# Blandfordia



**North Shore Group** (ABN 87 002 680 408)



**NOVEMBER 2023** 

# President's message

Some plants are flowering now even though it is so dry. Many *Brachychiton acerifolius* (Illawarra flame) trees are very showy with their beautiful red blooms. Unfortunately, the 17m high tree over my back fence is not at all showy as it only has a few flowers amongst its green leaves.



In contrast, my *Hibiscus* 'Barambah Creek' and *Hibiscus heterophyllus* are in full flower.



Two of my favourite groundcovers are also flowering: *Myoporum insulare* (prostrate) with its beautiful white star flowers and *Chrysocephalum apiculatum* (Desert Flame) with its bright yellow pom-pom flowers. Give growing them a go!!

Our elections for next year's Committee will happen at our November meeting. It would be good to have some new faces on our Committee to help organise our activities for next year. None of our positions are onerous and sharing some of the load makes it easier for others. Committee members cannot be expected to do their jobs for ever so please offer to help out.





Don't forget to come to our Christmas Party at the Ku-ring gai Wildflower Garden on Friday 8th December. We will have our usual buffet dinner but what else we do is still a mystery. Last year's nocturnal spider walk was very enjoyable.

\*\*Written by, and images by, Sue Bowen\*\*

On FRIDAY 8<sup>th</sup> December APS NSG will hold our Christmas Party in Caley's Pavilion Ku-ring-gai Wildflower Garden.

## 6.00pm for 6.30pm

Please let Sue Fredrickson on 0401 362 921 or Jan Williamson janw7531@gmail.com know the following:

- \* Name/s of attendees
- \* What you would like to contribute (categories: nibbles, mains or dessert)
- \* 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



September APS NSG General meeting

# Friday 10 November

# 7.00pm for 7.30pm

**Beatrice Taylor Hall** 

25 Edgeworth David Ave, Hornsby NSW 2077

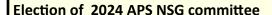
Speaker: Harry Loots

Topic: Plants Hidden in the Clouds

Background: Harry Loots will speak about the alpine plants of the Central Highlands of Tasmania. He took many photos on his most recent walks along the

Overland Track between Cradle Mountain and Lake St Clair in 2022 & 2023.

Harry is a long-time member of the society and Treasurer of APS NSW. Bushwalking since his teens fostered his interest in growing Australian plants.





At November meeting a selection of Pam and Jim Lawler's cards will be for sale: \$3.00 each. Five blue APS NSG polo shirts will be available for sale (\$25.50) cash at the November meeting. Sizes XS,S,M,L & XL

# Future 2024 meetings

Meetings will return to a 7.30pm for 8 pm start.

# 9 February 2024

**AGM & David Roberts** 

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

Suggestions for speakers welcomed. Please contact

Jan Williamson janw7531@gmail.com



## 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.



# **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.

#### 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

#### WELCOME

A BIG welcome to our newest members: Coedie, Simone and Peta. We hope that you have an informative and enjoyable relationship with our amazing flora, APSNSW and our group.

## **Group Activities for November**

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 <a href="https://austplants.com.au/event-5334268">https://austplants.com.au/event-5334268</a>

# Remembering APS NSW life member Jenifer Lewis

Compiled by Wendy Grimm on behalf of the North Shore Group

Jenny Lewis was an APS NSW life member (2005) and very long term North Shore Group member. It is with great sadness that we advise members of the death of Jenny Lewis in September 2023.

#### The early days

Jenny was a member of SGAP and later the Australian Plants Society from around 1981. Jenny had a long interest in native plants. She graduated with a Bachelor of Science from Sydney University in 1953 with a major in Physics and one year of botany. Inspired by a course in native plant identification in 1960, Jenny's hobby and lifetime passion for the identification, collection, preservation and photography of native plants began.

#### **Bush Regeneration**

In 1987 Jenny started a bush regeneration group in Beecroft Reserve at a time when local government had not got around to addressing the need for active management of the bushland under its control. Jenny was an early member of the Australian Association of Bush Regenerators and, as one of the pioneers of bush regeneration, helped many early bush regenerators with plant identification and advice. As a member of the Beecroft-Cheltenham Civic Trust's Parks subcommittee Jenny promoted appreciation of Beecroft and Chilworth Reserves and Pennant Hills Park, now Lane Cove National Park, and served on the Hornsby Council Bushland Management Advisory Committee 1989-1999.

