Blandfordia



North Shore Group (ABN 87 002 680 408)



NOVEMBER 2022

2022 is winding down and Christmas is coming.



Like the NSW Christmas Bush (Ceratopetalum gummiferum) featured here in flower in late October, sometimes the best is yet to come.

On **FRIDAY 9th December** APS NSG will once again be able to have our **Christmas Party** in the evening in Caley's Pavilion KWG.

6.30pm for 7pm

As in prepandemic days, people will be asked to contribute to create a delicious meal.

Please let Sue Fredrickson on 0401 362 921 or paulandsuefreddo@bigpond.com know the following:

name/s of attendees, what you would like to contribute (categories: nibbles, mains or dessert) and your contact phone number. APS NSG will provide a non alcoholic punch (BYO for other drinks).

Offers of help are most welcome e.g. entertainment: music, quiz etc

Walks and Talks programme is winding down for 2022



All welcome

November 2022

AT THE KU-RING-GAI WILDFLOWER GARDEN (KWG) 420 Mona Vale Road, St Ives

Meet at 9.45 am at Caley's Pavilion in KWG

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

Enquiries to the convener,

Wendy Grimm wagrimm@tpg.com.au or 0419 323 035

No booking necessary and no charge

November 7 Monday Grasses (Family Poaceae)

November 14 Monday Orchids & planning W&T 2023 & BBQ lunch

Mixed grasses Image by Wendy Grimm

Meetings for the remainder of 2022

11th November Helen Smith on Huntsman Spiders/Spider Q&A & Election of 2023 APS NSG Committee

9th December Christmas Party

APS NSG November Meeting 11th November 7.30 pm for 8pm

at Beatrice Taylor Hall, Willow Park Community Centre, 25 Edgeworth David Ave, Hornsby

Library available and plants for sale

Speaker: **Helen Smith**

Topic: Huntsman Spiders / Spider Q&A



Background: Many of us encounter huntsman spiders as we go about our daily lives. Their turn of speed and agility are impressive but can also be a bit scary. Spiders are important pest controllers in our gardens, so keeping cool when you have a surprise meeting with a particularly large one is a useful skill to ensure the safety of both parties.

Knowledge can help us to temper our natural fear and instead encourage enquiry and respect, so let us take a closer look at huntsman spiders. What makes a huntsman a huntsman, and how can they apparently defy gravity to run up smooth glass? How many different kinds of huntsman spiders are there in the Sydney area? What do they feed on and how do they grow? How can you relocate one without hurting either of you?

Helen Smith is Technical Officer in Arachnology at the Australian Museum in Sydney where answering public enquiries is a regular part of her job. So, while the first part of this evening will focus on our hairy huntsman friends, we will finish with a more general Spider Q&A. You can send photos to Jan Williamson janw7531@gmail.com before Thursday 10th November or ask questions from the floor on the night.



One photo has already been submitted.

Election of 2023 APS NSG committee will follow.

Annual General Meeting Friday 10th February 2023

Welcome to New Members

Welcome to Robert P. and Kate P, Maureen F and Lorna M. We hope that you enjoy your association with our group.

We look forward to meeting you and sharing in our appreciation, knowledge and love of our wonderful native plants.

Species sampled Species sampled Secretary of the secret

Image by Jan W

2021 Val Williams Scholarship

Effects of topography on resilience of fire prone eucalypt communities to climate change

(Summary of her presentation written by Harriett Simpson-Southward)

How eucalypts may have evolved protective bark traits in response to climate and fire, modified by topography, is understudied. Severe fires tend to occur on ridges and less severe fires tend to occur in gullies. Overtime, bark can thicken to insulate the cambiums of trees from lethal fire temperatures. However, in the short-term, bark is consumed by severe fire. There are mixed findings on the impact of bark density, though more evidence points to less dense bark providing better insulation than more dense bark. Fire scars can indicate which trees are not as well protected from severe fire as others. We investigated if differences in topographic position may influence the likelihood of mortality in some eucalypts and hence make them more vulnerable to range shifts under climate change. Range shifts may mean that some species can no longer survive where they once did due to changes in temperature, precipitation or fire regime.

