

CALEYI



NORTHERN BEACHES GROUP

austplants.com.au/northern-beaches

August 2022

Australian Plants Society Northern Beaches
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APS Northern Beaches Group acknowledges the Traditional Owners of the land on which our activities take place. We pay our respects to Elders past, present and emerging, and recognise the continuing connection to lands, waters and communities.

CALENDAR

Thursday August 4, 2022 APS Northern Beaches meeting at Stony Range Regional Botanic Garden, Dee Why.

7.15 pm Lesser plant family

7.30 pm Presentation - Penny Hunstead - Bush Tucker.

Supper - David & Julia

Saturday August 20, 2022 APS Northern Beaches walk 10.30 am The Bluff. See details p.3.

NB. 2022 Stony Range Spring Festival Sunday October 9. see p.6.

APS NSW November Annual Gathering, Southern Highlands, NSW Saturday 12 - Sunday 13 November 2022

Many thanks to Harry Loots, Lindy Monson, Penny Hunstead, Russell Beardmore, and Beth Gower for their great contributions to this edition.

If you have any photographs or words for CaleyI please send to me Jane March march@ozemail.com.au 0407 220 380.

WEST HEAD WALK

Harry Loots

We ventured into the bush on the coldest day just after the winter solstice. Four layers of clothing was de rigueur. Dew sparkled on flowers even at midday. There was no rain but the air was as wet as the ground after a week's drenching. Mosses grew high and lichen stood to attention.

Ridge top rock shelf heath flowers relished the chill. Astonishing pinks posed before cool greys while pretty whites danced from dense greens. It was viridescent, olive and pea green, emerald, lime, bottle green, Lincoln green, sea green, sage, acid green, eau-de-Nil, aquamarine, aqua, virescent, glaucous. For eons a hundred species had a home. Bar fire, drought and shallow sandy soils, these survivors grow where man would never dream to cultivate.



Rocky escarpments, overhangs and caves view blue drowned depths. The sun burns sharp-edged ironstone ripples. Glistening drips furrow, wear and colour the impenetrable. Pools mirror bonsai. Puddles muddy the track. Roots seek crevices, grow mats in the dust over less resilient sandstone. Stunted trees and shrubs find little purchase.

This primeval habitat near the metropolis is the Challenger trail on West Head. Their names defy their beauty. Unintelligible to most they are a list in Latin—

Eustrephus latifolius, Banksia serrata, Darwinia fascicularis, Epacris





Banksia beacons. Pic JM



Hemigenia purpurea. Pic Beth Gower



Leucopogon juniperinus. Pic HL



Hibbertia sp.. Pic HL



Philotheca salsifolia. Pic HL



Acacia myrtifolia Pic JM



Banksia serrata. Pic HL

microphylla, *Leucopogon juniperinus*, *Boronia ledifolia*, *Hibbertia*, *Eriostemon australasius*, *Persoonia levis*, *Philotheca salsifolia*, *Eucalyptus haemastoma*, *Epacris longiflora*, *Woolisia pungens*, *Hakea teretifolia*, *Boronia ledifolia*, *Xanthorrhoea arborea*, *Angophora costata*.



Darwinia fascicularis. Pic BG



Hakea teretifolia. Pic HL



Eustrephus latifolias. Pic HL



Eriostemon australasius. Pic HL



Grevillea sericea. Pic BG



Grevillea speciosa. Pic JM



Boronia serrulata. Pic BG



Dodoneae triquetra capsules. Pic JM



Photographer Harry. Pic Lindy Monson

THE MALVACEAE FAMILY

At the June meeting **David Drage** introduced us to the “lesser” plant family Malvaceae.

Malvaceae is not an insignificant family. In fact, it is a very large one. Worldwide there is something like 244 genera and 4,225 species in this family. These numbers vary a bit depending on the source of the information.

The largest genera are Hibiscus 300, Sterculia 250, Pavonia 200 and Sido 200. There are some species of economic importance such as okra, cotton, cacao and durian. There is, of course, the large horticultural business of producing many varieties of Hibiscus for home and public gardens.

