



# NEW ZEALAND ECOLOGICAL SOCIETY

## Newsletter

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No. 138, December 2011

### FROM THE EDITOR

A series of recent events has convinced me of the importance of getting sound ecological knowledge out into the public domain. John Key's BBC interview in which he likened ecologists to lawyers was a shocker. A West Coast holiday with anti-1080 "Poisoning Paradise" posters lining the otherwise empty roads was hardly surprising. The "Ban 1080" election hoardings placed by vote-hungry (or possibly just plain ignorant) politicians were rather more galling. A random conversation on a flight home from Auckland with a stranger misinformed about 1080 but unprepared to read about the facts (good and bad) left me feeling particularly frustrated. Perhaps it was a manifestation of the phenomenon observed by social scientists that people tend to only take on board new information that supports the viewpoint they already hold.

So what can we do as individual ecologists and as a society? In the short term, it's policy makers, politicians and other decision makers that we need to influence. Some politicians never let the facts get in the way of a good story, so maybe these ones are a lost cause. But I'm pleased to say that Fleur Maseyk has taken on the role of Submissions Officer for the NZ Ecological Society, so we will now be able to respond much more effectively to important issues. In the long term, we need to dramatically improve the ecological knowledge of the general public. Ultimately, the New Zealand public will decide the future of our country by how they vote and their submissions during public consultation. I've always said we need to indoctrinate children when they're young—I'll be keeping that in mind when doing my Christmas shopping this year!

### ILLUSTRATE ECOLOGY

#### 'Ecology & Society'



*Green Turtle (Chelonia mydas) observed by snorkelers in Akumal, México, which is an area for research, conservation and public awareness in order to protect natural resources and natural heritage. This photo was the overall winner of the British Ecological Society Photographic Competition 2011 (see article on p. 2). Photo: Benjamín Magaña-Rodríguez*

Debra Wotton  
*Landcare Research*  
*Lincoln*  
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*The deadline for submissions for the next issue of this newsletter is Friday 9 March 2012.*

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## NZ ECOLOGICAL SOCIETY CONFERENCE 2012

Lincoln University

25–29 November 2012

*Mark this date in your diary now!*

The conference will celebrate 50 years of Ecology teaching at Lincoln University. Details of the conference theme, symposia and registration will be available in early 2012.

### ARTICLES

#### VICTORIA UNIVERSITY STUDENT WINS BRITISH ECOLOGICAL SOCIETY PHOTO COMPETITION

Benjamín Magaña-Rodríguez, a PhD student at Victoria University, recently won three categories in the 2011 British Ecological Society Photographic Competition. As well as being voted overall winner with a photo of turtles taken in Mexico, he won the “Ecology in Action” section with a photo taken during field work for his PhD based in Molesworth Station, NZ. Benjamín also scooped first prize for the “Whole Organisms & Populations” category. Benjamin recently submitted his PhD thesis investigating whether New Zealand plant species’ distribution patterns are correlated with ecological traits, and was supervised by Dr Stephen Hartley.

#### Overall Winner and “Ecology & Society” Category Winner

*The photo is on the front page of the newsletter.*

“I took this picture in Akumal, México, early 2011 while snorkelling. I’ve been fascinated on species’ distribution either in land or in the ocean since I was very young. Akumal is a beach on the coast of Quintana Roo with seagrass beds growing in the bay. These seagrass patches attract green turtles (*Chelonia mydas*) which graze on them and in turn, these localised groups of turtles attract humans that observe them as they feed. What I wanted to illustrate with the picture is the accessibility of this place and the interaction of humans with turtles in this natural environment; you just need a pair of fins and a mask to swim a few metres offshore to see these amazing animals. I was stunned by how many people came out of the sea with a smile on their face after the fabulous encounter with the turtles. My hope is that by interacting with these wonderful creatures tourists and residents will raise their awareness of sea turtle biology and conservation issues.”

#### “Ecology in Action” Category Winner

“The picture was taken in Molesworth Station, South Island of New Zealand in 2010 while doing my PhD field work. Every time I have the opportunity of being in the field, I feel very lucky to enjoy the dramatic scenery and the isolation of the place. What I wanted to illustrate with this picture is the scale-dependency of the scenery; when you look at the background you see big mountains and clouds, when your look into the foreground you see the intricate distribution of small plants within the 1 m<sup>2</sup> quadrats. This picture represents in some way one of the questions I asked in my PhD: Do the distribution patterns of these plants change as we move from fine-scales to coarse-scales?”



Surveying grasslands in Molesworth Station, New Zealand. The photograph was taken using the High Dynamic Range (HDR), which is a set of techniques that allow a greater dynamic range of luminance between the lightest and darkest areas of an image.  
Photo: Benjamín Magaña-Rodríguez

### “Whole Organisms & Populations” Category Winner

“I shot this picture in Akumal, México as well, the same day I took the picture of the turtle. This place also attracts southern stingrays (*Dasyatis americana*); I saw some of them feeding on the bottom. After several attempts, I got this shot in the right moment when the ray was removing the sand to feed on small creatures. I think what I also like to illustrate in my pictures is the behaviour of the species and in this occasion, I was lucky enough to get up-close to this ray to capture a moment of its feeding behaviour.”



