

Blandfordia



North Shore Group
(ABN 87 002 680 408)

June 2021

Valette Williams Scholarship in Botany - Recipient 2021

Congratulations to Harriet Simpson-Southward who is a PhD candidate in Biological Sciences at the University of Wollongong (UOW).



I am a PhD Candidate working in the Centre for Environmental Risk Management of Bushfires (CERMB) at the University of Wollongong.

I have always been interested in conservation from a young age, however my passion for fire ecology only began when I spent a year on exchange in Australia during my undergraduate degree. I went on to complete my Honours project in the CERMB and was delighted to be given the opportunity to return to Australia to undertake further research in this field. Witnessing the devastation caused by the recent 2019-2020 bushfire season has only emphasised the importance of such research to me.

The mortality of eucalypts and therefore their distribution patterns can be influenced by a range of different environmental and landscape parameters. Firstly, I am investigating whether certain combinations of bark traits,

climatic parameters, fire regimes and topographic positions increase the likelihood of mortality in some eucalypt species. Secondly, I am investigating whether this makes some species more vulnerable to range shifts under climate change. The findings will contribute to improving public awareness, government decision-making and management policies. Knowledge of the spatial distribution of eucalypt bark traits will enable better prediction of eucalypt responses to increases in fire frequency and severity with climate change.

I aim to use the Valette Williams Scholarship to gather important data about the influence of topographic variation on bark traits, substantially expanding on my existing PhD research and delivering a broader evidence base for the impacts of fire and climate change on eucalypt species in Australia. Ultimately, I hope to use it to determine the influence that elevation, slope and aspect may have on bark thickness and density.

Val Williams Scholarship 2021

This year there were three applicants for the scholarship. After robust debate, the selection committee decided to award the grant to Harriet Simpson-Southward from the University of Wollongong. We wish her every success with her research.

Harriet's project is investigating the relationship between certain combinations of bark traits and topography for 20 eucalypt species in the Sydney region. The findings of her study will then be used to predict the spatial distribution of eucalypt bark traits which can be used to enable better prediction of eucalypt responses to increases in fire frequency and severity with climate change. This project will provide information that can be used to predict how increasing risk of wildfires might impact vulnerable eucalypt communities. Harriet's article about her interests and her research can be found elsewhere in this newsletter.

Another applicant wishes to determine if regeneration of seed-based native species can be promoted by delivering microbes in pre-made seed-coatings delivered via UAV (drone). The hypothesis is that the rhizosphere of seedlings grown with microbial amendments will be colonised by strains of beneficial bacteria added to seed-coatings, and that the presence of these microbes will increase plant growth and survival. The research targets four native plant species which occur on both shale and sandstone soils in the Sydney region.

In the preamble to another applicant's proposal, we were told that the Proteaceae family, which is usually well-represented in phosphorus-limited areas, are known to form cluster roots as an acquisition strategy to enhance the plant's ability to uptake P from the soil. With such P-acquisition and P-use efficiency many members of this family can grow at very low soil P levels but are sensitive to high concentrations of P in the soil.

Like a lot of Australian native plants, *Grevillea* are thought to be sensitive to excess phosphorus, yet relative to co-occurring Proteaceae, native *Grevillea* species tend to show higher leaf P and local microsite preferences for richer soils. This begs the question: How are *Grevillea* species able to sustain this? This research seeks to understand the P-requirements of *Grevillea* in contrast to nearby sister genera in the Proteaceae and serve to explore the possible P-mining acquisition strategy of *Grevillea* species.

Our winning candidate will be given one year's free membership and an opportunity to speak to us at one of our monthly meetings in 2022. Last year's recipient of the Val Williams Scholarship, Shubham Chhajed, will summarise his findings for us very soon, in September! All members are very welcome to attend. (Ed note: meeting date is 10th September).

Tania Lamble

Walks & Talks Term 2 at Ku-ring-gai Wildflower Garden St Ives (KWG)

Meet at 9.45 am at Caley's Pavilion in KWG. Sessions run from 10am to about 12 noon.

Talks in Caley's Pavilion return to the format of Walks & Talks for the rest of 2021.

Book your place by the Saturday prior to the walk & talk.

Numbers will be managed to suit prevailing Covid-19 regulations.

Please supply your name, mobile number and emergency contact via email to Wendy. You will receive an acknowledgement. Email: wagrimm@tpg.com.au (preferred) Phone: 0419 323 035

Term 2	Winter Term (Warm clothing is recommended)
May 31	Monday Banksia (Family Proteaceae)
June 7	Monday Flowers to fruit & seeds
June 14	Monday Public holiday no activity
June 21	Monday Ferns & fernery tour

Banksia. Leader: Helen Theile

Banksias are icons of the Australian bush. Many species of the Sydney Region are in splendid flower in May and provide much needed nectar to local wildlife during winter. Those who attended would have been able to see the seven or so species growing in KWG.

