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**Cover:** Snow gums with fresh snow, Guthega; Photo: Glenn Pure

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## Journal articles

The Journal is a forum for the exchange of members' and others' views and experiences of gardening with, propagating and conserving Australian plants.

All contributions, however short, are welcome and may be accompanied by photographs and drawings.

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The deadline dates for submissions are 1 February (for March edition), 1 May (June), 1 August (September) and 1 November (December). Send articles or photos to:

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# Summer Walks 2015

By Ros Cornish



View from Mt Franklin; Photo: Bill Willis

We had a full summer of walks without having to cancel any because of hot or wet weather. We went to several new locations and revisited some from the past.

## Dry Plains Road

Those on the November field trip saw some interesting roadside vegetation not far from Cooma and suggested a Wednesday Walk drive-and-stop trip which proved very worthwhile. Our first stop, for morning tea, was on the Snowy Mountains Highway just above Wambrook Creek. There were good displays of *Podolobium alpestre* — really orange flowers — and *Veronica perfoliata*, along with *Chrysocephalum semipapposum*. As we drove a bit further we could see interesting plants

flowering so made an unscheduled stop to investigate, finding great displays of *Calotis glandulosa* — pink, blue and white flowers (on separate plants) — *Calotis scabiosifolia* var. *integrifolia*, *Ranunculus lappaceus*, *Leptorhynchus squamatus*, *Stylidium montana*, a lovely *Geranium* sp. and some *Wahlenbergia multicaulis*, *W. communis* and possibly *W. planiflora* with very large flowers.



*Calotis glandulosa*, Dry Plains Rd; Photo: Roger Farrow



We continued on and turned right onto Dry Plains Road and stopped almost immediately for the first of many patches of *Rutidosia leiolepis* (Monaro Golden Daisy — listed as Vulnerable under the Environment Protection and Biodiversity Conservation (EPBC) Act) flowering beautifully.



*Rutidosia leiolepis*, Dry Plains Rd; Photo: Roger Farrow

Also flowering were *Calotis glandulosa* and *C. scabiosifolia* var. *integrifolia*, *Leucochrysum albicans* var. *tricolor*, *Bossiaea foliosa*, *Pimelea glauca*, *Mirbelia oxylobioides*, *Swainsona behriana*, *Chrysocephalum apiculatum*, *Convolvulus angustissima*, *Velleia paradoxa*, *Ranunculus lappaceus* as well as some lovely poa and *Themeda triandra*.

We stopped at a good population of *Eucalyptus lacrimans* which were flowering then it was on to Top Hut Travelling Stock Reserve (TSR). We had lunch first, watching the dark clouds advancing, then had a walk in the TSR. Most things that we'd already seen were there — it was difficult to walk without stepping on plants. Additional plants of interest were *Podolepis jaceoides* (flowering), *Dillwynia prostrata* (seeding well), *Bossiaea riparia*, *Acacia siculiformis*,



*Eucalyptus lacrimans*, Dry Plains Road; Photo: Jean Geue

*Wahlenbergia luteola*, *Discaria pubescens* and *Scleranthus diander* (flowering). A few drops fell as we got back to the cars but the rain held off mostly for our interesting drive back through some rather remarkable country — gorges, rocks, gullies and great views. We had one last stop for *Dodonaea procumbens* (also listed as Vulnerable under the EPBC Act).

## Mt Franklin

Mt Franklin is in the Brindabella Range and many years ago there was a ski lodge and ski slope there. The old ski slope is good to walk up and has a good variety of plants. There were good displays — *Podolobium alpestre* (a hillside of it when we reached the top), *Leucochrysum alpinum*, *Pimelea glauca*, *P. ligustrina*, *Rhodanthe anthemoides*,

*Podolepis jaceoides*, *Veronica perfoliata*, *Brachyscome spathulata*, *B. aculeata*, *B. diversifolia*, *Celmisia* sp., *Senecio pinnatifolius*, *Erigeron bellidioides* and very deep blue *Wahlenbergia stricta*. We also saw some orchids flowering — *Thelymitra simulata*, some *Hymenochilus crassicaulis* and a *Diuris monticola*. The views were spectacular.

## Googong Garden

In mid-December, we visited a private property south of Queanbeyan on the Old Cooma Road, near the new suburb of Googong. It is a mixture of grassland and open woodland and has several dams. There were some magnificent old trees — *Eucalyptus blakelyi*, *E. bridgesiana*, *E. nortonii*, *E. melliodora*, *E. polyanthemos* and one *E. rossii*.



*Veronica perfoliata*, Mt Franklin; Photo: Bill Willis



*Eucalyptus nortonii*, Googong property; Photo: Jean Geue

Lots of grasses were in full flower — *Rytidosperma pallidum* (formerly *Joycea pallida*), several other *Rytidosperma* including *R. laeve*, *Anthosachne scabra* (formerly *Elymus scaber*), *Themeda triandra*, *Cymbopogon refractus*, *Poa sieberiana*, *Dichelachne crinita*, *Aristida ramosa*, *Austrostipa scabra* ssp. *falcata* and another *Austrostipa*.

Also flowering were *Eryngium ovinum*, *Chrysocephalum apiculatum*, *C. semipapposum*, *Convolvulus angustissimus*, *Cullen microcephalum*, *Geranium solanderi*, *Leptorhynchus squamatus*, *Thysanotus tuberosus*, *Wahlenbergia communis*, *W. stricta*, *Bursaria spinosa*, *Xerochrysum viscosum*, *Pimelea curviflora*, *Goodenia hederacea* and *Dianella longifolia*. There were

many other interesting plants including *Pomaderris betulina*, *Cryptandra amara*, *Bossiaea prostrata*, *Lomandra bracteata* and many others. A very species rich property.

### Gigerline Nature Reserve

Our first walk for the New Year was in a new location — in the south-eastern part of Gigerline Nature Reserve, entering from the Monaro Highway at Williamsdale. There was a short walk through a weedy area and across a creek before entering the Reserve proper. It was grassy box woodland with some wonderful trees (*Eucalyptus bridgesiana*, *E. blakelyi*, *E. rossii*, *E. dives* and *E. nortonii*) with young trees coming along. There was a lovely array of grasses flowering



including *Rytidosperma carphoides*, *R. pallidum*, *Sporobolus creber*, *Enneapogon nigricans*, *Chloris truncata*, *Poa sieberiana*, *P. labillardierei*, *Aristida ramosa* and there were lots of patches of the sedge *Fimbristylis dichotoma* flowering.

There were a lot of peas and many of us became dispersal mechanisms for *Desmodium varians*. We found a couple of *D. brachypodum* which we don't often see — one with a good amount of seed. *Glycine tabacina* was flowering, *G. clandestina* was there too as well as *Cullen tenax* which we also don't see often. It was flowering well — quite a delicate flower, pale blue/mauve. There were a few blue *Eryngium ovinum*, large areas of *Chrysocephalum apiculatum* flowering as well as *Bursaria spinosa*, *Tricoryne elatior*, *Convolvulus angustissimus*, a *Brachyscome rigidula* and masses of *Zornia dictyocarpa* with a couple of flowers and many seeds.

Other interesting plants were *Pomaderris betulina* ssp. *betulina* with very rusty new growth, many *Swainsona sericea*, one *Calytrix tetragona* and some *Callitris endlicheri* regrowing after the 2003 fire.

## Stony Creek Nature Reserve

After a cloudy start and a threat of rain the weather cleared and we had an enjoyable walk through the reserve which is on the Captains Flat Road not far from Queanbeyan. We first climbed to the main ridge line and followed this to the eastern boundary where we had lunch and then returned to the main gate. The highlight was observing a ring-tail possum browsing high in a scribbly gum.

