



# TRILEPIDEA

NEWSLETTER OF THE NEW ZEALAND PLANT CONSERVATION NETWORK

Please send news items or events to [events@nzpcn.org.nz](mailto:events@nzpcn.org.nz)

Postal address: P.O. Box 16-102, Wellington, New Zealand

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Deadline for next issue: Monday 16 January 2012

## President's Message

The AGM held in November was a great success with excellent presentations in the panel discussion about biodiversity offsetting provided by Marie Taylor, Neil Mitchell and Susan Walker. We are grateful to those speakers for providing their expertise and time. Only one resolution was passed at the AGM—that was that the new Global Strategy for Plant Conservation be adopted as a key driver behind the work of the NZPCN. There was some discussion about the recent Department of Conservation job losses and how concerns could be raised about the consequences for conservation resulting from this loss of capacity. It was decided that the Network will continue post articles and open letters on the website, but will also meet with the Minister of Conservation, DoC and MAF to present the views of the NZPCN members on this and other plant conservation issues.

The Council has been reshaped. Rewi Elliot has taken on the Secretary role and Nicky Oliver-Smith has become our new Treasurer. Continuing Council members are: Susan Wiser, Kerry Gillbanks, Sarah Beadel, John Sawyer and Owen Spearpoint. Jesse Bythell (who was previously co-opted to the Council) has become the sixth Council member. We are lucky to have four people offer to act as ex-officio members this year. They are Erik van Eyndhoven (Erik was a co-opted member last year), Matt Ward, Astrid van Meeuwen-Dijkgraaf and Shannel Courtney (who has stood down from Council this year). We extend a big welcome to those new position holders and co-opted members. As mentioned in the President's report to the AGM, we are sad to see Mike Oates step down from the Council this year – he has provided wise counsel and played an important role in founding and developing the Network. Thanks for all your hard work Mike.

Finally, have a very Merry Xmas and all the best for the New Year.

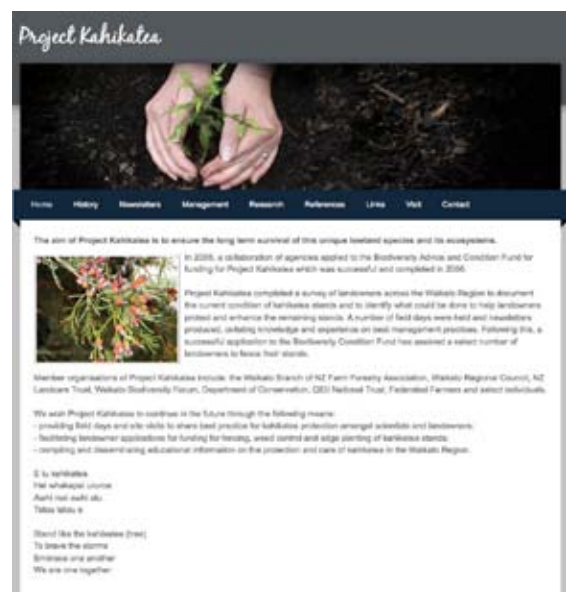
*Philippa Crisp  
Greater Wellington*

## Project Kahikatea: a new kahikatea website

Network members may be interested in a new website about kahikatea trees. You can see it by clicking on the link:

[www.projectkahikatea.net.nz/](http://www.projectkahikatea.net.nz/)

It is very much in the early stages of development, so any feedback would be welcome (Nardene Berry, e-mail: [nardene.berry@landcare.org.nz](mailto:nardene.berry@landcare.org.nz)). At the moment, the main focus of Project Kahikatea is in the Waikato, but it is eventually hoped to extend to the rest of the country.



## PLANT OF THE MONTH – *CAREX INOPINATA*



*Carex inopinata*. Photo: Nick Head. Inset: finely toothed leaf margin near the tip. Photo: Jeremy Rolfe.

Plant of the month for December is *Carex inopinata* (grassy mat sedge, or unexpected sedge). This small sedge is endemic to the eastern South Island from the upper Awatere River to Deep Creek and Tapanui in Southland. It is found in river terraces, limestone and schist overhangs, and along forest margins on rubble slopes amongst the shrubland.