*Southern stingray (Dasyatis americana), Akumal, México. Since their prey is often buried in the sand, they un-bury it by forcing streams of water out their mouth or flapping their fins over the sand.*

*Photo: Benjamín Magaña-Rodríguez*

### ARE RATS IN NZ GETTING BIGGER?

*By Mark Seabrook-Davison, Auckland Council*

New Zealand has three species of rat; Norway rat *Rattus norvegicus*, Ship rat *Rattus rattus* and Kiore *Rattus exulans*. As I am talking to a NZ Ecological Society audience of ecologists, I do not have to describe the damage these invasive species have wrought on our biodiversity.

I have been involved in a longitudinal rodent study at Massey University, investigating aspects of the behaviour of rats. As an aside to the aims of the research, I have noticed some of the individual rats encountered have been very large.

The largest Norway rat I have encountered had the following measurements: 300 mm nose to tail base (HBL); 500 mm nose to end of tail (refer to Plates 1 & 2). Please note, a section of the tail has been removed.



*Plate (1) Lateral view of Norway rat *Rattus norvegicus*.*



*Plate (2) Ventral view of Norway rat *Rattus norvegicus*.*

In the Handbook of NZ Mammals, King (1995) describes *Rattus norvegicus* as normally having a max head-body (HBL) length of between 200–300 mm. The rat shown in plates 1 & 2 is at the upper end of this range. The interesting aspect of this rat was its very large girth of 250 mm.

This is the largest rat I have recorded but I have also recorded rats within the range 230-280 mm. Although my suspicions are anecdotal and have not been quantified, I am wondering if rats in New Zealand, specifically Norway rats are getting larger. There is evidence of rats preying on species such as fantails and thrushes but if rats are increasing in size, it is likely these larger rats will be preying on larger avian species. This may have consequences for species which were previously considered too large for rats to predate.

## TAURANGA HORTICULTURALIST WINS LODER CUP

Tauranga horticulturalist Mark Dean has been awarded one of the country's highest conservation honours, the prestigious Loder Cup for 2011.

Minister of Conservation Kate Wilkinson said "Mark has made an outstanding contribution throughout his lifetime working in the horticulture industry specialising in native flora. He has spent much of the past 30 years inspiring others as an advisor, teacher and role model both within the horticulture industry and in community conservation projects. This prestigious Cup is awarded for outstanding service and commitment to the protection of New Zealand's native plant species. Mark is a conservation champion and it is a pleasure to award him the Loder Cup on the first day of Conservation Week. He joins other worthy recipients of this premier conservation award and it is a most fitting tribute to him for his lifetime contribution to our native plants."

English botanist Gerald Loder donated the Loder Cup in 1926, to honour New Zealanders who work to 'retain, investigate and cherish New Zealand's incomparable flora'. The Minister of Conservation awards the Loder Cup each year to acknowledge achievements in flora conservation.

Mark Dean was nominated for the award by the Nursery and Garden Industry Association. In the late 1970s, in a time when native plants did not have a high profile in ornamental horticulture, he established a nursery business which later expanded and was named Naturally Native New Zealand Plants. It became one of the country's largest native nurseries.

Mark is currently the secretary of Trees for Survival, and chair of the Dune Restoration Trust of New Zealand. He has provided support around the country for setting up and running Maori native plant nurseries. He has been and is currently supporting a number of iwi and hapu projects.

## CONFERENCE REPORT

### Wind Energy and Wildlife Impacts Conference, 2 – 5 May 2011, Trondheim, Norway

*By Gerry Kessels, Kessels and Associates*

Organised by the Norwegian Institute for Nature Research (NINA), this conference provided a forum for exchange focusing on the ecological impact of wind-power generation. This event was the first international conference ever organised around wind energy and wildlife impacts. Since wind farms are regarded as a major source of renewable energy, this conference acknowledged the need for sound expertise on the effects of these infrastructures on wildlife, as well as efficient measures to mitigate these.

Experts from all over the world took the chance to present their current work on how wind-power plants impact wildlife, including research tools, methodologies and technology around mitigation. As Norway is a forerunner in renewable energy including hydropower and wind energy, a major research programme was launched by the country around potential ecological impacts of wind-power, including effects on wildlife populations.

I attended the conference in Norway to expand my knowledge of assessing wind energy impacts, including the monitoring of birds, assessment of wildlife collision risk modelling, behavioural studies and new technological developments to mitigate ecological effects of wind farms. Because wind farms are becoming increasingly important to the energy market in New Zealand, robust ecological assessments are an important component of ensuring renewable power generation in our country is truly sustainable.