A surprising number of plants were still in flower including three brachyscomes, — *B. aculeata*, *B. dentata* and *B. rigidula*. Also flowering were *Calocephalus citreus* (new to our list), *Xerochrysum viscosum* (very abundant), *Chrysocephalum apiculatum*, *C. semipapposum*, three *Cassinia* species — *Cassinia aculeata*, *C. longifolia*, *C. quinquefaria* — and *Eryngium ovinum*. We found *Desmodium gunnii* which we don't often see and it sported a couple of characteristic flowers. There were lots of germinating plants following the good rains.

Unfortunately we did not find the grassland stick insect that we recorded



*Zornia dictyocarpa* seed, Gigerline Nature Reserve;  
Photo: Martin Butterfield



*Zornia dictyocarpa*, Queanbeyan NR; Photo: Roger Farrow

here in 2013 although we did find the localities where it had been previously seen and checked them thoroughly. Other insect life was prolific.

### Mt Aggie

Mt Aggie is in the Brindabella Mountains and is accessed from Mt Franklin Road — between Bulls Head and Mt Franklin. The walk is a steady uphill climb through *Eucalyptus pauciflora* woodland before the final steep ascent to the summit which is open and rocky. There was a lot to see which made the climb bearable. There was a great display of red fruit on *Acrothamnus hookeri*.



*Acrothamnus hookeri* fruit, Mt Aggie; Photo: John Wilkes

Many plants were flowering — *Persoonia chamaepeuce*, *P. subvelutina*, *Stylidium armeria*, *Brachyscome aculeata*, *Xerochrysum subundulata*, *Helichrysum rutidolepis*, *Lomatia myricoides*, *Velleia paradoxa*, *Craspediavariabilis*, *Wahlenbergia stricta*, *W. gloriosa*, some amazingly large Yam Daisies — *Microseris lanceolata* — as well as *Picris angustifolia*, *Goodenia*



*Microseris lanceolata*, Mt Aggie; Photo: Martin Butterfield



*Pelargonium australe*, Mt Aggie; Photo: Jean Geue

*hederacea* ssp. *alpestris*, *Stackhousia monogyna* and *Pelargonium australe*.

As we broke out of the forested area there were many daisies — carpets in fact — *Rhodanthe anthemoides* and *Leucochrysum alpinum* mainly but right at the top there were patches of another white brachyscome — *B. diversifolia*. Some other plants of interest which were not flowering were *Acacia obliquinervia*, *Leionema lamprophyllum* ssp. *obovatum*, *Linum marginale*, *Bossiaea foliosa* (a few flowers), *Oxylobium ellipticum* and *Podolobium alpestre*. We also saw many lovely grasses and there were fantastic views.





*Bossiaea foliosa*, Mt Aggie; Photo: Roger Farrow

## Kowen Travelling Stock Reserve

The walk began from the car park on Sparrow Hill Road which is now bypassed by the King's Highway — between Queanbeyan and Bungendore. The new starting place provides an interesting walk through very good grassy box woodland with excellent diversity. The old TSR is dry sclerophyll forest and has some different plants.

There were some very old trees and the *Eucalyptus rossii* and *E. mannifera* were very colourful, shedding their bark. Other trees were *E. bridgesiana*, *E. melliodora*, *E. rubida* and *E. dives*.

Flowering were *Xerochrysum viscosum*, *Hypericum gramineum*, *Chrysocephalum apiculatum*, *C. semipapposum*, *Leucochrysum albicans* var. *tricolor*, *Cassinia longifolia*, *C. aculeata*, *C. quinquefaria*, one *C. hewsoniae*, *Brachyscome rigidula* (many), *Glycine clandestina*, *G. tabacina*, *Hypoxis hygrometrica*, *Calocephalus citreus*, *Vittadinia muelleri*, *V. cuneata*, *V. gracilis* and, a surprise, *Desmodium brachypodium* and one *Lotus australis*.



*Calocephalous citreus*, Kowen Travelling Stock Reserve; Photo: Jean Geue (main) and Roger Farrow (inset)

A couple of greenhoods were spotted — *Diplodium decurvum*. There were other plants of interest — *Omphacomeria acerba* (new to our list), *Callitris endlicheri*, a green form of *Chrysocephalum apiculatum* and a silver form of *C. semipapposum*, *Bossiaea prostrata*, *Podolepis jaceoides* and *Calotis scabiosifolia* var. *integrifolia* with a few seed.

## Shanahan's Mountain

The walk starts from the car park on the eastern side of Boboyan Rd, and is a three kilometre loop into the Booth Range. There are good views from the top into the Naas Valley and to the Clear Range and Tinderries. The first part of the walk is dominated by an understorey of *Podolobium alpestre*, *Daviesia ulicifolia*, *Persoonia chamaepeuce*, *Exocarpos strictus* (with ripe fruit), some *Choretrum pauciflorum* and *Leucopogon fletcheri* ssp. *brevisepalus*.

Scattered among it were lots of *Lobelia dentata*, *Stylidium graminifolium*, *Veronica perfoliata*, *Brachyscome spathulata*, various *Wahlenbergia* sp. all with some flowers and *Olearia ramulosa* var. *stricta* flowering beautifully. On the hurried descent with thunder rumbling, we saw a lot of *Polyscias sambucifolia*, some with fruit. Then the storm hit.

## Queanbeyan Nature Reserve

The start of the walk was from the entry on Hoover Road, Queanbeyan. The Reserve is a good example of Natural Temperate Grassland with *Bothriochloa macra* as the dominant grass. Other grasses were *Enneapogon nigricans*, *Rytidosperma carphoides*, *R. laeve*,



*Exocarpos strictus* fruit, Shanahan's Mountain;  
Photo: Martin Butterfield

*Austrostipa bigeniculata*, *A. scabra* ssp. *falcata*, *Anthosachne scabra*, *Chloris truncata*, *Panicum effusum* and *Aristida ramosa*.

We were pleased to find quite a few forbs flowering — lots of the endangered *Rutidosia leptorrhynchoides* (Button Wrinklewort), *Goodenia pinnatifida*, *Chrysocephalum apiculatum*, *C. semipapposum*, *Convolvulus angustissimus*, *Wahlenbergia communis*, all three *Vittadinia* — *V. cuneata*, *V. gracilis*, *V. muelleri* providing good fuzz displays — a couple of *Tricoryne elatior*, one *Glycine tabacina* and a nice population of *Zornia dictyocarpa* with a few flowers. There were lots of spent flowers of *Eryngium ovinum*.

## Punch Bowl Swamp

This was a new walk for us and well worthwhile. Punch Bowl Swamp is formed by Punch Bowl Creek. Access to it



*Tricoryne elatior*, Queanbeyan NR; Photo: Roger Farrow



*Hypericum japonicum*, Punch Bowl Swamp;  
Photo: Roger Farrow

was from Corin Dam Road not far from the Gibraltar Creek crossing. Logging trails criss-cross the area but we found a loop walk which took us around the swamp. We also walked down a side track for a short distance and had good views back to Mt Stromlo and beyond. The main vegetation was *Eucalyptus dalrympleana*, *E. pauciflora*, *E. stellulata*, *E. dives*, *Daviesia mimosoides*, *Leptospermum myrtifolium*, *Baeckea utilis*, *Epacris breviflora* (a few flowers), *Olearia erubescens* and many herbaceous plants including (flowering) *Helichrysum rutidolepis*, *Wahlenbergia gloriosa*, *Geranium neglectum* and *Lobelia pedunculata*.

When we went down the side track we found the first of many *Spiranthes alticola* flowering. There were a number of interesting sedges and grasses here too, including *Juncus falcatus* and masses of *Gonocarpus micranthus* ssp. *micranthus* interspersed with *Hypericum japonicum*. The swamp had a lot of interesting plants in it including many *Brachyscome scapigera* (mauve flowers), *Velleia montana* (a few flowers), *Nymphoides montana* flowering, a few *Craspedia variabilis*, *Isotoma fluviatilis*, *Geranium neglectum*, *Leptorhynchos squamatus*



*Nymphoides montana*, Punch Bowl Swamp;  
Photo: Martin Butterfield



*Isotoma fluviatilis*, Punch Bowl Swamp;  
Photo: Martin Butterfield

ssp. *alpinus* and an uncommon fern — *Botrychium australe* (Parsley Fern).





