



ISSUE 75: MARCH 2017

### Currency

Revalidation - 101 ways Warning! Auto block belay fails Staff member shot - why? NMIT and Rotoiti to co-host Symposium Navigation and magnetic fields Profile: Kaiapoi High School Environmentally sustainable education



#### N70IA OUARTERIY **ISSUE 75: MARCH 2017**

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

Email: editor@nzoia.org.nz

Or send to: **Operations Manager** PO Box 1620, Nelson 7040

Articles should be submitted in Word format, All photos must be supplied individually in ipa format and cannot be used if embedded in a Word document.

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NZOIA courses not being run at a suitable time or location? Want to get all your staff sorted when and where it suits you? Got a group of 3 or more people and a date / location in mind?

Whether it be training, assessment or revalidation we are happy to run a custom course for you.

Contact the programme and membership manager to discuss your needs and we'll do our best to make it happen. Costs may vary from scheduled courses and minimum numbers of participants dependent on the course type will apply.

Email: admin@nzoia.org.nz Phone: 03 539 0509

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NZOIA gratefully acknowledges the financial support of Sport New Zealand



#### Are you getting your weekly NZOIA 4YA?

If you are not receiving weekly emails every Friday from NZOIA, then we either don't have your current email address, or your nembership details need updating.

PLEASE check the email address in your membership account on our website, or contact the NZOIA office if you do not have a username and password.



#### Kia ora all

I hope you have all had a safe and enjoyable adventure-filled summer, or in the case of those who've headed to the northern hemisphere for the snow, winter.

The team in the NZOIA office had a busy lead-in to Xmas organising courses for the coming year and writing funding proposals to Sport NZ and the NZ Community Trust. The outcome of the Sport NZ application in particular will be critical for the future shape of NZOIA.

The Association has been fortunate in recent years in receiving funding support from Sport NZ to provide a valuable resource for outdoor education and recreation in New Zealand – a pool of outdoor instructors and guides who have been through a rigorous peer assessment of their skills and capabilities. The Sport NZ funding has enabled NZOIA to build on the early work of a group of dedicated outdoor educators who established NZOIA, to provide affordable qualifications to meet the growing need for skilled outdoor instructors and guides across a range of disciplines.

The NZOIA vision is to create positive change through excellence in outdoor leadership. The main way we do this is through the NZOIA qualification system. Beyond this, however, we also offer ongoing support to NZOIA members and encourage good practice standards as a professional

## We want your story!

We are looking for contributions from you, the NZOIA members, for the NZOIA Quarterly. Do you have a story to tell? Do you know someone who has thoughts to share?

Articles could be:

A personal adventure and how your experiences have impacted your instruction of others. / An incident, near miss or accident that others could learn from. / A personal profile - an interesting tale about how you got to be where you are now in the world of outdoor instructing. / An organisation that is doing innovative and interesting things - with its programme, philosophy, direction and instruction. / A reflection on any aspect of outdoor instruction that you think would be educational and beneficial for others to hear.

Contact Jen Riley, the editor with your ideas and for guidelines: editor@nzoia.org.nz

SPORT

association. This includes the NZOIA Safety Management System, the annual Symposium, and the weekly 4YA and NZOIA Quarterly magazine.

The Quarterly is a vehicle for exchange of views and provision of information on the latest techniques and equipment. A topic that has been discussed at recent NZOIA Board meetings is that of dealing with and learning from incidents and investigations. There are two articles in the current Quarterly issue that relate to this topic – Why did our staff member get shot? by John Furminger and Warning – 'Auto' Block Belay Fails by Dave Brash.

It is good to see such articles appearing - sharing experiences so that other members can learn from what could have been very serious incidents. The NZOIA Safety Management System - required reading for all NZOIA Assessors, outlines what follow up investigation is required in the case of an incident on an NZOIA event. It is not only NZOIA events that we can learn from - we should share the learnings from any incidents involving our members so that systems and processes can be improved. The NZ Mountain Guides Association has a process where any serious incident involving an NZMGA member is investigated by their Association. Should NZOIA have a similar process? The NZOIA Board is reviewing our current approach and considering what we could be doing better.





#### Note from the Editor:

Maintaining currency of skills is as important now as ever before. Maintaining currency of qualifications is arguably becoming more important as our world becomes more regulated. NZOIA qualifications provide evidence of the 'necessary training' required by the HSW Act. These articles by Stu and Penny address this. In future editions of the NZOIA Quarterly we will present some case studies of how instructors have got back into the industry after a break away, and still maintained (or regained) skills and qualifications.

As we sized up the river crossing, my mate said that hanging onto a log had served him well for 40 years.

I must admit I liked using large logs, particularly in deep crossings, but exposure to modern, mutual-support methods made me realise that the world had moved on  $-a \log just$ doesn't provide enough security for everyone in the group. It isn't current, good practice.

Now, this may be an odd example for young readers (those under 60) who've never used a log in a river, but it illustrates how good practice varies over time. Similarly, our early efforts building climbing anchors struggled to equalise them, and we'd never even conceived of a releasable abseil rope. And when you think of the shift from bow rudders to bow draws and gliding draws, and pawlata rolls to sweep rolls, we have further historical relics.

#### **Historical measures**

Changes in good practice may bring changes to our qualification assessments. Sometimes it's change in technique as noted above; sometimes it's technology change, eg use of GPS and phones in addition to map and compass in the bush, or use of mid-clip snow anchors, guided pulleys, and assisted belay devices when climbing; sometimes it's a syllabus change to plug perceived gaps, eg rescuing a climber from a ledge in the Rock 1 syllabus. The result is that old qualifications are historical measures - they may be different from new qualifications.

So, instructors and guides need to be current to be gualified. Before NZOIA introduced a revalidation requirement, an employer couldn't rely on a qualification to be a measure of current skill and knowledge. We've come a long way in providing a high degree of assurance.



#### **Balancing shelf life and good practice**

Sometimes, safety auditors are told that an unqualified instructor or quide has worked for years without incident. Maybe they follow good practice and deserve their good record, or maybe they've just been lucky. If we're not careful, this could also apply to a qualified instructor or guide. NZOIA's revalidation process is an attempt to ensure that gualified instructors and guides' skills and knowledge match current, good practice.

Recently, I observed a revalidation day. Participants strutted their stuff, discussed different ways to skin a cat, and played with new toys. Some learnt more than others, but they all shared ideas willingly in a non-threatening environment and left confident that their skills and knowledge were current and they deserved to be qualified.

We need to find a balance. On one hand, we want to support members to shelve their qualifications (put them on hold) for reasons such as injury, parental leave, or extended overseas tripping; on the other hand, we must ensure we don't devalue our gualifications by over-extending their shelf life.

We can be proud of our qualifications, which have evolved steadily and are more than just historical measures of competence.

Stu Allan – NZOIA Board n

# MAYS TO REVALDATE



Ok, I am exaggerating, but there is more than one way to revalidate and rumour has it that some of our members are unaware of their options. To hold a current NZOIA qualification, revalidation is required every three years (Bush is every 5 years with a current Alpine qualification).

So how can NZOIA members revalidate their gualifications? You must complete a Refresher Workshop every second revalidation cycle. There are 3 alternative ways to revalidate, every other cycle (if you choose to not do a Refresher Workshop).

