





HARBOUR GEORGES RIVER Group of APS NSW NEWSLETTER – March 2023

NEXT HARBOUR GEORGES RIVER EVENT:

Wednesday 5th April, 6 pm Members Night

Hear from members old & new about their plant passions and an opportunity to socialise with them

At Burwood RSL Club

96 Shaftesbury Road Burwood

VISITORS ARE ALWAYS WELCOME

Welcome to the March 2023 edition of the APS Harbour Georges River Group Newsletter.

In April, we are having an indoor meeting where everyone can continue the conversations that started at Sydney Uni. We are asking members to tell us about their interests & projects, so we can better focus future events to meet those interests.

We also finally have The Library back in circulation, so have a look at the list on the web site & pick something to browse as the evenings draw in.

There aren't many pictures this month. Our President has sent some images of one of her wonderful flower arrangements and suggests other members may like to send in their arrangements and discuss them too.

Dorothy Luther, Editor

In the spirit of reconciliation, the APS Harbour Georges River group acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

https://www.austplants.com.au/Harbour-Georges-River

Table of Contents

Contents

A NOTE FROM THE PRESIDENT	3
NEXT MEETING	4
Members Night, Wednesday - 5 th April, from 6 pm	4
Where?	4
Plant Table	4
LAST MEETING	5
APS NSW Gathering at Bundeena	5
GROUP NEWS	6
Planning for 2023	6
Our Library	6
Royal Easter Show	7
Next ANPSA Biennial Conference	7
NEIGHBOURHOOD NEWS	8
When Sydney Water Just Has to Dig Up Your Bushcare Site	8
A Defence Against <i>Phytophthora</i> Dieback?	9
Menai Wildflower Group Catch Up	9
Introducing Dan Clarke	9
RANDOM JOTTINGS	10
Ecocide	10
World Biomass – the Numbers	10
New Bee Species	10
Recommended Web Site	11
Another Plant ID App	11
CORRESPONDENCE RECEIVED	11
Newsletters Received – March	12
Other Groups Newsletters	12
COMING EVENTS	14

A NOTE FROM THE PRESIDENT

Dear Members,

We have had an interesting month, attending the Quarterly Meeting at Bundeena, catching up with other groups and gaining new members.

Heather Miles announced she was stepping down from being the President of APS NSW after a very full term including hosting the Kiama conference last September. Congratulations Heather and thank you for all you have done for the Society.

Our next meeting will be at a new location and I am looking forward to seeing how successful it will be. The advantage of being able to move about is the flexibility we have in our group to try and get to know our patch.

The Easter Show starts on 6/4/23 till 17/4/23. Different APS Groups enter into the Native Flower section. It's a great way of showing the public our unique Native Flora. I have for years been involved with the Sutherland Group in entering flowers. 14 & 15 April will be APS entries.

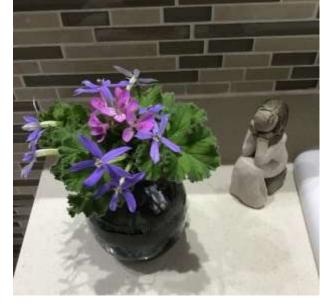
Every blessing to you all over the Easter period and enjoy your time in the garden.

Warmest regards to you all.
Marie O'Connor. President HGR APS.

I find going out into the garden to see what I can pick for a vase of flowers for the house a wonderful way of relaxing. It is stimulating to see what I can create with what's available.

Today's vase is from leaves from the Australian Pelargonium hybrid I bought from Graham Fry last year. There was one flower out which I added to the blue. The blue flowers are from a small cutting from Aileen Phipps (Sutherland) garden prior to her going into a Retirement Home.

Picking flowers is a good way to prune the plant & stimulate its growth.







1 Pelagonium australe hybrid, from Graham Fry

NEXT MEETING

Members Night, Wednesday - 5th April, from 6 pm

For this indoor evening meeting, we are going up market to the Burwood RSL Club Executive function room. Arrive from 6 pm for general socializing. The formal proceedings will start at 7 pm.

All members are invited to give short talks about their particular passions concerning native plants. A chance for new members to introduce themselves & get to know long standing members. That way, we get to find out what everyone's interests are & how we can support each other's particular projects. It will also help with tailoring future events.

If you would like to speak, or just listen, please tell Liz Cameron on elsmere02@gmail.com that you are attending.