Jenny was instrumental in the regeneration of Observatory Park, Beecroft which she documented (2001) "Regeneration of remnant Blue Gum High Forest following the cessation of mowing" *Cunninghamia* 7 (2): 173-182.



Grass Tree Rest Centre Seymour, Victoria taken in 2009



Rae Rosten: "My earliest recollection of Jenny was working with others to remove Trad behind her property when she was fighting the construction of the freeway." And later "there were lots of afternoon teas in my kitchen after Herbarium excursions."

L to R around table: Pat, Noel, Wendy, Barry and Jenny

#### **Legacy of conservation**

Jenny's advocacy during this period led to the realigning of the path of the proposed M2 motorway to retain a quality bushland corridor between Pennant Hills Golf Course and Cheltenham Oval. Now, in 2023, as part of the NSW Governments Places to Roam – Regional Trails program, there are plans to refresh and expand the Beecroft-Cheltenham Bushland Wayfinding Signage to "raise the community's awareness of the local bushland, its natural values, and how it is regionally connected".

Sheila Woods recalls that "Jenny shared her knowledge and expertise with so many. She certainly was a big influence for me. Jenny was a very good teacher and over a four-year period we learned a lot about weeding the bush from her. After the M2 was a *fait accompli* Jenny turned her botanical skills to collecting specimens for a herbarium for Hornsby Shire."

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#### Plant Identification and Herbaria

Jenny's expertise in plant identification expanded from compiling species lists for Observatory Park and Beecroft Reserve to a comprehensive herbarium of over 350 species in 205 genera of plants of the Ku-ring-gai Wildflower Garden (KWG) at St Ives from 1988 to 1997. At KWG she was assisted with identification of reeds and sedges by Val Williams (APS NSW president 1998-2000) and with identifying grasses by Pat Pike.

Robert Failes (life member 2022) recalls "Jenny and I were contemporaries at Sydney University in the late 1940's, studying in different scientific areas, but both members of Sydney University Musical Society. On my retirement, when I joined the North Shore Group of Australian Plants Society, I was delighted to meet up with Jenny again, this time with a joint interest in native plants. My knowledge of these plants though was minimal while hers was humongous! Her speciality was "Ferns" and later when I became involved with our Walks & Talks Program it was great having her lead the program on this topic."



For many years Jenny conducted walks to show visitors the wildflowers at the Ku-ring-gai 'Festival of Wildflowers' at St Ives in spring.

Sue Fredrickson recognised Jenny as "an inspiring lady" and has followed in Jenny's footsteps with walks at the festival.

Then just when you might think Jenny would slow down, she started compiling the Herbarium of the Hornsby Shire in 1997. In this endeavour she had active support from other keen plant identifiers in the North Shore Group who accompanied her on many field trips – notably Ross Doig (life member 1999), Pat Pike (life member 2015), Noel Rosten,

Anthony Lewis, Max Gregory and Barry Lees (life member 2019). The aim was to collect all indigenous native plants in the Hornsby Shire and have them available as a pressed collection in Hornsby Library.

Max Gregory recalls "When I joined the Hornsby Herbarium Group I was fascinated by the depth of knowledge and skills. But everyone deferred to Jenny. Jenny's academic training was in Physics. She applied rigorous scientific technique to her work. We would all go out for the day and the team would compile a plant list. Anything at all in doubt Jenny would take home and thoroughly check or on some occasions even work out what it was. Even the great Ross Doig would accept the occasional correction by Jenny. Jenny always shared her knowledge and was happy to discuss subtleties. A wonderful human being from whom we all learnt so much."

By December 2004 the Herbarium folders were available in the reference section of Hornsby Library for plant identification and research purposes. They were used by Council Officers, Bushcare trainers and volunteers, school children, tertiary institutions and the general public.

Helen Ray recalls "I was on very few Herbarium outings with Jenny. I just remember being amazed at her ability to just stand there and quickly identify dozens of native plants around her".

Vegetation species lists were made of 80 sites across various seasons and over 900 species have been collected and recorded in Hornsby Shire. Jenny's scientific licence from the National Parks & Wildlife Service permitted the team to collect native plant specimens in the Shire. Vegetation lists were sent to the National Herbarium of NSW at the Royal Botanic Gardens and the Wildlife Atlas for NP&WS (at their request). This resulted in increasing the known species diversity, the range of many species and the location of populations of threatened species that previously had not been recorded in Hornsby Shire.