*Thelymitra simulata*, Mt Franklin; Photo: Roger Farrow



*Diplodinium decurvum*, Kowen Travelling Stock Reserve;  
Photo: Martin Butterfield

## Summer orchids found on our walks



*Eriochilus magenteus*, Shanahan's Mountain; Photo: Martin Butterfield



*Spiranthes alticola*, Punch Bowl Swamp; Photos (above and below): Martin Butterfield



You can read a short description of our various walks, look at the list of plants we found and often, the birds and insects we spotted, as well as some photos in the Wednesday Walks section of the ANPS website — <http://nativeplants-canberra.asn.au>.

# Acacia Study Group Field Trip 2014

## Barakula State Forest, Qld



*Words and photos by Victoria Tanner*

In early August last year, 22 members of the Acacia Study Group descended on the small south-eastern Queensland town of Chinchilla, about 4.5 hours from Brisbane and not far from Dalby. About 45 kms from Chinchilla lies the Barakula State Forest, the largest state forest in Queensland (and reportedly the southern hemisphere). It is still a working forest supplying much of Queensland's cypress pine timber however we saw no logging trucks during our four-day stay and extensive travels through the forest. Barakula also contains many of south-eastern Queensland's (inland) wildflowers as well as over 30 species of eucalypts (including the Chinchilla White Gum, *Eucalyptus argophloia* and the endangered *E. pachycalyx* ssp. *waajensis*).

Most importantly and most relevant to this field trip, is that the forest and nearby surrounding area, also contains around 60 different acacia subspecies. Three of the area's acacias are unknown outside of the Chinchilla and adjoining Murella shires (*A. barakulensis*, *handonis* and *striatifolia*), while a number of other

Barakula acacias happily grow well away from their accepted geographic range, probably transmitted by forest trucks or other means eg *A. victoriae*. Barakula's most impressive acacias include *A. bancroftii* and *A. chinchillensis* as well as the rare *A. handonis*.



*Acacia barakulensis*



*Acacia handonis*





*Acacia bancroftii*



*Hakea purpurea*

Other common species found within the forest but not the subject of this article include: *Backea*, *Leptospermum*, *Micromyrtus*, *Westringia cheerlii*, *Prostanthera*, *Goodenia*, *Boronia*, *Persoonia*, *Hovea*, *Hakea purpurea*, *Grevillea longistya* (in flower), *Homoranthus decumbens* and *H. flavescent*, *Xylomelum cunninghamianum* (woody pear), *Caltryx gurulmundensis* and even *Eremophila*.



*Caltryx gurulmundensis*



*Prostanthera cryptanroides ssp. euphratoides*

As Barakula State Forest covers a huge area crossed by mostly unsigned and unsealed roads, intending visitors should first ask for advice at the Chinchilla Tourist Information Centre which also sells a number of excellent local books for native plant enthusiasts. The Chinchilla Field Naturalists Club has been active in the area for many years and a number of local authors, including Val Hando (*Acacia handonis*), are to thank for this. Sadly, Val's funeral took place not long before this field trip. She had a long-standing interest, enthusiasm and extensive knowledge of the local area's native plants.

You can camp within the forest but camping is rudimentary and should be pre-booked.

The majority of participants for the 2014 Acacia Study Group field trip were from nearby south Queensland, however there were also a few acacia enthusiasts from Victoria, two from Armidale (NSW) and one from the ACT. Some chose to stay in relative luxury offered in Chinchilla and make the drive each day, while most camped, caravanned or utilised the old forestry housing.

The field trip organisers were locals, Len and Joan Hubbard. Len's enthusiasm for, and knowledge of the local wattles and the forest, was clearly evident from the moment he spoke. He consequently led the group on an extremely well planned 3.5 day tour in the quest to find over 55 different wattles. As well as learning about the local acacias, Len also took the time to educate the group about the historical elements of the forest, which in former times contained schools and a number of small settlements for timber workers and their families. A number of ruins and relicts remain.

So after an initial meet and greet in Chinchilla at lunch time Friday, we were off! The remaining first half-day was spent travelling out to the forest from Chinchilla, stopping en route to view eight wattles: *A. salicina*, *decora*, *leocalyx* subsp. *leocalyx*, *aneura*, *melvillei*, *excelsa*, *semilunata* and *triptera*. (*A. semilunata* in particular, was flowering and once seen, was easily recognisable. It is quite common in the forest and very attractive.) After a few interesting hours, we arrived at our forest campsite where the group settled in to their accommodations, later



*Acacia semilunata*

enjoying a warm bonfire and chat in the cool evening.

Saturday started early as we had lots to see: *A. chinchillensis*, *caroleae*, *neriifolia*, *muelleriana*, *haddonis* and *sparsiflora* (and that was just before morning tea at Stockyard Lagoons). We then located ten more acacias before lunch taken at Turkey Mountain Fire lookout. This spot provided an excellent view over the surrounding area reinforcing the large expanse of the forest.

Re-energised after lunch, another five acacias were identified before heading back to the campsite and another warm fire. Of note, a stop was made to see *A. amblygona* (prostrate) growing happily on the sides of the road.

Sunday and "are we really in Queensland?" — the temperature dropped below zero with frost and to make matters worse, the luxury of electricity had suddenly

been removed from those staying in the old forestry hut ('the motel') — consequently, no water either! We made do as best we could then headed off to see even more acacias and added to our growing lists of acacias identified: *A. spectabilis*, *A. jucunda* (courtesy of a prior forestry grader?) and *A. johnsonii*. The acacia convoy of about ten vehicles then stopped at 'Kunzea Corner' to examine *K. opposita*, just starting to flower. From here we found *A. blakei* subsp. *blakei* growing in amongst a large stand of *Xanthorhoea johnsonii*. Then just before we reached Waaje Fire Tower, we stopped to admire a large stand of *A. shirleyi* before enjoying morning tea at the foot of the 100 ft high and 50 year-old wooden fire tower. (The fire towers are no longer used).

Post lunch, we continued our acacia quest examining *A. buxifolia* subsp. *pubiflora*, *juncifolia* subsp. *juncifolia*, *julifera* and even a few *Eucalyptus rubiginosa* (rare for this area). We were also lucky to see a lone stand of the endangered *E. pachycalyx* subsp. *waajensis*, however time was running out and the light fading so we started the journey back. Even though we were homeward bound, the acacia convoy still managed to find several more acacias before settling back in to our 'motel' and campsite. Luxury! Power has been restored, there was running water and the campfire was burning!

Monday (last day) and an early morning start but thankfully with power and warmer weather! So with vehicles packed, an even larger convey drove west to Pelham stopping briefly at Dogwood Creek for one of Len's very informative history lessons. Driving on we left behind the wonderful Barakula State Forest to

examine a small clump of roadside *A. flexifolia* in full flower and then on to see *A. burbridgeae* (probably germinated by a recent fire as the parent plants had not been seen for twenty years). On our next stop we examined *A. aprepta* growing roadside on Hookwood Road (into Miles) which was followed by morning tea held at Paddy's Lagoon (*A. stenophylla* and *A. pendula*). Revitalised after a short break, on the road to Condamine we unexpectedly found *A. victoriae*, *A. farnesiana* and *A. omalophylla*.