*Carex inopinata* is a creeping sedge forming diffuse mats, with green, tufted, leafy culms reaching only reach around 100 mm high. It is easily grown from rooted pieces and fresh seed. It grows best in a well-drained, moderately fertile soil in a semi-shaded site, and can be very drought tolerant.

*Carex breviculmis* and some species of hook sedge (*Uncinia* spp.) are similar, but *C. inopinata* can be distinguished by having fine teeth on the upper leaf margins only near the tip, whereas the leaves of *C. breviculmis* are finely toothed for their entire length and are also wider.

*Carex inopinata* is currently nationally endangered, and is very vulnerable to competition from invasive weeds. Recently, the species has been discovered in a number of new sites in Otago and Southland. These discoveries suggest that this species may yet prove to be more widespread, and perhaps less threatened.

The Network fact sheet for *Carex inopinata* may be found at:  
[www.nzpcn.org.nz/flora\\_details.asp?ID=54](http://www.nzpcn.org.nz/flora_details.asp?ID=54)

### The New Zealand Journal of Botany

Publish with the Royal Society of New Zealand and Taylor & Francis in an international plant science journal covering all aspects of the botany, mycology and phycology of New Zealand, the South Pacific, Australia, South America, Antarctica and southern Africa. We welcome original research papers, review papers, short communications, book reviews, letters, and forum articles.

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[www.royalsociety.org.nz/publications/journals/nzjb](http://www.royalsociety.org.nz/publications/journals/nzjb)



## Giant restiad beats forest giant

Jesse Bythell ([jesse.bythell@orcon.net.nz](mailto:jesse.bythell@orcon.net.nz))

The annual favourite native plant vote has produced a clear winner for 2011. Bamboo rush, or giant wire rush (*Sporadanthus ferrugineus*) received the most votes, clearly beating kauri. *Sporadanthus ferrugineus* highlights many of the issues surrounding New Zealand's plants and ecosystems. Relatively new to science, this handsome and impressively tall restiad is now found only in the Waikato region because 95% of its wetland habitat has been destroyed

Thousands of votes were cast by plant enthusiasts from New Zealand and around the world with over 140 different species nominated. There were some newcomers to the Top 10 list this year including two liverworts as well as some old favourites like pohutakawa and ongaonga.

The results of the vote are on the Network website. The Top 10 species are:

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### 1. Bamboo rush, giant wire rush, *Sporadanthus ferrugineus*



I fell in love with it after hearing a lecture about it. So I went out to see it and simply could not believe such a stunning plant had nearly been wiped off the face of the earth before anyone even realised it was a new species. – Margi

### 2. Kauri, *Agathis australis*



Kauri is an extreme plant. It can grow extremely big, extremely old and is extremely beautiful. It also has extreme effects on its environment that allows a suite of allied and unusual species to grow with it. – Bruce

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### 3. New Zealand calceolaria, *Jovellana sinclairii*



Well it seems to me that this delicate herbaceous shrublet has none of the obvious charms of great big trees like kauri, or pohutukawa or obvious iconic totems like cabbage tree—but it is every bit as special, if not more so because so few people even know it exists. It's also more threatened than people believe. – Dianne

### 4. Beach morning glory, *Ipomoea pes-caprae* subsp. *brasiliensis*



There is something decidedly funny about voting for a plant that scarcely makes it into your country – John

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5. Kirk's kohukohu, *Pittosporum kirkii*



I think it's important to vote for plants that are not well known and are highly threatened. – Kirsty

6. Ongaonga, *Urtica ferox*



Ongaonga is fiercely beautiful. It's also the host plant for kahukura the red admiral butterfly. – Kate

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7. Pohutukawa, *Metrosideros excelsa*



This tough and beautiful tree gets everywhere coastal and flourishes in the adverse conditions to act as a nurse for other plants and a nectar source for animals. Truly inspiring and a symbol of kiwi spirit. – Hayden