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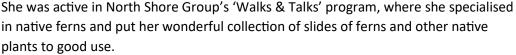
Tony Maxwell observed that a "monumental series of plant lists from bushwalks in northern Sydney was created by Lewis/Doig/Rosten/Pike/Lees and others. All these people are giants in our Society – nobody told them to do this work, they did it because they were interested".

Advances in digital technology and library grants have enabled the collection of scans/ photos of live/pressed plants to be made available to the public through the Internet. The online Herbarium can be accessed at www.hornsby.nsw.gov.au by following the links to the library, eLibrary and the Hornsby Herbarium.

Jenny was an active member of North Shore Group who gave talks to other APS groups and community and conservation groups such as the Hornsby Conservation Society.

Jenny received the North Shore Group Melba Dyer Award in 1999 and was recognised with

life membership of APS NSW in 2005.



Joanne Caldwell provided a copy of Jenny's life membership write-up in *Native Plants* for New South Wales (July 2005), adding "I had great respect for Jenny. Likewise for all the other North Shore members who have taught me so much."

Barry Lees recalls: "I joined the Herbarium Group in 2002. I often went to Jenny's place to help her assemble the A3 blue folders of pressed plants. Her dining room was piled with folders, A3 archival quality paper and plastic sleeves. Plants being pressed added to the clutter. Jenny organised weekly plant surveys for the Group until 2013, when she found the physical demands too much. From about 2002, she managed the enormous task of having all the pressed plants digitally scanned and custom software written so that the images could be made available to the public. This

was our online Herbarium that is still available. What a huge

legacy she has left behind!"

Wendy Grimm: My favourite memory is of Jenny at Anglesea Heath in Victoria and the Grass Tree Rest Centre, Seymour. Jenny, Pat Pike and I were returning from the 2009 national conference, Geelong. We indulged our love of orchids and other small plants for too long and we had to drive an extra

150km to secure beds for the night. My photo captured Jenny's enjoyment of the moment, her serious approach to photography and her love of collecting plants for identification. Jenny gave a subsequent talk to our group on her findings at those locations.

This tribute is in memory of Jenifer Lewis, a well-respected, inspiring member who made an immeasurable contribution to our knowledge of local native plants. A wonderful human being from whom we all learnt so much.

Photos attributed to Wendy and Phillip Grimm.









#### **EucFACE** visit

In early October, a group of North Shore members visited the University of Western Sydney's quite incredible EucFACE site at Richmond. Local resident and North Shore member Dr Tony Evans organised this in collaboration with North Shore member Dr Bob Failes. We were shown around by Prof David Ellsworth.

EucFACE is short for Eucalyptus Free Air Carbon Dioxide Enrichment Experiment. EucFACE is a massive experiment that exposes trial areas of native Cumberland Plain forest to an elevated  $CO_2$  level at around 550ppm which is what we expect to reach by 2050. The level of  $CO_2$  in the air is currently around 400ppm. The EucFACE experiment team hopes to gain a good insight into how our unique, native Eucalyptus-dominated ecosystems react. It has been running for 11 years and its future will be largely determined by further funding.

This is the first time such an experiment has been conducted in Australian Eucalypt Forest. There have been similar overseas experiments to test the effect of elevated  $CO_2$  but they have largely been conducted in crops, low vegetation and young plantation monocultures. The only other such experiments in a forest setting are a similar project in the UK and another is in advanced planning stages in Manaus, Brazil.

The vegetation here is Cumberland Plain Forest. It has existed on this site for decades already and the tree canopy consists almost solely of Forest Red-Gum, *Eucalyptus tereticornis*, some of which are older than 140 years. Scattered shrubs include *Breynia oblongifolia*, *Bursaria spinosa*, Melaleucas and *Ozothamnos diosmifolius*. There is a denser groundcover including, for example grasses such as *Microlaena stipoides* and *Cymbopogon refractus* (Barbed wire grass) and the lily *Bulbine bulbosa*. The soil is alluvial, alternating sand and clay layers above the clay base at 3 or 4 metres depth. This is a harsh environment for vegetation growth due to low nutrient i.e. phosphorous-poor soil and climate that is often dry with hot summers followed by frosty winters. Consequently, tree growth here is slow. Ten years after the experiment was started, there has been no measureable growth of the trees.