- 1. Refresher Workshop: This is the most obvious and common way to revalidate. There are three options: the workshop can be an advertised NZOIA event, a Custom Refresher Workshop or a Free-range Refresher Workshop.
  - Custom Refresher Workshop: Ideally you will join an event on the NZOIA calendar, however if you cannot find one that works for you can request a Custom Refresher Workshop. For this, you need to have at least three committed people from at least two different workplaces and give us three months notice to organise it. Alternatively....
  - Free Range Refresher Workshop: For this option, you contact the assessor directly to negotiate a fee, time and place for three or more people from two different workplaces. You pay NZOIA an administration fee of \$50 per person.

The following options are available every other revalidation cvcle:

- 2. Attend a NZOIA Training Workshop for a higher qualification in the relevant discipline. Take a Qualification Revalidation Form along with you to be signed off by the assessor.
- 3. Assessor Sign-off: Work or recreate with an assessor to the level of your qualification and they can sign you off as current on the Qualification Revalidation Form. Hire them in to work with you on your programme. If your organisation is under audit and a technical expert (who is also an



#### PENNY HOLLAND

assessor) is required to review activities, then kill two birds with one stone and get them to assess you in the field at the same time.

- 4. Attend an approved course:
  - a. NZOIA / WWNZ River Rescue 1 & 2: Sharpen up on your rescue skills and revalidate your Canoe, Kayak 1 or Kayak 2 as appropriate. Send the certificate in as proof of completion.
  - b. Back Country Avalanche Risk Management: Refresh on avalanche management and revalidate your Alpine 1. Send the certificate in as proof of completion.

Permanently overseas? As a result of our recent revalidation survey the TSC has included an alternative revalidation option for permanently located overseas NZOIA qualification holders. Members can submit to the TSC; 1. a logbook and 2. two letters; one from their employer and one from another qualified practitioner endorsing their revalidation and stating they have observed safe practice. An administration fee of \$100 is required to process this. To keep the integrity of the NZOIA gualification they will still need to come back and complete a Refresher Workshop in NZ every second cycle to ensure they are current with syllabus changes, new techniques and professional development with other qualification holders.

If you need some time out from the industry then do not despair; you can put your qualifications on hold. We commonly get members who are not using their qualification due to overseas travel, pregnancy, being a stay at home dad, injury or just exploring a change of career. You can put your gualifications on hold for up to 5 years since you last sat or revalidated them. If you know you are going to be out of action for a while then it pays to revalidate just before you put your qualifications on hold to buy you some time. Sometimes it does not always go to plan. If this is the case then get in contact with the Operations Manager at admin@nzoia.org.nz to discuss your circumstance.

# AUTO' BLOCK BELAY FAILS DAVE BRASH



Reconstruction of the belay set up. The climber fell on the (orange) rope which is coming up diagonally from the left. The right hand (purple) rope was weighted, preventing the belay device from moving fully into line with the direction of force; the load side of the orange rope on top slid to the side of the belay device, rather than cinching down on the lower section of rope. The Pivot is presently in space, but was dragged onto the rock protrusion to the left when the climber fell. I was nearing the end of a stellar pitch. Placing a final runner, I clipped my left hand rope into it and tentatively traversed right and up to the belay. A breath of relief and that great 'top out' feeling, and it was time to build the belay and bring up the seconds.

I set up my DMM Pivot\* in autoblock mode, so I could bring up the two followers simultaneously. Stu was in front, and made it right through the layback crux moves of the lower huge hanging block. His rope stopped moving; I could not see him. Thinking he was through the crux, I turned my attention to Ball, the lower climber, who was moving fast up the corner crack below, and I was pulling his rope through with both hands when Stu's rope started screaming through the belay device. By the time I got a hand onto it and stopped his fall, he had gone 10-12 metres. Luckily, the wall was steep and devoid of features, and he was relatively unhurt.

What the hell had happened? These Guide/Reverso type devices are supposed to be auto locking aren't they? Go to the instructional videos on You-Tube with the most hits and you will encounter these typical comments:

'The climber takes a fall, it's going to automatically lock off, and that's a hands-free device there.' (Boulders)

'The ability to auto-lock on top belay.' (BaseCamp)

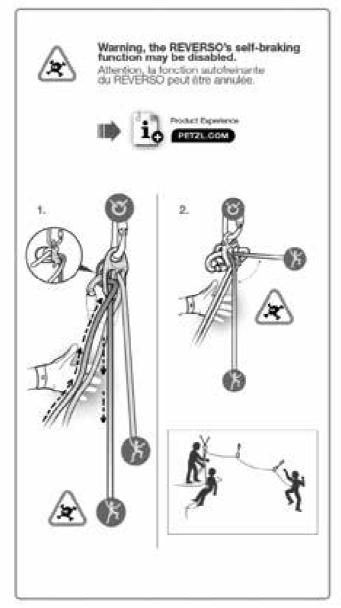
'The device will lock if the climber falls.' (Black Diamond)

'... autoblocks rope if brake hand is released.' (AMGA)

' I can go hands free with it, eat a sandwich, get a drink, get ready for the next pitch...' (Manzanita ICS)

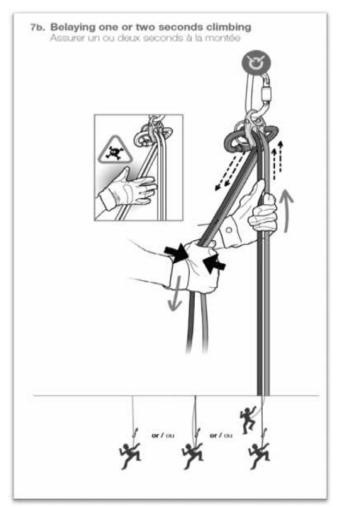
At first, I thought that the belay device lock-off must have been compromised by being dragged downwards (the focal point had been extended below the anchor with 2 metres of climbing rope) and sideways onto a rock rib, which might have held the Pivot in a tilted position, but then a reading of the Petzl Reverso 4 technical PDF revealed the warning about the danger of the falling climber's rope coming into the Reverso from the side while the device was weighted directly downwards by the second rope, and this became obvious as the primary if not sole cause when I experimented, without live test dummies this time. The Petzl diagram shows an angle of 90 degrees between the two ropes, but it became evident that failure to auto-lock could occur with an angle differential as low as 30 degrees.

Perhaps with hard earned experience from the history of the Gri-Gri, originally touted as a 'self-braking' belay device, and in more recent times altered to 'assisted', Petzl is much more conservative in their recommendations than the mainstream, stressing that the Reverso is not a hands off device for top belay. (However, Petzl still calls the Reverso a 'self-braking device', which could be construed as misleading, if not contradictory, considering their advice.) The CMGA is another rare voice of caution, warning in one of their excellent technical videos: 'It is possible for rope to slip through the device... particularly in situations where one rope is weighted and the other is not.'



www.petzel.com (technical-notice-REVERSO-4.pdf) Page 3

Be very aware that these devices do not work in 100% of situations, and if you do take hands off one of the ropes, tie a quick knot in it.



Petzl definitely does not recommend hands off! www.petzel.com (technical-notice-REVERSO-4.pdf) Page 3

\*Note: The DMM Pivot, Petzl Reverso and Black Diamond Guide are commonly used belay devices which can be set up with 'self braking' function when belaying from the top.



Dave Brash, with help from Stu Allan

# WHY DID OUR STAFF MEMBER GET SHOT?



Spotlighting is the practice of shining a tightly focused, high intensity light beam on an animal to make it freeze in confusion and be able to be shot. The membrane behind the retina in most mammals eyes reflect light and this is often the first thing seen at night when spotlighting. Think of a possum in the headlights. Spotlighting is illegal on public land. This includes all Department of Conservation (DoC) land.