Aside from the wonderful Norwegian hospitality and food, the highlights of the conference for me were learning about the novel ways in which ecologists were attempting to determine turbine blade strike, as well as a trip to a nearby wind farm. Perhaps the most interesting attempt to determine blade strike was by a French ecologist who had installed microphones in turbine blades and then fired paint balls (via a paint ball gun) of different weights and at different velocities at the blades in an attempt to duplicate the sounds that bats or birds would make if they hit a blade. If an impact was heard, carcass searches could be targeted at the affected turbine immediately in order to find the victim before it was eaten by scavengers or had decomposed. Interestingly, dogs are now being used as an essential component of carcass searches, being at least 70% more efficient than carcass searches undertaken by humans alone.

I was also fortunate enough to visit Smøla Wind Farm. Smøla is a set of islands about 10km off the north-west coast of Norway. A 68 turbine wind farm was built there in 2005, unfortunately in the middle of an area which was designated an Important Bird Area by Birdlife International in 1989 because it had one of the highest densities of white-tailed eagles in the world. Since the wind farm has been operational some 38 dead sea eagles have found under the wind farm, which have been attributed to collision with turbine blades.

Following on from Norway I have kept in touch with an Australian ecologist who is involved in convening an Australasian wind and wildlife conference. The conference date is set for the 9th of October 2012 and it will be in Melbourne. Calls for speakers will go out around February – March. The focus will also be established by then. The organisers have agreed that it would be great to keep the conference local (i.e., no American or European speakers)

but by local they would like to have some New Zealand representation. NZ Ecological Society members who may be interested in attending or presenting please feel free to contact me: Gerry Kessels – [gerry@kessels-ecology.co.nz](mailto:gerry@kessels-ecology.co.nz)



*Gerry Kessels on the conference fieldtrip to Smøla wind farm, Norway.*



*Sea eagle at Smøla wind farm, Norway. Photo: Gerry Kessels.*

## BOOK REVIEWS

### Practical Field Ecology: A Project Guide

C. Philip Wheeler, James R. Bell & Penny A. Cook.

Publisher: [Wiley-Blackwell](http://www.wiley-blackwell.com)

ISBN-10: 0470694289

ISBN-13: 978-0470694282

Published April 2011

**Reviewed by Mel Galbraith, Unitech Institute of Technology (Auckland)**

*Practical Field Ecology: A Project Guide* is a recently published book offering an introduction to the design of ecological projects and the subsequent interpretation of field data. The authors, C. Philip Wheeler, James R. Bell, and Penny A. Cook, hail from UK institutions, and represent a range of experiences in this field.

Although clearly written with tertiary students as a target market, the comprehensive treatment of ecological sampling warrants the book to be considered as a resource for anyone working in the complex world of ecology, whether student, researcher or decision maker.

The book's contents follow a logical sequence of information required for initiating an ecological field project and seeing it through to completion:

- preparation for a project including all internal and external factors;
- monitoring of the characteristics of the site;
- sampling methodology for both mobile and static organisms (plants, vertebrates and invertebrates) in both terrestrial and aquatic environments;
- analysis and interpretation of data, including statistical techniques;
- report structure and writing styles for presentation of information.

This collation of 'start-to-finish' skills into a single publication is certainly one of the book's strengths.

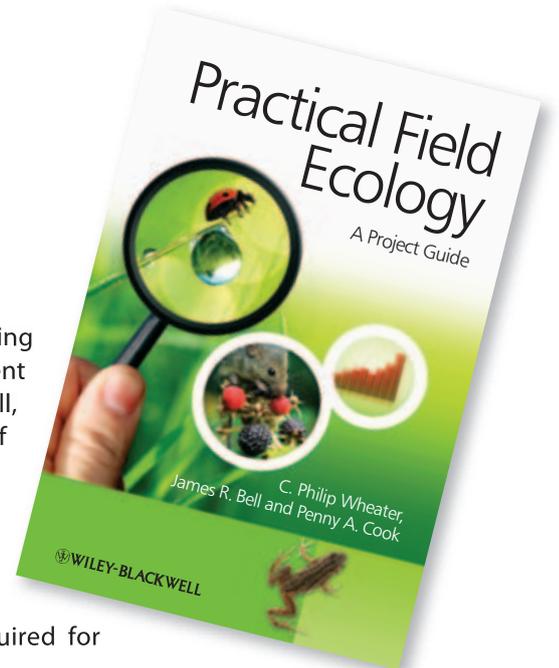
The text is well supported with figures, illustrations, case studies and a glossary, with a style of writing that makes for easy reading. And since it is a science text, there is an impressive list of cited references to follow-up on if needed. The book originates from Europe, so, inevitably, there is information on sampling techniques for organisms that we do not have in New Zealand. This, however, is the only negative aspect I can pick, and an aspect outweighed by the wealth of pertinent information on ecological research.

