

# Bushland Newsletter

SUMMER 22



## On the go with Emily

Welcome to our Summer 2022 edition of the Bushland Newsletter. In this edition we welcome a new section, brought to you by Council's Sustainability team.

With the warmer weather comes more activity, albeit when its not raining. I still think back to just a few summers ago when our country was burning and remain grateful for rain rather than fires. The plants generally prefer it too. We saw this during the return of the annual Spring Wildflower walk, where our expert guide, Danny Hirshfeld, discussed disturbance and fire ecology of plants during a wander through sections of the Henry Head track in Kamay Botany Bay National Park.

On display was a huge array of blooms. Danny suggested that one area off Grose St could contain the highest diversity of Eastern Suburbs Banksia Scrub plants in Randwick. This diversity, he suggests, may be a direct result of an appropriate fire regime.

**Emily Strautins**  
Randwick City Council  
Bushland Officer

## WHAT'S ON

### Bushcare Christmas party

In November we celebrated all that's been happening this year in Randwick Bushcare with a delicious lunch and bush-based activities. Anyone who participated in local bushcare, parkcare or landcare volunteer events was welcome. This year we shook up the format and included an educational ecological site tour of Randwick Environment Park before settling in for the feast.

### Our frog and reptile survey gets underway

Expert consultants have begun surveying a selection of sites chosen to represent various types of habitats present within Randwick City. Meanwhile, we will be looking to you, our community, to help identify species which may be living near you. Make the most of some great apps which are available for download to

you phone and start logging your observations via 'FrogID' or 'iNaturalist'. Both are FREE and fantastic tools to learn about the animals in your neighbourhood, while contributing to real science-based conservation efforts.

### Mountains of weeds

The snap below was taken at Maroubra Dunes Bushcare during the first working bee for spring. The team devoted the whole session to just three weeds: Turkey Rhubarb (*Rumex sagittatus*), Annual Veldtgrass (*Ehrharta longiflora*) and exotic Scented Geranium (*Pelargonium capitatum*). Fortunately, the geranium had not yet seeded and so could be piled and what a pile it made! This pile will provide habitat for wildlife while the native plants re-grow. Thanks so much to everyone who contributed, especially considering we experienced every season in just one session.



# The small and mighty



Tiny members of our community that are often working hard to propagate our native plants right under our noses, the insects of Randwick play an indispensable role.

## Common Wasp-mimic Bee (*Hyleoides concinna*)



This clever bee disguises itself as a wasp to scare off predators, which might think that it is likely to pack a nasty sting. The bee not only copies the colours but even the V-shape positioning of its wings, a trick that fooled the first scientists who discovered it and who initially misidentified it as a wasp.

This beauty was spied feeding on a bottlebrush planted in our Clovelly Bay Bushcare site. This type of habitat is typical for this insect, which is known to inhabit urban areas, forests, woodland and heath.

Like many of our local native bees, this species makes solitary nests usually in dead wood. When the female finds a nice hole in a stump or log, she lays an egg in a nest made of chewed up vegetation before sealing the nest with a tight, cellophane-like curtain. As the larva develop, they munch through this material, eventually chewing their way to freedom.

## Caper White Butterfly (*Belenois java*)



The Caper White Butterfly is easily mistaken for the much more common White Cabbage Moth, which is a similar sized but plain white moth often seen laying eggs in your vege patch. Yet, peer a little closer and you may have noticed thousands of these white butterflies with black spots appear suddenly in huge numbers during November.

The Caper White Butterfly is a migratory species, which flies between Papua New Guinea, Indonesia and Adelaide, with stopovers inland of the Great Dividing Range. It only rarely gets blown off course to appear on the coastline, a bit of an inconvenience since this butterfly will only lay its eggs on plants belonging to the caper family (*Capparis* spp.).

The highly selective diet of the caterpillar of the Caper White Butterfly is where this species gets its name. Adult butterflies, on the other hand, can be observed to sip nectar from a wide variety of plants found during their journey.

## Harlequin Bug (*Dindymus versicolour*)



As its name implies, this little species is identified by its bright multi-coloured body. It is a "true bug", which means it has two pairs of wings, the first or outer

pair adapted to form a tough shield which sits over the secondary pair, which are more delicate flight wings.

True bugs like the Harlequin Bug also have hypodermic needle-like mouthparts, which allow them to puncture the softer parts of plants and drink the sap. Prior to the development of synthetic insecticides these beautiful bugs were enemy number one, causing devastation to crops of apples, figs, pears, stonefruit and berries.

