

ROYAL BOTANIC GARDENS- CRANBOURNE

Our speaker at the October meeting was John Arnott, Manager of Horticulture at the Royal Botanic Gardens, Cranbourne. John has been with the gardens since leaving Geelong Botanic Gardens in 2006.

The Cranbourne site was acquired in a number of parcels of land and now totals 363 Ha. The area was first explored in the 1820s by William Hovell, and by the 1850s was a thriving agricultural community. An ancient sand-dune was left as 'waste-land', being deemed unsuitable for agriculture, and that is the basis of the current gardens.

Millions of cubic metres of sand was mined from the area in the late 19th and early 20th centuries. The old quarries were used by Crawford Productions for filming desert scenes for TV.

The suggestion that the RBG needed and Australian Plant annex was first mooted in 1945, but not until 1970 was the first parcel of land purchased to begin work on the gardens. The first part of the gardens was opened in 1989 ... 44 years after the initial discussion.



Aerial view of the gardens today

In that early stage, there were some interesting plantings, in particular special collections of Banksias and other Proteacae.

250 hectares of the site is remnant bushland, the largest and most significant remnant of the sandy heathland that covered the northern end of Mornington Peninsular before European settlement. There are several distinct plant communities within the bushland reserve, with over 400 flowering plants, which equates to 12.5% of Victoria's flowering plant species in one reserve. Many are rare or endemic species.

It is also home to 24 species of mammals including a large and thriving population of the once widespread and now endangered Southern Brown Bandicoots.

The Australian Garden first stage was opened in 2006. After a competition for design ideas, Taylor Cullity Lethlean were appointed as designers of the iconic Australian Garden. They came up with three designs, and the conservative RGB went with the most radical design in 1995. The gardens were finally completed in 2012.



The Australian Garden

Embedded in the brief was the desire to display native plants in creative and interesting ways, to celebrate our relationship to plants in our suburban gardens, and to educate visitors about the uses of Australian plants.

It is a non-naturalistic landscape, with minimum number of species, yet it evokes the desert landscapes of inland Australia. This approach allows many horticultural opportunities within the scope of the design, using trade available plants, in interesting, unusual and unique ways.

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The standard 'collection' approach has not been followed at Cranbourne. There are 21 precincts within the gardens and the plants and plantings are responding to the 'feel' of the area.

The philosophy of the gardens is to use robust and low-risk plants as the backbone of the plantings. This means plants that are matched to the local conditions, with higher risk plants used in the details of the plantings.

The gardens are also liaising with local councils and building developers to plant more native plants in the gardens of new developments.

ON THE TABLE with Bruce McGinness

Our plant table was spectacular this month, and October could well be renames the month of the Chamelaucium, with no fewer than eleven varieties on show.

Among the named varieties were Seaton's, with very large whitish flowers; Sweet Rosy – a compact shrub with small, deep red and white flowers; Sweet Sixteen – with deep pink buds and flowers, which quickly fade to white; 'Purple Pride' with deep purple flowers, and the *Verticordia* hybrid 'Paddy's Pink. Others were variously described as 'uncinatum' or 'floribundum' and were every shade of pink, mauve and purple. There was also *C. ciliata*, a small shrub with tiny pink/white flowers.



Chamelaucium 'Sweet Rosy'

There were quite a few eucalypts, which many members thought were flowering quite late. Interestingly, all were yellow ... among them *E. grossa*, *E. preissiana*, *E. goniantha* and *E. orbifolia*.

Grevilleas feature every month. What a great show they give us, no matter the time of year. Grevillea buxifolia has interesting white tipped brownish flowers, and is one of the earliest Australian plants described, being given the name *Embothrium buxifolium* in 1793. *G. zygoloba* is a heavily scented Western Australian species, with white or pinkish terminal flowers. Also on the table were *G. oligamera*, *G. paradoxa*, *G. insignis*, *G. treuriana*, *G. georgiana*, *G. plurijuga* and several very attractive hybrids. Of interest was a specimen of *G. maccutcheonii*, an attractive, medium shrub from the Busselton area of Western Australia. It produces large red flowers in the spring/summer, and is one of Australia's most endangered plants.



Grevillea zygoloba – Pink Form

Melaleucas were also well represented with M. elliptica, M. filifolia, M. citrina, M. spathulatum, M. wilsonii, and M. fulgens.