Flowers, Fruits and Seeds. 7th June

Leader **Jan Marshall**



Flowers



Fruits



Seeds

An indoor meeting with a PowerPoint presentation and specimens, followed by a Walk in Ku-ring-gai Wildflower Gardens to explore some of the many plants and fruits that grow there. This Talk and Walk will explore the structure and diversity of flowers, the way these turn into a variety of fruits and seeds ready for a new generation of plants. These features are a useful aid to the identification of different species.

Ferns. 21st June Leader John Williams

Ferns are plants for all seasons and are known to be surprisingly tough. They are one of the first groups of plants to spread a flush of green over the fire-blackened landscape. Hear how they differ from flowering plants and after the talk enjoy a meander through the newly renovated Fernery at Lambert's Clearing, KWG.



Hymenophyllum cupressiforme 2x

President's Message

It was so good to see around 20 brave members who came to our first face to face meeting for more than a year on Friday 14th May. It was a very cold night but we were very pleased to find that our hall now has air conditioning!

Our guest speaker, member and photographer Bruce Usher, showed us some of his favourite photos from his beautiful new book - *Coast Tree Street* - and then showed us more slides of snowgums and the bush at Wollombi after the Gaspers Mountain fire. Jan Williamson, our hard-working Minutes Secretary and *Blandfordia* editor, was the lucky door winner of a copy of Bruce's book.

Our plant sales, library and supper operated as usual (although there were a few changes to how supper was served).

I am very pleased that the coffee table donated to us by Joanne, who was down-sizing her housing arrangements, has gone to a good home where the beautiful flannel flowers will be enjoyed once more by a bush-lover.

Sue Bowen



Styphelia tubiflora in flower
at KWG on 26th May.
Image by Sue Bowen

Beautiful CARDS of Australian plants, birds and scenes.

Pam and Jim Lawler have asked me to let our members know that they still have lots of cards for sale. Unfortunately getting to evening meetings is now more difficult for them.

If you would like to organise a time to visit them at their home in West Pymble to select and purchase some cards please contact them on 9498 6093 or 0424 065 956

As well, provided we can continue to have in person monthly meetings, the committee will endeavour to organise opportunities for members to buy some cards.

Editor.



Group Activity **THURSDAY 10th June to former Westleigh Sydney Water site.**

This walk breaks with the tradition and is on a weekday, not a weekend.

The walk is to what is now referred to as Westleigh Park, a 36 hectare area purchased from Sydney Water by Hornsby Council and currently zoned as Low density residential or Public recreation. About a third of it is degraded long grassed wasteland and the rest is very nice bushland. The Council's current Draft Plan Document proposes turning the grassed area into three large sports fields with associated car and bus roads access and parking and leaving the bush area as bush but with some worrying management issues.

The bush has stands of Sydney Turpentine Ironbark Forest (STIF) and Duffys Forest Vegetation Community, both of which are Endangered Ecological Communities as well as Bloodwood Scribbly Gum Woodland, Peppermint Angophora Forest and Scribbly Gum Open Woodland and 4 rare and endangered plants.

There are mountain bike tracks criss-crossing the bush, hence the choice of a much less busy week day when we are not likely to encounter many bikes. These tracks have and continue to cause damage to the bush there. Hornsby Council's Draft Plans would see the number of bike trails reduced. See the plans at <https://www.hornsby.nsw.gov.au/council/noticeboard/works/major-projects/westleigh-park>

APS North Shore Group has previously put in a submission in 2018 on preserving the bushland there. The submission has been added to on the basis of information in the Council's latest Draft Plans and re-submitted.

Our Group Activity is a chance for you to be guided over the site and explore it. The walking is mostly flat and easy. Bring your lunch as there is a nice park nearby and also a café not far away.

Where to meet: Westleigh Rural Fire Brigade, Warrigal Drive Westleigh

When to meet: 10am Thursday 10th June

What to Bring: Good walking shoes, hat, rain gear/ umbrella if necessary, water, lunch, snacks, keep cup, plant ID book, hand sanitiser and we will practice distancing .

Contact Person: Sue Fredrickson 0401 362 921.

Booking in is essential and is a Covid requirement.

It can be done by emailing paulandsuefreddo@bigpond.com and stating your name, car rego, phone number and emergency contact phone number.

An event, which may be of interest to our members, is happening in our area.

2021 Linnean Society of NSW Natural History Field Symposium

Natural History of the Northeastern Sydney Basin

Wednesday October 27–Thursday October 28 (oral presentations),

Friday October 29 (field trip)

The symposium is being held at Hornsby RSL Club. Please visit the [Linnean Society NSW](http://www.linnean.org.au) website for further information, including costs and registration, and download the First Circular



APS NSG Events in June 2021

Next Meeting on 11th June 2021

7.30pm for 8pm at Beatrice Taylor Hall Hornsby

25 Edgeworth David Drive Hornsby. Located behind Willow Park

Speaker: Narelle Smith

Topic: **Sir Joseph Banks life's works.**

A journey of Sir Joseph Banks work including the Endeavour journal, Australian plant collections, taxonomy and recruitment that enabled the publishing of Florilegium editions.

