz).
- Complete a self-assessment using the standard guideline provided and return it with all supporting documentation particularly any previous safety audits to Outdoors New Zealand
- A "desk audit" is carried out by an approved safety auditor on the self assessment and documentation provided

- A "field audit" is carried out by the same approved safety auditor
- Accreditation status is decided based on the auditor's report
- Accreditation status is notified
- Ongoing re-assessment.

Speaking at the launch Outdoors New Zealand Chair Chris Knol said, "As the lead body for outdoors recreation in New Zealand, ONZ is always striving to increase participation in outdoors activities. Encouraging and promoting continuous improvement in quality and safety management is a key part of this."

"ONZ has developed OutdoorsMark to provide the sector and the participating public, with visible methods and proof of adhering to best practice. We believe this is a very positive step forward for our sector," he said.

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# The NZOIA Logo & Website

## Trademarking

Over the last few months the NZOIA Executive has been completing the process of trademarking the NZOIA banner. They decided to take this action to give us all legal protection against people who might want to use the NZOIA mark without authority. The use of the NZOIA logo will always signify that this "mark" is used by our organisation to depict our services. It gives us the right to use the mark in the form registered. The legislation is designed to allow current NZOIA members to use the mark on a collective basis.

This means that you can use the logo in the registered form:-



in any publication or apply it to an good(s) or service(s) without fear of infringement.

From a legal point of view we are saying that the NZOIA brand as represented by the registered logo is worth protecting and the organisation is prepared to initiate court proceedings against any entity (person or organisation) that is using our Trademark illegally.

As of **NOW** you are welcome to apply the logo to any promotional material you are preparing.

The following outlines the conditions applicable to the use of the NZOIA logo.

*All full financial members of NZOIA may use the NZOIA logo in conjunction with the promotion of their business activities.*

*The NZOIA logo will be used in a manner that indicates that the member (business operator) is a member of NZOIA.*

*The NZOIA logo will NOT be used in a manner that implies that the business activities of the member are "endorsed or approved" by NZOIA.*

*The NZOIA logo is trademarked and remains the property of NZOIA and will be used in accordance with logo design and specifications provided by NZOIA.*

## NZOIA Logo Design & Specifications

The NZOIA logo is available in various electronic file formats, in both colour and grayscale (black and white). These may be obtained from the NZOIA Administration Officer by email:- [ao@nzoia.org.nz](mailto:ao@nzoia.org.nz)

For printing purposes, the colour of the NZOIA logo is: PMS 1795. This is the only colour permitted.

If you have any queries on the use of the Trademark contact Steve Milgate at:- [milestone@xtra.co.nz](mailto:milestone@xtra.co.nz)

## Website Use of NZOIA Logo

Where the NZOIA logo is to be used on a member's website, the member is required provide a "link" to the NZOIA website ([www.nzoia.org.nz](http://www.nzoia.org.nz)), either directly from the NZOIA logo on the members website, or from a links list on the members website.

## Links from the NZOIA Website

Within the NZOIA website, in both the "members only" and public sections, there is a number of pages that provide for "links" to other websites.

Currently these pages are headed:-

- Government Departments
- NZ Outdoor Recreation Organisations
- Our Funders
- Our Partners in Developing Qualifications
- Useful Links

We will shortly be adding additional "link categories" covering:-

- **NZOIA Member Links**
- **NZ Outdoor Education**

NZOIA Members whose "business" activities fall within these two additional categories are eligible to have a link to their business website, subject to the following conditions:-

- The business/organisation is aligned to and promoting NZOIA's goals.
- Key staff of organisation are NZOIA members.
- A reciprocal link is to be provided to the NZOIA website.

**If you wish to have a link to your business or organisations website, please provide appropriate details by email the NZOIA Administration Officer at:-**

**[ao@nzoia.org.nz](mailto:ao@nzoia.org.nz)**

## "Anchor Sling Breaks, Climber Plummets..."

by Mark Jones

*The climber was on a top-rope, his belayer calling encouragement from far below.*

*He made another committing move, hands sweaty, strength failing, and then he was falling through space.....*

*The initial rush of fear (that is usually short-lived as the rope goes tight) was suddenly magnified to terror as his fall continued and he watched the rope and busted sling catapulting toward him.....*

Next stop would usually be the ground in such a scenario. The only reason it wasn't in this case was that the climber had a second top-rope attached to him; a most unusual precaution, and this second rope arrested his fall.