The site was chosen largely because of its location within the University grounds which affords it some security as well. It formerly was grazed in part and there is the usual assemblage of weedy shrubs and groundcover. However, mostly the site has intact Eucalypt forest which was required for this experiment and it is in this part that the experiment was set up. Remarkably, the experiment was installed with minimum disturbance and without any destruction or even thinning of trees.

Scattered through the forest are six imposing looking, 28 metre tall carbon-fibre ring structures, each ring having 32 vertical vent

pipes and weighing 450 kilograms each. The six rings are all the same except that three release air at  $^{Helen\ Smith}$  enriched CO<sub>2</sub> levels into the 25m diameter circular plots of forest within, while three are control rings that release air with ambient CO<sub>2</sub>



Sue Fredrickson

The circular rings are designed to deliver  $CO_2$  enriched air according to the speed and direction of the wind, adjusting their output accordingly. Using sensors and valves, the direction of the air release means that enriched air is always directed into the centre of the plot, creating a stable level of  $CO_2$ . The  $CO_2$  needed for the experiment is piped in from a bank of three 50 tonne tanks where it is stored in liquid form.

Each ring has its own crane used during construction and now used for maintenance and to provide access to tree canopy for scientists. A team of plant physiologists, soil biologists, molecular biologists, entomologists and ecological modellers study various aspects of the EucFACE experiment. There are around 80 science projects going on at the site, involving around 400 scientists.

\*\*Continued page 8\*\*

Below ground, fungi and microorganism communities – essential for plant health - and soil chemistry are being comprehensively studied.

David explained that so far in this type of forest in this location anyway, there has not been a measurable change in tree growth or above ground productivity in the enriched CO<sub>2</sub> environments. This is thought to be largely due to

soil phosphorous limitation. Maybe it will be found that below ground, fungi and microorganism communities are where the extra CO<sub>2</sub> is being stored and having an effect.

This has implications for the belief that growing more trees everywhere will solve our Global Warming problems, although it's possible that there would be different conclusions if a similar study were to be done in more productive areas.

In the meantime, he advocates that we all do as much as we can to stop our CO<sub>2</sub> producing habits in the first place. If only it was so easy eh!

Written by Sue Fredrickson



A convivial lunch finished off the visit Image by Helen Smith

Acacia fimbriata. I am appreciating this as even with my wonderful pruning pole reaching the tips to give it a prune is very difficult.



# Rambling through the rushes (etc)



The background promotion for Karen Wilson's talk was "Karen 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." We were not disappointed.

Karen, started with an acknowledgement of all the exciting times that she has experienced over her career. Over this time theories, data sources, techniques, equipment, electronic analysis of data and electronic communication have all made huge leaps forward. In the 1970s the theory of Plate tectonics was verified and became mainstream. The 1970s and 1980s were the halcyon days with funding available, but since the 1990s funding has decreased. In 1983 there was discussion at the RBG as to whether one or two computers would be required! Over Karen's career the involvement and treatment of women in the

field has also improved. Some notable events included the opening of Australian Plantbank in 2013 and in 2022 the National Herbarium of NSW Australian Botanic Garden, Mt Annan, in 2022. Karen also worked and studied in Paris and Kew Gardens, England.

Karen's youth was spent on a property at Garah on the Moree plains where she had plenty of time and opportunity to look at the local grasses and vegetation. In times of flood access was not possible giving even more time on the property. One of her favourite local plants was *Capparis mitchellii*. High school saw Karen at boarding school and, like our September speaker, a school experience gave her great encouragement to enter the field of the science of plants. Karen was presented the Award for School Science Research by Sir Mark Oliphant in August 1964. Her 4<sup>th</sup> year university project was on *Ajuga australis* (Austral bugle).

Karen commented that field work is very important and it has taken her to many places, both within Australia and abroad. Leaf colour and the arrangement of floral parts are two aspects which are best appreciated and noted in the living plant. Fieldwork also has incurred some hazards, such as crocodiles, snakes and the more local ones, ticks and leeches.

