Kia ora koutou! Welcome to the ngahuru (autumn) edition of our newsletter.

In the December edition of the newsletter, I committed to seeking out Te Reo words and phrases each month. In the process, I have discovered some informative resources that I would like to share NZES members.


cont. overleaf

**ILLUSTRATE ECOLOGY**

*Tussocks rise from the ashes. Tussock grassland species of the genus Chionochloa have been referred to as being eternal by Prof. Allan Mark (University of Otago, Dunedin, NZ). Here (in the Kaimanawa Range, Central Plateau, North Island, NZ), red tussocks (Chionochloa rubra) survive, recover and eventually flourish after wildland fires despite having lost most of their aboveground biomass and alterations to soil properties following fires. November 2012. Photo: Matthew Aaron Krna, PhD in Ecology from Massey University, Palmerston North, NZ.*
from p. 1.


- Finally, the Landcare Research Manaaki Whenua information on Māori bird names has some fascinating insights into the variety of names used for birds. [http://www.landcareresearch.co.nz/science/plants-animals-fungi/animals/birds/biodiversity-measures/explainers/maori-bird-names](http://www.landcareresearch.co.nz/science/plants-animals-fungi/animals/birds/biodiversity-measures/explainers/maori-bird-names)

In this edition in, we build on our ongoing theme of science communication with a piece from Josie Galbraith on the power of visual communication in science. Our current president, Clayson Howell, pays tribute to a past president, John Sawyer and Laura Young writes about her mountain encounters. We also have a couple of great book reviews and all the usual news and notices. Sadly no postgraduate profiles in this edition. If you are a student and you haven’t written something about your work, please think about making a contribution.

I’ve started shoulder-tapping people for pieces but I’m always happy to receive unsolicited pieces so do get in touch.

Ngā mihi,
Cate Macinnis-Ng

---

**OBITUARY – JOHN SAWYER**

**John W.D. Sawyer. 1 November 1968 – 6 November 2015.**

John Sawyer died unexpectedly of a heart attack on 6 November 2015 in the place he described as his Turangawaewae, the Isle of Mull in the Inner Hebrides, Scotland. He was with Karlene, his New Zealand partner of 10 years and it is clear that his 20 years in New Zealand had had a profound effect on him. It is equally clear that his incredible energy affected many ecologists here.

I first met John in 1999 when I volunteered to compile a pest plant atlas at the Wellington Conservancy of the Department of Conservation. Like many before and after me, I was surprised to find how knowledgeable a relatively recent arrival from the UK was on both the native and exotic flora. After I volunteered for three weeks, John used his considerable persuasion skills to get funding from somewhere, and I started getting paid. John gleefully told me over a beer that he had to volunteer for seven months when he arrived. I later moved on to other contracts within DOC. In the early days these projects took the ideas that John had made work for Wellington and implemented them at a national scale. John continued to have a large influence on the DOC Science & Research team and other Conservancy Botanists.

John became Vice President of the New Zealand Ecological Society in 2003. He then went on to become president for two years and a council member for a further four. John was instrumental in establishing the Ecology in Action award in 2005, which recognises practitioners of ecological principles. He was later was the recipient of the award in 2011. Starting in 2003 he was also a driving force behind the establishment of the New Zealand Plant Conservation Network.

John was a firm believer that people will believe you if you write a book about it, and was overflowing with ideas for books. He was also very good at convincing a wide variety of people to collaborate. He co-authored an undergraduate textbook *An Introduction to Applied Biogeography* with Ian Spellerberg. He wrote books on lower North Island orchids, mistletoes, clematis, and weeds with Jeremy Rolfe and others. He worked extensively with Peter de Lange especially on the flora of the Chatham islands. Perhaps most significant was his role as a catalyst for the 2009 book *Threatened Plants of New Zealand*, again with Peter de Lange as lead author with Peter Heenan, David Norton, Jeremy Rolfe and John as co-authors.
Many ecologists have been practising their own brand of gourmet tramping for years, but John wrote a cookbook about it. He loved testing new recipes on friends and I enjoyed his hospitality on numerous occasions, often with a bottle of wine left over from some sponsored book-launch. On one memorable trip I arrived mid-afternoon with Jonathan Boow and Tom Belton to Shamrock hut in the Orongorongo valley. John had been keen to take a side-trip to the summit of Mt Matthews and back, but then he and Karlene became distracted by a very large billy of mulled wine. A half-prepared gourmet feast covered two tables and a great night was had by all.