Kahunui is the remote campus of St. Cuthbert's College. It is located 16km up the Waiotahe Valley in the Eastern Bay of Plenty. Students stay for 28 days experiencing a social living programme, a curriculum based on sustainable practices and tramping and sea-kayaking journeys.

May 13th 2016. This was the first of the three day Kahunui Valley Tramp. After several river crossings, an off-track navigation section and slippery and steep terrain negotiated the group reached the often used Totara Campsite. This is in the DoC forest estate, on the river and across from a large clearing. There is road access to the clearing but the three kilometre forest road is gated at the start and locked.

Chicken korma had been cooked over the camp fire and consumed and tents and flies erected in areas safely assessed for overhanging branches, widow makers and flood danger. The twelve students and three staff were asleep in their tents and flies, warmly tucked up in their sleeping bags.

At midnight a shooter spotlighting for deer off the back of a ute points a high powered rifle into the campsite, and fires. The projectile strikes a low hanging totara branch and breaks up. Several bullet fragments pierce a staff person's tent and sleeping bag, one embedding in his eye orbit, another grazing his shin.

The angle of the shot indicates it was fired from the height equivalent to the back of a ute, from a distance of about 115 metres and it is assumed the shooter mistook the reflective tag on the tent guy rope tie-in for a deer eye.

After staff lit up the camp the shooters drove closer then turned and sped away. The injured staff member decided to evacuate himself to Kahunui by vehicle taking his gear to meet the police and ambulance and to organise other staff to evacuate the remainder of the group. At the time of writing no arrests have been made. WorkSafe New Zealand deemed it not a notifiable injury due to the fact it was the result of an uncontrolled third person.



The resultant trauma has had a huge impact on those involved and the centre. As a result of this incident St Cuthbert's Kahunui have now made the following changes to their tramping policy:

#### **CAMP SITE SAFETY**

- Tent reflective tags are removed (and the tent manufacturer informed of the hazard the tags present.)
- A reflective line of tape is glued high on each tent side.\*
- We will not use any public or DoC bush campsites that have vehicle access.
- We will place a sign at the track start indicating we are camping in the area and the date.
- · We have a reflective sign: CAMPERS to hang between two trees on the approach direction to bush camps.
- Lightweight solar lights will hang in the trees above the camp site.
- We have increased signage on our property as well.

The assigned Police Officer to the incident suggested hanging a lantern above bush camp sites during the night. Andrew Glaser DoC Opotiki warns that a stationary dull white light may have inherent dangers and at distance in the glare of a spotlight may also look like a reflective eye.

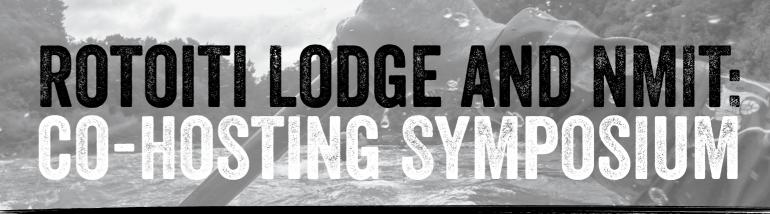
In 2012 a camper was shot dead in a DoC camp site near Turangi. Her head torch was mistaken for a deer eye. The shooter was jailed for manslaughter.

Nowadays, walking behind trampers at night will display to your head torch a huge variety of small reflective tags, including backs of shoes and boots, jackets and packs. I think these create a danger rather than a safety feature and suggest a solid bar of reflective tape which cannot be mistaken for anything else but for what it is.

#### \*We have used Tenacious Tape TM Reflective Fabric Tape.

The author: John Furminger is the Co-Director of Kahunui with Christine. Kahunui is the Residential Campus of St. Cuthbert's College near Opotiki. Prior to Kahunui he was the Director of Tihoi Venture School and Resident Teacher/Instructor at Motutapu Island Camp. He assesses this to be the most traumatic incident in his 40 year outdoor career.

John Furminger – Co-Director of Kahunui, Residential Campus of St. Cuthbert's College



The NZOIA National Training Symposium will be co-hosted this year by Rotoiti Lodge Outdoor Education Centre and Nelson Marlborough Institute of Technology (NMIT). NZOIA is grateful for the support of NMIT with resources and staffing support and Rotoiti Lodge for the venue.

The Nelson – Tasman region is unique in having three national parks all within 90 minutes of each other; the Abel Tasman renowned for its beaches and coastal kayaking, Kahurangi National Park home to the Heaphy Track and world class caves, and the Nelson Lakes with its twin lakes and mountains. Instructors who don't know the area will be blown away by the variety of outdoor activities on offer here.

Rotoiti Lodge Outdoor Education Centre, which has been running since 1968 at St Arnaud in the Nelson Lakes National Park, will be home base for the Symposium. The lodge is about an hour's drive from from both Nelson and Blenheim. There is a mixture of dormatory accommodation and camping. The lodge is sited on a gentle rise, surrounded by native bush and has superb views of Lake Rotoiti and the surrounding mountains. The lake shore at both West Bay or Kerr Bay is a short walk away, as is St Arnaud village. See the NZOIA Quarterly Issue 68, December 2014 for more information on the centre.

The St Arnaud area provides diverse environments that will cater for the wide range of refresher and training courses being run; the Buller River, the Rainbow ski area for alpine skills, Kahurangi National Park for caving and stunning bush right on the doorstep.

NMIT's Adventure Tourism (AVT) programmes have been running for 20 years. NMIT AVT runs a level four Certificate and level five Diploma in Adventure Tourism with most graduates able to find jobs in New Zealand or overseas.

Sam Russek, an NMIT AVT staff member, says the Symposium is a highlight of his year, giving instructors the chance for professional development and to mix with peers both in the outdoors and socially. "It's a lot of fun as well as a great learning experience." Sam has attended all but one of the Symposiums and says it's a great opportunity to re-united with friends and make contacts. "If you want to build a career in this industry you need to keep upskilling and networking. The Symposium is one of the best events for that as well as learning new things in a great setting."

NZOIA, Rotoiti Lodge and NMIT all look forward to seeing you in St Arnaud on the 21st of September!











# NAVIGATION AND THE EARTH'S NAACQNETIC FIELD

So there you are, out in the bush, teaching nav to a group of keen students. You've introduced the basic concepts and spent a day focusing on mapwork, terrain feature ID, and time/ distance calculations. The students have been soaking it up and are ready for the next step. It's time to bust out the compass.

You introduce the compass and its key features. Then out comes your trusty orange and vivid, which you use to draw/ explain the difference in position between true north and magnetic north. So far so good, and the use of citrus was a nice touch.

The students are really interested, and keen to know more.

"But why is magnetic north in a different place to true north?"

"Why is that angle between true north and magnetic north 22 degrees?"

"Is that angle always 22 degrees?"

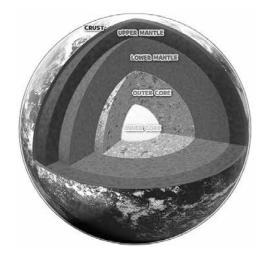
At this point, unless you've got a good handle on some key underlying geology and physics concepts, trotting out concise, understandable and accurate answers to these questions can be pretty tricky.

Which is probably why you've heard answers like "because there is a big pile of metal under the sea off the coast of Canada" or something similar...

As educators, we have a responsibility to do our best not only to inspire our students about the natural world, but to be reasonably accurate with what we teach too! The answers to these questions actually lead us to some pretty intriguing places, so it's worth our while to briefly explore these concepts in geology and physics.

