

CALGAROO

August 2022



Eucalyptus parramattensis - Calgaroo

**Newsletter of the Parramatta and Hills District Group
Australian Plants Society NSW Ltd**

What's on for the rest of 2022

Saturday 27 August 2 pm: Bushwalk Cobar Ridge, Murrumbidgee National Park.

Saturday 24 September: Celebration of our Group's 50th anniversary.

Saturday 22 October 2 pm: Bushwalk.

Saturday 26 November 2 pm: Members' meeting and Christmas Party.

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Bushwalk Cobar Ridge, Murrumbidgee National Park

Saturday 27 August 2 pm

Marilyn Cross

We will explore Cobar Ridge in the interestingly named Fiddletown, which is in the far north-west of Hornsby Shire. The ridgeline trail is part of the Murrumbidgee National Park, which sits astride the Hills Shire and Hornsby Council areas.

Marramarra Creek runs through the national park from Old Northern Road at Maroota to Berowra Creek, which runs into the mighty Hawkesbury River. Marramarra is from the Darug Aboriginal language and means 'many fish'.

Cobar Ridge Fire Trail, aka the Neverfail Fire Trail, ends at Collingridge Point, which is a magnificent high point looking over Berowra Creek. Collingridge was one of the Hawkesbury artists of the 19th Century.

The round walk is 10km but we will walk perhaps 3 km, depending on how many amazing plants we see and how many times we stop. In the first tier of the forest are scribbly gums, angophoras and yellow bloodwoods. The beautiful understorey plants include geebung, banksias and, if we are lucky, we may find some orchids flowering.

Meet at the entrance to the Neverfail Firetrail at the very end of Bloodwood Road for a 2 pm start.

These photos were taken by Marilyn along the track:



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"Everything has beauty, but not everyone sees it."

—Confucius

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Name where it would grow . . .

In the June Calgaroo, Angie Michaelis explored what botanical names could tell us about a plant's habit. This month, it's habitat!

Faced with a botanical mouthful like ***Austroblechnum penna-marina* subsp. *alpina***, where do we start? By breaking it into pieces, as we might with new long words in English (**super-cali-fragilistic-expi-alidocious**, anyone?).

Austroblechnum comes from two words, one Latin - *austro* meaning 'south', and one Greek - *blechnum* for 'fern'. The *Austroblechnum*s were spilt off by botanists in 2016 from the *Blechnum* genus, presumably so named because they were found in the southern hemisphere. ***Austroblechnum penna-marina*** is also known as Antarctic Hard-Fern, and its range is from Chile and Argentina, via New Zealand and some Pacific islands, to the southern states of Australia.

Then why *penna-marina*? It's a Latin word for sea-pen, a colony of polyps that looks like a quill. The name in turn comes from the Greek word for 'feather' (*penna*) and the Latin word (*marina*) meaning 'of the seas'.

Austroblechnum penna-marina* ssp. *alpina
Photo: Yarra Ranges Council



Sea-pen
Photo: Wikipedia



So, once we know that subsp. means subspecies, there is only the final word to interpret – and we all know that **alpine** means 'coming from high mountains'. So it is to work out that this fern, or any other with the same epithet like *Billardiera alpina*, is a high mountains plant.

Similar terms are **alpestris**, meaning ‘nearly alpine’, and **subalpina**, for ‘just below the snow line’. *Prostanthera subalpina* is a recently described plant previously thought of as *P. lasianthos* (Victorian Christmas Bush), and comes from the high elevation snow-gum forest in Kosciuszko National Park. *Pultenaea subalpina* comes from the Grampians; so does *Grevillea alpestris*, although it is now known by its synonym *G. alpina*.

Prostanthera subalpina

Photo: iNaturalist



Let’s go down the mountain to the hills, where we will find *Banksia collina*, *Acacia collina*, *Babingtonia collina*, *Brachyschome collina* ... yes, **collina** (or **collinum** or **collinus**) is the Latin word for ‘of the hill’. It is likely that all these plants need good drainage!

The opposite is true of plants like *Banksia uliginosa*, *Brachyscome uliginosa* and so on. The Latin word **uliginosa** means ‘marshy’, and botanists find it a useful way to describe a plant found in a boggy spot. Banksia/Dryandra specialist Alex George, for example, named *Caladenia uliginosa*, an orchid of winter-wet spots in southwest WA.