So far, we have (in no particular order):

- Karen about her volunteer work at the Marrickville Community Nursery and Royal Botanic Gardens.
- Graham on his Eremophila mackinlayi chimera (with living example).
- Andrew to tell us about what he is doing at Sydney University.
- Dorothy to lead a discussion about how APS works, using the slide set that Heather Miles prepared, which goes thru the different parts of the organisation.
- Ashlie Stevenson on her horticultural experience.
- Dorothy on extracting and using Hugh Stacy's plant descriptions from the old newsletters.
- Liz on plant names and families (based on Botany courses at University). She will

bring a few books that describe the origin of many of the names.



Where?

Club Burwood RSL, 96 Shaftesbury Road, Burwood, in the Executive room on the 1st floor. Note that the Dining rooms are on the ground floor, if you want to eat there.

If coming by train, the station is on Burwood Rd, (near the food places on the map) Nearest cross street to the RSL is Clarence St.

If coming by car, there are traffic lights on Paisley Rd at Shaftesbury Rd, and a railway overpass.

Parking is available on the premises.

Plant Table

There is an old tradition from the East Hills Group days that when we have an indoor meeting, people bring cuttings from their favourite plants to show off. It can be from your garden, a street plant (legally obtained) or whatever. Wrap the stem in wet paper & plastic to help keep it fresh. Can anyone bring a fine misting spray bottle? It helps to spray the plants lightly with water in air conditioning. It's a chance to show off you garden or bring something you need identified, or want some advice about. Someone may be able to help you.

Then our Plant Table officer writes up notes about what was brought for the next newsletter. It's a good active learning experience for everyone.

LAST MEETING

APS NSW Gathering at Bundeena

In March, we piggy backed onto the APS NSW Gathering at Bundeena, hosted by Sutherland group. There are some lovely photos and stories about the excursions from members on the APS NSW Facebook group

https://www.facebook.com/photo?fbid=576898574474167&set=pcb.1879867662377848

There will be more in the APS NSW newsletter, due out at the end of March.

The afternoon talk was given by

Ann Young: Mosaics of vegetation - the rocks and dirt story.

Ann is a geographer with a particular interest in soils & their relationship to vegetation, which form mosaics at different scales. At the macro level, there are woodlands, forest, sedges & grassed areas, depending on the nutrient levels in the soil. At the micro level, why does my garden plant grow well here but the same species dies over there?

It largely depends on the soil. **Rainforest** has all the nutrients in a thin layer of topsoil, so it supports plants with a flat, circular root system. **Ideal soil is brown** & made up of 'peds' — small lumps that allow water & air to penetrate the soil. This supports the bacteria & 'beasts' that maintain the soil by decomposing organic matter & digging the soil over. In Australia, ants are the main diggers, not worms, as in Europe. There are also termites & fungi that make their contributions. The presence of wombats indicates good, deep sub soil.

Much of Australia's soil is **red from iron oxides**, which do not leach away as other minerals do. To help with getting nutrients from the poor soil, Mycorrhizal fungi grow around the roots and some plants have proteoid roots (thin red finger like structures) that secrete organic acids & pick up nutrients. They also expand the interaction surface.

Black soil is low in oxygen with high organic content. It is often wet & boggy and doesn't support microbes.

Yellow & white soils are either sand or clay with little nutrient content.

Ann described some simple mechanical tests for your soil quality.

- 1. The Pencil test. Try to push the flat end of a pencil into the soil, with the point against your palm. If this hurts, your soil is too sticky for plant roots to penetrate too.
- 2. The Spade test. Toss a spadeful of soil onto the ground. If it breaks into stable fragments (peds) it is good soil. If it is very granular, it allows water to flow through & out again. If it sticks in a lump, it is pencil test failing soil.
- 3.The Water Test. Drop a largish lump into a bucket of water. If it stays together, it will resist erosion. If the water becomes milky, the soil is clay & will erode. If it falls apart & releases air bubbles, it is hard packed and won't allow air to penetrate.

We hear a lot about the other main criteria for growing plants: the availability of water & the temperature & sunlight. But soil condition is also of prime importance.

GROUP NEWS

Planning for 2023

In 2022 our group's monthly gatherings were held at a range of localities and at different times of the day and on different days of the week. In 2023 we plan to continue holding some events outdoors and others indoors (mostly evenings).