#### Earth's core and the magnetic field

First up, let's revisit the structure of the earth:

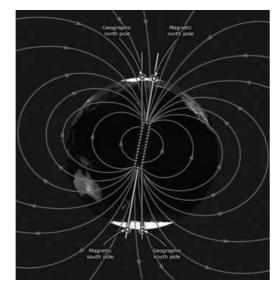


Source: www.ngkids.co.nz/science-and-nature/structure-of-the-earth

This simplified diagram is a handy reference point as we delve into the source of earth's magnetism. For a more detailed diagram and explanation of the earth's structure check out "layers of the earth – Maggie's science connection" in your Google search).

As you can see, the earth's core is separated into two parts, a solid inner core and a liquid outer core (compositionally these two layers are similar, both being composed of iron and nickel; however the intense pressure at the centre of the earth keeps the inner core solid while the outer core, being under less pressure, exists in a liquid state).

The inner core is really really hot, about 5500 – 7000 degrees C (nearly as hot as the surface of the sun). The outer core is pretty hot too, about 4500 – 6000 degrees C. Heat transfer from the inner core to the outer core causes convection currents in the liquid outer core (convection currents behave similarly to eddies on rivers). The earth's rotation further enhances the flow pattern of the convection currents. As the molten iron moves around it passes through the earth's initial or "seed" magnetic field (thought to come from the sun, or from chemical reactions at the core-mantle boundary), which creates an electric current through a process known as magnetic induction (molten iron is a good conductor of electricity). This in turn creates another magnetic field, which strengthens the initial or seed magnetic field, and thus provides a positive feedback mechanism (1). (This is the dynamo principle, on which electric generators are built. It wasn't until 1996 that scientists were actually able to prove this "earth geodynamo" theory; the culmination of centuries of scientific curiosity and research (2). For anyone with an interest in this history, check out Gillian Turners excellent book North Pole. South Pole, referenced at the end of this article).



Simplified diagram of earths magnetic field Source: www.teara.govt.nz/en/diagram/9213/earths-magnetic-field

So, movement of iron rich fluid in the centre of the earth creates earth's magnetic field via the dynamo principle. Not only is this handy when following a compass bearing, but the magnetic field actually extends thousands of kilometres beyond the earth's surface into space and forms the magnetosphere, which shields us from a barrage of solar radiation and cosmic rays. Without this magnetic shield, planet earth would be quite uninhabitable (we would be toast). (2)

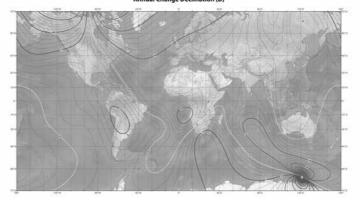
And we're not the only ones who use the magnetic field to navigate. Along with cues from the sun, stars, and physical landmarks, many birds, mammals, insects and sea creatures use the earths magnetic field to help them navigate around the globe (3).

#### **Magnetic declination**

The earth spins around the axis between the geographic north and south poles. We call the top of this axis of rotation true or geographic north. We call the top of the axis of earth's magnetic field the magnetic north pole. The axis of the magnetic field is not parallel to the axis of earth's rotation (refer to the earlier diagram of earth's magnetic field to get a visual on this).

The difference in horizontal angle between True North and Magnetic North is known as magnetic declination or variation. Declination changes around the world. We can draw lines of declination or isogonic lines to show these changes (4), much like isobars link areas of equal pressure on a synoptic weather map.

US/UK World Magnetic Model - Epoch 2015.

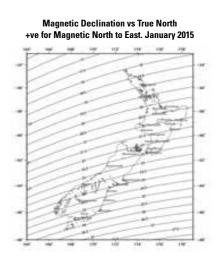


Source: https://www.ngdc.noaa.gov/geomag/WMM/data/WMM2015/ WMM2015\_D\_SV\_MERC.pdf

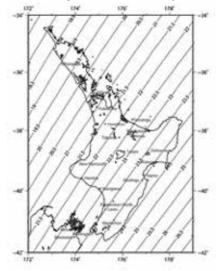
The force of the earth's magnetic field at the earths surface influences the shape of these isogonic lines. Note that they curve around the earth, and do not point directly at magnetic north. In other words, if you followed a compass bearing to the magnetic north pole, it would take you there, but not by the shortest route. Note also that according to this map, New Zealand's magnetic declination varies from 18 in the far north to 26 through Stewart Island; a considerably greater range of declination than we generally allow for ("but I thought the declination was 22!"). The reason for this is that grid north in the NZTM 2000 projection system our topographic maps currently use is slightly offset to true north (a trick cartographers and surveyors regularly use to orient maps in a position that makes the most sense for the map area and what they want to show on the map); which effectively makes our country more parallel with the isogonic lines running through NZ; so 22 degrees is not such a bad approximation after all. If this sounds a tad

## confusing check out the diagrams below and then refer to the NZ Geological Institute of Nuclear Sciences (GNS) website for more beta:

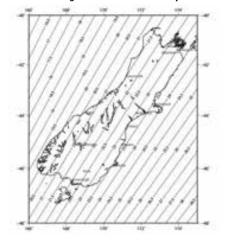
www.gns.cri.nz/Home/Our-Science/Earth-Science/Earth-s-Magnetic-Field/Declination-around-New-Zealand



Magnetic Declination vs True North +ve for Magnetic North to East. January 2015



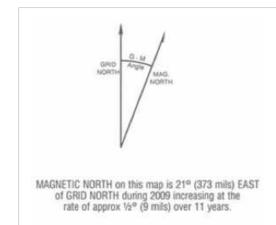
Magnetic Declination on maps using NZTM +ve for Magnetic North to East, January 2015



Source: GNS

#### Changes of declination over time

Pull out any detailed topographic map and in the key it will show you what magnetic declination is for the mapped area. It will also show you the rate at which this declination is changing. For example:



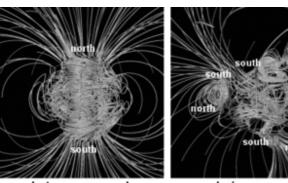
This small and seemingly innocuous reference to slight changes in magnetic declination over time actually hints at one of the most outlandish phenomenon in earth science: polarity reversals.

While the position of the north magnetic pole does vary a bit due to variations in heat and fluid movement in the earth's core, every so often the earth's magnetic field does a complete 180 flip, so that the north magnetic pole would be close to the south geographic pole and vice versa (your compass needle would actually point towards the south geographic pole in Antarctica). It does this randomly, on average every 450 thousand years, although the interval between reversals mostly ranges from a few thousand years to tens of millions of years. Most reversals take between 1000 and 10 000 years to complete (although they have occurred in less than 100 years!). The last one happened about 780 thousand years ago (5).

We know all this because iron rich minerals in rocks align themselves with the earth's magnetic field, and by studying rocks of different ages around the world we can measure the changes and frequency of past polarity reversals. The most likely explanation for these reversals is that random changes in the patterns of the fluid motion in the outer core disrupt the earth's geodynamo, which can result in a complete polarity reversal (2).

The earlier diagram of the earth's magnetic field was a simplified one. Check out the more realistic diagrams of earth's magnetic field during normal polarity and during a polarity reversal opposite.