When I was told of this near miss and it was clear a sharp edge wasn't involved, my initial reaction was, "impossible! Top-rope systems can not generate enough force to break an anchor sling" (Matt Barker and I ran a rope workshop at the SPARC Risk 2002 conference "Exploding Rope Myths", and we experienced significant trouble breaking even dodgy old slings and ropes with fall factors far more severe than those generated by top ropes) ...but this sling broke... This one definitely broke and it could easily have been "Exhibit A, Your Honour". The obvious question was how did it break?

*How could a top-rope climber generate the force required to bust a sling; a sling that was only purchased three months previously and used only once before?*



### Background

This top-rope system used a single 25mm tubular sling, tied in a "snake sling" configuration, i.e. an overhand loop was tied in each end (see photo above). The sling was passed around a single tree anchor, the ends clipped together with a steel karabiner and the top-rope secured through this. Significantly it was belayed from the bottom (a bottom top-rope).

The novice instructor, "just to be really sure" decided to attach a second rope to the client and belay him from the top from a second anchor, separate from but close to the other (a top top-rope).

The climber was approx.130kg and when he fell the student belayer had allowed a significant amount of slack to accumulate in the system.

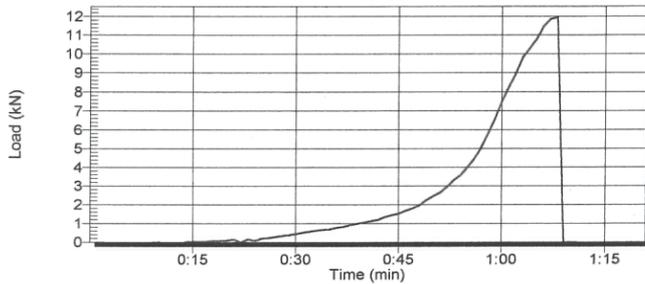
He fell an estimated four metres then the sling broke and the climber's full weight then came onto the second

top-rope (which presumably had some initial slackness in it) and his fall was arrested.

Significantly the rope used was a sport rope. These ropes are designed for top roping, but are essentially static in nature. They are not well designed to absorb larger fall factors being essentially inelastic in nature.

### Was it a fault with the sling?

The first thing to do was to test the sling for any inherent weakness on a test bench. I went to the folks at Onehunga Chain and Rigging who have an industrial test bench and offer a great service. An undamaged part of the sling was tied in a snake sling configuration and pulled from each end. It failed dramatically at 12kN at one of the knots.



Given a manufacturer's rating of 18kN for a similar sort of sling and the fact that an overhand knot reduces the strength of a sling by about 30%, it was probable that there was no undue loss of strength in the sling material due to defect.

I contacted Lindsay Main at Aspiring Enterprises for his opinion and sent him a sample of the sling. In return he sent me some sample lengths of tape of the possible same type: Donaghys, Christchurch and Webbing and Trimming, Sydney.

After testing in the same snake-sling configuration they yielded the following results.

**Donaghys - 13.9kN**

**Webbing and Trimming - 17.4kN**

The first thing that was evident was the strength disparity, close to 4kN, between tape that had the same dimensions, the same weave, even the same colour. This strength difference equates to almost 400kg of load! Quite a lot.

The sling that broke in the climbing situation looked the same as the Donaghys tape, and the fact it broke at only 12kN could be explained by statistical variation, or the fact that the severe loading prior to testing had weakened "exhibit A". So I could probably rule out "faulty sling" as being the cause of the failure.

## **Marking and Strength of Webbing**

The two main manufacturing countries for tubular webbing are the USA and France, and each has a very different tradition. The French use chainweaving and favour compile multi-coloured patterns. Under the new CE standard, the webbing must have a pattern of marker yarns woven down the face of the sling/tape. Each line of stitching/yarn representing 5 kN of strength. Most European webbings have three such stitching yards woven into them, indicating a minimum strength of 15kN.