Despite the potential damage to cultivated crops, the Harlequin Bug is a native species, which in a balanced bushland setting may help to keep the local plant gene pool strong.

## Longicorn Beetle (Family: *Cerambycidae*)



These charismatic beetles are pretty easy to recognise with their relatively huge and highly segmented antennae. Despite being one of the most diverse beetles in Australia (with over 1,400 species classified – so far), these beetles are generally poorly understood.

The larvae of these beetles are a particularly large grub, most often observed boring its way through wood. Although the food preference of the immature beetle can make it a threat to timber plantations, Andrea Wild from the CSIRO (2013) suggests this habit can assist the natural turnover of dead wood in bushland. By boring through stumps and weak branches, the Longicorn grubs create air pockets in the wood, increasing the rate of decomposition and thereby aiding the natural cycling of energy and nutrients through the ecosystem.

## Peacock Carpenter Bee (*Xylocopa bombylans*)

Carpenter bees are some of the largest and most spectacular of the native Australian bees. Their name comes from their habit of nesting in soft wood, like dead banksia trees, in which they cut entrance holes with their strong jaws.

The nest of the Peacock Carpenter Bee is usually a single tunnel about 30 cm long with interconnecting passages when the wood is wide enough. The tunnels are sectioned off into brood

cells, which are sealed after an egg is laid inside with a supply of nectar and pollen rolled up into a moist ball. When the eggs hatch, the larvae eat the food balls and pupate.

Often the young bee in the bottom cell of the nest emerges from its pupa first as it was the first egg laid. It chews its way through the walls of the other cells to break free of the nest. The other pupae usually fall through the holes and gather in the bottom cell. They hatch normally and climb their way out of the nest.

Female carpenter bees sometimes co-operate during brood rearing, taking it in turns to guard the nest entrance while the main egg-laying bee goes out foraging for nectar and pollen to feed the larvae.

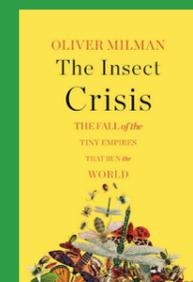
### Information Sources:

Australian Museum Animal Fact Sheets  
CSIRO (by Andrea Wild 2013) Critter Corner: look up your local longhorn  
DPI (2021) Prime Fact: Harlequin bug in apple orchards  
Images: E. Strautins



## To learn more about the incredible world of insects

Anne-Maree Mitford recommends:



*The Insect Crisis: The Fall of the Tiny Empires That Run the World.* By Oliver Millman

I would recommend it – it is easy to read, and although based on science you don't need to be a science graduate to understand it. Some of its content is alarming, however it also provides opportunities to redress the situation – some of it even at the small / personal / local scale. And something we should all be aware of.

Scan here for a summary



Or a great starting point for those who'd like to identify and learn about the insects in their gardens:



*Australia's Incredible Insects* by Jessa Thurman

Jessica Thuman is a young entomologist whose passion for world of

insects shines through this very approachable entry into the world of insect for young and old alike.

# Fantastic Flannels



One of the nursery's most sought-after species would have to be the iconic Flannel Flower (*Actinotus helianthii*), and for good reason. Its ephemeral nature and large white flowers are sure to delight on bushwalks throughout the LGA.

Two great local walks showcasing flannels at their best are the Malabar Headland and Kamay - Botany Bay National Park in spring. Flannel Flowers can be seen thriving on the exposed ridge-tops and sand dunes. Their adaptability and endurance in both extreme weather and landscapes has earned the respect and adoration of many.

The seed is fluffy, with fine hairs, relying heavily on wind for dispersal. Germination is largely triggered by fire, leading to mass germination events after burns along the East Coast. For several years following these burns this plant appears in abundance until competition, mainly for light and space, sees the species reduce in numbers. However, intermittent and sporadic germination will still occur.

What many people assume are its glorious white "flannel" petals are in fact modified leaves called 'bracts'. The French botanist Jacques-Julien de Labillardiere in 1805 named the plant based on the Greek word for 'Having Rays' – *Actinotus*. Flannels have long been a part of Sydney's history and have been part of indigenous culture for thousands of years, known by the D'harawal name Talara'tingi. It is a



member of the Apiaceae family, which includes coriander, parsley and carrots.

While there are only three *Actinotus* species found within proximity to Sydney (*A. helianthii*, *A. minor* (Lesser Flannel Flower) and the even more elusive *A. forsythii* (Pink Flannel Flower) there are approximately 18 species in total. These are found mostly through the Arid regions, with one of these also found in New Zealand.