As it was the last day of our "wattle wander" and after finding so many new and interesting wattles, it was definitely time to stop for a farewell lunch and to say thanks to Len. A fitting location for our farewell lunch was the Condamine pub but before going inside, Bill Aitchison (Acacia Study Group leader), formally thanked Len and Joan for organising and leading the Study Group tour for August 2014 — a trip very well organised and enjoyed by all (56 species with 29 flowering seen in less than only four days!). Well done Len and thanks for all the work and time that you expended in preparing such an interesting trip which included so many acacias and so much information.

The Acacia Study Group field trips are always worth attending and usually held in different locations each year. Anyone interested in joining the study group and attending the next field trip can contact the group's leader, Bill: [acaciastudygroup@gmail.com](mailto:acaciastudygroup@gmail.com).

*Acknowledgement:* Len Hubbard's detailed report of the field trip published in the Acacia Study Group Newsletter (Sep/Oct 14).



# A Summit of Diversity: Big Badja Hill



Checking the *Nematolepis* (bright green vase-shaped bushes below) on the summit flysch

*Words and photos by Roger Farrow*

In the Gourock Range east of Cooma lies the isolated summit of Big Badja at 1363m. Until the road that crossed Pikes Saddle between Gundillion and Countegany was constructed in 1972 this summit would have been rarely visited except by a few bush walkers investigating the Woila wilderness. It is now easily accessible by a 4WD fire trail from the saddle and members of ANPS have visited it on three occasions as part of field trips and Wednesday walks. The trail is better walked than driven

and is a scenic stroll through snow gum woodland and white ash forest to the heath- and shrub-covered summit.

The summit area consists of an exposure of broken Ordovician quartz-rich flysch, an ancient sedimentary sandstone and breccia, highly deformed by folding and faulting. The heathland on the summit is termed **southern montane heath** although it does not support *Allocasuarina nana* that is dominant in nearby areas of heath.

Several botanists have collected plants from the area and its flora is now well known and has some unusual characteristics, namely the presence of a number of species and varieties that are either endemic to the summit area or are restricted to this or some other heathy summits in the surrounding region such as Wadbilliga Trig and Mt Kydra.

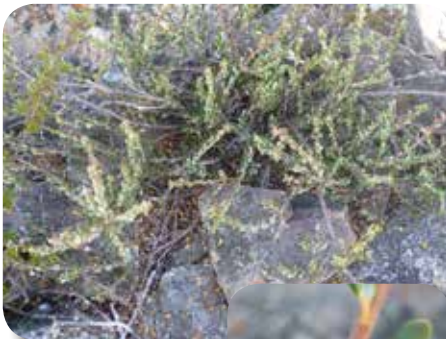
The most well-known of these is *Kunzea* 'Badja Carpet' that is now widespread in cultivation. It dominates the ground cover of the rugged summit outcrop with some further occurrences southwards towards Mt Kydra. There are 12 species of *Kunzea* in NSW but the genus is characterised by at least five localised geographic races of uncertain taxonomic affinities. The



Wednesday Walkers among the white ash *Eucalyptus fraxinoides* on the trail to the summit

local species are *K. ambigua*, *K. capitata*, *K. ericoides*, and *K. parvifolia*, and it has probably split off from one of these, possibly *K. capitata*. It is a very variable plant being completely prostrate in the summit area while in the lower woodland understory it produces curving ascending branches. It is known as *K. sp.* 'Wadbilliga' in the *Flora of NSW*.

The trailing monotoca, *Monotoca rotundifolia*, an endangered species, is only known from Big Badja summit, Wadbilliga trig and one locality in Victoria. It grows among the Badja carpet and is relatively inconspicuous and was seen for the first time by the Wednesday Walkers on our recent visit.



*Monotoca rotundifolia*

It differs from the common *M. scoparia*, found in the surrounding woodland lower down, by its sprawling habit and rounded leaves and it was in flower at the time of our visit. It was described as

recently as 1967 by John Willis from the Victorian population at Brumby Point on the Nunniong plateau.

A rutaceous shrub growing to about 1.5m was found in a rocky gully below the summit on a recent visit by the Wednesday Walkers and was subsequently identified as *Nematolepis elliptica*. According to the *Flora of NSW* it is confined to rocky summits in the ranges of this area and is not known in cultivation. It is characterised by extremely glandular-warty stems and flowers in spring.



*Nematolepis elliptica*

In the shrubbery below the summit, a local form of Victorian Christmas bush, *Prostanthera lasianthos*, occurs among the tea-trees and has been brought into cultivation as *P. lasianthos* 'Badja Peak'. It differs from the more typical form of the species by its smaller, stiffer leaves and more compact growth (to two metres) and is more cold- and drought-hardy, possibly an adaptation to altitude and exposure. Its cuttings grow true to type. The much larger typical form, growing to five metres, can be found nearby in the Tallaganda, Deua and Wadbilliga National Parks where it grows at altitudes



up to 1250m. A large variety of forms of this species are recognised in the *Flora of NSW*.



*Prostanthera lasianthos* 'Badja Peak'

There are other interesting species growing in the summit area that are more widespread. These include *Prostanthera phyllicifolia* found on the Tinderry granite outcrops (it normally grows on granite but is confirmed by the Atlas for the flysch on Big Badja) and *Leptospermum micromyrtus* and *Epacris robusta* that are also confined to rocky outcrops at high altitude in the Southern Tablelands.



*Leptospermum micromyrtus*



*Epacris robusta*



*Prostanthera phyllicifolia*

Visits during the spring and summer flowering period may yet reveal other species that are restricted to this montane heath. These heaths also contain other endangered and rare

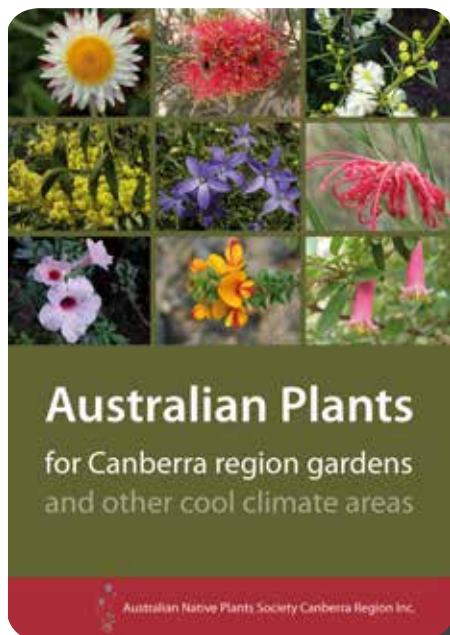
species in the region and include *Dampiera fusca*, *Westringia kydrensis*, and *Euromyrtus denticulata* that may yet be found at Big Badja.

Big Badja is not only great for plants, on a clear day it has the best view in the region: to Mother Woila and the coastal ranges to the east, to the Three Brothers on the Monaro to the south, to the snow-capped Main Range to the southwest, to the Tinderry Range to the west, and finally to the Gourrock range to the northwest. Closer to the south and below are the interconnecting swamps of Badja Nature Reserve that are the source of Badja River, a tributary of Numeralla River.

# ANPS book launch

By An Van den Borre

*An is the convener of the ANPS Book Working Group who compiled the new, fifth edition, of the ANPS book.*



The fifth edition of the ANPS book, *Australian plants for Canberra region gardens and other cool climate areas*, was launched on 15 March 2015 at the Australian National Botanic Gardens' theatre.

It was wonderful to see so many people at the launch, both members and other friends of the society. For us, the ANPS Book Working Group, it was a very

special occasion as we finally saw our work of the past seven years completed.

There were five speakers: Gwyn Clarke spoke about the history of the book and its four previous editions. I spoke about the fifth, new edition and the work of the ANPS Book Working Group and many other contributors. Greg Quinn showed the audience a 'live' performance of the image database and of the page layout algorithm he used to format the description pages in the book. Alison Roach, our president, talked about our society.

Finally, Ian Warden launched the book and among many things spoke about his ideas associated with growing Australian native plants and using them in the garden.