The authors have made a deliberate decision to avoid highly technical methods. Although technology has made significant advances in data gathering for some aspects of ecology (for example, remote sensing), the authors' emphasis is on tried and tested practical techniques still effective for obtaining data (perhaps also recognising the limited access that students might have to technical methods). The sampling methodologies that are outlined are standardised approaches, and may prove particularly useful for anyone branching out into sampling of taxa beyond that of their normal interest group.

The 14 case studies, written by guest contributors, offer insights into research on specific species. Their information is presented in a standard format — characteristics of an organism and typical sampling problems faced, how the problems were overcome, and advice for researchers. These case studies are not intended to provide instant solutions for research problems, but may help the reader develop a flexible approach to the application of research methodologies.

A similar book targeting terrestrial monitoring in New Zealand is Peter Handford's *Native Forest Monitoring — Guide for Forest Owners and Managers* (ISBN 0-473-06891-5). Although there is overlap, I consider the two books to be complementary. Handford is focused on New Zealand forests, Wheeler et al. cover monitoring from a range of habitats and perhaps more directed at the professional. The inclusion of interpretation and analytical tools, and tips for the presentation of results, guides the reader through to the ultimate completion of a project, which must be the effective communication of research outcomes.

At the recent 25th International Congress for Conservation Biology held in Auckland, a recurring message was the need for, and importance of, basic ecological knowledge to facilitate meaningful modelling and, ultimately, sound management decisions. This book provides an excellent foundation from which to address this message. I recommend this book as a worthy companion to the field ecologist.



**New Zealand's Native Trees**

**John Dawson & Rob Lucas**

Craig Potton Publishing

ISBN 978-1-877517-01-3

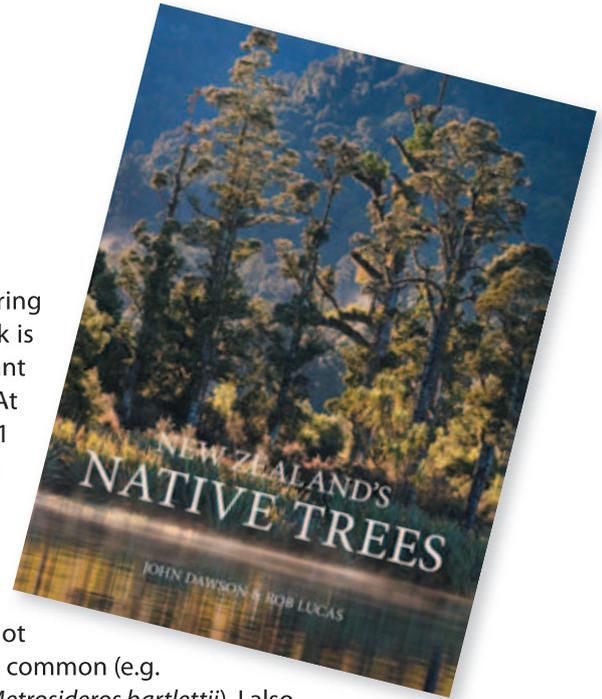
Published September 2011

RRP: \$120 (or \$180 for deluxe edition).

**Reviewed by Jane Gosden, University of Canterbury**

*New Zealand's Native Trees* is a large and comprehensive book covering any native plant that can form a tree at some point in its life. The book is aimed at a general audience, but the detailed descriptions of the plant species included will be equally useful for the scientific community. At 576 pages the book covers over 320 species from 85 genera and 51 families. Most species are illustrated by several photographs covering the whole plant, and close ups of leaves, reproductive parts and other useful identifying features. As you might expect from a Craig Potton Publishing book these pictures are as beautiful as they are useful.

My general plant expertise lies in the alpine flora of the central South Island, but after reading *New Zealand's Native Trees*, I know a lot more about our tree species and forests in general. This book covers the common (e.g. *Weinmannia racemosa*) right through to the extremely uncommon (e.g. *Metrosideros bartlettii*). I also learnt about the strange tree species New Zealand is home to. For example, the tree *Pisonia brunoniana*, whose informative description comes complete with an accurate photo, given the tree's common name: the bird-catcher tree. The photo shows an unfortunate fantail entangled in the tree's sticky seeds. The book is full of interesting text as well as the standard species descriptions, and I definitely feel inspired to explore more of New Zealand's forests after reading this book.



*continued next page.*

*Dacrycarpus*  
POINCELOTIA

*Dacrycarpus* has nine species, ranging from New Zealand, New Caledonia and Fiji through New Guinea to south China. The species are trees or shrubs, and most are tropical. New Zealand has only one species, the largest and tallest of the genus.

*Dacrycarpus* has two types of branchlets long and short shoots. Long shoots continue to extend in length and have openly arranged scale leaves, whereas short shoots have only one growth increment and longer, flattened leaves in two horizontal rows. Short shoots are mostly confined to juvenile plants.