Among the many interesting plants were *Ricinocarpus pinifolius*, or Wedding Bush with striking white star-shaped flowers; *Pimelea nivea* with white flowers contrasting sharply with deep green, glossy foliage; the local and very tough Snowy Mint-bush, *Prostanthera nivea*; *Beaufortia schaueri* with its small mauve/purple rounded flowers; a Bluebush, bluebush maireana sp.; a magnificent specimen of *Olearia phlogopappa*, the Dusty Daisy-bush with masses of creamy white flowers and two *Scholtzias* ... *S. oligandra* which has white flowers, and the pink flowered *S. laxiflora*.



Beaufortia schaueri – Photo I Holliday

UPCOMING EVENTS

November Meeting Grafting Eremophilas

The speaker at the **November 17th** meeting will be Russell Waite, who specialises in grafting techniques for Eremophilas.

The **December meeting** as always, is our Christmas break-up BBQ dinner. It will be at Roger and Sheila's, 17 Aldershot Street, St Albans Park on Saturday 12th December. The club will provide meat for the BBQ, but members should bring a slad/dessert to share and BYO drinks. Members <u>MUST</u> signal their intention to attend. Email Frank at <u>ftscheelings@gmail.com</u> ... if you don't let us know you are coming, you won't be catered for, and will have to bring your own food.

We are in recess in **January**, and we will bring you information about the February meeting soon.

From the 15-20th of November, the 28th **ANPSA Biennial Conference** will be held in Canberra. The theme is "Bush Capital, Garden City". Speakers will include Angus Stewart, who will give the AJ Swaby Address, Ian Fraser, David Headon, Penny Olsen and David Lindenmayer AO. More information can be gained from the ANSPA website ...

http://conference2015.anpsa.org.au.

AN OLD ONE NOT WELL KNOWN TODAY, AND ONE TO DROOL OVER by Tony Cavanagh

Despite our strange weather this year, the flowering in our garden has been especially good. Only a few weeks ago, I was at Cranbourne for a couple of days and I swear that when I returned, a whole lot more things had burst into bloom. Two plants particularly caught my eye, *Astartea* "Winter Pink" and *Pimelia spectabilis*, both Western Australian and putting on the best show I could remember.



Astartia 'Winter Pink' with Verticordia plumosa

When doing some checking for this article, I made another discovery – "Winter Pink" is not as I had always believed an Eastern form but originated at the Zanthorrea Nursery in Perth in 1976. It is a garden hybrid between *Astartea clavulata* and *Astartea astarteoides*, although at the time, the latter was known as *Baeckea astarteoides*, giving rise to the very awkward sounding original name of *xAstackea* 'Winter Pink'.

Of a dozen or so seedlings, a deep pink form was selected and registered in 1981. It must have been in the mid-1980s that I obtained my first plant and we have always had plants grown from cuttings from the original.



The October show – Astartia 'Winter Pink'.

We have found it very reliable in nearly all positions apart from hot and dry or in heavy soil. It grows to around 1.8 m and is usually very floriferous ... the flowers covering the whole upper section of the bush. Despite its name, flowers can appear from April to October, and, in Ocean Grove, it is at its peak over September-October. As you can see, I am not exaggerating its attractiveness yet despite this, I don't believe I have seen plants for sale for some years. It is worth chasing down.



Pimelea spectabilis is very well named, the term "spectabilis" meaning literally "remarkably spectacular". All plants that I have seen in gardens over here have been grafted, generally on to more hardy eastern species. Even though the flower heads

are all white, they are large, up to 50 mm in diameter, and again are massed over the whole bush. In close up, the heads are seen to be composed of hundreds of individual flowers in quite intricate patterns with little splashes of colour visible. My plants have been about 1.2 to 1.5 m in height and spread and they grow well in sun or light shade although not in hot, dry areas. Again it is worth chasing down but they are only occasionally available from specialist native nurseries.



Pimelea spectabilis in full flower – October

DISA BRACTEATA The South African weed orchid. By Roger Wileman

Disa bracteata is a ground or terrestrial orchid, introduced from South Africa. It has wide, grass-like leaves at the base and along the flower spike. The flower spike grows to about 30 cm in height and looks very similar to an asparagus stem, with a purple colour underneath. The numerous, very small flowers along the stem are insignificant. It is probably the least attractive of the 169 species in the genius *Disa*.