Earth's magnetic field is currently getting weaker, and because the magnetic north pole is also moving relatively quickly at present (compared to the last few thousand years); there is some speculation that we might be headed for a polarity reversal. While this could be somewhat disruptive to modern humanity, it's probably not going to happen in a hurry; chances are we're going to have greater concerns in our lifetimes at least (5,6).



between reversals

during a reversal

NASA computer simulation of what Earth's magnetic field lines might look like during a polarity reversal. Based on the model of Glatzmaier and Roberts. The tubes represent magnetic field lines, blue when the field points towards the center and yellow when away. The rotation axis of the Earth is centered and vertical. The dense clusters of lines are within the Earth's core. Source: www.wikipedia.org/wiki/Geomagnetic\_reversal

#### Summary

Movement of really hot molten iron at the earth's core creates a magnetic field around the earth. We refer to the northern end of the axis of this magnetic field as the north magnetic pole or magnetic north, and that's where our compass needles point to. The axis of the magnetic field is at an angle to the earth's axis of rotation, which is why magnetic north is not the same as true north. The difference in angle between true north and magnetic north relative to where we are is known as magnetic declination. When we are using a compass we have to account for this declination. In NZ magnetic north is currently approximately 22 east of true north. Declination changes as we move around the world due to the way the earth's magnetic field is felt on the earth's surface. Declination also changes over time, and every now and again the earth's magnetic field even completely changes direction.

#### References

- 1 Natural Resources Canada (2015). Generation of Earth's magnetic field. Retrieved from www.geomag.nrcan.gc.ca/mag\_fld/fld-en.php
- Turner, G (2010). North Pole South Pole: The epic quest to solve the great 2. mystery of Earth's magnetism. Wellington, New Zealand. Awa Press.
- 3 Grabianowski, E. How Animal Migration Works (n.d). Retrieved from www. animals.howstuffworks.com/animal-facts/animal-migration4.htm
- Wikipedia. Magnetic declination (2016)
- 5. Retrieved from www.en.wikipedia.org/wiki/Magnetic\_declination
- 6. Bryson, B (2004). A short history of nearly everything. London, Great Britain (Doubleday)
- 7. Wikipedia. Geomagnetic reversal (2017). Retrieved from www. en.wikipedia.org/wiki/Geomagnetic\_reversal

#### With thanks

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Rob Dunn, Tutor of Outdoor Education, Ara Institute, Timaru

# KAIAPOI HIGH SCHOOL - ADVENTURE SCHOOL

#### Who we are

Nestled in the river town of Kaiapoi, North Canterbury, lies Kaiapoi High School. Kaiapoi High School has its very own Adventure School comprised of two courses; Outdoor Education and Outdoor Leadership. The roots of the Adventure School go back a number years to when 'Project R' was born (an alternative education class) which then developed into the mainstream subject of Outdoor Education. Several years later Outdoor Leadership was introduced as an additional subject.

Many staff over the years have put their time, energy and passion into building the Adventure School into what it is today. Currently there are three permanent Outdoor Education staff (Lyndsay Fenn since 2012, Eamonn Lowe since 2013 and Nic Thomas since 2016). Alongside our permanent staff we have a regular pool of NZOIA gualified instructors, employed through Outdoor Education NZ (OENZ), who have worked with us for five years now and understand our school systems and values.

2016 saw the biggest (and busiest) year to date for the Adventure School with ten different classes from Year 10 through to 13, plus the whole of Year 9 going on camp. Considering there were around 800 students on the school roll, that was a huge percentage of students involved in Outdoor Education.

#### **Outdoor Education Courses**

Across the 5 year levels we have some common themes and values that are threaded through each course. We try to promote kaitiakitanga in all that we do. The majority of our trips are run locally in the Canterbury area in the hope that we can help students develop a sense of place and connection with the areas and in turn want to look after and return to these areas.

A tradition, and a somewhat right of passage for Year 9 students is their school camp at Boyle River Outdoor Education Centre in the Lewis Pass area. These trips have been happening since the opening of the Centre. Kaiapoi High School was one of the founding schools for The Boyle and still has a representative on the board of trustees. Many of our students' parents and grandparents were involved in the building and constructing of The Boyle or went there on school camp themselves. This is a tradition that we are proud of and hope to continue for many vears to come.

At Year 10, we offer an optional half-year course which is run as a taster course and intro to Outdoor Education. The main focuses are on risk assessment and decision making, along with personal and social development. The main activities are raft building, orienteering, day tramping and rock climbing. The course is short and condensed however does give the students a bang for their buck!

In Year 11 the programme runs for the full year, focusing on managing self and an introduction to hard skills. The units for this course are tramping, indoor rock climbing, orienteering, mountain biking and flat water kayaking. The highlights



of the year are always the two three day tramps in the Mt Somers area and the Craigieburns.... nothing beats eating marshmallows around a campfire!

The Year 12 students start the year completing an externally run 2 day first aid course. The rock climbing unit is run in term one on the Port Hills while the sun is still baking the rocks. Then we move into the tramping and survival units where students learn navigation, two-way radio use, managing an emergency situation, weather, working with helicopters and general bushcraft. The finale at the end of the year, where all their skills are put to the test, is a multi-day scenario based tramp. Some of our students could put Bear Grylls to shame!

The grand finale in the Adventure School is the Year 13 course. By now students should have enough skill to manage themselves on front country tracks. They have technical skills in a range of pursuits to function independently while being part of a well led group and know what to do if something goes wrong. This course is constructed by the students and teacher at the start of the year and varies from one year to the next depending on what the students' interests are. Once the pursuits and assessments are decided, it is over to the students to investigate, plan and organise the trips (with guidance from the teacher).

#### **Outdoor Leadership Courses**

An Outdoor Leadership course is offered in both Year 12 and 13 and is designed with a huge focus on Adventure Based Learning. The course is designed to empower students to develop peer leadership skills, to gain confidence to stand up and speak in front of a crowd and to lead activities for others. Students often work with our local feeder schools running activities, helping out on athletics days, coaching and helping run primary school camps.

Both the Year 12 and 13 classes spend a week at Boyle River together working on a number of Adventure Based Learning activities and overnight tramps. The main difference in the Year 13 leadership course is that they go with the Year 9 students on camp as their group leaders. To go as a leader takes a lot of practice, planning and commitment from the students and the Year 9s love having an older student as their leader.

Over the years we have had guite a number of students go off to tertiary programmes to continue studying outdoor education, and to go on to jobs in the industry. This is a real testament to Kaiapoi's Adventure School and the positive impact outdoor education at high school in general has on students' lives.

As teachers we feel really lucky to work with such a fantastic bunch of students in a great programme in a supportive school.

#### Ma te aroha ka tu tukuki

Through caring support and concern for others, all things are possible.

## ENVIRONMENTALLY SUSTAINABLE **EDUCATION AND OUTDOOR EDUCATION**

"You psychologists talk of an identity crisis. I'll tell you what an identity crisis is. It is when you don't know the land, and the land doesn't know vou." Leroy Little Bear cited in Per Espen Stoknes (2015)

Disconnection from nature has been talked about by many for years; research shows that between 1997 and 2003 the amount of time 9-12-year-olds spent recreating outside declined by 50% and the average 3-11 year old spent only 30 minutes every week on outdoor activities. Richard Louv says, Our children are starting to suffer more and more from "Nature Deficit Disorder". What does this mean? A 2003 survey found that the amount of antidepressants prescribed to children had almost doubled in 5 years. There are growing numbers of studies that show how getting into natural spaces helps reduce stress, anxiety, anger and depression. This means as outdoor educators, teachers and instructors we are in a privileged position to help this generation that has become more sedentary and is predicted to die before their parents. (Children and Young People Statistics, British Heart Foundation and University of Oxford)

Research inspirations: So where to begin? I suggest starting by looking at yourself; your purpose; your "why". Why do you work in the outdoors? For me, it has always been about the people and the environment. I want to both improve people's lives and also ensure the environment is looked after. At 17 I had quite a naïve view of this, I assumed that by bringing people out of the city and into the country (I was still in England then), I could show them how beautiful a place could be if you looked after it, and how much nicer it was to live there. That somehow they could just transfer this learning and start to improve 'their' place. I discovered while researching as part of my degree, that my assumption was just that; an assumption. In fact, the research I read, told me that not only were students unlikely to start looking after "their" place better, but also they could see no connection between how and where they lived and the pristine place that they wanted to protect and look after.

