



ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE

Newsletter

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President's Comments

As yet another calendar year draws to a close I think we can all look back on a year of financial challenges whether they be the number of visitors to your garden, seeking sponsorship of Young Horticulturist of the Year (YHOTY) and Notable Trees or even the erosion of your disposable incomes. Despite the melancholy of the economic environment spring never fails to cheer as the new season's roses emerge, the perennials burst into flower and the first of the summer vegetables are harvested. Of particular note in my garden this year has been an *Olearia cheesemanii* hedge which flowered prolifically for weeks to the extent that I was beginning to wonder if the plants would survive such floral profusion. They did!

It was with great sadness that we learnt of David Pufflett's passing just two weeks before the YHOTY competition to which he had contributed so much. David's contribution to horticulture throughout his working career was immense. His obituary can be read in our December 2012 journal. On behalf of you all the RNZIH has passed on its condolences to the Pufflett family. We also acknowledge the passing of Muriel Fisher, an Associate of Honour of the RNZIH, author, and native plantswoman, Bill Van Dyk, long serving International Plant Propagation Society (IPPS-NZ) member, and environmentalist and patron of the arts, Lady Diana Isaac.

The YHOTY competition ran very well this year. Congratulations to the RNZIH New Zealand Education Trust and to Elenka Nikoloff and her team who put it together. Sponsors are critical to hosting such an event and the input from AGMARDT, FruitFed Supplies, Turners and Growers and a host of other contributors was hugely appreciated. This year's overall winner was Braden Crosby from viticulture, runner up was Andrew Scott from the vegetable growing sector and third was Karl Noldan from the amenity sector.



Our congratulations to all contestants for their huge effort and especially to Braden for his well-deserved win. With representatives from most of the sectors at the finals dinner it was certainly an industry highlight again this year.

I recently attended a meeting to establish Industry Partnership Groups (IPGs) which will be advisors to the new Primary Industry ITO board. From early October 2012, the New Zealand Horticulture Industries Training Organisation was folded into the Primary Sector ITO (PriITO) which covers all training across the primary production sector including dairy, sheep and equine. While on the face of it this may seem an odd combination, further exploration reveals that even so there are many units and training standards in common. This along with savings from reductions in administrative overheads will hopefully evolve into a stronger and more focussed industry training programme. IPGs will be formally established either as standalone sectors or as alliances or partnerships to ensure that training voices are heard. As I write it is still not clear whether amenity will stand alone or merge with others in the sector that are closely aligned. Certainly the RNZIH and Botanic Gardens of Australia & New Zealand (BGANZ-NZ Region) are taking an active interest to ensure that good training outcomes evolve which will be an advance on the

rather watered down qualifications we currently have. In parallel with this, the Targeted Review of Qualifications has established a new more rigid qualifications framework which can only be of benefit to the wider horticultural sector.

We have approached the one year milestone in the New Zealand Plant Collection Register project, funded for three years by the Terrestrial and Freshwater Biodiversity Information System (TFBIS). Led by Murray Dawson, a huge amount of work has gone into sourcing and verification of plant names (genera, species, cultivars etc.) from the horticultural literature to populate the database. From 2013, work will swing towards the collection records and development of an online resource.

It's the time of the year to think about the RNZIH awards both honorary and monetary. If you have a nomination for an Associate of Honour or Fellow of the Institute please send your nomination into the RNZIH office. Details can be found on the RNZIH website at www.rnzih.org.nz/pages/awards.html. Also found on that webpage are details of the monetary awards. Please check these out and submit your application if you have a project which meets the criteria.

It's also time to start thinking about next year's AGM which will be held in Dunedin in the first week of April 2013. Do you have some time and resources to assist the Institute? I will be standing down as President at the AGM and there are currently two general positions to be filled on the executive. Do consider ways in which you can support this long-standing institution representing horticulture in New Zealand, conservation of exotic and native plant species, horticultural skills capacity and accreditation of New Zealand's best gardens. The role of the Institute remains important as an umbrella for the RNZIH Trusts and advocacy, especially as pressure comes on the conservation estate, and we strive to protect our native and exotic plant heritage and seek to encourage excellence in horticulture.

On behalf of the RNZIH executive I wish you and your families all the best for the Festive Season and the New Year.

David Sole
President, RNZIH

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RNZIH New Zealand Gardens Trust

NZGT 2013 Conference: Deep South – Dramatic and Diverse

Pre-conference tour 4–5 April 2013

Includes an overnight stay in Invercargill to visit a selection of outstanding Southland gardens:

- Gore Public Gardens (NZGT Registered Garden) and Bannerman Park (NZGT Garden of Significance)
- Tudor Park Gardens, Queens Park (NZGT Garden of National Significance), Marshwood Gardens (Invercargill), Southland Threatened Plants Garden (Otatara), Maple Glen (Wyndham).

