Blandfordia



North Shore Group (ABN 87 002 680 408)



OCTOBER 2023

President's message



We really enjoyed selling our plants at the Berowra Woodchop on Sunday 27th August. Despite the early start and very long day, we sold lots of our advanced plants and were able to give individual growing advice to many people.

We were amazed at the sheer numbers of people who came on the day and were pleased to be able to use our colourful banner to advertise our stall. We were very grateful to he Friends of Berowra Valley who loaned us a gazebo and sold some of our plants.

Now is a good time to visit the bush to see many of our wildflowers at their best. The Ku-ring-gai Wildflower Garden is worth a visit, with the wildflower display at the Visitor Centre crammed with the various plants in flower in the garden.

The sculpture trail exhibition has just finished, but is worth keeping in mind in September 2024. It is amazing to see the variety of recycled material used in the sculptures.

Sue Bowen



VALE TO JENNY LEWIS

It was with much sadness that we learnt of the recent death of our esteemed, and much loved, member Jenny Lewis. APSNSG offers our sincerest condolences to all Jenny's family and friends.

A full tribute will appear in November 2023 Blandfordia. Rae Rosten provided this image of Jenny receiving the Melba Dyer Award in 1999 from Barry Lees.



WELCOME

A BIG welcome to our newest members:

Merilyn & Sam, Isabelle, Mark & Angela, Greg
and Vic.

We hope that you have an informative and enjoyable relationship with our amazing flora, APSNSW and our group.

September APS NSG General meeting

Friday 13 October 7.00pm for 7.30pm

Beatrice Taylor Hall 25 Edgeworth David Ave, Hornsby NSW 2077



Speaker: KAREN WILSON

Topic: Rambling through the rushes (etc)

Background:

Karen Wilson has a special interest in the rushes, sedges, she-oaks and smartweeds.

After growing up in the country and studying

Agricultural Science at university, she worked at the Royal Botanic Gardens Sydney for 43 years, and continues there as an Honorary Research Associate. She will talk about her studies of these plants and her involvement with global biodiversity information projects, botanical history, and regulating plant names.

Five blue APSNSG polo shirts will be available for sale (\$25.50 cash) at the October meeting: sizes XS,S, M, L & XL.

Feedback on starting time for meetings is welcomed by committee.

Future 2023 meetings

10 November Harry Loots Plants Hidden in the Clouds

Election of 2024 APS NSG committee

8 December Christmas Party KWG

2024 Meetings 9 February 2024 AGM

Monthly general meetings occur on the second Friday of each month between February and November.

Suggestions for speakers welcomed. Please contact Jan Williamson janw@7531@amail.com.au

Venues for plant sales

Following the success this year with plant sales at Berowra Fauna Fair and Berowra Woodchop the

committee is keen to hear of other community events which may be suitable for us to contribute to with plant sales. Propagation and plant sales are very important activities for APS NSG. The money raised is vital to fund the annual Val Williams Scholarship.

If you have any suggestions please contact Sue Bowen 0478 957 951 or Tania Lamble 0415 043 671

Bird friendly garden tips from

- Grow native plants
- Grow plants at different heights
 - > Think seasonal
- Keep existing plants that already attract birds
- ♦ Provide water
- ♦ Reduce lawn space
- ♦ Weed regularly
- Lay off the sprays and chemicals





https://birdlife.org.au/

Monday Walks & Talks Ku-ring-gai Wildflower Garden (KWG), 420 Mona Vale Road, St Ives





Be guided by members of the North Shore Group of the Australian Plants Society on a walk in the Ku-ring-gai Wildflower Garden to see and learn about our wonderful native plants as they come into flower. These sessions are free. No prior knowledge is required. Information sheets will be provided.

Meet at 9.45 am at Caley's Pavilion in KWG. No booking necessary.

Enquiries: Wendy: wendyagrimm@gmail.com or ring 0419 323 035

Walks are easy/medium. Sessions run 10am to about 12 noon. Please wear a hat, have suitable footwear and carry

water/snack.

Sunscreen and insect repellent would also be a good idea.

Meeting in Caley's Pavilion, for a 10am start. A power point presentation with specimens followed by a Walk in Ku-ring-gai Wildflower Gardens to explore some of the many plants and fruits that grow there.

Oct 9 Monday Walk Only: West Mueller Track return 1pm Leader: Gillian

Oct 16 Monday Waratahs and other members of Family Proteaceae

Leader: Jeannie

Oct 23 Monday Callistemon, Kunzea and Melaleuca Leader: Wendy

Oct 30 Monday Leptospermum and Baeckea Leaders: Eva & Phillip

Nov 6 Monday Grasses Leader: Barry

Nov 13 Monday Euphorbiaceae & BBQ and planning W&T 2024 Leader: Wendy





Images by Wendy Grimm

For more information and the full 2023 W&T programme see https://austplants.com.au/North-Shore-Walks-&-Talks

At this site to see notes on each topic, click on Walks & Talks notes for each topic are here.