Calystegia is a form of Convolvulus or bindweed which can be a weed, or a native plant –or perhaps both. Two closely related *Calystegia* have species epithets that refer to their habitat. *C. sepium* is found in other parts of the world as well as Australia, and the name means ‘of the hedgerow’. The name of the naturalised weed *C. sylvaticus* (or **sylvaticus**) means ‘of the forest’.

Which is not what **forrestiana** means! Not much Latin here, and only the broadest clue to its habitat. *Eucalyptus forrestiana*, the Fuchsia Gum, was named for the explorer and politician, Sir John Forrest, born and bred in Western Australia. And for a more specific habitat, as a politician recently said, ‘Google it, mate!’

Calystegia sepium

Photo: Jhoney, iNaturalist Australia

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Early research into Australian plants . . . at the Powerhouse Discovery Centre, Castle Hill

There's an article by Jennifer Farrer in the June 2022 *Calgaroo* about her visit to see the Eucalyptusdom Exhibition at the Powerhouse Museum, Ultimo.

As Jennifer wrote in the article, "The Powerhouse Museum was formerly known as the Technological Museum, and one of its primary roles was to research the commercial potential of indigenous plants. It was the Technological Museum that discovered the antibacterial properties of Tea Tree Oil in the 1920s. The Eucalyptus plantation at the corner of Showground Road and Windsor Road Castle Hill was planted primarily to research the commercial properties of these trees."

In 1947 the museum, renamed the Museum of Technology and Applied Sciences, bought the nine hectares of land at Castle Hill to establish this plantation and continue its research. The research continued until 1979. In the early 1980s, the Museum erected new buildings to house its collection of large objects. In 2007, known as the Museums Discovery Centre, it was opened to the public and now has regular exhibitions and workshops.

Elaine White, currently one of the volunteers at the Community Environment Centre, Annangrove, had first-hand experience of the plantation, as her father, Harold Crust, was caretaker and Field Assistant of the property. Elaine was just five years old when her family came to live on the site at Castle Hill in 1952.

Here are some recollections by Elaine:

Dad's job was as a Field Assistant (a farmhand with technical expertise), and to caretake the property, and undertake duties as directed and planned by the scientific section (botanists and chemists) of the Museum, for research into the extraction of oils from native plants. This was ground-breaking research, which saw the commencement of an Australian Essential Oil industry, and included research into compounds that could be used in the pharmaceutical industry and very early cosmetics.

As the 1950s progressed, so did the plantation and its activities. Constructed glasshouses were now adjacent to the shade houses, so seeds could be germinated under controlled conditions, tube-stocked, and then planted out in the rows now seen.



This is one of Elaine's photos, probably taken in the 1950s, and shows that some of the trees were coppiced to make them multi-trunked.

There was row upon row of different species all identified by a marker (like at the Botanical Gardens) indicating species, variety, source site, date of planting, date of pruning, and any other relevant data, to identify which variety gave the best volume and quality of essential

oil. All trees were grown from seeds collected on-site or elsewhere by the botanists. My father went on field trips with the botanists to West Wyalong, Sunny Corner, Warragamba/Silverdale, Scheyville and Audley to collect seeds.

This photo shows Elaine's dad, Harold Crust (left) coppicing trees, and botanist Phil Croft (right) collecting leaves. Showground Road, now a bustling thoroughfare, is at the rear

In 1954 the distillery was built (now the TAFE office) with its internal boiler house, the attached coal shed, a water tower for the cooling process, stills, (I think there were 20), a laboratory and test benches. Dad completed his boilermaker's ticket as a requisite to operating the boiler and distillery, attending at night the place of his previous employment at Ultimo Tech.

As a child, I remember very important visitors from overseas – botanists, chemists and other dignitaries – coming to inspect the plantations and facilities.



By the early 1960s, the site was virtually covered in planted trees, with only a small area of Cumberland Plain Woodland vegetation remaining along the northern boundary.

All the trees on site were planted by Dad, and there were many more than there are now. Many were removed to make way for the Powerhouse buildings, as well as the TAFE buildings at the rear of the property.