Large trees generally have thicker bark than small trees and in dry sclerophyll forests where this study was planned, trees in gullies are generally larger than those on ridges. Therefore, converting absolute bark thickness (ABT) into relative bark thickness (RBT) made it easier for us to interpret, by allowing us to make more accurate comparisons between trees of varied sizes. Using this information, we hypothesised that: (i) there would be a higher RBT and lower bark density for trees on ridges than in gullies and so (iii) there would be a higher proportion of trees with fire scars on ridges than in gullies.

The study took place close to Blackheath, in Blue Mountains National Park. We collected data on five eucalypt species (*Eucalyptus piperita*, *Eucalyptus racemosa*, *Eucalyptus sieberi*, *Eucalyptus deanei* and *Eucalyptus oreades*) from seven ridge-gully pairs, equating to 14 sites in total. At each site, a tree diameter measurement at breast height (DBH) was taken from the largest live stem of every tree sampled. A screwdriver was gently tapped into each stem until it reached sapwood, which has a distinct feel and sound. The distance between the stem surface and point where the screwdriver bit joined its handle was measured using vernier calipers. To calculate the ABT, this measurement was subtracted from the total length of the screwdriver bit. The RBT could then be calculated as the percentage of the DBH that comprised the ABT. Next, an increment borer was used to extract bark cores from the same stems. Finally, a nested 10 m radius plot was produced. The DBH of the largest live stem of every tree in the plot was recorded, along with whether they had a fire scar or not.

The volume of each bark core was estimated using the water displacement method. Here, a vessel containing water was placed on an electronic balance and the cores were submerged in the water one at a time. The change in mass recorded on the balance was taken to be the approximate volume of a core. If a core was friable, meaning that it expanded and broke apart easily, the dimensional method was used to obtain its fresh volume instead. Each core was then sealed in an envelope and dried completely, before being weighed to obtain its dry mass. Its bark density could be calculated afterwards, by dividing its dry mass by its fresh volume. Figure 1 shows some of the field and laboratory work described here.



Fig. 1. Photographs taken during different stages of the field and laboratory work.

Continued on page 4

When looking at all five species as a collective (all trees), we found that the trees on ridges did indeed have a higher RBT than the trees in gullies. Even so, only *E. piperita*, *E. racemosa* and *E. sieberi* (Fig. 2) occurred both on ridges and in gullies (ridge-gully species). When just looking at the ridge-gully species, only *E. piperita* had a higher RBT on ridges, but the difference between ridges and gullies was minor.







Fig. 2. From left to right: *E. piperita, E. racemosa* and *E. sieberi* (source: *Eucalypts of Australia*).

When looking at all trees again, those on ridges had denser bark than those in gullies, contrary to our hypothesis. Of the ridge-gully species, both *E. piperita* and *E. sieberi* had a higher bark density on ridges than in gullies. There was a higher proportion of all trees with fire scars on ridges than in gullies. Of the ridge-gully species, both *E. racemosa* and *E. sieberi* had

a higher proportion of fire scars on ridges, yet the difference between ridges and gullies was small for *E. sieberi*.

Species with peppermint-like bark like *E. piperita* may use their higher RBT and higher bark density on ridges as forms of protection against severe fire. This might explain why *E. piperita* had the smallest difference in the proportion of trees with fire scars between ridges and gullies. Perhaps the higher bark density of species on ridges with rough bark like *E. sieberi* provides some protection but it might not be as effective as having a higher RBT here too. This might explain why *E. sieberi* had a greater difference in the proportion of trees with fire scars between ridges and gullies. Lastly, species with smooth bark like *E. racemosa* may be least well protected against severe fire, having both a lower RBT and lower bark density combined on ridges, as well as the greatest difference in the proportion of trees with fire scars between ridges and gullies.

CONGRATULATIONS from all APS NSG members to **Barry Lees** on his recent award **Senior and Overall Regional Volunteer of the Year** by the Centre for Volunteering.

The award recognised two decades of Barry's dedication to preserving Hornsby Shire's bushland and waterways.