8th September 2023 presentation by Sarah McInnes (2022 Val Williams Scholar)

Sarah kindly supplied this summary of her talk. Image by Jan Williamson

Title: How is dormancy controlled in seeds of heat-responsive Australian fire-prone species?

Fire is a common aspect of the Australian environment, and as such, many Australian plant species have evolved to survive in fire-prone regions. Seeds in fire-prone regions have mechanisms such as dormancy breaking-cues related to fire (e.g. high heat or smoke), so that germination occurs in the post-fire environment. This allows the species to survive as the seedlings replace plants that were killed by the fire. Seeds of physically dormant species (i.e. seeds with a hard, water-impermeable seed coat/outer layer) in fire-prone ecosystems have varying temperature thresholds to overcome dormancy, ranging from 40 °C to 120 °C. Variation in dormancy temperature thresholds between species is likely to be an important driver of community assemblage, as fire intensity and severity will determine which seeds germinate and thus define the post-fire vegetation.

However, the mechanism controlling this variation is unknown – despite its importance. It's been hypothesised that the seed coat oil composition could play some role in controlling this variation - specifically, oils known as 'fatty acids'. The idea is that higher melting point fatty acids are found in species with higher dormancy breaking temperatures, and vice versa.

I set out to study this question, and fatty acid content more broadly, by analysing the fatty acid content in seeds from both fire-prone (e.g. temperate dry sclerophyll) and fire-free (e.g. coastal sand dunes) environments, and comparing the fatty acid content between these two habitats, as well as the oils in the seed coat (outer seed layer) and embryo (inner seed). A few key results were found:

- 1. Higher melting point fatty acids were **not** present in seeds in with higher dormancy breaking temperatures. This meant that fatty acids did not seem to control variation in dormancy breaking thresholds.
- 2. 2. The seed coat fatty acid content for species in fire-free and fire-prone environments was **distinct**. The seed coat composition was also distinct from the embryo. This suggests a specific role for the seed coat in fire-prone environments.
- 3. The embryo fatty acid composition is broadly the same in fire-free and fire-prone environments, except where it has more low melting point fatty acids in fire-prone environments. Rapid germination is critical for seeds after a bushfire, so that the species can recover. Low melting point fatty acids are easier to convert into energy for growth, so by the embryo having more low melting point fatty acids in fire-prone environments, it suggests that it could be a mechanism for **rapid growth**.



Putting this together, it appears that the fatty acids do not explain variation in dormancy breaking thresholds, but that the seed coat still has a distinct role in fire-prone environments and that fire has shaped fatty acid content in fire-prone regions.

Future work is focused on understanding what this role might be. This will be done by looking at where the fatty acids are in the seed coat, and how they change with microclimate (e.g. a plant by a river vs a plant on a ridge) and over time, to determine the role that they play for seeds during a bushfire. More work is also currently being done on the genetics of native seeds, to see if their DNA can help explain how they survive these extreme temperatures and why it varies across species. This type of fundamental data has never been obtained for so many native species before, and understanding the fundamental mechanisms and chemistry of seeds will help to understand how plants might be affected by worsening bushfires due to climate change. A huge thank you to the North Shore Group of the Australian Plants Society for supporting this work!

Sarah commented that this project over her primary school years primed her interest and passion in Australian plants.

Visit to Brian Roach's garden at Westleigh Sunday 10th September

Many thanks to Brian for welcoming eight people to his spectacular garden.

Some of Brian's tips:

- ◆ Try things e.g. After many attempts over many years, Brian thinks he may have cracked how to propagate *Conostylis aurea*, a WA ground cover.
- Be prepared to start again- Brian has recently removed an old grevillea and started a new bed.
- Don't be afraid to prune- sometimes a "boy prune" can work wonders and produce unexpected results. A banksia cut back severely for a new paved area has never looked back.
- Use garden features to add interest- solar powered pond, raised sitesterracotta pots, sculptures.
- Raised beds- Brian suggests digging out paths and put soil onto gardens.
- Mulch regularly
- Rarely applies fertiliser
- Chat with others and learn from them



Brian Roach and Jeff Howes were the two people who introduced me to native plant gardens many years ago. As grounds convenor of the local public school in the early 1990s, Jeff designed the school's garden beds and Brian supplied the plants. Their generosity of spirit and willingness to share their experience and knowledge has continued unabated over all these years. So many people have similar experiences- thanks to Brian and Jeff and to so many other native plant enthusiasts.

Written by & images by Jan Williamson







Conostylis aurea

Group Activities for October and November

October: Outing to EucFACE Richmond. As discussed at September meeting.

November 18-19 at Goulburn 2023 APSNSW Annual Get together. Hosted by Southern Tablelands group.

Talks by Dr. Lyndal Thorburn, leader of the APS Eremophila Study Group, on erempohilas and Dr, Brian Faulkner, Biodiversity Assessment Officer Goulburn-Mulwaree Council on local threatened species. Visits to the Goulburn wetlands, Peter Wauchope's extensive native garden and much more.

For full details and registration see https://austplants.com.au/event-5334268

Jeff Howes shares some of the highlights from his recent travels.