Ian Warden launching the book; Photo: Lucinda Royston

The presentations of Gwyn Clarke, An Van den Borre and Greg Quinn continue on the following pages, with photographs of the event by Lucinda Royston.

## Stepping stones from the past

Gwyn Clarke

Gwyn and her husband Geoff Clarke were part of the Editorial Committee of the fourth edition of the ANPS book.



Gwyn Clarke; Photo: Lucinda Royston

Over the years ANPS Canberra Region has published five editions of the book *Australian Plants for Canberra Region Gardens*. These books have provided information about the growing of the Australian flora in order to encourage members and the general public to introduce native plants into their gardens. This is an important part of the sharing of information learned about the flora with those who are enthusiastic about its use in gardens and its conservation.

When the Society was first formed by A J Swaby, it was because the flora was being cleared for urban development, farming, road building and industrial activities and appeared to be disappearing at a great rate. At this time very few people knew how to grow the plants and there were very few gardens where they grew. One of Mr Swaby's goals was to establish local groups with those who had the

knowledge of growing the flora, passing on their knowledge to enthusiastic learners so that the Australian flora would take its place in gardens as well as the bush. It was 'preservation by cultivation' and there are plants alive in gardens today that are extinct in the wild.

In 1962 the Canberra Region of the Society for Growing Australian Plants was formed. Two of the most important activities were teaching people how to grow their own plants and providing suitable plants for growing in Canberra gardens. Coastal grown plants did not always do well in Canberra's climate, nor were the labels that accompanied them helpful, so the Society set out to remedy this situation. Members growing the plants in their Canberra gardens were happy to share their successes as well as their failures and this information was vital in developing the books that were to follow.

The first book was published in 1973. The title was *Australian Plants for Canberra Gardens* and the editors were Henry Nix and David Mackenzie. This was a basic book. The early chapters described Canberra's conditions, how to design a garden, garden management and plant acquisition. Chapters similar to these are still to be found even in the newest edition. There was a list of about 330 recommended plants ranging from large trees to indoor plants. The two-toned cover showed a range of plants in various sizes and shapes, but there were no other drawings or pictures. This was the first time this kind of book had been available for gardeners interested in growing the Australian flora in Canberra.





Previous editions of the book, clockwise from top left: 1973, 1976, 1983 and 2001; Photo: Gwyn Clarke

The second book appeared in 1976. It was edited by Arthur Chapman. It was very similar to book one. There were some different species in the recommended plants because of new information. Line drawings were used in the early chapters to help reinforce the text message and illustrate some species listed in the text.

The third book was published in 1983. This time the editors were Geoff Butler and Aiden O'Leary. For the first time we had a coloured picture on the front cover and some coloured photographs inside. This showed the attractiveness of the plants. There were also line drawings, but basically books one to three had only small changes in organisation and content. All these books were well received and my copies were well used.

Then there was an eighteen-year gap. In this time the Society was following up other issues, which would mean quite a change when book four appeared.

The first issue concerned plant labelling. There was general agreement among all regions of the Society that plant labels lacked really important information to help people grow the plants properly anywhere. *Choice Magazine* was approached by the Society to help them address this matter. It was decided to have members throughout the regions take photos of labels on the plants in nurseries. At the same time the Society and *Choice Magazine* came up with a ten-point list of important information that gardeners needed on labels. The label photos were sent to *Choice*

*Magazine* and, using the ten-point list, it was able to analyse the labels. An article was written for the magazine, which showed where labels were sadly lacking in important information and how this might be improved. This certainly led to some improvement in labelling for coastal areas, but none of the labelling was written for non-coastal climates. Canberra region decided it was time to write labels providing the appropriate information for Canberra's climate to help local gardeners.

At this time there had been a great leap forward in the use of information technology (IT) and this led to the setting up of a plant label database where newly written plant labels could be stored. The original database was given to the

Society by some members who had been running a nursery but were closing down. Some enthusiastic members took it over and with the help of our own IT man, Greg Quinn, our own labelling service came into operation. We could now provide labels for the plants we were growing, which were suitable for Canberra's climate. This database is still in operation and continually updated by volunteer members.

For many years the Society had held flower shows with some plant sales, but the flower show side was fading, particularly as we were holding them in the Australian National Botanic Gardens. Two plant sales, one in spring and one in autumn, were held. These sales were very enthusiastically received by the



ANPS plant sale at the Australian National Botanic Gardens; Photo: Anne Campbell

public and still continue today. Many new plants grown by members were expanding our list of suitable plants and it was time for a new book.

Book four was published in 2001. In order to include many more plants than in previous books, symbols were introduced to help shorten plant descriptions without losing important information. Over a thousand plants were listed, many of which were suited for use in pots or indoors where it is easier to control some conditions. Many local plants were also included. This book had some coloured photos as well as some line drawings, but the cost of colour photos limited the number able to be included. The plant label database was the source for the descriptions and, as this resource is continually updated when new information is received, it was only a matter of time before a new book was needed.

Thanks to the growth of digital camera technology it was hoped to include a picture for each plant described in the new book. What a challenge! I leave it to the team who accepted this challenge to complete the story.

## The fifth edition

*An Van den Borre*

When the initiative was taken in February 2008 to start updating the book, we were indeed a bit naive to think that we could do this in just a few years — at least I was.

The previous edition was indeed a hard act to follow and was invaluable to us working on the new edition. When I say 'us', I am talking about myself and the other members of the Book Working

Group who worked on this edition. They are Anne Campbell, Jenny Campbell, Greg Quinn, John Robertson and Masumi Robertson. A great team.

The fifth edition follows a similar content structure as the previous edition. The first four chapters provide information about gardening with Australian plants. These chapters have been updated and some sections were revised. Our whole team worked on most of those, but Masumi Robertson especially spent a lot of time reworking the environment chapter. That chapter elaborates on many of the local climate issues gardeners will encounter. This will enable them to understand their garden under various seasonal conditions. Masumi and John Robertson, together with input from Ben and Ros Walcott, also reviewed the garden design section.

There are also some new sections in the book that we are really pleased to have. Roger Farrow kindly wrote a special section on insects in the garden. This is a taste of what is to come in Roger's new book on insects of south-eastern Australia that will be published soon (independently from the Society). We now also have a section in the book on bonsai with Australian plants, thanks to Roger Hnatiuk.

As the title of the book indicates, the main aim of the book is to provide gardeners in the Canberra region and in other, similar, cool climate regions with the best information on how to create a thriving garden using Australian species. It was therefore important to provide a reliable and up-to-date list of suitable Australian plants. Consequently, the descriptions and illustrations of these





From left to right: An Van den Borre, John Robertson, Jenny Campbell, Greg Quinn, Masumi Robertson, Roger Farrow, Gwyn Clarke, Ian Warden, Roger Hnatiuk, Anne Campbell; Photo: Lucinda Royston

plants take up the largest part of the book. So, I would like to talk a little bit more about how this was compiled.

We built further on the information in the previous edition in several ways. To ensure the plants we included would be available for purchase in the Canberra region, Jenny Campbell spent many hours gathering information from local nurseries' plant selections. We also surveyed the members and analysed the society's own plant sales records for this. However, the central component from which we started was the ANPS plant label database, which is quite special. This database contains the information that is printed on the plant labels for the society's plant sales. It was built over many years and has captured much of the experience and knowledge of members and member growers.

Using this database and the plant availability as a starting point, we spent much time researching literature to add new information, check accuracy and check species' suitability for our region. Anne Campbell surely spent nights dreaming of the Excel spreadsheets of information she patiently amalgamated. We then spent many — many! — hours selecting suitable species, forms and cultivars for the book using her spreadsheets. Our final selections were then sent to some of our members and member growers, who kindly sent feedback.