We have an activities calendar planned, but need to finalise dates & times for some:

- Sun 7th May, from 10 am. outdoors gathering at Sydney Park, St Peters. Spend two
 hours exploring the 40 ha area which encompasses wetlands with lots of birdlife,
 extensive revegetation by native plantings, a community garden, dog off-leash areas,
 a kiosk and more: https://en.wikipedia.org/wiki/Sydney Park Meeting place and
 itinerary to be confirmed.
- June indoors evening meeting, date and time to be finalised. Talk by a botanist, possibly on Australian desert flora or the background to the CampusFlora app for the University of Sydney campus.
- July Tour of the GreenWay with IWEG (Inner West Environment Group)
- August Activity with the Bankstown Bushland Society a 'PUB' (Patches of Urban Bush) crawl. Some local Government reserves have unique flora; in August, rare orchids are flowering at Picnic Point. Suggested use of car-pooling as we will visit 3 or 4 sites.
- September Royal Botanic Garden, Sydney Spring guided tour, following our successful tour in winter 2022.
- October, evening, indoor meeting hear about Canterbury Bankstown Council's environmental programs.
- November South Eveleigh Native Rooftop Farm that Clarence Slockee's Jiwah company has developed; it is apparently not open to the public, but we may be able to organise a group tour. Maybe followed by lunch at Lucky Kwong in Eveleigh (owned by Kylie Kwong).
- December Christmas Party and AGM

Our Library

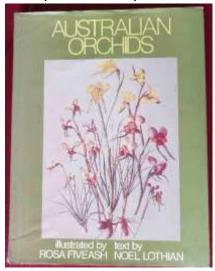
The Library is contained in two large wooden cupboards and has been moved to Dorothy's home.

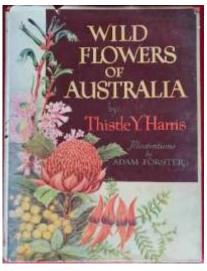
It contains 67 books, 10 of which are also available online from the ANPSA web site; a random selection of periodicals, some in binders, some loose, and a complete set of *Encyclopaedia of Australian Plants Suitable for Cultivation* [9 volumes] by W. Rodger Elliot, David L. Jones, 1981 to 2010. This is valued at over \$2000 and is available for reference only, not for loan.

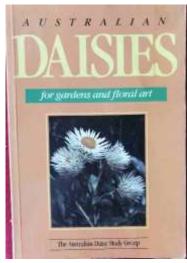
Dorothy has compiled an Excel list of the publications, which is **posted in the Members' section** of the HGR website. https://www.austplants.com.au/sys/website/?pageId=18256

You have to log in to see the list, so it is only available to members of the Harbour Georges River group. If you have problems signing in, contact the APS NSW membership officer, Merle Thompson on merleaps@bigpond.com

Dorothy will manage the list, oversee borrowings, deliver requested books to meetings and retrieve them at the end of the borrowing period. Kerry Snelgrove is unable to manage The Library due to family commitments.







Please have a look at the list, https://www.austplants.com.au/sys/website/?pageId=18256 borrow a book and write a few notes about it, so we know how useful it is. The books are quite old so the plant names (taxonomy) may be out of date, but some probably contain a wealth of information about the propagation and care of native plants.

You **borrow a book** by sending an email to Dorothy, at <u>dlutherau@yahoo.com.au</u> and it will be delivered to the next meeting. Or you can make an appointment to look at the library, in Lewisham, in the Inner West. Again, email for a suitable time & the address.

Royal Easter Show

Sydney Royal Flower & Garden Show - Australian Plants Competition

Marie will once again be contributing to the APS NSW Sutherland Group's entry. The judging and display will be on Friday 14th and Saturday 15th April.

This is part on the Royal Easter Show, which is on from 6 - 17 April at Sydney Showground at Sydney Olympic Park, which is conveniently serviced by trains, buses and ferries.

Next ANPSA Biennial Conference

We have received the first newsletter of the next ANPSA biennial conference, Gardens for Life, hosted by APS Victoria and starting on 30th September 2024. If you want to see more detail, go to the APS Victoria website - https://apsvic.org.au/anpsa-biennial-conference-2024/

Held at the Melbourne Conference and Exhibition Centre, the conference topics include Gardens for Wildlife and Habitat, Restoration and Revegetation of Wetlands, Grasslands and Verges, Care for the Rare, Insects and Biodiversity, Garden Design, Indigenous Food Plants and many more.

Tours before and after will go to Victoria's best wildflower areas and day excursions will feature new botanic gardens, private gardens and wild areas.