## Growing Flannel Flower in the nursery

The nursery consistently grows this popular species for sale throughout the year. The vast majority are seed grown from locally collected seed for use in the council's Bush Regeneration sites, landscapers and our customers for their home gardens. As mentioned earlier, this species' seed germination is triggered by fire, which is why we



replicate with the application of 'Smoke Water'. This contains the complex array of chemicals which aid in breaking the inbuilt dormancy of the seed. Before the pioneering development of Smoke Water, the Flannel Flower was rarely seen in cultivation because of poor germination. From time to time, we also grow cutting-grown plants for sale, the benefit of these being very early flowering for those who just cannot wait.

## Growing Flannel Flower at home

It's not only the flowers which are soft to the touch but also the grey foliage, which have tiny hairs on the leaf surface. These hairs reduce the rate of water loss by protecting the leaf from wind and direct sunlight. It is for this

reason in the home garden Flannel Flowers are highly drought tolerant. Position them where they can receive the most sun possible to promote bushiness and reduce fungal problems, particularly an issue if the felt foliage stays too wet for too long. It is important that they are planted into in very well drained soils or potting-mix if growing in a pot. Depending on the growing conditions they will vary in height from 50cm to 1m. In cultivation they last around three to four years, however in the right conditions self-sown seedlings will allow you to continue to take delight in this iconic member of our Sydney flora into the future.

*Bibliography: D'harawal Dreaming Stories, compiled by Frances Bodkin and Gawaian Bodkin-Andrews, Worldpress 2015*



# Beyond the garden



**PermaBee is a local community garden which you may not have heard of until now, but its impact can be felt across the community.**

While PermaBee may seem like any other community garden, the people who make up this volunteer group are the living heart of the Sustainability Hub.

Encompassing open space, nature trails, five different demonstration gardens and a sustainable classroom, the Randwick Sustainability Hub is an oasis just down the hill from Randwick's iconic Spot. The site sees around 20,000 visitors every month including locals, school groups and businesses. The Hub has even featured in TV shows including "Old People's Home for 4 Year Olds".

Every Friday morning, the PermaBee volunteers come together to work in and maintain the gardens, turning what was once a plain grassed area into a beautiful and productive series of educational gardens.



Even though it is off the main road, the Hub and its gardens have attracted many groups and activities including the Sydney Bee Club, WIRES, Adamama, yoga, African drumming, playgroups, geocaching, orienteering, nature wellness trail, nature discovery trail, Eco Living Festival, NOX night sculpture, Twilight Concerts, with more to come. Each of these groups and activities takes advantage of the beautiful surrounds and gardens to deliver their nature-based programs to the community.

The gardens were first designed and developed around 12 years ago. In that time people have come and gone, but the strength of connection between the members is palpable. When you come to PermaBee, you can tell that people like each other. From the friendly conversations to the easy way in which people work together, it makes it a welcome place to come and meet other like-minded people.

We believe that there are a few things that help the group to function smoothly and avoid some of the conflicts that can occur in typical community gardens.

We have facilitators who work with the group, meaning that there is consistent vision and members can learn from experts, developing their own skills more quickly. All the gardens are communal, so everyone is working together for the common good. And of course, we share morning tea which has evolved into an opportunity for members to share unique foods and celebrate important events from their culture.



All of this has resulted in PermaBee coming together like a second family who want to spend time together outside of the garden too. Members organise visits to each other's gardens, go on field trips together, and even help look after each other's pets.

To keep the group connected during Covid lockdowns, a Whatsapp group was created which is still used now that we are back in the garden. In fact, it's busier than ever and is full of conversation about individuals gardens, achievements, recipes and opportunities to learn more. Open to all, it helps to keep the group connected throughout the week and make organising activities easy. It also serves to keep members who may not be active anymore or who have moved away from the area connected to the group. It's lovely to reconnect with a past PermaBee when they comment on a photo and helps us to reflect on what has been achieved together.

Not only do the PermaBees make the Randwick Sustainability Hub shine, but their impact can be felt throughout the

community. The strong connections that the PermaBees have built allow them to support each other to take their skills and experience out of the garden and into the community by organising initiatives for each other and the wider community.

PermaBee has been a supportive place to start new ventures and we are proud to have nurtured initiatives such as TED Circles in Randwick, which bring community together to talk about climate change in a friendly and informative way, Organic Buyers Group, which makes organic produce accessible at non-organic prices. A

current project is a sustainability-themed library.