As in the previous book, the plants are categorised according to growth form, but we have added two new categories: a small selection on ferns, and the herbaceous plants category.

Greg Quinn did some amazing database coding to get all this information organised into a new book database linked to the label database. This he placed online and we were able to edit the data from home via the internet. Many, many hours were invested — especially by Anne and Jenny — to record this information and each characteristic was recorded separately. Many more hours were then invested, especially by Masumi and John to check these records and edit them consistently.

What this means for you, the readers, is that the plant descriptions are presented in the book in a standardised way. Katharine Campbell did a great job in designing symbols for us that show the preferred growing conditions for light, drainage and frost-hardiness for each species. These symbols stand out on the



President Alison Roach; Photo: Lucinda Royston

pages and so can be quickly scanned by the reader. The symbols are explained in the book and are also listed on the inside back cover, and on the bookmarks.

Now, I still have not spoken about our most ambitious wish with which we started this update of the book. And that was to provide photographs for all the



The audience at the ANPS book launch filled the ANBG theatre; Photo: Lucinda Royston

plants in the book. Because, to be honest, that is what plant lovers and gardeners get very excited about — and we do too! Many of us already had a significant collection of plant photographs, but we needed many more to complete the book. So, we appealed to the members, friends of members and anyone who was interested and knowledgeable to help out with taking photographs of the selected plants. Many people responded generously and sent images, which was wonderful. The team also spent several weekends taking photographs here at the Botanic Gardens to fill in the gaps.

To accommodate all these images, Greg built another online database, which allowed photographers to upload images online and slowly, images started trickling in. Greg made it possible for us to view all images online, edit the images online, and associate the images we liked with the species descriptions in the book database. It was all amazing!

In the end, the database held more than 6500 images. And this became our final big, and sometimes quite difficult, job — to select the best images for the book. During this long selection process, we tried to not only select the best images, but also to show the most characteristic parts of each plant, when possible. At the same time, we tried to vary the images on the page.

Of the entire process of compiling the book, I think this was the part we most enjoyed — to see the image database grow and see the images and descriptions ‘come together’ on the pages. This ‘coming together’ part was quite extraordinary. It was made possible through Greg’s final ‘pièce de

résistance’ of coding: an automated layout algorithm for the book pages that placed the photographs neatly arranged on the opposite page, next to the description page (as you will see them in the book). To us it looked as if the images ‘magically’ found the best spot on the page. Consequently, Greg’s code was baptised ‘the magic algorithm’.

And so the book slowly came together. Our last steps were to create the index and engage the help of Debra Butt from Design One. She converted the layout of the introductory chapters from Word into InDesign. She also designed the front cover, which we absolutely love. Noel Healey from the ANU Printing Services enthusiastically advised on and managed the final printing process.

As you can see, the book has benefited greatly from many contributions from a large group of people. Without these, the book would not be what it is today. So I would like to thank the members of the Book Working Group and everyone who contributed to this book and also to the previous editions. I also would like to thank the various ANPS Council members over the last seven years who trusted us with the task of creating this new edition.

I hope the book will follow in the footsteps of the previous editions, have a great uptake and enable a whole new group of Canberrans to enjoy having Australian plants in the garden.

Finally, I would like to introduce our next speaker, Greg Quinn.

Greg is a life member of the society and is the quiet achiever of our team who — as you heard — really does things that



seem quite impossible to many of us. He has taken the production process of the book several dimensions further than we ever thought of — to 'Where No Book Designer Has Gone Before'. The value of his information storage system is that it will continue to grow and benefit the society for many years to come.

Unfortunately, when you look at the book, this is the part that remains invisible. But, fortunately for you, today you have a unique chance to see some of the 'magic algorithm' and databases in action.

## Images, databases and magic algorithms

Greg Quinn

*Greg is the programming expert of the ANPS Book Working Group who developed the databases and algorithm used to compile the new, fifth edition, of the ANPS book.*



Greg Quinn; Photo: Lucinda Royston

The time between the fourth edition (2001) and the new fifth edition (2015) of the book saw the rise of a significant new technology — the affordable digital camera.

The early cameras had a limited resolution by today's standards. A

typical high-end (>\$1000) camera of 2001 offered one megapixel (MP) or less. Today, everybody has something much better than that, even if it's just in their phone!

The digital camera allowed the fifth edition of the book to differ significantly from the fourth edition in a very obvious way — a picture for every plant.

The Book Working Group collected nearly 7000 pictures of plants and gardens, donated by members and friends of ANPS. These pictures span the history of the digital camera, which gave us a highly variable collection of images to work with:

- small images (<1 MP)
- big images (30 MP)
- images with different aspect ratios (3:2, 4:3, etc.) and orientations (landscape or portrait)
- images cropped by the photographer to squatness (2:1 landscape) or tallness (1:3 portrait)

We also received many mid-range images — about 4 MP with 3:2 or 2:3 ratio snapshots at a resolution about 2200 x 1700 pixels — which turn out to be perfectly adequate for printing at the size we wanted for the book: no more than about four inches by three inches at 300 pixels per inch.

We were determined that every plant described in the book would have a picture. For many common garden plants, we had plenty of contributions to choose from — indeed, sometimes the problem was which one to pick. For some plants, we only had one picture: this made the choice very easy.



The images used in the book were highly variable in size, resolution and shape.

But sometimes we had a plant that we wanted to include, but no picture had been contributed at all. We went to some trouble to fill those gaps, including having our own photography sessions at the ANBG. However, when we could not find any specimens and had no picture, we had to ask some questions to make a choice: Drop the plant from the book? Work out if the plant was not commonly grown? Did we have good pictures of other members of the same genus? — if the latter, maybe dropping the plant from the book was not a bad decision.

Since the early 1990s, ANPS has had a database of plant descriptions used to produce the labels for our plant sales. In 2015, this database contains nearly 2500 descriptions of plants that we have sold. This meant that we had plant descriptions, we had pictures, and so 'in theory' we could produce a book. But how to put it all together?

Early in the project, we made the decision that the basic layout of the description pages in the book would be 'text and information' on the left and images on the right (facing) page.

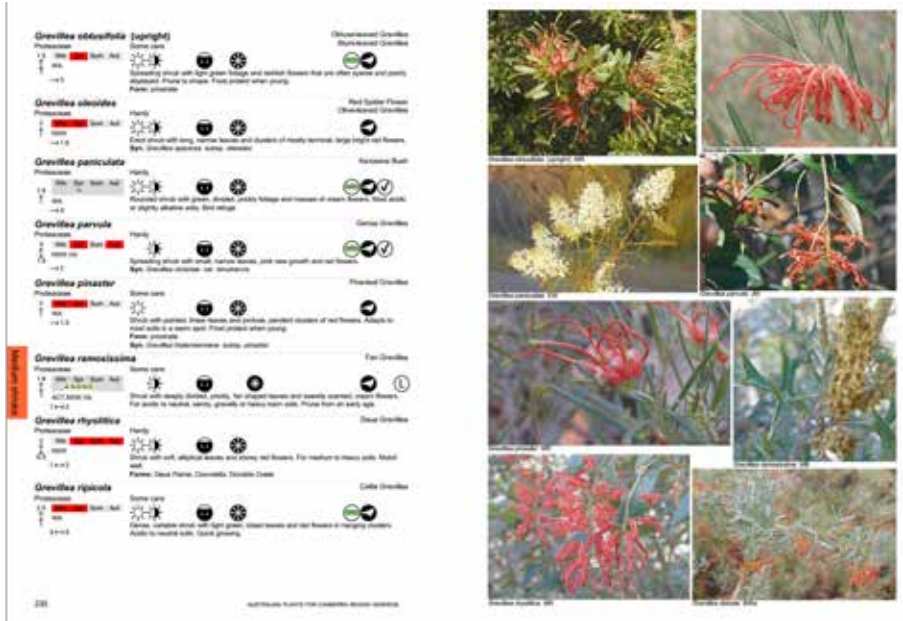
This was prototyped as web pages and eventually it evolved to having seven or eight plants per page: rarely less, never more.