That those of us lucky enough to have known John were all shocked by news of his passing especially as he was preparing to become a father. This would have been a new role for John but one that I am sure he would have loved—and probably would have written a book about. “Gourmet tramping for babies” perhaps... Although he and Karlene had decided that the UK would be their permanent home from 2013, his friends in New Zealand will still miss him greatly.

Clayson J. Howell. President New Zealand Ecological Society

FEATURE ARTICLE

Science in Shiny Wrappers
Josie Galbraith, PhD student, University of Auckland @josieanya

Something all scientists share is an inherent understanding that science is a worthy pursuit. That knowledge, like pie, is worth seeking. We are prepared to read paper after paper—countless paragraphs of text—for the betterment of our understanding. But even amongst ourselves, we usually draw the line at reading literature outside our fields of interest. And fair call—aın’t nobody got time for that. Papers outside our broad disciplines may as well be written by aliens. Alien subject matter, alien concepts, alien terminology. Crossing the disciplinary event-horizon doesn’t exactly make for easy digestion or light bedtime reading.

What we all want, what we really really want, is for someone to hand us delicious bite-sized science in shiny wrappers. Sweet juicy visual treats, like graphical abstracts, infographics and animations (check out this sweet as bird feeding animation—yeah you got me... it’s mine). Data visualization and visual storytelling aren’t new concepts, but in this digital age they have become more important than ever. Increasingly, journals across the spectrum are recommending or even requiring visual summaries of research. Visual representations of research are many more times effective at engagement than legions of characters lined up on a page (there’s a graphic of that). Do not underestimate the power of the drawn lines.

You’ve probably stopped reading already to check out this awesome graphical summary or #ArtStract from deciphered.com
What’s more, this kind of science is also perfect to share with all manner of non-scientificy folks. Science communication is, after all, a hugely important part of science and part of our responsibility as scientists (scidev.net editorial, Brownell et al. 2013). Not all of us are comfortable giving interviews via conventional channels (TV, radio, articles). Furthermore, mainstream media have a tendency to cover only those articles that are sexy, sensational, or published in the top journals. But, with the age of social media, opportunities for communicating science to the world in graphical ways have skyrocketed and we can do it ourselves. We don’t have to wait to be asked. Make the most of it. Turn your fancy words into shiny pictures, because pictures are great. Great for society and great for our own science.

It is a vastly useful academic exercise to distill your research down into a single picture or a 60-sec animation. What is it that really matters about your study? What are the vital pieces? And these days we need to do more distilled. While opportunities to communicate science are increasing, attention spans are shrinking. Sharing scientific findings graphically is the perfect answer.

A final comment: don’t let artistic skill or lack thereof stand in your way. Graphics software is pretty awesome these days (your institution may already have a license for Adobe Illustrator, or there are many free apps, too). Failing that there are people out there to help you with the research make-over you’re looking for (shout out to deSciphered and maybe future me).

This piece first appeared on the Ecology Ngātahi blog (aucklandecology.com). Reproduced with permission.