Not only do we need to get out into nature more for our health and our well-being, but we also need to start looking after the planet and our places if we are to survive as a species. I could go all gloomy on you here, but I prefer to live with hope and be proactive about what we can do. So what can we do? This is where I started with my research for my Masters Degree, which has allowed me to investigate: 1. Does a place responsive outdoor education journey lead to an "ethic of care" for "their" place: 2. How does / does this "ethic of care" developed from the place responsive outdoor education journey motivate students to take action; 3. Can people take a broader view and see how they live also affects "their" place? I am going to share my learning so far from this research of how you could incorporate more sustainability into your outdoor sessions and programmes.

Place responsive outdoor education: Place responsive outdoor education is concerned with encouraging people to connect or reconnect with the place they live, work or recreate in. Through



this learning about "your" place, you discover where you are from, get to know your people, your stories, which helps build a sense of belonging, connection to place and is linked to your sense of identity and wellbeing (see some of Wally Penetito's work). I designed the journey in my research using the four signposts Wattchow and Brown suggest as a skeleton to work from. These signposts are:

- 1. Being present in and with place
  - This is about ensuring some time to actually "be" in place, it could be doing an activity which makes everyone start to observe what is really around them.
- 2. The power of place-based stories and narratives
  - This is about getting to know the place you are in. who has been here before you, the history both Maori and European, how the land has formed and also the stories of your journey.
- 3. Apprenticing ourselves to outdoor places (learning about the place as you do in an apprenticeship).
  - This is about sparking curiosity. Wattchow and Brown suggested some questions to help with igniting the curiosity and allowing you to get to know the place on a deeper level.
    - i. What is here?
    - ii. What will this environment allow us to do here?
    - iii. What will the environment help us do here?
    - iv. How does this place interconnect with my home place?
- 4. The representation of place experiences.
  - Get students to reflect on their experience with the place, it's good to be creative here - if students have taken photos or done drawings they could use these to help with the reflection.

Education for Sustainability: This is often talked about as education that is in, for and about the environment. This fits well with place responsive outdoor education. If we take education in the environment, this is doing real activities in the real world

where you are helping students gain greater awareness and concern for the environment they are in. Education *about* the environment means gaining ecological understanding and learning about the place they are in, the issues and the factors that influence them, be it social, economic, political or ecological.

Education for the environment is a little trickier this is getting students to take action. This action needs to address the cause of the issue, rather than address the symptoms. For example: picking up litter from a beach is addressing a symptom. The cause may be boats throwing rubbish overboard, or no litter bins at the beach, or industry close to the beach not properly disposing of their rubbish.

What I have discovered so far: From my research, I have found that the students on my journey got a new appreciation for the place they live, what is around them and what some of the issues are. They did do a small environmental action at the end, I think only due to the fact they were being led through a process of how to design an environmental action and having time as part of the club to do so. When interviewed, all the students showed they had been affected by some of the issues and wanted to do something about it. A further interview showed that although they cared, taking action wasn't a high priority for them; it is something that if they had the time, they might look at taking further action or joining enviro club at school. Only 1 out of 6 students remotely made a link between the way they live having an effect on the place and the issue they were concerned about.

What does this mean: That trying to get people to transform the ethic of care they develop from a place responsive outdoor education programme or journey to being intrinsically motivated to take sustainable action, is not a simple fix. Many facets are required. However, there are many potential solutions.

All the great environmentalists spent time playing and exploring in nature when young. So starting people early is a key ingredient to developing a connection that later can lead to being intrinsically motivated to take actions. (see Project Wild Thing, Bush Schools and the variety or nature playgroups that have sprung up).

Develop deep-seated and understood values – your actions will reflect these. Creating a connection to a place helps place value on it. Consider aligning values with responses that will ensure decisions are based around caring for the local environment.

Talk more openly about how our behaviour at home affects all places. Making these conversations common, will help instigate awareness and share potential actions.

One major barrier to people taking action comes from their resilience levels and ability to look beyond themselves. Life has can shrink this to one branch. This allows the students to really a tendency to leave many with low self-esteem, low resilience start and use their other senses. and a low number of loving moments in their life. We need to Local experts. Bring in community members that know their field. build people up in an authentic and positive way, build resilience This can strengthen community bond. It also moves your role as and show them how to increase their positivity resonance. This the instructor, away from being the holder of all knowledge. can be done by connecting them to their communities, through loving-kindness meditation, by using gratitude diaries or similar. Jo Martindale has a Bachelor Degree in Adventure Recreation and Check out Dr Barbara Fredrickson's work for more ideas and Outdoor Education (CPIT), is completing her Master's in Sport and suggestions. Environmental psychology has shown that until we Leisure Studies at University of Waikato. build up that positivity resonance and resilience, we are unable to focus on anything outside of ourselves. Even if we have a Jo Martindale, NZOIA Bush and Rock Assessor, member NZOIA Board high positivity resonance and can be outwardly focused, it isn't

a guarantee we'll take action but is an important ingredient if we want people to.

Start celebrating the amazing work others already are doing in the community. It shows it is possible to make a difference.

Re-story things, we don't like the idea of losing things or giving things up. Let's start telling stories of how amazing the place could be, and what we could gain by changing our behaviour i.e. biking to work means we are fitter and healthier, can fit smaller clothes, saves us money, we can run around with children, have more green space and fewer car parks. Develop a vision that includes a sustainable future.

The thing to remember, as with everything on this planet, nothing works in isolation, everything is a complex interconnected web and cannot be separated into a neat box. All we can do is ensure we are working towards finding a solution.

#### References

Fredrickson, B. (2013). Love 2.0. Hudson Street Press. Silverman, J., & Corneau, N. (2017). From nature deficit to outdoor exploration: curriculum for sustainability in Vermont's public schools. Journal of Adventure Education and Outdoor Learning, 1–16.

#### https://doi.org/10.1080/14729679.2016.1269235

Wattchow, B., & Brown, M. (2011). A Pedagogy of place: outdoor education for a changing world. Australia: Monash University Publishing.

#### How does this look in practice? Here are some starting ideas:

Waterway awareness. While on the river, go through the water cycle or river hydrology. Get students to look at what invertebrates are in the water and then work out how clean it means the water is (the Otago Regional Council has a fantastic resource for this). What are the land uses around the river, how do they affect the river? Is anyone trying to do anything to look after this place? Who are the other river users? What are the stories, history around the river?

If you are climbing you could do a similar thing looking at rock types and formation. www.leavenotrace.org.nz has some great activities to run with students in the bush.

Observation line. Place out a number of items along a track (both sides, high and low, easy to see and not guite so obvious). Give a start and finish line. Have students walk along in silence, counting the number of items they can find. Purpose - encourage being more observant and present with place. Could lead into a discussion about camouflage. Can also be a good discussion on rubbish and looking after the environment.