Conference in Dunedin 6–7 April 2013

Garden visits to:

- Dunedin Chinese Garden (NZGT Garden of National Significance)
- Glenfalloch Woodland Garden (NZGT Garden of National Significance)
- Hereweka Garden (NZGT Garden of Significance)
- Larnach Castle Garden (NZGT Garden of International Significance)
- Dunedin Northern Cemetery Heritage Rose Collection
- Dunedin Botanic Garden (NZGT Garden of International Significance)
- Wylde Willow Garden (NZGT Garden of National Significance).

There will be a variety of experts speaking on a wide range of topics. Speakers include:

- Denis Hughes, well-known plant breeder and owner of Blue Mountain Nurseries in Tapanui
- Yolanda van Heezik, Senior Lecturer, University of Otago: “biodiversity in the garden”
- Hamish Saxton, CEO Dunedin Tourism: “tourism industry trends – eco tourism”
- Fiona Eadie, Head Gardener, Larnach Castle: “The often forgotten and/or neglected parts of plants”
- Fiona Hyland, Editor of *Heritage Roses NZ* journal: “Dunedin Northern Cemetery volunteer project – snowball effect”
- Dylan Norfield, Collection Curator at Dunedin Botanic Garden and Ellerslie Flower Show judge: “What makes a garden stand out”
- Brian Rance, DOC: “Southland threatened plants garden/subantarctic plants
- Dinner speaker: Phil Bishop, Associate Professor, University of Otago Zoology Department.

Dunedin and the deep south, dramatic and diverse in plants, gardens and landscape. Head south for the NZGT 2013 Conference and be ready to see and experience a region that will inspire, delight and surprise.

To Register for the New Zealand Gardens Trust Conference 2013 please contact:

Irene Collins, Administration Manager
Email: nzgt@rnzih.org.nz
Phone: 027 NZGTrst (027 694 8778)

Websites: www.eventfinder.co.nz/2013/new-zealand-gardens-trust-conference/dunedin
www.gardens.org.nz

RNZIH Notable Trees Trust

Notable Tree Notes

In each edition of the Newsletter we feature a tree from the New Zealand Tree Register. The idea is to highlight a specimen with outstanding attributes and/or an especially interesting history. Please visit the website for more information.

NNR/1030 – *Araucaria bidwillii* (bunya bunya or bunya pine)

Bunya bunya are native to areas of Queensland, Australia, where they are found in fragmented remnant populations. They represent the last-surviving species of the ‘bunya’ section of the genus *Araucaria* – a plant group that were once diverse and widespread across the warmer parts of the ancient super-continent of Pangaea, throughout the Mesozoic, from approximately 300 million years ago. *Araucaria* species, together with those in *Agathis* and *Wollemia*, form the family Araucariaceae – an especially interesting union of primitive trees whose origins predate the dinosaurs. They may reach 35–40 m in height and live to 500 years.

Whilst bunya bunya is an indigenous name (referring to the local aboriginal tribe and a mountain range in Queensland) the binomial botanical name tells an interesting back-story. The genus name, *Araucaria*, places the tree within the earliest era of woody plant evolution, when cone-bearing gymnosperms were developing their dominance over spore-producing pteridophytes. The specific epithet name, *bidwillii*, commemorates John Carne Bidwill (1815–1853), an English botanist and explorer. Bidwill worked in conjunction with many famous botanists of his day, in particular William Hooker, the first Director of the Royal Botanic Gardens at Kew – and, as a consequence of his energy and drive contributed much to the discovery of several important plants in both Australia and New Zealand. Sadly, Bidwill died in Queensland in 1853, at the age of 38 – unable to recover from the debilitating effects of starvation he suffered whilst lost in deep forest on a previous exploration to the Moreton Bay area in 1851.

An especially quirky aspect of bunya bunya physiology is its seed germination. Each seed forms an underground tuber from which, over several years, an aerial shoot emerges.



Top: Bunya bunya cones may typically reach 20–35 cm in diameter – the largest of any fruit. The large cones are soft-shelled and nutritious – and fall intact – so it’s best to avoid standing beneath the tree when fruits are present.