8. A liverwort, *Frullania wairua*



They never rate much mention, yet New Zealand has such a remarkable diversity of these minute jewels of nature. They are every bit as important as big trees, and yet so undervalued. This liverwort is incredibly small, so small you'd miss it unless you knew it existed, and that it what makes it special to me! – Anders

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9. A liverwort, *Lejeunea hawaikiana*



Because it's a liverwort and people ALWAYS forget about these amazing minute plants (also of course mosses and hornworts), which form such a critical part of New Zealand's ecosystems. – Anon

10. Surville Cliffs kohukohu, *Pittosporum serpentinum*



I like plants that grow in odd places. – Caroline

It is great reading through the comments people have included with their votes. A consistent theme was voters' concern about the threats facing the species they nominated and a desire to raise awareness of these interesting, and often lesser-known, members of our unique flora. Other reasons given by voters included: the plant's association with a special place or person, the fact that the plant is local and iconic for an area, the plant's beauty or scent or because it is fascinating to study.

Despite being a national icon for our sports teams, the silver fern has never featured in the Top 10, not even this year after the rugby world cup win. However, one voter managed to work rugby in to his vote explaining that he voted for golden speargrass because the area Ritchie McCaw comes from is called Hakataramea, 'Valley of Dancing Speargrass'. To see the full results of the vote and learn more about the plants that were nominated, visit the New Zealand Plant Conservation Network's website: [www.nzpcn.org.nz](http://www.nzpcn.org.nz)

Using the Network's system for making your own books that is available on the website, a booklet of the Top 10 has been made. To download it, click on the link below:

[www.nzpcn.org.nz/publications/NZPCN\\_Favourite%20Plant%202011-web%20version.pdf](http://www.nzpcn.org.nz/publications/NZPCN_Favourite%20Plant%202011-web%20version.pdf)

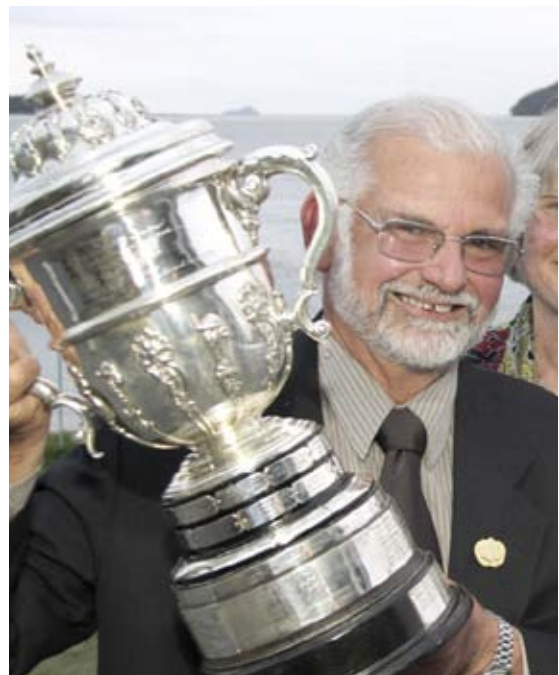
**Note:** the file size is 1.6MB.

### **Tauranga horticulturist wins Loder Cup**

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

The Minister of Conservation, Hon. 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."



Mark Dean with the Loder Cup.

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.

## **Report on the Global Partnership for Plant Conservation Conference – July 5 – 7 2011, St Louis, Missouri, USA**

*John Sawyer, Network Council member ([redpine09@me.com](mailto:redpine09@me.com))*

### **Introduction**

The Global Partnership for Plant Conservation met at the Missouri Botanic Gardens, USA in July 2011. The Global Partnership (which the New Zealand Plant Conservation Network joined earlier in 2011) was established to bring together international, regional and national organisations to support worldwide implementation of the Global Strategy for Plant Conservation.

The main purpose of the meeting was for members of the partnership to meet to discuss implementation of the Global Strategy for Plant Conservation. I represented the Network at the meeting and my attendance was kindly sponsored by the New Zealand Department of Conservation and supported by the New Zealand Plant Conservation Network.