The genus is unusual in the family in having pollen grains with three wings (not flattened) instead of two. Seed cones have a fleshy, warty receptacle and usually a single, inverted, rounded seed that is embedded in a brown or black spatulate seed with a low crest over the top.

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*Dacrycarpus dacrylloides*  
KAHIKATIA, WHITE PINE

The kahikatea may not be New Zealand's largest tree in terms of timber volume—that distinction goes to the kauri—but it is probably the tallest, with some specimens extending 40 m, possibly reaching 45 m. The largest kahikatea trunks can be more than 2.5 m in diameter, but they are mostly up to 1.5 m. Kahikatea can live for at least 400 years and probably for several hundred years beyond that.

Kahikatea is found throughout the country, including Westland Island. It is mostly a tree of lower elevations, up to 400 m, and it favours moist sites, including swamps and moist, fertile, free-draining flood plains and river terraces, often adjoining the swamps. Kahikatea grows best in these moist soils as they are reasonably well aerated. In these sites they can sometimes form dense groves or even extensive forests, to the exclusion of other trees. Such dense stands result from an abundant supply of seeds, which in open spaces germinate into the rounded heads of seedlings maturing as the seedlings.

The capacity of these die at an early stage, and the 400-metre-tall trees, occupy the light as they grow upwards close together. A number of the young trees succumb, and the survivors end up with somewhat tall trunks and often relatively small crowns. As the forest ages and trees die and fall, often, mostly flowering, tree and shrub species become established. Most of these are reasonably shade tolerant, but kahikatea is more demanding of light and gradually die out as their seedlings cannot establish on the shady forest floor. The individuals of later kahikatea generations tend to be more scattered, and have shorter trunks and wider, deeper crowns.

The trunks of older kahikatea often have prominent rounded buttresses at the base. The bark of young trees is smooth and often attractively patterned with patches of cream lichen. The reddish-grey bark of older trees separates off in thick, oval flakes, leaving the trunk with a disrupted, 'barnacle-marked' surface.

The sometimes leuciscent foliage of the seedlings has a fern-like appearance: the leaves are small, attractively curved, widely spreading, angled away from the stem and flattened into two rows. Juvenile trees often have hanging lichens on their branches, giving them a rather ethereal appearance. The juvenile leaves persist for several years, and even on young trees they may be interspersed with the rounded heads of seedlings maturing as the seedlings.

1. A dense stand of seedlings with small leaves flattened into two rows. The lowest branches are here fallen into the crown of an adult tree and above the soil, with the adult leaves. 2. Young tree with characteristic central shape, near Pukari. 3. Mature tree, no longer central, the trunk has rounded buttresses that extend upwards. These usually develop in trees growing on somewhat swampy soil, perhaps suggesting that this kahikatea is a remnant from a swamp forest that was cleared by pasture, south Westland. 4. This large kahikatea, with a trunk 1.5 m in diameter, has significant exposed roots, especially the massive one protruding horizontally to the left, these would support the particularly tall trunk and perhaps allow easier access of air with its exposure into the canopy. White Pine Bush Reserve. 5. Bark of a mature tree with a covering of lichens and the characteristic 'barnacle-marked' pattern that results when thick flakes of bark fall away. Otari.

36 DACRYCARPUS

DACRYCARPUS 37

*New Zealand's Native Trees* follows the 1980 book *The Native Trees of New Zealand*<sup>1</sup> by J.T. Salmon, which is no longer in print. The most obvious difference between the two books is that Dawson and Lucas cover 320 tree species in comparison to Salmon's 220. Dawson and Lucas have used up to date taxonomy for the species covered in their book (yes, *Hebe* is listed as *Veronica*). Where Salmon's book had an in-depth introduction on the role of trees in the forest through processes like energy cycling, and photosynthesis; Dawson and Lucas do not cover these topics. Instead, Dawson and Lucas give better descriptions of the three major plant groups included in the book (conifers, tree ferns and angiosperms). Both books cover important types of forest ecosystems found in New Zealand.

The book took seven years to write, but I suspect many more years went into the photographs. The text is clear and concise, avoiding unnecessary jargon and where botanical terms are included, the comprehensive glossary has them covered. Particularly useful are the close-up pictures of leaves placed against a white background for almost every species included in the book. The more specious genera (e.g. *Coprosma*) or those with similar looking species (e.g. *Sophora*) have sections where leaves for all the species are compared side-by-side to further aid in their identification. Each genus is introduced with a short description outlining its status in New Zealand. Families are given for every genus but there are no descriptions of these. However, I believe that such descriptions are outside the scope of this book and would require a book three times as long.

The book contains numerous information boxes that outline important or interesting information associated with some of the tree species. For example, there are boxes on the honeydew beech forests, mistletoes, epiphytes, and the caterpillars associated with genera like *Macropiper* and *Olearia*. I enjoyed reading the information contained within these sections, and I feel that they were used well to provide important information without clogging up the more specific species descriptions. There is also a useful list of sex expressions for each tree species included in the book for quick reference for those interested in the wide range of sex expression found in our native trees.