Karen's four major areas of study were

- 1. **Rushes** 38 species of Juncus in Australia. Juncus is a genus of monocotyledonous flowering plants, commonly known as rushes. It is the largest genus in the family Juncaceae, containing around 300 species. <u>Wikipedia</u>
- 2. Casuarinaceae family (She-oaks): 68 species in Australia.
- 3. Polygonaceae family (Smart weeds, docks): 60 species in Australia. *Muehlenbeckia costata* is one example and is now listed in NSW as a vulnerable species. It is fire ephemeral which means that if responds to fire with large flushes of germination. It lives for 2-4 years after which it dies. Spotting it is therefore often difficult. Unfortunately, there is another species in this family, *Persicaria chinensis*, which is a very invasive weed which is proving an increasing problem in the Sydney and Hunter areas. A plus for control is that it does not "disappear" as *Muehlenbeckia costata* does. Karen suggested that any apparent "new specimen" should be checked out- it may be a new species of weed.

  4. Sedges: 650 species in Australia The Cyperaceae are a family of graminoid, monocotyledonous flowering plants known as sedges. The family is large. Wikipedia. This family can be found in all habitats on all inhabited continents and favours poor soils, which will be occasionally wet and then dry out. An example is *Eleocharis macbarronii* <a href="https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Eleocharis~macbarronii</sub>. Karen commented that it is often hard to distinguish.

Karen has been involved in many conferences and committees including the General Committee for Nomenclature (International Association for Plant Taxonomy) which oversees the rules for naming plants- its aims include one scientific name for each species.

Karen recommended herbarium resources and, for the most diligent members, The Global Biodiversity Information Facility (GBIF). This is an international organisation that focuses on making scientific data on biodiversity available via the Internet using web services.

Thanks to Karen for joining us and giving us an insight into her varied and extensive career with her enthusiasm obviously undiminished.

Written by and image by Jan Williamson

#### 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 3

**MONTHLY GROUP ACTIVITY** see page 3

**PROPAGATION** is held at KWG on alternate Wednesdays from 1-4pm 1<sup>st</sup>, 15<sup>th</sup> & 29<sup>th</sup> November 13<sup>th</sup> December 10<sup>th</sup> & 24<sup>th</sup> January 2024

**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:

 $8^{th}$  &  $22^{nd}$  November,  $6^{th}$  &  $20^{th}$  December  $17^{th}$  &  $31^{st}$  January 2024

2023 Activities	CONTACTS
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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

Local STEP activities St Andrews Uniting Church, corner of Vernon

Street and Chisholm Street, Turramurra.

Saturday 4 November, 2 pm

AGM and Talk on Human Security and Climate Change (no need to book)

We are delighted that Ian Dunlop will give a talk after our AGM.

The subject of his talk is climate and security, leading into the social and economic reform required for a sustainable future, one example of which is the recent Club of Rome Earth4All initiative.

Saturday 25 November, 2:30 pm

Talk on Biodiversity Conservation in Ku-ring-gai (no need to book)

Jacob Sife (Manager of Environment and Sustainability) will talk
about biodiversity conservation now and in the future.

https://www.step.org.au/

#### **Committee Contacts**

northshore@austplants.com.au

#### **President:**

Sue Bowen 0478 957 951

Website: <a href="https://austplants.com.au/">https://austplants.com.au/</a>

North-Shore

**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/aboutmembership

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

northshore@austplants.com.au

#### 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 appnsymembership@gmail.com

#### **October 2023 Committee Meeting Notes**

- Speakers Programme
- Quarterly APS NSW meeting March 2024
- Donations to Australian Flora Foundation & Berowra Apex Club
- Blandfordia distribution

#### More plants for sale

**Brian Roach** (APS NSG member) at Westleigh Native Plants Contact <a href="mailto:westleighnativeplants@gmail.com">westleighnativeplants@gmail.com</a>

#### Do you want to know more about native plants?

Have you tried <a href="https://austplants.com.au/">https://austplants.com.au/</a> and within that site <a href="https://resources.austplants.com.au/plant-database/">https://resources.austplants.com.au/plant-database/</a>?

#### Newsletter submissions:

Deadline for submissions is the third Friday of the month. For the December 2023 edition is Friday 17<sup>th</sup> November 2023

Editor: janw7531@gmail.com

# Blandfordia The Newsletter of the Australian Plants Society North Shore Group