This photo is from the special wrap-around supplement of the *Hills Shire Times*, 6th March 2007, commemorating the opening of the Discovery Centre to the public.

The caption reads:-

'Elaine White with the remnants of the native plantation on the Castle Hill site which her father planted more than 50 years ago.'

Elaine has a copy of a quarterly report, dated 31st October 1955, addressed to the Director, Museum of Applied Arts and Sciences, Sydney, which gave a progress report on the plantation's experiments and projects. Lots of these were itemised.

Here's a summary of just a few:

- Isotope experiments were carried out on *Eucalyptus citriodora*. It was noticed that the radioactive seedlings were much greener than the controls!
- Comparisons were made of the oil yields from mature and juvenile leaves of *Eucalyptus macarthurii*.
- The correlation between the oil yield and the oil gland count on length/breadth ratios in leaves of *Eucalyptus dives* 'type' from Berrima.
- Comparisons of the cineole content of various leaf measurements of *Eucalyptus polybractea*.
- In the laboratory, projects were continued on section cuttings in *Baeckea citriodora*; the anatomy of the operculum in Bloodwoods; and microscopic work on oil gland formation.
- A trial of the fertilizers, superphosphate, ammonium sulphate and lime, was in progress, using different levels and ratios.
- A population of *Eucalyptus citriodora* was given the name 'Stinkers'!

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Our bushland playground at Kenthurst (Part 3)

Malcolm Johnston

First published in the *Kenthurst Community News*

As children growing up in the Hawkesbury Sandstone Region of Sydney during the 1950s and 1960s, we gained a special connection with the bush and the wildlife within. On weekends and during school holidays we looked forward to exploring new places in the gullies and revisiting favourite sites discovered in the past. There were no boundaries, as there were no fences. Our playground was as large as we could walk in one day.

We shared our Bushland Playground with the birds, animals and reptiles. The little Double Barred and Red Browed Finches built their nests in the prickly vegetation, which protected them from predators. Flocks of them fed on the seed heads in the grassy paddocks. Echidnas sometimes crossed our path, and we knew where the Bandicoots (Burrage)* lived under the dense stands of tufted grasses. Diamond Pythons lived in the rabbit burrows or hollows in the old trees, and Blue Tongue Lizards sheltered in crevices under the rocks.

Blue Flax Lillies (*Dianella caerulea*) grew in the deeper soil on the sandstone ridges above the gullies. During Spring it was covered in blue flowers, followed by lots of blue pea-sized juicy berries with small black seeds. These sweet berries moistened our dry mouths but stained our tongues and teeth blue. Eating too many of these berries could upset your stomach. If we pulled the right leaf from the flax clump, we could make a high-pitched whistle by sucking air through the double edge of the leaf. Rosellas (Bundeluk)* and other birds also enjoyed the berries on the Flax Lilly.

We often ate the fruit on the Sandpaper Figs (*Ficus coronata*) (Ulowang)* which grew on the banks of our local creeks. This tree bears small, sweet figs on its trunk and mature branches,

and it was best to eat them after plenty of wet weather which made them moist and juicy. The Sandpaper Fig has sandpaper-like leaves which were used by Aboriginal people to smooth wooden objects. The bark was stripped and used as string.



We ate the Blue Flax Lilly (*Dianella caerulea*) berries, but only a few at a time (left,) and Sandpaper Figs were tasty after good rain (right).

Wattle trees (*Acacia parramattensis* and *Acacia decurrens*) once lined our roads and dotted the ridges. Golden sap oozed from the borer holes in the trunks of the older trees. We loved to chew the crystallised parts of this sap. The softer fresh sap was a bit gooey. We also boiled strips of the bark from the wattle trees (Wattungulle)* in a metal pot of water, and after the water cooled, we soaked rabbit skins in the mixture to tan them.

The Wombat Berry (*Eustrephus latifolius*) vine is a scrambling native vine that grows up and over some of the low woody shrubs in the bush. The pea-sized orange berries contain several small black seeds and a small amount of thin, sweet-tasting, white flaky flesh. The tuberous root of the Wombat Berry vine is also quite tasty.