In Australia there are about 24 genera containing 160 species, found mostly in tropical and sub-tropical locations. I couldn't find a reference to numbers in NSW so I concentrated on the Sydney Region contingent. I believe there are 9 genera with 21 species described, however, 10 of these are introduced species, mostly originating from around the Mediterranean Sea. 2 other species are found in the Hunter Valley and 1 in the Shoalhaven. That leaves just 7 species that we may encounter in or near the Northern Beaches environment. However, none of the members present at the meeting had ever seen any of the 7 while bushwalking locally. Here are the 7.



Abutilon oxycarpum Shrub to 2m, flower yellow about 15mm diameter. Found in open forest and along creek banks. Pic: Flickr

Hibiscus splendens A small tree to about 6m found on rocky slopes in open forest. Flower pink to 25mm diameter. Pic: ppnn.org.au



Hibiscus diversifolius Shrub—2m in located in swampy places. Flower yellow. (Possible African origin). Pic: inaturalist.com



Hibiscus heterophyllus Small tree to 5m in sheltered, moist areas. Flowers 119mm diameter are white, yellow or pink. Pic: ANBG



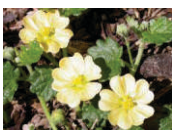
Howittia trilocularis Shrub to 3m in moist, well-drained gullies. Flowers are mauve and about 20mm diameter. Pic: Wickepedia.com



Sida rhombifolia. Small shrub to 1.2m. Widespread in thick scrub, on hillsides and swampy woodland. Flower pale pink and about 10mm diameter. Pic: keyservers.lucidcentral.com



Sida corrugata Prostrate plant to about 30cm in damp places in clay and sandy fertile soils in woodlands and grasslands. Flower yellow to 15mm diameter. Pic: plantnet.rbgsyd.nsw.gov.au.



THE BLUFF WALK SATURDAY AUGUST 20, 2022

Russell Beardmore wrote ‘At “show and tell” last week (July meeting) I presented a sample of a mystery plant, hoping the group could identify it. I found it just inside the entrance to the Bluff Trail. After some discussion, we decided it was probably *Pultenaea polifolia*. I checked my photo files for the Bluff Trail and found the attached picture of *P. polifolia* taken in August last year - supports the diagnosis’.



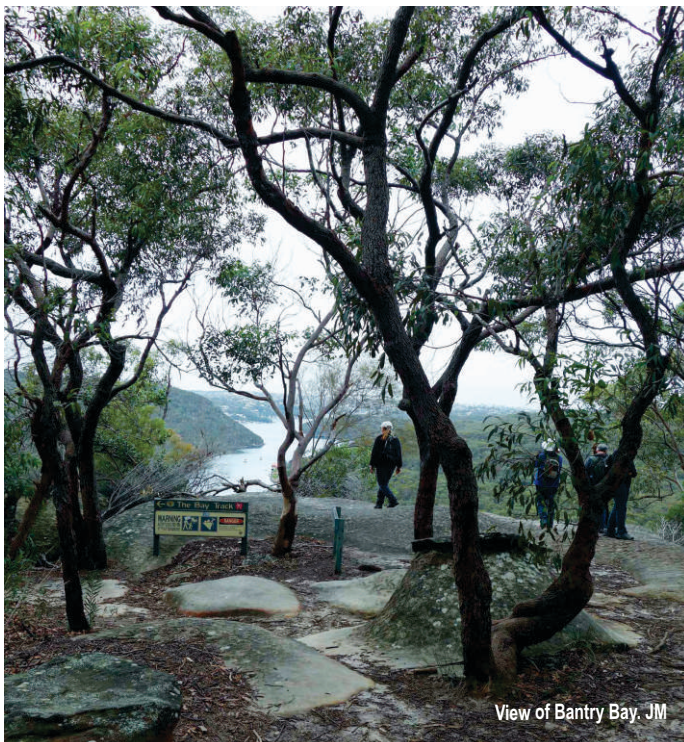
Pultenaea polifolia. Pic RB

So how fortunate are we to check out this location for ourselves on Saturday August 20, 2022.

Our APS Northern Beaches group last visited the Bluff Track in July, 2020. It was our first walk of the year due to the Covid-19 epidemic and we were all complying with social distancing restrictions.