A common theme emerging from the conference was that plants are the solution to many environmental problems whether it is protecting watersheds, conserving soils, preventing floods, sequestering carbon, sheltering humans and wildlife and supporting the world's biodiversity. They are also a culturally important part of our landscape, an aesthetic back drop to urban areas and a sustainable resource fulfilling many human needs. An in-depth review of the first iteration of the Global Strategy completed in 2009 showed good progress has been made on some targets. In 2010, the governments of the world signed up to a new Global Plant Strategy with revised targets (see Box below).

A challenge was laid down by Robert Hoft – Secretariat to the Convention on Biodiversity – when he said “The Global Plants Strategy is often seen as something benign and of little political interest, countries pay little attention to it. The plant conservation community is often working on the political margins”. Native plant conservation is often perceived as a “nice to do” rather than a vital aspect of a country's environmental programme. It is now the UN Decade of Biodiversity so plant conservation must be part of that. Ensuring plants, and the benefits they provide, are central to discussions about environmental management, economic recovery and biodiversity protection in New Zealand is a major challenge.

A number of suggestions were made that could have application in New Zealand including:

1. Revise national biodiversity strategies incorporating plant targets.
2. Undertake a botanical capacity assessment baseline survey.
3. Summarise the Network and New Zealand's achievements in implementing the Global Strategy over last 8 years.
4. Establish an agreement with the Millennium Seed Bank (UK) and establish a National Seed Bank partnership within New Zealand
5. Apply to become joint New Zealand focal point for the Global Strategy.
6. Work to further develop Network website into New Zealand on-line flora and further develop the website to improve people's access to accurate plant information
7. Grow a Plant conservation philanthropic trust to fund direct plant conservation action.
8. Grow the David Given Threatened Plant Research Scholarship.
9. Prepare a National Plant Conservation Strategy.
10. Prepare a national media / communication strategy for plant conservation in New Zealand.
11. Work with EnviroSchools to help them become more involved in plant conservation.
12. Stop being apologetic for costs of plant conservation projects.

## Main messages

The main messages heard at the meetings were:

- The new Global Strategy for Plant Conservation has been adopted globally with 16 revised targets (see Box) including the development of a World online flora.
- A popular guide to the global strategy is now published (see article in this newsletter).
- Revision of national biodiversity strategies incorporating plant targets is needed.
- Global Strategy toolkit has now been launched (<http://www.plants2020.net/>).
- Conference papers will be published as a special issue of the Annals of the Missouri Botanic Gardens.
- There is no technological reason for any plant species to go extinct.
- The 30 crop plants that produce 95% of calories in the human diet.
- We must prevent “plant blindness” – the importance of maintaining botanical capacity in agencies and government.
- Coca production is causing the destruction of the mega-diverse ecosystems of Columbia
- The Millennium Seed Bank in the United Kingdom can play a significant role in plant conservation.

## Global Strategy for Plant Conservation Objectives and Targets

**Objective I:** Plant diversity is well understood, documented and recognized

**Target 1:** An online flora of all known plants.

**Target 2:** An assessment of the conservation status of all known plant species, as far as possible, to guide conservation action.

**Target 3:** Information, research and associated outputs, and methods necessary to implement the Strategy developed and shared.

**Objective II:** Plant diversity is urgently and effectively conserved

**Target 4:** At least 15 per cent of each ecological region or vegetation type secured through effective management and/or restoration.

**Target 5:** At least 75 per cent of the most important areas for plant diversity of each ecological region protected with effective management in place for conserving plants and their genetic diversity.

**Target 6:** At least 75 per cent of production lands in each sector managed sustainably, consistent with the conservation of plant diversity.

**Target 7:** At least 75 per cent of known threatened plant species conserved in situ.

**Target 8:** At least 75 per cent of threatened plant species in ex situ collections, preferably in the country of origin, and at least 20 per cent available for recovery and restoration programmes.

**Target 9:** 70 per cent of the genetic diversity of crops including their wild relatives and other socio-economically valuable plant species conserved, while respecting, preserving and maintaining associated indigenous and local knowledge.