The only negative comment I would make about the book is that it would have been nice to include small thumbnail maps showing the distribution of each species in New Zealand (e.g. as in *An illustrated guide to New Zealand Hebes*<sup>2</sup>). I feel that this would have aided users of the book in quickly determining whether any particular species was likely to be found in their area. Species distributions are included in the text.

Finally to whom would I recommend this book? Firstly, anyone with an interest in plants, or trees in general. Also, this book would be equally useful to anyone currently working or planning to work with New Zealand tree species. Lastly, anyone who enjoys looking at stunning pictures of plants. Dawson and Lucas should be commended for producing an in-depth, informative and beautiful book that both highlights the uniqueness of our tree species and shows them off at their finest.

<sup>1</sup>Salmon JT 1980. *The native trees of New Zealand*. Reed Books, Auckland.

<sup>2</sup>Bayly M, Kellow, A 2006. *An illustrated guide to New Zealand Hebes*. Te Papa Press, Wellington.

## RECENT STUDENT RESEARCH

By Haseeb Randhawa

### UNIVERSITY OF OTAGO ECOLOGY THESES 2010–2011

#### 2010

Futter, Julie M. 2010. An Investigation in the the Murihiku Toheroa (*Paphies ventricosa*): matauranga, monitoring and management. (MSc).

Lill, Adrian WT. 2010. The ecology of intermittently closed estuaries of Otago, South Island, New Zealand. (PhD).

Thorsen, Michael J. 2010. Seed dispersal in New Zealand, and its vulnerability to loss of dispersers. (PhD).

#### 2011

Camara, Amadou 2011. The role of shrubs and rabbit herbivory in the ecological restoration of the drylands of south-central New Zealand. (PhD).

Dobert, Timm F. 2011. Fragmentation, edge effects and regeneration of tropical dry dipterocarp forest in Thailand. (MSc).

Hicks, Andy S. 2011. Facultative amphidromy in galaxiids and bullies: the science, ecology and management implications. (PhD).

Korsten, Annika C. 2011. Life at the edge: how do plants respond to extreme environments in Australia and New Zealand alpine snowbanks. (MSc).

Lawrence, Rebecca J. 2011. Rodent impacts in forest communities. (MSc).

## NEWS FROM COUNCIL

### STRATEGIC PLAN FOR SOCIETY

The NZES Council will attend a strategic planning day following the next Council meeting in February, to start developing a strategic plan for the society. The strategy will outline the society's aims and determine the focus of the society's efforts over the next few years. The Ecological Society of Australia has a five year strategic plan, which I'm sure the NZES council will find a useful starting point.

### REPLY FROM THE MINISTER FOR CONSERVATION

#### **Job losses of technical and scientific staff at Department of Conservation**

*The NZES Council sent a letter to the Minister for Conservation expressing concerns about the impact on NZ's biodiversity of impending job losses at the Department of Conservation. A copy of the letter was published in the September 2011 issue of the newsletter and the Minister's reply to that letter is below.*

3 Oct 2011

Dear Dr Burns

Thank you for your email of 5 September 2011, in which you comment on the uniqueness of New Zealand's biodiversity, and express concerns about announced job losses within the Department of Conservation, and the capacity of the department to carry out its science and technical functions.

I agree with you that our unique biodiversity requires innovative and careful management, but we must also be prudent and ensure that money spent is prioritised on frontline work, and that 'back-office' support functions are efficient.

The Government took office in difficult economic times, and it subsequently undertook a programme of public expenditure reduction in order to address a growing deficit. As part of that programme, the Government determined, in 2009, that the baseline to Vote Conservation was to be reduced by \$52 million over four years, which approximates to a three to four percent reduction. To put that into some form on relevant context, however, Vote Conservation is now \$441 million, which is almost double that of the \$226 million appropriated to Vote Conservation ten years ago in 2001, and, with over 1,500 employees, the department is now relatively large, compared to the other 36 government agencies.

I would like to reiterate that the priority for the Government is to ensure frontline services remain, and that conservation work on the ground, and field programmes, will continue. The field work will now be supported by the Natural Heritage Management System. This is an innovative terrestrial and freshwater data management system tool that the department has been developing and testing since 2003. I am pleased to advise you that no science positions in the department have been lost as part of this review, although a number of technical support positions have been consolidated into service centres.

I have attached links to the *Statement of Intent* for the Department of Conservation and *Performance Information for Appropriations to Vote Conservation* that set out the work commitments and performance measures for this financial year, and demonstrate the Government's ongoing commitment to conservation.

Thank you again for conveying your interest and concerns.

Yours sincerely

Hon Kate Wilkinson  
**Minister of Conservation**

## THE NOTICEBOARD

### WANTED: PAPER WASPS (*Polistes*)

By Darren Ward, Landcare Research

We are updating the distribution of the Asian Paper Wasp (*Polistes chinensis*) and the Australian Paper Wasp (*Polistes humilis*) in New Zealand.