NEIGHBOURHOOD NEWS

There is a lot happening in our patch, with community groups and local councils being active in promoting native plants. My plan is to feature a local group or event each month. I welcome contributions - stories about your other favourite groups.

When Sydney Water Just Has to Dig Up Your Bushcare Site

There is a well-developed bushcare site on the Greenway that is about to be trashed by Sydney Water. Is there some way that we can save the plants by digging them out & transferring or storing them until SW have moved on? I've seen quite mature plants being planted out by council workers so I'm wondering if we can do something.



3 Waratah Mills Site 2002. photo by Bruce Ashley

4 The Site in 2008, photo by Bruce Ashley

One informed opinion:

As far as I'm aware, all plants can be moved if the root ball is big enough and they get plenty of water before and after. With larger shrubs and trees that would mean bobcats or industrial machinery and storage facilities and someone to take responsibility for them in ensuring they don't dry out.

It seems to me that Sydney Water should bear the responsibility in restoring the site, especially a site that has been cared for.

Community Contact Response

It would be a good outcome, if we can save some of the plants. We are still negotiating with Sydney Water about where their path will go. After the community uproar, Council has had to pull back from their clearing & grubbing of the entire site and will only clear the path (we hope). The Design and Construct documents won't be available till mid-April. We dug up a few *lomandras* and *dianellas* last week to take to the nursery.

Dorothy's Story

My sister works for the Forestry Commission, out in the bush. Whenever a bit of ground is to be cleared, she rushes in & rescues as many native plants as she can get her hands on & distributes them around the neighbourhood. I have also rescued plants from the gardens of houses being trashed, much to the amusement of the builders. Let's have more guerrilla gardening!! "Reduce, Reuse, Recycle" applies here too.

A Defence Against Phytophthora Dieback?

From the APS Parramatta Hills newsletter for March.

While conducting a survey of soils in eastern New South Wales for the presence of the destructive plant pathogen *Phytophthora cinnamomi* in 2018, recently retired Saving our Species Senior Threatened Species Officer Dr Keith McDougall noticed that highly sensitive plant species persisted on some sites where *Phytophthora* was expected to occur. This indicated that the soils at these sites may potentially be suppressing the pathogen.

Funded by the Saving our Species program, preliminary research is underway at the Royal Botanic Garden Sydney, led by Dr Edward Liew, to investigate the reproduction and survival of *Phytophthora* in soils. Seven of the 10 soils being tested are thought to be suppressive.

See https://mailchi.mp/environment.nsw.gov.au/saving-our-species-newsletter-december-2022?e=533571ad4c about halfway down, for the full story.

Menai Wildflower Group Catch Up

Thanks to Graeme Davies for the following:

We've had 2 very successful guests so far with Beth Mott giving us an update on her many activities including The **Glossies in the Mist** programme. I think some of us were surprised/disappointed at Beth's claim there is not a great number of Glossies in the wild.

Tony Porritt and his wife Kate showed us slides of their **trip to Arnhem Land**. Beautiful scenery, some wonderful plants in flower and interesting stories about their time in a part of the area I had no idea existed. Tony explained Arnhem Land is really 3 areas in one. You still need approval to enter any of it but the most easterly area is extra special, where a group of our people still live in the way they did for many thousands of years - off the land and sea. It was a real eye-opener to many of us. They do have some mod cons like vehicles but to all intents and purposes everything else is the way it was before white settlement.

Many reports of the **trip to the Maritime Museum** thanks to Pam and Greg who are Guides there. Everyone enjoyed their day immensely. It was also our first using public transport. We have a few more expeditions like this in mind, as you will hear in the weeks and months ahead, so stay tuned.

Our trip to **Maddens Falls in Darkes Forest** to check out the flowering Terrestrial orchids was also well attended, with the added benefit of a number of members of other groups joining in. A very nice and relaxed wander peeking here, there and everywhere, with some lying on their tummies, some on tippy toes trying to get that wonderful photo of these beautiful orchids.

Introducing Dan Clarke

Dan Clarke's name crops up quite often in the APS world & I was happy to find this very brief bio of him:

Dan Clarke is a Botanist who operates the consultancy Arcane Botanica Pty Ltd. He is also APS Conservation Officer [writing submissions on environmental topics for government] and a collector for the National Herbarium of NSW. Dan's work includes vegetation surveys, threatened flora species searches and reporting, assisting with biodiversity assessment methodologies and the implementation of Saving our Species Programs. So, he is a very busy man.