The importance of having supportive people you can trust and a space to develop new initiatives cannot be underestimated. Ask anybody involved in social and environmental change, and I'm sure you will receive emphatic nods that they could not have turned their idea into reality without good people to do it.

Just like an opal, the PermaBee community gardening program at Randwick Sustainability Hub reveals flashes of incredible beauty and depth.



PermaBee and the Randwick Sustainability Hub are open to anybody in the community. For more information and bookings visit [www.randwick.nsw.gov.au/permaBee](http://www.randwick.nsw.gov.au/permaBee)



**Got a snap to share?** We'd love to share your recent photos of native plants, animals or you - getting out into nature. Please send your photos to [bushcare@randwick.nsw.gov.au](mailto:bushcare@randwick.nsw.gov.au).



Black-faced cuckoo-shrike chicks (Ella Brunken)



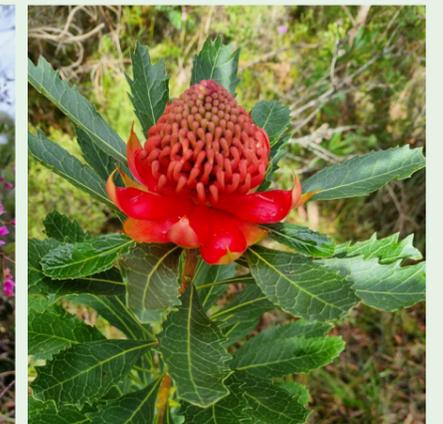
La Perouse's very own elusive echidna! (Ella Brunken)



Sea of Flannel Flowers post-burn at Jennifer Street (Ella Brunken)



Greg Toms's image of Eriostemon taken during the Spring Wildflower Walk



Images of the display at Muogamarra Nature Reserve on the Central Coast. If you haven't been, be sure to book in for their annual wildflower tour (the only time it is open to visitors).

# Working bee calendar

**BUSHCARE** Look out for the updated schedule to be released for 2023.

GROUP	LOCATION	DAY	TIME	DEC	JAN
<b>Clovelly Bay</b>	Opposite 18 Eastbourne Ave, Clovelly	Friday	9am-11am	9	No Bushcare in January 2023
<b>Dunningham Reserve</b>	Adjacent to 5-7 Major St, Coogee	Thursday	9am-11am	22	
<b>Fred Hollows Reserve</b>	Bligh Place entrance, Randwick	Wednesday	9am-12pm	14	
<b>Gordons Bay</b>	Access via UNSW Cliffbrook Campus Grounds, 45 Beach St, Coogee	Sunday	9am-1pm	4	
<b>Grant Reserve</b>	Coogee Surf Life Saving Club carpark (south of the beach)	Wednesday	8am-10am	21	
<b>Ladies Pool (Ladies Only)</b>	At the entrance to the Ladies Pool, Mclver's Rock Baths, Coogee	Thursday	9am-12pm	15	
<b>Malabar Foreshore</b>	Opposite 9 Bay Parade, Malabar (near Malabar Ocean Pool)	Saturday	8am-12pm	3	
<b>Malabar Wetland</b>	End of Manwaring Ave, Maroubra	Wednesday	1pm-4pm	21	
<b>Maroubra Dunes</b>	South Maroubra SLSC car park	Thursday	9am-1pm	1	
<b>Prince Henry</b>	Alternate between the corner of Jennifer and Harvey St or opposite 2 Millard Dr, Little Bay	Saturday	9am-12pm	10	
<b>Randwick Environment Park</b>	Access via corner of Dooligah Ave and Burragulung St, Randwick. Works take place within fenced area on the far side of the oval.	Wednesday and Sunday	9am-12pm	7, 11	
<b>Wylies Baths</b>	At the picnic tables above Wylie's Baths, Neptune St, Coogee	Tuesday	9am-12pm	X'mas Break	
<b>Friends of Malabar Headland*</b>	Contact Therese Weiss on 0403 532 655 or via malabarheadland@gmail.com for details.	Thursday	9am-1pm	8, 15, 22	

\* Denotes non-council run groups. Please contact organisers directly.

## PARKCARE

GROUP	LOCATION	DAY	TIME	DEC	JAN
<b>Alison Road</b>	Corner of Alison Rd and Beach St, Coogee	Wednesday	8am-10am	X'mas Break	
<b>Old Tramline</b>	The reserve between Dudley St and Carrington Rd, Randwick	Thursday	8am-12pm	8	