I would be grateful for information on the species identity and locality/date. A photo of the specimen/nest would also be useful. Wasps can be sent if you are unsure of the species' identity. Further information can be found at [www.landcareresearch.co.nz/research/biocons/invertebrates/Wasps/distribution.asp](http://www.landcareresearch.co.nz/research/biocons/invertebrates/Wasps/distribution.asp)

We are particularly interested in sightings from the lower North Island and the South Island. Paper wasps are most active over the summer period but begin making nests in spring.

Please send info, photos or wasps to:

Darren Ward, Landcare Research, Private Bag 92170, Auckland ([wardda@landcareresearch.co.nz](mailto:wardda@landcareresearch.co.nz)).



Asian paper wasp (*Polistes chinensis*)



Australian paper wasp (*Polistes humilis*)

### CHARLES FLEMING FUND—CALL FOR APPLICATIONS

The Royal Society of New Zealand is now calling for applications for the following awards:

- Charles Fleming Fund - Senior Scientist Award
- Charles Fleming Fund - Publishing Award

The closing date for applications is **31 March 2012**. Information on these awards and the application form are available on the Society's website: [www.royalsociety.org.nz/programmes/funds/fleming/](http://www.royalsociety.org.nz/programmes/funds/fleming/)

### FLORA OF AOTEAROA/NEW ZEALAND (BIOL226-12C)

#### Waikato University, 10–24 February 2012

Want to learn how to identify New Zealand plants? Planning to major in Plant Biology or Restoration Ecology? Round out that biology degree with a Botany course and add plant identification skills to your CV!

Beginning with a weekend field trip in native forest you will be immersed into the world of botany. Following this field trip is two weeks of intensive lectures, labs and two day-trips to forests in the Waikato. Finally students complete an individual assignment after the two week teaching portion is over.

The course is open to students wishing to major in Plant Biology or Restoration Ecology and people with a keen interest in botany (admittance at the discretion of the Course Co-ordinator).

Topics covered in this course include: the origin of New Zealand's unique flora; basics of plant taxonomy; modern methods of plant classification and identification; and identifying plants in the field.

For more information contact Dr Chrissen Gemmill: [c.gemmill@waikato.ac.nz](mailto:c.gemmill@waikato.ac.nz); phone: 07 838 4053; room CD1.01.

To enrol contact the Science & Engineering Dean's Office: [science@waikato.ac.nz](mailto:science@waikato.ac.nz); phone 07 838 4625; room F1.07.

## PRACTICAL FIELD BOTANY COURSE

### University of Canterbury

17–24 January 2012, Cass Mountain Biological Field Station

Practical Field Botany is an intensive, short summer course designed to meet the need for training in the collection, preparation, and identification of botanical specimens. It will be valuable for students who intend to seek employment in areas such as field ecology, conservation, biodiversity, and taxonomy or biosystematics. It will also be of interest to members of the workforce who need to acquire or upgrade taxonomic skills, e.g., from Crown Research Institutes, Department of Conservation, Local and Regional Councils, Botanic Gardens, horticulture, and teaching. The course is targeted at participants with various entry levels: from students with limited plant knowledge to experienced career professionals. For further information, see the course flyer [Biol 305 2012.pdf](#)

Contact: Dr Pieter Pelsler, phone 03 364 2987 ext 45605; Email: [pieter.pelsler@canterbury.ac.nz](mailto:pieter.pelsler@canterbury.ac.nz)



## STUDY TOUR 2012 — EUROPEAN SUSTAINABLE FORESTRY

This study tour led by Tane's Tree Trust trustee and Loder Cup winner Mark Dean will take place in September 2012. The fully guided tour will visit Germany, Italy, Scotland and England, visiting areas where sustainable forest management has been practiced for centuries in some cases. Mark Dean is organising the itinerary and House of Travel are managing the travel. Mark would like expressions of interest for the trip next year and suggests this is a very good way to spend your SKI money.

Please contact Mark Dean at [mark@naturallynative.co.nz](mailto:mark@naturallynative.co.nz) or telephone him at 07 543 1494.

## TIM FLANNERY KEYNOTE ADDRESS: WRITERS AND READERS WEEK

### Wellington Town Hall

Friday 9 March 6.30–7.30pm

Tickets \$33 / Bookmark Pass & Friends \$28

Bookings are now open to hear internationally acclaimed scientist, explorer and environmentalist, Tim Flannery, opening Writers & Readers Week, 9 March 2012.

Few people are more passionate or knowledgeable about the natural world than 2007 Australian of the Year Tim Flannery. He is chairman of the Copenhagen Climate Council and has written over a dozen books including his award-winning bestsellers *The Future Eaters: An Ecological History of the Australasian Lands and People* and *The Weather Makers: The History and Future Impact of Climate Change*. His more recent *Here On Earth: An Argument for Hope* charts the history of life on our planet and is an extraordinary exploration of evolution and sustainability. Tim Flannery's session is hosted by David Young.