Harry Loots' report of the walk and photographs by members listed many of the plants in flower at that time including:-

Actinotis minor, *Acacia longifolia*, *A. ulicifolia*, *A. mytifolia*, and *A. suaveolens*, *Banksia spinulosa*, *Boronia ledifolia*, *Bossiaea heterophylla*, *Conospermum longifolium*, *Crowea saligna*, *Dampiera stricta*, *Hibbertia riparia* and *H. cystiflora*, *Hybanthus monopetalum*, *Lambertia formosa* and *Patersonia longifolium* (in bud).



View of Bantry Bay. JM

EUCALYPT FOUND ONLY IN SYDNEY SUBURBS CONFIRMED AS NEW SPECIES

ABC Radio Sydney July 21, 2022 Rosemary Bolger



Dr Trevor Wilson inspects seedlings of the yet-to-be-named rare eucalypt. (ABC Radio Sydney: Rosemary Bolger)

An incredibly rare eucalypt found in some of the most densely developed areas of Sydney has been confirmed as a new species.

The yet-to-be formally named species is a shrubby type of eucalypt with cup-shaped fruit and is found in the Hills District in Sydney's north-west.

"It's an unassuming eucalyptus tree," Australian Institute of Botanical Science scientist Trevor Wilson said.

"It's not too tall, it is actually a mallee which means it doesn't have a main trunk system, it looks very shrubby."

It was first spotted in the suburbs in the 1990s, but it is only now that scientists can say with certainty that it is a distinctive new species.

"It's been a long time coming," Dr Wilson said. "The problem was that it was never known whether or not it was a hybrid, like a cross between two other species, or whether it was a distinct species on its own."

To answer that question, the Australian Institute of Botanical Science used genomic sequencing to identify key differences from other types of eucalypt and understand more about its evolutionary history.



The flower looks pretty, but when it comes to distinguishing the species from other types of eucalypts, the buds are more important. (Supplied: Australian Botanic Garden Mount Annan)

Dr Wilson said the results showed, not only was it not a hybrid of two other species, it was more distantly-related than expected. "That means we've identified quite a distinct, more unexpected amount of biodiversity, just sitting at the doorstep of Sydneysiders."

Seedlings to be planted in secret locations

There are estimated to be just 14 populations made up of 700 individual specimens left in Sydney. "It's never been seen elsewhere outside of Sydney," Dr Wilson said. "Being close to a lot of urban development and land clearing, it puts something like this in extreme jeopardy."

The species, currently known as *Eucalyptus sp. Cattai*, was first listed as endangered in 1999 before it was upgraded to critically endangered in 2005.

Now it will get its own name and formal description which scientists hope will boost conservation efforts.

At the Australian Botanic Garden Mount Annan, seedlings are being grown to plant in secret locations. But many of the seedlings grown from seeds collected from the "Cattai" species turned out to be hybrids.

Given the low number of specimens in the wild, Dr Wilson says it is no wonder that many of the trees have become "frisky" with other species to survive.

Hybridisation is rare in the animal world, but it is quite common between closely-related plant species. "Eucalypts are notorious for being promiscuous and will readily receive pollen from other eucalypt species."

While it may be a natural phenomenon, scientists want to increase the numbers of the original species. They are now using genomic sequencing to identify genetically "pure" seedlings to translocate to nearby suitable habitat.

"That's one way we can actually improve the resilience of some of these populations to maximise their survival in the wild," Dr Wilson said.

The institute has partnered with Jiangsu University in China and the NSW government's Saving our Species program to undertake the project.



An unusual example of the new tree with a main trunk growing. (Supplied: Australian Botanic Garden Mount Annan)

Dr Samantha Yap, of the Institute's Research Centre for Ecosystem Resilience, said confirmation that it was a distinct species was significant.

She said genetic studies were increasingly being used to overcome some of the roadblocks in the way of species discovery. "For effective conservation, the first step should be to assess what's a rare species and what is not, and a genetic study presents a very effective approach," she said.

"Once it's known to be rare, we must then focus efforts to save it."