Feel a plant: Have a communal start/finish area. Students are in pairs, one blindfolded. The seeing student walks the blindfolded one to a tree. The blindfolded student feels the tree and really gets to know it. They then get taken back to the start/finish area, remove the blindfold then go find the tree. As a second phase you

on the	se recently gained NZOIA Qualifications!			
	<u></u>			
Alpine 1	Stephen Ritson, Garry Kane			
Abseil Leader	Akhil Munjampalli, Gabby Bruce, Andrew Thompson, Balveer Singh, Kerrien Weale, Lora Pelvin, Daniel Vincent, Siplele Ngxabani, Chris Mackie, Gabriel Vink Wackernagel, Hazel McAlister, James McLean, Joshua Bougen, Lachie Brownlie, Ryan Morris, Toby Johnstone, Zhane O'Neill Harvey, Ankur Jain, Jessie Maclaurin, Crystal Taia-Scott, Joshua Goodman, Tom Batts, Robert Scott, Gabriel Janovitch, Isla McCutcheon, Jamie Marr, Kahu Davis, Keely Cooper, Lucy Foote, Michael Garland, Lucy Harwood, Briar Inwood, Cody Cochran, Ty Orsbourn, Rebecca Bailey, Zakary Ainsworth, Joseph Prangnell, Matthew Trembath, Lui Tulley, Rooster Turner, Ruaiti Everett, Wairakau Greig. Luke Cowie, Brodie Taylor			
Bush Walking Leader	Trevor Ridgway, Sarah Bell, Natasha Mills, Andrew Thompson, Ariel Coleman, Chris Mackie, Gabriel Vink Wackernagel, Hazel McAlister, James, McLean, Joshua Bougen, Lachie Brownlie, Ryan Morris, Sam Manson, Toby Johnstone, Zhane O'Neill-Harvey, Riley Bungard, Ankur Jain, Jessie Maclaurin, Ezra Robinson, Thomas Self, Mat Smith, Ee Hann Wong, Caleb Martin, Crystal Taia- Scott, Jacob Kelway, Joel Buckley, Joshua Goodman, Tom Batts, Aidan Conway, Brenton Rodger, Brody Duncan, Gabriel Janovito Isla McCutcheon, Jamie Marr, Jarom McKenzie, Kahu Davis, Karl Scholtens, Kayla Duggan , Logan Tribe, Lucy Foote, Michael Garland, Niki Walker, Robert Scott, Ben Cockell, Cara Irvine, Cecelia Campbell, Georgia Thomson, Jacob Real, Kim Hanco Kylie Booth, Liana Clark, Sarina Anderson, Scott McCrindle, Serena Finlay, Tadhg Mcdermott, Drew Smith, Timothy Finlay, Ben Fleming, Ty Orsbourn, Klay August, Lewis Prisk, Verena Haider, Hannah Lawson, Oliver Jarman, Aimee Crawley, Joe Prangna Matt Trembath, Michael Power, Toni Owen, Darian O'Sullivan, Isla Kennedy			
Bush 1	Joshua Barnett, Nigel Seebeck, Garry Kane, Stephen Ritson, James McMillan, Stephanie Waldon, David Ryan, Brad Gibbons, Ross Sprung, Pawel Wypych, Jeremy Johnston, Adam Boyd, John Duxfield, Alex Britton, Peter Stone, Sally Dymond, Paul Tupou-Vea Sarah Inglewood, Sean Jolliffe, Paul Cunningham, Annah Winheld, Justin Blacklock, Grant Metcalfe, Anna Brooke, Andrew Riley, Samuel Aldrich, Zoe Findlay			
Bush 2	Rob Dunn, John Hannam, Nick Hanafin, Stephen Onyett, Lyndsay Fenn, Steve Garside			
Cave 1	Pip Rees, Joe Dawson, Bee Fradis			
Climbing Wall Supervisor	The Edge Indoor Rockwall – Doireann Meade, Rockatipu Climbing Wall – Christian Laurence Miller, Rockatipu Climbing Wall – Torben Kallmeier			
CWS with Monitor Lead Climbing Endorsement	Rockatipu Climbing Wall – Christian Laurence Miller, Rockatipu Climbing Wall – Torben Kallmeier			
Kayak Leader	Ariel Coleman, Gabriel Vink Wackernagel, James McLean, Joshua Bougen, Lachie Brownlie, Ryan Morris, Sam Manson, Toby Johnstone, Zhane O'Neill Harvey, Caleb Martin, Jacob Kelway, Joel Buckley, Aidan Conway, Brenton Rodger, Brody Duncan, Jarom McKenzie, Karl Scholtens, Kayla Duggan, Logan Tribe, Niki Walker, Robert Scott, Ben Cockell, Cara Irvine, Cecelia Campbel Georgia Thomson, Jacob Real, Kim Hancox, Kylie Booth, Liana Clark, Sarina Anderson, Scott McCrindle, Serena Finlay, Tadhg Mcdermott, Drew Smith, Stephen Miller, Andrew Read, Morgan Larkins			
Kayak 1	Tyler Russell, Emma Yates, Sam Dowd, Laura Oakley			
Rock Climbing Leader	Seton Pennell, Kathryn Bunckenburg, Akhil Munjampalli, Gabby Bruce, Andrew Thompson, Balveer Singh, Kerrien Weale, Lora Pelvin, Daniel Vincent, Siplele Ngxabani, Chris Mackie, Gabriel Vink Wackernagel, Hazel McAlister, Joshua Bougen, Lachie Brownlie, Toby Johnstone, Zhane O'Neill Harvey, Ankur Jain, Jessie Maclaurin, Crystal Taia-Scott, Joshua Goodman, Tom Batts, Robert Scott, Isla McCutcheon, Jamie Marr, Kahu Davis, Lucy Foote, Michael Garland, Ben Cockell, Jacob Real, Kim Hancox, Kylie Booth, Serena Finlay, Sven Ramsay, Scott McCrindle, Akimitsu Hirayama, Rebecca Bailey, Zak Ainsworth, Emma Swain, Anthony Fokkens, Oscar Brownlee, Michael Power, Francis Ahlers-Simpson, Michelle Williams, Verena Haider, Lewis Prisk, Liam Hutson, James Haylock, Emma Halkett, Aimee Crawley, Klay August, Rooster Turner, Ruaiti Everett, Wairakau Greig, Luke Cowie, Brodie Taylor			
Rock 1	Kevin Webb, Matt Cloonan, Lacey Beadle, James McMillan, Garry Kane, Andrew Balcar, Chris Mackie			
Rock 1 – Sport Climbing Endorsement	Joe Dawson, Rebecca Fradis, Ben Fenselau, Anna Brooke, Sam Aldrich, Kayla Stuart, Zoe Findlay, Sean Jolliffe, Jeremy Campbell, It Richard Dunn, Will Bosnich, Mike Brien, Victoria Alexander, Ryan Camp			
Rock 2	Prajot Sabnis, Rob Dunn			
Sea Kayak Leader	Jenny Harvey, Nicole Preller, Toby Richardson, Adam Haack, Jackie Loffley-Wilson, Natasha Mills, Gabby Bruce, Andrew Thompson Balveer Singh, Lora Pelvin, Danielle Elsdon-Williams, Daniel Vincent, Siplele Ngxabani, Olivia Miller, Ariel Coleman, Hazel McAlister, Lachie Brownlie, Riley Bungard, Ezra Robinson, Mat Smith, Ee Hann Wong, Ben Cockell, Cecelia Campbell, Jacob Real, Kim Hancox, Kylie Booth, Serena Finlay, Tadhg Mcdermott, Sven Ramsay, Hilary Munro, James Haylock, Lucy Harwood, Lui Tully, Francis Ahlers-Simpson			
Sea Kayak 1	Natasha Smith, John Scanlon, Ronnie Greene, Sierra Stretton, Koha Mason, Dougal Pollock, Charles Martin, AJ Carrick			



These awards recognise the highest achievements of individuals involved in outdoor recreation, education and guiding in New Zealand. If you know of someone who fits the criteria, make sure you nominate them so we can acknowledge and celebrate their achievements! Nominations open 1 April | Nominations due 30 June - nominations forms are on our website. Judging year from 1 July – 30 June | Finalists & Winners announced at 2017 NZOIA Symposium Awards Dinner.