Unexpected animal encounters in the mountains: Musings of a modern day naturalist

By Laura M. Young

I’ll never forget going hunting in the mountain ranges between Lewis Pass and the St James, glassing the tops for red deer and chamois, when through the corner of my binoculars I caught a glimpse of a bunch of slow-moving, large animals. For a moment I thought I’d got on to the motherload of some form of ungulate to go after (hunted wild meat is the only meat I eat, so life depended on it)! Alas, on second glance they certainly didn’t have four legs, they weren’t the right colour and they had extremely long black necks. A flock of Canada geese ambled their way effortlessly up the mountainside through the tall tussocks towards a subalpine tarn. That was not the only time I’ve noticed this phenomenon. Another unexpected encounter took place when I arrived with my team mates at a DOC Tier 1 monitoring plot high up in the Raglan Ranges dividing the Marlborough and Nelson regions. At 1700 m near the head of a stunning side valley, at least 30 of these large birds stood around in a near-pristine alpine stream. It appeared the Canada geese had made themselves right at home in this area, littering the place with their distinctive elongated turds. Immediately I scoured around for weedy species and sure enough, found several exotic herbs that almost certainly had been recently introduced there – perhaps by geese, or perhaps by the three giant red stags that were hiding out behind a large boulder on the edge of the adjacent scree slope. Now, I know for certain just how capable both these species are of dispersing intact seeds of native and exotic plant species around the landscape (I dissected thousands of faecal samples from many animal species as part of my PhD on alpine plant seed dispersal).

Everyone knows that Canada geese have become a huge problem in some areas, especially in agricultural landscapes. They’ve been known to foul waterways due to their large numbers and damage crops. Yet what do we know about their impact in alpine systems? One could speculate on some of the roles Canada geese may play: obviously disturbance, nutrient enrichment and weed dispersal occur but perhaps they may also play some positive roles such as dispersal of native plants or fill a niche left by extinct native grazers?

There are also other species that we underestimate or just don’t understand at all well, spreading their wings so to speak and venturing high into the big mountains. Now let’s talk about hedgehogs… nowhere can I find any information to suggest that: (a) hedgehogs hang out in alpine areas, or (b) climb trees, or (c) eat mostly fruits in the peak fruiting season, yet I know all these things are true. Two seasons of counting hedgehog poops informed me that during the height of the montane fruiting season, hedgehogs preferred fruit over invertebrates (with the odd lizard thrown in for protein), and most of these fruits were Coprosma propinqua. If you know your Coprosma’s, you’ll know that C. propinqua come in the form of reasonably tall shrubs with a decent stem and are often a good 1-2 m tall. Not too many of their fruits litter the ground below the canopy – certainly nowhere near enough for hedgehogs to have sought out to eat (and then pass as hundreds of seeds in their poops). The only feasible answer of course is that hedgehogs climb trees! I do realise I need to back this up with some video evidence for my theory to be accepted by the masses, so I am planning some hedgehog tree climbing trials and will use my infrared camera to capture this. And yes, I also recorded hedgehog poops right up above treeline too, so they seem to be making the mountains their home now too.

Another underestimated mammal in the alpine zone is that large gentle looking creature we occasionally frighten out from behind a tussock – the European hare. They look so cute and innocent, incapable of causing damage because we usually only see one or two at a time if we are lucky. We often don’t even see them at all and only know they are there from their pellets. And then they run for their life when we disturb them and we never get to see what they’re actually eating! However, I believe hares are those silent but violent (well, not really) types. Because they’ve been
around a long time and have never really been the subject of dedicated, widespread control. It seems to me that in alpine areas, hares have already eaten out some of the most palatable plant species to low numbers and the structure and composition of some alpine communities today is perhaps by no means an indication of what they were like B.H. (Before Hares). Of course it’s very difficult to tease apart the impacts of hares relative to alpine-dwelling ungulates or possums, but this warrants further study (if you’re willing to build some snow-proof exclusion fences and check them every year!) There’s really only one decent study on hare diet (by John Flux in the Nelson Lakes area) so there is massive scope for better understanding the ecological impacts of hares.