This meant that with the 934 plants selected for the book, we'd have about 120 double pages of descriptions and associated images. Given the variable nature of the images, how could they be arranged on the page? The conventional answer is: fiddle about with it yourself, or get a designer to do the fiddling for you (at considerable expense).

Instead, we used what came to be called the 'Magic Layout Algorithm' to arrange the images on the page. It's like solving a seven- or eight-piece jigsaw puzzle. The aim of the algorithm is to fill the image page as much as possible, minimising the white space by adjusting the position and area of the individual images.

But the algorithm also has some constraints: the aspect ratio of the images has to be maintained, individual images have to be at least a minimum size, and should also not be too big. In addition, if the image has a limited number of pixels, it can't be expanded beyond that limit.

How to solve this problem? A simplistic solution is for the algorithm to try every possible combination of image position and image size. Is this feasible? It turns out that for an eight-image page, this 'brute force' technique can work in a reasonable time. On the shared Linux server of our website, the algorithm can find the best arrangement for a typical page in about two minutes. All the 120 image pages can be laid out from scratch in about four hours.



Page layout in the medium shrubs section, generated using the Magic Layout Algorithm.



So that's what we did, and how the layout for the plant descriptions in the book was generated. The result is quite pleasing. The calculation process can be seen in action on our website (<http://nativeplants-canberra.asn.au/mla.html>).

Some common patterns in page layout arrangements emerged from all the algorithm's calculations, not all of them obvious, and these are what you see in the book.

However, it should be noted that a nine-image page would take about 15 minutes to calculate using this technique, making the whole book's layout take a day and

a half. If the sixth edition has a layout with more than eight images per page, a smarter minimisation algorithm will no doubt be needed. This is a well-known computing problem and good solutions exist. That can be an exercise for the next Book Working Group, if books still exist in 2030!

Thanks to the Magic Layout Algorithm, the end result is that pages 62–333 of the fifth edition can be generated, in a format ready for printing, from the database and our library of images in a few seconds.



Photo: Glenn Pure

**Sea-urchin Hakea.** Hardy bird-attracting shrub from Western Australia. 5mH x 3mW. Rounded grey-green leaves. Cream buds open to pink and cream sea-urchin flowers, which age to maroon and cream. Flowers in autumn and winter. Well-drained soil in full sun. Protect from frost when young, frost hardy to  $-7^{\circ}\text{C}$ . Prune lightly.

Source: *Australian Plants for Canberra region gardens and other cool climate areas*

# True Blue Aussies

By Lachlan Garland

In the world of rose growing, breeding a blue rose is considered the holy grail. While many have tried, it has never been achieved. This is where Australian plants beat roses by many thousands or millions of years. For in the Australian floral colour palette blue flowers are in abundance. And in all shades of blue.

Here is a small selection to tempt you to grow a true blue Aussie.

## ***Lechenaultia biloba***

Blue Leschenaultia



*Lechenaultia biloba*; Photo: Glenn Pure

A spectacular small shrub up to 50 cm in height and similar width. The large flowers, given the plant's size, are up to 30 mm in diameter and appear from late winter to summer.

Flower colour ranges from dark blue to light blue, and cream and white forms are known.

As it occurs naturally in gravelly and sandy soils of south-west Western Australia, it really needs sandy, well-drained soils to flourish; dry summers; and full sun to partial shade.

It is quite short lived — about four years if conditions are ideal. However it is easy to propagate from semi-hardened cuttings. Good in a rockery where it can straggle over rocks, or in pots and hanging baskets. Prune to keep compact habit.

## ***Wahlenbergia stricta***

Australian, Tall or Austral Bluebell



*Wahlenbergia stricta*; Photo: Chris Clarke  
(via Nature Share)

A perennial herb up to 50 cm tall. Individual bell-like flowers occur mainly in spring or summer.

Generally easily propagated by division or root cutting. Hardy once established and tolerates a range of well-drained soils in a sunny or semi-shaded position.

It is shallow rooted so keep soil moist but not water-logged. However if they do die back, as they form thin tubers, reshooting occurs following rain. A great plant for rockeries, in a border, pot or hanging basket.

## **Dampiera**

*Dampiera* is a genus well known for having many blue-flowering species and cultivars, so there are many to choose from. However, to be sure of the exact flower colour of the plant you are considering purchasing, it is best to see it in flower.

### ***Dampiera linearis*** Common Dampiera



*Dampiera linearis*; Photo: Chris Clarke, Melburnian (Wikimedia CC BY 2.5)

An erect perennial from south-west Western Australia. Grows up to about 50 cm and one metre in diameter. Flowers between July and December. Prefers a well-drained situation in full sun or light shade; while it tolerates some dryness it is moderately frost tender. Two forms include: the dwarf, compact 'Cobalt Mound' and the mound forming 'Blue Moon'.

### ***Dampiera stricta*** Blue Dampiera



*Dampiera stricta*; Photo: Chris Clarke (via Nature Share)

An erect perennial low-growing shrub native to the open forests and woodlands of eastern Australian states. It grows to usually about 25 cm, although occasionally up to 60 cm height, up to one metre in diameter. Flowers between August and January; ranging in colour from light blue through to purple. Has a suckering habit, but never is invasive. A number of forms in cultivation.



Prefers well-drained soils in full sun or partial shade; will tolerate occasional light frost. Cuttings usually strike reliably.

Good for rockeries, and grows well in a container.

## ***Brunonia australis*** **Blue Pincushion**



*Brunonia australis*; Photo: Chris Clarke (via Nature Share)

A small herb, found in all Australian states and territories, with leaves to 10 cm and flowers in clusters on long stems 50 cm high. Flowers occur in clusters of up to 50 flowers on long stems, usually in spring.

Grow in well-drained soils, either in full sun or partial shade. Establishment can be difficult, and in cultivation can be short lived. Can tolerate temperatures as low as  $-8^{\circ}\text{C}$ . Goes into dormancy and will re-shoot in spring after rain. Propagation is not difficult by seed or by division of established plants.

## ***Dianella revoluta*** **Blueberry Lily, Blue Flax-lily, Black-anther Flax-lily**



*Dianella revoluta*; Photo: Linda Richmond  
(via Nature Share)

This tufted, clump-forming perennial (up to one metre in height and a diameter of two metres) grows in extremely variable conditions. Flowers from spring to late summer with deep blue to purple flowers on wiry stems. Fruit is a shiny dark blue berry.

Once established is very hardy, and drought, frost and wind resistant. Suitable for most soils, but prefers a well-drained soil; full sun to full shade. Suitable in a rockery or border, and in public landscaping situations. Propagation can be either from the seed or by division of rhizomes.

## ***Linum marginale*** **Native Flax, Australian Flax**



*Linum marginale*; Photo: Sue Guymer (via Nature Share)

A slender, short lived, erect, perennial herb to about one metre in height. Large blue flowers in spring and summer which form at the top of wiry stems. After flowering, papery capsules form containing sesame-like seeds.

The plant dies back in summer, but reshoots in autumn following rain. Grows best in moist well-drained soils; full sun to semi-shade. Frost tolerant. Good in rockeries. Will self-seed in good conditions.

## ***Stypandra glauca*** **Nodding Blue Lily, Blind Grass**

A multi-stemmed tufted perennial plant to 1.5 m in height. The lily-like flowers occur in spring and tend to hang facing downwards. Colour can be variable — usually blue or occasionally white. Tolerates a range of soil types; sun or semi-shaded; and drought and frost. Best propagated by division in cooler months.