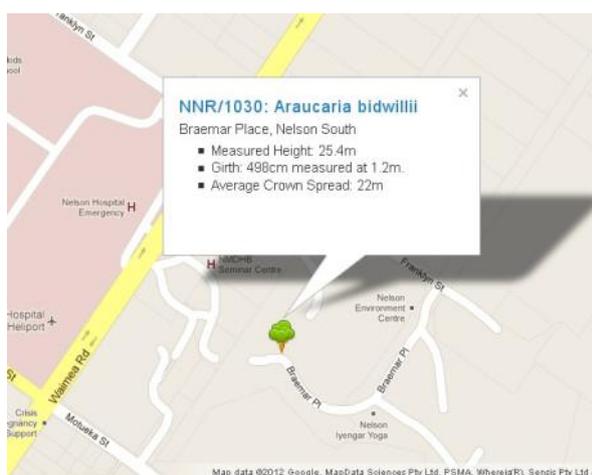
Bottom: The Braemar Hospital bunya bunya ... a specimen like so many others – that is, easily seen but overlooked.

This is thought to be a survival strategy, ensuring the shoot only emerges when climatic conditions are optimal and also, possibly, as a safeguard against wildfire damage. The basketball-sized cones weigh up to 10 kgs and usually fall intact, littering the ground beneath the tree before drying and cracking open to reveal the highly nutritious seeds. There is speculation the seeds were originally dispersed by dinosaurs and then early large mammals – a reasonable presumption given the cone’s size and energy content – although no firm evidence exists to confirm the theory.

And so to here and now, today. There are relatively few bunya bunya in New Zealand. As an exotic they were planted around the country in all manner of locations, but are rare south of Nelson due to generally decreasing temperatures. The trust holds 22 records for bunya bunya on the New Zealand Tree Register (NZTR). The tallest (BPR/1025 – at 36.6 m high) stands in Yatton Park, Tauranga. Another great specimen, however, is NNR/1030, at Braemar Hospital, Nelson South – described by Brad Cadwallader as:

“A fine old tree that harks back to the early years of settlement in Nelson. In the 1842 register of original holders of sections in Nelson; the owner of this section (Town Acre 1015) was a D. Reid. The adjacent section to the north (Town Acre 1017) was listed as a Colonial Reserve and still has many old trees. The site is now occupied by Braemar Hospital” (Cadwallader, 2012, NZTR).

There are probably many unknown and unrecorded bunya bunya living quietly among us. The New Zealand Notable Trees Trust is keen to add new records of this tree to the database. If you’re aware of one in your area – or see a decent specimen by chance – why not take some measurements and photographs? Check the NZTR first, to see if any record already exists – and, if it doesn’t, you’ve just found a new tree. The trust and everyone else with an interest will thank you for your effort.



NZNTT database search results shown in ‘Map View’. Summary data for record NNR/1030 is displayed.

Please remember, NZNTT welcomes anyone who would like to contribute to expanding the New Zealand Tree Register (NZTR) database. It’s simple – just follow the straightforward standard method described in step-by-step detail on the NZNTT website. Whether you’re an experienced tree recorder or a first-timer, your effort is appreciated. Your record may make a genuine difference – and it all helps to build a comprehensive database of New Zealand’s notable trees.

Bryan Gould
Trustee, New Zealand Notable Trees Trust

The New Zealand Notable Trees Trust manages a free public database containing verified details of the most notable and significant trees in this country. The database is constantly being updated. New trees may be registered at any time – together with any contributions of information or support. View online at www.notabletrees.org.nz.

RNZIH Education Trust

The Young Horticulturist of the Year 2012 Competition

Partnered by AGMARDT, Fruited Supplies and Turners & Growers.

Congratulations to the winners of the 2012 Young Horticulturist of the Year (YHOTY) competition!



Young Horticulturist of the Year 2012 Braden Crosby receiving his awards. Left to right: Nathan Flowerday, AGMARDT Associate Board member; Braden Crosby; Richard Bawden, National Manager Fruited Supplies; Colin Lyford, General Manager Domestic Products Turners & Growers.

The latest issue of the RNZIH journal (*New Zealand Garden Journal*, December 2012, Vol. 15, No. 2, pp. 23–27) has a special feature on the competition results, details of overall winner Braden Crosby, Daniel Chong's winning speech, and the overseas travel reports of two previous YHOTY place-getters, Rangi Green (2011) and Dave Harris (2010).

Final results:

2012 Young Horticulturist of the Year:

- First: Braden Crosby representing NZ Winegrowers. Braden is viticulturist at Borthwick estate in Carterton.
- Second: Andrew Scott representing the combined fruit and vegetable sectors for Horticulture NZ. Andrew is operations manager for Hewsons Farms, Ashburton.
- Third: Karl Noldan representing the amenity sector of NZ Recreation Association. Karl is team leader at Wellington Botanic Gardens.



YHOTY finalists: Back row left to right: Andrew Rae, Andrew Scott, Karl Noldan. Front row left to right: Braden Crosby, Annika Horgan, Daniel Chong (standing).