And what business is it of pigs to suddenly enter our high mountain areas and dig them up anyway! See photo, left, showing before and after pig damage high in the Tasman Wilderness Area of Kahurangi National Park. Similar damage is evident elsewhere, for example, flying over tussock grasslands in the Hawkdun Range and the Molesworth, pigs can be seen scattering under the chopper with large areas rooted by these ecosystem engineers (of the worst kind).

Geese, hedgehogs, hares and pigs are just a few examples of animals we know are out there but don’t really think about that much as pests in mountain ecosystems. It’s not a new or difficult concept, but perhaps it is time for us to take a closer look and ask ourselves what we think the new “possums, stoats and rats” might be in say 50 years time. Which of these already-present animals have been simply lying “dormant” and waiting for their time to come to invade into and adapt to susceptible mountain ecosystems? Should we be watching more carefully for our next serious animal pests just as we do for new weeds? It may well be to our peril if we ignore them.

Animals are of course constantly on the move, invading into places they haven’t been before (just the nature of most creatures on earth). But while we as conservationists are trying to limit or reverse this movement, we are often competing with the ever-increasing pressure of hunters moving different species of deer, as well as pigs, around the landscape.

Of course it’s not just mountain systems we should think about, I just use them as one example of a potentially much wider issue. But what about those roosters, for example, that people dump on roadsides, simply because they’re not wanted in the household chicken coop? Are they staying put on those road verges, rarely venturing into the bush, or are they becoming more adventurous and exploring further afield? Should we be on the lookout for feral bush chooks and asking questions about what impacts they’re having on our native ecosystems, especially on invertebrates? Just some food for thought.

Laura has worked widely in the South Island mountains for over a decade, undertaking a MSc on Aciphylla reproductive biology then a PhD on seed dispersal of alpine plants, as well as being involved in many vegetation surveys and kea monitoring. She is also a keen trapper and hunter who fancies herself as a bit of a modern-day naturalist, keen to share her reflections with fellow ecologists.

**ACROSS THE TASMAN**

**News from the Ecological Society of Australia (ESA)**
The annual ESA conference will be held in Fremantle Perth on 28 November to 2 December 2016. Further details are available at the conference website [http://www.esa2016.org.au/](http://www.esa2016.org.au/)
THE DRAMA OF CONSERVATION

Book review By R E Brockie


This is an extraordinary compilation of the dramatic natural and human history of the Pureora Forest in the King Country. It concentrates mainly on the northern end of Pureora Forest Park, but its purview stretches down the western side of Lake Taupo as far south as Waiouru.

Separate chapters describe the volcanoes, the forest, native wildlife, Maori and European exploitation of the bush, the activities of 44 logging mills in the district, Forest Service management, the Forest Village and its community, conflicts between loggers and conservationists, political intervention and the expensive compensation agreements that ensued, the research and control initiatives undertaken to protect the forest from foreign animal pests, and the contemporary multiple use of the Park, including public recreation (tramping tracks, huts, campsites and the wonderful cross-country cycle route, the Timber Trail).

With 26 maps, innumerable tables, graphs, detailed references, and cross references, The Drama of Conservation observes all the conventions of scientific publication, but is charmingly written, and enlivened with many historical images, cartoons, accounts or photos of saw-doctors, log-haulers, tractor drivers, foresters, and a visiting Prime Minister. The writing is also vivified with dramatic subtitles such as ‘Crunchpoint: Sitting in the Tree Tops’, ‘High Tension in the Village’, ‘Shock Announcements’.

This substantial book concludes by drawing from the Pureora experience to suggest strategies for resolving other conflicts of interests between forest exploiters, conservationists and the public.

Copies can be ordered from the DOC Hamilton office by emailing nritchie@doc.govt.nz. Price in New Zealand only is $60 (full colour, softback).