We were always exploring new places in the gullies, especially caves, as they were always different. I was about ten years old at the time, barefooted and stumbling through dense bracken fern at the base of a very high cliff face, when we looked up to discover many caves. From that day on we called it our Inca City. Not far from our Inca City, near Marieba Place, there was a spot in the creek where we found white clay. We dug this clay from the creek bed and shaped it into mugs, bowls and anything else that came to mind. The clay objects were then placed on a rock shelf to dry in the sun. We would return in a day or so to inspect our work.

Those early years exploring our bushland playground gave us a good understanding of the environment in which we lived, leaving us with our special connection to those Hawkesbury Sandstone gullies for the rest of our lives.

* Denotes Dharug language.

We loved to eat this sap oozing from the wattles (left), and we ate the white parts of Wombat Berries (right), and the roots:



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Spines, thorns and prickles

Kevin Mills

Many plants are armed with sharp processes, ranging from herbs to shrubs to trees and vines. This evolutionary feature is present in many families of plants and is familiar to all gardeners and bushwalkers, often to the latter's infuriation.

Spines (thorns) are modified stems or leaves with vascular tissue, while prickles are not vascular and sit on the surface of a plant's stem (e.g., rose thorns).

The strict definitions of the terms from the PlantNet glossary are:

spine (thorn): a stiff process with a sharp point, formed by a modification of a plant organ that contains vascular tissue, e.g. a lateral branch or a stipule.

prickle: a hard, pointed outgrowth from the surface of a plant, involving several layers of cells, but not containing a vascular system.

spinescent: ending in a spine; modified to form a spine.

Pittosporum pauciflora, showing the fine thorns along the branches.

The obvious reason for these appendages is to protect the plants from browsing by larger animals. Some local plants produce thorns, such



as Orange Thorn *Pittosporum pauciflora*, while the apply-named Prickly Current Bush *Coprosma quadrifida* has spinescent branches.

Thorns and prickles also assist a plant to climb. Quite a few local vines produce thorns/prickles, including several plants found in the rainforest. These species include



Green-leaved Bramble *Rubus nebulosus*, Austral Sarsaparilla *Smilax australis* and the particularly nasty Cockspur Thorn *Maclura cochinchinensis*.

The robust rainforest climber *Rubus nebulosus*.
All parts of the plant are armed with severe prickles.

The thistles (many genera in the family Asteraceae) produce prickly growth on all parts, including the familiar flower heads. Thistles obviously do not make good eating for larger animals!

Small animals use prickly bushes as refuges and nesting sites, where they are protected from predators. Fairy-wrens and Red-browed Finches find dense shrubs such as *Meliccytus dentatus* and *Coprosma quadrifida* much to their liking for nesting purposes.

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From the archives - how our Group began . . .

With our 50th anniversary coming up Jennifer has been researching our archives, and these three stories are from old documents she's unearthed:

Our Group's history

John Evans*

The inaugural meeting of the Group was in August 1972. The NSW Region, North Shore Group and Blue Mountains Group assisted in its establishment.

The Secretary and Treasurer, Pauline de Viana, had had experience in growing native plants in Gladstone, Queensland, and on coming to live in Castle Hill, had placed an advertisement in a local publication inviting interested persons to contact her to form a SGAP group in Castle Hill.

As a result, 41 persons attended the Group's first meeting at Baulkham Hills Public School. The first President was Jack Stevenson, Headmaster of the school, and the Vice President was Phil Maloney, who owned a large native nursery in Neich Road, Glenorie. Phil's wife was tragically killed when a tree was blown onto their house after a gale, and Phil did not attend any meetings afterwards, which was a huge loss to the Group. Phil had donated plants and conducted workshop sessions on propagation.

Jack Stevenson did not stand again as President and did not attend further meetings. During my Presidency in 1975, Pauline de Viana and her family moved to Townsville, and Jack was invited to attend a farewell evening for Pauline but did not come. Elsie Hamerlok then very ably took on the role of Secretary.

I am listing information about some former members who had a high profile, or who had great expertise in our Group, or who later became well-known elsewhere.