**Target 10:** Effective management plans in place to prevent new biological invasions and to manage important areas for plant diversity that are invaded.

**Objective III:** Plant diversity is used in a sustainable and equitable manner

**Target 11:** No species of wild flora endangered by international trade.

**Target 12:** All wild harvested plant-based products sourced sustainably.

**Target 13:** Indigenous and local knowledge innovations and practices associated with plant resources, maintained or increased, as appropriate, to support customary use, sustainable livelihoods, local food security and health care.

**Objective IV:** Education and awareness about plant diversity, its role in sustainable livelihoods and importance to all life on earth is promoted

**Target 14:** The importance of plant diversity and the need for its conservation incorporated into communication, education and public awareness programmes.

**Objective V:** The capacities and public engagement necessary to implement the Strategy have been developed

**Target 15:** The number of trained people working with appropriate facilities sufficient according to national needs, to achieve the targets of this Strategy.

**Target 16:** Institutions, networks and partnerships for plant conservation established or strengthened at national, regional and international levels to achieve the targets of this Strategy.

## **New guide to the Global Strategy for Plant Conservation released**

At its tenth meeting, the Conference of the Parties to the Convention on Biological Diversity adopted a consolidated update of the Global Strategy for Plant Conservation 2011-2020. The NZ Plant Conservation Network has now adopted the new Strategy as a core direction for its work in NZ.

A new guide to this Strategy has now been compiled by Suzanne Sharrock and published by Botanic Gardens Conservation International:

[Global Strategy for Plant Conservation - a guide to the GSPC](#)

The Strategy highlights the fact that without plants, there is no life. The functioning of the planet, and our survival, depends upon plants. It seeks to halt the continuing loss of plant diversity. The vision is of a positive, sustainable future where human activities support the diversity of plant life (including the endurance of plant genetic diversity, survival of plant species and communities and their associated habitats and ecological associations) and where, in turn, the diversity of plants support and improve our livelihoods and well-being.

For more information see the Plants 2020 website - a tool kit for the Global Strategy implementation:

[Plants 2020](#)

## **Collection of totara species from extremes of their range in New Zealand**

We are doing some sequencing of totara species in New Zealand to better understand their relationships and origins. We are particularly interested in samples of:

- (1) Snow totara (*Podocarpus nivalis*) from either extreme of its range, that being Moehau, Hikurangi, or the central volcanoes in the north or from Southland, Otago or Stewart Island.
- (2) *Podocarpus acutifolius* from either extreme of its range, being Marlborough in the north to South Westland.
- (3) *Podocarpus halli* from either extreme of its range, being Kaitaia/Mangonui in the north or in Stewart Island, Southland or Otago in the south.
- (4) *Podocarpus totara* var *waihoensis* (found only in South Westland lowland), anywhere in its range.

To send a sample, if possible, take a photo of the parent plant and e-mail it to: Trish McLenachan <[p.a.mclenachan@massey.ac.nz](mailto:p.a.mclenachan@massey.ac.nz)>. In addition, take a handful of young growth, put it in a plastic bag with a dry paper towel (the sample should be free of surface water but fresh not dried), a note on its location and identification, and mail or courier to:

Trish McLenachan  
PN462 Molecular Biosciences Institute  
Inward Goods, Room D3.01, Level 3  
Science Tower D  
Riddet Road  
Turitea Campus  
Palmerston North 4442



## UPCOMING EVENTS

If you have important events or news that you would like publicised via this newsletter please e-mail the Network ([events@nzpcn.org.nz](mailto:events@nzpcn.org.nz)):

### Taonga o Te Hiku o Te Ika Treasures of the Far North

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**Conference:** Dune Restoration Trust 2012 national conference, February 14-17, Taipa Northland.