The E-version or hardback is available from Springer Verlag at http://www.springer.com/us/book/9783319184098

STEWART ISLAND RAKIURA NATIONAL PARK

Book review by James Russell

Stewart Island Rakiura National Park – Neville Peat
Revised edition 2015

Stewart Island Rakiura National Park is a medium length and format book (72 pages), which Neville Peat has completely revised in 2015. Although it may not appear so to those not from the island, much has changed in the 15 years since the first edition of the book. Neville writes in a matter of fact style presenting an exhaustive collection of historical and contemporary facts for the reader, and probably something new for everyone. For example I didn’t know the island had a 6 hole golf course, and was surprised to read most tourists stay only a day.

The book is targeted at first time visitors to the island, with little prior knowledge of the island. Useful maps are included although the Oban layout is three dimensional is pretty but distorting. The NZ map at the start similarly dwarfed the North Island in to the distant (perhaps reflecting a southern cultural view of New Zealand’s shape). The ecology of the island has a good coverage for novices, although I thought it cruel to introduce kakapo first given the audience of the book will likely not ever see them during a visit.

The gorgeous photos in the book betray a sense of consistently sunny weather I doubt actually exists, although in my imagination draws me to the region. Contemporary issues such as predator control and climate change are touched on, along with the delisting of South Island kokako from extinct and potential rediscovery of greater short tailed bats. The book is recommended reading for any student about to embark on fieldwork on the island, and it’s a perfect companion to throw in the backpack for your first visit to the island.
BOOK REVIEWS

THE DRAMA OF CONSERVATION

Book review By R E Brockie


This is an extraordinary compilation of the dramatic natural and human history of the Pureora Forest in the King Country. It concentrates mainly on the northern end of Pureora Forest Park, but its purview stretches down the western side of Lake Taupo as far south as Waiouru.

Separate chapters describe the volcanoes, the forest, native wildlife, Maori and European exploitation of the bush, the activities of 44 logging mills in the district, Forest Service management, the Forest Village and its community, conflicts between loggers and conservationists, political intervention and the expensive compensation agreements that ensued, the research and control initiatives undertaken to protect the forest from foreign animal pests, and the contemporary multiple use of the Park, including public recreation (tramping tracks, huts, campsites and the wonderful cross-country cycle route, the Timber Trail).

With 26 maps, innumerable tables, graphs, detailed references, and cross references, The Drama of Conservation observes all the conventions of scientific publication, but is charmingly written, and enlivened with many historical images, cartoons, accounts or photos of saw-doctors, log-haulers, tractor drivers, foresters, and a visiting Prime Minister. The writing is also vivified with dramatic subtitles such as ‘Crunchpoint: Sitting in the Tree Tops’, ‘High Tension in the Village’, ‘Shock Announcements’.

This substantial book concludes by drawing from the Pureora experience to suggest strategies for resolving other conflicts of interests between forest exploiters, conservationists and the public.

Copies can be ordered from the DOC Hamilton office by emailing nritchie@doc.govt.nz. Price in New Zealand only is $60 (full colour, softback).

The E-version or hardback is available from Springer Verlag at http://www.springer.com/us/book/9783319184098

STEWART ISLAND RAKIURA NATIONAL PARK

Book review by James Russell

Stewart Island Rakiura National Park – Neville Peat

Revised edition 2015

Stewart Island Rakiura National Park is a medium length and format book (72 pages), which Neville Peat has completely revised in 2015. Although it may not appear so to those not from the island, much has changed in the 15 years since the first edition of the book. Neville writes in a matter of fact style presenting an exhaustive collection of historical and contemporary facts for the reader, and probably something new for everyone. For example I didn’t know the island had a 6 hole golf course, and was surprised to read most tourists stay only a day.

The book is targeted at first time visitors to the island, with little prior knowledge of the island. Useful maps are included although the Oban layout is three dimensional is pretty but distorting. The NZ map at the start similarly dwarfed the North Island in to the distant (perhaps reflecting a southern cultural view of New Zealand’s shape). The ecology of the island has a good coverage for novices, although I thought it cruel to introduce kakapo first given the audience of the book will likely not ever see them during a visit.