Les Scott was an early member. He and his wife lived in the far end of Church Street Castle Hill, where Les had a fine garden – a showpiece for native plants. He was friendly with the late George Althofer, owner of the former Nandethana Nursery at Dripstone, NSW. For many years Les grew a large range of native species. Ever helpful with advice, he welcomed visitors to his garden. It was a sad loss when he died in November 1974. In April 1975 a working bee which included Ray Best, Steve Clemesha, Geoff Cowling and me, tidied up his once-fine garden, overgrown with weeds and in need of pruning. Shortly afterwards the house was sold.

Berry Primrose, a foundation member, was a master at The Kings School, where he lived with his wife. He had extensive knowledge of native plants and was responsible for the upkeep of a tract of natural bush on the school's property. He became editor of the Group's newsletter, which took on the name of '*Calgaroo*', said to be the Aboriginal name for *Eucalyptus parramattensis*. It was through Berry's connection with The Kings School that three plant exhibitions and sales were held, free of charge, in a hall at the school in 1974, 1975 and 1976.

Ray and Marie Best were active members and had a fine collection of ferns and orchids. Ray was ever helpful with advice to members, who were welcome to visit their garden.

Don and Maria Hitchcock were joint Publicity Officers in 1973 but were lost to the Group when they moved to Armidale for Don to take up a teaching post. Since then, Maria has become a high-profile figure in the New England Group.

Steve Clemesha, a recognised authority on orchids and ferns, was a member for several years before moving to the North Coast of NSW.

Janet Ball, a schoolteacher, who had been the Group's delegate to the Regional Show Committee, lived with her parents on a five-acre property in West Baulkham Hills. She and her mother propagated many plants, and some in large containers were made available for the Society's shows as exhibition plants.

Max Gregg, another member, was an acknowledged authority on pests and diseases in plants, and Joan Doney, OAM, was a member of our Group in the early years

The early years of the Group were vibrant, with a core of dedicated and active members. There were outings to reserves, parks and gardens, and at meetings high profile speakers from outside and within the Society.

**John Evans was an iconic member of our Group. He had a wonderful garden at Cherrybrook, and was a great propagator and keen bushwalker. Grevillea 'John Evans', a hybrid that came up in his garden, is still sold in many nurseries.*

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From Native Plants for NSW, September 1972:

New Group at Parramatta and the Hills

Joe de Viana can have his wife back; he and the kids must have felt underprivileged during all this time while she has been trying to get a Group started in the district, but they must all share her gratification at the result of the meeting on 28th July at their home. The meeting, extremely well attended despite the petrol shortage, quickly and unanimously decided to set up this Group, and a working party headed by Jack Stevenson, the headmaster of Baulkham Hills Public School, was appointed to get things underway.

The meeting revealed that in this district there are many people, members of the Society and others, who are keenly interested and who have a wide range of differences in knowledge and experience. Just to take one example, may we mention Mr Berry Primrose, a master at The Kings School, who described what he has done in a native garden which he has established at his house in the bushland grounds of the school; how the boys of the school were showing a spontaneous interest in native plants, and were indeed working actively on propagation and planting.

By the time you read this note, the Group will have had its first meeting and its first outing. Future events will be announced in local newspapers.

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Letter from Pauline de Viana, Maleny, Queensland

To: Parramatta and the Hills Group, Australian Plants Society

17th August 2002

Dear Members

Receiving the invitation to attend your 30th anniversary as a group came as quite a surprise, a real blast from the past as the saying goes. It was received with much pleasure, not only to be invited, but to know that the group still exists, and I send my congratulations to you all on that achievement. Quite a feat in this changing world of ours.

Unfortunately, I am unable to take up your invitation, having just returned from a few weeks in Sydney and Canberra. While in Sydney I enjoyed meeting Gordon and Gloria Brooks, seeing their garden and talking about your group.

It has made me think back to those years in Sydney when newly returned from Queensland, we bought a new home in a housing development in Winston Hills. I had been a member of SGAP since 1960/61, but I never had access to a group during that time. When I contacted the NSW executive about the nearest group, I expressed my disappointment when I found out there was no group in my area. They told me 'Why don't you start a group? We will support you in any way we can'.

After my initial shock, I thought about it for a while and decided there was a great need in that newly-developing area for such a group, and that I should take up the challenge.