RANDOM JOTTINGS

These are items of general interest found on the World Wide Web. All contributions for future editions gratefully accepted.

Ecocide

Something to do.

Ukraine's environment is being destroying, leaving behind more than 50 billion dollars in environmental damages. If you believe that the severe destruction of our precious Mother Earth should be a crime, join our petition demanding laws against ecocide, starting in Europe and creating a ripple effect to protect nature in the entire world!

https://secure.avaaz.org/campaign/en/make_ecocide_illegal_loc_rb/?cpBuwab_

World Biomass - the Numbers

Something to have nightmares about.

https://www.theguardian.com/environment/2023/mar/18/a-wake-up-call-total-weight-of-wild-mammals-less-than-10-of-humanitys

The total weight of Earth's wild land mammals – from elephants to bisons and from deer to tigers – is now less than 10% of the combined tonnage of men, women and children living on the planet.

Wild land mammals alive today have a total mass of 22m tonnes.

By comparison, humanity now weighs in at a total of around 390m tonnes.

The species we have domesticated, such as sheep and cattle, in addition to other hangerson such as urban rodents, add a further 630m tonnes.

The total mass of marine mammals was calculated to be around 40m tonnes.

There are 1,200 species of bats that account for a fifth of all land mammal species and two-thirds of all individual wild mammals by head count. However, they make up only 10% of the biomass of wild land mammals.

The figures demonstrate starkly that humanity's transformation of the planet's wildernesses and natural habitats into a vast global plantation is now well under way — with devastating consequences for its wild creatures. As the study authors emphasise, the idea that Earth is a planet that still possesses great plains and jungles that are teeming with wild animals is now seriously out of kilter with reality.

New Bee Species

Something to cheer about.

From APS NSW Facebook Group

https://www.facebook.com/groups/apsnsw/?multi_permalinks=1879867952377819%2C18 79867662377848¬if_id=1678521579823655¬if_t=group_activity&ref=notif

"I do citizen science on iNaturalist and attempting to match native flowers with their pollinators, so I was observing these flowers to see which species pollinated it (with bees I counted around 10 different types of native bee). This particular bee came along (genus Lasioglossum), and I hadn't seen any with orange hairs like this one had. So, I checked with

an online bee group, and a native bee expert (Senior Entomologist Dr Ken Walker at Museums Victoria) very excitedly said that it was a bee that didn't appear to be on scientific record."

Image and text Michelle de Mol, Shell Bell

Recommended Web Site

Good reading, from Parra Hills Group

Life in a Southern Forest is one of the best websites you could find about plants, insects, animals and biodiversity. Check it out! https://southernforestlife.net/

Another Plant ID App

Called "Trees Near Me", the free app was launched in late 2022 by the NSW Dept of Planning and Environment. The app is designed to help people discover information on plant communities, trees etc., around the state, and draws on information from the State's Bionet vegetation classification and mapping database. https://treesnearme.app/

"Built for landholders, conservationists, land managers and anyone with an interest in NSW flora, the Trees Near Me NSW app provides a simple to use way to learn about which plants are growing anywhere in NSW".

I have heard that it works well for some areas but not others. Garbage In, garbage out, perhaps!



CORRESPONDENCE RECEIVED

Newsletters Received - March

The full text of the APS newsletters is available from the APS website, on the District Group pages – usually under 'Resources'.

Australian Plants Society, Parramatta Hills NSW Group - Newsletter March 2023

Peter Ridgeway's extended PUB Crawl through the Cumberland Plain - a route of 178km trekked over 8 days, which has become the book "A Wide and Open Land"; AGM report; letter re protecting critically endangered bushland; For self-proclaimed 'gum nuts' this is eucalyptus heaven . . .

Australian Plants Society, Menai Wildflower Group – Quarterly Newsletter Autumn 2023

MWG Tip Nursery has propagated almost 30,000 *Allocasuarina* and other plants for the Glossies program – a heroic effort; Reports from the Snowy Mountains Trip led by Sutherland APS; Snow Gum Threats; Nursery news.