The gorgeous photos in the book betray a sense of consistently sunny weather I doubt actually exists, although in my imagination draws me to the region. Contemporary issues such as predator control and climate change are touched on, along with the delisting of South Island kokako from extinct and potential rediscovery of greater short tailed bats. The book is recommended reading for any student about to embark on fieldwork on the island, and it’s a perfect companion to throw in the backpack for your first visit to the island.

Pureora residents expressed their reactions to the successful anti-logging campaign by naming the road to the local dump “Stephen King Place”. Stephen thought it was a wonderful joke. Bob Brockie (2013)
THE NOTICEBOARD

TWO FUNDED PHD POSITIONS—MODELLING ECOSYSTEM CHANGE AT THE UNIVERSITY OF AUCKLAND


Apply By: Friday, April 15, 2016 - 00:00

Professor George Perry has two funded PhD positions available in the following areas:

- Development of agent-based models of human-fire interactions in NZ’s prehistoric period—this will expand research in Perry et al. 2012 Global Change Biology
- Potential for state change in contemporary NZ forest ecosystems affected by fire and invasive weed and mammal species—this will expand research described in Perry et al. 2015 in Ecosystems
- Interactions between range dynamics and life-history traits (e.g. dispersal) and how they have influenced response to past climate change (e.g. the Holocene transition)—this will draw on work such as McGlone et al. (2010) NZ Journal Ecology and the pollen records described in Newnham et al. (2013) QSR
- Extinction dynamics in networks, especially in the context of mutualistic relationships and spatial meta-networks (that is, spatially structured networks of networks).

The projects will be built around simulation modelling and would suit someone with experience in ecological modelling with a strong interest in the past and the use of palaeoecological information to improve understanding of contemporary ecosystems. The students will be based in the School of Environment at the University of Auckland and supervised by Prof. George Perry, and will work closely with other project partners especially at Landcare Research. Please direct any academic questions about these projects to George Perry.

Scholarship funding (living costs, tuition fees and research costs) is available for three years, and is open to both domestic and international candidates. Applicants will need to meet the University’s criteria for entry into the PhD programme.

Please apply by sending your application to George Perry by e-mail as a single document (pdf preferred), including a statement outlining your suitability for the post and which project interests you, a detailed CV, and contact details of two academic referees to George Perry.

ADVANCED STUDY FOR RESTORATION PRACTITIONERS AND POSTGRADUATE STUDENTS

Postgraduate course for students of ecology and environmental science, being offered 9–24 August 2016 at Lincoln University.

Includes:

- South Island of New Zealand: coast-to-coast across the Southern Alps.
- A showcase of field research on the re-integration of biodiversity into human-modified and managed ecosystems.
- Pollution mitigation, monitoring, phytotechnologies and ecosystems services.
- Hands-on experience of active restoration projects: Canterbury and West Coast.
- Field trips, lectures and seminars led by local and international experts.

Limited places available.

Contact person for scientific or technical questions: Prof. Nicholas Dickinson
Email: nicholas.dickinson@lincoln.ac.nz
Phone: 03 423 0741

BRAIDED RIVERS WORKSHOP

FREE workshop for braided river practitioners, stakeholders, and students. Includes lunch, morning and afternoon teas.

Interested members of the public welcome

“On the plains, virtually all we see above-ground today has been introduced in the last 200 years. Only the braided rivers still retain a reasonable component of their original indigenous ecosystems. The most obvious component of that is a range of bird species—the majority of which are threatened.”

Sixteen presenters from: Department of Conservation, Landcare Research, University of Canterbury, University of Otago, Environment Canterbury, Wildlife and ecology consultants and NGOs, Community conservation groups

Lincoln Event Centre
15 Meijer Drive,
Lincoln 7608,
New Zealand

Tuesday, 31 May 2016, 8:30 a.m to 5:00 p.m. (doors open at 8.15 AM)

See http://braid.org.nz/about-braid/workshop-2016-programme/ for registration information and further details
JS WATSON TRUST FUNDS
The trust is administered by Forest and Bird and funds conservation projects of groups and individuals for up to $5000 each and may be suitable for small research projects and other activities.