Banks was a significant global influencer, a collaborator and enabler in Botany and the Natural Sciences as President of the Royal Society, an advisor on plant collections at the Royal Botanical Gardens, Kew and to Governments on the new colony in Australia.



Image by Wendy Grimm

To comply with Covid requirements BOOKINGS are required :

Please book with Sue Bowen on suzannebowen@gmail.com Your name and phone number must be provided.

Group activity THURSDAY 10th June see page 5

9th July APS NSG Meeting *Speaker* Donna Fitton, Tree Care Officer, Hornsby Shire Council (HSC)

Topic 'Greening Our Shire' - HSC's Planting Projects

Propagation at KWG Wednesday 2nd, 16th & 30th June 14th & 28th July

Contact: Tania Lambie 0415 043 671

Bushcare at KWG 9th & 23rd June 7th & 21st July *Contact:* Sue Bowen 0478 957 951

The Knoll 11th & 25th June *Contact:* Michael Griffith michaelgriffith1@gmail.com

Walks and Talks at the Ku-ring-gai Wildflower Garden St Ives Monday 7th & 21st June

see page 3 for full details

Bookings are essential. Please email wagrimm@tpg.com.au (preferred) or ring Wendy 0419 323 035

Please provide 1) your name 2) mobile number and 3) the number of a person who could be contacted in the case of an emergency.

New Member

A big welcome to new member Matthew Gibson.

We look forward to meeting you and sharing with you our interest in and knowledge of Australian native plants.

Myrtle Rust in local area

After all this wet weather is back in my garden after a long absence due to drought and very dry conditions.

Myrtle rust is recognisable by its yellow and orange spores on tree leaves and branches, especially on plants belonging to the Myrtaceae family.

Last week I noticed it on my Walpole Wax (*Chamelaucium floriferum*) belonging to the Myrtaceae family. It is also on a few of my rainforest plants especially the Lemon Myrtle (*Backhousia citriodora*).

The following two links give you a good background if you do not know about this very serious problem.

<https://www.dpi.nsw.gov.au/biosecurity/plant/insect-pests-and-plant-diseases/myrtle-rust>

<https://www.abc.net.au/news/science/2019-12-04/myrtle-rust-fungus-invasive-species-killing-native-trees/11730738>

My inadequate, far too simple, management plan is to:

- cut off all the affected branches, place in a plastic bag and place in garbage bin and NOT the green bin.
- I then spray the plant with Yates Triforine, one of three I have tried and while not 100% successful it slows it down.
- Clean your secateurs with methylated spirits.
- If plants badly infested remove the whole plant as I have done with a few Geraldton wax plants (*Chamelaucium uncinatum*)

In the SMH article dated 4 May 2012 page 6 'Biosecurity funding boost to tackle pests and disease' it was quoted "Myrtle Rust is an example of what can go wrong when biosecurity is breached. The exotic fungus threatens the Myrtaceae family of plants. It is not known how myrtle rust entered Australia and there is no method to control its spread".

Jeff Howes



May Committee meeting notes (virtual zoom meeting)

The following items were discussed:

- Remaining monthly general meetings to be at BTH Hornsby with Covid safe arrangements, including bookings
- Speakers' Programme 2021
- APSNSW Delegate report
- Plant sale SUNDAY 29th August 2021
- Approval for costing of new projector and laptop

Tania Lamble receiving the 2021 Noel Rosten Encouragement Award from Sue Bowen at the May general meeting.



Autumn is here and it is the time I have to be diligent to stop my annual infestation of white scale especially on my *Acmenia* sps (Lilly Pillies). They grow to about 6 mm in diameter and their favorite location is in the V shape between the trunk and a new young branch. They are very unsightly and will slow the plants growth down by sucking the sap out of branches, especially small branches.

I have three methods of eradication:

- Hose them off with nozzle on jet. Effective for hard to get to scale.
- Pick them off by hand if not too many.
- With a bad infestation, I use Horticultural Oil (white oil) and this suffocates them and over time the white scale turns grey and drops off.

Interestingly, what you are seeing is the mature female and juvenile male and female scales. The adult male is a small winged insect. The white waxy coat hides the insect underneath that feeds on the plants sap.

So a plant inspection is worth while especially if you have time on your hands in these Covid times.

This is a good link for more information: <https://www.yates.com.au/plants/problem-solver/pests/scale-insects/>

Jeff Howes



Committee Contacts

President: Sue Bowen 0478 957 951

Secretary: Judy Jeffery 0429 438 598

Email: secretary@blandfordia.org.au

Website: <https://austplants.com.au/North-Shore>

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-membership>

If joining or renewing online presents any problems assistance can be given by emailing your query to membership@blandfordia.org.au

For your convenience, an EFT payment option is now available.

Treasurer: Helen Ray treasurer@blandfordia.org.au

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

Newsletter submissions: Deadline for submissions is the third Friday of the month.

For the July 2021 edition this will be 18th June 2021 Editor: janw7531@gmail.com

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