The NSW body provided me with a list of members in the area and suggestions for publicity and how to get started. They also gave me the name of Mr Jack Stevenson, the headmaster of Baulkham Hills Public School, saying he would be a great resource person if I could get him onside, as he had recently been a moving force in his school establishing a native plant garden. They were not wrong! Jack willingly supported us not only by offering his school for meetings but taking on the position of President. What a great start!

After a public meeting at my house to judge interest, which was extremely well attended, and supported by speakers from the NSW Executive, we were launched.

We had lots of enthusiastic and talented input from members, among them Betty Primrose, Betty Irvine, Clare Montgomery, Eve Ross, Shirley Graham and many others. I must not forget to mention the Greggs, who were an elderly couple from Northmead, whose major interest was the study of the Sydney funnel web spiders.

Our next project was the production of our own newsletter, *Calgaroo*, to inform members of group activities, meetings and items of interest. Betty Primrose and Betty Irvine made this happen, with input from group members. Before long we moved on to have our first native plants exhibition which was held at the Kings School. The Mayor of Parramatta was invited to the opening together with dignitaries from the NSW executive. It was a great success.

The Group's achievements at that time were due to the enthusiasm and input of its members. They were a committed band of people keen to learn more about growing

Australian plants and willingly share their knowledge with others. I am sure your group has had and still does have, many dedicated members over the past 30 years, and I wish you every success in future years.

Best wishes
Pauline de Viana

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Sedges, rushes & restiads

An upcoming Walk & Talk with the North Shore Group of the Australian Plants Society

On: Monday 29th August 2022

Leaders: Karen L. Wilson AM and Dr Barbara G. Briggs AM

At: Ku-ring-gai Wildflower Garden (KWG), 420 Mona Vale Rd, St Ives

Topic: Sedges, rushes & restiads

Both Karen and Barbara are Honorary Research Associates in Systematic Botany at The Royal Botanic Garden Sydney. Their research interests include the systematics, phylogeny and morphology of the plant families Cyperaceae, Juncaceae and Restionaceae, which are rush-like plants closely related to the grasses.

These herbs have a vital role in local ecological communities but are notoriously difficult for people interested in native plants to get to know. They may lack showy flowers but they exhibit forms and functions that render them intriguing to native plant lovers and bush regenerators.

Karen and Barbara will introduce these herbs in a lecture (10- 11 am approx.) at Caley's Pavilion before leading a walk (approx. 11.15-12.30 pm) in the surrounding Ku-ring-gai Wildflower Garden, St Ives. Walk grade: easy.

Learn more about these widespread plants at KWG. Everyone is welcome, including APS members from other groups, non-APS members and bush regeneration volunteers, as we wish to share the opportunity that Karen and Barbara will provide to study these plants.

Go to <https://austplants.com.au/North-Shore-Walks-&-Talks> for details

Enquiries to the convener, Wendy Grimm wagrimm@tpg.com.au or 0419323035.

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Why bother with names?

Some wisdom from Rhonda Daniels . . .

Botanical names may seem foreign at first encounter, but they are useful. We have developed a naming system for plants to help us communicate with others, share and build knowledge, and understand relationships and linkages. But remember, the plants don't know they have to fit into our system.

To see Rhonda's full article about identifying native plants, go [here](#).

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There's an excellent article on The Conversation by Professor James Watson of The University of Queensland about overhauling Australia's environmental laws.

As he says, after years of neglect, Australia's environmental crises can wait no longer. Here's what our new government can do quickly to begin turning things around:

- Restore degraded farmland with native vegetation
- Coordinate how we manage vegetation across all lands
- Phase out logging of native forests
- Properly fund our protected areas
- Urgently boost threatened species recovery efforts

To read the full article go [here](#).

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Jones Road Fire Trail walk Kenthurst Saturday 23 July

For our second bushwalk this year we were a little apprehensive, as showers were forecast. We were all kitted out and ready for the usual bad weather, but, guess what? – it was fine!

This fire trail is on a ridgetop of Hawkesbury Sandstone, and the flora is very diverse. One of the post-conference tours from Kiama is calling here in September. Wendy and Sue from the North Shore Group, experts on this type of flora and who will be tour guides, were with us today.