*Stypandra glauca*; Photo: David Francis (via Nature Share)

Good in rockeries or natural plantings. Older growth blackens which provides a good contrast to the younger green growth, but may be an issue for some growers who may find the old growth unsightly.

While Vita Sackville-West had a 'white' garden consisting only of plants with white flowers at Sissinghurst in England, I'm not sure a garden entirely of blue flowering Australian plants would work. Perhaps one featuring blue and white Australian plants could work, much like the blue and white of Wedgewood's Jasperware porcelain, or a blue and yellow garden to pick up on the yellow features found in many blue flowered species. Something to consider if you want a real design statement to your garden.

Despite the colour blue being associated with sadness, blue flowering natives in your garden are sure to lift your spirits whether you're planting one blue-flowered species or several.

*This article first appeared in Growing Australian No 231 March 2015*

# Study Group Notes

By Lesley Page, Study Group Liaison Officer, ANPS Canberra Region

## Acacia Study Group

Newsletter No. 128 March 2015

- From the leader
- From members and readers
- Some notes from Yallaroo
- Rust Fungi, *Endoraecium* sp
- *Acacia awestoniana*
- *Acacia carneorum*
- New species — *Acacia yalwalensis*
- *Acacia pendula*
- Pre-treatment of *Acacia* seed
- Wattle Dat at Colac 2015
- Books
- Photos of wattle places
- Seed bank
- Study group membership

## Dryandra Study Group

Newsletter No. 68 February 2015

- Letter from the leader
- More on *D. mucronulata* subsp. *retrorsa*
- Alex George's paper
- Mystery dryandra in Thomson Reserve
- Good news and bad news from members
- Get together in the West

- Finding *D. erythrocephala* var. *inopinata*
- Report from The Netherlands

## Epacris Study Group

Newsletter No. 39 Autumn 2015

- Letter from Gwen Elliot
- A very special contribution to our newsletter
- The Epacris Study Group to go into recess
- Key to the genus *Epacris* Labill.

## Eremophila

Special Newsletter

- New study group leader — Lyndal Thorburn
- Summer seedlings

## Garden Design Study Group

Newsletter 89 February 2015

- Leader's comments
- Correspondence
- Redesigning a native meadow
- UK nurseries suffer from cheap plants
- Sculpture in the garden
- Dilemmas of a designer
- California drought worsens
- Kenrokuen Garden, Kanazawa, Japan
- New UK pollinator strategy

- Report of Melbourne garden visit and meeting
- Garden visit — Milton NSW
- Treasurer's report

## Grevillea Study Group

Newsletter No. 100 February 2015

- SE Qld programme 2015
- An anniversary editorial 2015
- Field trip reports — Sydney grevilleas, October 2014
- Grevillea Study Group 2014 Easter field trip
- Conservation
- Propagation
- In your garden
- Seed bank

## Hakea Study Group

Newsletter No. 57 February 2015

- Letter from Paul with an update on Colac
- Propagation

- Bush fires
- Letters from members
- Request for hakea seed
- *Hakea bakeriana*

## Wallum & Coastal Heathland Study Group

Newsletter No. 38 March 2015

- Letter from Barbara: outings programme report of 2014: Bribie Island, Kobble Creek / Mt Kobble, Sandstone Point, Beerburrum Cemetery, Mt Mee, Glass House Mountains Lookout, Bribie Island Community Nursery
- Activities for March, April, May 2015: Beachmere Conservation Park, Caboolture Lawn Cemetery and Beerwah scientific area, "The Fragile Web", Blackbutt, 160km north-west of Brisbane, opening in 2014

That's all folks, Lesley



*Myoporum bateae*; Photo: Glenn Pure





## Australian Native Plants Society (Australia)

Biennial Conference 2015  
AIS Canberra, Bruce ACT

### Program

#### Sunday, 15 November

ANPSA Delegates meeting

Free shuttle bus runs hourly from AIS to National Museum, National Portrait Gallery, National Gallery, War Memorial and other attractions for all registrants

#### Monday, 16 November

Morning presentations; afternoon excursions

Eve: meeting of study groups leaders and coordinators

#### Tuesday, 17 November

Morning presentations; afternoon excursions

Eve: meeting of study groups

#### Wednesday, 18 November

Morning presentations; afternoon excursions

7.30pm Australian Plants Awards and A.J. Swaby Lecture with Angus Stewart

#### Thursday, 19 November

Morning presentations; afternoon excursions

7pm Conference dinner with speaker Ian Fraser

#### Friday, 20 November

Morning excursions; afternoon presentation and plant sale

The program will explore the genesis of the Bush Capital and its development as a garden city. We will also investigate current research on native plant systems and habitat recovery. The program will emphasise the work of study groups with reports from their leaders.

### Keynote speakers

- Angus Stewart — Swaby Lecture
- Ian Fraser — Conference Dinner
- David Headon

### Conference excursions

Each day of the conference, there will be five different excursions to:

- Australian National Botanic Gardens
- National Arboretum, Southern Tablelands Ecosystems Park, National Bonsai Collection and the National Rock Garden
- Pillans garden and Queanbeyan Nature Reserve
- Kowen Travelling Stock Reserve
- Walcott garden



## Conference Dinner

The dinner will be held in the Arena of the AIS and will feature after dinner speaker Ian Fraser. Ian is a Canberra naturalist who has written extensively about local plants. Ian is a passionate speaker on native plants and was given the Australian Plant Award in 2001.

## Book, Plant and Artwork Sales

During the conference, a large variety of books on native plants and ecosystems will be for sale at times to be announced. In addition, the new revised fifth edition of *Australian Plants for Canberra Region Gardens* will be available.

Canberra has a large number of talented botanic artists and their work will be on display during the conference. Some works will also be for sale. It will be a

great opportunity to acquire botanically accurate artwork as well as to support these artists.

A plant sale will be held at the end of the conference. Member growers of the Australian Native Plants Society Canberra Region will provide a variety of unusual and interesting plants, including some grafted plants.

## Registration

Early Bird Registration until 1 July:	\$355
Regular Registration until 1 Nov:	\$395

## For more information:

Email: [conference2015@anpsa.org.au](mailto:conference2015@anpsa.org.au)

Web: <http://conference2015.anpsa.org.au>

Post: ANPSA Conference 2015  
PO Box 187  
Deakin West ACT 2600



## *Eucalyptus leucoxylon*

Photos: Flowers, Glenn Pure; Tree, C. Green, ANBG [www.anbg.gov.au](http://www.anbg.gov.au)

**Yellow Gum, White Ironbark.** Hardy tree from NSW, Vic, SA. 15mH x 6–9mW. Smooth, white bark, long bluish-green to green leaves and showy cream, pink or red flowers in winter, spring and summer. Most soils, well-drained in full sun. Frost hardy to  $-7^{\circ}\text{C}$ .

Source: *Australian Plants for Canberra region gardens and other cool climate areas*

# Australian Native Plants Society, Canberra Region Inc.

The aims of the Society are to foster the recognition, conservation and cultivation of Australian native plants.

Meetings are held at 8pm on the second Thursday of each month, February to December, in Canberra. Visitors are always welcome.

Day and weekend field trips to locations of outstanding botanical interest are organised on a regular basis.

The Society publishes a Bulletin in all months except January, and this quarterly Journal in March, June, September and December.

Website: [nativeplants-canberra.asn.au](http://nativeplants-canberra.asn.au)

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## Council

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Nola McKeon

Peter Woodbury

Phil Price

Masumi Robertson

Vacant

## Membership Fees

Single or family memberships are the same price.

Basic membership including Bulletin and Journal — \$35 (\$20\*)

Full membership including Bulletin, Journal and Australian Plants — \$50 (\$36\*)

Life member subscribing to Australian Plants — \$15

\* Concession rates apply to pensioners (Centrelink), full-time students and unemployed.

Membership Secretary: Masumi Robertson 6251 6525  
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## Other useful contacts

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