American webbings derive from a military specification requiring a minimum strength of 4000 lbs - about 18 kN - for a 25mm width webbing. It also requires a yellow or black marker yarn to be woven down the centre of one face. Climbing lore abounds with stories about this thin black marker yarn.

Originally a marking requirement of the US military, since copied by "commercial" manufacturers both inside and outside the USA, it has no structural significance whatsoever.

In particular, it does not indicate over-stressed webbing. After hundreds of tests on webbings with markers, we can assure you that the marker never breaks before the webbing does.

<http://www.aspiring.co.nz/>

### **Relevant Anchor Principles:**

1. A length of tape passed around an object such as a small tree approximately doubles its strength. So the 12kN test on the single strand would indicate the sling broke at around 24kN
2. Forces are multiplied as anchor angle increases. However the angle created by the sling was only 25 degrees approx. so the increase in force would have been negligible
3. When bottom belayed top-roping is being employed, the force at the anchor (assuming no friction) can be up to twice that generated by the falling person. This is easy to understand if you think of the upward force on the belayer (which has an equal and opposite force down on the anchor). This force acts on the focal karabiner in addition to the force of the faller.

***The above principles indicate that a force of only 12kN need have been generated on the climber's side of the system in order to break the sling.***

**Could the belay device be a factor?**

An interesting feature of belaying devices is that they limit the amount of force that can be generated in a system by slipping at high loads. The hand on the breaking side of the belay can only hold so much force before the rope slips through it. For example a Sticht plate type belay device can hold a force of around 2kN before rope begins to slip through the breaking hand. The device therefore becomes slightly dynamic at this loading, thereby taking the peak off the fall factor.

**Contributions to the NZOIA Quarterly ~**

The *NZOIA Quarterly* welcomes articles, photos, letters, news, details of coming events and bits and pieces from all readers. Submissions may be edited.

Please forward all items to:  
 Administration Officer PO Box 11-325  
 Manners St Wellington  
 or by email to: [ao@nzoia.org.nz](mailto:ao@nzoia.org.nz)



**FIG 8 DESCENDER** (rope around back of device)  
 The braking hand can resist a force of up to 2 kN.

**FIG 8 DESCENDER** (rope through carabina). The hand can hold a pulling force up to around 1.5 kN.

**BRAKE PLATE-STICHT** The braking hand can resist a force of up to 2 kN.

**ITALIAN/MUNTER HITCH** The braking hand can resist a force of up to 2.5 kN.

**GRIGRI**  
 The braking does not depend on the user's hand, the device is self-locking. Slipping occurs at 9 kN.

Although not tied down the belayer was a large person and was held down from behind. A back-up belayer was also holding the dead rope. This means little or none of the force would be absorbed by any give at this end of the system.....

With an Italian hitch a belayer can resist a force of up to 2.5kN before slippage occurs. However a GRIGRI self-locks with a camming action and slippage does not occur until 9kN! So the inherent "safety valve" of rope slippage does not operate until a far higher force is reached. A GRIGRI was used in this incident, with an extra pair of hands (the back-up belayer's) on the dead rope side of the system. Hmmm, Seems like this could be a factor.

**Doing the maths:**

I just knew that school physics would come in handy one day!

To calculate the force a falling climber generates you need to know the weight of the climber, how far they fell, and how quickly they came to rest. I used an estimate of the climber's weight (as provided by the instructor) of 130kg and an estimated falling distance of 4 metres.

To generate a theoretical force of over 12kN the falling climber must've pulled up in less than 0.43m.

**- see calculations on next page**

### To calculate the velocity of a body falling 4m

$$V_1^2 = V_{fall}^2 + 2hg$$

$$V_{fall} = \sqrt{80}$$

$$V_{fall} = 8.94\text{m/s}$$

Where  $g$  = gravity = approx  $10\text{m/s}^2$   
 $V_1$  = starting velocity =  $0\text{m/s}$   
 $V_{fall}$  = peak velocity  
 $h$  = height of fall =  $4\text{m}$

$$V_1 = 0$$

$$h = 4\text{m}$$

$$V_{fall} = ?$$

### Calculates the deceleration of stopping in 0.42m

$$V_1^2 = 2ah_g$$

$$a = -\frac{V_{fall}^2}{2h_s}$$

$$a = -\frac{(8.94)^2}{(2 \times 0.43\text{m})}$$

$$a = -92.93\text{m/s}^2$$

Where  $a$  = acceleration of stopping  
 $V_1$  = final velocity =  $0\text{m/s}$   
 $V_{fall}$  = velocity of fall =  $8.9\text{m/s}$   
 $h_s$  = stretch distance