Australian Plants Society, South East NSW Group - Newsletter March 2023

A hands on propagation session at their local Botanic Garden nursey; Cullendulla Nature Reserve and Square Head bush walk - fine examples of very different ecosystems – from mangroves to littoral rainforest; Much Appreciated Pop-Ups - *Myoporum floribundum* on a rocky Queanbeyan ridge; Volunteer weed eradication project in Kosciuszko National Park - the volunteer programme enables the general public to assist staff managers for one week over the summer period. https://www.environment.nsw.gov.au/topics/animals-and-plants/pest-animals-and-weeds/weeds/new-and-emerging-weeds/mouse-ear-hawkweed

Australian Plants Society, Sutherland Group - Newsletter March 2023

Rhonda and Anthony Jackson on their Western Wildflowers Discovery Tour; Trip to Charlotte Pass, 19-26 February, 2023; Identifying plants on our Charlotte Pass trip – recommended books.

Other Groups Newsletters

We have begun to swap newsletters with other environmental groups in the Harbour Georges River area. Links to their web sites are provided where available.

Wolli Creek Bushcare Group

The Wolli Creek Preservation Society carries out bush restoration at many sites in the Wolli Creek area. We generally work from 9-12.30, under the supervision of an experienced professional bush regenerator. They are always looking for people who want to get their hands dirty for 3 hours once a month, with a friendly group who love a cuppa afterwards.

To volunteer, contact Peter Semple, co-ordinator on bushcare@wollicreek.orgau Mobile 0411 021 440.

<u>Department of Agriculture, Fisheries and Forestry Biosecurity Webinar</u>

Thursday, 30 March at noon until 1.15pm. Seedy sales – the costly risk of buying plants and seeds online.

Register through Eventbrite here: <u>Seedy sales - the costly risk of buying plants & seeds</u> online Tickets, Thu 30/03/2023 at 12:00 pm | Eventbrite

"Biosecurity is everybody's responsibility, including Australian gardeners and online plant and seed enthusiasts. **Buying overseas products** can be risky and costly, not only for your pocket but if you purchase non-compliant goods, the consequences for our environment, industries and economy can be devastating. Non-compliant imported plants and seeds can host destructive hitchhiker pests and exotic diseases from which Australia is free, and which once in the community, can cause havoc."

My latest house guest – a **Golden Silk Orb-Weaver**, *Trichonephila edulis*

Not causing havoc at all – she is a very gentle spider and doesn't even eat her mate. She has quite a fan club in the neighbourhood, watching her web change & her larder get bigger. During the heatwave, she built a little sun shade over the spot where she sits. And the rain leaves fine little diamonds around her.



COMING EVENTS

For further details of coming district group events, please see the APS NSW website at http://austplants.com.au/calendar

Saturday 1 April 9am to 12 noon	Wolli Creek Preservation Society walk - Bexley North to Turrella Reserve https://www.eventbrite.com.au/e/biodiversity-walk-talk-in-wolli-creek-valley-tickets-528009198727		
Saturday 1 April, 2 pm	Menai Wildflower Group Meeting - Dan Clarke, APS conservation officer talking about endangered plants of Western Sydney. Illawong Rural Fire Station, Old Illawarra Road, Illawong		
Wednesday 5 th April, 6 pm	APS HGR Monthly meeting, Members night, indoors at Club Burwood RSL, 96 Shaftesbury Road, Burwood. RSVP to Liz Cameron on elsmere02@gmail.com		
Saturday 15 April 9am to 12 noon	Wolli Creek Preservation Society walk - Bardwell Park to Tempe – https://www.eventbrite.com.au/e/biodiversity-walk-and-talk-2-bardwell-park-to-tempe-tickets-528028486417		
Wed, 19 Apr, 7 pm	Sutherland Group Meeting, Peter Olde on Our local grevilleas, at Gymea Community Centre, 39 Gymea Bay Rd, Gymea		
Wed, 22 Apr, 10 am to 4 pm	Open day at Joseph Banks Reserve, Kareela, hosted by Sutherland Group		
Saturday 20 th May	APS NSW Annual General Meeting hosted by the Central Coast group		
Wednesday 24th May, 7.30 pm	APS HGR Committee Meeting, via Zoom. All HGR members welcome to attend. Please advise Dorothy if interested		

EAST HILLS GROUP CONTACTS

President	Marie O'Connor	9546 8105	madoc71@gmail.com
Secretary	Liz Cameron	9580 6621	elsmere02@gmail.com
Newsletter Editor	Dorothy Luther	9564 6513	dlutherau@yahoo.com.au
Website Editor	Dorothy Luther	9564 6513	dlutherau@yahoo.com.au

https://www.austplants.com.au/Harbour-Georges-River