AGMARDT Market Innovation Project:

- First: Andrew Scott representing the combined fruit and vegetable sectors for Horticulture NZ.
- Second: Braden Crosby representing NZ Winegrowers.
- Third: Andrew Rae representing Landscaping New Zealand. Andrew is a landscaper for Southern Landmarx in Queenstown.
- Consolation prizes: Daniel Chong, foreman at Rainbow Trees Ltd, Auckland, representing the Nursery and Garden Industry New Zealand; Annika Horgan of Nectar Florist, Christchurch, representing Floristry NZ Inc.; Karl Noldan representing the amenity sector of NZ Recreation Association.

Fruited Supplies Best Overall Speech:

- Daniel Chong representing Nursery and Garden Industry New Zealand.

Leadership Award partnered by Fruited Supplies and Ballance Agri-Nutrients:

- Braden Crosby.

Bayer Best Practice Award:

- Andrew Scott.

Turners and Growers Best Practical Activities Award:

- Braden Crosby.

The RNZIH Education Trust sincerely thanks all sponsors and the many volunteers who contributed to the success of this year's event and assisted in achieving the aim of the Young Horticulturist of the Year Competition – nurturing and developing young people in horticulture.

New Zealand Plant Collection Register: December 2012 update

One year has now passed of this three-year TFBIS (Terrestrial and Freshwater Biodiversity Information System) funded project to create an online register of living plant collections, so what progress has been made?

Early on in this project, we realised that our initial efforts should be prioritised towards completing a cultivated plant names module. A well resolved and comprehensive set of horticultural names, botanical names and common names, along with synonyms will help validate those arriving from the living plant collection records. These names will also be fed into the New Zealand Organisms Register (NZOR) and contribute to this wider resource.

To date, Murray Dawson and Kathleen Barber have extracted names from 26 New Zealand focussed horticultural references. The largest reference comprises 38,000 botanical names; the second largest 31,000 names. Of course, we are respecting copyright of these references and are only harvesting the names, not the authors text or illustrations without their permission.



In addition to these books and articles, work on digitising the Duncan & Davies Nursery catalogues is progressing well, and we have so far scanned 40 catalogues ready for converting into PDF files. This side project is funded by the Sir Victor Davies Foundation and the Peter Skellerup Plant Conservation Scholarship. We will need to seek further grants for this large undertaking as there are 100 historic catalogues from c.1916 to 2004 with an estimated 8,630 pages to process. This catalogue collection is an invaluable resource for tracking first introductions of plants into New Zealand, the names that have been applied to them, their descriptions, and relative abundance over time.

In 2013 we will shift our effort towards gathering further plant collection records. So far, we have records from seven collection holders – more than 32,000 records. At the Botanic Gardens of Australia and New Zealand (BGANZ-NZ) seminar in Hamilton (on April 2012), there was agreement to support the New Zealand Plant Collection Register project by providing accession records of their members, mainly botanic gardens. Some of these gardens use software called BG-BASE for their records management, and we are awaiting exports from this package.

Needless to say, there is a huge amount of standardisation and reformatting required of this collection and names data!

From 2013 to 2014, we will be actively engaging with a software development company to make these new resources live. As mentioned in previous progress reports, we will probably share and extend development of the underlying platform used by iNaturalist (www.inaturalist.org) and NatureWatchNZ (<http://naturewatch.org.nz>). These interesting websites are centred around recording natural history observations (plants, animals, fungi) and so we will need to extend the functionality of the platform towards an integrated management system – a full-featured tool to manage non-commercial living plant collection records for free.

Murray Dawson
New Zealand Plant Collection Register Project
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Royal New Zealand Institute of Horticulture funding opportunities

The Royal New Zealand Institute of Horticulture (RNZIH) has available two principal awards for funding those who are undertaking study and research opportunities in horticulture.

The RNZIH is New Zealand's most widely recognised horticultural organisation. Each year it has available awards from the Memorial Prize Fund and the Peter Skellerup Plant Conservation Scholarship to support the promotion of and advocacy for New Zealand's native and exotic flora.

The Memorial Prize Fund has available up to \$3,000 annually to support RNZIH members, who are bone fide full or part time horticultural students, by contributing to the costs of attending seminars, conferences or workshops that are being held within New Zealand. There may be one or more awards from this fund at any one time.

The Peter Skellerup Plant Conservation Scholarship has available up to \$5,000 annually to support research field work, publication, propagation, protection and/or cultivation of plants, production of educational resources, and any other activity likely to promote and assist the conservation of New Zealand's indigenous and exotic plant genetic resources. There may be one or more awards from this scholarship each year. This award is open to anyone though preference is given to members of the RNZIH. To be eligible for this award you must be a New Zealand resident or citizen.

For further details about these awards see www.rnzih.org.nz/pages/awards.html, or email office@rnzih.org.nz



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