$$V_{fall} = 8.94\text{m/s}$$

$$h_s = 0.43\text{m}$$

$$V_1 = 0$$

### Calculates the force generated when a 130kg person stops this quickly

$$F = m \times a$$

$$F = 130\text{kg} \times 92.93\text{m/s}^2$$

$$F = 12.1\text{kN}$$

Where  $F$  = Force to stop the fall  
 $m$  = mass of falling object =  $130\text{kg}$   
 $a$  = deceleration =  $60.9\text{m/s}^2$

**These calculations show that a person of 130kg can generate a force of over 12kN, enough to brake a sling, if they fall far enough and stop fast enough.....**

All of this maths is highly simplistic and ignores frictional losses, slippage at the device, movement at the belayer's end of the system, and "knot-cinching" all of which act to absorb energy and reduce peak force.

The results of this investigation are not entirely conclusive. The figures used in calculations are estimates and may be far from exact, but what is clear is that somehow this particular sling defied the rule of thumb that slings and ropes don't break.

If it were not for the intuition of the young instructor involved, who had a nagging doubt and had the good sense to back up the system, the resulting accident would have been severe. It is an isolated case, and not a reason for paranoia, however there are some important lessons to learn from it.

### **What can we learn?**

Certainly it is a case for building redundancy into anchor systems rather than relying on a single strand of tape. It has been recommended for some time by NZOIA that karabiners at TR focal points be backed up by a snap-link or doubled up.

Likewise slings, if used double around anchors trees, provide a safety margin for the unforeseen. (NB: sewn slings, when used around trees, can **only** be used in this way).

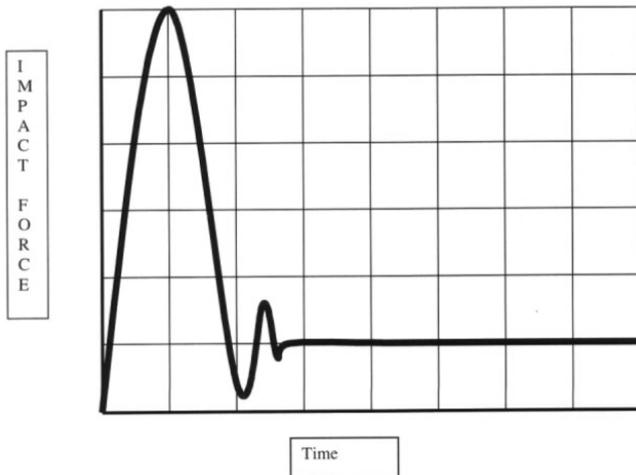
The fact that a single anchor was used is not a factor. The anchor itself held, the sling broke... Multiple anchors may not have prevented this failure. Many anchor systems distil the anchors down to a single focal loop of tape, linked by the focal karabiner to the top-rope. Such anchors essentially result in the same order of overall strength as the failed system in question, in the region of 24-29kN. Only a system that has multiple strands of tape in the focal loop would provide a higher order of strength.

# WHY THE SLING BROKE

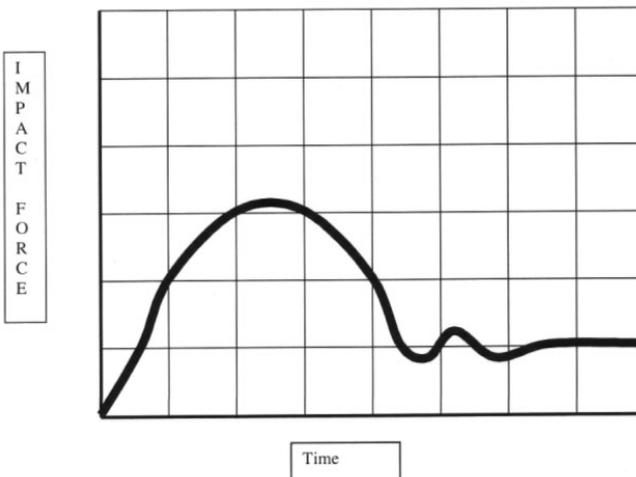
## Static vs Dynamic

The fact that a static rope was employed is certain to have contributed to the failure. An applied force is absorbed by the rope over a shorter length of time and thus transfers a larger resultant force to the anchors (and to the climber) than would a dynamic rope. This can be easily compensated for by using a dynamic belay, if you are using a device that allows for this - (NB. GRIGRIs do not) but this is an advanced belaying technique and beginners would not be expected to be taught this or be proficient at it.