RUSSELL'S RED HILL JULY COLLECTION

Russell Beardmore



Acacia longifolia. Pic RB



Boronia ledifolia. Pic RB



Grevillea buxifolia. Pic RB



Grevillea speciosa. Pic RB



Hibbertia cistiflora. Pic RB



Woolisia pungens. Pic RB



Leptospermum squarrosum. Pic RB



Phyllota phillicoides. Pic RB



Zieria levigata. Pic RB

WALK & TALK WITH THE NORTH SHORE GROUP OF THE AUSTRALIAN PLANTS SOCIETY (APS NSG)



Isoplepis cernua.

WALKS & TALKS AT KU-RING-GAI WILDFLOWER GARDEN

All welcome to NSG Walks & Talks activities for June to August 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.

For your safety in the Ku-ring-gai Wildflower Garden, we will ask you for your name, mobile number and emergency contact number on arrival.

Sessions run 10am to about 12 noon unless a later return time is indicated.

Sessions are free. No booking required.

No prior knowledge is required and information sheets will be provided.

Walks are easy/medium grade.

Please wear a hat, have suitable footwear and bring water/snack.

Sunscreen and insect repellent would also be a good idea.

Monday 29th August 2022

Leaders: Karen L. Wilson AM and Dr Barbara G. Briggs AM

At: Ku-ring-gai Wildflower Garden (KWG), 420 Mona Vale Rd, St Ives

Topic: Sedges, rushes & restiads

Both Karen and Barbara are Honorary Research Associates in Systematic Botany at The Royal Botanic Garden Sydney. Their research interests include the systematics, phylogeny and morphology of the plant families Cyperaceae, Juncaceae and Restionaceae, which are rush-like plants closely related to the grasses.

These herbs have a vital role in local ecological communities but are notoriously difficult for people interested in native plants to get to know. They may lack showy flowers but they exhibit forms and functions that render them intriguing to native plant lovers and bush regenerators.

Karen and Barbara will introduce these herbs in a lecture (10- 11am approx.) at Caley's Pavilion before leading a walk (approx. 11.15-12.30pm) in the surrounding Ku-ring-gai Wildflower Garden, St Ives. Walk grade: easy.

Learn more about these widespread plants at KWG. Everyone is welcome, including APS members from other groups, non-APS members and bush regeneration volunteers, as we wish to share the opportunity that Karen and Barbara will provide to study these plants.

Go to <https://austplants.com.au/North-Shore-Walks-&-Talks> for details
Enquiries to the convener, Wendy Grimm wagrimm@tpg.com.au or 0419323035.



SUNDAY, 21 AUGUST 2022 FROM 10:00-13:00

Eastern Suburbs Banksia Scrub – Fire management
 Gunner Rd, Manly NSW 2095, Australia
www.givar.com/campaigns/eastern-suburbs-banksia-scrub-fire-management

Eastern Suburbs Banksia Scrub was the 1st ecological community listed as threatened in NSW. Come and see how fire is being used to manage its natural regeneration. And see what happened when a fire got out of control in 2020.

This walk and talk will take place at the spectacular North Head Sanctuary – the best site to visit ESBS. Our route will follow existing tracks, much of which is on elevated boardwalks. Flowering of many species is due to have started. Also expect excellent views across the harbour and northern beaches.

The walk will be led by experienced bush regenerator, Peter Jensen, Environment Officer for Sydney Harbour Federation Trust, who has managed the site for the past 19 years.

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)

Scope

Over the past decade the Linnean Society of NSW has been active in organising field symposia highlighting aspects of natural history in the Port Macquarie area (2010), Royal National Park (2012), Jenolan Caves (2013), Belubula Valley (2015), Snowy Mountains (2017), the Warrumbungles (2018) and Blue Mountains National Park (2019).