Jeff Howes recently visited Forbes NSW and wrote:

Forbes has some of the world most recognised wetlands along the Lachlan River and some great sculptures to compliment it.

Sculpture Down the Lachlan is a permanent, inland public art trail stretching 100 kilometres between Forbes and Condobolin NSW, along the meandering Lachlan River. Sculpture Down the Lachlan | Forbes

The picture is one such example, tiles *Bird in The Hand* (2021) and worth a look see if you are in the area. It was created by Gold Coast sculptor, Michael 'Mike' Van Dam.

The accompanying inscription read as following:

Inspired by the saying 'a bird in the hand is worth two in the bush', this piece represents the profound responsibility of environmental preservation, sustainability and development bestowed upon humans.

'Bird in Hand' captures the importance of the wetlands to the Australian environment. The wetlands act as natural flood mitigators and they also recycle nutrients into the soil, filter water and most importantly provide a habitat for a diverse range of wildlife.

This sculpture reminds viewers that we need to preserve and protect this important environment and its future, including all creatures such as native birds, as of which are in our hands.

The 6.5 metre, 3.5 tonne piece depicting a hyper-realistic hand cradling a great white egret was made from 1600 meters of 10mm, 316 marine grade, stainless steel chain, with 38 links per meter and 4 welds per link. This equates to just over 243,000 welds, taking eight months to complete.



Eucalyptus camaldulensis, commonly known as the **river red qum**,

I came across these 200 to 300 year old River Red Gums. So iconic and just look at all the hollow limbs that are ideal for nesting sites. To see this group of ancient trees all growing together along the Lachlan river outside Forbes was a huge delight for me and I thought our readers may also enjoy them. For further reading look at: https://en.wikipedia.org/wiki/ Eucalyptus camaldulensis

Jeff also recommends Melton Botanic Garden for dryland Eucalyptus species. Their nationally registered arboretum contains more than 100 eucalypt species.

As well, there are many other themed gardens to see, like the bushfood garden and is very well maintained and accessible. Is an easy drive north from Melbourne.

Melton Botanic Garden, Attraction, Melbourne, Victoria, Australia

2023 Activities:

SEE https://austplants.com.au/North-Shore

MONTHLY **GENERAL MEETING** with guest speaker

WALKS & TALKS 2022 is held at Ku-ring-gai Wildflower Garden (KWG) 420 Mona Vale Rd, St. Ives see page 6

MONTHLY GROUP ACTIVITY Sunday area see page

PROPAGATION is held at KWG on alternate Wednesdays from 1-4pm

11 & 25 October 1, 15 & 29 November

THE KNOLL APS NSG Native Plant Community Garden at KWG Please contact Wendy Grimm 0419 323 035

PLANT SALES and growing advice at our shadehouse (with white roof) at KWG (behind Visitors' Centre & KWG Nursery) on propagation afternoons every 2nd Wednesday (weather permitting) (cash only).

FLOWER DISPLAY at KWG Visitor Centre

BUSHCARE (KC) in KWG on alternate Wednesdays from 9am-12pm: 4 & 18 October 8 & 22 November

2023 Activities CONTACTS

Walks and Talks at KWGWendy Grimm0419 323 035Propagation at KWGTania Lamble0415 043 671Bushcare at KWGSue Bowen0478 957 951The KnollWendy Grimm0419 323 035Flower Display at KWGJan Marshall0403 908 042



In Brian's garden.

One large grevillea out and new garden installed .

Jan V

Committee Contacts

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North-Shore

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The preferred method for Membership Applications & Renewals is to go to the APS NSW website and follow the instructions at https://quistalants.com.gu/about

https://austplants.com.au/aboutmembership

If joining or renewing online presents any problems assistance can be given by emailing your query to

northshore@austplants.com.au

apsnswmembership@gmail.com

Are you in a joint membership of APS NSW?

Would you prefer to use separate email addresses and/or contact numbers? This arrangement would mean that you each receive electronic communications, e.g. *Blandfordia*. This can be arranged by contacting Merle Thompson

September 2023 Committee Meeting Notes

- Plant sales
- APS NSW proposal to store group newsletters
- Bookings for 2024 Beatrice Taylor Hall
- General matters

BOONGALA NATIVE GARDENS & RAINFOREST OPEN DAYS

Friday, Saturday, Sunday and Monday 10am to 4pm from Friday 1st September to Monday 9th October, 2023 Adults \$5 Children free 76 Pitt Town Rd, Kenthurst https://www.boongalagardens.com/

More plants for sale

Brian Roach (APS NSG member) at Westleigh Native Plants Contact <u>westleighnativeplants@gmail.com</u>

Do you want to know more about native plants?

Have you tried https://austplants.com.au/ and within that site https://resources.austplants.com.au/plant-database/?

Newsletter submissions: Deadline for submissions is the third Friday of the month. For the November 2023 edition is Friday 20th October 2023

Editor: janw7531@gmail.com

Blandfordia The Newsletter of the Australian Plants Society North Shore Group