Tiny flowers of D. bracteata

South Africa has the main concentration of species in this genus, but it also occurs in Madagascar, Yemen

and Reunion. *Disa* species usually have a single species of pollinator, however, *D. bracteata* has evolved in a different way, using nearly all major pollinating insects to produce seed. This may explain this orchid's invasion of, and massive expansion in Australia. Our terrestrial orchids have not evolved this way and still require a specific fungi and/ or a specific pollinator to set seed so making our native species very vulnerable to invasion from this *Disa* species.

Disa bracteata was first discovered in Australia in Albany W.A. in 1944 - most likely introduced from South African ships. It then spread eastward and was found in South Australia in 1988. Both these states now have major infestations. It was found in Victoria, near Bacchus Marsh, in 1994 and more recently near Bridgeport in Tasmania. The fact that this orchid has expanded its range from Albany to Tasmania in approximately 60 years, traversing the Nullabor Plain in that period is a real concern. The seed may have been transported across the Nullabor by the wind that blows from west to east.



Disa leaves and immature flower spike

It has been identified as a new emerging weed in the Wimmera district of Victoria and is considered to be a threat to the environment. It thrives in disturbed ground and the projected distribution is the lower portion of South Australia, all of Victoria, southern New South Wales and all of Tasmania.

We found this orchid on our former property at Pomonal in the Grampians after the 2006 bush fires.

The more we dug up the tubers, the more plants appeared the next season. Perhaps the digging helped them multiply in the disturbed ground.

So, if you discover this orchid and remove it have in mind that there are two or three small potato like tubers approximately 100 mm below the surface of the ground. If you have any doubt about the identification remember the underside of the ground leaves have a slight purple colour.

STORIES FROM THE WEST

Penny and I were in WA on the last leg of our holiday in September, and a couple of interesting stories were gleaned from a local newspaper while we were there.

* A new hybrid Grevillea has been developed for the RSL in Western Australia, to honour the ANZACS. In 2013, the WA State President Mr Graham Edwards put the challenge to the botanists at King's Park in Perth to produce a tough plant which would be in flower on ANZAC Day.

This year the plant was released for public sale across Australia, and Mr. Edwards hopes that every Australian garden may one day be growing a specimen of Grevillea 'Sprit of Anzac'.

The plant, which has a profusion of deep red flowers, is a combination of parents sourced from WA's Wheatbelt, the South Australian desert and the northern New South Wales coast.

It is hoped that this Grevillea may also be planted in military cemeteries overseas as a special tribute.



Grevillea 'Spirit of ANZAC'

* A new and rare daisy found in the Wheatbelt has been named WA's 10,000th native species, cementing the state's title as having the highest number of species of any state in Australia.

Named Angianthus globuliformis, it is known from only one location on the margin of a salt lake near Lake Grace. It was only recently named after an identification process at the WA Herbarium, which is part of the Department of Parks and Wildlife.

Western Australia has the highest number of native species followed by Queensland with 8,545.

In the last decade, on average, over 50 species have been discovered each year in Western Australia. Recently, 17 new species of orchids were named, taking the total number of identified spider orchids in WA to 158.



Agianthus globuliformis – Photo courtesy ABC online

* Critically endangered WA flora is being translocated across the South West in a bid to prevent its extinction. Seedlings of several threatened species are being planted in Cataby, Jurien Bay, Three Springs, Albany, Kojonup and Narrogin, as part of a Department of Environment and Conservation project.

Seeds are collected, stored and propagated in the Threatened Flora Seed Centre. Among the species to be relocated are the feather-leaved Banksia (Banksia brownii), Kamballup Banksia (Banksia ionthocarpa subsp. Ionthocarpa), Stirling Range Banksia (Banksia montana), Mogumber Bell (Darwinia carnea), Foote's Grevillea (Grevillea calliantha), Spreading Grevillea (Grevillea humifusa), Branched Hemigenia (Hemigenia ramosissima), Stirling Range Beard-heath (Leucopogon gnaphalioides) and white Featherflower (Verticordia albida).

Six other species have previously been translocated and are being followed up with a monitoring and maintenance program.



Grevillea calliantha - Photo Alexy Yakovlev