**Programme, registration forms, information:**  
[www.dunetrust.org.nz](http://www.dunetrust.org.nz)  
or contact: [info@dunestrust.org.nz](mailto:info@dunestrust.org.nz)

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### 8th Asia Pacific Conference on Algae Biotechnology for the Asia Pacific Society for Applied Phycology

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**Conference:** Adelaide, Australia, 9 – 12 July ([www.sapmea.asn.au/apcab2012](http://www.sapmea.asn.au/apcab2012)). Proposals are invited for oral and poster presentations as part of the APCAB 2012 and the 1st ICCB Conference Programme. For further information and the online submission link: [www.sapmea.asn.au/apcab2012](http://www.sapmea.asn.au/apcab2012). The deadline for submission of abstracts is 24 February.

**Contact:** Conference Secretariat:  
ph: +61 8 8274 6048;  
fax: +61 8 8274 6000; e-mail:  
[apcab2012@sapmea.asn.au](mailto:apcab2012@sapmea.asn.au)

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### Auckland Botanical Society

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**Field trip:** Monday 2 – Tuesday 10 January 2012 a South Island camp at Arthur's Pass.

**Contact:** Maureen Young, e-mail:  
[youngmaureen@xtra.co.nz](mailto:youngmaureen@xtra.co.nz)

**Field trip:** Friday 27 – Monday 30 January, Anniversary Weekend camp at Mayor Island.

**Contact:** Maureen Young, e-mail:  
[youngmaureen@xtra.co.nz](mailto:youngmaureen@xtra.co.nz)

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### Rotorua Botanical Society

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**Field trip:** Sunday 22 January to Tukainuka Scenic Reserve, Waiotahi Valley. **Meet:** the car park, Rotorua, at 8.00 a.m. or corner of Waiotahi Valley Rd and SH2 at Waiotahi Hall at 9:30 a.m. **Grade:** medium, will probably involve an easy river crossing.

**Leader:** Paul Cashmore ph: 07 348 4421 (hm), 07 349 7432 (wk),  
e-mail: [pcashmore@doc.govt.nz](mailto:pcashmore@doc.govt.nz)

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### Wellington Botanical Society

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**Field trip:** Friday 20 January – Sunday 29 January 2012 Summer Camp to Taranaki. **Accommodation:** based at Vertical Horizons, Everett Rd, Inglewood, 10 km from Inglewood.  
BOOKING ESSENTIAL

**Contact:** Mick Parsons, ph: 04 972 1148 or 06 273 8078, mobile: 027 249 9663, e-mail: [mtparsons@paradise.net.nz](mailto:mtparsons@paradise.net.nz). Further information will be sent to people who indicate they intend going.

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## Nelson Botanical Society

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**Field trip:** Sunday 15 January to Mt Arthur and Horseshoe Basin.  
**Meet:** in Selwyn Place between the gum tree and Church steps at 7.30 a.m. or at the Flora car park at 9.00 a.m.

**Leader:** Susan Cook  
ph. 03 544 6175.

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**Field trip:** Friday 27 – Monday 30 January, Anniversary Weekend Camp to Sedgemere, Rainbow Road, Molesworth Station (4WD). If interested please book.

**Leader:** Cathy Jones  
ph: 03 546 9499.

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## Canterbury Botanical Society

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**Field trip:** Thursday 5 – Thursday 12 January the 2012 Summer Camp at the Catlins. Accommodation: Tautuku Forest Cabins in the Lenz Reserve, cost \$15/night.

**Contact:** Gillian Giller,  
ph: 03 313 5315,  
e-mail: [ggillerma1@actrix.gen.nz](mailto:ggillerma1@actrix.gen.nz)  
for bookings.

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## University of Canterbury

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**University of Canterbury summer course:** Practical Field Botany (BIOL305) is an intensive, short summer course designed to meet the need for training in the collection, preparation, and identification of botanical specimens. **Venue:** Mountain Biological Field Station at Cass, Canterbury. **Dates:** 17 January – 25 January 2012.

**More information:** [www.biol.canterbury.ac.nz/biol305](http://www.biol.canterbury.ac.nz/biol305) or contact Dr Pieter Pelsler, e-mail: [pieter.pelsler@canterbury.ac.nz](mailto:pieter.pelsler@canterbury.ac.nz)  
ph: 03 364 2987 ext 45605.

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