Focus of the 2021 field symposium will be on the Ku-ring-gai Chase National Park north of Sydney and surrounding regions in the Northeastern Sydney Basin, bounded to the north by the Hunter River, the coastline to the east, Sydney Harbour to the south, and extending west as far as the Putty Road on the boundary of Yengo National Park. Much of the area lies within the distinctive lower Triassic Hawkesbury Sandstone outcrop with its spectacular geomorphology and characteristic floral communities, contrasting with those developed on the underlying lower Triassic Narrabeen Group and upper Permian rocks in the Hunter Valley. On the Central Coast large coastal lakes provide important freshwater and brackish water habitats. Two days of scientific and general interest talks and presentations on current research into the geology and geodiversity, flora and fauna, and other aspects of the natural history of this extensive region will be followed by a day-long field trip exploring aspects of Ku-ring-gai Chase National Park.

Costs and logistics

Venue for the symposium sessions will be the Hornsby RSL Club (4 High Street, Hornsby), conveniently located within 5 minutes walk of Hornsby Railway Station, which provides a hub for Sydney suburban services with good connections to the Central Coast and Newcastle area. A variety of rooms are available at the club for conferences – currently we have booked one that holds 180 people in the expectation that this will cope well with any need for social distancing. Based on previous symposia we anticipate 100-120 persons will attend the talks.

The registration fee (details shown on the attached Registration Form) will cover the venue hire, morning and afternoon refreshments and a buffet lunch (vegan & gluten-free options available) each day at the RSL Club, and the Program/Abstracts/field guide booklet. Presentations will commence each day at 9 am (registration) with talks between 9.30 am – 4.30 pm. The field trip fee will cover transport by bus and the National Park entry fee. Those participating on the field trip are to provide their own lunch, snacks and beverages. The bus will depart from the bus zone adjacent to the western side of Hornsby Station no later than 8.30 am and return there between 5 – 5.30 pm. Participants can register for any combination of the three-day sessions. However, bus seats are limited (max. 48) for the field trip, and preference will be given to those also registered to attend the preceding day sessions. Early registration for the field trip is recommended.

Members of the Linnean Society of NSW will enjoy a modest discount on registration and field trip fees. Non-members are welcome to apply for membership of the Society to access these discounts. For details of membership categories and our low subscription rates, please refer to the website of the Linnean Society of NSW.

Cancellation policy: 50% refund will apply to cancellations notified up to and including Sept. 30. No refunds will be given for cancellations notified after that date. Should it be necessary for the Society to cancel the symposium due to COVID-19 (or other unforeseen events), we will return all monies paid by participants, less administration costs imposed by the venue or bus company.

Proposed itinerary for field trip

The field trip commences at Hornsby Railway Station at 8.30 am on Friday November 18, and proceeds via Mona Vale Road, McCarrs Creek Road and West Head Rd to West Head in Ku-ring-gai Chase National Park. First stop will be at West Head lookout to view Pittwater, the entrance to Broken Bay, and the Palm Beach-Barrenjoey Headland tombolo. There will be a brief diversion to the interpretation centre near West Head. The second main stop will be at the head of the Elvina Track to inspect a spectacular exposure of prismatic sandstone, aboriginal carvings, and a heathland plant community. We plan to arrive 12.30 pm at the Ku-ring-gai Wildflower Garden, off Mona Vale Rd at North St Ives, for a picnic lunch (own arrangements) and a short bush walk. We then proceed through North Turrumurra to Bobbin Head. From the carpark we will walk along the Mangrove Boardwalk to examine that plant community and the associated brackish water biota on the rising tide. If possible the final stop of the day will be Hornsby Quarry Park just west of Hornsby where a superb cross-section through a diatrema of Jurassic age had been exposed by quarrying.



STONY RANGE SPRING FESTIVAL

Stony Range Regional Botanic Garden is an oasis of Australian native plants located at Dee Why in the heart of the Northern Beaches.

**61st
year**



Sunday 9 October

9 am - 3 pm

Stony Range Regional Botanic Garden

SALE OF NATIVE PLANTS

Take advantage of expert cultivation advice from Stony Range Botanic Garden volunteers & members of Australian Plants Society Northern Beaches Group.



Fun for children

face painting, treasure hunts, native animals



Fun for all

**live music, native bees, guided walks
Sausage sizzle, Coffee Shop, Home made cakes.**

**Stony Range Regional Botanic Garden
810 Pittwater Rd, Dee Why stonysrange@gmail.com**