For full report see https://www.hornsby.nsw.gov.au/council/noticeboard/news/Hornsby-Shire-bushcare-volunteer-takes-out-

Regional-Volunteer-of-the-Year-awards

We also, once again, thank Barry for all his contributions to APS NSG over many years. Barry is always prepared to help others and share his knowledge and experience.

2022 BOB HAWKE LANDCARE AWARD

For those members of APS NSG who attended the Central West trip in April and visited *Willydah* at Narromine, it may come as no surprise that Bruce Maynard was given this award. The award was for promoting sustainability in agriculture.

https://nationallandcareconference.org.au/awards/2022 -bob-hawke-landcare-award/

Congratulations to Bruce from APS NSG.

2022 Activities

CONTACTS

Walks and Talks at KWG
Propagation at KWG
Bushcare at KWG
The Knoll
Flower Display at KWG
Wendy Grimm
0419 323 035
Tania Lamble
0415 043 671
Sue Bowen
0478 957 951
Michael Griffith 0417 026 111
Jan Marshall
0403 908 042

Walks & Talks see page 1

Propagation & plant sales 2nd, 16th, 30th November & 14th December During 2022 our shade house at KWG will be open to members on these dates from 1-4pm for propagation, plant sales (cash only) and growing advice. Our white shade house is behind the Visitors' Centre and Wildflower nursery.

Other enquiries: Contact **Tania Lamble** 0415 043 671 or **Sue Bowen** 0478 957 951

Bushcare 9th, 23rd November & 14th December

The Knoll Friday 4th November & 2nd December 10am to 1pm Please contact Michael Griffith michaelgriffith1@gmail.com or 0417 026 111 at least one day before hand as Michael will then bring extra tools.



THE KNOLL 16 October 2022





A very happy and tireless worker, Judy Jeffery, enjoying the challenge. Judy had already put in a morning's effort at her local bushcare site.

Other images by Jan Williamson



November event :

APS NSW Get together Southern Highlands NOVEMBER Sat 11 & Sunday 12 November 2022

Individuals are to organise their own registration, transport and accommodation.

Registrations required Australian Plants Society NSW - APS NSW Get together in the Southern Highlands (austplants.com.au)

October 2022 Committee Meeting Notes

- Meetings and speakers
- Plant sale at Turramurra UC Flea Market
- Val Williams Scholarship 2023 update of the information & wording on application form has now been completed
- Plant label machine
- APS NSW Delegate report
- Improvement of drainage at The Knoll KWG
- Meeting bookings for 2023

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/? To date 832 plants have been profiled on this site. Currently (spring has sprung!), the plant database gets about 150-200 hits a day on average!



Why plant natives??

2022 LINNEAN SOCIETY OF NSW NATURAL HISTORY FIELD SYMPOSIUM

NATURAL HISTORY OF THE NORTHEASTERN SYDNEY BASIN

Wednesday November 16-Thursday November 17 (oral presentations) Friday November 18 (field trip)

Venue: Hornsby RSL Club (4 High Street, Hornsby), For full details see http://linneansocietynsw.org.au/

Jan W

Committee Contacts

Vice President: Sue Bowen 0478

957 951

president@blandfordia.org.au

Secretary: Judy Jeffery 0429 438

598

Email: secretary@blandfordia.org.au
Website: https://austplants.com.au/

North-Shore

Treasurer: Helen Ray treasurer@blandfordia.org.au

Newsletter Editor: Jan Williamson 9875 2262 janw7531@gmail.com

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

Link to Deidre Noss's talk on Colo River (August meeting) is now available. https://www.youtube.com/watch?v=4D-r30Lkl9c

2022 Biennial ANPSA Conference at Kiama September 2022

https://resources.austplants.com.au/stories/australian-flora-conference-presentations-available-on-youtube/

https://resources.austplants.com.au/stories/australian-flora-conference-past-present-future/

More plants for sale

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

Newsletter submissions: Deadline for submissions is the third Friday of the month. For the December 2022 edition is Friday 16th November 2022 Editor: janw7531@gmail.com

Blandfordia The Newsletter of the Australian Plants Society North Shore Group