### STATIC GRAPH



### DYNAMIC GRAPH



This near miss provides food for thought and underlines the need to be aware of the implications of how we each do things. A little like the 7m Great White caught off Waiheke over summer. Definitely food for thought if you're a spear fishermen towing fresh fish behind you in the Hauraki Gulf. But it's good to be reminded every now and then that the things we do are real, they're not fake or pedestrian, they are adventurous and they have the potential to hurt us. Incidents such as the above make us re-evaluate what we do, keep our powers of observation sharp and prevent complacency.

There are traps in any adventure sport and climbing has its fair share of these, things that can catch out the beginner or the unwary. Things to learn about, and avoid, control or mitigate the effects of. Certainly they are not reasons not to get out over Autumn and do lots of climbing - Just keep your eyes open for circling fins and don't get bitten...

#### References:

**Aspiring Enterprises** website:  
<http://www.aspiring.co.nz/>

**Petzl** website:  
<http://www.petzl.com/petzl>  
 Matt Barker- Breaking Rope Myths proceedings

Lindsay Main of Aspiring Enterprises  
 - a mine of technical information and expertise.  
<http://www.xmission.com>

**Mark Jones** is a lecturer at the Auckland University of Technology, long time NZOIA member and NZOIA Assessor for Abseil, Bush and Rock, who holds various NZOIA Awards covering Alpine, Bush, Kayak and Rock.

**NZOIA  
 ABSEIL  
 Assessment  
 May 8th - 9th  
 Christchurch**

Contact ~ Administration Officer  
[ao@nzodia.org.nz](mailto:ao@nzodia.org.nz)

## Congratulations ~

*to the following members who recently gained NZOIA Awards*

### **Flatwater Kayak**

Peter Hitchman

### **Kayak 1**

Craig Adams  
Luke Boddington  
Eryn Cutler

### **Rock 1**

Sam Brooks  
Steve Carr  
Rob Gathergood  
Edwin Hollins  
Ian Mann  
Julie Polkinghorne  
Mark Stansfield  
David Taylor  
Derek Taylor  
Jason Watson

### **Rock 2**

Ofer Fishler  
Anna Jones  
Paul Stevens  
Chris Warburton

## NZOIA

### WEB POSITIONS

NZOIA is looking for someone with some web skills and a passion for initiating and inspiring discussion to take on the role of Forum manager, also for a new webmaster/mistress (two different roles). If there is anyone out there who is interested in this, please contact either Jim Hepburn or Jill Dalton.

## Mountain Safety and Avalanche Seminar

### 29 May 2004

Presented by  
**Mountain Education Centre  
of New Zealand**  
in association with the  
**NZ Mountain Safety Council**

Building on the success of the 2003 Queenstown Avalanche seminar the Mountain Education Centre of New Zealand is pleased to host the 2004 Mountain Safety and Avalanche Seminar in the Central North Island.

The theme of the seminar is Mountain Safety and Avalanche Awareness, with particular emphasis on the unique situation as experienced on the North Island Volcanoes.

We encourage all mountaineering instructors, SAR personnel, ski patrollers, snow safety professionals, mountain and ski guides and any other interested individuals or groups to join us for a seminar focused on current practices and developments in mountain safety, search and rescue, avalanche risk management and control and the latest in safety equipment.

This is a great opportunity to meet other professionals and club personnel and expand the network of the 'mountain safety and avalanche community'.

**Cost:** \$95.00 per person

**Venue:** Sir Edmund Hillary Outdoor Pursuits Centre of New Zealand.

For more information please refer to information notes posted on the NZOIA web site - there is a link at bottom of the NZOIA "home" page.