Photo: Tony Maxwell

One of the upsides of this walk was that we were able to identify the beautiful *Boronia* that is widespread here. Previously we thought it to be *Boronia ledifolia*, but thanks to Wendy and Sue, concluded that it is *B. rubiginosa*.

Another positive was that we updated the plant list for this area, which will be included in the tour booklet. Thanks to Tony for the printed copies he handed out.

Something I noticed on this walk was that a few plants were flowering later than usual. This is the case too in the bush at my place just down the road. *Leucopogon fletcheri*, *Boronia floribunda*, *Styphelia triflora*, *Calytrix tetragona*, amongst others, were yet to flower. Perhaps this is because of all the rain we've had this year?

Here are a few of the stand-out plants on this walk:

Top: *Boronia rubiginosa*, pink and white forms. We found the white one on a walk here last year.

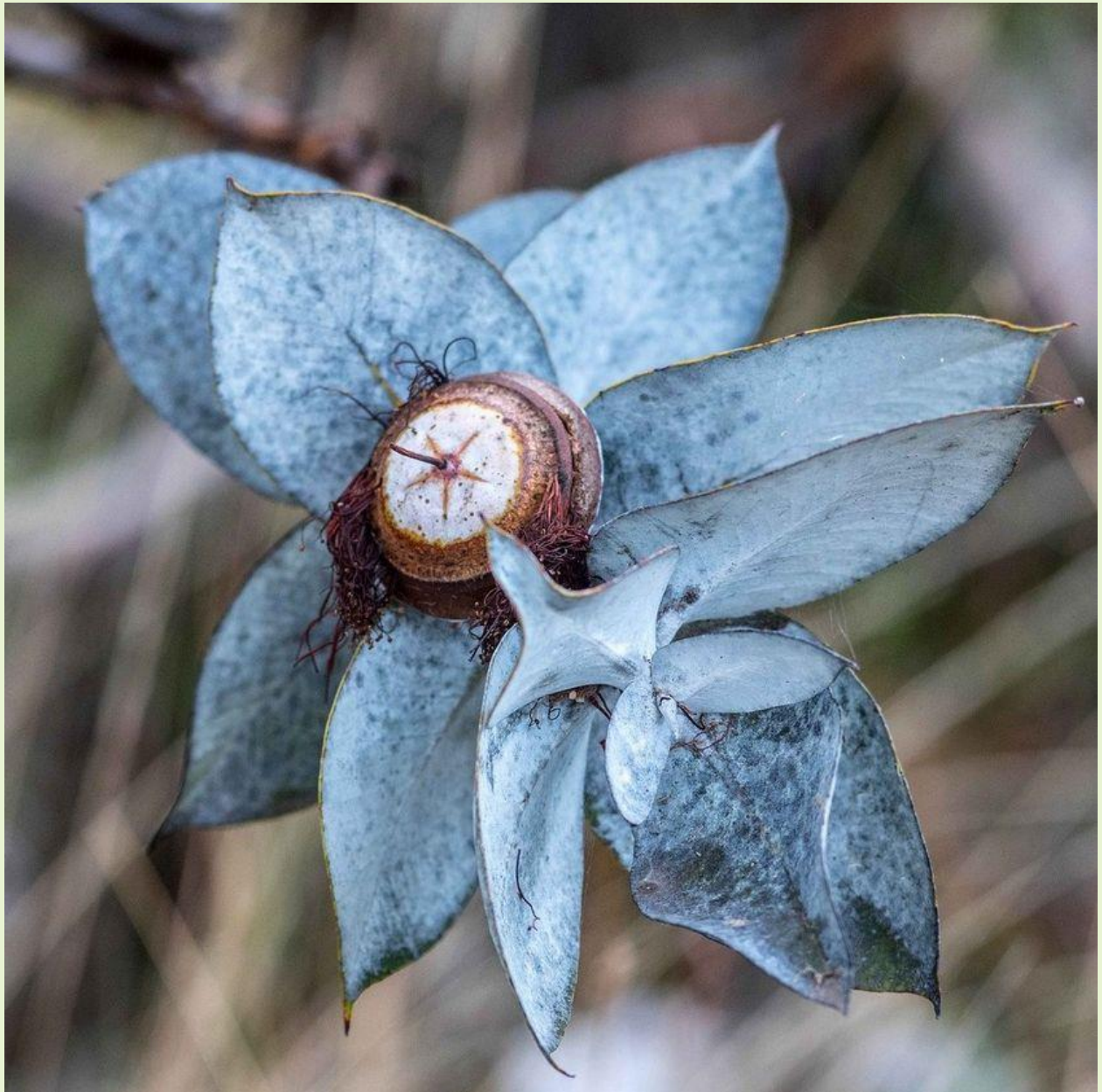
Bottom: *Wollisia pungens*, and *Phebalium squamulosum*.