#### EMERGING INSTRUCTOR

Awarded to an instructor who displays great potential for the future, and who demonstrates strong commitment to professional development and qualification acquisition. The ideal recipient will have at least one NZOIA qualification and be recognised as a talented instructor who stands out from the crowd.

#### **EMERGING GUIDE \*NEW!\***

Awarded to an emerging guide who displays great potential, talent and commitment to a career in the guiding sector. The ideal recipient should demonstrate a commitment to professional development and qualification acquisition and will have at least one NZOIA qualification.

Full criteria for each award and nominations forms are on the NZOIA website: www.nzoia.org.nz/about/nzoia-excellence-awards

Past NZOIA Awards Recipients:	2005 – Rebecca Wylie
Emerging Instructor	2004 – Nicci Mardle
2016 – Jon Harding	2003 – Regan Edwards
2015 – Tim Shaw	2002 – Holly Thompson
2014 – Alan Haslip	<b>Tall Totara</b>
2013 – James Geddes	2016 – Dave Moore
2012 – Sophia Mulder	2015 – Drew Brown
2011 – Cameron Walker	2014 – Mike Atkinson
2010 – John Hannam	2013 – Tim Wills
2009 – Jye Mitchell	2012 – David Brash
2008 – Samuel Langridge	2011 – Gareth Wheeler
2007 – Vashti Duncan	2010 – Ray Hollingsworth
2006 – Ben Barlow	2009 – Ian Logie

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#### Things you should know:

#### TALL TOTARA

Awarded to a current instructor or guide who personifies 'excellence in outdoor leadership'. A highly respected role model, someone who has contributed significantly to outdoor education in New Zealand through both work with clients and with aspirant instructors/guides.

#### LIFE MEMBER

Awarded to a member who personifies the very best combination of an excellent instructor/guide, a high achieving personal performer, and an outstanding contributor to the work and promotion of the association.





Excellence in Outdoor Leadershi

- 2008 David Mangnall 2007 – Ian Barnes
- 2006 Linda Wensley
- 2005 Graham Charles
- 2004 Mark Jones
- 2003 Jo Straker
- 2002 Mick Hopkinson
- 2001 Don Paterson
- 2000 No record of being presented 1999 - No record of being presented
- 1998 No record of being presented
- 1997 Lyndsay Simpkin
- 1996 John Skilton

1995 – John Davidson 1994 - Ray Button 1993 – Hazel Nash 1992 – Bev Smith Life Members 2013 – Matt Cant 2012 - Mick Hopkins 2010 – Ray Button 2006 – John Entwisle 2005 - Jill Dalton 2004 - Jo Straker 2000 – Grant Davidsor

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There is a mixture of mandatory /drop down menu fields and free text fields. The mandatory fields enable NZOIA to collect and use data (in aggregate form only - individual members will not be identified). This data is really important for funding applications, reporting and advocacy purposes. The free text fields enable you to include more specific information according to your preferences.

Coming soon... our computer guru is looking at options to enable you to upload previous logbooks to the online logbook, so you can have it all in one place. We are also working on a mobile friendly version, so you can simply fill it in while out in the field. Watch this space!!

To access this logbook, sign in to your NZOIA profile, head to your dashboard and select 'My Logbook Entries' from the blue menu on the right hand side of the screen. Give it a go!



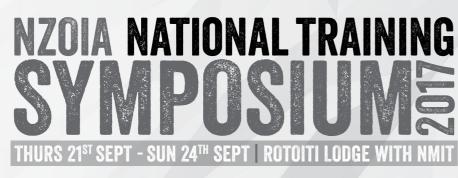


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31 MAY 2017!

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- Skilled and experienced facilitators and assessors
- A range of professional development workshops available try something new!
- Meet other instructors and connect with your industry .
- Combines with NZOIA Annual Awards Dinner and AGM
- The call is out for guest speakers and professional development workshop facilitators -11.4 could this be you?
- Registration closes 1 August 2017

#### **STAY UP TO DATE!**

Go to Symposium on the noticeboard at www.nzoia.org.nz Enquiries email: accounts@nzoia.org.nz | ph: 03 539 0509 www.facebook.com/NZ0IAInstructors







## NZOIA Training & Assessment

ASSESSMENT FEES		
Assessment course	Course fee	
Abseil Leader		
Bush Walking Leader		
Canoe Leader	Contact an assessor directly	
Kayak Leader		
Rock Climbing Leader		
Sea Kayak Leader		
Sea Kayak 1 Upgrade	\$290	
Sport Climbing Endorsement		
Canoe 1	_	
Cave 1		
Rock 1	\$545 - \$595	
Sport Climbing Instructor	- \$545 - \$595 	
Kayak 2 – Class 3 River MMt		
Kayak 2 – Skills Instruction		
Alpine 1		
Bush 1 & 2		
Canyon 1 & 2		
Cave 2 \$730 - \$780		
Kayak 1		
Rock 2		
Sea Kayak 1 & 2		
Alpine 2	\$930	

The course calendars for Training and Assessments can be found at www.nzoia.org.nz. Members are notified of updates to the calendar via the NZOIA 4YA - our weekly email.

#### **Booking for an NZOIA Assessment, Training or Refresher Workshop**

- 1. Go to www.nzoia.org.nz
- 2. Check out the Syllabus & Assessment Guide, if you are applying for an assessment then make sure you meet all the pre-requisites.
- 3. On the course calendar, find the event you want to apply for (you will need to be logged into your member profile) and select 'Apply'. Upload your logbook, summary sheet, first aid certificate and any other required documentation to your application. (NB: Non-members can attend Training Courses)
- 4. Applications close 6 weeks before the course date.
- 5. After the closing date we will confirm that the course will run.
- 6. If we cancel the course we will refund all fees.
- 7. If NZOIA cancels a course, you will receive a full refund/transfer of your fee. If you withdraw before the closing date, you will receive a full refund of your fee.
- 8. If you withdraw after the closing date of a course, the fee is non-refundable. It is transferable under exceptional circumstances (e.g. bereavement, medical reasons), medical certificates/other proof may be required. Contact admin@nzoia.org.nz for more details.

#### **Further Information**

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Details of courses run by NZOIA, pre- requisites and online payment are all	
available at: www.nzoia.org.nz	C

TRAINING COURSES				
Course Duration	NZ0IA members	Non - members		
1 day courses	\$200	\$315		
2 day courses	\$400	\$515		

#### Courses by special arrangement

It is possible to run assessments on other dates. You will need a minimum of 3 motivated candidates and the date of when you would like the course to be run. Go to the FAQ page on the website www.nzoia.org.nz/faq#custom for details on how to arrange a course. Course Costs: all courses run by NZOIA are discounted for members.





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PLUS a percentage of your purchase supports NZOIA. \* Discount is off RRP, not to be used in conjunction with any other discount, special or offer. Some exclusions apply. 

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www.nzoia.org.nz

## PLANTING THE SEEDS OF ADVENTURE



#### Photos supplied by Kaiapoi High School

Profiles of organisations are welcomed for the back page series "Planting the Seeds of Adventure". Contact editor@nzoia.org.nz