Or contact Russell Braddock the program coordinator at:- [mecnz.tpp@xtra.co.nz](mailto:mecnz.tpp@xtra.co.nz)

We look forward to your participation in the seminar.



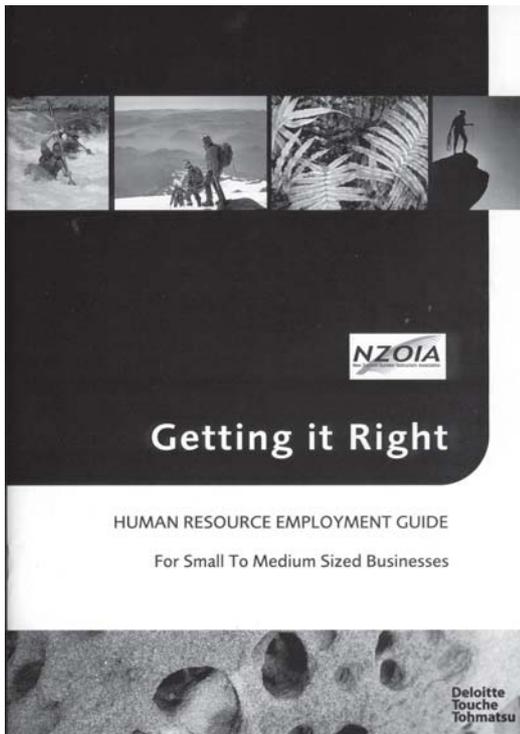
## 2004 NZOIA Calendar

**\$10 each, OR receive one free when you purchase any other publications to the value of \$20 or over.**

**Order via the NZOIA website**

**~ [www.nzoia.org.nz](http://www.nzoia.org.nz) ~**

# ITEMS available from NZOIA



## “GETTING IT RIGHT”

This is a Human Resource Guide for small to medium sized employers - a NZOIA resource written by Marcus Waters of Deloitte Touche Tohmatsu.

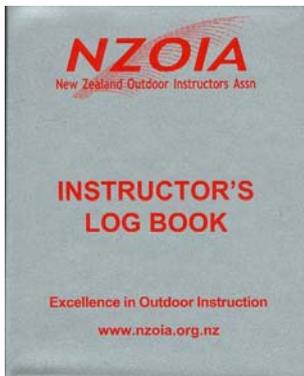
This manual has been written for **employers in the outdoor industry**, employers such as adventure tourism providers, outdoor education providers, guiding and trekking companies. The information is structured for the busy employer who is grappling with taking on their first employees or for the small company that employs a few staff, most of them seasonally.

Contents include chapters on recruitment and selection of employees, employment agreements, performance management and leadership, induction and training, remuneration and rewards, health and safety, and much more.

By providing quality information through this employer resource, NZOIA hopes to continue to add value to businesses and help ensure a safe and healthy outdoor industry.

Priced at \$30 for members (\$50 non members) (Inc. P&P)  
 Order: *via the NZOIA website ~ [www.nzoia.org.nz](http://www.nzoia.org.nz)*  
 or: *from the NZOIA Office, PO Box 11-090 Wellington*

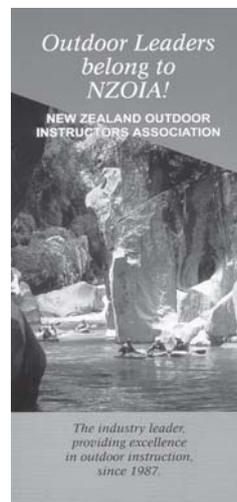
## NZOIA Logbooks



The format is an A5 plastic ring-binder (with the standard 2 ring).

Members - \$20,  
 Non-members - \$23  
 5 or more copies - \$18  
 (Inc. P & P)

Order *via the NZOIA website, or from the NZOIA Office PO Box 11-090 Wellington*



## NZOIA Information Brochure

~ outlining NZOIA the aims and activities, including the Award Scheme.

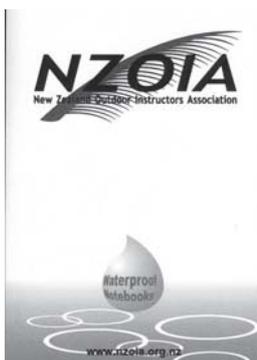
email: [ao@nzoia.org.nz](mailto:ao@nzoia.org.nz), for a supply.