All photos Lesley Waite.



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A gorgeous seed pod of *Eucalyptus macrocarpa* growing at Burrendong Botanic Garden and Arboretum. Photo by Bruce Usher:



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Open Day – Community Environment Centre Annangrove

On: Saturday 13th August 2022
At: Currie Avenue Annangrove
Why: To celebrate the opening on Saturdays

Yes, our Group will have a stall there, and we'll be selling plants!
I hope to see you there!

See the next page . . .

Community Environment Centre **OPEN DAY**

ACTIVITIES

Mayor Welcome and Address - 12:15pm

Tours of the Community Environment Centre by our volunteers - 12:30pm, 1:30pm, 2:30pm, 3:30pm

Australian Wildlife Displays - Educational and interactive wildlife shows on the hour

The Hills Shire Council Library Caddy and Storytime activities

Crop swap and seed exchange - bring your crops and garden produce in a crop swap activity and seed exchange

Feed the Worms - bring your compost scraps to feed our giant worm farm

Seraphic Creations- a range of environmental art on display

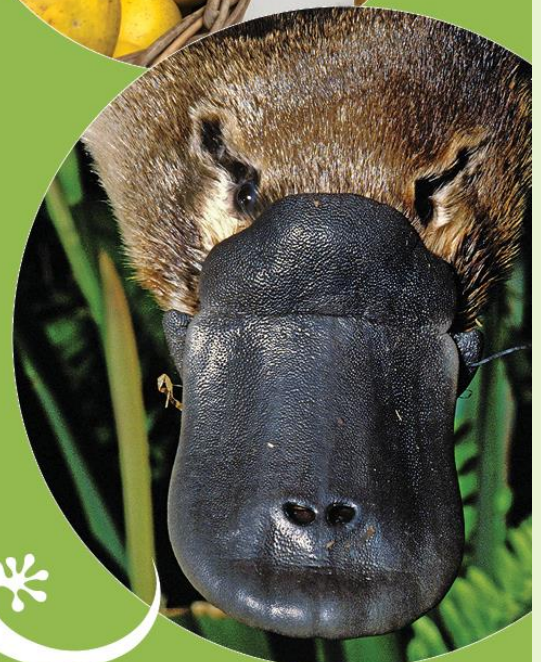
Art Mosaic Carla K Inspirations - a range of art mosaics on display

Country Women's Association - craft on display

Daily Grind coffee cart - Hills Community Aid- coffee cart will be there from 12pm-3pm, get great coffee and snacks

Community Run BBQ

...Plus more!!



STALLS

Annangrove Fire Brigade

Australian Plants Society

Cattai Hills Environment Network (CHEN) - information on platypus and koala projects

Greater Sydney Landcare - BCT NSW and Land for Wildlife

The Hills Shire Council Bushcare and Bidiwong Community Nursery

Hawkesbury River County Council

Habitat Stepping Stones

Hills Eco Kids

Sydney Permaculture West

WIRES ...Plus more!!



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Sydney's Garden Shire

Share your stories . . .

What have you been doing?

Email me at itcox@bigpond.com for the next *Calgaroo*.

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In the spirit of reconciliation, we acknowledge the Traditional Custodians of our Country, the people of the Dharug Nation, whose cultures and customs have nurtured, and continue to nurture, this land since time immemorial. We honour and celebrate the spiritual, cultural and customary connections of Traditional Owners to Country and the biodiversity that forms part of that Country. We pay our respect to Elders past, present and future, and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

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Parramatta and Hills District Group

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