Applications close 15 April 2016.

DONATE NOW!
KAURI FUND FOR ECOLOGICAL SCIENCE
We invite you to help grow the science of ecology in New Zealand by contributing to the NZES Kauri Fund. This fund was established in 2001 to provide resources for initiatives that assist the development of ecology and ecologists in New Zealand. As the Fund grows, it will play an increasingly critical role in advancing the Society’s goals and fund exciting new initiatives for New Zealand ecology.

Please consider a donation to the Kauri Fund, whether $10, $20 or $50, now or when you renew your subscription. You can contribute in two ways:
- Send a cheque made out to: “NZES Kauri Fund” to the New Zealand Ecological Society, PO Box 5075, Papanui, Christchurch 8542.
- Internet banking: credit to New Zealand Ecological Society, account 06 0729 0465881 00, identify the payment as “Kauri Fund”.

UPCOMING MEETINGS

9th Australian Conference on Grassland Invertebrate Ecology
Biology, ecology and management of pest and beneficial invertebrates.
4–9 April 2016
Western Sydney University.
Conference website: www.grassbugs.com.au

Society for Conservation Biology 4th Oceania Congress
The Society for Conservation Biology (SCB) Oceania will be hosted by University of Queensland Centre for Biodiversity and Conservation Science (CBCS)
July 6-8, 2016
Brisbane, Australia.
More details: http://brisbane2016.scboceania.org/

Island Biology 2016
An international conference on island evolution, ecology and conservation.
18–22 July 2016
University of Azores, Terceira, Azores
http://www.islandbiology2016.uac.pt

Wild Places
The Environmental Defence Society’s 2016 conference will explore New Zealand’s Wild Places.
10–11 August 2016
Viaduct Events Centre, Auckland
http://www.edsconference.com/

Combined Australian Entomological Society 47th AGM and Entomological Society of New Zealand Conference
27–30 November 2016
Rydges on Swaston, Melbourne, Victoria
SUBMISSIONS TO THE NEW ZEALAND ECOLOGICAL SOCIETY NEWSLETTER

Contributions from NZES members are sought in the form of:
- **Feature articles** on topics of interest to NZES members
- **Event announcements**, for listing on the Noticeboard
- **Conference reports**, on conferences of ecological relevance
- **Images**, for Illustrate Ecology on the newsletter cover
- **Ecology news from overseas**
- **Book reviews**
- **Post graduate profiles**

**Feature articles** can be up to 1,000 words accompanied by up to four images.

**Conference reports** should be around 600–800 words with up to three images.

**Illustrate Ecology images** should be accompanied by a short title and a caption explaining the ecological concept illustrated.

Unless indicated otherwise, the views expressed in this Newsletter are not necessarily those of the New Zealand Ecological Society or its Council.

Content for the June 2016 issue of the NZES Newsletter is due by Friday 10 June 2016.

**Book reviews** of up to 1,000 words are now published in the newsletter. If you would like to review a book of interest to NZES members, please contact the newsletter editor.

**Postgraduate profiles** of current or recent PhD, MSc, or Honours students should be no more than 200–300 words and include a 2-sentence blurb about yourself, a summary of your thesis written for a general scientific audience, and a photo and caption related to your research.

Please do not use complex formatting—capital letters, italics, bold, and hard returns only, no spacing between paragraphs. All photos should be emailed as high resolution (300 dpi) jpg files.

All contributions and enquiries can be emailed to Cate Macinnis-Ng, the Newsletter Editor: newsletter@newzealandecology.org

JOIN THE NEW ZEALAND ECOLOGICAL SOCIETY

For information on joining the society and renewing a membership, please click the 'join' button in the top toolbar of the society website, newzealandecology.org.