## Also - NZOIA Promotional Posters

~ A3 full colour posters (same style as brochure)

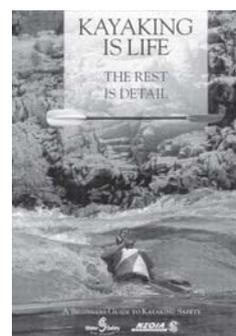
## Waterproof Notebooks

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 Non-members - \$8.50  
 (Inc. P & P)

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## Kayaking is Life ~ a FREE Beginners Guide to Kayaking

email: [ao@nzoia.org.nz](mailto:ao@nzoia.org.nz), for a supply.

# NZOIA ASSESSMENT CALENDAR for 2004

**Course & Location**    **COURSE DATE**    **Closing Date**

## Kayak FW

Auckland    October 30-31    October 1  
Christchurch    November 6-7    October 8

## Kayak 1

Central NI    March 15-17    February 13  
Christchurch    March 22-24    February 20  
Murchison    April 16-18    March 19  
Christchurch    October 15-17    September 17  
Central NI    November 19-21    October 22  
Christchurch    November 26-28    October 29

## Kayak 2

Murchison    March 26-28    February 26

## Abseil 1

Christchurch    May 8-9    April 8  
Auckland    November 21-22    October 22

## Cave 1

Waitomo    May 1-2    April 2

## Cave 2

On request

## Canoe

Murchison    March 29-30    February 27  
Christchurch    November 13-14    October 15

Climbing Wall On request

NOTE: Check the NZOIA website for additional assessments that may have been scheduled since the publication of this Quarterly.

**Course & Location**    **COURSE DATE**    **Closing Date**

## Rock 1

Christchurch    March 11-12    February 11  
Auckland    March 13-14    February 13  
Christchurch    April 17-18    March 19  
Central NI    April 17-18    March 19  
Christchurch    September 18-19    August 20  
Dunedin    September 23-24    August 20  
Auckland    October 16-17    September 17  
Christchurch    Nov. 6-7    October 8

## Rock 2

Whanganui Bay    Nov. 12-14    October 15

## Bush 1

South Island    April 16-18    March 16  
Central NI    April 24-26    March 26  
South Island    Nov. 27-29    October 29

## Bush 2

North Island    Nov 16-18    October 15

## Alpine 1

North Island    September 4-6    August 5  
South Island    September 11-13    August 13  
South Island    October 16-18    September 17

## Alpine 2

South Island    September 16-19    August 13

## Booking for a NZOIA assessment !

**Booking Routine** - You must have completed the prerequisites before applying for assessment; check the syllabus - they are all available on the NZOIA website at: [www.nzoia.org.nz](http://www.nzoia.org.nz). You must also be a current member of NZOIA as at the date of the assessment. To apply for a place on an assessment, obtain an assessment application form from the website (or administration officer) and forward it to NZOIA by the closing date with:

- a \$100 deposit;
- a **copy** of your log;
- a **copy** of your current first-aid certificate, (and the application form).

**APPLICATIONS close 4 weeks before the assessment date.**

**We allocate places on assessment courses a on first-in, first-served basis.** After the closing date, we will send you confirmation of your booking. You must pay the balance of the course fee before the assessment. If we cancel the course, we will refund all fees.

If you withdraw before the closing date, we will refund your deposit. If you withdraw after the closing date, we will refund 50% of your deposit. If you withdraw within one week of the course, fifty percent of the course fee will be retained.

Course fees: Two day - \$370  
Three day - \$495  
Four day - \$640

**Assessment by special arrangement** - It is possible to arrange assessments on dates other than those scheduled (generally subject to the availability of assessors). Contact the Assessment Co-ordinator (email - [assessment@nzoia.org.nz](mailto:assessment@nzoia.org.nz)) or Steve Scott, telephone 04-385 6048.