Book in person at Ticketek outlets or online: [www.ticketek.co.nz](http://www.ticketek.co.nz) or by phone: 0800 Ticketek (842 538). Booking fees may apply. For more information visit: <http://festival.co.nz/writers-and-readers/town-hall-talks-tim-flannery/>

## 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 contribution, whether \$10, \$20 or \$50, to the Kauri Fund now or at the time you renew your subscription. You can make your contribution to the Kauri Fund in two ways:

Send a cheque made out to the "NZES Kauri Fund" to the New Zealand Ecological Society, PO Box 5075, Papanui, Christchurch 8542.

Use internet banking, to credit your donation to New Zealand Ecological Society, bank account 06 0729 0465881 00, identifying the payment as "Kauri Fund".

## UPCOMING MEETINGS

### Science Communicators Association of NZ (SCANZ)

#### 2012 Conference

22–23 February 2012

Te Papa, Wellington

The theme of the 2012 Science Communicators Association of New Zealand (SCANZ) conference is '21<sup>st</sup> century communications for 21st century science'. The conference will offer a mix of high quality presentations, workshops, panel discussions and networking opportunities to an expected 120+ journalists, communicators for science and innovation organisations, scientists, academics and students. Full details of the conference programme will be available soon on at [www.scanz.co.nz/conference-2012.html](http://www.scanz.co.nz/conference-2012.html)

### Island Arks Symposium II

February 2012

Canberra, Australia

Island Arks Symposium II is a national conference on island conservation related issues from tourism to invasive species. Find out more about Island Rescue, and the second Island Arks Symposium (Canberra, February 2012) at <http://islandarks.com.au/islandarks/Symposium.html>

### 5th National Wetland Restoration Symposium

21–23 March 2012

Ascot Park Hotel, Invercargill

This symposium is being organised by the Southland Wetlands Working Party in conjunction with the National Wetland Trust.

[www.wetlandtrust.org.nz](http://www.wetlandtrust.org.nz)

### MMM3: Meeting on Mangrove ecology, functioning and management.

2–6 July 2012

Galle, Sri Lanka

[www.vub.ac.be/APNA/greendyke/MMM3/](http://www.vub.ac.be/APNA/greendyke/MMM3/)

### IV International Wildlife Management Congress

9–12 July 2012

Durban, South Africa

[www.iwmc2012.org](http://www.iwmc2012.org)

### Ecological Society of America 97th Annual Meeting

5–10 August 2012

Portland, Oregon

Theme: Life on Earth: preserving, utilizing and sustaining our ecosystems

Abstract deadline: 23 February 2012

### 7th World Congress of Herpetology

8–14 August 2012

Vancouver, Canada

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

### Aboveground-belowground interactions: technologies and new approaches

Joint meeting of the British Ecological Society, the Biochemical Society and the Society for Experimental Biology

8–10 October 2012

London, UK

Abstract deadline: 13 August 2012

Early registration deadline: 10 September 2012

### NZ Ecological Society Conference

25–29 November 2012

Lincoln University

### Ecological Society of Australia Conference

3–7 Dec 2012

Melbourne, Victoria

Theme: 'Ecology: Fundamental Science of the Biosphere'

### INTECOL 11 Congress

18–23 August 2013

London, UK

Theme: Ecology—Into the Next 100 Years

[www.intecol2013.org/](http://www.intecol2013.org/)

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(Effective from 30 August 2011)

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**Next deadline for the newsletter is Friday 9 March 2012.**

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

## MEMBERSHIP

*Membership of the society is open to any person interested in ecology and includes botanists, zoologists, teachers, students, soil scientists, conservation managers, amateurs and professionals.*

### **Types of Membership and Subscription Rates (2011)**

Full (receive journal and newsletter) .....	\$80* per annum
Unwaged (with journal) .....	\$45* per annum
<i>Unwaged membership is available only on application to Council for full-time students, retired persons etc.</i>	
<i>Unwaged members may receive the journal but must specifically request it.</i>	
Overseas Full .....	\$105* per annum
School .....	\$12 per annum
Institutional (New Zealand) .....	\$NZ120* per annum (incl. GST and postage)
Institutional (Australia & South Pacific) .....	\$NZ130* per annum (incl. GST and postage)
Institutional (Rest of World) .....	\$US80* per annum (incl. air postage)

Overseas members may send personal cheques for their local equivalent of the NZ\$ amount at current exchange rates, for most major overseas currencies.

For more details on membership please write to:

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PO Box 5075  
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Christchurch 8542  
NEW ZEALAND

or e-mail: [info@nzes.org.nz](mailto:info@nzes.org.nz)

\* There is a \$10 rebate for members who renew before Feb 15 each year, and for new members