**If you are intending to participate in a particular assessment, don't be disappointed - please secure your place early - don't delay in forwarding your deposit.**

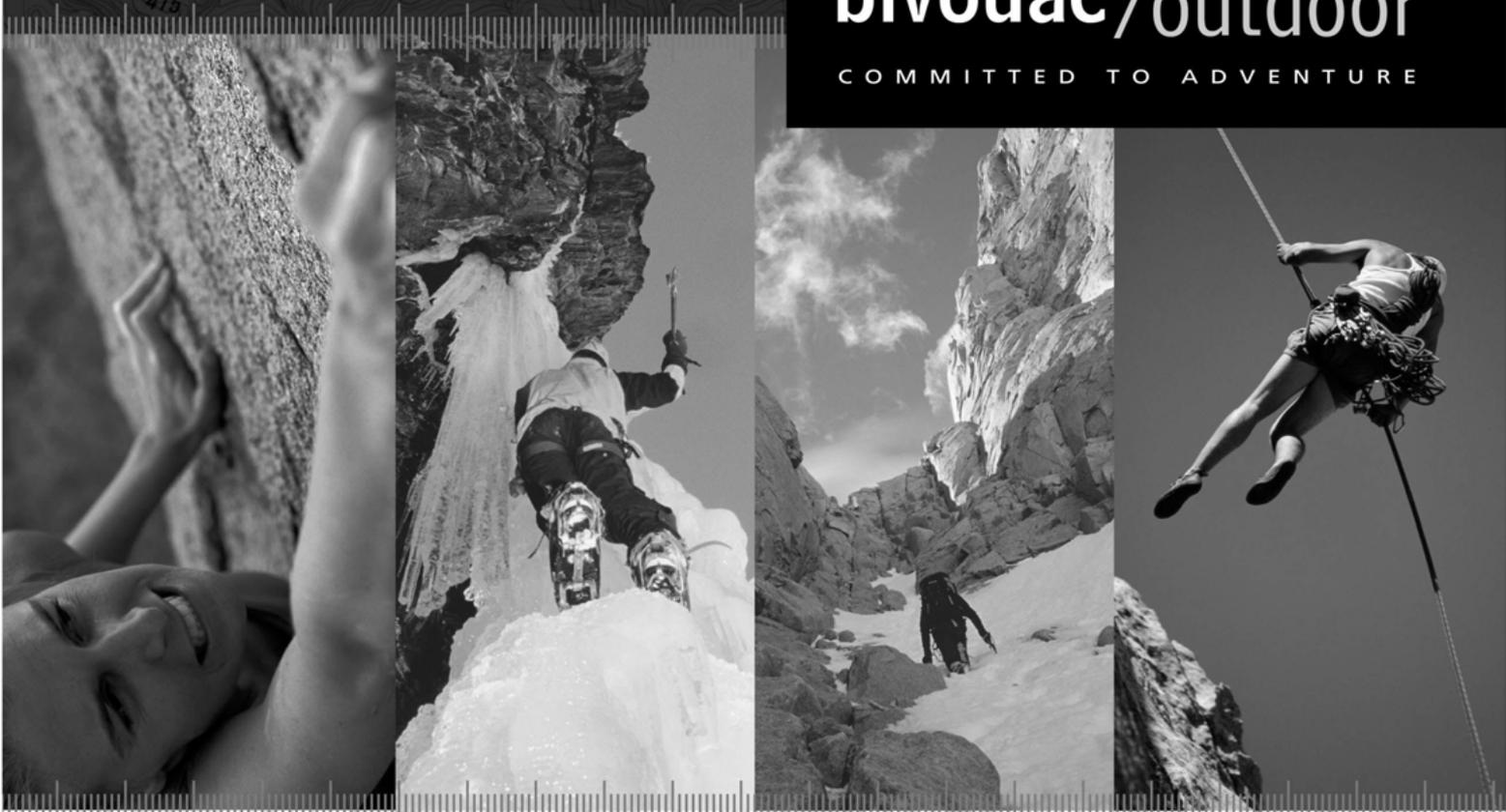
## NZOIA Cave 2 and Climbing Wall Assessments

These assessments are conducted "on request". If you are interested in participating in one of these assessments, please contact the NZOIA Administration Officer at: [ao@nzoia.org.nz](mailto:ao@nzoia.org.nz). When we have sufficient interested persons, we will organise an assessment.

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adventure

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 at  
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 suggestions are  
 welcome !**